1. Energy Portfolio overview

KEY ISSUES

While the energy system had been in a fairly steady state for the two decades up to 2018, the system is now becoming more complicated, is facing increased demand, and is decarbonising. Technology change is both an opportunity, and a complicating factor in the energy system.

Energy underpins the operation of both our economy and society, and the costs of a lack of energy security are significant. The importance of, and current challenges with, energy security have been highlighted over winter 2024. In response, the Energy Portfolio is accelerating work in many areas, and expanding work in others. This includes:

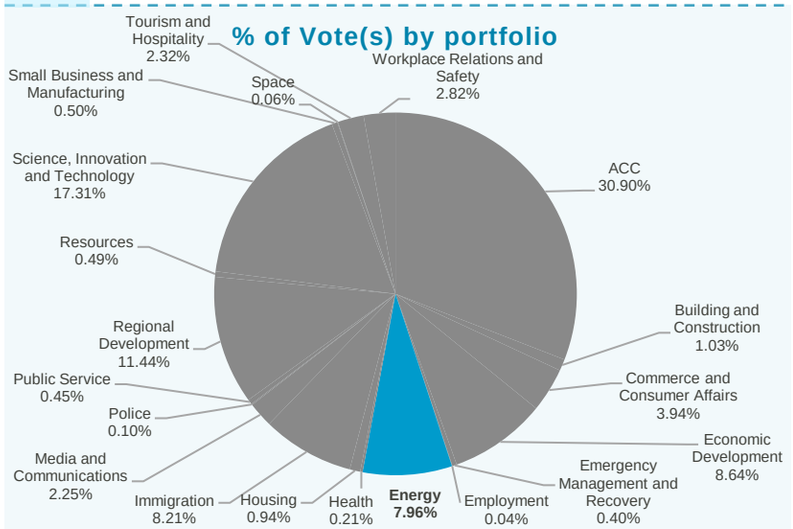
- Establishing enabling regulatory regimes for import of LNG, offshore renewable energy, and carbon capture utilisation and storage.
- Strengthening market settings through the Energy Competition Taskforce, and Review of Electricity Market Performance
- Enabling generation and electrification by creating more certainty through the regulatory system (RMA reform; enabling distributed energy resources, smart energy devices, and related pricing reform)
- Other security work, including the Gas Security Response Group and Fuel Study and Security Plan.

In addition, there is a substantial suite of work to maintain/update system settings such as: aviation fuel security in Auckland, address hazards from trees, the Emissions Reduction Plan, hydrogen roadmap, consumer data right, EECA Act amendments, minimum energy performance standards, etc.

Resourcing the current pace and breadth of work is not possible into 2025/26 with the current appropriations (both MBIE policy and Electricity Authority). Furthermore, while B24 partly-addressed the issue, the MBIE policy appropriation is declining over the forecast period, as fixed term funding tails off.

Funding in the portfolio is dominated by grants/funds (majority administered by EECA). Evaluations show that these are delivering effectively on energy efficiency, and that technology change is an opportunity in the energy system. However, there is scope for trade-offs between these funds and policy and regulatory work necessary to ensure security of supply.

1.1 SPEND BY PORTFOLIO



TARGETS AND PRIORITIES

Government targets

The energy portfolio focusses on ensuring New Zealand enjoys a secure energy system at affordable prices for households and businesses. It plays a key role in ensuring that climate change policies are aligned and do not undermine national energy security as per the National/NZ First coalition agreement, as well as contributing to Target 9: *Reduced net greenhouse gas emissions*

Strategic priorities

Prosperous and adaptable people, sectors, and regions is realised through market regulation that supports security of supply and promotes investment (generation and electrification). It is also supported by grants and funds supporting sectors, regions, and communities to use energy more efficiently, invest in distributed energy generation to support resilience, and affordability. Examples include Community Energy Resilience Fund, Warmer Kiwi Homes, and EECA technology demonstration funds

Value is sustainably derived from the natural environment through increasing renewable energy generation, and reducing emissions (renewable energy and energy efficiency)

A dynamic business environment fostering innovation and international connections is supported through co-funding for development and diffusion of innovative energy technology (EECA and Ara Ake), and market settings (including the EA/ComCom Taskforce)

Informed consumers and businesses interacting with confidence includes creating a competitive energy market, enhancing information for consumers through powerswitch, consumer data right (tbc), and EECA information services. Secure and affordable energy also underpins the operation and confidence of other sectors to operate and invest.

Portfolio priorities

Priority 1: Security of supply, noting New Zealand's electricity and gas systems face growing security of supply challenges both over the short and longer terms. *This priority has been accelerated in light of recent security of supply and affordability challenges.*

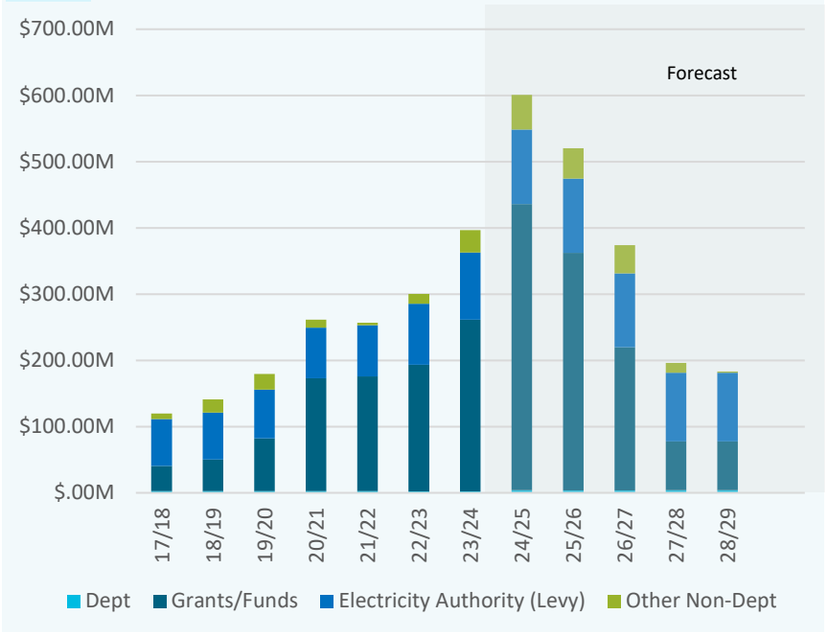
Priority 2: Electrify NZ, cutting red tape to drive investment in renewables including through removing consenting barriers, enabling the use of offshore renewable energy, and ensuring fit-for-purpose cost recovery rules for network infrastructure.

Priority 3: Supercharge EV Infrastructure, supporting the delivery of a comprehensive, nationwide network of 10,000 EV charging stations.

Priority 4: Electricity market and regulatory settings to facilitate a least cost transition, noting significant upward pressure on electricity prices over coming decades (demand increases, market power of some generators increases, build more network infrastructure). *This priority has been accelerated in light of recent security of supply and affordability challenges.*

EXPENDITURE BY TYPE

1.2 Energy Portfolio Expenditure ($m)



Recent changes in expenditure

Portfolio expenditure is dominated by non-departmental spend, mostly the EA and grants. The major increase over 23/24 and 24/25 related to the GIDI contracts that were committed to prior to the closure of the project, as well as Public EV charging infrastructure, and Warmer Kiwi Homes. Budget 2024 closed a number of Funds, and scaled others.

Expected changes in expenditure

Grant expenditure falls as time-limited funds close, including Warmer Kiwi Homes. Activity in the next four years is going to be driven by measures to electrify New Zealand, address security of supply, improve market competition, and increase renewables.

Emphasis is currently on enabling a market-led approach. This requires supporting work within policy and regulatory functions and cost pressures have been identified: Confidential advice to Government The majority is levy funded activity, however, there is a drop in policy funding as fixed term funding finishes (the Policy MCA sits within the ED Portfolio).

Should there be a need for greater pace or scale of change, the government may wish to consider funding levers to achieve its goals. Government has also committed to Supercharging EVs, which has included a grant programme.

Monitoring and funding of Crown companies or entities

Electricity Authority and Energy Efficiency and Conservation Authority

The Energy Portfolio also includes services from the Commerce Commission and WorkSafe, these are levy-funded, and both funding and performance are covered in the relevant portfolios.

2. Energy Portfolio overview: Current specific fiscal risks, workforce, and third-party revenue

Confidential advice to Government

WORKFORCE

2.2 Drivers and implications of change(s) in FTE

Economic growth and demographic trends (size and location of population) drive demand on the energy system (pressure and necessary pace of change), as well as technological developments in generation and consumption. Climate change, and the steps necessary to mitigate and adapt are also a factor. Parts of the energy system are a natural monopoly, and therefore requires high levels of regulation (and resource to support that). That regulatory and policy work drives the FTE requirements.

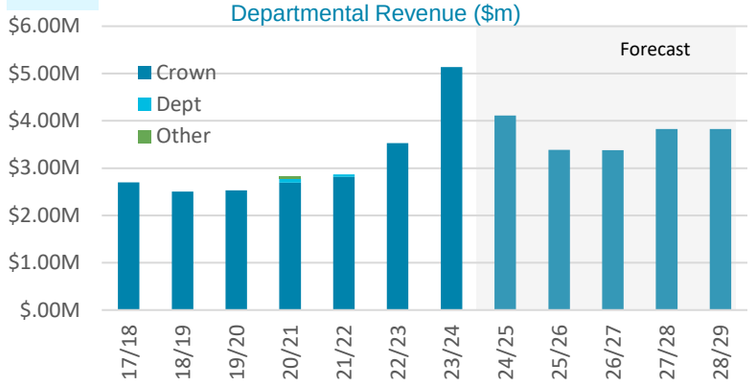
Currently, the volume of work required to deliver on priorities, and the rapid response to address the serious risk to New Zealand's energy security and affordability are creating pressures on FTE resource. There is a clear pipeline which is likely to have on-going resource requirements over the next 2-3 years. This has implications for resourcing in both MBIE (where there is a declining baseline) and the Electricity Authority (whose policy and regulatory team will be reduced if market operations costs cannot be met).

The EA has specifically identified current challenges in attracting and retaining staff in specialist roles. There is high competition to attract candidates. While recruitment strategies are in place, this does mean drawing on contractors and consultants as required.

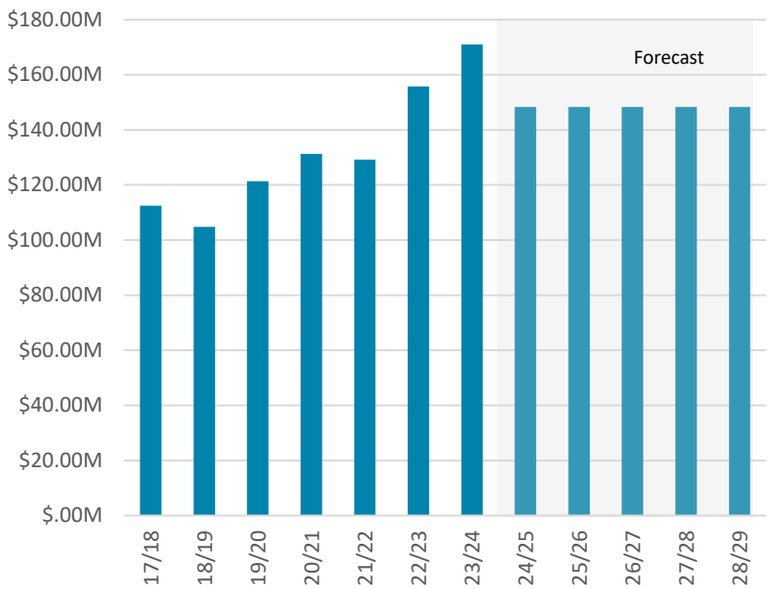
In addition, to support that transition, EECA plays an important role in supporting uptake of more energy efficient products (business and retail), including diffusion of new technologies. This role can be flexed, based on Government priorities.

DEPARTMENTS WITH THIRD PARTY REVENUE (INCLUDING TAX, FEES, LEVIES, EXCISE, DUTIES AND CHARGES)

2.1a Departmental Revenue ($m)



2.1b Non-departmental revenue and receipts ($m)



Third-party revenue

Ref	Source
1	Electricity Industry Levy
2	Petrol or Engine Fuel Monitoring Levy
3	Gas Safety, Monitoring and Energy Efficiency Levy
4	Gas Industry Levy
5	Electricity Lines Owners Levy
6	Electricity Safety and Monitoring Levy
7	Gas Pipelines Levy

Commerce Commission (5&7), WorkSafe (3&6) & Trading Stds (2) in Commerce and Consumer Affairs also receive

Scenarios that could impact third-party revenue

Scenarios	Incidence in last 10 years	Likely in next 10 years?
Implementation of the Offshore Renewable Energy regime	n/a	Yes
Implementation of the Carbon Capture, Utilisation and Storage regime	n/a	Yes
Electrification is likely to reduce demand and therefore revenue for both the petrol and gas levies.	Minor	Yes
Cost pressures (volume and price) may require an increase in the Electricity Authority Levy	Increases reflecting work programme	Yes
Extension of PEFML to include marine fuel levy and meet MARPOL Treaty requirements	No	Yes

Activities funded by third-party revenue and performance

Activity name	% User funded	Date last reviewed	Date next reviewed	Under/ over recovery	2023/24 performance
Managing resilience of fuel supplies	100% (2)	2019 Review	2024/25, subject to Cabinet agreement	Under- to use memo surplus	*Standard*: 90 days oil stock reserve *Actual*: 93.4 days
Electricity Authority	100% (1)	Annual Levy Review 2023 Entity Review (Sapere)	Annual Levy Review Follow-up Review (underway)	Nil	*Standard:* Market operations meet standards; promote market development; Investigating Code breaches *Actual:* Achieved
Energy Sector Information and Monitoring services	100% (2,3,6)	Individual levy reviews as indicated elsewhere	Individual levy reviews as indicated elsewhere	-	*Standard:* Meet international reporting obligations, Releases are free of errors and on time *Actual:* Achieved
Gas Industry Company	100% (4)	Annual Levy Review	Annual Levy Review	Nil	As set out in annual reporting
EECA: *Low Emissions Transport Fund*	50-75% (2)	Demo Funds evaluation 2019 Annual Levy review	Demo Funds evaluation underway Annual Levy review	Nil	Standard: 95% of available funding is committed Actual: 100% in respect of levy-funded activity.
EECA: *Regulator, Information, co-funding*	(1,2,3)	Annual Levy review	Annual Levy review	Nil	

3. Energy Portfolio Managing within baselines: Current and future drivers

4.1 DRIVERS OF COST PRESSURES AND REPRIORITISATION

	Operating impact $m increase, (decrease)					
	2017/18	2024/25	2025/26	2026/27	2027/28	2028/29
Total baseline*	**120**	**601**	**520**	**374**	**196**	**183**
Operating baseline	**120**	**601**	**520**	**374**	**196**	**183**
Confidential advice to Government						
Net impact on baseline	**-**	**-**	**-**	**-**	**-**	**-**

**includes all operating (departmental, non-departmental, Benefits or Related Expenses and revenue dependent appropriations). Benefits or Related Expenses and revenue dependent appropriations are removed in the operating baseline.*

Summary of cost pressures:

The overall complexity, security of supply risks, and risk of the energy transition means more active energy policy work is needed on an ongoing basis when compared with the two decades up to 2020 when the sector was in a steady-state, including work to deliver Government priorities. This drives

- Volume pressures in both policy and regulatory functions (across MBIE and the Electricity Authority)
- Price pressures for contracting market operations systems (aging grid, electrification, and complexity of maintaining supply eg increased volume of outages, increased commissioning (bringing generation online), greater and more complex modelling to manage intermittent generation); and core systems reach end of life.

Volume pressures are exacerbated by a falling MBIE Energy Policy baseline. Volume pressures above include $0.8m rising to $5.4m to maintain the current nominal baseline.

4.2 FUTURE DRIVERS

Climate change: increasing global GHG emissions caused by human activity is directly linked to rising global temperatures and more extreme and frequent weather events. In the energy sector this drives :

- Weather events causing outages and/or requirements for more resilient infrastructure
- Changing weather patterns affecting hydro-generation (key base-load energy source)
- Increasing renewable generation to reduce emissions, requiring system changes to manage intermittent generation

Technology change, including electrification: the development and adoption of new technologies, and greater electrification presents opportunities for greater use of distributed energy resources, smart energy systems, and new forms of generation and storage (offshore renewables, batteries). It requires proactive regulation to make the most of these opportunities, and ensure they are fit for purpose. It also has implications for the complexity of the energy market and the infrastructure required to support it.

Demographic change: a growing, aging population has implications for the demands on the energy system, including increasing demand, affordable energy, and changes in use patterns. However, New Zealand's economic growth is a more significant impact on energy demand.

Geopolitical change: the international rules-based trading system is being undermined by increasing protectionism and rising geo-political tensions, with some countries adopting protective measures to provide economic security and to support their transition to a low emissions economy. Within the energy system, this is taking the form of subsidies for new generation, such as offshore wind and hydrogen, which affects New Zealand's relative attractiveness for investment.

Choices to mitigate/manage long term pressures

Policy that causes demand or demand driver	Options to manage this?	Lead time required to make changes?
Transition of the electricity system to low emissions	Adapt market settings to support renewables, including hedging/firming products	Work underway, impact to be seen in coming years
Ensuring security of supply in face of demographic and economic growth	Strengthen market settings to enable supply response to demand changes	Work underway, impact to be seen in coming years
Overseas support for energy systems could impact our ability to attract investment	Monitor current market-enabling approach, for scale and pace.	Should further support be required, it could be implemented within 6-12 months.

Plan for managing within baselines (Table 4.1)

Area	Impact 24/25	25/26	26/27	27/28	28/29	Description
Electricity Market Operations	Confidential advice to Government					The Electricity Authority is negotiating with Market Operation Service Providers to manage costs down. Of particular note, however, is the end-of-life IT platform currently supporting the System Operator (Transpower). While there is a drive for efficient service provision, there are also risks to security of supply if market operations fail or are unreliable, with longer term implications for investment in generation and energy-intensive sectors. To the extent the EA needs to meet additional market operation costs, it can also consult on an increased levy, rather than risking the quality of market operations.
Electricity Authority regulatory function						The EA is currently prioritising its work programme. Options could include Confidential advice to Government . Alternatively, the EA can consult on an increased levy. It's worth noting that the sector have raised concerns about the pace and scope of delivery from the EA.
Energy Policy capacity	Scaling to be determined					Confidential advice to Government
Funds and grants	Option for trade-offs and levy investment, depending on preferences					Funds and grants currently investing in innovative technology diffusion could be reprioritised (in addition to Budget 2024 cuts) to meet policy cost pressures (in part or full), with trade-offs in demonstrating benefits of energy efficient technology. There is $175m in funds 2024/25, falling to $34m in 2027/28 and outyears. $13m pa is levy funded, and work is underway to consider whether there is scope to increase the levy share of investment.

4. Energy Portfolio: Workforce, Capability and Crown Entities

WORKFORCE AND CAPABILITY

Strategy for workforce costs, including remuneration

Bargaining is underway and we are unable to provide full details of MBIE's remuneration strategy while that is ongoing. The focus of MBIE's approach is to ensure workforce costs balance affordability alongside ongoing sustainability, and enable us to deliver MBIE's work programme.

In addition, the Energy portfolio has a falling policy baseline (resulting from fixed term funding put in place to address emerging issues), against an increasing volume and complexity of work required as the energy system transitions to a new equilibrium. This was partially addressed in Budget 2024, through expense transfer of project funding.

	2024/25	2025/26	2026/27	2027/28	2028/29
Change in baseline	-	(0.792)	(1.346)	(1.650)	(5.415)

Confidential advice to Government

The current and expected work programme cannot be supported with a reducing baseline. While MBIE can provide surge support (such as for the initial response to winter 2024 security of supply risks), this is not sustainable. As noted under Key Issues, the energy system had been in a fairly steady state for the two decades up to 2018. The 2028/29 baseline is consistent with that historic baseline, rather than what is required for the more dynamic environment we expect over the medium term.

Capability – non-workforce (e.g. organisational systems, processes, governance, technology and data)

MBIE has both a significant enterprise ICT infrastructure and technology platforms that underpin specific economic systems and engagement with businesses and the public – from key application processes (eg visas), registries (eg licenced builders), to contact centre help lines (eg tenancy).

MBIE is investing in modern, cloud-based, scalable, multi-use platforms to reduce system complexity. Two specific areas requiring ongoing investment and effort are the transition of visa processing off legacy systems (Immigration) and the upcoming need to replace legacy assets that support the corporate registries (eg: the companies office). In the next 12-24 months moving off all on-premise data centres into the public cloud is also a key shift.

Simplification and the considered use of AI will contribute to greater efficiency and effectiveness across the business. Cyber threats are a growing issue. In response we have already delivered a number of modern security tools as part of a zero-trust architecture. We continue to implement these across MBIE.

MBIE collects and manages a wide range of data. We have invested in and are implementing a cloud data platform designed to make data more accessible, but also safe. This work is prioritised within our new Data Strategy which brings together new technology and data capabilities, and a new way of working to deliver the value of analysis and insights that shape policy and operational decisions at speed. MBIE has extensive governance and risk management systems in place, managing both strategic, policy and operational matters.

The key technology and data requirements for the energy portfolio are related to monitoring energy system (gas, fuel, electricity), and modelling future needs. We will continue to maintain our capabilities in this area, through on the job learning, governance systems already in place, and MBIE's systems.

The Energy portfolio also has obligations under the Treaty, and specific settlements. We have a capability building plan in place to ensure we can continue to meet these requirements in a proactive manner that minimises risks to the Crown.

CROWN ENTITY MONITORING STATEMENT

ELECTRICITY AUTHORITY (EA) regulates the operation of the electricity market and contracts for system operations. These functions are currently under significant pressure as recent security of supply and affordability issues have triggered a substantial review of market settings, with a focus on competition. The EA is 100% funded through an annual levy, and reports on its performance to the Minister of Energy quarterly (from 1 July 2024).

Around 70% of the Authority's expenditure is used to fund the service providers that operate the electricity system and markets. The Authority contracts external parties to do this, the largest of these is the contract with the system operator, Transpower.

Commercial Information

Pressures from service provider contracts will be managed with some increase in levy rates, and reprioritisation of policy and compliance resources. The scope for further reprioritisation in this area is limited, given the current electricity markets Taskforce (Commerce Commission and Electricity Authority), and the need to support the transition of the electricity system at least cost.

Sapere Research Group (Sapere) completed a strategic baseline review of the Authority in August 2023. This confirmed that the Authority's operating context is increasingly complex and that more is being asked of them, the review supported an increase in funding (via levy). Since then, further work has been commissioned from the EA, including the Energy Competition Taskforce (responding to the recent security of supply risks).

We plan to commission Sapere to conduct an independent follow-up review to provide an update on the Authority's progress towards addressing the findings from its 2023 review. We also expect the review could evaluate how the Authority is prioritising the funding increase it received through the levy changes approved in 2024. We propose that this would be over the levy consultation period running from November 2024 through to the end of January 2025.

ENERGY EFFICIENCY AND CONSERVATION AUTHORITY (EECA) has 3 functions: regulation for energy efficiency, Funds investment (subsidy/loan) for energy efficiency (demonstration projects through to rollout programmes such as EV charging stations), and information provision. It is funded through a mix of an annual levy and Crown funding.

EECA reports quarterly on performance to the Minister of Energy, and there are no significant performance or fiscal risks. Confidential advice to Government

MBIE 's monitoring activities include:

Activity	**Frequency**	**Entity**	
		Electricity Authority	**Energy Efficiency and Conservation Authority**
Monitoring Status	-	Standard	Standard
Appointments & Governance	As required	✓	✓
Performance advice to relevant Minister/s	Minimum quarterly:	✓	✓
Engagement with Chair / Board	Minimum:	Six-monthly	Six-monthly
Engagement with CE / ELT	Minimum:	Two-monthly	Quarterly
Regular attendance at board meetings	Typically monthly	×	×
Significant additional activities		Follow-up review pending	Possible review (tbc)

5. Energy Portfolio: Spotlight on Energy Efficiency and Conservation Authority

CONTRIBUTION TO PRIORITIES

EECA supports Government Target 9, ERP 2 and Climate Strategy:

- Help deliver a least-cost transition by using energy efficiently and encouraging transition to renewables.
- Support affordability and resilience in the transition through reduced demand on the grid and promoting more affordable energy use through efficient technology.
- Boost innovation through demonstration and de-risking of newer technologies.

EECA contributes to Energy and Transport Portfolio Priorities, delivering Supercharging EVs programs, Public Bus Decarbonisation and supporting Electrify NZ through promotion of key technologies for electrification and resilience for the grid.

OVERVIEW

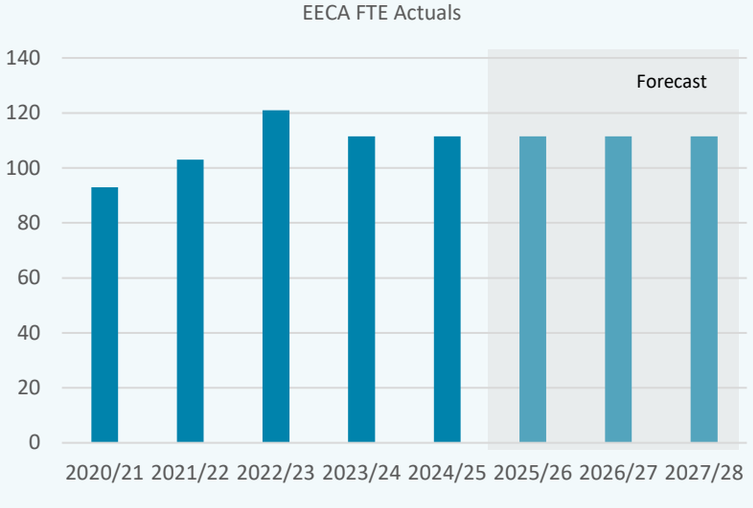
EECA has 3 functions:

- Regulation for energy efficiency,
- Funds investment (grant/loan) for energy efficiency and electrification/decarbonsiation (demonstration projects through to rollout programmes such as EV charging stations),
- Information provision to consumers and businesses.

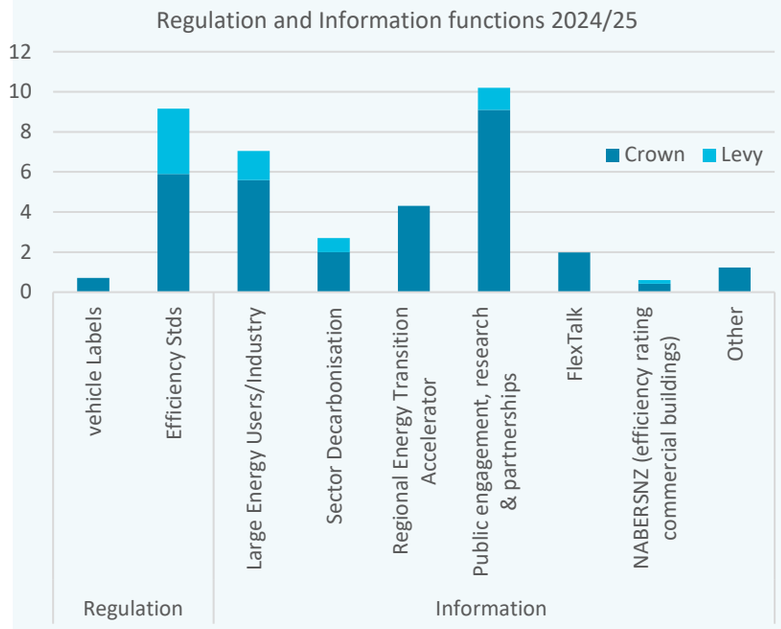
EECA is funded through a mix of annual levy and Crown funding. **There is potential to increase the levy-share of activity and/or reduce the scale of the Crown investment**

WORKFORCE

To meet Government directions, EECA has reduced FTE from a peak of 145 budgeted FTE in 2023/24 to 111 in 2024/25. The graph below shows actual FTE at the end of each year. EECA has also reduced its consultant and contractor spend from $4.3m to $2.6m (saving $1.6m). Forecast is a rollout of 2024/25.



OPERATIONAL SPEND BY FUNCTION



REGULATOR AND INFORMATION FUNCTIONS

Regulator

EECA regulates for energy efficiency, ensuring NZ keeps pace with other jurisdictions and poor performing products do not enter the market. This is a joint approach with Australia to ensure alignment, and currently covers over 20 products.
The Act is currently being updated to enable regulation for smart products and a more efficient regime.
Key outcomes since 2002:

- Over 98 million products sold under our regulations
- Saved 94.5 PJ of energy, equivalent to the annual energy use of 2.2 million homes
- Cost savings of $2.3 billion; and
- Emissions avoided of 3.5 million tonnes.

Information

Information based on evidence so businesses and household can make informed decisions on managing their energy use.

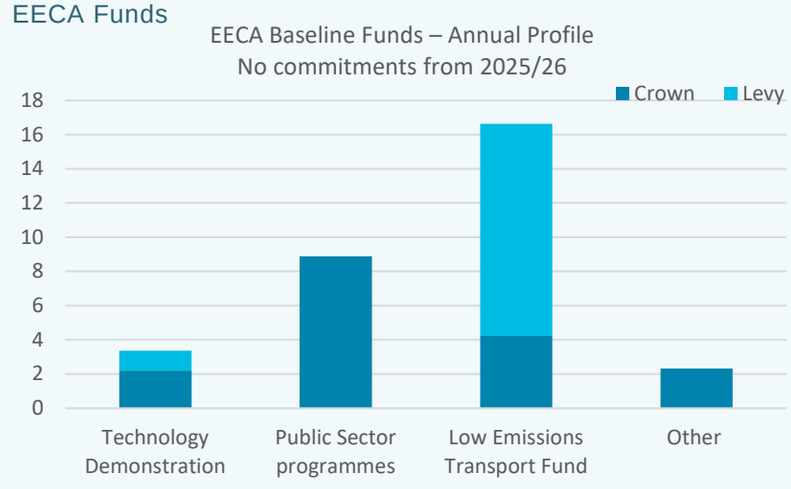
- Raising awareness and encouraging consumers and businesses to actively manage their energy use.
- Providing market coordination and filling information gaps, eg through the RETA programme.
- Publish key research used by industry and Govt for making decisions around energy efficient technologies and the energy system (12 reports last year, including household electrification and zero-emissions trucks).
- Public engagement with key partners eg. Consumer NZ, Master Plumbers to reach target market and save consumers money (most recent had ROI of over $3).

FUNDS FUNCTION

Targeted investment for energy efficiency and low-emissions fuel switching to overcome market barriers to adoption, demonstrate projects and unlock private investment.
De-risk innovative projects for first movers and unlock private investment for key Government priority areas such as EV charging.
Accelerate electrification and uptake of low-emissions fuels through targeted funding for Government priority areas.
Support low-income households to use energy efficiently and have warm, dry homes.
Key outcomes:

- Over 150,000 heating and insulation retrofits since 2018, with a benefit-cost ratio of 4.4, 16% less electricity use and $15 million in avoided health costs.
- 870 chargers supported since 2016
- Widespread uptake of key industrial technologies following first NZ demonstrations, including high temperature heat pumps, electrode boilers and biomass boiler conversions.

EECA Funds



	Government Priority Investment Programmes (Crown Funded via MYAs)			
	2024/25	**2025/26**	**2026/27**	**Status**
Total MYA funding	**249**	**301**	**153**	Forecast profile
Warmer Kiwi Homes (grants)	83	83	83	$83m committed for 2024/25
Warmer Kiwi Homes (opex)	8	8	8	Staff and Support Services
Public EV Charging Hubs /Infrastructure	34	60	-	$28m committed
Low Emissions Heavy Vehicles	2	13	13	No commitments yet
GIDI (remaining commitments	118	136	49	Fully Committed
Shovel Ready Projects	4	-	-	Fully Committed
Uncommitted	**10**	**165**	**104**	