

Statement of Intent

1 July 2021 – 30 June 2025

Amendment 19 June 2023

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Foreword

The electricity sector has a major role to play in New Zealand's shift to a low-carbon future. As the sector drives towards more renewable electricity, a decarbonised system will support the accelerated electrification of transport and heat – the most significant contribution to New Zealand achieving net-zero carbon by 2050.

Regulation must keep pace with the sector and enable the transformation under way. People want certainty and they want to know how they can work with the regulator to both enable and safeguard the sector through the next few years. That's why our role is critical now and into the future.

The sector no longer enjoys a predictable and relatively stable environment. Like other industries, we are grappling with increasing uncertainty due to external shocks, including a global fuel shortage and escalating climate concerns. It is imperative the Electricity Authority balances our oversight of immediate supply issues with our focus on strengthening regulatory settings to incentivise investment, competition and the right market behaviours.

Most importantly, consumers should expect and receive a reliable and affordable electricity supply. The public should have confidence in the system, and it's our job to make sure the market and participants, including our service providers, deliver on behalf of all New Zealanders.

The Electricity Industry Amendment Act 2022 gives the Authority clearer powers to protect the interests of small electricity consumers in relation to their electricity supply and increases our ability to hold industry participants to account. This will be an important focus for the Authority over the next year.

PREPARING FOR THE FUTURE

Moving to highly renewable supply will have major implications for future security and resilience of the power system in (or close to) real time. This is the focus of the Authority's Future Security and Resilience project – a key initiative expected to run for several years and have very significant long-term implications.

The Future Security and Resilience project is developing a system that will continue to be both reliable and secure in the future, while the Market Development Advisory Group is investigating how the wholesale electricity market might operate with an electricity supply that is 100 percent renewable.

Additionally, distribution companies have an important role to play in reinforcing the importance of the demand response in the transition to a low-emissions energy system, and the Authority is working to ensure the future security and resilience of distribution networks in the coming decades.

While we look ahead, we also need to learn from the past and deal with the short and medium term. We are working with industry to implement additional changes to provide an extra layer of protection ahead of winter peaks. The challenge is not so much a lack of fuel – we're starting to see a variety of sources coming into the system, including wind and solar. The challenge is balancing those more intermittent generation sources with the incumbent slow start thermal units and the operational coordination required to balance supply.

STRATEGIC AMBITIONS

All this important work is anchored to the Authority's 2020 strategy that was designed alongside industry, agencies and other interested parties. The output was a strategy that included five strategic ambitions that reflected not just the Authority's focus but also that of our stakeholders.

- **Consumer centricity** to guide regulation and the industry.
- **Low-emissions energy** to electrify the economy.
- Building **trust and confidence** in the industry for all stakeholders.
- Having **thriving competition** delivering better outcomes for New Zealanders.
- Seeing **innovation flourishing**.

These ambitions are still relevant and pressing today and will continue to guide the Authority over the next year.

The shifts our stakeholders expected from us in 2020 and that informed the five strategic ambitions are not dissimilar to the themes that emerged during our 2022 stakeholder perception survey: pragmatism, certainty, future focused and greater collaboration.

We are under no illusion that we can regulate for the future in isolation, and relationships with sector participants and other agencies are critical for regulatory certainty. That's why we're committed to improving our engagement with industry, consumers – large and small – iwi and capturing diverse voices to support informed decisions.

As a medium-sized agency regulating a complex and divergent industry with a key role in the Government's low-emissions aspirations, we will need to increase our capability and capacity to stay ahead of change and respond to our stakeholders' expectations of the regulator.

We need diverse experience, perspectives and capabilities to support us to work closely with the sector. Diversity will be essential as we seek to build trust and confidence in the market, the sector and ourselves.

We have requested an increase to our baseline to support the required uplift in capacity and capability. The baseline review is under way, and we are optimistic about the outcome, which we expect around the middle of 2023.

We look forward to working with the Board, including our two new Board members Paula Rose and Erik Westergaard, Authority staff and stakeholders to drive and respond to necessary change while providing regulatory predictability over the next few years.



Dr Nicola (Nicki) Crauford

Chair

19 June 2023



Allan Dawson

Member

19 June 2023

Introduction

Electricity is essential to modern life – its potential to support improved social, economic and environmental outcomes is significant.

BACKGROUND

On 1 November 2010, the Electricity Industry Act 2010 (the Act) established the Electricity Authority (the Authority) as an independent Crown entity and regulator of the electricity industry.

The Act sets out our statutory objectives and functions and authorises the making of regulations and the Electricity Industry Participation Code 2010 (the Code). The Code sets out the rules for the electricity industry.

In addition to the Act, two key pieces of legislation are applicable to our work:

- The Public Finance Act 1989 defines the key accountability requirements for the state sector.
- The Crown Entities Act 2004 provides the specific planning and reporting requirements for Crown entities.

Over the past 10 years, the Authority has successfully combined the functions of rule making and rule enforcement to regulate how the market operates and to support incentives for industry investment and development.

In this time, we have introduced a suite of market-based tools, reduced barriers to competition and, most notably, navigated dry-year risks. Through incremental changes to regulation, the Authority has made a significant contribution to New Zealand's 85 percent renewable profile while ensuring a reliable supply of electricity.

The Authority has advocated for increased competition – with sound enforcement of market rules to further a competitive industry culture and delivery of intended outcomes for consumers. Our pricing reform projects aim to achieve prices that reflect the true cost of the service provided and in doing so send the right signals to potential investors and foster innovation and the uptake of technology.

Incremental and consistent regulatory change will support reliable and affordable electricity over the long term.

Electricity Industry Amendment Act 2022

On 31 August 2022, the Electricity Industry Amendment Act 2022 received Royal assent.

The Amendment Act implemented a number of recommendations from the 2019 Electricity Price Review¹ and ensures our governing Act provides an effective regulatory framework for the electricity industry. In particular, it gives us the ability to respond quickly to technological changes and promote competition and innovation in emerging markets.

It also introduced an additional statutory objective for the Authority – to protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to these consumers. For more information on the additional statutory objective, see page 15 of this Statement of Intent.

Accountability Statement

This Statement of Intent is a public accountability document required under sections 139 and 141 of the Crown Entities Act 2004. It outlines our long-term strategic intentions for the period 1 July 2021 to 30 June 2025. The Statement of Intent may be updated at any time, but no later than 1 July 2024.

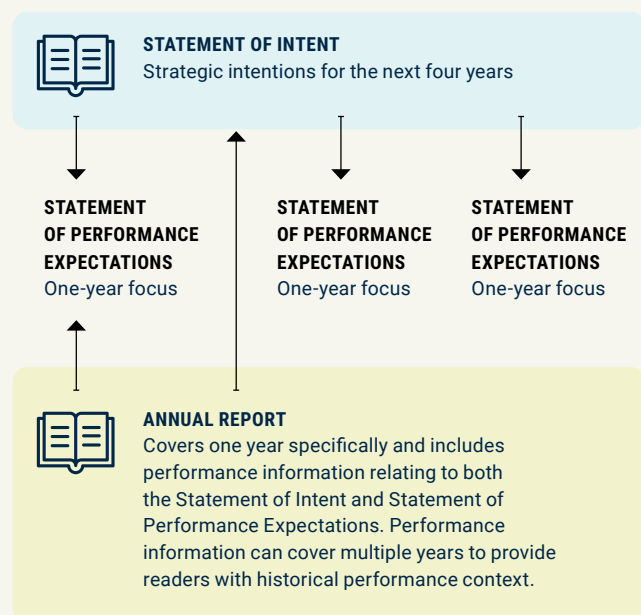
This Statement of Intent was amended on 19 June 2023, to incorporate the Authority's additional statutory objective, which came into effect on 31 December 2022.

¹ New Zealand Government (2019), Electricity Price Review Final Report. Available online at: www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-consultations-and-reviews/electricity-price (accessed February 2023).

For detailed financial and non-financial performance information, please see our Statement of Performance Expectations, which is published annually and is available on our website. For further information about our work, visit www.ea.govt.nz.

Planning and reporting cycle

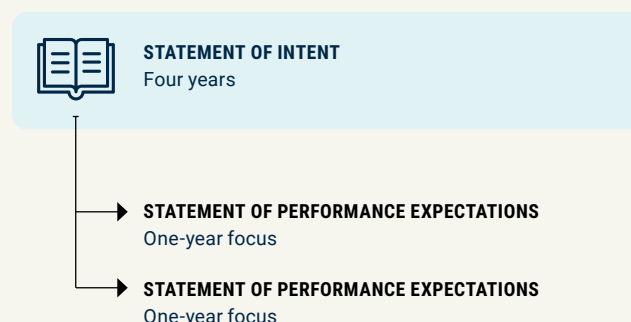
The diagram below sets out how each of our key publications fits into our planning cycle.



ELECTRICITY IN NEW ZEALAND

Over the past 20 years, New Zealand’s electricity market has been praised domestically and internationally – it is considered world leading. During this time, the Authority’s work embedding a market-based regime has delivered significant benefits that other jurisdictions can only envy. The International Energy Agency (IEA) said in its 2017 review of New Zealand’s energy policies:²

With its unique resource base, New Zealand is a success story for the development of renewable energy, notably hydro and geothermal, without government subsidies. Geographically isolated, New Zealand has developed robust policies for security of supply.



2 International Energy Agency (2017) Energy Policies of IEA Countries: New Zealand 2017 Review. Available online at www.iea.org/reports/energy-policies-of-iea-countries-new-zealand-2017-review (accessed February 2023).

New Zealand also regularly features in the top 10 of the World Energy Council's energy 'trilemma' index ranking.³ This reflects our strong balance of energy security, energy equity and environmental sustainability.

We have high levels of system reliability and efficiency, the competitive wholesale and retail markets provide consumers access to increasingly efficient pricing and approximately 86 percent of our electricity already comes from renewable sources. It's also one of our most capital-intensive industries with around \$7-9 billion spent on electricity per year.

In New Zealand, there are:⁴

- 1.83 million residential consumers
- 189,000 commercial consumers
- 86,400 agriculture, forestry and fishing consumers
- 51,400 industrial consumers.

There is significant opportunity for electricity to play a bigger role in helping Aotearoa New Zealand grow, meet its challenges and support its economy.

DRIVERS OF OPPORTUNITY

Electrification to combat climate change

The Government's emissions reduction plan sets out how Aotearoa New Zealand will reduce our impact on the climate. The transition to a low-emissions economy is a significant opportunity to improve Aotearoa's economic prosperity, lower the cost of living, restore nature, address inequality and improve living standards for all New Zealanders.

Electrification is key to reducing the emissions from New Zealand's wider energy system and economy. While the emissions from the electricity sector are already relatively low, the share of renewables in total primary energy supply reached only 40.7 percent in 2021. Much more renewable generation of all scales is needed – especially to transition away from fossil fuels used in heat and transport.

The Authority has a critical role to play in the transition to low-emissions energy, supporting the decarbonisation of the electricity industry, and in doing so the decarbonisation of all New Zealand. We are already working hard to ensure that the transition occurs efficiently over the coming decades, and that New Zealanders have trust and confidence in the ability of the system to remain affordable and reliable as it carries a greater responsibility for New Zealand's energy needs.

Wellbeing, affordability and energy as an economic driver

The Economic Plan for New Zealand 2022 describes the Government's vision for a productive, sustainable and inclusive economy. It articulates the key economic shifts required to improve the wellbeing and living standards of all New Zealanders. Sustainable and affordable energy systems are key shifts required to achieve this vision.

Energy systems and consumer behaviour

As technology and society progress, so does disruption to traditional electricity business models. Changes in consumer behaviour, electricity generation, consumption, storage and the use of smart technology will influence evolution of our energy system, including multi-directional power flows on networks.

³ World Energy Council (2022) World Energy Trilemma Index 2022. Available online at www.worldenergy.org/assets/downloads/World_Energy_Trilemma_Index_2022.pdf (accessed February 2023).

⁴ Ministry of Business, Innovation and Employment (2022) Electricity Statistics: Data tables for electricity Quarter 3 (September) 2022 figures. Available online at: www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/electricity-statistics/ (accessed February 2023).



Our purpose

We guide the nation's electricity system on behalf of all New Zealanders – promoting positive consumer outcomes today and ensuring continued enhancement and reliability for future generations.

Our work provides the platform from which electricity can be used to make things better.

We are the **kaitiaki of electricity**.
Our purpose is to **enhance**
New Zealanders' lives,
prosperity and environment
through electricity.

Electricity regulation is the tool through which we can contribute to wider outcomes. Electrification of the wider energy system will play a key role in the transition to a low-emissions economy.

Electricity is an enabler – a mechanism for change and progress.

Electricity plays a critical role in the quality of our lives and businesses, the state of our environment, strength of our communities, performance of our economy and the nation as a whole.



Our place in the energy system

THE ROLE OF REGULATION

An independent regulator is appointed by Government to govern or manage complex systems on behalf of the public. The intent is for the regulator to steward the system so that it produces desired or beneficial outcomes that might not occur naturally through pure market forces.

Regulators are often now expected to think more broadly about the wider environment and the interaction of their sector with others – considering long-term economic, social, cultural and environmental implications together – and embed principles of the Treaty of Waitangi to ensure the right rules are in place that both enable and guide change.

Electricity industry regulation

The Authority was established as an independent Crown entity to regulate the electricity industry for the long-term benefit of consumers.

Our primary function is to regulate New Zealand's electricity system and markets, enforcing the rules and holding industry participants to account through active monitoring and enforcement. Where required, we facilitate the development and enhancement of the markets to ensure their robustness and the delivery of long-term benefits to consumers.

Acting as kaitiaki, our regulatory stewardship aims to both protect the progress and strengths of New Zealand's electricity system for generations to come and ensure industry participation continually builds new strengths and adds value as it delivers the outcomes for consumers Parliament expects of us.

Our independence is valuable for promoting high-performing electricity markets – reducing the risk of intervention and increasing predictability in how the regulatory regime operates. This is important for sectors like electricity which are technically complex and rely on long-lived, capital-intensive investments.

While this means we give advice rather than take direction, we are attuned to the external environment in which we operate and the Government's key priorities.

Our work needs to meet the requirements of legislation and best-practice guidance provided by central agencies,⁵ the Office of the Controller and Auditor-General and Audit New Zealand.

The benefits of high performing markets

In large, dynamic and interconnected systems the task of coordinating decision making between a large number of parties is a complex activity. Markets are crucial – bringing together the breadth of economic participants and, through their interactions and response to price and demand signals, driving towards efficient allocation of system and economic resources to achieve desired outcomes.

Electricity is fundamental to our way of life. New Zealand's high-performing electricity markets play a key role in contributing to the overall health and efficiency of the economy – creating both benefits for end consumers and pathways for growth, innovation, greater service and efficient infrastructure investment and ultimately a cost-effective transition to low-emissions energy.

To increase their performance and realise the benefits of competition, markets require regulatory certainty and long-term investment confidence. This is supported through greater transparency of market information, predictable regulatory change and sound enforcement of market rules.

⁵ The central agencies are Te Tai Ōhanga The Treasury, Te Kawa Mataaho Public Service Commission and Te Tari o te Pirimia me te Komiti Matua Department of the Prime Minister and Cabinet.

For over 20 years, the wholesale spot market has operated effectively in providing signals for efficient generation investment, including managing dry-year risk when the lakes used for hydro-electric generation have less water. This has been supported in more recent years by well-functioning hedge markets which provide parties with the means to enter into forward contracts for purchasing electricity, and the ancillary services markets, which are used to ensure New Zealand's electricity system is stable and reliable.

This approach also delivers for consumers. Consumers can now choose from many different retail brands, plans and packages on offer. Switching between providers is relatively easy and quick, and New Zealand has one of the highest switching rates in the world.

Who and what we regulate

Nearly every aspect of the electricity industry and participant type is covered in the Code, including:

- generation of electricity
- wholesale electricity market
- transmission via the national grid
- system operation
- security of supply
- market arrangements
- metering
- distribution via local networks
- retail electricity market.

Did you know? – We create tier three legislation

Levels of legislation		Who creates the legislation
Tier 1	Acts of Parliament	Parliament sets rules through Acts of Parliament. The Electricity Industry Act 2010 (the Act) is the primary Act that relates to our work.
Tier 2	Regulations	The Government sets rules through regulations. While the Authority may provide advice on regulations and Acts in relation to the electricity sector, this work is mainly done by the Ministry of Business, Innovation and Employment (MBIE).
Tier 3	The Code	The Authority sets rules for the electricity sector through the Electricity Industry Participation Code 2010 (the Code).

OUR FUNCTIONS – THE THINGS WE DO

The Act sets out our functions, describing the activities we perform and the tools through which we can pursue our statutory objective and ambitions. They can be summarised into five main functions.

Operate the electricity system and markets

We are responsible for the day-to-day operation of the electricity system and markets. To achieve this, we contract out some services including the role of system operator which provides the real-time coordination of sending generated electricity across the national grid to meet demand from consumers.

Monitor, inform and educate

Transparency and understanding are vital to the operation of the electricity markets. Our market monitoring, information and education work focuses on making data, information and tools available, increasing participation, and improving awareness of how electricity markets function.

Enforce compliance

We ensure the Act, regulations made under the Act, and the Code are followed by electricity industry participants. Our compliance function also helps improve the industry more generally, as lessons learned support our education of participants, and help us to identify and resolve on-going or systemic issues.

Promote market development

To enable New Zealand's electricity markets to deliver better outcomes for consumers we maintain a responsive regulatory environment that both reflects industry's current state and supports innovation and change. Key tools for market development include market facilitation measures and amending the Code.

Protect the interests of small electricity consumers

We undertake actions to protect the interests of domestic and small business consumers in relation of the electricity supply to those consumers. This includes monitoring how electricity retailers and other industry participants deal with small consumers, including medically dependent and vulnerable consumers.

The combined function set gives us a range of levers to promote certain behaviours or outputs from the sector.

Our annual Statement of Performance Expectations details our intended operations for the financial year and the measures we use to monitor performance for each function. We publish the results every year in our Annual Report.

STATUTORY OBJECTIVE – WHAT WE ARE ACCOUNTABLE FOR

The Act gives us the **main statutory objective** to promote competition in, reliable supply by, and efficient operation of, the electricity industry for the long-term benefit of consumers. The statutory objectives are what we are accountable to deliver.

Competition

Competition helps ensure New Zealanders have plenty of choice about how they get and use electricity and improves their access to competitive pricing. We encourage competition in all electricity-related markets, right across the supply chain, taking into account long-term opportunities that will lead to better outcomes for consumers.

Reliability

Reliability is important because homes and businesses depend on a continuous supply of electricity. We seek reliable day-to-day and long-term security of electricity supply for consumers. Our regulatory focus on reliability will become even more important as the country reduces emissions through increased electricity use.

Efficiency

When efficiency is high, electricity system resources and investments are focused in the right areas and costs to operate the system can reduce and become more flattened. Ongoing innovation and improvements help create greater efficiency. For a consumer, greater efficiency should translate into more affordable electricity and services.

The Electricity Industry Amendment Act 2022 amends section 15 to also set out the **additional objective**, which came into force on 31 December 2022.

Protection of small consumers

Protecting the interests of domestic and small business consumers is key to ensuring that all New Zealanders have access to the electricity they need. Our focus is on the conduct and dealings that electricity retailers and other industry participants have with small consumers where an imbalance of power could result in adverse outcomes for those consumers.

We use our statutory objectives **competition, reliability and efficiency** as well as the **protection of small consumers** to drive the delivery of our strategy. Details of our strategy and how it aligns with our statutory objectives are set out on the following pages.

Our Strategy

We have been successful in promoting strong, competitive markets. Now, we're thinking more broadly to ensure our regulation responds to a changing world.

STRATEGIC FRAMEWORK

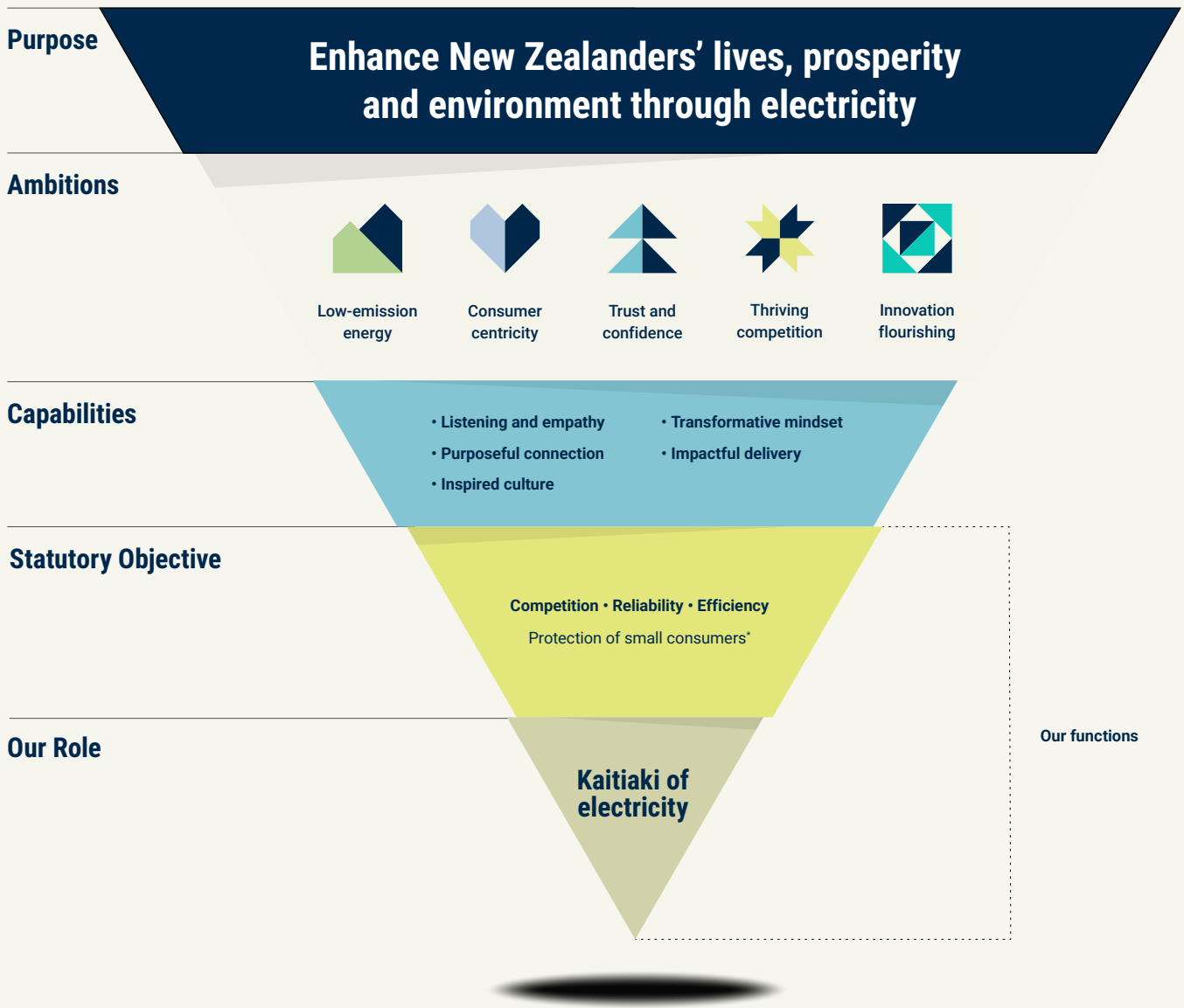
As the regulator of New Zealand's electricity system, our work provides a platform for the country to achieve its aspirations for enhanced quality of life, prosperity, the environment and the transition to a low-emissions economy.

Our integrated framework – aligned to the tikanga-based values of kaitiakitanga (long-term sustainability), manaakitanga (social responsibility), whanaungatanga (social connections) and whairawa (thriving whānau) – sets out five strategic ambitions for the sector that guide the prioritisation of our work.

The ambitions provide focus in both the pursuit of our statutory objectives and our purpose – ensuring we create wider long-term benefit for New Zealand.

Five key strategic capabilities underpin success. We focus on these capabilities to ensure work we do achieves measurable results.

Figure 1:
Integrated strategic framework



* The Electricity Industry Amendment Act 2022, which came into force on 31 December 2022, set out the additional objective “to protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers”.

STRATEGIC AMBITIONS – THE IMPACT WE HAVE

Our strategic ambitions for the sector are more than an aim or a prioritisation tool – they describe success and how the electricity industry can make a difference.

We are taking deliberate action on behalf of New Zealand consumers. Our five sector ambitions reflect a collective call to action for and by the sector and show our commitment to the broader economic and social goals to which electricity can contribute.

The successful delivery of our functions and statutory objectives are a fundamental part of all five ambitions. This drives a continued focus on delivery of high-quality operational activities, increasing retail and wholesale market competition, enforcing compliance and improving the regulatory, transmission and distribution systems.

How our strategic ambitions and statutory objectives work together

Our statutory objectives are linked to our strategic ambitions. We use competition, reliability, efficiency and protection of small consumers as regulatory tools to drive the success of our ambitions.

This holistic system-based approach towards achieving our ambitions and objectives highlights how the two work together to achieve our purpose.

The table below summarises how our strategic ambitions align to our statutory objectives. Each ambition has a primary relationship to an objective and may also have a secondary or tertiary relationship. The tick sizes indicate the level of relationship between an ambition and objective.

STATUTORY OBJECTIVE (OUTCOME MEASURES)	STRATEGIC AMBITION (IMPACT MEASURES)				
	Low-emissions energy	Consumer centricity	Trust and confidence	Thriving competition	Innovation flourishing
Competition	✓	✓	✓	✓	✓
Reliability	✓	✓	✓	✓	✓
Efficiency	✓	✓	✓	✓	✓
Protection of small consumers		✓	✓	✓	

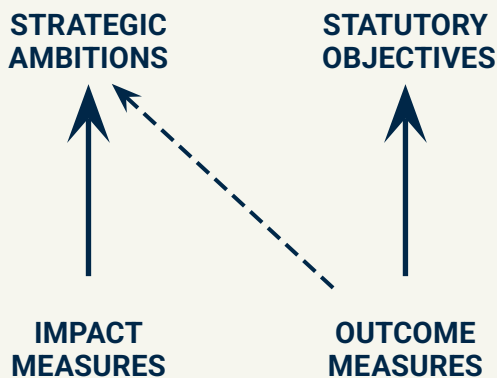
How we measure progress

Each *strategic ambition* has a series of **impact measures** that relate to it. Our impact measures are designed to measure the contribution our work makes towards achieving our strategy.

Similarly, each part of our *statutory objectives* (competition, reliability, efficiency and protection of small consumers) has a series of **outcome measures** that relate to it. Our outcome measures are designed to measure the contribution our work makes towards achieving our statutory objectives.

Our system-based approach means that the outcome measures for our statutory objectives also contribute to our strategic ambitions. However, while they contribute to the ambitions, outcome measures are not used to directly measure progress against a given ambition – this is measured with impact measures.

The graphic below highlights the relationship between strategic ambitions, statutory objectives and their performance measures.



We report on progress made towards our strategic ambitions and statutory objectives every year in our Annual Report. Reporting on our impact and outcome measures includes a mix of statistical analysis and qualitative assessments.

Interim performance measures

With the introduction of the additional protection of small consumers outcome, the Authority is updating our processes, including our retail market data collection. Because we are in the early stages of this work, we have developed interim performance measures to assess progress towards the outcome. Interim performance measures may be different to the final measures we use once this work is completed.

What success looks like

Due to the long-term nature of our strategic ambitions, it may take several years for measurable change to become clear. Over the next four years, success will be seen by achieving the desired trends for each measure. Once a robust baseline has been established, we will look to implement tangible targets.

External factors can also influence results. When relevant, we provide commentary on these influences in our Annual Report.

In the following pages, we lay out our impact measures for each strategic ambition. We have also identified the high-level outcome measures of our statutory objectives that contribute to that ambition.

LOW-EMISSIONS ENERGY

Electrification is a key enabler in the transition to a low-emissions economy.

Unlocking the potential for more renewable generation is a focus for the Authority. We work hard maintaining, developing and implementing market rules that give investors confidence and signal where additional generation is required.

The Climate Change Commission’s advice and Government’s emissions reduction plan show the need to electrify New Zealand’s heat and transport and increase low-carbon electricity generation. Making more use of New Zealand’s renewables advantage is essential in our transition to a low-emissions economy. The required level of investment in new generation will be significant.

We need to promote a stable investment environment with robust rules and clear price signals. This will ensure the transition is as efficient as possible while maintaining energy security, system adaptability and affordable electricity for consumers.

How we measure our impact

IMPACT	MEASURE	SOURCE	DESIRED TREND
Our electricity market settings enable an efficient transition to reliable low-emissions energy in New Zealand	Improved participant confidence in settings to facilitate efficient transition	Participant survey	Increasing
	Improved participant confidence in reliability as New Zealand transitions to low-emissions energy	Participant survey	Increasing
	Assessment of the ability of market settings to facilitate an efficient transition to low-emissions energy	Independent assessment	Increasing
Network and market price signals support the lowest overall cost to consumers	Level of implementation of cost-reflective network prices, transmission pricing and real-time pricing	Authority data	Increasing

Related outcome measures

The table below shows the outcome measures that also relate to low-emissions energy.

Maintaining reliability and efficiency within the electricity sector is critical to achieving our ambition of low-emissions energy, as a secure and stable investment environment encourages investment in low-emissions solutions.

Competition helps ensure New Zealanders have a choice about how they get their electricity, including via low-emissions options.

STATUTORY OBJECTIVE	OUTCOME MEASURE*	SOURCE	DESIRED TREND
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing
Reliability	Improved participant perceptions on the efficiency of supply reliability	Participant survey	Increasing
	Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Authority data	Improving
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing
	Overall improvement across a suite of statistics on electricity system and market efficiency	Authority data	Improving

* These are the headline measures that relate to the strategic ambition. For a full overview of the outcome measures for each statutory objective, please refer to Appendix A.

CONSUMER CENTRICITY

When decision making is centred around consumer outcomes, more diverse needs can be met and expectations exceeded.

We have focused on creating long-term benefit for consumers through development of market-oriented solutions to place downward pressure on price, embrace new technology and enhance consumers' choice of plans, packages and retailers.

Expectations of both regulator and industry have shifted – recognising a need to think more broadly about the wider environment we interact with, strengthen the consumer voice and deeply consider how our decisions affect outcomes for all consumers – whether they are domestic, community, small, medium or large businesses or industrial consumers.

We will put consumers and our understanding of their varied perspectives and aspirations front and centre of what we do and how we do it. Consumer centricity in energy system development is a key enabler for innovation and further improving consumers' access to better pricing, control and ability to participate in energy markets.

With the introduction of our additional strategic objective of protection of small consumers, the Authority's consumer centricity will continue to grow.

How we measure our impact

IMPACT	MEASURE	SOURCE	DESIRED TREND
Our decisions improve the way the sector meets consumers' needs	Improved participant perceptions in the electricity system's ability to meet consumer's ongoing needs	Participant survey	Increasing
	Assessment of the quality of our decision-making processes on meeting consumers' needs	Independent assessment	Increasing
	The customer transfer process works effectively in the event of retailer default	Authority data	Increasing
Consumers are engaged with through our decision-making processes	Assessment of the quality of our engagement with consumers in our decision-making processes	Independent assessment	Increasing
	Increased consumer awareness of the impact of the Authority's role and the benefit our work has on them	Authority data	Increasing

Related outcome measures

The table below shows the outcome measures that also relate to consumer centricity. The long-term benefit of consumers underpins all our outcome measures.

Understanding perceptions of competition, reliability and efficiency provides insight into how the industry is meeting consumers' needs.

STATUTORY OBJECTIVE	OUTCOME MEASURE*	SOURCE	DESIRED TREND
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing
	Improved consumer perceptions of the competitiveness of electricity markets	Consumer survey	Increasing
Reliability	Improved consumer perceptions of the reliability of electricity in New Zealand	Consumer survey	Increasing
	Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Authority data	Improving
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing
	Improved consumer perceptions of the efficiency of electricity in New Zealand	Consumer survey	Increasing
Protection of small consumers** <i>Consumers are empowered to make informed decisions about their electricity supply [Interim]</i>	Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply	Consumer survey	Increasing
	Increased consumer access to independent information relating to their electricity supply	Authority data	Increasing
	A sustained number of consumers switch electricity providers	Authority data	Maintain at 20% or higher
Protection of small consumers** <i>Electricity retailers provide a consistent and supportive standard of service to domestic consumers [Interim]</i>	An increased number of electricity retailers align to the Consumer Care guidelines, covering a greater proportion of consumers	Authority data	Increasing

* These are the headline measures that relate to the strategic ambition. For a full overview of the measures for each statutory objective, please refer to Appendix A.

** Outcome measures relating to the protection of small consumers are interim while the new function and processes are set up.

TRUST AND CONFIDENCE

High levels of trust and confidence drive action and acceptance and reduce intervention.

To date, we have emphasised the development of rules that promote consumer choice, give clear investment signals and treat participants equally. We monitor industry closely and act when required – favouring a largely non-interventionist, facilitative approach.

However, actively building trust and confidence in the industry and regulation through greater transparency, understanding and improved behaviours is increasingly important. Consumers expect participants to be held to account to rules designed to provide long-term benefit. Participants require a stable investment framework and regulatory environment to enable decision making that will deliver further benefit to consumers.

As regulator, we need to continue using markets and our compliance function to create the right incentives for progress, work with participants to ensure better practice by all of industry and enhance consumers’ and stakeholders’ understanding of the electricity industry and how it delivers benefit.

How we measure our impact

IMPACT	MEASURE	SOURCE	DESIRED TREND
The Electricity Authority and our actions promote trust and confidence	Improved participant perceptions of trust and confidence in us and how we are fulfilling our role	Participant survey	Increasing
	Assessment of the quality of material produced (e.g. EMI reports, thought pieces)	Independent assessment	Increasing
We are active regulators who enhance operational efficiency and reliability	Improved participant perceptions of reliability and operational efficiency	Participant survey	Increasing
	Market services are resilient to adverse events (as measured on a case-by-case basis)	Authority data	Maintain
We improve compliance and sector conduct	Improved participant perceptions of the quality of our monitoring	Participant survey	Increasing

Related outcome measures

The table on the next page shows the outcome measures that also relate to trust and confidence.

An efficient, reliable and secure supply of electricity is a key driver of trust and confidence.

STATUTORY OBJECTIVE	OUTCOME MEASURE*	SOURCE	DESIRED TREND
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing
Reliability	Improved participant perceptions on the efficiency of supply reliability	Participant survey	Increasing
	Improved participant perceptions of the balance between the cost and reliability trade-offs	Participant survey	Increasing
	Improved consumer perceptions of the reliability of electricity in New Zealand	Consumer survey	Increasing
	Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Authority data	Improving
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing
	Improved consumer perceptions of the efficiency of electricity in New Zealand	Consumer survey	Increasing
	Overall improvement across a suite of statistics on electricity system and market efficiency	Authority data	Improving
Protection of small consumers** <i>Consumers are empowered to make informed decisions about their electricity supply [Interim]</i>	Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply	Consumer survey	Increasing
	Increased consumer access to independent information relating to their electricity supply	Authority data	Increasing
	A sustained number of consumers switch electricity providers	Authority data	Maintain at 20% or higher
Protection of small consumers** <i>Electricity retailers provide a consistent and supportive standard of service to domestic consumers [Interim]</i>	An increased number of electricity retailers align to the Consumer Care guidelines, covering a greater proportion of consumers	Authority data	Increasing

* These are the headline measures that relate to the strategic ambition. For a full overview of the outcome measures for each statutory objective, please refer to Appendix A.

** Outcome measures relating to the protection of small consumers are interim while the new function and processes are set up.

THRIVING COMPETITION

Market competition is a key enabler to deliver a better energy future – driving progress, affordability, efficiency and valuable outcomes for New Zealand.

Our market-oriented solutions have successfully reduced barriers to retail participant entry and expansion. Consumers can now choose from over 40 different brands with some now opting to pay the wholesale market spot price rather than a fixed plan.

Increased disruption to traditional electricity business models and industry structure through competition improves choice, control and affordability for consumers.

Competition and competitive pressure now need to expand across new parts of the supply chain to drive efficiency, reliability and innovation and integrate new technology.

We're committed to encouraging participation and reinforcing competition in traditional and emerging markets by putting in place the mechanisms needed to maintain a level playing field. Our regulatory environment needs to enable participants to better manage risk and provide consumers value for money through a growing range of innovative products, services and opportunities to participate.

How we measure our impact

IMPACT	MEASURE	SOURCE	DESIRED TREND
New entrants can compete on a level playing field with established participants	Improved participant perceptions of ability for new entrants to compete with established participants	Participant survey	Increasing
Market settings enable competition between distributed energy resources (DER's) and established technology solutions	Number of network companies seeking to procure non-network services on a competitive basis	Participant survey <i>(Network companies only)</i>	Increasing
	Number of participants providing non-network services to network companies	Participant survey <i>(Network companies only)</i>	Increasing
	Improved participation in a range of electricity markets, for example, demand-side participation in a range of markets	Authority data	Improving

Related outcome measures

The table below shows the outcome measures that also relate to thriving competition.

Our outcome measures for competition are particularly relevant for this ambition, as being both a strategic ambition and statutory objective reflects the importance of competition to electricity markets and the wider industry. Competitive pressure also drives efficiencies within the market.

STATUTORY OBJECTIVE	OUTCOME MEASURE*	SOURCE	DESIRED TREND
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing
	Improved consumer perceptions of the competitiveness of electricity markets	Consumer survey	Increasing
	Overall improvement across a suite of statistics on electricity market competition	Authority data	Improving
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing
	Overall improvement across a suite of statistics on electricity system and market efficiency	Authority data	Improving
Protection of small consumers** <i>Consumers are empowered to make informed decisions about their electricity supply [Interim]</i>	Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply	Consumer survey	Increasing
	Increased consumer access to independent information relating to their electricity supply	Authority data	Increasing
	A sustained number of consumers switch electricity providers	Authority data	Maintain at 20% or higher

* These are the headline measures that relate to the strategic ambition. For a full overview of the measures for each statutory objective, please refer to Appendix A.

** Outcome measures relating to the protection of small consumers are interim while the new function and processes are set up.

INNOVATION FLOURISHING

Evolution of the electricity system will be achieved through innovation and disruption, with both participants and the Authority thinking beyond the status quo.

The unique challenges of New Zealand’s electricity market have led to innovative approaches to wholesale, retail, reserve management, security of supply and supporting participants to manage risk. Our preference for market-based instruments – proven to be technology-friendly – positions New Zealand for continued change.

Innovation and new technology will affect how electricity is generated, distributed and consumed and ultimately change the cost and competitive structure of our industry. Data transparency, insights and automation will act as key enablers for increased deployment of distributed energy resources and support consumers’ ability to control their energy use and participate in new ways.

Our role is to help unlock the full benefits of innovation for consumers by making sure the settings are conducive to innovation and industry success. This demands a proactive, agile and forward-looking regulatory approach to match the pace of change and help innovation flourish.

How we measure our impact

IMPACT	MEASURE	SOURCE	DESIRED TREND
The regulatory system accommodates new business models	Improved participant perceptions of the ability of the system to support rapid change	Participant survey	Increasing
	Improved participant perceptions of the current market settings’ ability to encourage innovation	Participant survey	Increasing
	Number of sandboxes, trials, pilots in play across the network	Authority data	Increasing
	Increased number of participants providing new services to consumers	Authority data	Increasing
The availability and transparency of industry data is continuously improved	Number of data transactions we have facilitated	Authority data	Increasing
	Number of new datasets we have provided access to	Authority data	Increasing

Related outcome measures

The table below shows the outcome measures that also relate to innovation flourishing. Innovation, competition and efficiency work hand in hand, as competitive pressures and improved efficiencies drive innovation. In turn, ongoing innovation leads to greater efficiencies and changes the competitive structure of the industry.

Throughout this, the balance between the cost to and reliability of the electricity system will also need to be met to ensure a stable, reliable environment for innovation to occur.

STATUTORY OBJECTIVE	OUTCOME MEASURE*	SOURCE	DESIRED TREND
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing
Reliability	Improved participant perceptions of the balance between the cost and reliability trade-offs	Participant survey	Increasing
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing
	Improved consumer perceptions of the efficiency of electricity in New Zealand	Consumer survey	Increasing

* These are the headline measures that relate to the strategic ambition. For a full overview of the measures for each statutory objective, please refer to Appendix A.

Organisational capability

The organisation and investment areas have changed progressively over the past 10 years. We expect the organisation to continue to evolve. As ever, our staff are passionate about the contribution we make to New Zealanders' lives and our country as a whole.

In addition to our ambitions for the sector towards which we will invest our effort, our strategy identifies the strategic capabilities we will rely on for successful delivery.

We recognise the role of the public service in supporting the Crown's commitment to its relationship with Māori. The Authority is committed to exploring how best to engage with Māori and to considering Māori perspectives in its decision making.

STRATEGIC CAPABILITIES

Listening and empathy

To deliver value and the best outcomes for the breadth of different electricity consumers, we need to understand who they are and their experiences, perspectives and needs. This understanding can only come from increased curiosity and genuine, open listening. We also need to exercise this capability with the regulated community. We will adopt a customer-centred approach to ensure the regulatory platform better serves people, businesses and the nation.

Purposeful connection

To grow trust and confidence, build knowledge and progress the electricity sector, we will deepen our connection to those we serve, Māori, the regulated community and agencies we must collaborate with and can learn from. We also need to broaden our networks internationally. We will be clear about who we engage with and why and actively build relationships. We need to listen and demonstrate we've heard and better communicate sector success.

Inspired culture

To achieve great outcomes for New Zealand, our internal talent needs to grow and thrive. We will invest in our culture, diversity and capability and provide opportunities for collaboration and progression so our people feel fulfilled and are empowered to do their best work. Their valued experience and commitment are the foundation from which the Authority will change, grow its professional maturity and enhance the craft of our regulation.

We remain committed to equal employment opportunities in our employment policies and procedures.

Transformative mindset

To meet the pace of change and drive innovation, we need to be creative, fast, bold, practical and flexible – choosing processes and methodologies that support responsiveness, agility and better solutions. We will improve our governance, be more pragmatic, experiment, iterate and scan horizons – both within and outside energy, domestically and internationally.

Impactful delivery

To achieve our intended outcomes we need to be more efficient and strategic – prioritising and aligning our efforts and using more streamlined, transparent processes. We will invest in systems and tools for success, better leverage internal knowledge, resources, data and technology and apply a continuous improvement mindset to all our activities.

CLIMATE CHANGE AND GREENHOUSE EMISSIONS

As an independent Crown entity, the Authority intends to lead by example, taking active steps to measure and reduce our greenhouse gas (GHG) emissions.

We have identified the following areas as our main sources of GHG emissions:

- purchased energy
- travel
 - road travel (taxis and rental cars)
 - air travel (domestic and international)

We will measure and report our emissions in these areas with the goal to reduce emissions over time, in line with the Government's target of net-zero emissions by 2025⁶ and the Climate Change Commission's recommendations.

As we grow our capability in this area, we may identify further, indirect sources of GHG emissions. Where practicable, we will include these in future emissions reporting.

ASSETS AND PROCESSES

We strive to ensure that our systems, tools and processes lead to improved quality, efficiency and productivity and support international best practice.

Market services provision

The Authority's intangible assets are comprised of acquired software, systems and associated licences used by the service providers to facilitate the operation of the electricity markets, the most significant of which is the software used

in the operation of the electricity market. At 30 June 2020, this software had a cost of \$27.345 million, a net carrying value of \$3.466 million and an estimated remaining useful life of between three and five years.⁷

These market services are provided under contract by NZX,⁸ Jade⁹ and Energy Market Services.¹⁰ An important feature of the contracts is that the service providers ensure the systems, on a continuing basis, function, operate and perform so that the services are delivered in accordance with performance standards. This includes providing the hardware and other supporting infrastructure.

The real-time coordination of the electricity system

This is a critical function for the Authority, carried out under contract by the system operator Transpower New Zealand Limited (Transpower). Unlike the market services, the Authority does not own the system operator assets. The Authority does, however, work closely with the system operator in the development of its capital plan. In December 2020, the Authority signed a new service provider agreement with the system operator, effective from 1 July 2021 for a period of five years.

Information systems

We pursue a programme of continuous development to increase the effectiveness of our information systems. This, combined with ongoing release of information and data, supports improved Authority and stakeholder decision making.

⁶ As an independent Crown entity, the Authority is not mandated under the Carbon Neutral Government Programme. However, we are committed to measuring and reporting our greenhouse gas emissions.

⁷ The useful life of this software is for accounting purposes only. This means that the useful life of the software is fully depreciated over the life of the contract. Providing the software continues to be maintained, it will remain viable beyond its useful life.

⁸ NZX Limited is the operator of the New Zealand stock exchange.

⁹ Jade Software Corporation Limited is a specialist technology and research development organisation.

¹⁰ Energy Market Services is a commercial business group within Transpower.

Our dedicated Electricity Market Information (EMI) website includes extensive sets of data, market performance metrics, APIs, a forum for analysts to ask questions, share and interact and analytical tools.¹¹

GOVERNANCE, ADVICE AND SERVICE PROVIDERS

Authority Board

Electricity Authority Board members are electricity consumers and represent the interests of consumers. Following a public call for nominations, they are appointed by the Governor-General on the recommendation of the Minister.

There are between five and seven members on the Authority Board. Members hold office for a term of up to five years and may be reappointed.

Information about membership of the Authority Board, Chief Executive and management team is available on our website at www.ea.govt.nz/about-us/who-we-are/

Board committees

There are three Board committees.

- The **Audit and Finance Committee** advises on the quality and integrity of the Authority's financial reporting, including managing the relationship with the external auditor. It also considers whether appropriate governance, policies and operating processes are in place to identify and manage risk and oversees and assesses the internal audit process.
- The **Compliance Committee** makes decisions on alleged breaches of the Act, various regulations and the Code. It determines appropriate enforcement responses and whether settlements should be approved or further

investigation undertaken and makes recommendations to the Board regarding the laying of formal complaints with the Rulings Panel and instigating prosecutions.

- The System Operations Committee oversees the performance monitoring of the system operator, identifies any emerging system security risks and addresses any other matters relating to the system operator's obligations under the Code.¹²

Rulings Panel

The Rulings Panel is an industry dispute resolution and disciplinary body established under the Electricity Governance Regulations 2003 and continued by the Act, which sets out its membership, functions and funding arrangements. The Governor-General appoints panel members.

The Rulings Panel's functions include assisting with enforcing the Code by dealing with complaints about Code breaches, hearing appeals against certain decisions made under the Code and resolving certain disputes relating to the Code. If a complaint about a Code breach is upheld, the Rulings Panel can make a range of orders including imposing penalties, awarding costs or compensation, issuing suspension or termination orders, and recommending Code changes.

Information about the Rulings Panel is available at www.electricityrulingspanel.govt.nz

Security and Reliability Council and other advisory groups

The Act sets requirements to establish the Security and Reliability Council and other advisory groups. The Act also requires the Authority to publish a charter about advisory groups. The charter was first published in February 2011 and most recently updated in January 2017.

¹¹ The Electricity Market Information (EMI) website is available at www.emi.ea.govt.nz

¹² In early 2023, the Authority revised its governance arrangements, with the System Operations Committee being superseded by a new Board Committee with a wider remit – the Market Operations Committee. The new Committee performs a similar function, but does so in respect of all the Authority's contracted providers who perform a service in relation to electricity market and operations – including but not limited to the system operator.

- The **Security and Reliability Council** was established in March 2011. It provides independent advice to the Authority on the performance of the electricity system and the system operator, and on reliability of supply issues.
- The **Innovation and Participation Advisory Group** (IPAG) and the **Market Development Advisory Group** (MDAG) are tasked with providing advice and recommendations to the Authority on the development of the Code and market facilitation measures.

The IPAG focuses on issues specifically related to new technologies and business models and consumer participation. The MDAG focuses on further evolving the ‘machinery’ of the electricity market.

From time to time, other advisory and technical groups have been established. Information about these groups is available in the Annual Report and on our website.

Information about the Security and Reliability Council (SRC), advisory groups and technical groups is available on our website at www.ea.govt.nz/about-us/our-people/our-advisory-and-technical-groups

Service providers

The system operator is responsible for the real-time operation of the power system, including scheduling and dispatching electricity, in a manner that avoids undue fluctuations in frequency and voltage on the transmission grid.¹³

The **reconciliation manager** allocates volumes of electricity to generators and purchasers. It uses metering information supplied by participants and calculates unaccounted for electricity.

The **pricing manager** calculates and publishes final prices, which are used by the clearing manager to calculate invoices.

The **clearing manager** invoices and settles physical electricity sales and purchases identified by the reconciliation manager, ancillary service payments and any financial hedges required to be taken into account in the prudential calculation. It also maintains prudential security requirements.

The **FTR manager** runs regular auctions for financial transmission rights, which are a locational hedge product.¹⁴

Information systems

The **wholesale information and trading system** (WITS) is used to transfer information among participants, especially the uploading of bids and offers.

The **registry** is a database that identifies every customer point of electricity connection to a local or embedded network. It enables customer switching between traders and contains key information for the reconciliation process.

PUBLICATIONS AND RESOURCES

- Electricity Authority website: www.ea.govt.nz
- Electricity Market Information website: www.emi.ea.govt.nz
- Electricity Authority corporate documents: www.ea.govt.nz/about-us/corporate-documents
 - Interpretation of the Authority’s statutory objectives
 - Statement of Intent
 - Statement of Performance Expectations
 - Annual Report
 - Annual Corporate Plan
 - Consultation charter
 - Charter about advisory groups

¹³ System operator responsibilities include giving instructions as to when and how much electricity to generate (i.e. it dispatches generation) so that injections of electricity into the system match uptake by electricity consumers at each moment in time. The system operator also publishes the generator dispatch schedules and is responsible for the operation of security of supply forecasting, monitoring and emergency management functions.

¹⁴ For more information on service provider contracts, which include detailed performance specifications, and reports, see the operations section of our website: www.ea.govt.nz/industry/mosp

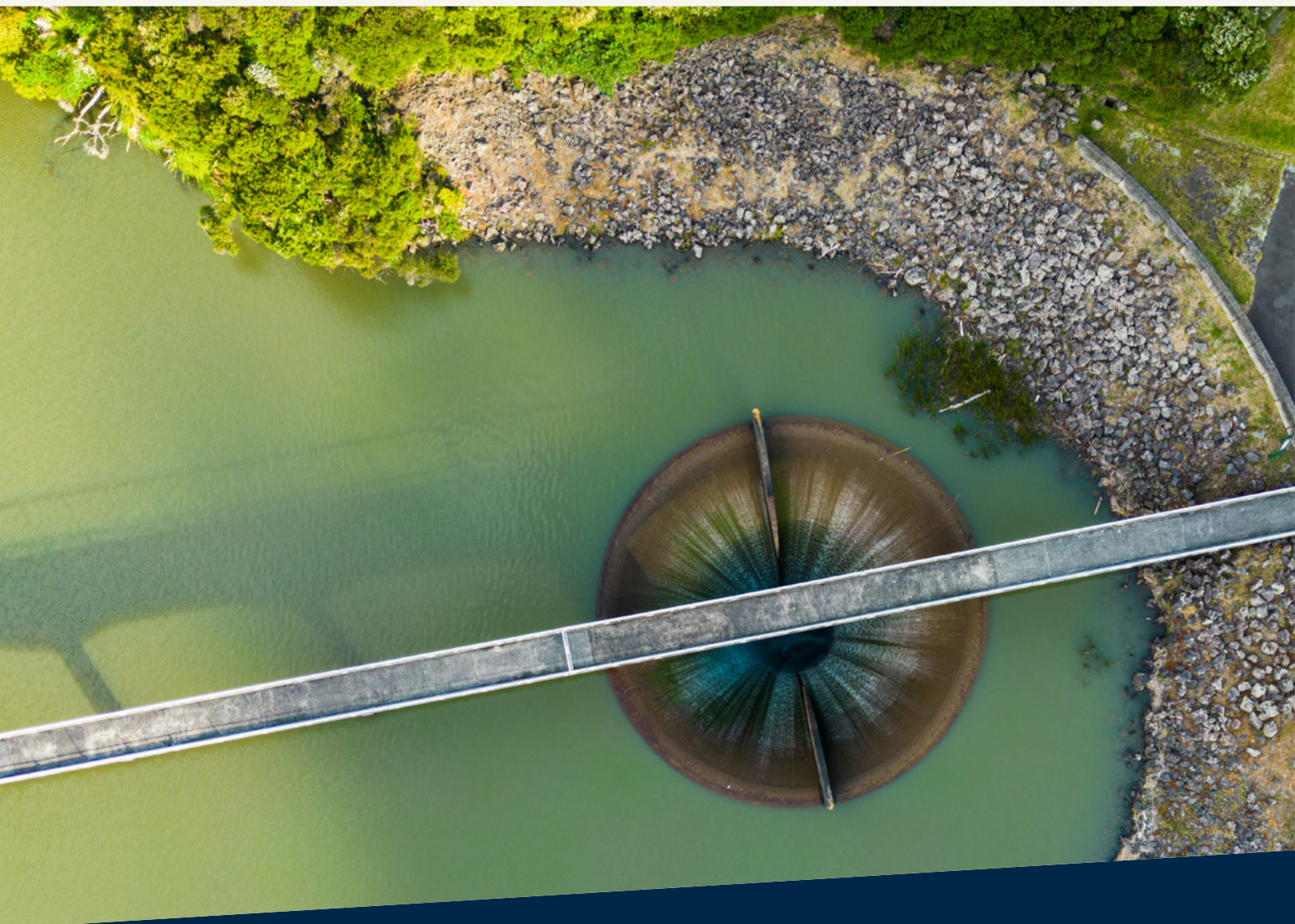
Appendix A

Statutory objective outcome measures

The following tables contain further details on the outcome measures we use to track progress against our statutory objectives of competition, reliability, efficiency, and protection of small consumers. The headline outcome measure for each has been linked with related strategic ambitions earlier in this document. The tables also provide further details on the measures that roll up to the headline outcome measure.

Our performance measures take a holistic system-based approach. The outcome measures for our statutory objectives also support some of the progress made towards our strategic ambitions. This is in addition to the impact measures set out earlier in the document.

Each outcome measure may relate to more than one strategic ambition. Where this occurs, we have identified the ambition that the outcome relates to most in **bold**.



COMPETITION

OUTCOME	MEASURE	SOURCE	DESIRED TREND	LINKED STRATEGIC AMBITIONS	SOI PAGE
Improved participant perceptions of the competitiveness in electricity markets	Percentage of participants who agree with a range of statements on electricity market competitiveness:	Participant survey	Increasing	Low-emissions energy	20
	1 Competition between electricity generators ensures wholesale market prices are set at an efficient level (i.e. there is a balance between the amount of generation and cost)			Consumer centricity	22
	2 Competition between electricity generators ensures they build the most efficient power stations			Trust and confidence	24
	3 Competition between retailers ensures that consumer prices only rise in line with costs to the electricity companies			Thriving competition	26
	Percentage of participants who agree that prices in the following electricity markets reflect the outcomes expected in a workably competitive market:			Innovation flourishing	28
a) Retail market b) Spot market c) Hedge market, including ASX and OTC d) Ancillary service markets					
Improved consumer perceptions of the competitiveness of electricity markets	Percentage of consumers who agree with a range of statements on electricity market competitiveness:	Consumer survey	Increasing	Consumer centricity	22
	1 I have a choice in my electricity provider			Thriving competition	26
	2 I can find a power company that meets my needs 3 Having a choice of power companies means I can find a fair price				
Overall improvement across a suite of statistics on electricity market competition	Overall improvement in the following statistics: <ul style="list-style-type: none"> Retail market concentration (HHI statistic) Retail market share (CR4 statistic) Net pivotal analysis Hedge market concentration (HHI statistic) Concentration in the ancillary services market (HHI of reserves statistic) Number of retailers' approaches to consumers with offers to induce switching (measured by survey) 	Authority data	Improving	Thriving competition	26

RELIABILITY

OUTCOME	MEASURE	SOURCE	DESIRED TREND	LINKED STRATEGIC AMBITIONS	SOI PAGE
Improved participant perceptions on the efficiency of supply reliability	Percentage of participants who agree with a range of statements on electricity supply reliability:	Participant survey	Increasing	Low-emissions energy	20
	<ol style="list-style-type: none"> 1 There is a reliable supply of electricity each day 2 There is enough electricity to meet ongoing needs 				Trust and confidence 24
Improved participant perceptions of the balance between the cost and reliability trade-offs	Percentage of participants who agree with a range of statements on the balance between the cost and reliability trade-offs:	Participant survey	Increasing	Trust and confidence	20
	<ol style="list-style-type: none"> 1 The current electricity market arrangements ensure an appropriate balance between reliability and cost 2 Over the next 10 years the electricity system will strike a balance between reliability and cost 				Innovation flourishing 28
Improved consumer perceptions of the reliability of electricity in New Zealand	Percentage of consumers who agree with a range of statements on electricity reliability:	Consumer survey	Increasing	Consumer centricity	22
	<ol style="list-style-type: none"> 1 It's rare to experience an unplanned power cut 2 If there is an unplanned power cut, it gets fixed quickly 3 There is enough electricity to keep New Zealand homes and business powered in the future 				Trust and confidence 24
Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Overall improvement in the following statistics:	Authority data	Improving	Low-emissions energy	20
	<ul style="list-style-type: none"> • Pricing in scarcity events reflects opportunity cost, as measured by case-by-case analysis • Effective management of dry years or emergency events, as measured by case-by-case analysis 				Consumer centricity 22
	<ul style="list-style-type: none"> • Capacity and energy margins are within efficient bounds or are moving towards those bounds, as measured by the annual security assessment • Investigation of reliability events does not identify systemic issues, as measured by case-by-case analysis 				Trust and confidence 24

EFFICIENCY

OUTCOME	MEASURE	SOURCE	DESIRED TREND	LINKED STRATEGIC AMBITIONS	SOI PAGE
Improved participant perceptions of the efficiency of electricity markets and transmission and distribution arrangements	Percentage of participants who agree with a range of statements on the efficiency of electricity markets:	Participant survey	Increasing	Low-emissions energy	20
	1 The New Zealand electricity market ensures electricity is generated efficiently			Consumer centricity	22
	2 The New Zealand electricity market ensures electricity is transmitted efficiently			Trust and confidence	24
	3 The New Zealand electricity market ensures electricity is distributed efficiently			Thriving competition	26
	4 New Zealand's wholesale electricity market efficiently coordinates electricity production and consumption			Innovation flourishing	25
	5 New Zealand's wholesale electricity market efficiently facilitates timely investment in the electricity system				
	6 New Zealand's hedge market efficiently coordinates electricity production and consumption				
	7 New Zealand's hedge market efficiently facilitates timely investment in the electricity system				
8 Competition between electricity retailers promotes efficiency within retail operations					
Improved consumer perceptions of the efficiency of electricity in New Zealand	Percentage of consumers who agree with a range of statements on the efficiency of electricity in New Zealand:	Consumer survey	Increasing	Consumer centricity	22
	1 I can easily find and connect with an electricity provider			Trust and confidence	24
	2 Prices on my electricity bill fairly represent the actual cost of my electricity use			Innovation flourishing	25
Overall improvement across a suite of statistics on electricity system and market efficiency	Overall improvement in the following statistics:	Authority data	Improving	Low-emissions energy	20
	• Robust futures prices			Trust and confidence	24
	• Dry year prices reflect storage levels, as assessed by case-by-case analysis				
	• Exceptional prices are justified by underlying fundamentals, as assessed by case-by-case analysis			Thriving competition	26
	• Reducing constrained-on compensation				

PROTECTION OF SMALL CONSUMERS

The following measures are interim measures and may change as the Authority grows our focus on protecting the interests of domestic and small business consumers.

There is ongoing work to identify where and how the new objective applies, (for example, in small businesses, and

the relationship between electricity retailers and their customers), and to expand our monitoring of the retail market to ensure consumer interests are protected. As we progress this work, we will establish baselines to measure future performance against.

OUTCOME	MEASURE	SOURCE	DESIRED TREND	LINKED STRATEGIC AMBITIONS	SOI PAGE
Consumers are empowered to make informed decisions about their electricity supply [Interim]	Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply <ul style="list-style-type: none"> Percentage of consumers who have heard of the Powerswitch or Utilities Disputes services Percentage of consumers who heard of the Powerswitch or Utilities Disputes services that also used those services 	Consumer survey	Increasing	Consumer centricity	22
				Trust and confidence	24
				Thriving competition	26
	Increased consumer access to independent information relating to their electricity supply <ul style="list-style-type: none"> Number of Powerswitch sessions that progress to a results page Number of energy enquiries raised with Utilities Disputes 	Authority data	Increasing	Consumer centricity	22
				Trust and confidence	24
				Thriving competition	26
	A sustained numbers of consumers switch electricity providers <ul style="list-style-type: none"> Percentage of residential consumers that switch electricity providers during the year 	Authority data	Maintain at 20% or higher	Consumer centricity	22
				Trust and confidence	24
				Thriving competition	26
Electricity retailers provide a consistent and supportive standard of service to domestic consumers [Interim]	Increased number of electricity retailers align to the Consumer Care guidelines, covering a greater proportion of consumers <ul style="list-style-type: none"> Percentage of retailers self-assessed as aligning to the Consumer Care guidelines* Percentage of residential ICPs covered by retailers' alignment to the Consumer Care guidelines* 	Authority data	Increasing	Consumer centricity	22
				Trust and confidence	24

* The Consumer Care guidelines describe actions that should be taken by retailers as needed to create safeguards for consumers. Although alignment to the guidelines is voluntary, the Authority considers there are significant benefits from wide industry alignment. Retailers are encouraged to undertake an annual self-assessment of their alignment with the guidelines and report this to the Authority.



Appendix B

Glossary and abbreviations

Act	Electricity Industry Act 2010.
Ancillary services	The system operator contracts individual participants to provide five services essential to maintaining the common quality of electricity supply. These ancillary services are black start, over-frequency reserve, frequency-keeping reserve, instantaneous reserve and voltage support.
Authority	Electricity Authority.
Black start	Some generators have the ability to black start, meaning they can restart their generation plant with no electrical input if the system has blacked out. Generators without this capability require power from the grid to restart their generating plant.
Capability	What an organisation needs in terms of access to leadership, people, culture, relationships, processes and technology, physical assets and structures to efficiently deliver the goods and services required to achieve the results sought by the Crown entity, whether those results are set by reference to government policy or by statute.
Code	Electricity Industry Participation Code 2010.
Common quality	Common quality refers to those processes and technical requirements placed on asset owners and the system operator that impact on power system quality such as the Code requirements for system frequency management, system event management and system voltage management.
Consumer	Any person who is supplied with electricity other than for resupply.
CRX	<p>Concentration ratio (CR) of the top four generation-retailer companies (gentailers).</p> <p>The CR measures the sum of the market shares for the largest retailers – a higher number indicates a more concentrated market.</p> <p>We chose CR4, the sum of the market shares for the top four parent retail companies, because the market started with four large gentailers and CR4 will help identify how the structure has changed. It should be noted that these four gentailers are not the dominant players in every region.</p>
FTR	Financial transmission right.

HHI	<p>Herfindahl-Hirschman Index.</p> <p>HHI is a measure of market concentration, and the relationship with competition occurs because less-concentrated markets are likely to be more competitive. It is calculated as the sum of the squares of the market share of all participants.</p>
Instantaneous reserves	<p>Generation capacity and interruptible load that is made available to be used in the event of a sudden failure of a generating or transmission facility in order to maintain system frequency at 50 Hz. Fast instantaneous reserve is available within six seconds and must be able to operate for one minute. Sustained instantaneous reserve is available within 60 seconds and must be available for 15 minutes.</p>
MBIE	<p>Ministry of Business, Innovation and Employment.</p> <p>MBIE is the policy adviser to Ministers on energy matters. MBIE also acts as the monitor for the Minister of Energy and Resources regarding the Electricity Authority.</p>
Market facilitation measures	<p>Actions that the Authority can take short of amending the Code or recommending changes to regulations. This can include discussion with participants, education programmes, publication of guidelines and publication of model agreements.</p>
Participant	<p>A person, or a person belonging to a class of persons, identified in section 7 of the Electricity Industry Act 2010 as being a participant in the electricity industry. These include generators, Transpower, distributors, retailers, other lines owners, consumers directly connected to the national grid, buyers of electricity from the clearing manager and service providers.</p>
Service providers	<p>Parties contracted by the Authority to manage the electricity system (system operator) and market services, as described in Part 3 of the Code.</p>

