

Statement of Intent

1 July 2024 — 30 June 2028





Front cover image: Canterbury dam, Canterbury, New Zealand.

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Te whakataki mai i te Poari

Foreword from the Board

We are pleased to present the Statement of Intent for the Energy Efficiency and Conservation Authority (EECA) Te Tari Tiaki Pūngao.

EECA's refreshed strategic direction for 2024–2028 will deliver on our legislative purpose to encourage, promote, and support energy efficiency, energy conservation and the use of renewable sources of energy. While our mission endures – to mobilise New Zealanders to be world leaders in clean and clever energy use – our new strategy responds to the evolving energy environment and the Government's priorities.

New Zealand has a real opportunity to build an energy system that meets the needs of energy users while maintaining affordability, balancing reliability and resilience, increasing productivity, and achieving positive environmental outcomes.

Three strategic objectives will guide our decision-making over the next four years.

Energy efficiency first focuses on helping New Zealanders and businesses seize every opportunity to use energy as efficiently as possible to optimise our energy system, increase energy security, and unlock cost savings.

Empower energy users supports New Zealanders and businesses to understand and manage their energy use, while making the most of our increasingly flexible and responsive electricity system.

Accelerate renewable energy drives the electrification of our energy system with the support of other renewable fuels. Coordinated investment in clean energy is essential to increase New Zealand's energy security and affordability and reduce our energy-related emissions.

While working to achieve these strategic objectives, effective and efficient delivery of programmes remains a core focus. We are committed to spending public money responsibly on activities that improve outcomes for New Zealanders, and we will ensure our organisation is right-sized to match the nature and level of activities we are funded for. Resources and programmes will be evaluated and reprioritised as appropriate, to achieve the highest value to New Zealanders.

We look forward to using our regulation, information and motivation, and targeted investment and support levers across the energy system to unlock the benefits of clean and clever energy use for all New Zealanders and our environment.



Signed on behalf of the Board

Elena Trout
Board Chair
27 June 2024

Catherine Taylor
Deputy Chair
27 June 2024

EECA Board as at June 2024 (left to right): Albert Brantley, Karen Sherry, Catherine Taylor (Deputy Chair), Christopher Boyle, Elena Trout (Chair), Dr Daniel Tulloch, Judi Jones, and Andrew Knight.

A large-scale agricultural facility, possibly a greenhouse or covered walkway, with a windmill in the center. The structure is supported by numerous vertical poles and covered with a translucent material. A person is visible in the foreground, walking through the rows of plants. The sky is clear and blue.

About Us

Find out more about EECA, why we exist, what we aim to achieve, and the levers we use to deliver outcomes.

Our purpose – why we exist

Legislative purpose

The Energy Efficiency and Conservation Authority (EECA) is a Crown entity, established under the Energy Efficiency and Conservation Act 2000 (the Act).

As set out in the Act, EECA exists to **encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy.**



Energy comes from physical and chemical resources like the sun and fossil fuels. Energy is all around us. We use it to power our vehicles, to generate electricity for our homes, and to produce process heat for our businesses.



Energy efficiency is using less energy to perform a task, usually with the help of efficient technologies. For example, an efficient LED light bulb still lights up the room – but it uses less energy in doing so.



Energy conservation is changing our activities to reduce energy use. A simple example is turning off the lights when no one is in the room. The cheapest and most environmentally friendly source of energy is the energy we do not use.



Renewable sources of energy come from natural resources that can be replenished and will not run out, like solar, hydro, geothermal, biomass, wind, and marine. Energy sources like oil, gas, and coal (fossil fuels) will eventually run out, so they are non-renewable sources of energy. Non-renewable energy releases large amounts of harmful greenhouse gas emissions into the atmosphere when used, unlike ‘clean’ renewable energy sources which produce much less.



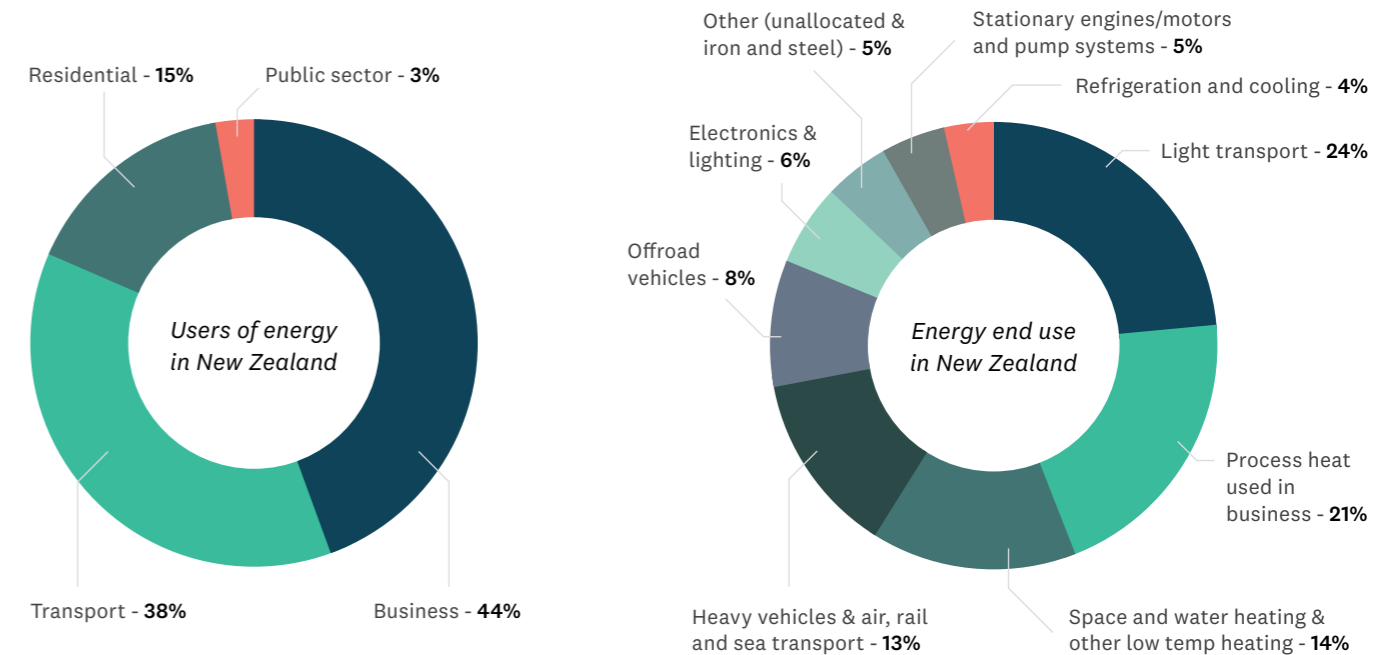
EECA is a delivery agency, a regulator, and an authority on energy use. We deliver programmes that mobilise New Zealanders to be world leaders in clean and clever energy use. We work with a wide range of stakeholders, including industry, government, and everyday New Zealanders – because everyone uses energy.

Energy in New Zealand

What we use energy for

We are all energy users – whether as individuals, whānau, small businesses, or large industrial companies. New Zealand’s energy system must meet the needs of all users.

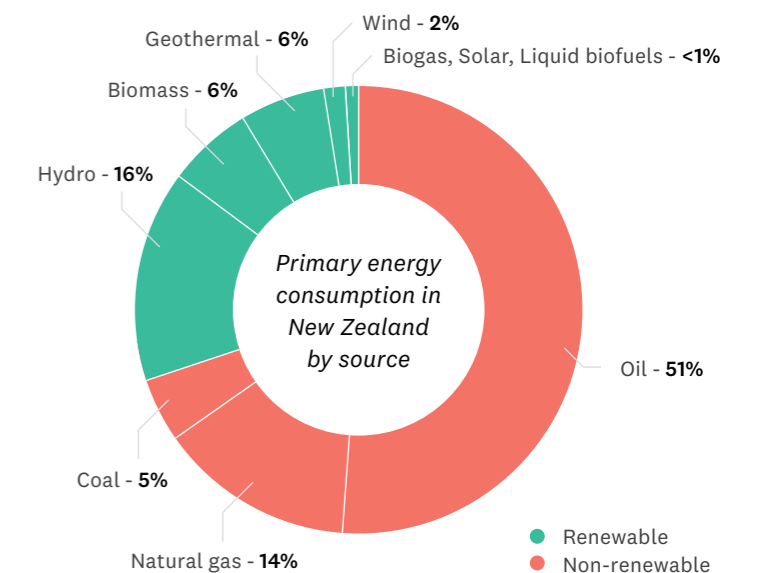
The most common understanding of energy use is electricity. However, energy is used for much more than that. Energy powers the cars, freight trucks, buses and planes that help us move ourselves and goods around – the majority by fuels like petrol and diesel. We also use energy in our industrial sector, where fuels like coal and biomass help produce process heat.



Source: 2022 data from EECA’s Energy End Use Database (2024).

Where our energy comes from

In New Zealand, our energy comes from a range of sources. These sources are either renewable (can be replenished) or non-renewable (will eventually run out). While New Zealand’s electricity system is powered by highly renewable energy sources, electricity is only part of the picture. If we look at all energy consumed by users in New Zealand, only 30% comes from renewable energy sources. This means we still rely on non-renewable fossil fuels for 70% of our energy needs. There are many benefits to shifting away from non-renewable energy sources, but energy users need the right information and systems in place to enable this.



Source: 2022 data from the Ministry of Business, Innovation and Employment’s (MBIE) Energy Balance Tables (2024) and Electricity Statistics (2024).

The case for clean and clever energy use

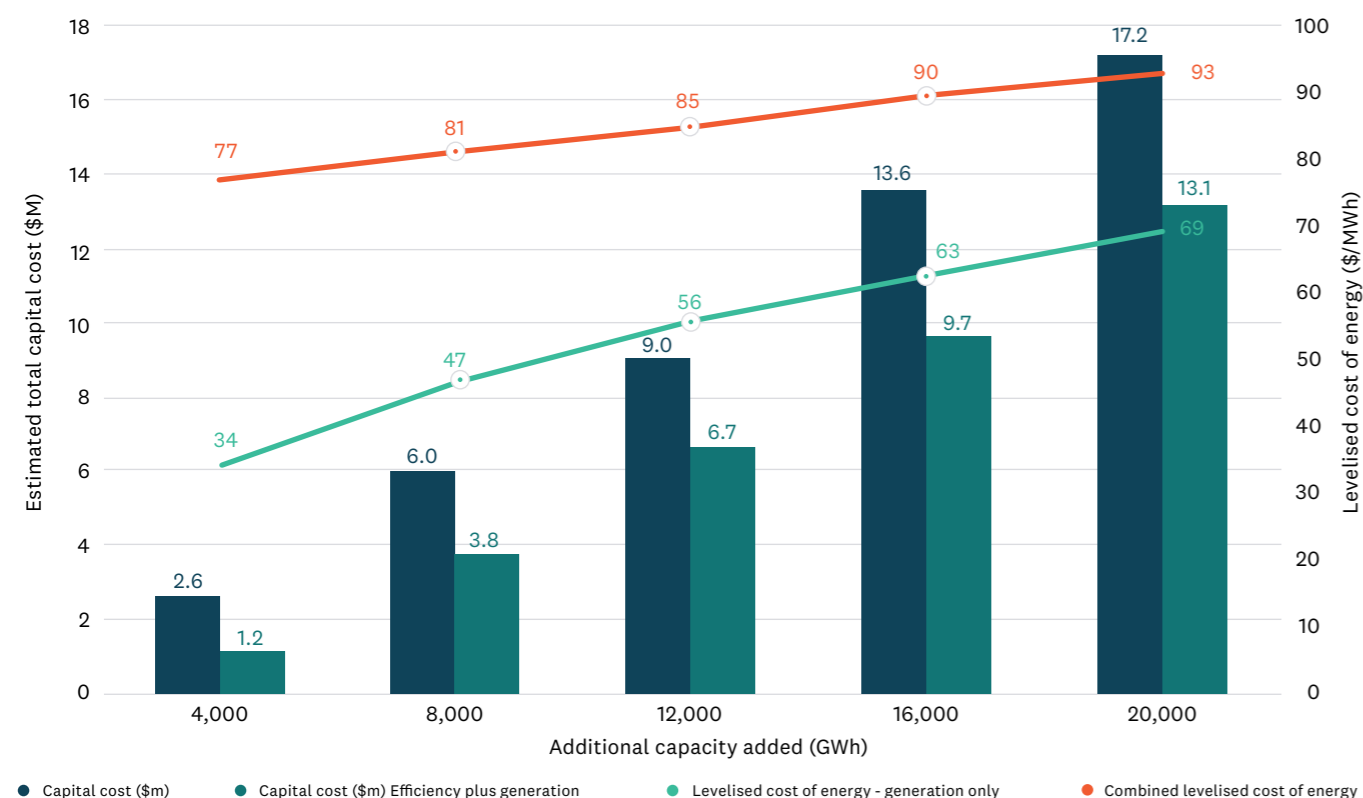
Energy efficiency, energy conservation and the use of renewable energy sources will help with the energy challenges New Zealand is facing – while unlocking significant economic, environmental, and social benefits.

A smart and efficient energy system that supports energy security, reliability, and resilience

It is an ongoing challenge to ensure New Zealanders have access to energy that is secure, reliable, and resilient. There needs to be enough energy available to meet the demand from users, the right infrastructure has to be in place to provide the energy where it is needed, and energy sources must be resilient to external forces like international availability and intermittent or extreme weather.

We know significant new renewable energy supply is needed to keep up with growth and reduce the use of fossil fuels. Energy efficiency and conservation are essential first steps to support this shift and make the best use of existing assets. Enabling energy users to implement energy conservation and efficiency measures reduces the amount of energy needed by households and businesses, and enabling access to smart energy management shifts energy use away from peak times. This helps lower new generation and infrastructure requirements and increases the reliability of New Zealand’s energy supply. For example, EECA analysis shows that investment in electricity efficiency measures could deliver around 4,000 GWh of extra renewable electricity capacity at a lower price than investment in new renewable generation alone:

Costs of additional electricity capacity



Source: Estimates are based on the Ministry of Business, Innovation and Employment’s (MBIE) Levelised Cost of Electricity (LCOE, 2021) with adjustments for inflation to present day and EECA’s New Zealand Energy Scenarios TIMES-NZ 2.0 (2021) with costs updated based on data from EECA programmes. The graph presents both capital costs and the levelised cost of energy across various generation capacities measured in gigawatt-hours (GWh). Capital costs (in million NZD) are shown for new renewable energy generation and new renewable energy generation with efficiency. The levelised costs of energy, both for generation only and generation with efficiency, are expressed in NZD per megawatt-hour (MWh).

Enabling energy users to increase their energy efficiency, energy conservation and the use of renewable energy sources also reduces New Zealand’s reliance on overseas energy imports, helping to increase our energy independence.

Helping build an affordable, economic, and productive energy system

Energy users in New Zealand spend around \$27 billion¹ on energy each year. It is important that all users are empowered to maximise the value of their energy use. New Zealand’s energy system can support our economy and productivity, while keeping energy affordable for users.

The cheapest form of energy is the energy we do not use. Energy efficiency measures provide an opportunity for people and businesses to reduce their energy use while still being able to produce the same output or service. This not only helps users save money on energy costs – it increases New Zealand’s productivity too.

Energy users also need to be empowered to make the most of our increasingly flexible, distributed, and responsive electricity system. Enabling access to smart products and services and demand-flexible systems gives people and businesses the opportunity to manage their own energy usage and respond to electricity prices in real time – offering significant cost savings and helping to offset or defer costly network upgrades. For example, EECA modelling shows that widespread use of smart charging technology could help manage the increased peak electricity demand that will come from private electric vehicles, potentially saving \$4 billion in grid infrastructure costs by 2050².

Renewable energy offers significant economic benefits too. Reducing our dependence on fossil fuels makes us more resilient to their price fluctuations and supports our nation’s ‘clean, green’ export image which drives up the value of our goods overseas.

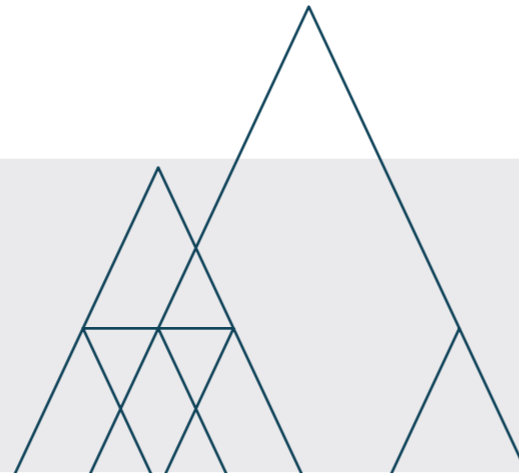


¹ This figure is estimated using energy consumption (GJ) and nominal annual average energy prices (NZ\$/GJ) for the year 2022. Energy consumption data for each sector and fuel type is based on the Ministry of Business, Innovation and Employment’s (MBIE) Energy Balance Table (2024) and Energy Overview (2024). The price data is from MBIE’s Energy Prices (2024). This is an approximate value estimated using available data and assumptions.

² Residential Smart EV Chargers and Demand Flexibility, EECA (2024).

Our strategy summary – what we aim to achieve

Our strategy guides the work we do and helps us focus our efforts in areas that will maximise positive outcomes for New Zealanders. The next section of this document unpacks each of the strategic objectives in more detail, including how we will achieve the objectives and how success will be measured.



Our mission

Mobilise New Zealanders to be world leaders in clean and clever energy use.

Focus areas



Energy efficiency first

Efficient energy use is the first option users adopt.

Outcomes

- + Users accept and adopt energy efficient products and practices.
- + Proven energy efficient technologies are identified and widely available.



Empower energy users

Users are empowered to control their energy.

- + Users understand, manage, and conserve their energy use.
- + Users get value from responsive and flexible energy systems.



Accelerate renewable energy

Users transition to low-emissions energy.

- + Users plan for and adopt low-emission energy and technologies.
- + Fuel options for energy transition are identified and widely available.

Energy users save energy, money and reduce emissions.
Energy productivity and resilience improves.

Our levers – what we do

Our levers are the tools we have available to deliver on our strategic objectives. We use a combination of these levers to overcome market barriers to clean and clever energy use, enabling it to happen faster and in a more coordinated way.

Regulation



Of products, processes, and systems.

Our regulations and standards mean New Zealanders have access to and are encouraged to use the best performing new products and technologies available internationally, including vehicles – for home, commercial and industrial use, saving money and energy.

Information and motivation



To promote clean and clever energy choices.

We provide evidenced-based information and motivation to New Zealanders and businesses to help them make informed clean and clever energy choices – lowering energy bills, improving productivity, and future-proofing for a clean and secure energy economy.

Targeted investment and support



To demonstrate and scale up energy efficient technologies and renewable energy use.

We use our expertise to facilitate and catalyse targeted investment and support that addresses significant, evidenced market barriers for the adoption of clean and clever energy technology. We are committed to investing in a way that is the best use of money and provides the best outcomes and value for energy users and the Government.

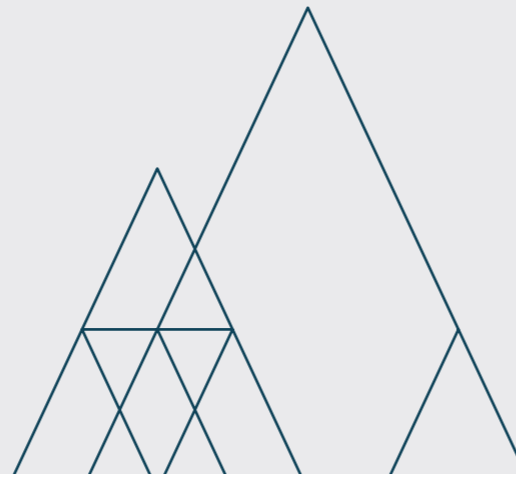


Our strategic objectives

This section outlines the specific objectives and outcomes EECA will work towards in the next four years, including the types of activities we expect to undertake and how success will be measured.

Energy efficiency first

Efficient energy use is the first option users adopt.



Why energy efficiency first?

Energy efficiency is using less energy to perform the same task, usually with the help of efficient technologies. For example, an efficient LED light bulb still lights up the room – but it uses less energy in doing so.

Users still get the same level of service using energy efficient technologies and practices, making energy efficiency one of the easiest and most cost-effective ways to reduce energy use. It is the essential ‘first step’ because people and businesses should start with using no more energy than they need to.

Enabling users to access and implement energy efficiency offers substantial economic and environmental benefits. It unlocks significant user energy cost savings and productivity improvements; helps lower energy demand, freeing up capacity and offsetting or deferring costly energy infrastructure; increases the security and reliability of New Zealand’s energy supply, which is critical for the successful operation of our economy; and cuts energy-related emissions. To seize these benefits, energy users need the right information, support, and systems in place.

What outcomes do we seek?

+ Users accept and adopt energy efficient products and practices.

+ Proven energy efficient technologies are identified and widely available.

How will we achieve these outcomes?



Regulation

Implementing energy efficiency standards and regulations

We will develop and administer standards, guidance, and regulations to specify requirements for efficient energy using products in New Zealand.



Information and motivation

Providing users with the knowledge and tools they need to make energy efficient choices

Supported by analysis and research, we will deliver education, insights, advice, resources, and tools that support energy users to adopt available energy efficient technologies and practices.



Targeted investment and support

Removing barriers to the early adoption of energy efficient technologies and practices

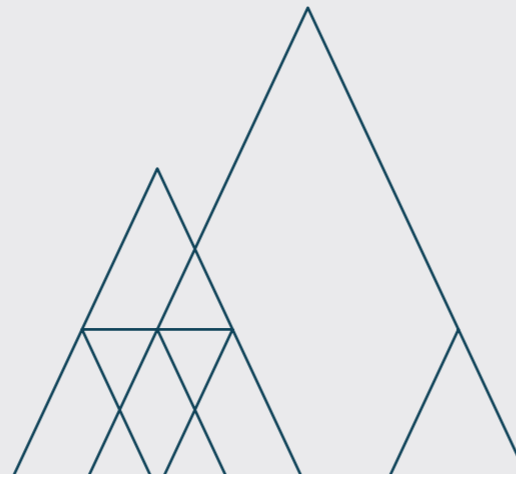
In partnership with the private sector, we will help remove user barriers to the demonstration and diffusion of energy efficient technologies and practices.

How will we measure success?

Measure	Baseline	Desired trend
New Zealand energy intensity (MJ/\$)	1.96 MJ/\$	Decreasing
Energy intensity gives an indication of the relationship between energy use and economic growth. It is calculated as energy use divided by gross domestic product (GDP) and tells us the amount of energy (in megajoules) required to produce each dollar of GDP. A fall in the indicator — where less energy is required to produce each dollar of GDP — is viewed as an improvement. Energy intensity decreases if energy users within a sector using energy more efficiently. GDP data is sourced from Statistics New Zealand and energy data is sourced from the Ministry of Business, Innovation and Employment (MBIE).	(2022 data, latest available)	

Empower energy users

Users are empowered to control their energy.



Why empower energy users?

We are all energy users – whether as individuals, whānau, small businesses, or large industrial companies. It is important that all users are empowered to maximise the value of their energy use. A user-centred approach is required. Users need to have the right information, tools, and settings in place to unlock the value of New Zealand’s energy system – particularly from our increasingly flexible, distributed, and responsive electricity system.

Everyone benefits when energy users are empowered. Enabling access to smart products and services and demand-flexible systems gives people and businesses the opportunity to manage their own energy usage and respond to electricity prices in real time. Flexibility and demand-side management offers significant cost savings; can offset or defer costly network upgrades; maximises the use of renewable energy; and helps balance energy affordability, equitability, and security.

What outcomes do we seek?

+ Users understand, manage, and conserve their energy use.

+ Users get value from responsive and flexible energy systems.

How will we achieve these outcomes?



Regulation

Implementing smart technology standards and regulations

We will develop and administer standards, guidance, and regulations to specify requirements for smart, connected products and systems in New Zealand.



Information and motivation

Educating users on smart ways to manage energy use

We will share user-specific advice, tools and resources on smart energy use and systems, including energy conservation and demand management. We will also influence sector stakeholders to address market and regulatory barriers.



Targeted investment and support

Removing barriers to the uptake of smart technologies and systems

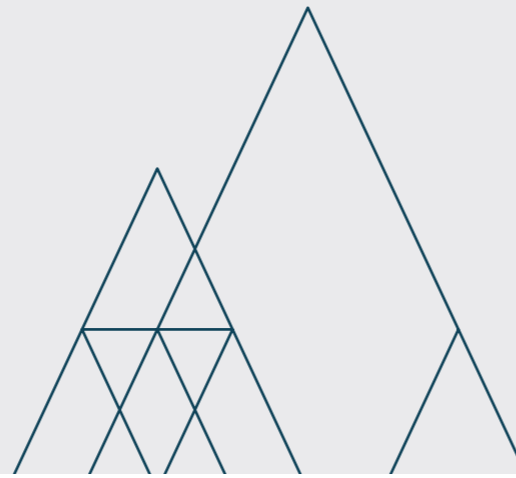
We will work with the private sector to trial and demonstrate new technologies and systems that enable the operation of responsive and flexible energy systems.

How will we measure success?

Measure	Baseline	Desired trend
User perception of ability to understand and manage energy use	To be established	Increasing
This measure gives an indication of the extent to which energy users understand and feel empowered to control their energy use. Data is sourced from EECA energy user surveys. An increase in the indicator is viewed as an improvement.		

Accelerate renewable energy

Users transition to low-emissions energy.



Why renewable energy?

Energy comes from a range of sources. These sources are either renewable (can be replenished) or non-renewable (will eventually run out). While New Zealand’s electricity system is powered by highly renewable energy sources, electricity is only part of the picture. If we look at all energy consumed by users in New Zealand, we still rely on non-renewable fossil fuels for around 70% of our energy needs. These fossil fuels produce large quantities of greenhouse gas emissions when burned, with energy use responsible for over 40% of New Zealand’s total greenhouse gas emissions.

With diverse renewable energy options, our country is well-positioned to transition to a sustainable, low-emissions energy system. Electrification (using our highly renewable electricity system) will play a significant role in the low-cost transition away from fossil fuels – it is already the most suitable and cheapest option for much of our energy needs – alongside other renewable fuels where electrification is not viable.

Accelerating renewable energy offers substantial benefits. It will make New Zealand more resilient to fossil fuel availability and price fluctuations, increase our energy independence, and significantly reduce our energy-related emissions – particularly important for meeting our domestic and international emissions reduction commitments and reducing the negative impacts of emissions on our environment and health.

What outcomes do we seek?

+ Users plan for and adopt low-emissions energy and technologies.

+ Fuel options for energy transition are identified and widely available.

How will we achieve these outcomes?



Regulation

Increasing user confidence in renewable energy

Develop and administer installation and product/system performance specifications to increase trust and confidence in renewable energy systems.



Information and motivation

Providing users with the tools they need to switch to renewable energy sources

We will deliver education and resources to help energy users plan for and make the switch to renewable energy sources for transport, business, and home use, with a focus on electrification.



Targeted investment and support

Removing barriers to the early adoption of renewable fuels and technologies

In partnership with the private sector, we will help remove barriers to the demonstration and early uptake of renewable energy fuels and technologies.

How will we measure success?

Measure	Baseline	Desired trend
Proportion of New Zealand energy consumption that is renewable	30.3%	Increasing
This is a measure of the share of New Zealand’s total energy use that comes from renewable energy sources. It is calculated as renewable energy consumption divided by total energy consumption. An increase in the indicator is viewed as an improvement. The renewable share of energy use increases if energy users switch to using renewable energy sources. Renewable energy consumption data is sourced from the Ministry of Business, Innovation and Employment (MBIE).	(2022 data, latest available)	



Organisational capability

This section outlines the key organisational capabilities we aim to build and strengthen.

Organisational capability

Ehara taku toa i te toa takitahi, engari he toa takitini.
Success is not the work of one, but the work of many.

The success of our organisation depends on the success of our people.

We are committed to building a positive work environment. We will ensure that our organisation maintains the right size to match the nature and level of activities we are funded for.

EECA has chosen four key organisational behaviours to foster a positive work environment that enables us to deliver on our strategic outcomes:



Open to the new

We welcome fresh thinking and value new perspectives that can move us forward.



Stand in others' shoes

We understand our audience, we are empathetic, and we do not make assumptions before we act.



Believe in 'we' not 'me'

We actively collaborate and work together in a positive and proactive way.



Deliver the goods

We own what we individually have to do to meet EECA's challenges.

In addition to our behaviours, we have practices in place to help us create an environment where people feel respected, valued, and like they belong. This includes:

- **Proactively adhering to Equal Employment Opportunities practices**, as set out by the Human Rights Commission. Under this programme, we look at all of our organisational settings and consider how we can continuously improve them.
- **Involvement in the Papa Pounamu work programme to improve diversity and inclusion** across the Public Service. Under this programme, we are committed to actions that will build cultural competence, address bias, foster inclusive leadership, build relationships, and support employee-led networks.
- **Participating in the Kia Toipoto gender pay gap reporting**. Under this programme, we publicly report on gender pay gaps at a detailed level and make an effort to understand the reasons behind them, addressing issues where possible.

These commitments are underpinned by actions in our People and Capability Plan, which has a vision of attracting and growing our people to bring innovative solutions to New Zealand's clean and clever energy challenges. Our current plan has actions to see us through to 2025, with three key focus areas: developing our people, living our behaviours, and embedding Te Ao Māori into how we operate. We will refresh this plan in 2025 and provide more details on specific actions in our Statement of Performance Expectations and Annual Report documents each year.

Supporting the Crown to uphold Te Tiriti o Waitangi

As a Crown entity, we aim to support the Crown in its Treaty of Waitangi relationships and deliver our services in ways that enable equitable outcomes for Māori. Our Te Ao Māori programme was launched in 2021 and has renewed our focus on Te Ao Māori capability. We look forward to growing this programme over the coming years by:

- Continuing to build our internal capabilities and implementing Tikanga Māori in our ways of working.
- Having meaningful engagement with Māori communities in relation to our work programmes.

E mōhio ana mātau ko te Tiriti o Waitangi te tuinga whai tikanga o te kāwanatanga, i noho pūmau ai tātau i te motu nei o Aotearoa. Ko ta mātau whāinga ko te tautoko i te Karauna i roto i ngā kaupapa whanaungatanga o te Tiriti kia pai ake ai te tuku i ā mātau ratonga mā ngā āhuatanga e tōkeke ai ngā putanga mō te Māori.

We recognise that the Treaty of Waitangi is a founding document of government in New Zealand and established the country as a nation. We aim to support the Crown in its Treaty of Waitangi relationships and deliver our services in ways that enable equitable outcomes for Māori.

Managing our carbon footprint

We are committed to showing leadership in organisational sustainability and reducing our carbon footprint. While we have already implemented several energy efficiency and emissions reduction initiatives at EECA, we know there is still room for improvement. In 2018, we made a commitment to sustainability by setting the following science-based targets to reduce our gross emissions:

- A 32% reduction from a 2018/19 baseline to **166.5 tCO₂e by 2025**
- A 55% reduction from a 2018/19 baseline to **110.0 tCO₂e by 2030**

We are currently on track to achieve these targets, but further action in the 2024 – 2028 period will be critical. Our priority areas for emissions reductions action will be low-emissions transport, office energy efficiency, and sustainable procurement practices.



Glossary



Key terms

Appropriation – a sum of money allocated by the Government for a particular use.

Carbon equivalent (CO₂e) – a measurement unit used to indicate the global warming potential of greenhouse gases, using, carbon dioxide (CO₂) as a reference gas.

Electric vehicle – electric vehicles (EVs) have an electric motor powered by a battery charged by connecting to an external source of electricity. Battery electric vehicles (BEVs) are powered only by the battery, while plug-in hybrid electric vehicles (PHEVs) have one engine powered by a battery and another fuelled generally using petrol or diesel.

Electrification – the conversion of a machine or system, where the use of fossil fuels is substituted with the use of electrical power.

Emissions – greenhouse gas emissions.

Energy – the capacity of a physical system to perform work. Energy can be derived from physical or chemical resources, such as the sun or fossil fuels. We need energy for everything from manufacturing and electricity generation right through to powering our vehicles.

Energy conservation – an effort to reduce energy consumption by changing your activities. An example of this is turning the lights off when no one is in the room.

Energy efficiency – using a technology or tool that enables you to perform a task using less energy.

Energy independence – an independent energy system produces sufficient energy, meaning that it does not need to rely on overseas imports to meet demand.

Energy-related emissions – the greenhouse gas emissions that result from burning or producing fossil fuels (such as petrol, diesel, gas, and coal).

Energy reliability – a reliable energy system consistently supplies energy to its consumers, withstanding against unexpected conditions. For example, electricity generation can switch to hydro when solar availability is low, avoiding a supply disruption.

Energy resilience – a resilient energy system can easily and quickly recover from disruptive events, such as a natural disaster.

Energy security – a secure energy system can provide uninterrupted availability of energy sources at an affordable price.

Fossil fuels – includes coal, natural gas, LPG, crude oil, and fuels derived from crude oil (including petrol and diesel).

Greenhouse gases – these include CO₂, methane, and nitrous oxide. In the energy sector, the burning of fossil fuels (oil, coal, gas) for heat, transport or electricity generation creates greenhouse gas emissions. Greenhouse gas emissions contribute to climate change.

Process heat – energy used for commercial and industrial processes, manufacturing, and heating. For example, meat and dairy processors use steam from boilers to sanitise equipment and process raw products, such as turning milk into powder.

Renewable energy – energy produced from hydro, geothermal, biomass, wind, solar and marine sources, which can be replenished. Non-renewable energy is energy produced from oil, gas, coal, and other fossil fuel sources which cannot be replenished.

Sustainable energy – energy that serves the needs of the present without compromising the ability of future generations to meet their needs. It includes renewable energy and energy efficiency.





EECA

TE TARI TIAKI PŪNGAO
ENERGY EFFICIENCY & CONSERVATION AUTHORITY