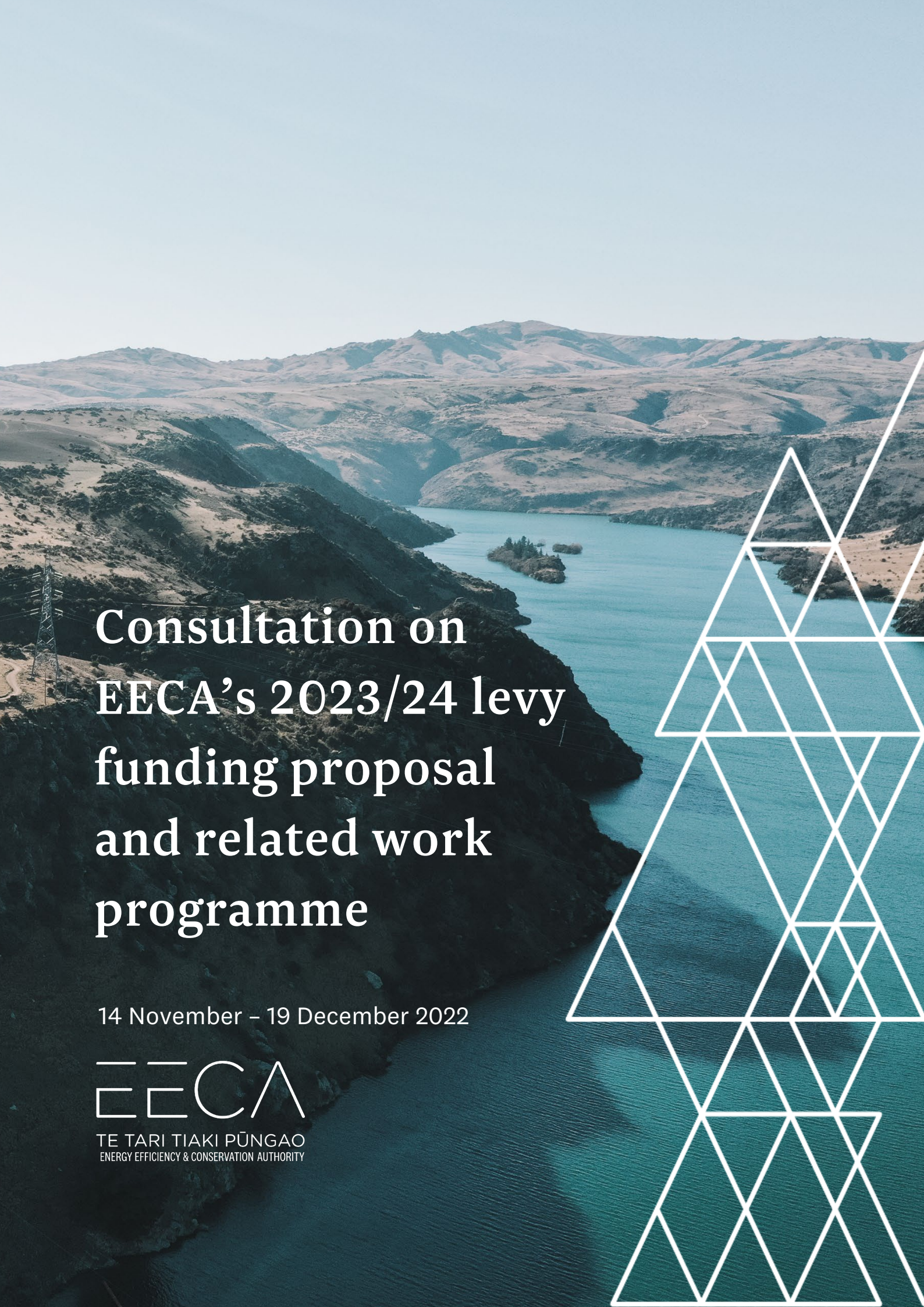


Consultation on EECA's 2023/24 levy funding proposal and related work programme

14 November – 19 December 2022

EECA
TE TARI TIAKI PŪNGAO
ENERGY EFFICIENCY & CONSERVATION AUTHORITY

Contents

Summary

What you need to know to make a submission

What this consultation paper is about

This consultation document provides the opportunity to make submissions on Te Tari Tiaki Pūngao Energy Efficiency and Conservation Authority's (**EECA**) levy funding proposal and draft levy-funded work programme for 2023/24, which covers the period 1 July 2023 to 30 June 2024.

Consultation on EECA's levy funding proposal from the three energy levies is required under section 129A of the Electricity Industry Act 2010 for the Electricity levy, and section 14A of the Energy (Fuels, Levies, and References) Act 1989 for the GSMEE levy and the PEFM levy. The legal context for this consultation is outlined in Appendix 4 (see page 36).

How to make a submission

Email: You may provide your submission in electronic form, which can be emailed to **levyconsultation@eeca.govt.nz** with "EECA 2023/24 levy consultation submission" in the subject line.

Post: Alternatively, you may wish to post a physical copy of your submission:
EECA, PO Box 388, Wellington 6140.

All received submissions will be acknowledged upon receipt (by email). We will also provide written responses to each submission.

We will publish all submissions we receive on our website. If required, please indicate any information in your submission you wish to provide on a confidential basis and do not want published.

EECA is subject to the Official Information Act 1982 and this means we may be required to release information, unless there is a good reason to withhold it. If you indicate there is a part of your submission that should not be published, we will consult with you before deciding to release or publish that information.

Submission deadline

The consultation period commences on Monday, 14 November 2022, and all submissions must be received by **5:00pm Monday 19 December 2022.**

Next steps

The EECA Board will consider all submissions before presenting our levy funding request for our 2023/24 work programme to the Minister of Energy and Resources in early 2023.

The approved appropriations will be announced by the Government in its 2023 Budget, which is expected to be in May 2023. This information will be included in EECA's Statement of Performance Expectations 2023/24, which will be published on the EECA website by 30 June 2023.

Questions?

If you have any questions regarding the contents of this consultation document or the submission process, please email us at levyconsultation@eeca.govt.nz.

Summary of EECA's levy funding proposal for 2023/24

Consultation details

This document outlines and seeks submissions on EECA's levy funding proposal for our 2023/24 work programme from three energy levies:

1. Petroleum or Engine Fuel Monitoring (**PEFM**) levy
2. Electricity Industry (**Electricity**) levy
3. Gas Safety, Monitoring and Energy Efficiency (**GSMEE**) levy.

Submissions are sought on EECA's levy proposal by **5:00pm Monday 19 December 2022.**

Total levy funding proposed in 2023/24

EECA's activities are funded by the Crown through appropriations of public money. Some of these activities are *partially* funded from levies on electricity, natural gas and engine fuels (i.e. petrol, diesel, ethanol and biodiesel).

Table 2 (on page 7) shows that for 2023/24, EECA's activities with most direct relevance to the PEFM, Electricity and GSMEE levies will cost $38.97 million. As shown in Table 1 (on page 7), we propose **$20.3 million** of funding in 2023/24 be sourced from the three energy levies to *partially* fund the listed programmes.

Changes from the 2022/23 levy funding proposal

1. Increase in PEFM levy funding request

We propose a $3.0 million increase in the PEFM levy funding request (from $10.5 million 2022/23 to $13.5 million in 2022/23) which will match the Government's $3.0 million increase in contribution to the Low Emission Transport Fund for 2023/24.[1]

The Labour Party's 2020 Election Manifesto[2] stated, if elected, they will:

> *"...Progressively increase funding [for the Low Emission Transport Fund, formerly the Low Emission Vehicles Contestable Fund] to a total of $25 million per year, evenly shared by Government contributions and sector levies to fund more electric vehicle chargers and support the purchase of more low emission vehicles. Labour will match the sector's investment and widen the scheme to include both demonstration projects and wider diffusion of low emissions technologies in the transport sector."*

The Government is now delivering on the final step in that commitment and so the intention is the funding increase for the Low Emission Transport Fund be matched by an increase in funding from the PEFM levy (as opposed to being funded fully from general appropriations). We are consulting on the $3.0 million being funded by the PEFM levy, which was signalled in our 2022/23 consultation in November 2021 in the table below.

[1] This programme was formerly the Low Emission Vehicles Contestable Fund.

[2] Labour Party 2020 Election Manifesto – Clean Energy (2020): https://d3n8a8pro7vhmx.cloudfront.net/nzlabour/pages/18628/attachments/original/1599690526/Clean_Energy_-_Factsheet.pdf?1599690526

	2021/22 $000	2022/23 $000	2023/24 $000	2024/25 and outyears $000
Proposed PEFM funding for Low Emissions Transport Behaviour Change Programme	740	1,000	1,000	1,000
Proposed PEFM funding for Low Emissions Transport Fund	6,760	9,500	12,500	12,500
Total proposed PEFM levy-funded contribution	**7,500**	**10,500**	**13,500**	**13,500**
EECA Funding for Low Emissions Transport Fund	**6,760**	**9,500**	**12,500**	**12,500**
Total	**14,260**	**20,000**	**26,000**	**26,000**

2. Decrease in Electricity levy funding request and increase in GSMEE levy funding request

It is proposed the Electricity levy funding request be decreased by $0.2 million (from $5.3 million in 2022/23 to $5.1 million in 2023/24) and the GSMEE levy funding request be increased by $0.2 million (from $1.5 million in 2022/23 to $1.7 million in 2023/24) in line with the changing proportion of our activities that are related to electricity and gas. As signalled in our 2022/23 consultation in November 2021, we expect this trend of increased GSMEE levy-related activities and decreased Electricity levy-related activities to continue. Therefore, we expect to continue to increase our GSMEE levy request and (all things being equal) decrease our Electricity levy request accordingly in at least the following year (and potentially further out). This is so we can continue to focus on where we can deliver the best benefits and to reflect the changing level of levy-funded activity between electricity and gas.

3. Increase in resourcing for Equipment Energy Efficiency programme related to the Electricity and GSMEE levies

The proposed increase in resourcing for our Equipment Energy Efficiency (E3) programme is due to additional activity related to the proposed changes to the Energy Efficiency and Conservation Act 2000 and regulatory powers under Section 36 (which we expect will be in place at the beginning of the 2023/24 year) to enhance the energy efficiency regulatory system for products and services and support the achievement of New Zealand's future energy efficiency and emissions reduction goals. This activity will revolve around the benefits identified from further well targeted regulation for the benefit all consumers of both electricity and gas.

Summary of our 2023/24 levy funding proposal

Table 1 – Summary of EECA's levy funding proposal for 2023/24			
Description	2022/23 ($ million)	2023/24 ($ million)	Difference ($ million)
Total cost of levy-related activities (see Table 2)	**36.67**	**38.97**	**2.30**
Proposed PEFM levy funding	10.50	13.50	3.00
Proposed Electricity levy funding	5.30	5.10	(0.20)
Proposed GSMEE levy funding	1.50	1.70	0.20
Total amount proposed to be recovered from levies	**17.30** (47%)	**20.30** (52%)	**3.00** (5%)
Total proposed balance to be covered by EECA funding	**19.37** (53%)	**18.67** (48%)	**(0.70)** (5%)

Table 2 – Total cost of EECA's levy-related activities for 2023/24						
Strategic focus area	Levy-related programme	2022/23 cost ($ million)		2023/24 cost ($ million)		Difference ($ million)
		Activities related to PEFM Levy	Activities related to Electricity and GSMEE Levies	Activities related to PEFM Levy	Activities related to Electricity and GSMEE Levies	
Efficient and low-emissions transport	Low Emission Transport Fund	19.68	-	26.05	-	6.37
	Low Emissions Transport Behaviour Change Programme	1.64	-	2.56	-	0.92
Energy efficient homes	Equipment Energy Efficiency Programme – Residential	-	1.80	-	2.57	0.77
Productive and low-emissions business	Equipment Energy Efficiency Programme – Business	-	1.80	-	2.57	0.77
	Large Energy Users – Direct Programme	-	5.39	-	0.73	(4.66)
	Technology Demonstration Programme	-	2.69	-	2.37	(0.32)
	Sector Decarbonisation Programme	-	2.10	-	1.04	(1.06)
	Industry Development Programme	-	0.60	-	0.29	(0.31)
	NABERSNZ Programme	-	0.34	-	0.23	(0.11)
Government leadership	Local Authorities Programme	-	0.63	-	0.56	(0.07)
Subtotal		21.32	15.35	28.61	10.36	7.29 (4.99)
Total cost of levy-related activities		**36.67**		**38.97**		**2.30**

PEFM levy

In 2023/24, EECA's PEFM levy-relevant activities will cost $28.61 million. We propose **$13.5 million of funding from the PEFM levy**, which is 47% of the total relevant programme cost.

The amount of $13.5 million requested from the PEFM levy is a $3.0 million increase from 2022/23 ($10.5 million) and represents 66% of our total proposed request across the three levies ($20.3 million).

The following programmes would be *partially* funded by the proposed levy funding:

- **The Low Emission Transport Fund** to co-invest in the demonstration and adoption of low-emission transport technology, innovation, and infrastructure to accelerate the decarbonisation of the New Zealand transport sector.
- **Low Emissions Transport Behaviour Change Programme** to promote and encourage people to use electric vehicles or other low-emissions transport instead of higher-emitting alternatives.

Electricity and GSMEE levies

In 2023/24, EECA's Electricity levy and GSMEE levy-relevant activities will cost $10.36 million. We propose **$5.1 million of funding from the Electricity levy** and **$1.7 million of funding from the GSMEE levy**, which is $6.8 million total and represents 65% of the total relevant programme cost.

The amount of $5.1 million requested from the Electricity levy is a $0.2 million decrease from 2022/23 ($5.3 million) and 25% of our total proposed levy funding across the three levies ($20.3 million). Furthermore, $5.1 million is 75% of the total proposed combined Electricity and GSMEE levies request of $6.8 million.

The amount of $1.7 million requested from the GSMEE levy is a $0.2 million increase from 2022/23 ($1.5 million) and 9% of our total proposed levy funding across the three levies ($20.3 million). Furthermore, $1.7 million is 25% of the total proposed combined Electricity and GSMEE levies request of $6.8 million.

The following programmes would be *partially* funded by the Electricity and GSMEE levies:

- **The Equipment Energy Efficiency (E3) Programme** for developing energy efficiency standards and regulations for energy using products used in business and residential settings.
- **Technology Demonstration Programme** to support demonstration projects for proven but under-utilised energy efficient and low-emissions technologies and processes.
- **Large Energy Users Programme** to help businesses become more energy efficient and low-emissions to accelerate the transition to a low-emissions future.
- **NABERSNZ Programme** to improve the energy performance of commercial buildings.
- **Industry Development Programme** to develop the capability and competence of industry groups, sectors and associations that are aligned or work in connection with EECA's purpose and objectives.

- **Sector Decarbonisation Programme** to create decarbonisation roadmaps for industry sectors and sub-sectors that are using high levels of non-renewable energy so are higher carbon emitters from their energy use.
- **Local Authorities Programme** to provide advice and co-funding for local authorities to reduce their energy use and accelerate their move to renewable forms of energy.

Context

Our story

About EECA

EECA is a Crown entity established under the Energy Efficiency and Conservation Act 2000 (**EECA Act**), to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. Our purpose is to mobilise New Zealanders to be world leaders in clean and clever energy use.

Our desired outcome

We want New Zealand to have a sustainable energy system that supports the prosperity and wellbeing of current and future generations. To achieve this, we focus on energy efficiency and the use of renewable energy sources. Put simply, we want all of New Zealand to recognise that clean and clever energy use will be an asset to our collective future in a myriad of ways (see page 12 for further detail).

Our three levers

We work to create positive change across systems, using the most effective combination of three important levers:

1. **Co-investing**: We co-invest in energy-efficient technologies and energy systems using renewable sources of energy. When there are financial barriers, we help to overcome these and appropriately share the financial risk to incentivise energy users to accelerate investment in technologies and the use of renewable sources of energy that can make a real difference.
2. **Motivating people**: We motivate people to make clean and clever energy choices. We develop and communicate credible information that will help targeted audiences to make informed choices, and to take action.
3. **Regulating**: We regulate proven technologies and processes. We help prevent inefficient products and appliances from being sold in New Zealand. We support the development of energy-related policies that create the enabling environment energy users need to transition to a low-emissions economy.

Our investment approach

We have five strategic focus areas (as shown over the page). The programmes we design and implement within these focus areas are guided by our strategic principles and align with New Zealand's energy and climate change goals. We work with a wide range of stakeholders, clients and New Zealanders as we transition to a low-emissions and sustainable energy system that supports the prosperity, and the wellbeing, of current and future generations.

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

Motivate decision makers to accelerate the transition to a low-emissions economy.

Efficient and low-emissions transport

Switch to efficient low-emissions technologies and fuels to move people and goods.

Energy efficient homes

Optimise New Zealand's use of renewable energy at home.

Government leadership

Lead the transition to a low-emissions economy.

Engage hearts and minds

Create an enabling environment for systemic change, where clean and clever energy is expected and demanded.

Our desired outcome

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

Emerging government policies and initiatives

Our proposed 2023/24 work programme is aligned to the Government's priorities and particularly its broader agenda to help address climate change. Those most relevant to our work include:

- The Emissions Reduction Plan, in which the Government has adopted emissions budgets for the next 14 years and laid out its plan to deliver these with allocated funding through the Climate Emergency Response Fund to deliver on the Plan.
- A growing suite of energy and transport decarbonisation initiatives, including the Clean Car Package, Resource Management Act national direction on industrial greenhouse gas emissions, and proposals to reform the Energy Efficiency and Conservation Act 2000 and related energy efficient product and services regulatory regime.

Positive impacts from clean and clever energy

Environmental

Emissions reductions

Using energy more efficiently and switching to renewable energy solutions reduces emissions that have a harmful impact on the environment. Nearly 40%[3] of New Zealand's gross greenhouse gas emissions come from energy use, primarily through using fossil fuels. There are significant opportunities for New Zealand to reduce its emissions associated with energy use and, in doing so, helping meet our Paris Agreement target.[4]

While more than 80%[5] of New Zealand's electricity generation comes from renewable resources, emissions from electricity generation still account for almost 6% of our total energy-related emissions, meaning that using our electricity more efficiently will reduce energy-related emissions.[6]

At times, such as during very cold weather or low inflow periods, a significant portion of New Zealand's peak demand is met by thermally generated electricity, meaning that reducing peak demand is another important step to achieving the Government's goal of a 100% renewable electricity system.

Transport fuels and process heat systems are large producers of energy-related emissions. New Zealand's growing transport energy needs are almost exclusively met by petroleum-derived fossil fuels, with emissions from transport accounting for almost 50% of New Zealand's energy-related emissions.[7] Furthermore, around 55% of our industrial and commercial heat needs are met by fossil fuels.[8]

[3] Greenhouse Gas Inventory 1990-2019, Ministry for the Environment (2021).
[4] Paris Agreement target: New Zealand's net emissions will be 50 per cent below 2005 gross emissions for the period 01 January 2021 to 31 December 2030. This target is New Zealand's first Nationally Determined Contribution (NDC) under the Paris Agreement.
[5] mbie.govt.nz/dmsdocument/16820-energy-in-new-zealand-2021.
[6] Greenhouse Gas Inventory 1990-2020, Ministry for the Environment (2022).
[7] Greenhouse Gas Inventory 1990-2020, Ministry for the Environment (2022).
[8] mbie.govt.nz/assets/8c89799b73/process-heat-current-state-fact-sheet.pdf.

Economic

Improving energy efficiency saves money across the economy. New Zealand spends approximately $18.6 billion on energy each year and EECA estimates that around 15 to 20% of energy use could be saved through improved energy efficiency by 2030.[9]

Lower energy prices

In an efficient and competitive market, less energy will be used. This produces a mix of economic benefits and wealth transfers in the form of lower energy prices for energy users. Price reductions tend to be larger in markets with convex supply curves (such as electricity), where the cost of more production tends to increase steeply as demand increases.

Increased energy productivity

Energy efficiency can be achieved by using less energy to deliver the same services or using the same amount of energy to deliver a greater level of service. Improved energy efficiency increases energy productivity, which supports New Zealand businesses and exporters to become more competitive and profitable.

Reduced/delayed investment

Electricity efficiency can help to reduce peak demand, delivering system-wide benefits to New Zealanders in the form of reduced or delayed investment in grid and distribution infrastructure, and less volatile wholesale prices.[10] Our research indicates that electricity efficiency measures can be deployed at a lower equivalent cost than new renewable generation, and that implementing these measures would make it easier to meet new demand arising from electrification.[11]

Resilience and security

Switching to renewable energy solutions where possible also reduces our dependence on fossil fuels, increases our energy security and makes us more resilient to fluctuating commodity prices. Electric vehicles can be more expensive to purchase than fossil-fuelled vehicles, especially brand new. But as they cost far less to run, they can be cost-competitive over time.

Social

Disposable income

Ensuring that poor performing, and inefficient appliances are not available for sale in New Zealand saves households and businesses money on their energy bills for the lifetime of those appliances.

Improved health and wellbeing:

There are proven health benefits from reducing pollution associated with the use of fossil fuels for heat and transport.

[9] EECA's analysis using the Ministry of Business, Innovation and Employment's *Energy Balance 2020* and *Energy Prices 2020.*
[10] Concept Consulting Group Limited, *What is the case for electricity efficiency initiatives*? June 2017.
[11] Energy Efficiency First, EECA (2019): eeca.govt.nz/insights/eeca-insights/energy-efficiency-first.

How we are funded

Our appropriations

Our activities are funded by the Crown from general appropriations. Based on current appropriations, in 2023/24 we are receiving funding through the following appropriations within Vote Business, Science and Innovation:

1. **Energy Efficiency and Conservation**: This appropriation is used to achieve improvements in energy efficiency, energy conservation and renewable energy. See below for more detail.
2. **Grant Scheme for Warm, Dry Homes**: This appropriation is used to achieve energy savings and health benefits for households through the Warmer Kiwi Homes scheme.
3. **Implementation of the Grant Scheme for Warm, Dry Homes**: This appropriation is used to achieve the implementation of the Warmer Kiwi Homes grants scheme.
4. **Accelerating Energy Efficiency and Fuel Switching in Industry 2021-2025:** This appropriation is for energy efficiency and fuel switching projects that reduce carbon emissions from industrial processes, including electricity network connections (GIDI 1.0).
5. **Accelerating Energy Efficiency and Fuel Switching in Industry 2022-2027:** This appropriation is for projects that reduce, or enable the reduction of, energy use and/or carbon emissions of industrial and commercial processes, through energy efficiency, fuel switching, energy supply or other decarbonisation approaches (GIDI 2.0).
6. **Investment in Infrastructure Projects:** This appropriation is for the implementation of the projects EECA is overseeing as part of the $3 billion 'shovel ready' infrastructure programme, which was part of the Government's economic response to COVID-19.

Energy Efficiency and Conservation appropriation

This appropriation is limited to operational and policy outputs in accordance with our statutory functions under the EECA Act and the Government's energy strategies. There are nine components: Crown funded initiatives, State Sector Decarbonisation, Accelerating Energy Efficiency and Fuel Switching in Industry 2021-2025, Accelerating Energy Efficiency and Fuel Switching in Industry 2022-2027, Carbon Neutral Government Programme, Low Emission Transport Fund, Electricity levy funded initiatives, PEFM levy funded initiatives, and GSMEE levy funded initiatives.

The Government collects the energy levies and *partially* invests them in our work programmes, alongside funding from the various appropriations detailed above. This document consults on the levy-sourced funding that will be used to *partially* fund EECA's 2023/24 work programme. The proposed contributions to EECA's 2023/24 proposed budget and a comparison to our 2022/23 Statement of Performance Expectations (SPE) budget is shown below:

Funding source by appropriation	2022/23 SPE budget ($000)	2023/24 proposal ($000)
Non-departmental output expenses		
Energy Efficiency and Conservation		
Crown funded initiatives	16,284	16,284
Scaling up energy and decarbonisation support for business	4,000	4,000
State Sector Decarbonisation	4,800	6,450

Accelerating Energy Efficiency and Fuel Switching in Industry 2021-2025	100	0
Accelerating Energy Efficiency and Fuel Switching in Industry 2022-2027	4,268	5,118
Carbon Neutral Government Programme	11,182	11,182
Low Emission Transport Fund appropriation	9,500	12,500
Freight Decarbonisation	0	292
Electricity levy funded initiatives	5,300	5,100
PEFM levy funded initiatives	10,500	13,500
GSMEE levy funded initiatives	1,500	1,700
Non-departmental other expenses – multiyear appropriations		
Accelerating Energy Efficiency and Fuel Switching in Industry 2021-2025	53,550	6,250
Accelerating Energy Efficiency and Fuel Switching in Industry 2022-2027	61,684	142,795
Warmer Kiwi Homes – Implementation	5,070	5,118
Warmer Kiwi Homes – Grants	67,360	68,000
Infrastructure Reference Group shovel-ready projects grants scheme	9,787	8,025
Total operational appropriations	**264,885**	**306,314**
Other revenue	1,475	1,475
Total operational funding	**266,360**	**307,789**

Who pays the energy levies?

Electricity Industry Levy

Section 128 of the Electricity Industry Act 2010 provides for a levy on electricity industry participants. The funds recovered by this levy meet many of the costs of the Electricity Authority. The EECA portion of the levy is collected from electricity industry participants that purchase electricity from the wholesale market (i.e. typically electricity retailers).[12] The final 2023/24 Electricity levy rate will be published in the New Zealand Gazette in May 2023.[13]

Petroleum or Engine Fuel Monitoring (PEFM) levy

Section 24 of the Energy (Fuels, Levies and References) Act 1989 (**EFLR Act**) provides for the collection of a levy on each litre of petroleum or engine fuel sold (petrol, diesel, ethanol, and biodiesel). The PEFM levy is payable by fuel importers, who pass on the cost on to consumers. Imported petrol and diesel is levied by the Te Mana Ārai o Aotearoa New Zealand Customs Service at the port of import, whereas imported oil is levied at the refinery once processed into the finished product.

The indicative PEFM levy rate for 2023/24 is 0.69 cents/litre, including 0.19 cent/litre for the variable EECA cost, and 0.50 cents/litre for non-EECA activities. The final levy rate will be published in the New Zealand Gazette in May 2023.[13]

[12] gazette.govt.nz/notice/id/2021-gs2406.
[13] gazette.govt.nz.

Gas Safety, Monitoring and Energy Efficiency (GSMEE) levy

Section 23 of the EFLR Act provides for the collection of a levy on piped natural gas, except for gas which is sold for used as a feedstock or for the generation of electricity or is liquefied petroleum gas. The GSMEE levy is payable by sellers of piped gas to gas retailers and gas retailers who sell piped gas.

The indicative GSMEE levy rate for 2023/24 is 4.6 cents/GJ, including 2.6 cents/GJ for the variable EECA cost, and 2.0 cents/GJ for non-EECA activities. The final levy rate will be published in the New Zealand Gazette in May 2023.[13]

Our draft 2023/24 work programme and levy funding proposal

Our approach to providing information on the proposed 2023/24 levy-funded programmes

Detailed information on proposed levy-funded programmes

Consistent with our normal approach, we have provided detailed information below on the programmes that will be funded from the three energy levies. This includes the need for each programme and the expected outputs and benefits they will deliver.

In addition, where it is appropriate or practicable, we have also outlined the link between the groups being levied and whether they benefit from, or cause a need for, a particular levy-funded programme. The provision of information of this type helps to ensure transparency in the use of levy funding for our programmes and helps us to consult with levy payers and other parties who are significantly affected by the levy.

Full work programme provided for context

We have provided information about our whole proposed programme portfolio to demonstrate the wider context for our work, and how our *partially* levy-funded programmes fit within this wider portfolio (see Appendix 1, page 33).

Pooling of funding from Electricity and GSMEE levies

The use of multiple fuels (i.e. electricity and gas) by many businesses is driving the need to give EECA greater operational flexibility and avoid the complexity and administrative costs of making strict judgements about which levy can be used when a programme cuts across multiple fuel types. Consequently, our funding from the Electricity and GSMEE levies is pooled to partially cover relevant programmes (as outlined in our 2022/23 consultation in November 2021). Electricity levies will continue to pay the majority share due to the regulatory-related programmes having a predominant focus on electricity products and appliances. However, we will periodically review the split of funding between the two levies to ensure each levy contribution is fair and equitable.

This approach is permitted by changes made to the Energy (Fuels, Levies, and References) Act 1989 which allowed for the creation of a pool of levy funding available for EECA to use towards any activities within its statutory function.

Changes from the 2022/23 levy consultation

1. **Increase in PEFM levy funding request**

   We propose a $3.0 million increase in the PEFM levy funding request (from $10.5 million 2022/23 to $13.5 million in 2022/23) which will match the Government's $3.0 million increase in contribution to the Low Emission Transport Fund for 2023/24.[14]

[14] This programme was formerly the Low Emission Vehicles Contestable Fund.

The Labour Party's 2020 Election Manifesto[15] stated, if elected, they will:

> *"...Progressively increase funding [for the Low Emission Transport Fund, formerly the Low Emission Vehicles Contestable Fund] to a total of $25 million per year, evenly shared by Government contributions and sector levies to fund more electric vehicle chargers and support the purchase of more low emission vehicles. Labour will match the sector's investment and widen the scheme to include both demonstration projects and wider diffusion of low emissions technologies in the transport sector."*

The Government is now delivering on the final step in that commitment and so the intention is the funding increase for the Low Emission Transport Fund be matched by an increase in funding from the PEFM levy (as opposed to being funded fully from general appropriations). We are consulting on the $3.0 million being funded by the PEFM levy, which was signalled in our 2022/23 consultation in November 2021 in the table below.

	2021/22 $000	2022/23 $000	2023/24 $000	2024/25 and outyears $000
Proposed PEFM funding for Low Emissions Transport Behaviour Change Programme	740	1,000	1,000	1,000
Proposed PEFM funding for Low Emissions Transport Fund	6,760	9,500	12,500	12,500
Total proposed PEFM levy-funded contribution	**7,500**	**10,500**	**13,500**	**13,500**
EECA Funding for Low Emissions Transport Fund	**6,760**	**9,500**	**12,500**	**12,500**
Total	**14,260**	**20,000**	**26,000**	**26,000**

4. Decrease in Electricity levy funding request and increase in GSMEE levy funding request

It is proposed the Electricity levy funding request be decreased by $0.2 million (from $5.3 million in 2022/23 to $5.1 million in 2023/24) and the GSMEE levy funding request be increased by $0.2 million (from $1.5 million in 2022/23 to $1.7 million in 2023/24) in line with the changing proportion of our activities that are related to electricity and gas. As signalled in our 2022/23 consultation in November 2021, we expect this trend of increased GSMEE levy-related activities and decreased Electricity levy-related activities to continue. Therefore, we expect to continue to increase our GSMEE levy request and (all things being equal) decrease our Electricity levy request accordingly in at least the following year (and potentially further out). This is so we can continue to focus on where we can deliver the best benefits and to reflect the changing level of levy-funded activity between electricity and gas.

5. Increase in resourcing for Equipment Energy Efficiency programme related to the Electricity and GSMEE levies

The proposed increase in resourcing for our Equipment Energy Efficiency (E3) programme is due to additional activity related to the proposed changes to the Energy Efficiency and Conservation Act 2000 and regulatory powers under Section 36 (which we expect will be in place at the beginning of the 2023/24 year) to enhance the energy efficiency regulatory system

[15] Labour Party 2020 Election Manifesto – Clean Energy (2020): https://d3n8a8pro7vhmx.cloudfront.net/nzlabour/pages/18628/attachments/original/1599690526/Clean_Energy_-_Factsheet.pdf?1599690526

for products and services and support the achievement of New Zealand's future energy efficiency and emissions reduction goals. This activity will revolve around the benefits identified from further well targeted regulation for the benefit all consumers of both electricity and gas.

Levy-funded programmes for 2023/24 are only partially funded by levy funding

We are again not seeking to recover 100% of the costs of levy-funded activities from the levies. We are instead proposing to recover 47% of the total costs of PEFM levy-related activities from the PEFM levy, and 65% of the total costs of GSMEE and Electricity levy-related activities from the GSMEE and Electricity levy. The balance of the costs of these activities will be covered by EECA's baseline Crown funding. This is because:

- the Government has provided specific additional EECA baseline Crown funding to achieve additional results in the move to renewable sources of energy for transport
- the method for allocating overheads to levy-related activities and assessing the proportion of programme costs across levy sources is subjective, albeit based on robust assumptions and consequently we have chosen to take a conservative approach in not seeking to fully recover all assessed costs from the levies.

We acknowledge previous feedback from submitters asking us to consider increasing government funding for EECA's levy-related programmes, for example, through Emissions Trading Scheme (ETS) proceeds. However, we consider that because our levy-related programmes are caused by or benefit narrow groups, a 'user pays' levy-funded system is more appropriate than other broader revenue sources like ETS proceeds.

Summary of our proposed 2023/24 levy funding request

EECA's activities related to the PEFM, Electricity and GSMEE levies will cost $38.97 million (Table 2). We propose **$20.30 million from three levies** to *partially* fund the listed programmes (Table 1).

Table 1 – Summary of EECA's levy funding proposal for 2023/24

Description	2022/23 ($ million)	2023/24 ($ million)	Difference ($ million)
Total cost of levy-related activities (see Table 2)	**36.67**	**38.97**	**2.30**
Proposed PEFM levy funding	10.50	13.50	3.00
Proposed Electricity levy funding	5.30	5.10	(0.20)
Proposed GSMEE levy funding	1.50	1.70	0.20
Total amount proposed to be recovered from levies	**17.30** (47%)	**20.30** (52%)	**3.00** (5%)
Total proposed balance to be covered by EECA funding	**19.37** (53%)	**18.67** (48%)	**(0.70)** (5%)

Table 2 – Total cost of EECA's levy-related activities for 2023/24

Strategic focus area	Levy-related programme	2022/23 cost ($ million)		2023/24 cost ($ million)		Difference ($ million)	
		Activities related to PEFM Levy	Activities related to Electricity and GSMEE Levies	Activities related to PEFM Levy	Activities related to Electricity and GSMEE Levies		
Efficient and low-emissions transport	Low Emission Transport Fund	19.68	-	26.05	-	6.37	
	Low Emissions Transport Behaviour Change Programme	1.64	-	2.56	-	0.92	
Energy efficient homes	Equipment Energy Efficiency Programme – Residential	-	1.80	-	2.57	0.77	
Productive and low-emissions business	Equipment Energy Efficiency Programme – Business	-	1.80	-	2.57	0.77	
	Large Energy Users – Direct Programme	-	5.39	-	0.73	(4.66)	
	Technology Demonstration Programme	-	2.69	-	2.37	(0.32)	
	Sector Decarbonisation Programme	-	2.10	-	1.04	(1.06)	
	Industry Development Programme	-	0.60	-	0.29	(0.31)	
	NABERSNZ Programme	-	0.34	-	0.23	(0.11)	
Government leadership	Local Authorities Programme	-	0.63	-	0.56	(0.07)	
Subtotal		21.32	15.35	28.61	10.36	7.29	(4.99)
Total cost of levy-related activities		**36.67**		**38.97**		**2.30**	

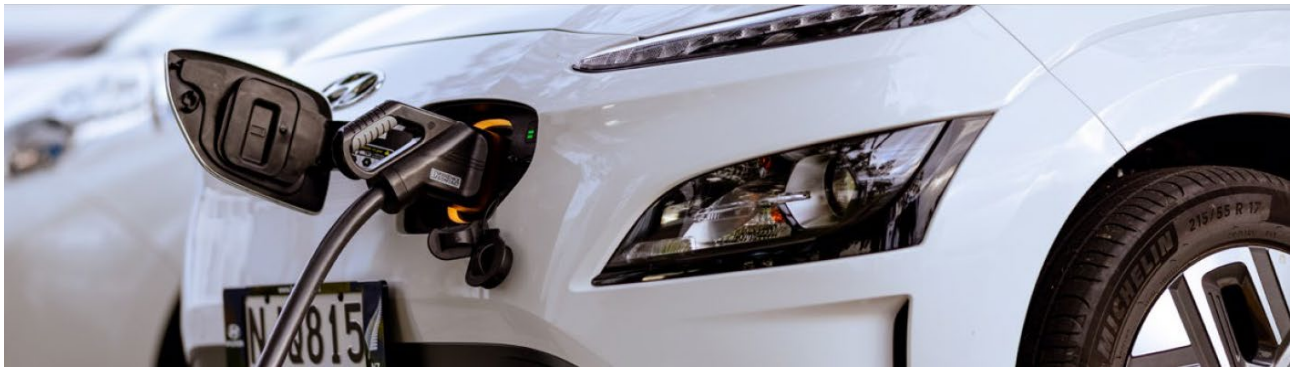
Proposed PEFM levy-funded programmes

Overview of proposed PEFM levy-funded programmes

In 2023/24, **we are seeking $13.5 million sourced from the PEFM levy** (in 2022/23 we sought $10.5 million). The $3.0 million increase is to match the Government's investment in the Low Emission Transport Fund. See page 5 for more information. The table below shows the programmes that the proposed PEFM funding would *partially* fund.

Levy-related programme	Levy-funded in 2022/23	Levy-funded in 2023/24
Low Emission Transport Fund	✓	✓
Low Emissions Transport Behaviour Change Programme	✓	✓

Efficient and low-emissions transport programmes



Almost 50% of New Zealand's energy-related emissions come from the transport sector. When we burn fossil fuels like petrol and diesel to power our cars, trucks, buses, boats, trains, and planes, we produce harmful greenhouse gas emissions that contribute to climate change. While minimising the transport sector's emissions will not be a quick fix, optimising the way we move people and goods and making the most of available low-emissions technologies and fuels will help us achieve the actions specified in the Emissions Reduction Plan, which are necessary to meet the emission budgets adopted by government. EECA is committed to supporting individuals and organisations to adopt energy efficient and low-emissions transport behaviours, technologies, and fuels.

LOW EMISSION TRANSPORT FUND

What we are aiming to achieve

The Low Emission Transport Fund (**LETF**) builds on the completed Low Emission Vehicles Contestable Fund, with an increase in size and scope. The purpose of the LETF is to support the demonstration of high potential and replicable solutions, and adoption of low emission transport technology, innovation, and infrastructure to help accelerate the decarbonisation of the New Zealand transport sector.

The fund focuses on activities in the transport sector that move people and/or goods on roads, off-road, and potentially in the marine and aviation sectors to: demonstrate innovative solutions that will enable future adoption and deployment; reduce energy related emissions in the transport

sector; address market and organisational barriers through co-investment and diffusion of new knowledge and learnings; and share knowledge and learnings to stimulate wider replication of successful projects and solutions in the transport sector.

The LETF is divided into a portfolio of investment activities which are released to the market as individual funding rounds for co-funding in each area within the scope of the fund. An announcement is made in advance of each new activity.

For more information, visit our website: eeca.govt.nz/co-funding/transport-emission-reduction/low-emission-transport-fund.

What we expect to deliver in 2023/24

In 2023/24 we expect the LETF to undertake the following activities:

- Commit approximately $25.0 million in co-funding to low-emissions transport projects
- Run at least two technology funding rounds and two charging infrastructure rounds
- Support the completion of existing project milestones due in the year
- Deliver learning outcomes and publish these in case studies to aid the development of business cases and showcase potential.

LOW EMISSIONS TRANSPORT BEHAVIOUR CHANGE PROGRAMME

What we are aiming to achieve

We deliver a low-emissions transport behaviour change programme that contributes to our strategic outcome of New Zealanders choosing low-emissions mobility options. Through this programme, we aim to build awareness of the link between transport and carbon emissions and promote behaviour change by choosing transport modes like walking, cycling, and public transport. We also aim to engage New Zealanders about electric and low-emissions vehicles, reinforcing motivations like the Clean Car Discount and addressing barriers such as uncertainty about battery life and afterlife, range anxiety, and uncertainty about charging.

What we expect to deliver in 2023/24

In 2023/24, we expect the Low Emissions Transport Behaviour Change Programme to undertake the following activities:

- Conduct impactful marketing advertising and activity to engage our target audience on low-emissions transport behaviour
- Continue to develop information and insights on the state of electric vehicle and low-emissions vehicle technology and the implications for New Zealand and share this with stakeholders working to the same objectives
- Publish information about low-emissions vehicles and transport behaviours on our website, social media, and emails, which will target behaviour change
- Provide guidance and advice to motorists, car dealers, and other industry players
- Manage productive stakeholder relationships with key partners working on the same objectives.

Linking efficient and low-emissions transport programmes to the PEFM levy

Link to PEFM levy

The transport sector is heavily reliant on fossil fuels and with continued growth in the domestic transport sector, emissions from road transport are increasing. By harnessing New Zealand's highly renewable electricity system and by promoting the transition to low-emissions vehicle technologies, the Low Emission Transport Fund and Low Emissions Transport Behaviour Change Programme will support New Zealand's transition to a low emissions economy.

The widespread uptake of zero and low-emissions vehicles, technologies and fuels will contribute to New Zealand meeting its climate change commitments, reduce fossil fuel consumption, improve local air quality by reducing harmful air pollutants, save money, diversify the sources of our transport energy, and enhance energy security in the long run.

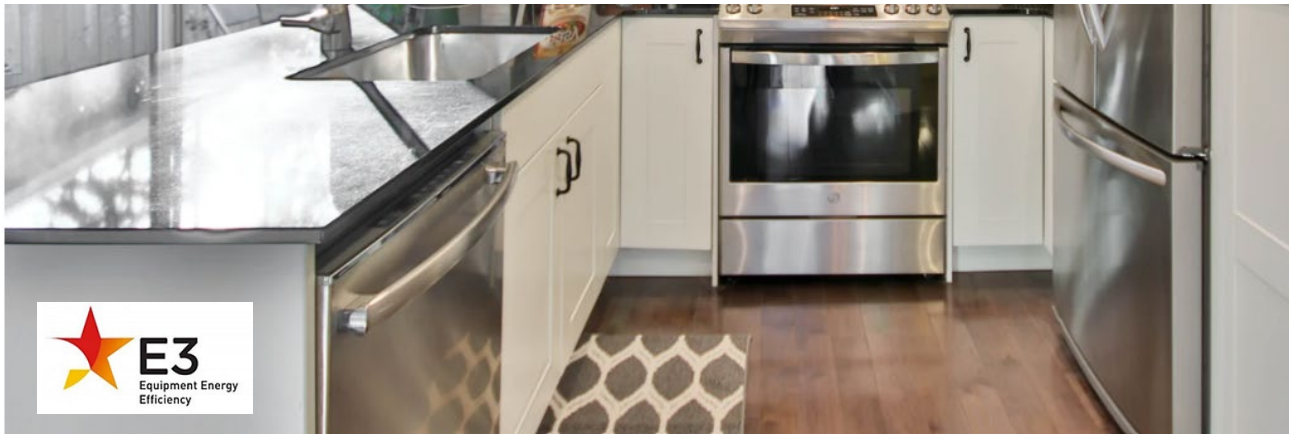
Proposed Electricity and GSMEE levy-funded programmes

Overview of proposed Electricity and GSMEE levy-funded programmes

In 2023/24, **we are seeking $5.1 million sourced from the Electricity levy and $1.7 million from the GSMEE levy** (in 2022/23 we sought $5.3 million from the Electricity levy and $1.5 million from GSMEE levy). The table below shows the programmes that this levy funding will *partially* fund. This change is due to increased GSMEE levy-related activities and decreased Electricity levy-related activities which we expect to continue as the focus increasingly shifts to gas fuelled energy systems. Therefore, we expect to continue to increase our GSMEE levy request and (all things being equal) decrease our Electricity levy request accordingly in at least the following year (and potentially further out). This is so we can continue to focus on where we can deliver the best benefits and to reflect the changing level of levy-funded activity between electricity and gas.

Levy-related programme	Partially levy-funded in 2022/23	Partially levy-funded in 2023/24
Equipment Energy Efficiency Programme – Residential	✓	✓
Equipment Energy Efficiency Programme – Business	✓	✓
Large Energy Users – Direct Programme	✓	✓
Technology Demonstration Programme	✓	✓
Sector Decarbonisation Programme	✓	✓
Industry Development Programme	✓	✓
NABERSNZ[16] Programme	✓	✓
Local Authorities Programme	✓	✓

Commercial and residential equipment energy efficiency programmes



EQUIPMENT ENERGY EFFICIENCY (E3) PROGRAMME

What we are aiming to achieve

The Equipment Energy Efficiency (**E3**) Programme is a joint programme with Australia that develops common regulatory energy efficiency Standards for both residential and business

[16] National Australian Built Environment Rating System New Zealand.

products.[17] Collaboration with Australia means that overheads are shared appropriately between the two countries, making the programme cost-effective and excellent value for money. Equipment energy efficiency activities include:

- the development and optimisation of minimum energy performance standards (**MEPS**) to ensure that poor-performing products are prevented from being sold in New Zealand
- ensuring regulated appliances for sale in stores display the correct energy rating label (Mandatory Energy Performance Labelling (**MEPL**) by surveying stores, helping consumers to choose energy efficient products
- ensuring regulated appliances meet MEPS requirements by check testing their energy performance
- the development of Publicly Available Specifications (**PAS**) which provide best practice guidance for technologies.

EECA is also involved in a number of ongoing projects in the demand flexibility space. These projects help provide the framework to deliver smart appliance connectivity and interoperability to New Zealand consumers.

The E3 Programme contributes to two of EECA's strategic focus areas: 'productive and low-emissions business' and 'energy efficient homes.' E3 ensures manufacturers and suppliers raise the efficiency of their products, resulting in efficiency gains and reducing the total cost of operating products in New Zealand.

Over the past two decades, 89 million products have been sold under the programme, resulting in a national benefit of $1.7 billion, 70.0 PJ of energy savings, and 2.7 Mt CO2e of emissions reductions. The key estimated benefits of this programme in 2023/24 include:

- Electricity savings of 433 GWh
- Carbon emissions reductions of 47,000 tonnes
- A New Zealand benefit of $38 million.

What we expect to deliver in 2023/24

For the E3 Programme, in 2023/24, we expect to undertake the following activities:

- Contribute to the governance of the trans-Tasman E3 Programme, including developing future strategies and priorities. For more information see the E3 Prioritisation Plan.
- Develop and implement MEPS and MEPL, which this may include (subject to Ministerial approval):
    - MEPS for three-phase electric motors
    - MEPS for air conditioners over 65kW
    - MEPS and MEPL for household fridges/freezers
    - MEPS and MEPL for LED lights
    - MEPS and MEPL for wetgoods like clothes washers, clothes dryers, and dishwashers

[17] More information about EECA's E3 Programme is available here: eeca.govt.nz/regulations/equipment-energy-efficiency/about-the-e3-programme

    - MEPS for chillers
- Develop a new PAS for electric motor driven systems
- Update the PAS for commercial electric vehicle (**EV**) chargers, residential EV chargers, and high temperature heat pumps
- Continue the development/consultation of policy options for EV chargers and demand flexibility
- Review existing regulations to check they are still relevant and, if not, then revoke them
- Manage compliance with the Energy Efficiency (Energy Using Products) Regulations 2002 through market surveys, product check testing and taking enforcement action when required
- Support MBIE's work on proposed amendments to the Energy Efficiency and Conservation Act 2000 following a review of energy efficient product regulation.

In 2023/24, the New Zealand demand flexibility market is expected to become operational starting from a small base of engaged Electricity Distribution Businesses (EDBs) prior to expansion at scale in later years. EECA will conclude the current OpenADR project that will deliver an exemplar of open communication protocols being used by EDBs and Flexibility Providers to deliver and react to demand signals from connected devices in New Zealand homes.

Linking equipment energy efficiency to the Electricity and GSMEE levies

Link to the Electricity levy

Business and residential households benefit directly from the E3 Programme whenever they purchase appliances or equipment covered by the programme. Products will use less energy, for the same output, resulting in a lower total cost of ownership as compared to the absence of our intervention. More efficient products result in lower energy and maintenance costs for businesses, thereby enabling them re-invest the savings to be more productive and profitable.

The E3 Programme effectively lowers overall energy demand (particularly electricity), leading to lower energy costs for all consumers and creating system-wide benefits that allow New Zealand to defer investment in new expensive generation infrastructure and continue meeting most of its stationary energy needs from renewable and low-emission energy resources.

Link to the GSMEE levy

Part of the E3 Programme is proposed to be funded under the GSMEE levy to support work on MEPS for business products (such as gas water heaters), which would improve gas efficiency and reduce associated emissions. This part of the E3 Programme will therefore help to reduce negative externalities caused by GSMEE payers in the form of reduced carbon emissions.

Productive and low-emissions business programmes

Over 42% of New Zealand's energy-related emissions comes from business. The largest portion of the business sector's energy-related emissions comes from the burning of fossil fuels for 'process heat' – the steam, hot water or hot gases used in industrial processing, manufacturing, and space heating. The good news is, there are low-emissions alternatives available for businesses that not only reduce emissions but can also lower energy costs and improve profitability. Businesses need to act now to help meet the emission budgets adopted by government and the associated actions required to achieve these as set out in the Emissions Reduction Plan. EECA is focused on motivating and supporting the business sector to be more productive with less emissions.

LARGE ENERGY USERS (DIRECT ENGAGEMENT) PROGRAMME

What we are aiming to achieve

Businesses can improve their energy efficiency through smarter energy use and investment in energy efficient technologies. We partner with large energy using businesses to prioritise the areas of greatest potential for energy savings and emission reductions.[18] We facilitate access to tailored advice and services for large energy users across New Zealand to help them identify and invest in long-term solutions to energy and carbon management challenges. This reduces energy-related costs for the business, moves the sector forward on its energy transition journey, and helps build capability in the sector. It also creates public benefits, primarily in the form of reduced carbon emissions.

We work directly with large energy users because their large-scale operations offer the most cost-effective gains and provides the greatest benefits to our economy. Their prominence also provides leadership to other businesses (large and small), and the best opportunity to spread best energy management practices across the market.

For more information on the programme, please visit: eeca.govt.nz/co-funding/energy-and-carbon-reduction.

What we expect to deliver in 2023/24

In 2023/24, we expect the Large Energy Users Programme to deliver:

- Long-term energy management partnerships with large energy users, with EECA providing direct account management support and co-funding for electricity and gas projects

[18] You can find out more information about EECA's support of large energy users by visiting our website: eeca.govt.nz/co-funding.

- Support and funding for energy transition accelerator plans, energy audits, operational efficiency improvements, and energy monitoring and targeting
- Training and industry development
- Monitoring of project milestones to ensure that co-funding is only paid out as contracted
- Provision of energy management information, resources and advice
- A targeted approach for small to medium enterprises
- Energy and emissions savings as a result of partnerships with large energy users.

TECHNOLOGY DEMONSTRATION PROGRAMME

What we are aiming to achieve

We aim to find solutions that reduce energy use and emissions, which often involves support for new technologies. New and under-utilised technologies can carry risk for businesses due to uncertainty about performance and the consequential risk of disruption to production lines, and this can have flow-on impacts on other areas of performance, consumer satisfaction and overall business competitiveness.

Our co-investment in innovative technology demonstrations shares the financial and operational risk. This investment supports early adoption of technologies by setting up/demonstrating commercially available, but proven under-utilised technologies, which have significant potential to reduce energy use and emissions in New Zealand. The programme also includes *process changes*, which are under-utilised process improvements for making energy-using technology more energy efficient. Not only do these projects create direct benefits, they also help accelerate the diffusion of innovative technologies and processes throughout the economy.

For more information on the programme, visit: eeca.govt.nz/co-funding/technology-demonstration.

What we expect to deliver in 2023/24

In 2023/24, we expect the Technology Demonstration Programme, to deliver:

- Co-funding specifically targeted to demonstrate technology to displace fossil fuelled steam generation such as ultra-high temperature heat pumps and electromagnetic drying systems
- Co-funding to target electrification of off-road diesel using machinery
- Energy and emissions savings as a result of co-funded projects
- Case studies and information to promote the results of demonstration projects and to encourage uptake within and across sectors.

SECTOR DECARBONISATION PROGRAMME

What we are aiming to achieve

The Sector Decarbonisation Programme was designed to move from a ‘one to one’ approach as used for the large energy users programme to a ‘one to many’ engagement approach given the sheer number of entities involved. Through providing co-funding and access to technical expertise, we aim to define decarbonisation roadmaps for industry sectors and sub-sectors that are carbon intensive in their energy use. Our primary approach is to engage with an aligned

industry association that represents the sector and leverage the sector-specific expertise and communication channels to maximise engagement with representative businesses.

We have prioritised a number or subsectors to target and the initial focus of the programme is the decarbonisation of stationary energy (supporting sectors and representative businesses identify a pathway away from coal, natural gas, fuel oil/diesel, and liquefied petroleum gas where these are used for process heat).

What we expect to deliver in 2023/24

In 2023/24, we expect the Sector Decarbonisation Programme to undertake the following activities:

- Complete further priority sector decarbonisation partnerships and roadmaps.
- Encourage the implementation of sector decarbonisation roadmaps through other existing EECA programmes, particular the Government Investment in Decarbonising Industry (GIDI) Fund.

INDUSTRY DEVELOPMENT PROGRAMME

What we are aiming to achieve

We aim to develop relationships with and support industry partners and associations that are aligned or work in connection with EECA's purpose and objectives. This is designed to build capability and capacity within the energy sector to meet the demand for expertise. We fund the development of technical information, guidance, specifications; the development and delivery of training courses, webinars, seminars, conferences; and the maintenance of energy and carbon management accreditation framework. Our engagements and industry collaborations extend across partners working with all fuel types.

What we expect to deliver in 2023/24

- Continued support to industry partners and associations such as Carbon Energy Professionals, Bio Energy Association, Drive Electric, and LUMO
- Targeted training webinars and conferences
- Growth of partner member bases and more sustainable sector organisations.

NATIONAL AUSTRALIAN BUILT ENVIRONMENT RATING SYSTEM NEW ZEALAND (NABERSNZ)

What we are aiming to achieve

EECA delivers ongoing improvements in the energy performance of commercial buildings (and more recently hospitals) by providing access to and implementing the NABERSNZ scheme – a system for rating the energy efficiency of existing and new office buildings and identifying opportunities for implementing building energy performance improvements. Assessing and improving the energy performance of buildings can improve their value and desirability for both investors and prospective tenants and reduce energy costs and associated emissions.

What we expect to deliver in 2023/24

In 2022/23, we expect NABERSNZ to deliver:

- An increase in the number of existing commercial offices that have NABERSNZ ratings, as well as hospitals which are now included in the programme

- Electricity, cost and emissions savings through resulting building energy performance improvements.

Linking productive and low-emissions business programmes to the Electricity and GSMEE levies

Link to the Electricity levy

The above business programmes help to achieve electricity efficiency, resulting in demand reduction and downward pressure on wholesale prices.[19] Increased electricity efficiency can also result in reduced lines network costs when reducing peak usage, and defer investment in new generation infrastructure, resulting in system-wide benefits for all electricity consumers, including levy payers.[20] The move to renewable forms of energy will also inevitably increase the demand for and supply of electricity which will be of benefit to all electricity users as the fixed costs of the electricity system are spread across a larger user base.

Link to the GSMEE levy

Inefficient gas use by levy payers can cause emissions to be higher than they need to be. The above business programmes promote the efficient use of gas through boiler tuning, energy system optimisation and equipment upgrades. The programmes will contribute towards lowering costs and creating efficient, more productive and lower-carbon businesses.

As well as increasing efficient gas use, in some situations, there are also economically viable lower-emission alternatives that can avoid the use of gas and its associated emissions. This includes the use of biomass fuels for heating (e.g. wood) where appropriate, and electrically-powered heat pumps to make hot water. Using gas levy funding to facilitate these activities by providing information and funding feasibility studies, helps mitigate the emissions that gas causes, and conserves gas reserves for those activities where there are currently no viable lower-emission alternatives which should have a downward influence on has pricing.

Government leadership programmes

Almost 2% of New Zealand's energy-related emissions come from government agencies. While this footprint is comparatively small, the Government has a key leadership role to play in the transition to a low-emissions future. Government agencies must both demonstrate the action required to accelerate the transition and influence New Zealanders to do the same. For example,

[19] Energy Link, *Electricity Price Impact of the EECA Levy-funded Electricity Efficiency Programmes:* Updated 2015, (October 2015).
[20] Concept Consulting Group Limited, *What is the case for electricity efficiency initiatives?* June 2017.

government agencies still own a large number of fossil-fuelled vehicles, and many public hospitals, universities and schools still use fossil fuels for heating. There is work to be done. EECA is focused on supporting government agencies to model clean and clever energy use, develop bold policies, and share low-emissions lessons.

LOCAL AUTHORITIES PROGRAMME

What we are aiming to achieve

We facilitate access to tailored advice and services and provide co-funding for local government authorities (i.e. regional, city and district councils) across New Zealand to help them identify and implement opportunities to reduce energy use and related emissions. This reduces energy-related costs for the organisation, moves the public sector forward on the energy transition journey and helps build capability in the sector. It also creates public benefits, primarily in the form of reduced energy use and carbon emissions. For more information, please visit: eeca.govt.nz/co-funding/energy-and-carbon-reduction.

What we expect to deliver in 2023/24

We expect to provide advice and co-fund energy audits, energy graduates, energy management plans, energy systems optimisation, feasibility studies and business cases, and monitoring and targeting for local authorities.

Linking government leadership programmes to the Electricity and GSMEE levies

Link to the Electricity levy

The Local Authorities Programme helps to achieve electricity efficiency, resulting in demand reduction and downward pressure on wholesale prices.[21] Increased electricity efficiency can also result in reduced lines network costs when reducing peak usage, and defer investment in new generation infrastructure, resulting in system-wide benefits for all electricity consumers, including levy payers.[22]

Link to the GSMEE levy

Inefficient gas use by levy payers can cause emissions to be higher than they need to be. The above Local Authorities programme promotes the efficient use of gas through boiler tuning, energy system optimisation and equipment upgrades. The programme will contribute towards lowering costs and creating efficient, more productive and lower-carbon local authorities.

As well as increasing efficient gas use, in some situations, there are also economically viable lower-emission alternatives that can avoid the use of gas and its associated emissions. This includes the use of biomass fuels for heating (e.g. wood) where appropriate, and electrically-powered heat pumps to make hot water and heat swimming pools. Using gas levy funding to facilitate these activities by providing information and funding feasibility studies, helps mitigate the emissions that gas causes, and conserves gas reserves for those activities where there are no viable lower-emission alternatives.

[21] Energy Link, *Electricity Price Impact of the EECA Levy-funded Electricity Efficiency Programmes:* Updated 2015, (October 2015).
[22] Concept Consulting Group Ltd, *What is the case for electricity efficiency initiatives?* June 2017.

Appendix 1: Proposed 2023/24 work programme and budget (current consultation)

EECA's proposed 2023/24 work programme				
Programme	**Funding forecast in 2023/24**	**Petroleum Levy Activities**	**Electricity and Gas Levy Activities**	**EECA only (includes Coal and Diesel)**
Productive and low-emissions business				
Equipment Energy Efficiency Programme - Business	2,573,140		2,573,140	
Business Marketing and Communications	3,169,173			3,169,173
Large Energy Users - Direct	1,456,610		728,305	728,305
Technology Demonstration Programme	2,370,865		2,370,865	
Industry Development	971,237		291,371	679,866
NABERSNZ	283,799		227,039	56,760
Large Energy Users - Indirect	38,878			38,878
Government Investment in Decarbonising Industry	661,565			661,565
Sector Decarbonisation Programme	1,294,316		1,035,453	258,863
Government Investment in Decarbonising Industry (2	93,036,459			93,036,459
Energy Efficient Equipment	58,354,363			58,354,363
Commercial Buildings	5,692,016			5,692,016
	169,902,421			
Efficient and low-emissions transport				
Hydrogen Refueling Network	65,297			65,297
Electric and Hybrid Ferries	10,000			10,000
Transport Strategy & Development	731,697			731,697
VFEL	361,402			361,402
Low Emission Transport Fund	26,054,041	26,054,041		
Transport Marketing and Communications	2,556,441	2,556,441		
LETF - Freight Decarbonisation	1,379,318			1,379,318
	31,158,196			
Energy efficient homes				
Equipment Energy Efficiency Programme - Residential	2,573,140		2,573,140	
In-Home Efficiency	197,471			197,471
Northland Housing Energy Retrofit Pilot	141,545			141,545
Otago Housing Energy Retrofit Pilot	132,830			132,830
Warmer Kiwi Homes	73,319,347			73,319,347
	76,364,333			
Government leadership				
Public Sector/Crown Loans	200,419			200,419
Cross Government Collaboration	1,560,790			1,560,790
Local Authorities	620,239		558,215	62,024
State Sector Decarbonisation Fund	6,387,959			6,387,959
Carbon Neutral Government Programme	10,833,263			10,833,263
Invercargill City Decarb	31,144			31,144
	19,633,814			
Engage heart and minds				
Hearts and Minds	3,999,909			3,999,909
	3,999,909			
Total 2023/24	**301,058,672**	28,610,482	10,357,527	262,090,663

Key:

green = levy-related activity

Appendix 2: Consulted 2022/23 work programme and budget (consulted on in November 2021)

Key:
✓ = levy-related activity

EECA's proposed 2022/23 work programme		Total fully allocated costs per project	Funding committed not yet expensed 1/7/22	Funding committed not yet expensed 30/6/23	Funding used in 2022/23		Petroleum Levy Activities	Electricity and Gas Levy Activities	EECA only (includes Coal and Diesel)
Productive and low-emissions business									
Equipment Energy Efficiency Programme - Business		1,804,915			1,804,915			1,804,915	
Information & Promotion to Business	✓	1,921,111			1,921,111				1,921,111
Large Energy Users - Direct		5,384,611	(3,538,000)	3,538,000	5,384,611			2,692,306	2,692,306
Technology Demonstration Programme	✓	2,686,809	(1,764,000)	1,764,000	2,686,809			2,686,809	
Industry Development	✓	596,170	(140,000)	140,000	596,170			178,851	417,319
NABERSNZ	✓	337,450			337,450			269,960	67,490
Large Energy Users - Indirect	✓	235,026	(139,000)		96,026				96,026
Government Investment in Decarbonising Industry		35,780,598			35,780,598				35,780,598
Sector Decarbonisation Programme	✓	2,099,779	(337,000)	337,000	2,099,779			1,679,823	419,956
		50,846,469			**50,707,469**				
Efficient and low-emissions transport									
Hydrogen Refueling Network		10,000			10,000				10,000
Transport Strategy & Development		786,701			786,701				786,701
Vehicle Fuel Economy Labelling		315,790			315,790				315,790
Low Emission Transport Fund	✓	16,944,686	(10,897,000)	13,637,000	19,684,686		19,684,686		
Low Emissions Transport Behaviour Change Programme	✓	1,641,257			1,641,257		1,641,257		
		19,698,434			**22,438,434**				
Energy efficient homes									
Equipment Energy Efficiency Programme - Residential	✓	1,804,915			1,804,915			1,804,915	
In-Home Efficiency		315,084			315,084				315,084
Warmer Kiwi Homes		72,075,377			72,075,377				72,075,377
		74,195,376			**74,195,376**				
Government leadership									
Public Sector/Crown Loans		430,044	(381,000)		49,044				49,044
Local Authorities	✓	630,488	(742,950)	742,950	630,488			567,439	63,049
State Sector Decarbonisation Fund		4,385,021	(650,000)	650,000	4,385,021				4,385,021
Carbon Neutral Government Programme		11,252,172	(4,816,000)	4,816,000	11,252,172				11,252,172
Influencing Strategy		1,342,783			1,342,783				1,342,783
		18,040,508			**17,659,508**				
Engage heart and minds									
Hearts and Minds		5,620,214			5,620,214				5,620,214
		5,620,214			**5,620,214**				
Total 22/23		**168,401,000**	(23,404,950)	25,624,950	**170,621,000**		21,325,943	11,685,017	137,610,040

Appendix 3: Notes on our financial projections for our 2022/23 and 2023/24 work programmes

The tables in Appendices 1 and 2 (above) outline the financial projections for our 2022/23 and 2023/24 work programmes. When reviewing them, it is important to understand that:

- The expenses incurred by EECA in any given year are a mix of the operating costs of our activities and our co-investment with partners in pursuit of government objectives.
- EECA enters into agreements with partners that frequently span multiple financial years. An example of this is the LETF.[23]

Commitments delivered on and expended in the current financial year are shown as expenses in the Statement of Comprehensive Revenue and Expenses for the year. Outstanding co-investment commitments are shown as committed funds in retained earnings in EECA's Statement of Financial Position (see our 2021/22 Annual Report[24]).

The financial tables in Appendices 1 and 2 state the commitments brought forward for programmes that include co-investment in multi-year projects and the expected funding to be expended in future financial years.

1. Cost allocation

Direct costs are those costs directly attributable to specific programme activity, and include items such as:

- The co-funding provided by EECA.
- The directly attributable marketing costs of the programme activity.
- Outsourced services to help deliver the programme.
- The personnel costs associated with delivery of the programme.

Indirect costs are costs which cannot be attributable to a specific programme and are distributed across the entire portfolio. Indirect costs are allocated to projects using cost drivers that are appropriate to the costs being allocated. Indirect costs include human resources, finance, information communication technology and property costs. These are predominantly a function of the number of people employed, and consequently, are attributed in proportion to the staff allocated to each programme. Indirect costs comprise approximately one third of the fully allocated cost of each programme.

2. Calculation of total levy costs expensed in the year

Once the fully allocated work programme has been determined, the levy-related percentages is applied to each levy-funded programme, giving the total proposed levy funding.

[23] Formerly the Low Emission Vehicles Contestable Fund.
[24] To be published on our website eeca.govt.nz in 2023.

Appendix 4: Legal context for this consultation

Electricity Industry Act 2010

129A Energy Efficiency and Conservation Authority consultation about request for appropriation

(1) The EECA must, before submitting a request to the Minister seeking an appropriation of public money for the following year, or any change to an appropriation for the current year, that relates to costs that are intended to be recovered by way of levies under section 128(3)(c), consult about that request with:

(a) those industry participants who are liable to pay a levy under that section; *and*

(b) any other representatives of persons whom the EECA believes to be significantly affected by a levy.

(2) The EECA must, at the time when the request is submitted, report to the Minister on the outcome of that consultation.

(3) This section applies to requests in respect of the financial year beginning 1 July 2018 and later financial years.

Energy (Fuels, Levies, and References) Act 1989

The Energy Innovation (Electric Vehicles and Other Matters) Amendment Act 2017 inserts section 14A into the Energy (Fuels, Levies, and References) Act 1989, which requires EECA to consult with those industry participants who are liable to pay a levy and any other representatives of persons whom EECA believes to be significantly affected by a levy:

14A Energy Efficiency and Conservation Authority consultation about request for appropriation

(1) The EECA must, before submitting a request to the Minister seeking an appropriation of public money for the following year, or any change to an appropriation for the current year, that relates to costs that are intended to be recovered by way of a levy under section 23 or 24, consult about that request with:

(a) those persons who are liable to pay the levy; and

(b) any other representatives of persons whom the EECA believes to be significantly affected by the levy.

(2) The EECA must, at the time when the request is submitted, report to the Minister on the outcome of that consultation.

Appendix 5: Annual Report on levy-funded activities (2021/22)

The report begins over the page.

Annual Report on EECA's levy-funded activities (2021/22)

Contents

Executive summary

With nearly 40% of New Zealand's greenhouse gas emissions coming from the energy sector, EECA plays an important role in supporting our country's emissions reduction targets while also improving our energy productivity. We work to create positive change across the energy system, using a combination of three important levers: co-investment, motivation, and regulation.

This report describes EECA's levy-funded activities in 2021/22, including the final budget, and the related delivered benefits. Further information on EECA's activities during the year will be included in our Annual Report 2021/22 (available on our website in early 2023 following our annual audit).

Co-investing in energy-efficient technologies and renewable sources of energy

EECA helps overcome financial barriers to energy efficiency and decarbonisation by sharing some of the financial risk of investment in innovative technologies and renewable sources of energy.

Our partially levy-funded Low Emission Transport Fund (previously the Low Emission Vehicles Contestable Fund) supports the demonstration and adoption of low-emission transport technology, innovation, and infrastructure. In 2021/22, we delivered four contestable funding rounds, committing $13.5 million of government co-funding to 49 projects, matched by $22.6 million of applicant funding. Projects supported will deliver public electric vehicle charging infrastructure and low-emissions vehicles and technologies.

EECA works directly with businesses and public sector organisations to increase energy efficiency and decarbonisation. In 2021/22, we continued our work with the largest energy using businesses and local authorities through our Large Energy Users Direct Engagement and Local Authorities programmes. We also helped large energy users define decarbonisation roadmaps through our Energy Transition Accelerator programme. Several organisations also received co-funding to test new or under-utilised energy-saving technologies and process improvement opportunities through our Technology Demonstration Fund. Overall, these programmes delivered energy savings of 0.82 PJ and over 42,000 tonnes of CO_2e emissions reductions.

Motivating New Zealanders to make clean and clever energy choices

EECA's research shows that many New Zealanders still do not understand the link between the transport sector and energy-related emissions. We seek to bridge this gap by motivating people to choose a low-emissions vehicle over a high emissions vehicle. In 2021/22, our Electric Vehicle and Low Emissions Vehicle Support Campaign helped New Zealanders access information and guidance about low-emissions vehicles and compare the total cost of owning different cars through our revised Total Cost of Ownership tool. We also supported the rollout of the Government's Clean Car Package, and it is encouraging to see the continuing increase of registered electric vehicles in New Zealand.

Regulating inefficient appliances out of the market

We regulate proven technologies and processes and help prevent inefficient products and appliances from being sold in New Zealand. The E3 programme continued to deliver significant electricity savings of 1.56 PJ in 2021/22 through product energy performance standards and labelling. These benefits make the programme the "hidden friend" of electricity users particularly.

Looking ahead

We appreciate the feedback we receive each year on our levy-funded activities and are currently seeking submissions on our energy-levy funding proposal for our 2023/24 work programme. We look forward to hearing from industry participants and other parties affected by the energy levies.

Introducing EECA

EECA is a Crown agency established under the EECA Act, to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy. Our purpose is to mobilise New Zealanders to be world leaders in clean and clever energy use.

We encourage the use of clean and clever energy across the economy, through a combination of direct interventions, such as co-investment and regulation. EECA also seeks to motivate people by providing information, raising awareness, and offering expert advice so they are better equipped to make sustainable energy choices.

EECA is partially funded by three energy levies

EECA is funded by the Crown through appropriations of public money. The Crown recovers a portion of this funding through three energy levies: the PEFM levy, the Electricity levy and the GSMEE levy. Under the Energy Innovation (Electric Vehicles and Other Matters) Amendment Act 2017, EECA can use funding from these levies to fulfil our statutory function.

In November 2020, EECA carried out a consultation process to ask stakeholders and the public for their views about the use of the three levies for its proposed 2021/22 programme of work. EECA received eight submissions, with one submission from the Major Electricity Users' Group opposing EECA's request.

Following consultation, the Minister of Energy and Resources allocated a total of $14.3 million in levy funding:

- $7.5 million from the PEFM levy.
- $5.5 million from the Electricity levy.
- $1.3 million from the GSMEE levy.

Overview of our levy-funded activities in 2021/22

This report describes EECA's levy-funded activities in 2021/22, including the final budget, and some of the benefits these programmes delivered. For further information on EECA's activities during the year and the delivered benefits, please refer to EECA's Annual Report 2021/22.[25]

Expenditure on levy-related activities

A total of $23.85 million was spent during the year on activities that are related to the three levies. Appendix 1 provides a breakdown of actual expenditure against the programmes delivered in 2021/22. Appendix 2 provides the proposed work programme and budget for 2021/22 that was released for consultation in November 2020. It shows the amount funded from each levy and from EECA's baseline funding.

[25] To be published on our website eeca.govt.nz in 2023 due to delays with Audit New Zealand's auditing timeframes.

Benefits of programmes part-funded by the Electricity and GSMEE Levies in 2021/22

In 2021/22, funding from the Electricity levy and GSMEE levy was used to deliver the following EECA programmes:

- Equipment Energy Efficiency (E3) – commercial and industrial products
- Equipment Energy Efficiency (E3) – residential products
- Large Energy Users – direct
- Large energy Users – indirect
- Technology Demonstration
- Energy Transition Accelerator (ETA)
- Industry Development
- NABERSNZ
- Local Authorities

These programmes have been assessed as having a high impact across the market in terms of supporting the uptake of new emerging technologies, energy efficiency, promoting the use of renewables, and addressing and planning for emissions reductions.

Equipment Energy Efficiency (E3) Programme

EECA collaborates with the Australian Department of Environment and Energy on the E3 Programme. The programme works 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**). This involves developing standards, developing regulations, check for compliance, enforcement activities, partner engagement, and marketing to consumers. Activity in this area also includes developing Publicly Available Specifications (**PAS**) that provide best practice guidance for technologies.

In 2021/22, EECA continued to implement existing MEPS and develop new MEPS for products and appliances that are sold in New Zealand and monitored compliance against those standards (including inspecting 24,894 products for MEPL requirements and check testing 37 products for MEPS requirements). By not allowing inefficient appliances onto New Zealand's shop floors, and by adding energy performance labels to those that were already there, EECA helped consumers make choices that reduced ongoing electricity bills. We also developed and published PAS for gas and liquid fuel boiler systems, introduced a new Energy Rating Label for heat pumps to show performance based on climate zone (including an updated Efficient Appliance Calculator consumer tool), and introduced a new regulation for refrigerated cabinets which increased its scope.

Overall, the E3 programme saved 1.56 PJ of energy in 2021/22, equating to reducing emissions by 47,600 tonnes and $38 million in national benefit. Over the past two decades, 89 million products have been sold under the programme, resulting in a national benefit of $1.7 billion, 70.0 PJ of energy savings, and 2.7 Mt CO_2e of emissions reductions.

Large Energy Users Programme

EECA has a range of programmes that increase awareness in businesses and reduce the barriers to electricity efficiency improvements and carbon emission reductions. In 2021/22, EECA partnered with businesses that use over a quarter of the energy used in New Zealand.

Over the past year, EECA has been seeing the results of an increased focus on helping the business and public sectors to not only become more energy efficient, but to also switch to cleaner forms of energy and reduce emissions. In 2021/22, the Large Energy Users Direct programme delivered energy savings of 0.79 PJ and achieved over 40,000 tonnes of emissions reductions.

One of EECA's key products for promoting energy efficiency is the Energy Graduate programme, which provides co-funding to help businesses commit the time and resource needed to analyse how energy is being used and the best ways to make savings. In 2021/22 there were 15 new graduates employed across New Zealand in both the private and public sectors (whose efforts will save a minimum of 2 GWh each over the next two years, totalling 30 GWh).

Details of our business co-funding and support programmes can be found on our website: eeca.govt.nz/co-funding.

Technology Demonstration Programme

EECA continued to help organisations test new or under-utilised energy-saving technologies and process improvement opportunities that could also benefit the wider sector by providing co-investment through our Technology Demonstration programme.

In 2021/22, we committed $2.5 million of co-funding to 17 technology demonstration projects which are expected to deliver annual energy savings of 0.1 PJ and reduce emissions by 7,300 tonnes. Two key supported projects were co-funded during 2021/22:

- The Oceana Gold Electric Shovel displaces a diesel-powered shovel and will deliver close to 2,900 tonnes of carbon abatement while being the first electric shovel for open cast mining operations in New Zealand. The technology is tethered to the grid and not a battery electric system.
- The NZ Luxury Greenbottle Project brought a new bottle washing machine to New Zealand that will give annual emissions reductions of 1,600 tonnes and net annual energy savings of 6.0 GWh of gas and 2.4 GWh of electricity. The machine will allow re-use of up to 10 million bottles per year instead of remelting/recycling as is current practice. There is considerable replication potential across major cities and towns within New Zealand.

This year also saw several technologies we have previously supported adopted within a different sector, at a different scale or a different location.

Energy Transition Accelerator

EECA continued to work with large energy-using businesses that are committed to reducing their emissions through the Energy Transition Accelerator (ETA) programme. EECA provides expert assistance to help each business onto a customised long-term pathway to decarbonisation by identifying technically and economically viable low-emissions investments. In 2021/22, we completed 33 ETA opportunities assessments (20 businesses and 13 public sector organisations) to identify opportunities and signed 17 new ETA collaboration agreements (10 businesses and seven public sector organisations) to begin working towards a low-emissions pathway.

Industry Development Programme

In 2021/22 we continued to develop and support our existing industry partners and associations whilst expanding to new partnerships. We are committed to growing the capability and competency right across the energy sector, helping to meet both the current demand and shore up the future skills shortage. This year, we engaged in a new funded partnership with the Energy Academy, enabling them to boost the development of and uptake in their energy sector specific collaboration platform, LUMO364. We also continued our ongoing support for the Carbon and Energy Professionals (CEP) and the Bioenergy Association of New Zealand (BANZ), who both deliver targeted training courses and educational webinars.

NABERSNZ

We delivered ongoing improvements in the energy performance of commercial buildings by providing implementing the NABERSNZ scheme – a system for rating the energy efficiency of existing and new office buildings and identifying opportunities for implementing building energy performance improvements. Assessing and improving the energy performance of commercial office buildings can improve their value and desirability for both investors and prospective tenants and reduce energy costs and associated emissions. In 2021/22 we saw significant growth in uptake of NABERSNZ with a total of 105 certified ratings (32 re-ratings and 73 new ratings), the best result since NABERSNZ was launched. The average star rating across the 105 was 4.17 out of 6 stars.

Local Authorities Programme

We delivered advice and co-funded energy audits, energy graduates, energy management plans, energy systems optimisation, feasibility studies and business cases, industrial systems design advice, and monitoring and targeting to local authorities (i.e. regional, city and district councils).

Summary of 2021/22 Electricity and GSMEE levies use and delivered benefits

Consulted proposal for Electricity and GSMEE levy-funded activities in 2021/22 (November 2020)			Actual allocation for Electricity and GSMEE levy-funded activities in 2021/22		Savings across the programme from projects completed in 2021/22[26]	
Programme	Proposed spend on Electricity and GSMEE levy-related activities ($)	Proposed Electricity and GSMEE levy funding spend ($)	Actual spend on Electricity and GSMEE levy-related activities ($)	Actual Electricity and GSMEE levy funding spend allocated pro-rata ($)	Energy savings (PJ)	Emissions reductions (tCO2e)
E3 (commercial and industrial products)	1,935,411	1,695,873	1,656,400	1,393,057	0.70	21,000
E3 (residential products)	1,935,411	1,695,872	1,656,400	1,393,057	0.86	26,000
Large Energy Users – Direct *(included Fuel Switch Enabler in 2021/22)*	767,522	671,763	1,872,169	1,222,718	0.66	36,075
Energy Transition Accelerator *(was merged with Large Energy Users Direct during 2021/22)*	560,580	490,852			N/A	N/A
Large Energy Users – Indirect *(was merged with Sector Decarbonisation Programme in 2021/22)*	915,409	801,930	506,235	330,623	0.13	5,304
Technology Demonstration	431,729	378,290	2,733,376	1,785,173	0.02	453
Industry Development	189,985	166,379	305,761	223,633	N/A	N/A
NABERSNZ	346,200	303,406	213,723	189,785	N/A	N/A
Local Authorities	680,147	595,635	358,155	261,954	0.01	592
Total	**7,762,394**	**6,800,000**	**9,302,219**	**6,800,000**	**2.38**	**89,424**
GSMEE funding	N/A	1,300,000	N/A	1,300,000	N/A	N/A
Electricity funding	N/A	5,500,000	N/A	5,500,000	N/A	N/A

Note: The above figures include overhead costs.

[26] A number of projects involved the switching of fuel from gas to electricity. As a result, the energy and emissions savings expressed at an individual levy level are not that informative and so we have combined the savings to give a more meaningful insight.

Benefits of programmes part-funded by the Petroleum or Engine Fuels Monitoring Levy in 2021/22

We want New Zealanders to have their transport needs met using significantly less, and cleaner energy. In 2021/22, PEFM Levy funding was used to deliver two key EECA programmes:

- Low Emission Transport Fund (previously Low Emission Vehicles Contestable Fund)
- Electric Vehicle and Low Emissions Vehicle Support Campaign

Low Emission Transport Fund (LETF)

Our partially levy-funded Low Emission Transport Fund (previously the Low Emission Vehicles Contestable Fund) supports the demonstration and adoption of low-emission transport technology, innovation, and infrastructure. In 2021/22, we delivered four contestable funding rounds, committing $13.5 million of co-funding to 49 projects, matched by $22.6 million of applicant funding. We also saw multi-year projects meet delivery milestones sufficient to draw on $7.5 million in co-investment.

Projects supported in 2021/22 will deliver public electric vehicle charging infrastructure and low-emissions vehicles and technologies. We invested $7.36 million to co-fund 128 public charging stations which will fill most of New Zealand's State highway public charging gaps. To date, the Fund has supported 755 public charging stations across New Zealand. We also committed funding to several types of technology and innovation projects, including New Zealand's first electric tanker, an electric passenger bus with solar panels, and an electric battery-swap concrete mixer truck. A full list of projects funded to date is available on our website: eeca.govt.nz/co-funding/transport-emission-reduction/co-funded-transport-projects.

Electric Vehicle and Low Emissions Vehicle Support Campaign

We aim to help more New Zealanders choose a low-emissions vehicle over a fossil fuelled vehicle. In 2021/22, we continued to develop and provide independent and authoritative information that dispelled myths and motivated people to improve their transport choices. Key outputs from the campaign include:

- Research on motivations, barriers and attitudes towards buying low emissions vehicles and sharing the reports cross-Government and on our website
- An always-on electric vehicle (EV) advertising campaign via digital channels to overcome barriers and emphasise motivations to purchase
- Development and promotion of EV messaging and content via social media and email communications, including case studies of organisations and people who are leading the way
- The redesign of the Vehicle Emissions and Energy Economy Label (VEEEL) to incorporate Clean Car messaging, including promoting the label requirements to vehicle dealers
- Sponsorship of EV rally driver Hayden Paddon to promote EVs and overcome barriers
- Engaging cross-Government on marketing activity with shared relevance
- Usability enhancements made to the Total Cost of Ownership online tool which compares electric vehicles, hybrids and internal combustion vehicles
- Updates to the EV Buyers Guide
- Publication of EV and low emissions vehicle information on the Gen Less website.

Summary of 2021/22 PEFM levy use and delivered benefits

Consulted proposal for PEFM levy-funded activities in 2021/22 (November 2020)			Actual allocation for PEFM levy-funded activities in 2021/22		Outputs from PEFM levy-funded projects and initiatives in 2021/22
Proposed spend on PEFM levy-related activities ($)	Proposed spend on PEFM levy-related activities ($)	Proposed PEFM levy funding spend ($)	Actual spend on PEFM levy-related activities ($)	Actual PEFM funding spend allocated pro-rata ($)	Delivered outputs
Low Emission Transport Fund	7,733,484	6,764,377	14,482,367	6,719,512	• $13.5 million of government co-funding committed to 49 projects • $7.5 million in co-investment paid out to multi-year projects as delivery milestones were met • 128 public charging stations funded
Electric Vehicle and Low Emissions Vehicle Support Campaign	841,013	735,623	1,682,162	780,488	• 46% of people say they are likely to consider an electric vehicle as their next car purchase • 37% of businesses are actively seeking to reduce the impact of their energy use and transport choices • 29% of individuals understand that transport is the biggest contributor to New Zealand's energy-related emissions
Total	**8,574,497**	**7,500,000**	**16,164,529**	**7,500,00**	

Note: The above figures include overhead costs.

Appendix 1: Our 2021/22 work programme and associated actual expenditure

EECA's 2021/22 actual work programme

Programme	Total fully allocated costs per project	-ve Funding committed not yet expensed 1/7/21	+ve Funding committed not yet expensed 30/6/22	Funding used in 2021/22	Total cost: Petroleum Levy Activities	Total cost: Electricity and Gas Levy Activities	Total cost: EECA only (includes Coal and Diesel)	Levy Funding allocated Pro-Rata: Petroleum Levy Activities	Levy Funding allocated Pro-Rata: Electricity Levy Activities	Levy Funding allocated Pro-Rata: Gas Levy Activities
Productive and low-emissions business										
Equipment Energy Efficiency Programme - Business	1,656,400			1,656,400	0	1,656,400	0		1,323,784	69,273
Business Marketing and Communications	1,750,983			1,750,983	0	0	1,750,983			
Large Energy Users - Direct (Includes ETA b/f)	2,355,523	-3,087,954	2,263,423	1,530,992	0	765,496	765,496		339,877	160,070
Technology Demonstrations	1,024,068	-984,020	2,693,327	2,733,375	0	2,733,375	0		1,213,609	571,564
Industry Development	815,854	-146,250	349,600	1,019,204	0	305,761	713,443		181,009	42,624
NABERSNZ	267,154			267,154	0	213,723	53,431		189,785	
Large Energy Users - Indirect	435,299	-404,605	110,375	141,069	0	0	141,069			
Government Investment in Decarbonising Industry	12,434,843			12,434,843	0	0	12,434,843			
Sector Decarbonisation Programme	487,663	0	145,131	632,794	0	506,235	126,559		224,767	105,857
Fuel Switch Enabler	144,455	0	1,700,000	1,844,455	0	1,106,673	737,782		491,359	231,412
	21,372,242			**24,011,269**						
Efficient and low-emissions transport										
Hydrogen Refueling Network	247,888			247,888	0	0	247,888			
Electric and Hybrid Ferries	7,159,980	-20,000,000	12,909,100	69,080	0	0	69,080			
Transport Strategy & Development	419,779			419,779	0	0	419,779			
VFEL	380,933			380,933	0	0	380,933			
Low Emission Transport Fund	8,689,428	-6,262,055	12,054,994	14,482,367	14,482,367	0	0	6,719,512		
Transport Marketing and Communications	1,682,162			1,682,162	1,682,162	0	0	780,488		
	18,580,170			**17,282,209**						
Energy efficient homes										
Equipment Energy Efficiency Programme - Residential	1,656,400			1,656,400	0	1,656,400	0		1,323,784	69,273
In-Home Efficiency	211,958			211,958	0	0	211,958			
Northland Housing Energy Retrofit Pilot	266,727			266,727	0	0	266,727			
Otago Housing Energy Retrofit Pilot	206,272			206,272	0	0	206,272			
Warmer Kiwi Homes	68,401,785			68,401,785	0	0	68,401,785			
	70,743,142			**70,743,142**						
Government leadership										
Public Sector/Crown Loans	658,591	-776,797	205,935	87,729	0	0	87,729			
Cross Government Collaboration	1,425,777			1,425,777	0	0	1,425,777			
Local Authorities	490,620	-657,122	564,452	397,950	0	358,155	39,795		212,026	49,928
State Sector Decarbonisation Fund	2,515,684	-147,998	1,654,849	4,022,535	0	0	4,022,535			
Carbon Neutral Government Programme	1,524,459	0	4,606,859	6,131,318	0	0	6,131,318			
Thermal Drying Facility	40,361			40,361	0	0	40,361			
Invercargill City Decarb	189,467			189,467	0	0	189,467			
	6,844,959			**12,295,137**						
Engage heart and minds										
Hearts and Minds	5,286,489			5,286,489	0	0	5,286,489			
	5,286,489			**5,286,489**						
Total 21/22	**122,827,002**	-32,466,801	39,258,045	**129,618,246**	16,164,529	9,302,219	104,151,498	7,500,000	5,500,000	1,300,000

Appendix 2: Our 2021/22 proposed budget released for consultation in November 2020

EECA's 2021/22 work programme										(as per 20/21 Forecast)			(as per 21/22 Forecast)			Total Cost with Mvt in Commitments included			Levy funding allocated Pro-Rata (except for PEFML)		
										Commitments b/f			Commitments c/f								
		Electricity Industry Levy activities		GSMEE Levy activities		PEFM Levy activities		Non-Levy related activities		Electricity Industry Levy	GSMEE Levy activities	PEFM Levy activities	Electricity Industry Levy	GSMEE Levy activities	PEFM Levy activities	Electricity Industry Levy	GSMEE Levy activities	PEFM Levy activities	Electricity Industry Levy	GSMEE Levy activities	PEFM Levy activities
	Total fully allocated cost per project	%	$	%	$	%	$	%	$							$	$	$	$	$	$
Productive and low-emissions business																					
Standards and Regulations ✓	1,935,411	92%	1,780,578	8%	154,833			0%	(0)							1,780,578	154,833	0	1,560,478	135,395	0
Information & Promotion to Business	1,250,141							100%	1,250,141							0	0	0	0	0	0
Large Energy Users - Direct ✓	1,346,529	23%	309,702	34%	457,820			43%	579,007	(277,225)	(409,811)		277,225	409,811		309,702	457,820	0	271,419	400,344	0
Technology Demonstrations ✓	1,877,082	21%	394,187	2%	37,542			77%	1,445,353	(454,080)	(43,246)		454,080	43,246		394,187	37,542	0	345,461	32,829	0
Industry Development ✓	633,284	20%	126,657	10%	63,328			70%	443,299	(18,230)	(9,115)		18,230	9,115		126,657	63,328	0	111,001	55,378	0
NABERSNZ ✓	432,750	80%	346,200	0%				20%	86,550							346,200	0	0	303,406	0	0
Energy Transition Accelerator (ETA) ✓	1,401,449	24%	336,348	16%	224,232			60%	840,869	(128,328)	(85,552)		128,328	85,552		336,348	224,232	0	294,771	196,081	0
Large Energy Users - Indirect ✓	984,310	76%	748,076	17%	167,333			7%	68,902	(601,553)	(134,558)		601,553	134,558		748,076	167,333	0	655,605	146,325	0
Process Heat Decarb Fund	994,024							100%	994,024												
	10,854,980		**4,041,747**		**1,105,087**		**0**		**5,708,146**							**4,041,747**	**1,105,087**	**0**	**3,542,141**	**966,352**	**0**
Efficient and low-emissions transport																					
Transport Strategy & Development	241,336							100%	241,336							0	0	0	0	0	0
VFEL	470,360							100%	470,360							0	0	0	0	0	0
Low Emission Vehicles - CF ✓	7,733,484					100%	7,733,484	0%	0			(7,779,702)			7,779,702	0	0	7,733,484	0	0	6,764,377
Low Emission Vehicles - IC ✓	841,013					100%	841,013	0%	0							0	0	841,013	0	0	735,623
	9,286,193		**0**		**0**		**8,574,497**		**711,696**							**0**	**0**	**8,574,497**	**0**	**0**	**7,500,000**
Energy efficient homes																					
Standards and Regulations ✓	1,935,410	92%	1,780,577	8%	154,833			0%	(0)							1,780,577	154,833	0	1,560,477	135,395	0
In-Home Efficiency	209,505							100%	209,505										0	0	
Warmer Kiwi Homes	39,264,272							100%	39,264,272							0	0	0	0	0	0
	41,409,187		**1,780,577**		**154,833**		**0**		**39,473,777**							**1,780,577**	**154,833**	**0**	**1,560,477**	**135,395**	**0**
Government leadership																					
State Sector Decarbonisation	3,790,497	0%	0	0%	0			100%	3,790,497							0	0	0	0	0	0
Local Authorities ✓	755,719	60%	453,431	30%	226,716			10%	75,572	(307,170)	(153,585)		307,170	153,585		453,431	226,716		397,382	198,253	
Influencing Strategy	1,128,550							100%	1,128,550							0	0	0	0	0	0
	5,674,766		**453,431**		**226,716**		**0**		**4,994,619**							**453,431**	**226,716**	**0**	**397,382**	**198,253**	**0**
Engage heart and minds																					
Hearts and Minds	6,135,874							100%	6,135,874										0	0	
	6,135,874		**0**		**0**		**0**		**6,135,874**							**0**	**0**	**0**	**0**	**0**	**0**
Total to be expensed in 21/22	**73,361,000**		**6,275,755**		**1,486,636**		**8,574,497**		**57,024,111**	(1,786,586)	(835,867)	(7,779,702)	1,786,586	835,867	7,779,702	**6,275,755**	**1,486,636**	**8,574,497**	**5,500,000**	**1,300,000**	**7,500,000**
Less Levy expenditure related to commitments made and funded in prior years			1,786,586		835,867		7,779,702														
21/22 Levy activities expensed in year			4,489,169		650,769		794,795														
Add: 21/22 Levy activities contractually committed in year but not expensed in year (funding held in retained earnings)			1,786,586		835,867		7,779,702														
Total cost of 21/22 Levy related activities			**6,275,755**		**1,486,636**		**8,574,497**														
2021/22 Funding breakdown																					
Levy Appropriations			5,500,000		1,300,000		7,500,000														
EECA Baseline Appropriation			775,755		186,636		1,074,497														
			6,275,755		**1,486,636**		**8,574,497**														

Key:
✓ = levy-related activity

Glossary of units

Table One – Energy use measurement units and context of scale[27]

Unit	Definition	Example
PJ	Petajoule - 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. One PJ is equivalent to a quadrillion joules (10^{15}).	New Zealand households use a total of 65.71 PJ of energy per year. Split by fuel type: 46.36 PJ - electricity 8.11 PJ - renewables 7.20 PJ - natural gas 3.73 PJ – oil (e.g. petrol and diesel) 0.31 PJ - coal
GWh	Gigawatt hour - a watt hour is a measure of electrical energy equivalent to a power consumption of one watt for one hour. One GWh is equivalent to one billion watt hours, one million kilowatt hours, and 3,600 joules.	Annually, the Manapōuri hydro power station supplies around 4,500 GWh of electricity and New Zealand households use 18,253 GWh of energy (from all fuel types).
kWh	Kilowatt hour - a watt hour is a measure of electrical energy equivalent to a power consumption of one watt for one hour. One kWh is equivalent to one thousand watt hours.	The average New Zealand household uses 9,869 kWh of energy per year.

Table Two – Emissions measurement units and context of scale[30]

Unit	Definition	Emissions produced by an average New Zealand household	Emissions produced by one light passenger vehicle in New Zealand	Emissions produced by New Zealand's light passenger vehicle fleet
$ktCO_2e$	Kilotonnes of carbon equivalent emissions - a unit used to indicate the global warming potential of greenhouse gases, using carbon dioxide (CO_2) as a reference gas. One kilotonne of CO_2e is equivalent to 1000 tonnes of CO_2e.	0.0012 $ktCO_2e$	0.0024 $ktCO_2e$	8,156 $ktCO_2e$
tCO_2e	Tonnes of carbon equivalent emissions - a unit used to indicate the global warming potential of greenhouse gases, using carbon dioxide (CO_2) as a reference gas. One tonne of CO_2e is equivalent to 1000 kilograms of CO_2e.	1.16 tCO_2e	2.43 tCO_2e	8,156,212 tCO_2e
$kgCO_2e$	Kilograms of carbon equivalent emissions - a unit used to indicate the global warming potential of greenhouse gases, using carbon dioxide (CO_2) as a reference gas. One kilogram of CO_2e is equivalent to 1000 grams of CO_2e (gCO_2e).	1,155 $kgCO_2e$	2,426 $kgCO_2e$	8,156,212,000 $kgCO_2e$

[27] Data sources: Household Estimates by Tenure, Tatauranga Aotearoa Statistics New Zealand (2021); Energy Balance Tables, Hīkina Whakatutuki Ministry of Business, Innovation and Employment (2021); Measuring Emissions - A Guide for Organisations, Manatū Mō Te Taiao Ministry for the Environment (2021); internal vehicle fuel consumption data, Te Manatū Waka Ministry of Transport (2021); and Future State Model VKT/vehicle numbers data, Te Manatū Waka Ministry of Transport (2021).