

Statement of Intent

1 JULY 2018 – 30 JUNE 2022



Energy Efficiency and
Conservation Authority
Te Tari Tiaki Pūngao



[New Zealand Government](#)

Foreword

The Board is excited to present EECA's strategic direction for 2018–2022, which reflects new thinking on how EECA can make the most impact in a rapidly changing and challenging energy environment.

Since our last Statement of Intent in 2014, a great deal has occurred and is occurring in the sector. This is being driven by rapidly developing new technologies, greater consumer choice and control, an increasingly competitive and innovative energy supply chain and a resolute commitment to dramatically reduce the carbon emissions from the energy sector.

These factors have all added to the need for EECA to carefully consider and identify where it can make the largest contributions to the ongoing need to improve energy productivity and the ambition to move to a sustainable energy system for New Zealand.

To this end the Board has revamped its strategy and identified a clear purpose for EECA, a set of strategic principles which

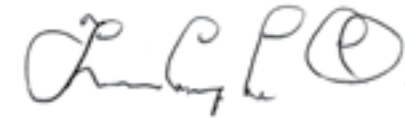
will guide our decision making, and the identification of five strategic focus areas.

These focus areas closely align with: the New Zealand Energy Efficiency and Conservation Strategy (2017–2022); the commitments New Zealand made as a party to the Paris Agreement on Climate Change; the ambitions of the Government in respect to the supply of renewable energy for the electricity sector; and the transition to a net-zero emissions economy by 2050.

These challenges are huge by anyone's definition and EECA is committed to making the maximum contribution possible, as is reflected in this document.

Underpinning this commitment is the parallel focus on building EECA's capability to meet the challenges ahead. We are guided on our areas of greatest priority by the recommendations of our recent Performance Improvement Framework review completed in late 2017.

We look forward to working with a wide range of stakeholders and customers, as we transition to a low-carbon and sustainable energy system that supports the prosperity, and the wellbeing, of current and future generations.



Tom Campbell
Chair of EECA



Catherine Taylor
Deputy Chair and Chair of the Risk and Audit Committee

29 May 2018

Contents



Our strategy

Our purpose

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

Our strategic principles



Focus on impact

Pursue high-impact change with agility and at pace.



Understand the customer

Focus on those it is important to influence and influence them based on what they care about.



Define the problem

Identify what's blocking progress and tackle it head on.



Join the dots

Work with and connect people and organisations who can be part of achieving our purpose.



Display leadership

Be proactive, have a fact-based point of view, own it.

Our strategic focus areas



Productive and low-emissions business

Mobilise decision makers and technical experts to accelerate action.



Efficient and low-emissions transport

Switch the fleet to low-emissions technology while ensuring that any remaining fossil-fuelled vehicles are as efficient as possible.



Energy efficient homes

Optimise New Zealanders' use of renewable energy through energy efficient homes, technologies and behaviours.



Government leadership

Equip the public sector to innovate and lead the transition to clean and clever energy use.



Engage hearts and minds

Foster a society in which sustainable energy is expected and demanded.

Our desired outcome

A sustainable energy system that supports the prosperity and wellbeing of current and future generations

Defining our purpose



Our strategic principles

Focus on impact

Pursue high-impact change with agility and at pace.

We will achieve this by:

- understanding and targeting the sectors with the greatest potential for using clean and clever energy solutions
- being aware of international best practice and technologies, and helping to bring these to New Zealand where they can make a difference
- relentlessly prioritising our resources to achieve the biggest impact for New Zealand
- quickly recognising when we need to focus our effort elsewhere if something is not working.

Understand the customer

Focus on those it is important to influence and influence them based on what they care about.

We will achieve this by:

- working with the people who can make the most difference to New Zealand's energy use
- understanding what these customers value, and what motivates them to act
- influencing with integrity and robust information.

Define the problem

Identify what's blocking progress and tackle it head on.

We will achieve this by:

- clearly defining the problem we're trying to solve
- understanding the system and the barriers to taking action
- influencing others to remove road blocks.



Join the dots

Work with and connect people and organisations who can be part of achieving our purpose.

We will achieve this by:

- thinking system-wide
- using wide networks of influence
- connecting people, and helping them collaborate.



Display leadership

Be proactive, have a fact-based point of view, own it.

We will achieve this by:

- basing our information on good evidence
- being bold, providing frank and objective advice
- sharing information with the right people
- understanding emerging issues or trends and starting the conversation.

Image: A convoy of electric vehicles on Saddle Road driving towards Meridian's Te Apiti wind farm. EECA sponsored the 2018 Leading the Charge Road Trip, which saw a convoy of electric vehicles travel the length of New Zealand. They stopped at 24 towns across the country and participated in more than 30 community events to raise the profile of electric vehicles. Photograph by Mark Tantrum.



Our strategic focus areas



Productive and low-emissions business

Mobilise decision makers and technical experts to accelerate action

Why this matters

There are significant opportunities for businesses to increase their energy productivity and use of sustainable energy. Businesses use about 50% of New Zealand's energy, excluding transport, and generate more than 40% of our energy-related emissions¹.

Improving energy productivity and switching to sustainable energy has many benefits. These include direct benefits, such as lower energy costs and improved profitability, as well as a contribution to New Zealand's emissions reduction goals.

Process heat use represents the most significant stationary energy opportunity for improved energy productivity and emission reductions from the use of sustainable energy in the business sector².

¹ EECA's Energy End Use Database (2015).

² Process heat is 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. It generally involves the use of coal, gas, wood or electricity.

Image: Ngatamariki Geothermal Power Station in the Taupo region of New Zealand is the largest of its kind in the world. It generates energy day and night and provides power to 80,000 New Zealand homes. Photograph by Chris Sisarich.

What success will look like

- EECA's client businesses demonstrate best practice, continuously improve their energy and emissions productivity and motivate other businesses to take action.
- New Zealand businesses are continuously improving their energy productivity and using sustainable energy to contribute to New Zealand's emissions reduction target.

Actions we will take

EECA will work with businesses that have the largest and most cost-effective opportunities to improve their energy productivity.

We will work with them to:

- develop plans for introducing cleaner and more efficient energy use over time
 - manage their energy use
 - adopt and sustain the best energy management practices
 - demonstrate the value of clean and clever energy use to meet business needs and the expectations of their boards, shareholders and customers.
- Switching to sustainable energy is a challenge, particularly with long-life plant and equipment. The economics do not always stack up and sometimes there are real or perceived risks involved in investment in new technology. We will support businesses to trial and adopt low-emissions technologies and techniques. We will help to de-risk investment decisions, support innovation and build capability for the sector-wide transition to a low-emissions economy.
- Our activities will include:
- working with energy users and industry to pilot new approaches to move to sustainable energy for process heat
 - diffusing best energy management practices and technologies across the market through technology demonstrations and learning networks
 - supporting the development of the energy services market to provide high-quality and bespoke technical assistance
 - supporting ongoing improvements in the energy performance of commercial buildings
 - working with Australian Federal and State government agencies to develop minimum energy performance standards (MEPS) and mandatory energy labelling (MEPL) for industrial and commercial products to assure New Zealanders that the appliances they buy are energy efficient and good quality.



How we will measure progress

What is intended to be achieved	How we will measure progress	Current state	Desired trend
Businesses generate more value from the energy they use	Energy productivity (\$GDP/energy) of New Zealand businesses	\$771.5 million/PJ	Increase
Businesses generate more value with fewer emissions	Emissions productivity (\$GDP/emissions) of New Zealand businesses	\$24.2 million/ktCO ₂ e	Increase
EECA's clients save energy (against business-as-usual)	Annual energy savings per annum by EECA's clients	0.78 PJ in 2016/17	Increase
EECA's clients reduce their energy-related emissions (against business-as-usual)	Annual emissions savings per annum by EECA's clients	46.7 ktCO ₂ e in 2016/17	Increase
EECA contributes to improvements in the electricity efficiency of industrial and commercial products through minimum energy performance standards (MEPS) and mandatory energy performance labelling (MEPL)	Annual energy use reduction in commercial and industrial appliances	125 GWh (0.45 PJ) in 2017/18	Increase

Image: Dave Hodder, Head of Projects at Whakatane Mill. Whakatane Mill used to spend in excess of \$21 million per annum on electricity, coal and gas to produce cardboard. In 2016, EECA and DETA consulting partnered with Whakatane Mill Ltd. to invest in best practice energy efficiency across the site. We helped them to reduce their energy costs by \$1.7 million in the first year, a saving which they are set to improve on in 2018, along with an expected emissions reduction of 11,900 tonnes. Photo credit: Troy Baker Photography

Over a quarter of the energy used in New Zealand is for industrial heat processes

72%

of it comes from non-renewable energy sources.



By 2030 businesses could be saving \$1.28 billion every year from energy efficiency.



EECA works with businesses that represent roughly 25% of New Zealand's energy use (excluding transport).



EECA's contribution to the SDGs through our work in productive and low-emissions business:





Efficient and low-emissions transport

Switch the fleet to low-emissions technology while ensuring that any remaining fossil-fuelled vehicles are as efficient as possible

Why this matters

The transport sector provides the largest opportunity to improve New Zealand's energy productivity and energy-related emissions profile. Transport is responsible for about 18% of New Zealand's total greenhouse gas emissions each year and 45% of energy-related emissions³.

There are significant improvements to be made using sustainable and efficient technologies, particularly electric vehicles. About three million tonnes of energy-related emissions can be avoided in 12 years by making economically feasible changes to how we move around⁴. This could largely be achieved by a switch to electric vehicles. Meeting our transport needs with sustainable energy will reduce emissions and our dependence on imported fuel.

³New Zealand's Greenhouse Gas Inventory 1990-2015, Ministry for the Environment.

⁴EECA's Economic Energy Potentials Tool 2016.

Image: A Tesla driving along Saddle Road past Meridian's Te Apiti wind farm. EECA's information campaign and Low Emissions Vehicle Contestable Fund are contributing to the accelerated uptake of electric vehicles in New Zealand. Photograph by Mark Tantrum.

What success will look like

- New Zealanders have their transport needs met and use significantly less energy.
- New Zealand's vehicle fleet is more energy efficient.
- More New Zealanders choose a low-emissions vehicle over a fossil-fuelled vehicle and have a good experience using it.
- People who do not buy a low-emissions vehicle choose a more efficient fossil-fuelled vehicle.
- The Government develops policy options to improve New Zealand's transition to a low-carbon transport system.

Actions we will take

EECA will take action to accelerate the adoption of more efficient and low-emissions technologies. This involves encouraging the use of alternative vehicle fuels where they make sense (electricity, hydrogen or biofuels) and supporting the increased efficiency of the petrol and diesel vehicles that will continue to enter our fleet.

We will achieve this by:

- providing independent and authoritative information that dispels myths and motivates people to improve their transport choices
- encouraging innovation and proving the application of low-emissions vehicles by sharing the financial risk
- using our expertise and influence to support high impact, sustainable policy change in the transport sector
- using our understanding of the electricity system and transport industry to identify opportunities, and to coordinate early action to address risks so they do not become barriers to the uptake of electric vehicles.



How we will measure progress

What is intended to be achieved	How we will measure progress	Current state	Desired trend
The carbon intensity of the light vehicle fleet decreases	Carbon intensity of the light vehicle fleet (gCO ₂ e/km)	237.5 gCO ₂ e/km	Decrease
Vehicles powered by renewable or low-emissions fuels become the dominant new entrants to the light vehicle fleet	Rate of transition to a low-emissions light vehicle fleet: <ul style="list-style-type: none"> percentage increase of low-emissions vehicles in the light fleet (battery electric, plug-in hybrid or hydrogen) over time number of additional low-emissions vehicles in the light fleet (battery electric, plug-in hybrid or hydrogen) over time 	130% from March 2017 4,040 from March 2017	Increase
The energy intensity of fossil-fuelled vehicles entering the light fleet improves	Energy intensity of fossil-fuelled vehicles entering the light fleet (litres/100km)	8.50 litres/100km	Decrease



20% of New Zealand's total emissions are from transport.

EECA's contribution to the SDGs through our work in efficient and low-emissions transport:



90% of car journeys in New Zealand are less than 90 kilometres.



An electric vehicle travels three times the distance travelled by a fossil-fuelled car using the same amount of energy.

Image: people test driving an electric vehicle at the 2018 Leading The Charge Roadtrip event in Christchurch. Photograph by Mark Tantrum



Energy efficient homes

Optimise New Zealanders' use of renewable energy through energy efficient homes, technologies and behaviours



Why this matters

Encouraging New Zealanders to improve the energy efficiency of their homes means they are warmer and healthier, and can enjoy the benefits of using smarter household technologies without increasing their energy costs.

The residential sector accounts for 6% of New Zealand's total energy-related emissions. It has a large number of small consumers and the dominant energy source is our highly renewable electricity system. Nevertheless, more than \$470 million could be saved each year by improving the quality of our housing and energy efficiency in our homes.

Households have a significant impact on our peak electricity use when electricity tends to be at its least renewable and most expensive to produce (for example, winter evenings).

Energy efficiency in the residential sector is also critical as we seek to engage all citizens in the collective objective of reducing New Zealand's energy-related emissions.

What success will look like

- More New Zealanders live in energy efficient homes and make informed choices on energy efficient technologies and behaviours.
- Households consume electricity more efficiently to reduce peak loading on infrastructure.
- New Zealand's residential energy-related carbon emissions decrease.

Actions we will take

We will inspire, assist and mobilise New Zealanders to make smarter use of sustainable energy in their homes by choosing more energy efficient technologies and behaviours.

We will achieve this by:

- engaging with New Zealanders and providing them with compelling, relevant information tailored to their needs
- working with Australian Federal and State government agencies to develop minimum energy performance standards (MEPS) and mandatory energy labelling (MEPL) for appliances to assure New Zealand consumers that the appliances they buy are energy efficient and good quality
- assisting the Ministry of Business, Innovation and Employment in activities including developing minimum housing standards, enhancing building code thermal performance requirements and updating related voluntary industry standards (for example, insulation, lighting, ventilation)
- investigating efficiency initiatives to reduce peak electricity demand
- providing subsidies for insulation retrofits for low-income households to achieve energy savings and multiple other benefits.



How we will measure progress

What is intended to be achieved	How we will measure progress	Current state	Desired trend
Households consume electricity more efficiently to reduce peak loading on infrastructure	Peak electricity demand in relation to average energy demand (Peak PJ/ baseline PJ)	To be established in 2018/19	Decrease (relatively)
	Energy use of residential appliances per capita (PJ)	1.34 PJ/100,000 people	Decrease
More New Zealanders live in energy efficient homes and make informed choices on energy efficient technologies and behaviours	Energy savings per annum from improvements in the electricity efficiency of household products through minimum energy performance standards (MEPS) and mandatory energy performance labelling (MEPL)	146 GWh (0.53 PJ) in 2017/18	Increase
	Percentage of people reporting that lack of information is a barrier to taking action on energy efficiency	To be established in 2018/19	Decrease



By 2030, energy efficient practices and technologies in the home could save New Zealanders up to \$0.47 billion every year.



33% of the average New Zealand home's power bill is spent on space heating.

EECA's contribution to the SDGs through our work in energy efficient homes:





Government leadership

Equip the public sector to innovate and lead the transition to clean and clever energy use

Why this matters

The Government has signalled a desire to demonstrate leadership in energy productivity and the use of sustainable energy.

Buildings owned or operated by the public sector (such as hospitals, schools, universities, prisons and offices) use around 3.2% (18.5 PJ) of New Zealand's total energy use and generate approximately 2.7% (811,000 tCO₂e) of energy-related carbon emissions.

The public sector is also the owner of large transport fleets, owning over 26,000 vehicles that in the future will supply the second-hand market. As such, the adoption of new technologies in the public sector fleet can contribute to a reduction in national transport emissions over time.

Through effective policies and modelling clean and clever energy use, the public sector can demonstrate wise management of public resources, support sustainable development objectives and influence a wide range of New Zealanders to follow suit.

What success will look like

- The state sector is an exemplar in improving its energy productivity and reducing its energy-related emissions.
- State services implements energy policy and programmes to accelerate the transition to clean and clever energy use in New Zealand.

Actions we will take

We will achieve this by:

- working with emissions-intensive users in the state sector (for example, hospitals, prisons and the Defence Force) to improve the energy and carbon performance of existing and new buildings, particularly in the high-impact areas of heating and lighting
- supporting greater electric vehicle uptake in state sector fleets
- promoting fuel switching to more sustainable energy where possible.

Image: Hon Dr Megan Woods, Minister of Energy and Resources and Andrew Caseley, Chief Executive of EECA.





How will we measure progress

What is intended to be achieved	How we will measure progress	Current state	Desired trend
The state sector is an exemplar in improving its energy productivity	Energy use (kWh per m ²) of state sector buildings ⁵	To be established in 2018/19	Decrease
The state sector transitions its light fleet to low-emissions vehicles	Rate of transition to a low-emissions light vehicle fleet: <ul style="list-style-type: none"> percentage increase of the state services fleet that is electric over time 	To be established in 2018/19	Increase

⁵ Including process heat.



The public sector uses roughly
3.7%
of New Zealand's total energy use, excluding transport.

EECA's contribution to the SDGs through our work in government leadership:





Engage hearts and minds

Foster a society in which sustainable energy is expected and demanded

Why this matters

We all make decisions about how we use energy. Energy is used in producing all of the goods and services we purchase. Tapping into the benefit that more sustainable energy can deliver requires collective action.

Over two-thirds of New Zealanders agree that climate change is the biggest problem the world is facing today. However, in the context of a myriad of more direct and immediate challenges of day-to-day life, it falls down the list of priorities in people's minds (24th out of 38 concerns)⁵.

Even small countries that individually only contribute a fraction of global emissions, together account for nearly a quarter of greenhouse gas emissions⁶. Acting together, we can support a global shift to greater action. We all have a voice as global citizens to expect and demand sustainable energy use.

We aim to help people contribute to the overall change they want to see, by supporting them in their understanding of how their individual energy-related choices can collectively make a powerful difference.

We also aim to help New Zealanders experience and recognise the multiple benefits that the efficient use of sustainable energy delivers for their own lives, including reduced energy costs and improved quality of energy services, health and wellbeing, mobility, cleaner urban and natural environments and economic opportunity. By doing so, we aim to increase the priority placed on energy efficiency and sustainable energy as tools for achieving other, broader, personal and social outcomes.

⁵ Colmar Brunton Better Futures Report 2017 edition.

⁶ CAIT Climate Data Explorer (2015), World Resources Institute.

What success will look like

- New Zealanders feel that the way they use energy positively contributes to achieving New Zealand's climate change commitments.
- New Zealanders expect and demand energy-related products and services based on their energy efficiency and sustainability.

Actions we will take

We intend to inspire New Zealanders to make the world more sustainable through the energy choices they make as parents, employees, business owners, shareholders and consumers.

We will achieve this by:

- better understanding the values and attitudes of New Zealanders to sustainable energy
- engaging with New Zealanders in a way that speaks to their values, and develops their ability to influence energy use in New Zealand
- laying the foundations to build a longer-term, national movement of public sentiment, which demands sustainable energy in the production of goods and services.



How will we measure progress

What is intended to be achieved	How we will measure progress	Current state	Desired trend
New Zealanders feel their energy use positively contributes to New Zealand's climate change commitments	Number of survey responses reporting people feel their energy use positively contributes to New Zealand's climate change commitments	To be established in 2018/19	Increase
New Zealanders choose energy-related products and services based on their sustainability	Number of survey responses reporting people choose energy-related products and services based on their sustainability	To be established in 2018/19	Increase



Over two-thirds of New Zealanders agree that climate change is the biggest problem the world is facing today.

EECA's contribution to the SDGs through our work to engage the hearts and minds of New Zealanders:



80%

of people buy products because of price, even those who are committed to a sustainable lifestyle.



Our role in the energy system

External environment

At EECA, we continually evaluate our environment to identify existing and emerging trends, challenges and opportunities. This allows us to be ready to respond, achieve our intended outcomes sustainably and deliver value for all New Zealanders.

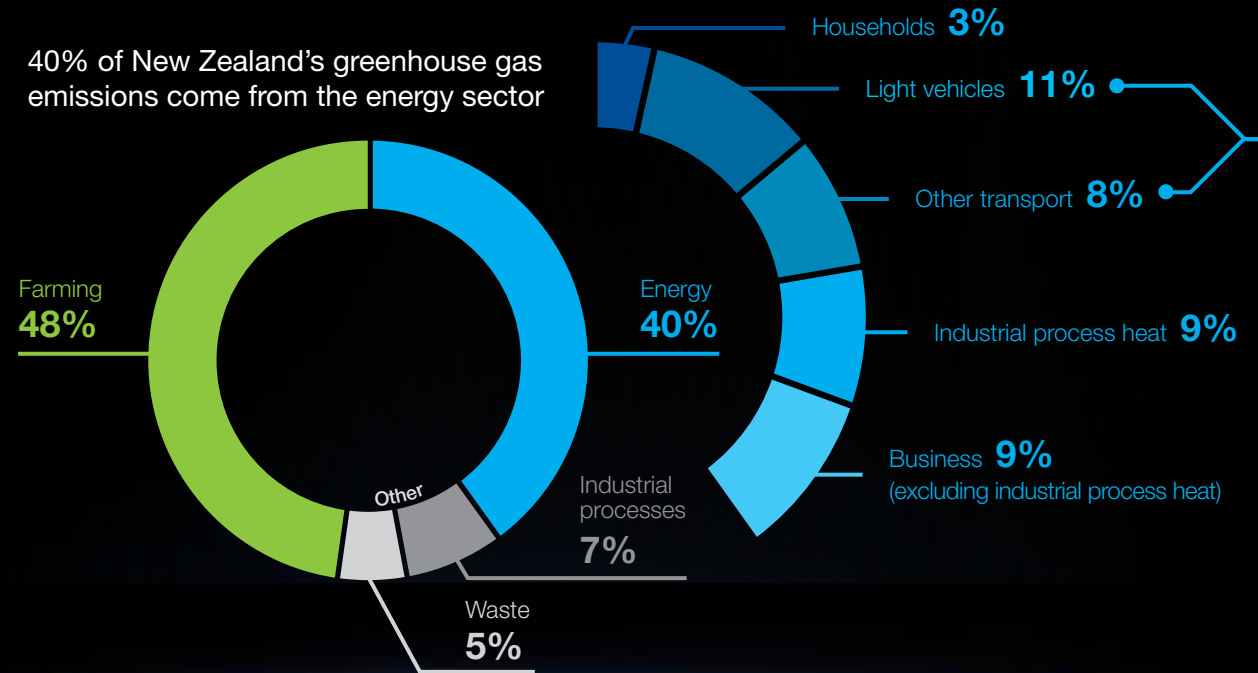
There is disruptive change occurring in our operating environment, as the world and New Zealand respond to the impact of climate change and its mitigation. New Zealand has committed to a target of reducing emissions by 30% below 2005 levels by 2030 as part of its Paris Climate Change Agreement.

The Government intends to introduce a Carbon Zero Bill in 2018 that will define a new 2050 emission-reduction target and to establish an independent Climate Change Commission. It has also indicated it wishes to move towards 100% renewable electricity generation by 2035. We will support the Climate Change Commission in its investigation of this transition.

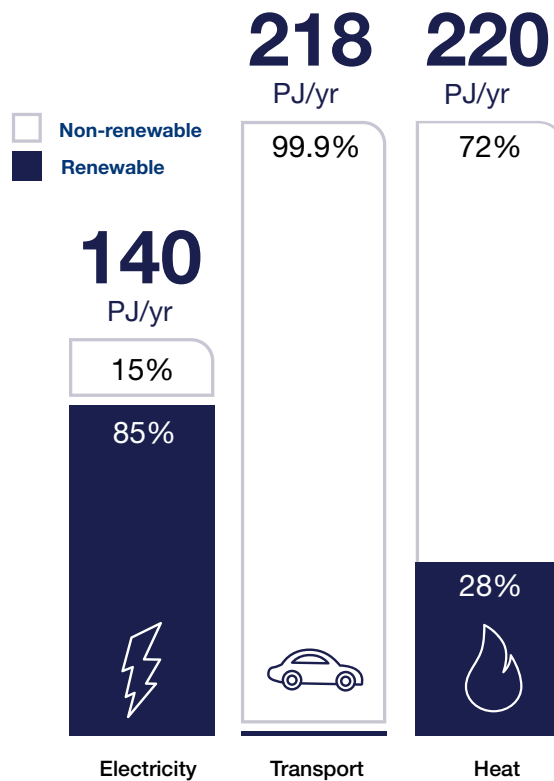
Source: New Zealand's Greenhouse Gas Inventory 1990-2015, Ministry for the Environment (2017), and the Energy End Use Database 2015, EECA (2017).

New Zealand's greenhouse gas emissions

40% of New Zealand's greenhouse gas emissions come from the energy sector



Energy use in New Zealand

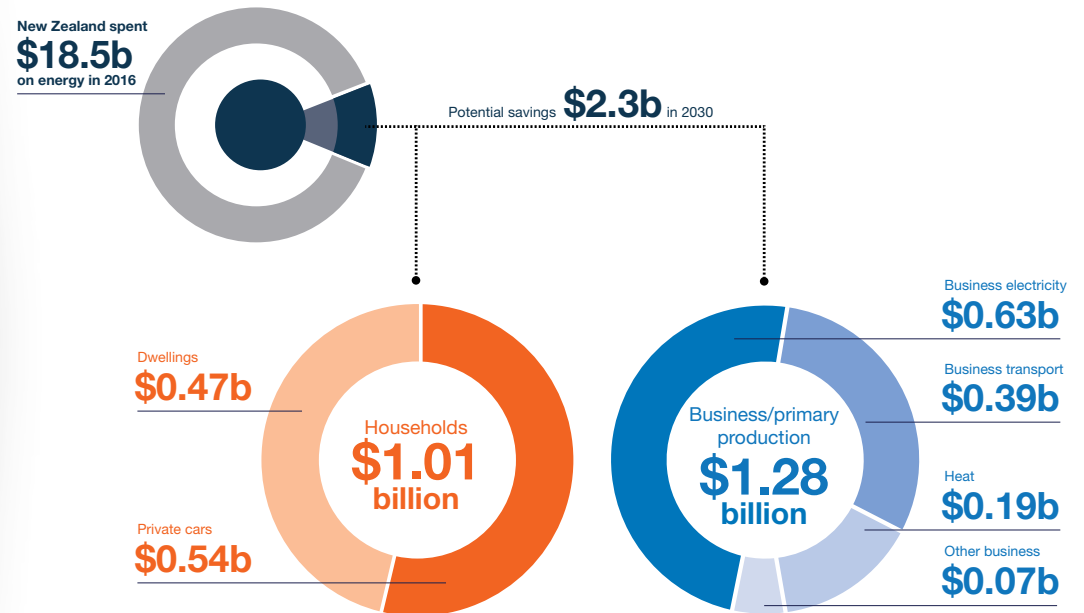


At the end of April 2018, there were **7,600** electric vehicles in New Zealand. Four years ago, there were only 250

Source: Energy in New Zealand: 2016, MBIE (2017).

2030 economic energy savings potential

Energy efficient practices and technologies could reduce New Zealand's annual energy use by 20% by 2030.



Source: Economic Energy Potentials Tool 2016, EECA (2017).

Our desired outcome

Our aim is for New Zealand to have a sustainable energy system that supports the prosperity and wellbeing of current and future generations. We are working towards this by helping New Zealanders increase their energy productivity and reduce their energy-related emissions.

Our outcomes framework

Our desired outcome

A sustainable energy system that supports the prosperity and wellbeing of current and future generations

Outcomes for each strategic focus area

- EECA's client businesses demonstrate best practices, continuously improve their energy and emissions productivity and motivate other businesses to take action
- New Zealand businesses are continuously improving their energy productivity and using sustainable energy to contribute to New Zealand's emissions reduction target

- New Zealanders have their transport needs met and use significantly less energy
- New Zealand's vehicle fleet is more energy efficient
- More New Zealanders choose a low-emissions vehicle over a fossil-fuelled vehicle and have a good experience using it
- People who do not buy a low-emissions vehicle choose a more efficient fossil-fuelled vehicle
- The Government develops policy options to improve New Zealand's transition to a low-carbon transport system

- Households consume electricity more efficiently to reduce peak loading on infrastructure
- More New Zealanders live in energy efficient homes and make informed choices on energy efficient technologies and behaviours
- New Zealand's residential energy-related carbon emissions decrease

- The state sector is an exemplar in improving its energy productivity and reducing its energy-related emissions
- State services implements energy policy and programmes to accelerate the transition to clean and clever energy use in New Zealand

- New Zealanders feel that the way they use energy positively contributes to achieving New Zealand's climate change commitments
- New Zealanders expect and demand energy-related products and services based on their energy efficiency and sustainability

Our strategic focus areas



Productive and low-emissions business

Mobilise decision makers and technical experts to accelerate action.



Efficient and low-emissions transport

Switch the fleet to low-emissions technology while ensuring that any remaining fossil-fuelled vehicles are as efficient as possible.



Energy efficient homes

Optimise New Zealanders' use of renewable energy through energy efficient homes, technologies and behaviours.



Government leadership

Equip the public sector to innovate and lead the transition to clean and clever energy use.



Engage hearts and minds

Foster a society in which sustainable energy is expected and demanded.



The New Zealand Energy Efficiency and Conservation Strategy (NZEECS)

The New Zealand Energy Efficiency and Conservation Strategy (NZEECS) sets out the overarching policy direction for government support and intervention for the promotion of energy efficiency, energy conservation and the use of renewable sources of energy. EECA's work programmes are guided by the NZEECS, and we undertake supporting actions to implement the Strategy.

To enable and foster businesses to take action, EECA will work with partners to:

MOT, MBIE, EECA, NZTA

Implement the Electric Vehicles Programme to double the number of electric vehicle registrations each year to reach 64,000 by 2021.



To encourage individuals, households and community institutions to take action, EECA will work with partners to:

EECA

Continue to provide information, advice and technical assistance to individuals on energy efficient and renewable energy technologies and practices, including advice on reducing costs and emissions.



MFE, MBIE, EECA

Build on the Government's guidance and mechanisms for businesses voluntarily reporting greenhouse gas emissions.



EECA

Introduce new, and periodically review, minimum energy performance standards and labels for appliances, equipment, vehicles to ensure that potential consumers are provided with clear and accurate energy information at the point of sale.



EECA

Introduce new, and periodically review, minimum energy performance standards and labels for appliances, equipment, vehicles to ensure that potential business consumers are provided with clear and accurate energy information at the point of sale.



MOT, EECA

Implement the Electric Vehicles Programme to increase awareness of the benefits of electric vehicles and accelerate uptake through collaboration with the private sector to aggregate demand and increase model availability and affordability.



EECA, MBIE

Support continuous improvement in the energy performance of commercial buildings, including through reviews of the energy efficiency provisions in the building code and increasing minimum energy performance over time, where cost-effective on a lifecycle cost basis.



EECA

Implement EECA's Warm Up New Zealand: Healthy Homes programme through to June 2018, and work with insulation providers and MBIE to ensure ongoing quality installations.



EECA, MOT

Refocus EECA's business programme towards emissions and productivity opportunities in process heat and transport.



EECA, MBIE, EA (support)

Continue to provide energy information and tools to consumers to support good decision making, and improve access to information so that they can respond to changing pricing structures and new technologies.



MOT, EECA

Explore options for how we can improve the efficiency of the heavy vehicle fleet, such as increasing efficient driving practices, and the pace of adoption of more fuel efficient vehicles (including EVs) by business.



MBIE, EECA

Support continuous improvement in the energy performance of new and existing homes through reviews of the energy efficiency provisions in the building code and by increasing energy efficiency performance requirements over time, where cost-effective on a lifecycle cost basis.



MBIE, EECA

Develop and implement a process heat action plan, with policies and programmes to improve efficiency of existing process heat plant, and encourage investment in efficient and renewable plant.



MOT, EECA

Explore options for how we can increase efficient driving practices and the pace of adoption of more fuel efficient vehicles (including EVs) by households.



To enable and foster public sector agencies to take action, EECA will work with partners to:

MfE, MBIE, EECA

Build on the Government's guidance and mechanisms for voluntary reporting of greenhouse gas emissions, including the role of public sector agencies.



To enable and foster coordinated actions across all groups and priority areas, EECA will work with partners to:

MBIE, EECA

Develop methods and guides to help businesses, individuals and other organisations quantify and monetise the multiple benefits of energy productivity and renewable energy.



EECA

Refocus EECA's Crown Loans programme toward emissions reduction and energy productivity improvement opportunities.



MBIE, EECA

Support skills development in the energy management and renewable energy fields, in partnership with relevant tertiary and research institutions and the business community.



EECA, MBIE (Government Property Group)

Increase the number of government owned or leased buildings that get regular NABERSNZ ratings, publish their ratings and show an improvement in their building energy performance.



MBIE, Callaghan Innovation, EECA

Support increased investment in energy research, development and demonstration (RD&D) to help foster innovation in the development and deployment of next generation technologies and ensure future productivity gains.



MBIE, EECA, MfE

As part of the process heat action plan, identify opportunities to increase public sector energy efficiency and renewable energy use in publicly owned process heating systems.



MBIE, EECA

Continue to build on the contribution that renewable energy and energy efficiency expertise make to New Zealand's international connections, and ensure that the supporting data and research are up-to-date and relevant.



Sustainable Development Goals

In September 2015, countries adopted a set of global goals to end poverty, protect the planet and ensure prosperity for all. Each goal has a number of targets to be achieved by 2030. To achieve the goals, everyone needs to do their part: all levels of government, industry, business, farmers, the non-profit sector and the public. The image below indicates how our activities and programmes contribute to achieving relevant SDGs.





Organisational capability

We aim to focus the commitment and capabilities of our staff and partners towards the benefits of clean and clever energy for New Zealand and the world. To successfully deliver on this will require us to make step changes in how we operate internally and externally. The Performance Improvement Framework (PIF) review completed in late 2017 will act as our reference point for the step changes required. Contained in this review are the theme areas EECA has identified in order to meet the challenges and expectations over the next four years. These are:

- clarifying our strategy
- acting as an authority and advisor
- maximising impact
- clearly identifying customers
- delivering effective programmes
- organisation development.

An action plan has been developed around these theme areas and the Board has committed to completing a further PIF review in late 2019 to assess the improvements made.

Our people and capability

Our people are passionate about the contribution that energy must make in addressing the world's climate change problem and to improving the wellbeing of New Zealanders.

To deliver our strategy we will develop an organisation capable of:

Being agile: galvanising ourselves and others to high impact action; embracing change, focusing on step change improvement and changing direction when required

Connecting: to look for connections and join the dots across the energy system and building wide networks of influence

Problem solving: be go-to and can-do people, using proven methods to solve difficult problems and overcome road blocks

Collaborating: working from the outside in; developing partnerships with our stakeholders and customers; understanding what they care about and their motivations and how we can add value as we work together to achieve mutual goals for New Zealand

Leading: have an evidence-based opinion and communicate it strongly; provide objective and forthright advice and inspire people and organisations to join us on the journey.

Our brand and reputation

EECA has strong and trusted brands. In delivering our purpose we will extend and develop our brands wisely, to reach out and engage with New Zealanders. We will continue to embed our trustworthiness, and the confidence people have in us as a source of truth.

Our systems

The way we operate our business, and the tools we use, must be fit for purpose if we want to work fast and efficiently, and attract partners to work with us. We will continue to simplify our processes and make it easier for others to work with us, whilst maintaining a high standard of integrity.

Glossary

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

E3 – the Equipment Energy Efficiency Programme, known as E3, is a trans-Tasman programme. It works to align energy efficiency requirements between Australia and New Zealand and to make residential, commercial and industrial products more energy efficient, through the implementation of minimum energy performance standards (MEPS) and mandatory energy performance labelling (MEPL).

Emissions – greenhouse gas emissions.

Emissions productivity – the comparison of emissions with production in the economy, defined as gross domestic product (GDP) per unit of emissions. It measures whether emissions have grown or decreased faster or slower than growth in the economy.

Energy productivity – the value we get from the energy we consume, defined as GDP per unit of energy.

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.

Low-emissions vehicle (LEV) – LEVs use our renewable electricity advantage to significantly reduce greenhouse gas emissions. LEVs include battery electric vehicles, plug-in hybrid vehicles and hydrogen fuel cell vehicles (as long as the hydrogen is produced using New Zealand's renewable electricity advantage).

Mandatory Energy Performance Labelling (MEPL) – EECA carries out regulation of energy efficiency labelling for products and appliances so consumers can compare the energy use of products and appliances they buy.

Minimum Energy Performance Standards (MEPS) – EECA carries out regulation of energy efficiency standards for products and appliances to ensure the worst-performing ones are kept out of the New Zealand market.

NZEECS – the New Zealand Energy Efficiency and Conservation Strategy (NZEECS) is a national strategy focusing on energy efficiency, conservation and the use of renewable sources of energy. EECA's work programmes are guided by the NZEECS.

Petajoule (PJ) – the unit most often used to measure energy production and use on a national scale in New Zealand. Energy savings are valued using the marginal cost of electricity supply.

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. It generally involves the use of coal, gas, wood or electricity.

Public sector – the public sector comprises four sectors: public service, state services, state sector and the public sector. It therefore includes both central and local government organisations.

Renewable energy – energy produced from hydro, geothermal, biomass, wind, solar and marine sources.

State sector – within the state sector lies the state services, and within this lies the core public service.

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.

Vehicle Fuel Economy Label – this is a label that shows how much fuel a vehicle will use to travel a certain distance, which helps people make an informed decision about the vehicles they are considering buying. All new cars, and all cars manufactured since 2000 and imported since 2005 for sale in New Zealand, must display information about the vehicle's fuel economy, whenever that information is available.



Energy Efficiency and
Conservation Authority
Te Tari Tiaki Pūngao

Level 8, 44 The Terrace, Po Box 388, Wellington, New Zealand
P +64 4 470 2200 F +64 4 499 5330 www.eeca.govt.nz

