



Aotearoa New Zealand's flexibility market: state-of-play

February 2026

Contents

Introduction	3
Part 1 – Overview of existing flexibility market in Aotearoa	4
How flexibility supports electrification and the energy transition	4
Existing electricity market and how flexibility fits in	6
Residential and small commercial customers	7
Commercial and industrial customers	7
Demand response initiated by electricity distribution businesses	8
Transpower demand response programme	8
Transmission and distribution investment deferral	8
Commercialising flexibility innovation	9
Evolving market settings	10
Part 2: Overview of flexibility platform offerings in Aotearoa	11
What is a flexibility platform?	11
Flexibility platforms in New Zealand	12
Platforms' commercial and operational functions From trials to market roll-out	14
Ara Ake National Flex Discovery Fund 2025 (Round 1)	15
Ara Ake National Flex Discovery Fund 2026 (Round 2)	15
Part 3: What's next for the Aotearoa flexibility market and platforms	17
Appendix 1: Ara Ake flexibility innovation projects 2020-25	20

Acknowledgements

This report was primarily authored by Briony Bennett, Senior Innovation Manager at Ara Ake. Thank you to all reviewers including Daniel Gnoth; Rosie Condon; Craig Evans, FlexForum; Siobhan Bradley, Electricity Authority; Terry Paddy, Cortexo Ltd; John Campbell, Our Energy, and additional industry and government reviewers.

Introduction

Our purpose at Ara Ake is to accelerate the demonstration, commercialisation, and deployment of energy innovation to support Aotearoa New Zealand's energy transition.

Flexibility has been one of the strategic priorities at Ara Ake since our establishment in 2020.¹ It has the potential to rapidly accelerate the electrification of the economy, whilst managing overall investment needs and system reliability as more distributed, consumer-owned and renewable energy resources are integrated into the electricity grid.

Over the past few years, Ara Ake has helped to establish an innovation ecosystem around flexibility by supporting innovators and projects in this space. Ongoing support for flexibility innovation remain critical to the energy transition in Aotearoa and abroad, and Ara Ake will continue to work closely with innovators, industry and government agencies to accelerate flexibility uptake and commercialisation.

This paper is written for innovators, industry and regulators that have a role to play in the evolving flexibility market. It describes the current 'state-of-play' in the flexibility market and how new flexibility platform offerings work, as well as opportunities and challenges for the near future.

The paper is structured as follows:

1. Overview of the existing electricity market and how flexibility is traded under current settings
2. Overview of flexibility platforms and current offerings under development in New Zealand
3. What's next for New Zealand's flexibility market and platform offerings

Regulators have indicated that the options for the future state of New Zealand's flexibility market remain open. As flexibility innovators and their service offerings mature, regulatory and market settings will need to evolve to help Aotearoa move beyond demonstrations and trials to commerciality.

1 FlexForum provides the following definition of "flexibility": Flexibility is the modification of generation injection and/or consumption patterns, on an individual or aggregated level, often in reaction to an external signal, to provide a service within the electricity system. Practically speaking, flexibility is available in some devices already, such as smart solar inverters that can lower generation output; battery storage systems, including those in EVs, that can either charge/discharge and; equipment, such as electric vehicle charge points, space and water heating, ventilation and air-conditioning, machinery can turn down, on or off.



Part 1 – Overview of existing flexibility market in Aotearoa

How flexibility supports electrification and the energy transition

Electrification of the local and global energy sector will continue to see demand for electricity grow in coming years. At the same time, consumer-owned and distributed energy technologies (CER or DER) like electric vehicles (EVs), solar panels and household or commercial batteries are making electricity flows more two-way, eclipsing the conventional one-way flow of electricity from large, centralised generation sources through to consumers.

The integration of CER into the electricity system and markets will play a key role in meeting rising electricity demand as Aotearoa transitions towards a low emissions, high resilience and more consumer-driven energy system. The transmission and distribution

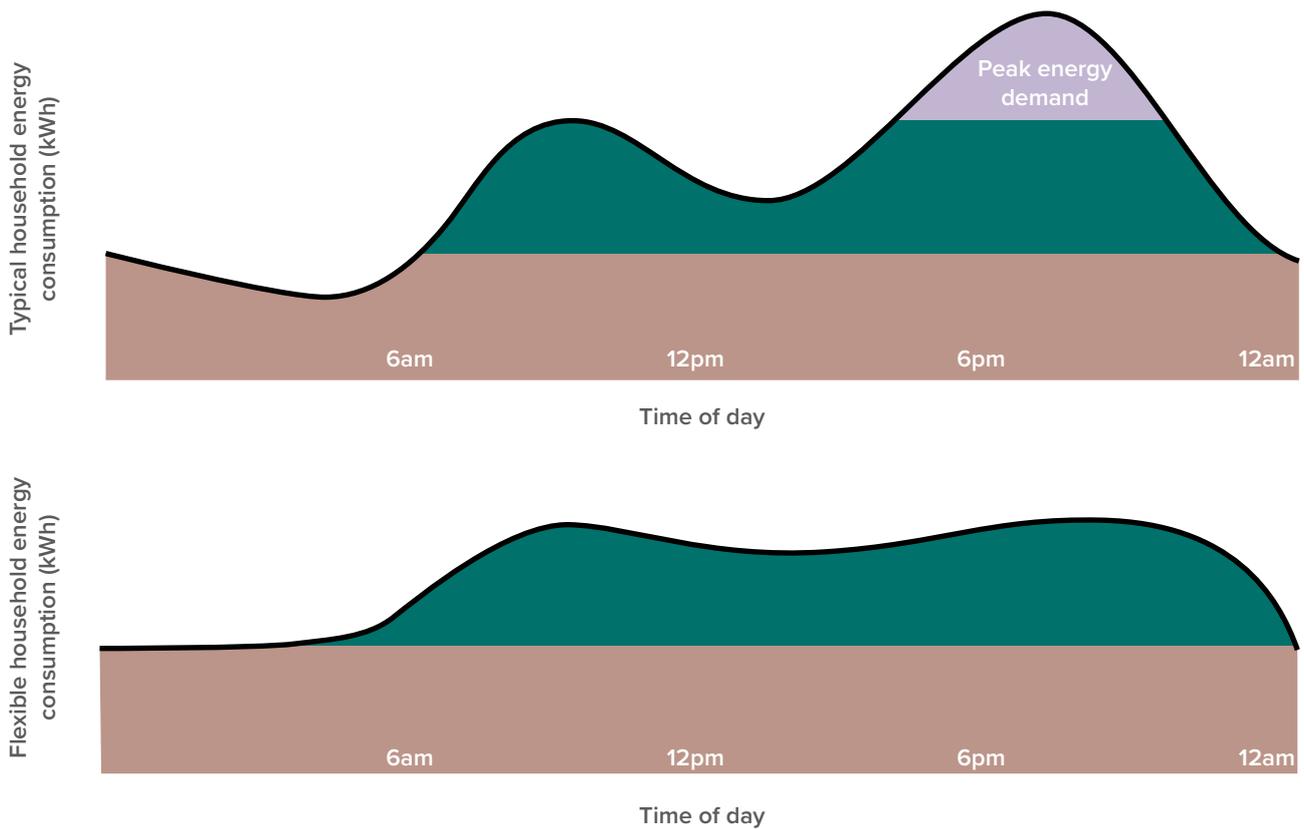
infrastructure that supports electricity flows will require investment and upgrades to manage CER, as well as the variability of wind and solar generation, and keep pace with growth and electrification.² The level of investment could result in significant increases to consumer electricity bills. In Queenstown alone, a transmission upgrade could result in bill increases of several hundred dollars per household per year in the next decade.³

The extent to which electricity production or consumption can be flexible can mitigate these rising costs. The ability to adjust output or load in response to external signals, such as prices, will be crucial for managing demand peaks, shown in Figure 1 below. By smoothing the curve, less investment in new large-scale generation, transmission and distribution infrastructure will be required.

² bcg.com/publications/2022/climate-change-in-new-zealand

³ transpower.co.nz/news/energy-plan-queenstown-includes-new-cromwell-queenstown-transmission-line

Figure 1: Comparison of peak household electricity demand vs. flexible household demand



In 2020, Transpower estimated every gigawatt (GW) of avoided peak demand would ultimately save consumers around \$1.5 billion. It also modelled that smart, managed, off-peak EV charging could reduce New Zealand’s winter evening demand peak by 1.9 GW (18 per cent) by 2035.⁴

The Energy Efficiency and Conservation Authority (EECA) has published more recent findings on the potential impact of demand side flexibility on the electricity system. It estimates this impact between 1.7 and 1.9 GW, or around 25 per cent of current peak electricity demand across Aotearoa. Applying Transpower’s estimate of \$1.5 billion in savings for every GW of avoided peak demand, this is a \$3 billion cost savings opportunity for consumers, due to avoided investment in generation and network infrastructure.⁵

The challenge and opportunity is to develop the markets and systems which make it easier to unlock the significant value of flexibility and return that value directly to Kiwis. Flexibility gives New Zealand households, organisations, businesses and communities choice and can enable them to play an active role in the energy transition.

In the next section, we describe how flexibility and demand response have been traded and incentivised to date in New Zealand via or alongside formal electricity market mechanisms. We find that the current settings limit the incentives to fully realise the value of flexibility as technology has evolved.

4 transpower.co.nz/about-us/our-strategy/whakamana-i-te-mauri-hiko-empowering-our-energy-future

5 eeeca.govt.nz/insights/eeeca-insights/understanding-the-full-potential-of-flexible-electricity-use-in-new-zealand/

Existing electricity market and how flexibility fits in

In Aotearoa, the existing electricity spot, futures, financial transmission rights⁶ and ancillary services markets were created by legislation and regulation from 1996 onwards.⁷ NZX, Transpower and Jade Software run or support market operations under contract for the Electricity Authority.⁸ The ASX is the authorised exchange for futures and options.⁹

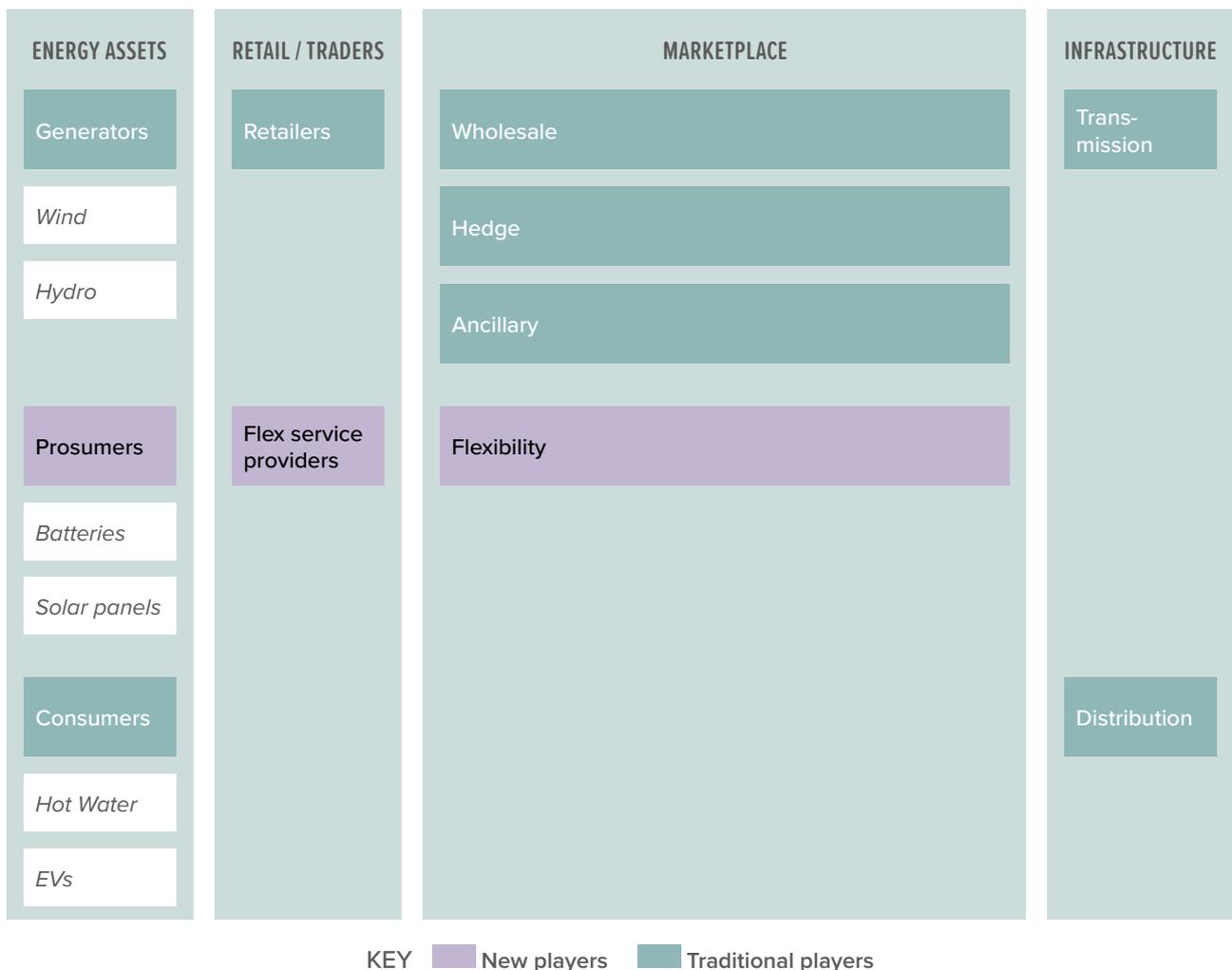
Figure 2 below contains a high-level schematic of these regulated and formalised markets for energy (excluding gas). The schematic shows how emerging, informal arrangements for trading flexibility sit alongside current market mechanisms.

Flexibility has been enabled or traded through a range of mechanisms over the past few decades in Aotearoa. It is incentivised via wholesale power prices, through distribution and transmission pricing and tariff structures, and has often been built directly into commercial contracts with large generators and industrial players.

Retailers are the original flexibility service providers (FSPs), as the actor sitting between wholesale markets and end-consumers. They can facilitate flexibility (demand response) and provide price signals via retail plans to encourage flexible energy use whether consumers have solar panels, batteries, EVs or not.

Electricity distributions businesses (EDBs) have also traditionally had a key role to play in incentivising flexibility via tariff design, including time-of-use and

Figure 2: New Zealand electricity market set up (simplified) that shows new players: prosumers with CER and flex service providers alongside existing market mechanisms. Throughout this paper, this diagram is built on to show the evolving mechanisms for trading flexibility.



6 ft.co.nz/

7 mbie.govt.nz/dmsdocument/178-chronology-of-nz-electricity-reform-pdf

8 ea.govt.nz/industry/mosp/

9 ea.govt.nz/industry/wholesale/hedge-market/

10 ea.govt.nz/industry/distribution/distribution-pricing/

on/off-peak tariffs. The Electricity Authority provides regular direction, guidance and scoring of EDBs' pricing practices to encourage cost-reflective and efficient price signals.¹⁰

Yet this space is becoming more contested, with new market entrants seeking to coordinate or manage CER or commercial and industrial load on behalf of consumers. These are often referred to as aggregators, virtual power plants or FSPs.

In the following section some of the main mechanisms to trade and incentivise flexibility, and their limitations, are set out for different consumer segments. We then turn to the users of flex: electricity distribution businesses and Transpower, and whether the current set up also meets their flexibility needs.

Residential and small commercial consumers

For most consumers that have invested in CER, their retailer traditionally sets a buy-back rate for any generation that is injected into the local network and not consumed on site. The retailer is the go-between for consumers and the wholesale market. This role helps to manage risk, so that consumers are not exposed to the downsides of wholesale price volatility. It also mutes price signals and captures much of the value of an investment in CER, particularly if that load is flexible and able to inject back into the grid during high price periods.¹¹

It is possible to shop around for more favourable buy-back rates¹², and retailers are developing more sophisticated time-of-use products, for example plans to encourage off-peak EV charging.¹³ Yet, there is no widespread, scaled-up programme to routinely and directly incentivise or reward everyday residential consumers or small businesses and organisations for flexibility.

In 2025, the Electricity Authority passed new rules requiring large retailers (with greater than five percent market share) to offer time-of-use pricing plans that offer consumers reduced rates for off-peak electricity use. Other changes will reward households with solar

and batteries that export to the network during peak times.¹⁴ The Authority is also currently considering increasing export limits for residential solar and battery installations from 5 to 10 kilowatts (kW). Since this rule change was proposed, some EDBs have voluntarily increased limits.¹⁵

Until late 2024, SolarZero was New Zealand's largest operational virtual power plant for everyday consumers (residential). Consumers signed up for solar and/or battery installations over a long-term period, sometimes more than 20 years.¹⁶ This plan, in partnership with Ecotricity as a retailer, enabled SolarZero to remotely manage consumers' solar and batteries. There was over 30MW in market when Ara Ake supported the Winter Peak Innovation Pilot with SolarZero and Transpower to test a coordinated response to tight residual capacity events in winter of 2023.¹⁷

Commercial and industrial customers

Large commercial and industrial consumers sometimes have bespoke arrangements with their retailers. Some can obtain favourable fixed-price, variable-volume retail rates as their large volumes enable retailers to directly link pricing arrangements with ASX futures trades.¹⁸ Nonetheless, commercial electricity rates have risen in recent years with contracts up for renegotiation as wholesale and futures prices have risen.

Other users may opt for direct spot market participation, also trading futures, over-the-counter (OTC) or via other bilateral contracts to manage risk.¹⁹

For large commercial and industrial players with the ability to adjust their load, commercial arrangements with generators or retailers that build-in demand response or flexibility can work out advantageously for both parties. The most significant example of this in Aotearoa is the New Zealand Aluminium Smelters' (NZAS) and Meridian Energy's on-going demand response arrangement, renewed in 2024, providing up to 185 MW during short-term supply constraints or high demand periods.²⁰

Both Enel X²¹ and Simply Energy also routinely participate in wholesale and ancillary services on behalf of commercial and industrial players, assisting these players to reduce, shift or shape their loads and arbitrage between high and low wholesale price periods or receive payments for ancillary services. For

11 rewiring.nz/symmetrical-export-tariffs

12 powerswitch.org.nz/solar-rates

13 powerswitch.org.nz/the-best-power-plans-for-charging-your-ev

14 ea.govt.nz/projects/all/energy-competition-task-force/

15 ea.govt.nz/data-and-insights/charts-and-dashboards/shift-to-10kw-export-limits/

16 solarzero.co.nz/solar-subscription/

17 araake.co.nz/project/wpip

18 There is a contract-for-difference disclosure obligation the Electricity Authority monitors to ensure pricing offered direct to commercial and industrial consumers is not materially different to what is being bid into the ASX futures market.

19 backend.meug.co.nz/assets/Documents/MEUG-Hedging-Documents-Large-User-perspective_May-2025.pdf

20 eeca.govt.nz/insights/eeca-insights/understanding-the-full-potential-of-flexible-electricity-use-in-new-zealand/

21 ea.govt.nz/documents/2529/Price_discovery_in_a_renewables-based_electricity_system_-_Options_Paper_-_Enel_X.pdf

example, Simply Energy supports Golden Bay Cement to offer flexible load into the ancillary services market as Interruptible Load.²² It also has contracts in place with both Synlait and Open County Dairy which pass through wholesale prices for electric boilers and switch over to fossil fuelled boilers when pricing is high.²³

Demand response initiated by electricity distribution businesses

New Zealand has a historic ‘ripple control’ scheme, operated by EDBs to remotely manage residential discretionary loads such as hot water cylinders, night store heating and pool pumps.²⁴ It can also be triggered by Transpower during a grid emergency.

A signal is sent to consumers’ smart meter (or ripple relay) that switches discretionary loads like electric hot water cylinders off when system supply constraints or peak demand require load reduction. Later, it turns the appliances back on. This is typically not detected by consumers, as heat is held by water for the short duration of the event.

Activating ripple and remotely controlling appliances on behalf of consumers during short periods reduces peak demand. Consumers benefit because a reduced tariff is offered via the hot water consumption ‘channel’ on consumers’ meters.²⁵ However, the event greatly benefits the system as a whole by reducing price spikes and managing supply constraints.

Ripple control is gradually being replaced by newer technologies to remotely control household appliances in New Zealand, some of which are retailer instead of EDB operated.²⁶

Transpower demand response programme

Transpower has piloted demand response since 2007. It ran an in-market demand response pilot programme that rewarded flexibility between 2015 and 2020.²⁷ This was not continued after 2020.²⁸ A fulsome review of the programme was provided by the Electricity Authority’s Innovation and Participation Advisory Group (IPAG) in 2021.

Today, Transpower has several demand-side, direct-to-market mechanisms available for large energy users or flexibility service providers. Of the four available, only Interruptible Load is active as it offers payment for services rendered.²⁹ SolarZero and Transpower tested the Dispatch Notification Load mechanism in the Winter Peak Innovation Pilot.³⁰

Transmission and distribution investment deferral

Transpower and EDBs are important potential buyers of flexibility services in Aotearoa. For these actors, flexibility services are often called non-network solutions (NNS) or non-transmission solutions (NTS) respectively, or simply alternatives. As an example, SolarZero was contracted to deliver peak demand reduction in the Upper Clutha region by Aurora Energy in 2021.³¹ This bespoke NNS arrangement is still operational.

NTS and NNS are currently procured on an ad hoc basis, typically via an EDB’s own website or the Government Electronic Tendering System (GETS). Transpower and EDBs may also use direct marketing strategies via Energy News and reaching out to known FSPs. Both Powerco³² and Aurora³³ had active tenders underway in late 2025. Transpower is currently actively seeking proposals for NTS in the Western Bay of Plenty and Upper South Island.³⁴

Potential respondents (flexibility service providers) report that previous Expressions of Interest or Requests for Proposal from Transpower and EDBs have been onerous in their terms, requiring levels of reliability or volumes that would-be sellers of flexibility have not been able to develop in the absence of on-going financial rewards, or even clear information about the prices that Transpower or EDBs might be willing to pay. Contract-length and lead time to prepare a response are also cited as issues for would-be respondents.

Flexibility service providers have also observed that whilst competition regulation incentivises EDBs and Transpower to consider NNS and NTS to find the least cost option for investment, in practice there is a persistent tendency to opt for ‘poles and wires’.

22 simplyenergy.co.nz/case-studies/golden-bay-cement/

23 simplyenergy.co.nz/case-studies/partnering-with-synlait-for-a-sustainable-energy-future/
simplyenergy.co.nz/case-studies/open-country-dairy-duel-fuel/

24 eeeca.govt.nz/assets/EECA-Resources/Research-papers-guides/Ripple-Control-of-Hot-Water-in-New-Zealand.pdf

25 For further context from an EDB perspective refer to: auckland.ac.nz/assets/business/our-research/docs/energy-centre/summer-school-2024-/Speaker-Slides---2024/UnlockinmaximumvaluefromNewZealandelectricitysystem.pdf

26 genesisenergy.co.nz/about/news/genesis-trials-hot-water-control-in-new-demand-flexibility-service

27 ea.govt.nz/documents/528/IPAG_review_of_Transpower_DR_programme_-_slide_pack.pdf

28 ea.govt.nz/documents/527/IPAG_review_of_the_Transpower_demand_response_programme.pdf

29 transpower.co.nz/system-operator/information-industry/electricity-market-operation/demand-side-participation

30 araake.co.nz/project/wpip

31 auroraenergy.co.nz/news/media-releases-news/aurora-energy-and-solarzero-partner-to-meet-future-growth-in-upper-clutha

32 powerco.co.nz/our-partners/flex-solutions/flex-solutions---mt-maunganui-gxp

33 gets.govt.nz/AURORA/ExternalTenderDetails.htm?id=31686130

34 transpower.co.nz/projects/wbop

In the past, EDBs and Transpower may have lacked the familiarity, understanding, trust or appropriate procurement mechanisms to compare and value flex against traditional solutions.³⁵ This has matured in recent years, yet coordination challenges remain significant for EDBs and Transpower. For example: sourcing the right type of flexibility project when and where it is needed and confirming it is the most economic option. EDBs also lack visibility at the low voltage level across their network when seeking out alternatives to poles and wires.³⁶

Transpower and EDBs may no longer insist on a reliable, mature flexibility offering before they are willing and able to procure and pay for services, given their regulated requirements to provide a certain level of service. Flexibility services may not need to be ‘as good as’ poles and wires in all scenarios. Flex does need to be in the right place at the right time though and could be better incentivised to show up where and when it’s needed. Reducing the need for a firm service level whilst gaining familiarity with new ways of working can also provide a way forward.

Commercialising flexibility innovation

A range of barriers exist to scaling up flexibility, but commercial viability remains the primary concern for

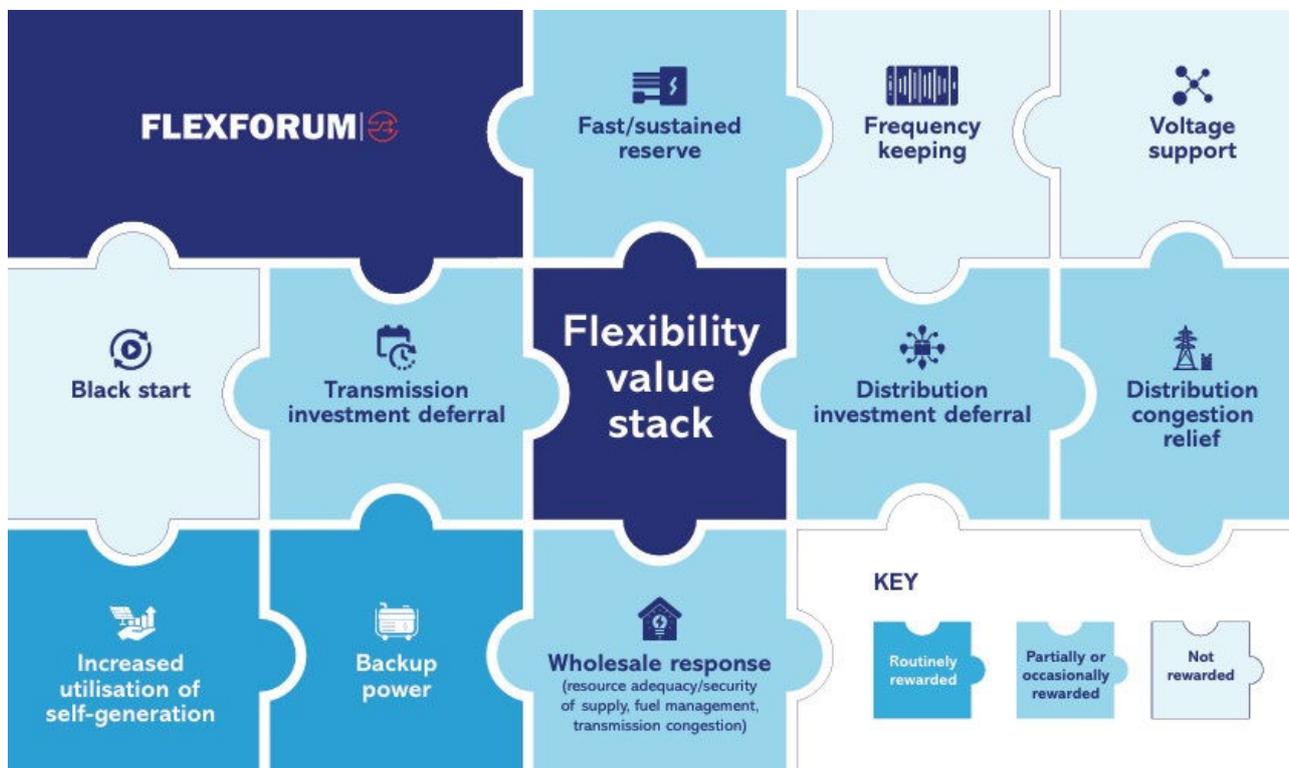
FSPs operating in New Zealand today.³⁷

FlexForum, an industry-led group committed to enabling flexibility uptake across Aotearoa for the benefit of Kiwi households, organisations, communities and businesses, identified the range of flexibility services and the extent to which these are rewarded, routinely, partially or not at all, via survey in 2024.³⁸ Refer to Figure 3 below.

The figure shows there is direct benefit in self-consuming or using CER as back-up power on-site. There are also some limited incentives via the wholesale market and some ancillary services. Also, some EDBs and Transpower are making occasional efforts to procure NNS and NTS to defer transmission and distribution investments, as outlined in the previous section.

Still, it’s evident that the existing mechanisms to incentivise, utilise and optimise flexibility are immature and incomplete. The FlexForum view is that the mechanisms which underpin the energy system are no longer fit-for-purpose. The existing pricing signals do not provide sufficiently granular temporal and locational signals required. There’s also no direct way to compare like-with-like and identify the highest value uses for flexibility.

Figure 3: FlexForum’s flexibility value stack, 2024



35 araake.co.nz/project/barriers-to-flexibility-uptake-innovators-perspectives

36 araake.co.nz/project/edb-challenge

37 araake.co.nz/project/barriers-to-flexibility-uptake-innovators-perspectives

38 flexforum.nz/filling-holes-in-the-value-stack-will-let-people-and-their-flexibility-do-more/

New and innovative flexibility service providers can help consumers operate and optimise CER or flexible loads, both large and small loads, in aggregate. They can introduce new technologies, including new devices to more effectively manage water or space heating or optimise EV charging in off-peak hours. They can potentially leverage all segments of the value stack to realise savings and return value to Kiwis.

But these innovators need assurance that compensation will materialise before investing in improving their service offering and bolstering the volume of their resources in kilowatt or megawatt terms. Most FSPs are currently focussed on other revenue streams, such as selling hardware. Some have looked to overseas markets, where flexibility is routinely and systematically rewarded by distributors or via a co-ordinated flexibility market mechanism. This may be a lost opportunity for the local energy transition, as innovators re-direct attention, investment, expertise and resources into developing offerings for overseas markets.

Evolving market settings

Nascent commercial arrangements and bilateral contracts for flexibility may evolve quickly in Aotearoa, becoming more common and diverse, as energy prices rise and grid upgrades appear on the horizon. This may in turn led to regulatory intervention to better coordinate trading. The creation of standardised contracts and a streamlined trading mechanism would even the playing field for flexibility buyers and sellers to trade fairly, competitively and transparently.

There are existing efforts underway, including the Electricity Authority's recent call for nominations for experts to co-design standardised demand flexibility products that could be used in the wholesale electricity market.³⁹ Standardised super-peak hedge products have also been trading since January 2025.

This new standardised demand flexibility product would only cover one use of flexibility and is only useful to players exposed to wholesale electricity prices. It's not clear whether this is the highest priority or highest value use of flex, yet it may provide significant price

relief over peak periods and offer a path to developing further products or formal market mechanisms. A whole-of-system assessment of price signals and mechanisms to trade is warranted, according to FlexForum.

The wholesale market mechanisms for trading flexibility do not address the transmission and distribution deferral challenge. In 2020, the Electricity Authority commissioned Sapere consulting group to conduct a cost-benefit analysis to identify the greatest potential contribution of CER to the New Zealand energy system.⁴⁰ It found that the greatest value use for CER, by a significant margin, is 'resource adequacy' related to avoiding investments in gas-fired generation, and transmission and distribution infrastructure that would otherwise be required to support the increase in peak demand resulting from greater electrification of the New Zealand economy over the next decades. Both Transpower and EECA have also identified this as a multi-billion dollar cost savings opportunity for Kiwi consumers, as outlined in this paper's introduction.

This is why so much attention is given to NNS and NTS, as well as the procurement mechanisms. Few meaningful, long-term contracts have been signed. Given the significant economic opportunity, an eventual shift towards more frequent, smaller, short-term and flexible contracting of flexibility may be warranted. This has been explored by the Electricity Networks Association in their work contrasting lumpy 'contract mode' with a more dynamic 'price mode' of trading flex.⁴¹

The challenge inherent in finding a middle ground between flexibility buyers' needs for a high level of service and flexibility sellers' needs for compensation before mature service offerings can be developed is a space that Ara Ake can help to bridge.

In the next section, we provide an overview of activities in the evolving flexibility innovation ecosystem and the role of emerging flexibility platforms in supporting EDBs and Transpower to procure flexibility.

39 ea.govt.nz/news/general-news/call-for-experts-to-develop-a-standardised-demand-flexibility-product-for-the-wholesale-market/

40 srgexpert.com/resource/distributed-energy-resources-understanding-the-potential/

41 ena.org.nz/assets/2024-Sept-Webinar-capability-roles-and-functions-presentation.pdf

Part 2: Overview of flexibility platform offerings in Aotearoa

What is a flexibility platform?

The Universal Smart Energy Framework (USEF) defines a flexibility platform as an IT platform where the trading, dispatch and/or settlement of flexibility is facilitated or coordinated.⁴²

Overseas, platforms including Localflex and Piclo have operational, local flexibility markets:

- **Localflex** was acquired from Centrica by Franco-German spot market operator EPEX Spot in 2021⁴³ and currently operates the localised flexibility market on behalf of UK Power Networks, the largest distributor in Great Britain.⁴⁴
- **Piclo** is UK-based and operates across the USA, Europe, and Australia, with over 30 GW of flexibility capacity on its platform.⁴⁵

Flexibility platforms aim to streamline, standardise and simplify the process for procuring and selling flexibility. Platforms can also provide transparency with regards to price and availability of resources, or how much a buyer is willing to pay. A platform can compare like-for-like offerings and enable aggregation of volume from multiple sellers to meet a buyers' needs without the complexity of multiple bilateral contract negotiations.

International precedents⁴⁶ suggest the following design principles be considered in developing flexibility platforms:

- Open to all market participants, barriers to entry are not discriminatory or overly onerous.
- Trading is competitive, transparent and visible, which helps reveal prices and drive competition.
- Operated by independent, neutral third parties without generation, transmission, distribution or retail interests (unbundled market).
- Services and products are standardised and technology agnostic.

- The process is streamlined and verified by transparent methods from initial bids through to settlement and confirmation of service delivery.
- Communications and data flows are commonly defined and interoperable.
- Integrated with existing markets and systems.

Platforms may provide some or all the following commercial and operational functions⁴⁷:

1. On boarding with user and asset registration
2. Visibility and availability with temporal and locational granularity
3. Procurement events and price signalling (e.g. auctions)
4. Contract matching
5. Dispatch signals
6. Verification of service delivered (including baselining)
7. Financial settlement and reporting

In the previous section a maturity gap was identified between what buyers like EDBs and Transpower need and what FSPs can currently offer without investment. This problem has been observed by others, including by the Electricity Authority's Market Development Advisory Group⁴⁸ and the FlexForum.⁴⁹

A platform or facilitated marketplace, even in a trial setting, can start to work through some of the challenges and roadblocks by aggregating smaller loads, standardising contracts with fair terms for both parties and building up familiarity with new processes. This 'learning-by-doing' is being supported by Ara Ake to accelerate market maturity and help FSPs commercialise.

42 usef.energy/

43 epexspot.com/en/news/new-trading-platform-boosts-epex-spots-localflex-offer

44 localflex.co.uk/home

45 piclo.com/about

46 List is adapted and expanded from the European Clean Energy Package 2019 and the Association of European Energy Exchanges position paper, A market-based approach to local flexibility – design principles, 2020: europex.org/wp-content/uploads/2020/02/20200212_A-market-based-approach-to-local-flexibility-design-principles_final-2.pdf

See also IEA research: iea-4e.org/edna/publications/overview-of-flexibility-platforms/

47 For a more exhaustive overview: energynetworks.org/industry/flexibility-services

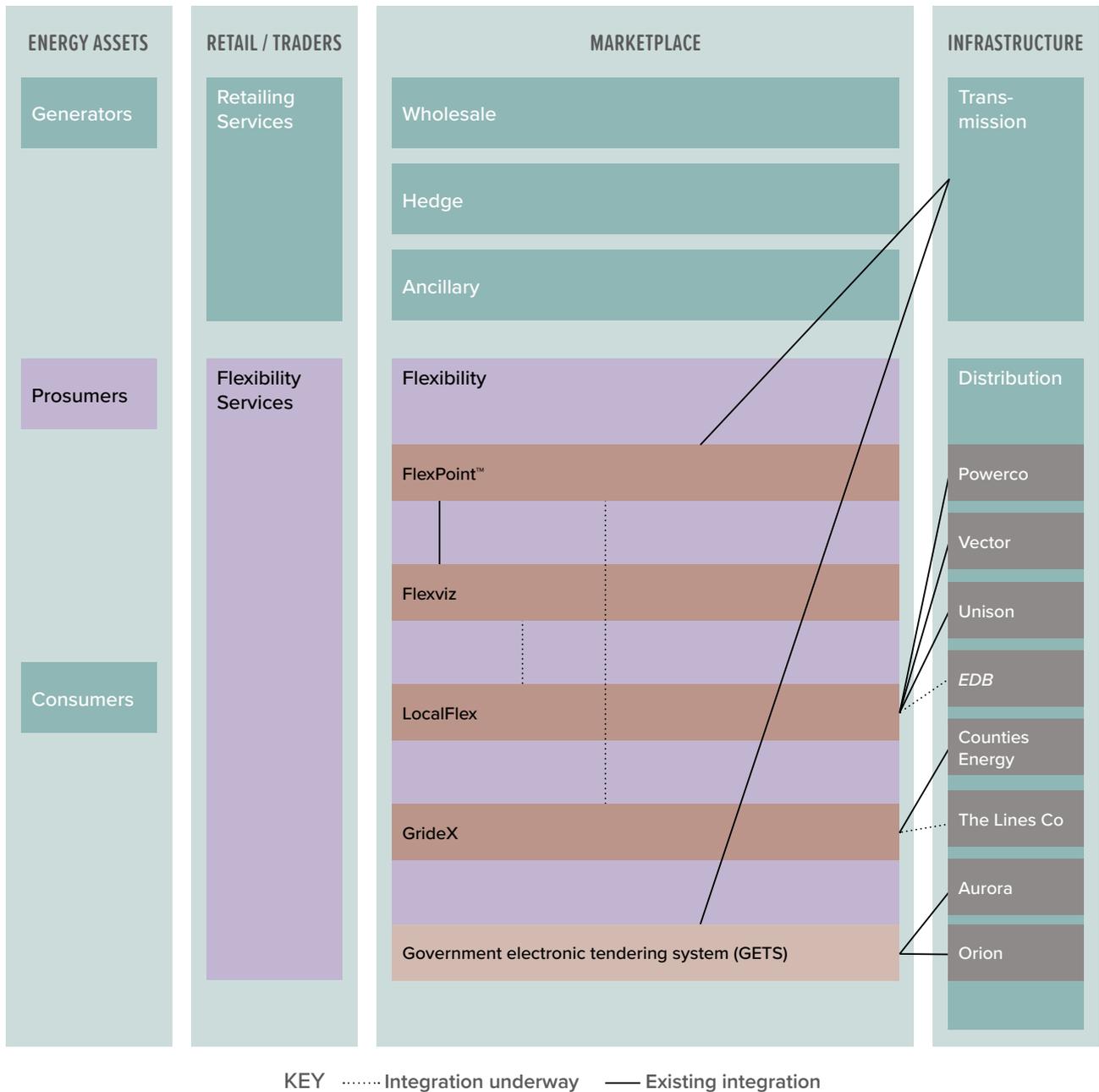
48 ea.govt.nz/documents/1095/03-Demand-Side-Flexibility-in-the-Wholesale-Electricity-Market-under-100-Renewables.pdf

49 flexforum.nz/filling-holes-in-the-value-stack-will-let-people-and-their-flexibility-do-more/

Flexibility platforms in New Zealand

There are four nascent flexibility platform offerings in New Zealand. The four platforms take slightly different approaches with regards to the type of buyer initially being targeted and ownership models. This is demonstrated in Figure 4. They also offer different functions, commercial, operational or both, in the flexibility marketplace.

Figure 4: Current flexibility platforms in Aotearoa including existing and in-progress integrations



Platform: LocalFlex⁵⁰

Delivered by: Our Energy (private software provider) and EPEX Spot (European energy exchange)

- LocalFlex is offered by Our Energy, an independent software provider with no existing market participant role (it exited the market as a retailer in 2024).
- It has worked with EDBs to understand their procurement needs and tailor a platform offering to meet these needs at a local network level. It's primarily a registration, procurement and contract matching platform. It does not currently offer operational functions such as dispatch, verification or financial settlement processes, but these are available in the LocalFlex platform suite of tools from European supplier EPEX Spot that has partnered with Our Energy to deliver LocalFlex in New Zealand.
- In January 2026, mock auctions were underway with participating distributors: Unison, Vector and Powerco, with a fourth EDB currently on-boarding. Registered FSPs number in the dozens.⁵¹

Platform: Flexviz⁵²

Delivered by: Cortexo Ltd (private software provider)

- Flexviz is delivered by Cortexo Ltd, an independent software provider with no existing market participant role.
- Flexviz is an OpenADR platform enabling real-time visibility of flexible resources at the Grid Exit Point (GXP) level. It is certified by the OpenADR Alliance for the OpenADR 2.0 standard. It's a 'shopfront' that shows potential buyers of flexibility where resource may already exist and could be mapped onto their location-based needs in real time. GXP granularity is most relevant to Transpower as System Operator. This platform is already integrated with FlexPoint™, Transpower's platform, which also operates in OpenADR.
- Cortexo Ltd currently has work underway to offer its functionalities in another common protocol, IEEE 2030.5.

Platform: FlexPoint™⁵³

Delivered by: Transpower (System Operator / Grid Owner)

- Locally developed and supported, FlexPoint™ is Transpower's Distributed Energy Resources Management System. It is a software platform that allows FSPs to enrol and offer their distributed energy storage, generation or demand response into the platform and for Transpower to call on these resources when needed.
- FlexPoint is an open access platform built around application programming interfaces (APIs) and is certified by the OpenADR Alliance for the OpenADR 2.0 standard.
- FlexPoint™ was first built to operate as an end-to-end solution for the demand response programme that Transpower ran under its regulatory control period 2 between 2015 and 2020.
- In 2024, Ara Ake and Transpower partnered to explore ways to enhance the visibility, coordination and measurement of flexibility resources for System Operator control room coordinators.⁵⁴ This is especially critical during periods of tight forecast capacity residuals. This resulted in a direct integration between Flexviz and Transpower's FlexPoint™ platform, allowing control room visibility of available flexibility when supply is tight.

Platform: GrideX⁵⁵

Delivered by: Counties Energy (EDB)

- GrideX is a CER orchestration platform under development by Counties Energy within its network area and underpinned by protocol IEEE 2030.5. Its development is part of its aspiration to become a Distribution System Operator (DSO), which would see it coordinate CER in real-time and convey information to the Transmission System Operator (TSO), Transpower.
- The details of technical integration between Transpower and Counties Energy is still under discussion and development between these two parties.
- Counties Energy also has a MoU with The Lines Company (TLC) to offer its GrideX solution within TLC's network.
- GrideX is currently integrated and being trialled with three energy retailers for the purposes of hot water management across Counties Energy network and multiple FSPs orchestrating 5MW of flexible resources currently with more volume in the pipeline for winter 2026. GrideX will also support Counties Energy's Flexible Connection service expected to go-live in April.

50 ourenergy.co.nz/flexibility

51 araake.co.nz/news/ara-ake-backs-13-projects-to-unlock-new-zealands-energy-flexibility

52 cortexo.com/flexviz/

53 transpower.co.nz/our-work/distributed-energy-resources/flexpoint

54 araake.co.nz/project/transpower-flex-visibility-project

55 countiesenergy.co.nz/energy-reimagined/

Platforms' commercial and operational functions

The four platform providers currently provide different functions across the chain-of-events needed for an end-to-end flexibility market. Some offer market / commercial layers and others offer operational / dispatch layers. This is shown in Figure 5 below. No single platform currently operates as an end-to-end solution in market. Each platform has the potential to offer all functions or complete the chain-of-events through effective integration with other platforms. And there is still the possibility of additional competitors entering New Zealand, such as Piclo (UK) or Nodes (Norway).⁵⁶

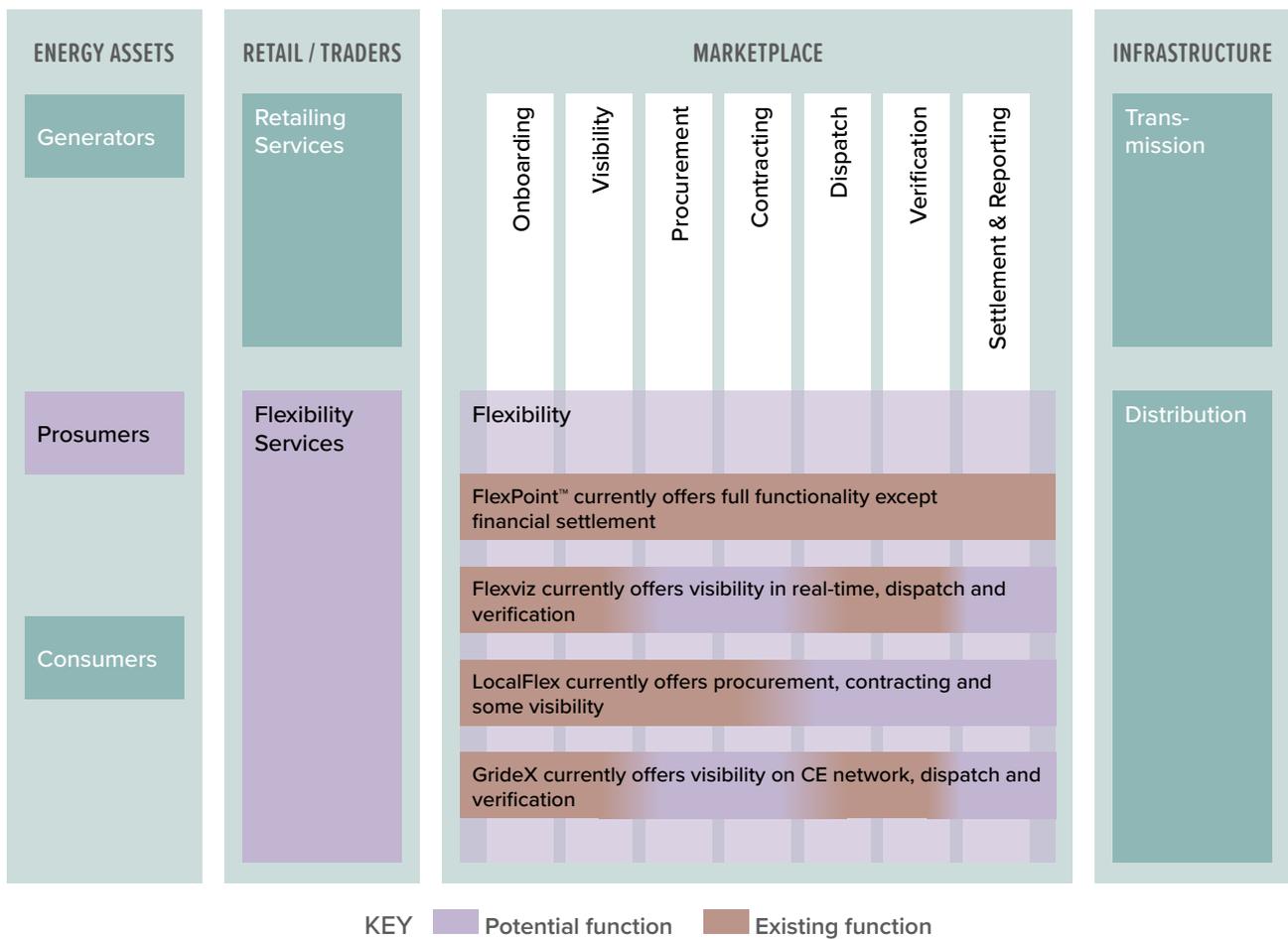
It should be noted that Figure 5 provides a simplified view, but integration may not proceed linearly across the chain-of-events. In practice, integration between different platforms may look more like a

web of interoperable solutions with commercial and operational functions offered by different providers within the market.

These high-level functions are⁵⁷: on-boarding FSPs and registering resources (may include pre-qualification of assets); visibility and availability at different locational and temporal granularities; procurement events, contracting and contract matching (across different possible products such day-ahead or forwards); signalling and dispatch; and settlement and reporting (including financial settlement via a clearing house such as the NZX).

Ara Ake has recently supported the exploration of an integration between Our Energy's and Cortexo's platform offerings given these platforms' synergies across commercial and operational functions. The design of this integration and possible options for next steps will be completed in 2026.

Figure 5: Flexibility platforms' existing versus potential functions. This diagram blends commercial and operational layers.



⁵⁶ [iea-4e.org/edna/publications/overview-of-flexibility-platforms/](https://www.iea-4e.org/edna/publications/overview-of-flexibility-platforms/)

⁵⁷ [energynetworks.org/industry/flexibility-services](https://www.energynetworks.org/industry/flexibility-services)

From trials to market roll-out

Ara Ake has provided funding in the form of both repayable and non-repayable grants to support flexibility innovators to demonstrate, deploy and commercialise their offerings since 2020. A full list of Ara Ake's flexibility-related initiatives is available in Appendix 1.

However, flexibility innovators, both service providers and platform providers, have reported that they are finding it unsustainable to participate in further industry pilots without compensation for flexibility services rendered, or at a minimum, recovering the full costs of participating in pilots since grants only go so far.⁵⁸

Innovators have also asked when pilots and demonstrations might evolve into lasting solutions for market deployment, or at least a workable minimum viable product (MVP) so that businesses can plan for the future. They need to see a clearer picture of future revenues to justify further investment in developing flexibility products and services.

Ara Ake's work to connect FSPs to the emerging flexibility platform offerings in 2025, under the banner of the Ara Ake National Flex Discovery Fund, was intended to accelerate the market towards commerciality. The platforms offer MVPs for how the future flexibility market might operate. Ara Ake will continue to focus on accelerating activities which move innovations from trial to market roll-out.

Ara Ake National Flex Discovery Fund 2025 (Round 1)

The flagship initiative, Ara Ake's National Flexibility Discovery Fund, made available up to \$1 million

in 2025. This aimed to support as many flexibility innovators as possible.⁵⁹ The Fund supported FSPs in becoming visible and discoverable to market participants on an open-access flexibility platform (Track 1). It also offered funding to FSPs already connected to a platform to scale or enhance the capacity or reliability of their flexibility offering (Track 2). FSPs could apply for both tracks in tandem.

The Fund resulted in 9 new connections to open-access flexibility platforms. Several FSPs opted to connect to more than one platform. The FSPs allocated funding were: Supa Energy, Octopus Energy, Flex-Able; PowerHub, Ecotricity, EWI Energy, Rinnai (Gridsmart), Evnex, Lastmyle, Cortexo, Counties Energy and Simply Energy.

In addition, five projects are underway under Track 2 to increase the capacity and reliability of flexible resources connected to these platforms, across diverse technologies: hot water controls, home energy management systems, remote, smart and fast EV charging, and commercial and industrial load.

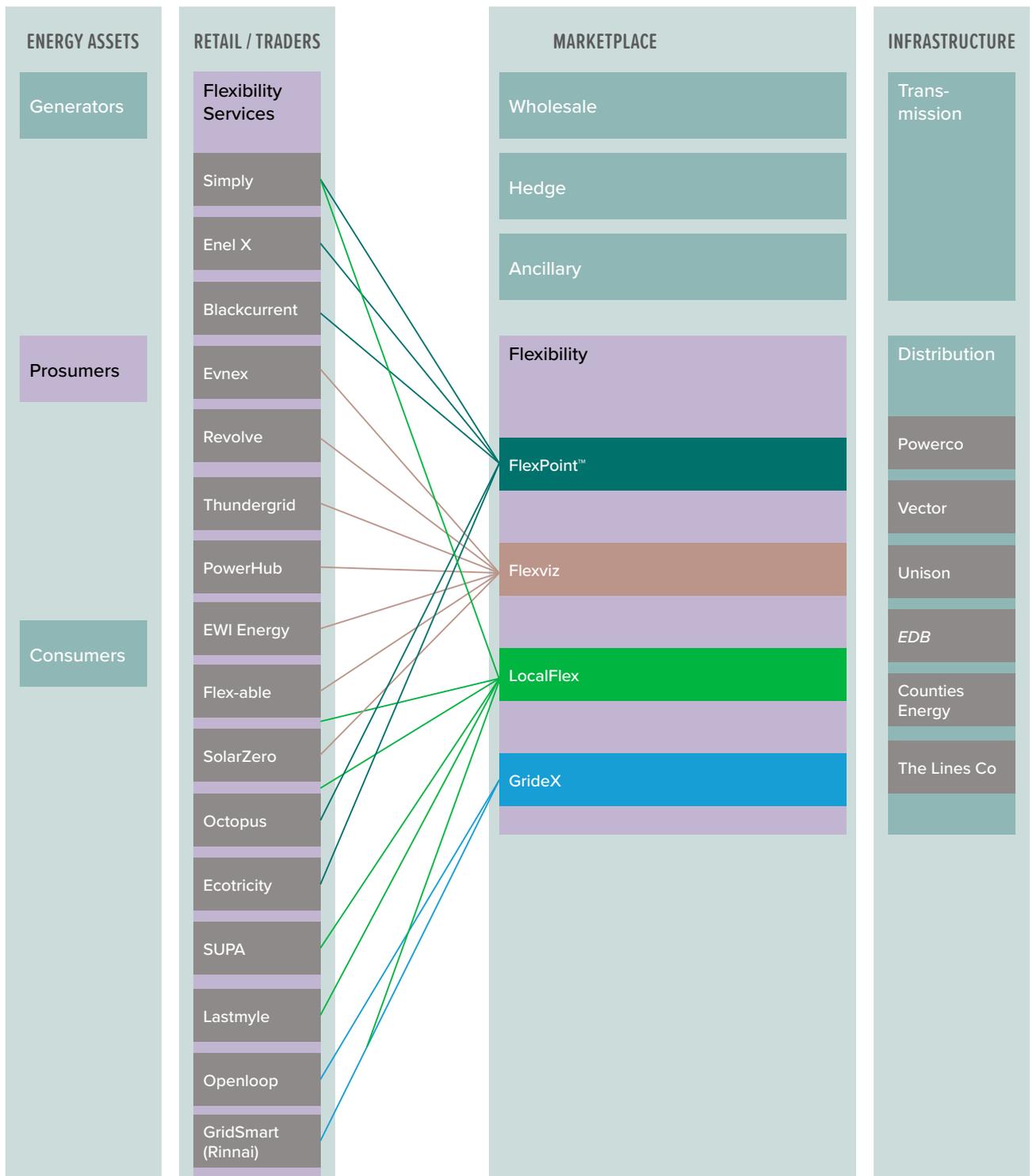
Ara Ake National Flex Discovery Fund 2026 (Round 2)

The National Flex Discovery Fund will be opened again in 2026 with expanded criteria and up to \$500,000 to be competitively allocated. Refer to the website for the most up to date information.

58 araake.co.nz/project/barriers-to-flexibility-uptake-innovators-perspectives

59 araake.co.nz/project/ara-ake-national-flex-discovery-fund

Figure 6: Flexibility ecosystem and platform connections emerging from National Flex Discovery Fund 2025. This is non-exhaustive and not all FSPs above were Flex Fund recipients.



Part 3: What's next for the Aotearoa flexibility market and platforms

The regulators have indicated that the options for how a future flexibility market might operate or be regulated are still open.

The conversation about Aotearoa's future flexibility market goes hand-in-hand with potential models for distribution system operation/operators (DSO).⁶⁰ It is not yet determined whether a centralised approach for coordinating CER and flexibility, led by Transpower, or a localised approach led by EDBs, will pan out.⁶¹ In 2025, the Electricity Authority explored a hybrid market set up in its consultation on DSO models.⁶² The submissions showed strong support from industry for the hybrid market model.⁶³

In the hybrid model, Transpower and one or more DSO would share responsibility for coordinating operational and commercial functions related to local flexibility markets. Figure 7 illustrates how DSOs and an independent flexibility market platform might exist alongside each other in a hybrid market model.⁶⁴

Originally, the Authority intended to publish a decision paper in the first half of 2026 confirming the DSO model for the New Zealand energy system. It has now pivoted to developing a cross-agency roadmap to support sector progress on developing DSO capabilities and functions.⁶⁵

A common, national flexibility market does not preclude multiple platforms operated by independent providers or DSOs co-existing alongside each other in a web of commercial and operational solutions. If these use common communications and data protocols, and are underpinned by successful digital and data architecture, this web can be seamless for both buyers and sellers of flexibility.

Nor should it preclude direct-to-market models or consumer-driven virtual power plants that leapfrog the need for any intermediaries between CER and the wholesale market. Interoperability standards will be key to successfully operating a hybrid market with diverse players and platforms, as consumers, FSPs and flex buyers should be able to easily switch between platforms or use them all if desired.

The downside of the hybrid model is if too many platforms or intermediaries emerge. This may not be too different from the current system where each of the 29 EDBs in New Zealand procure flexibility via unique and ad hoc tenders, if at all. Some level of rationalisation that allows for liquidity and transparency in future flexibility trading, and streamlined operations, seems likely.

60 ena.org.nz/assets/DMSDocuments/Potential-DSO-models-for-New-Zealand.pdf

61 ena.org.nz/assets/DMSDocuments/Potential-DSO-models-for-New-Zealand.pdf

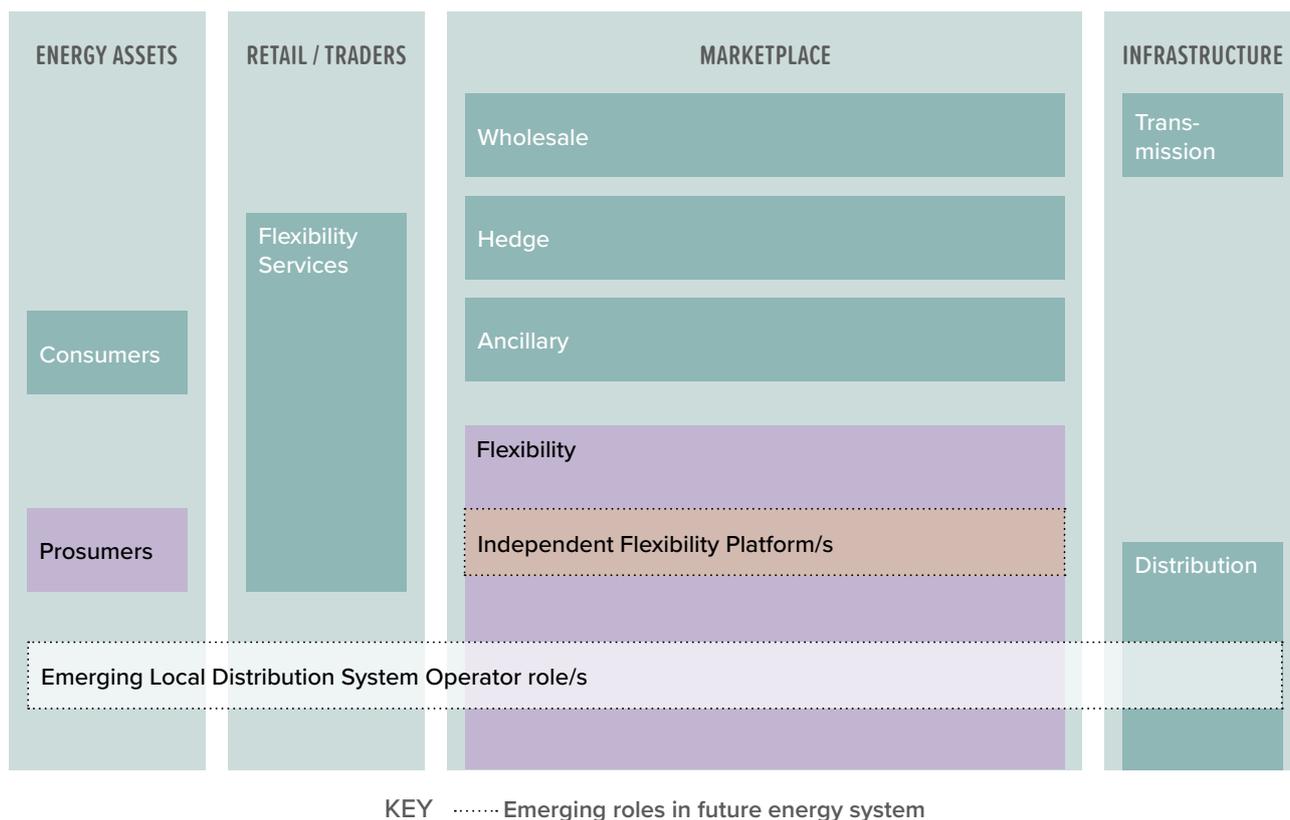
62 ea.govt.nz/projects/all/future-security-and-resilience/consultation/distribution-system-operation/

63 energynews.co.nz/news/electricity/835091/ea-finds-strong-support-hybrid-dso-model

64 transpower.co.nz/about-us/our-strategy/whakamana-i-te-mauri-hiko-empowering-our-energy-future

65 ea.govt.nz/projects/all/future-security-and-resilience/consultation/distribution-system-operation/

Figure 7: Evolving roles in the future energy system



The role of commercial trading platforms

It is not yet determined whether commercial platforms for trading flexibility will have a role in the future flexibility market, or whether industry and innovators are better off waiting for regulatory guidance.

The Electricity Authority has shown interest and support for new platform offerings via the Power Innovation Pathway and is currently actively monitoring the space.

The historical context, in New Zealand and overseas, shows that formal energy markets and trading platforms are often established by regulation. For example, the New Zealand Emissions Trading Scheme (NZ ETS) was set up under climate change legislation in 2008. Auctions are managed by the NZX and European Energy Exchange (EEX).⁶⁶

In some cases, trading platforms emerge commercially in response to a developing market need. A need that sees private players step in to play a seminal role in facilitating trading without responding to a government mandate or tender.⁶⁷

These players navigate some level of regulation during set up and face the likelihood of future regulatory requirements. Nonetheless the opportunity for such players can be significant as they may eventually become designated market operators and have the ability to inform and shape the evolving market settings. Here, Ara Ake has a role to play in supporting the commercialisation efforts of innovative players that see a future in operating a flexibility platform as a business.

International examples of commercial platforms in energy markets that followed this path include the first European energy exchange, Nord Pool, that was founded in Norway in 1993. Other exchanges were subsequently set up throughout the 2000s. The main trigger in most European counties was commercial interest, though there were some exceptions where a government mandate created an exchange, as in Spain, Portugal, Romania, Hungary.⁶⁸

66 etsauctions.govt.nz/

67 ceer.eu/wp-content/uploads/2024/04/C10-WMS-13-03a_EX-Oversight-Conclusions-11102011.pdf

68 ceer.eu/wp-content/uploads/2024/04/C10-WMS-13-03a_EX-Oversight-Conclusions-11102011.pdf

The companies that first established and ran these exchanges (e.g. Germany, Belgium, France, the Netherlands and the Nordic countries) did so as for-profit businesses charging fees to trading participants for providing the exchange services. They were eventually regulated and operated as nominated market operators. They remain successful, large-scale businesses in Europe today, some of which have merged and consolidated their offerings.

Examples of privately run markets in the New Zealand energy sector include BraveTrace's renewable energy certificates scheme.⁶⁹ This follows international standards for measuring and reporting on emissions, the Greenhouse Gas (GHG) Protocol.

Kiwi start-up Aotearoa Energy, founded in 2019, has developed an electronic derivatives platform offering hedge products not offered on the ASX, where NZ electricity future products are currently traded. It was the nominated provider for delivering the standardised super-peak product that started trading late January 2025.⁷⁰

The emerging, competitive platform offerings in Aotearoa's nascent flexibility market: Localflex, Flexviz, Gridex and FlexPoint™ offer innovative responses to emerging market needs and lean in to 'learning-by-doing' to accelerate the integration of CER and much-needed flexibility into our energy system.

At this point in time, options to trade and orchestrate flexibility remain open as the hybrid market model continues to emerge. In the latest round of the National Flex Discovery Fund, Ara Ake has introduced a new Track 3 focused on digitalisation opportunities that enable flexibility. The intent of this track is to enable new pathways for flexibility innovation as we continue to accelerate the commercialisation and deployment of energy innovation in support of Aotearoa's energy transition.

69 bravetrace.co.nz/

70 ea.govt.nz/news/eye-on-electricity/new-standardised-super-peak-hedge-product-has-improved-risk-management/

Appendix 1: Ara Ake flexibility innovation projects 2020-25

Short Term Objectives	Ara Ake Programme	Solution Area	Initiative	Description
Vibrant innovation ecosystem	Knowledge sharing and comms	Partnerships	FlexForum	Ara Ake has been a champion and supporter of the work of industry-led Flex Forum since its inception in 2022. Ara Ake provided seed funding to help the forum develop its Flexibility Plan, incorporate and write a constitution, grow its membership, shape collaborative initiatives and provide advice on regulatory changes. We continue to support flexibility innovators and forum members on their commercialisation journeys.
		Research	Barriers to flexibility uptake from the innovators' perspective	In 2024, Ara Ake commissioned a white paper which has identified that many flexibility service providers face significant upfront challenges and costs—such as integration, software development, and consumer engagement. To better understand the challenges facing flexible services providers (FSPs), Ara Ake commissioned a series of research interviews with a cross-section of innovators – from small startups to established industry players operating in the wholesale and reserves markets.
		Research	Flexibility Baseline Research	In 2025, Ara Ake commissioned a report from the University of Otago to understand which flexibility baselining methods are being used in Aotearoa and overseas and start a conversation about how flexibility services providers can prove deliverability and be rewarded for their services.
	Ara Ake Challenges	Visibility	EDB Challenge	Ara Ake ran a challenge event in 2022 for electricity distribution businesses to enhance visibility, coordination and measurement of activity, including consumer-owned energy resources, on the low voltage network. Both local and global energy innovators took part, enabling international collaboration and learnings.
		Peak demand management	Queenstown Flexibility Challenge	Ara Ake partnered with regional leaders in the Queenstown-Lakes District in 2024. The region is experiencing rapid economic growth and electrification, driving the need for significant investments to transmission and distribution infrastructure upgrades. By identifying both near and long-term opportunities to develop commercial or technology solutions that moderate demand peaks or enable demand response district, flexibility solutions have the potential to save or defer millions of dollars' worth of grid investments to meet regional demand growth.

Short Term Objectives	Ara Ake Programme	Solution Area	Initiative	Description
Deployment of innovative energy solutions	Pilots and testbeds	Electrification and CER uptake	Queenstown Electrification Accelerator	The Queenstown Electrification Accelerator was founded in 2025 with support from Ara Ake and other parties as a community-led electrification pilot project. Its goals are to achieve lower bills, lower emissions, and higher resilience through rapid and fair electrification throughout Queenstown-Lakes District and beyond.
		Peak demand management	Winter Peak Innovation Pilot	In winter 2023, Ara Ake, Transpower and SolarZero partnered to demonstrate that distributed energy resources in the form of residential solar batteries can be dispatched into the wholesale electricity market via a Virtual Power Plant (VPP) to address winter peak events where the forecast capacity residual is tight.
		Open communication protocols	FlexTalk	Led by the Electrical Engineers Association and Energy Efficiency and Conservation Authority in 2023 and 2024, with Ara Ake participating in the steering committee, this pilot tested the interoperability of a two-way common communication protocol, in this case OpenADR , between electricity distribution firms and flexibility suppliers, including EV smart chargers.
		Visibility	Flexviz	Following the success of FlexTalk, Ara Ake provided support for an OpenADR-based platform developed by Cortexo Ltd in 2024. Flexviz enables real-time visibility of available flexibility resources for participating flexibility service providers at grid-exit points around New Zealand. This platform can provide dispatch services. It is currently developing further functionality in IEEE 2030.5 for delivery in early 2026.
		Visibility	Transpower Flex Visibility Project	In winter 2024, Ara Ake partnered with Transpower to explore ways to enhance the visibility, coordination and measurement of flexibility resources, such as household solar and battery systems, within the electricity system operator control rooms. This saw the Flexviz platform integrated with Transpower's own distributed flexibility management system the OpenADR-enabled FlexPoint™ platform.

Short Term Objectives	Ara Ake Programme	Solution Area	Initiative	Description
Deployment of innovative energy solutions	Pilots and testbeds	Accessibility, competition	Multiple Trading Relationships	<p>Since 2021, Ara Ake has led a programme of trials and research considering how Multiple Trading Relationships (MTR) can help to integrate distributed energy resources into the electricity system. Enabling MTR in regulations would give consumers the option to contract with more than one supplier for electricity services at their home, organisation or business. This model offers flexibility without requiring significant changes to existing electricity metering setups.</p> <ul style="list-style-type: none"> The Kāinga Ora Multiple Trading Trial remains underway in the Wellington region. It allows the excess solar generation from Kāinga Ora homes with solar installed (what is not consumed on site) to be monetised by Kāinga Ora and reinvested into maintenance and further energy hardship reduction measures. The Franklin Energy Sharing Pilot is due to go-live in 2026 and enables peer-to-peer trading of solar energy and the use of community batteries.
		Visibility, pricing and matching	LocalFlex Market Platform	<p>Under development by Our Energy Ltd since 2023, the LocalFlex market platform optimises for the procurement and contracting of flexibility services by electricity distribution businesses. In 2025, Our Energy partnered with European energy exchange and platform provider EPEX Spot to develop this offering further. In early 2026, three EDBs participated in mock auction events alongside on-boarded flexibility service providers. The platform's market launch is due in 2026.</p>

**Ara
AKE**

Future
Energy
Development

Address: 8 Young Street, New Plymouth 4310

Email: info@araake.co.nz

www.araake.co.nz