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Collaboration for a changing energy system

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EECA ENERGY EFFICIENCY & CONSERVATION AUTHORITY
TE TARI TIAKI PŪNGAO

EECA's strategy

Our mission

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

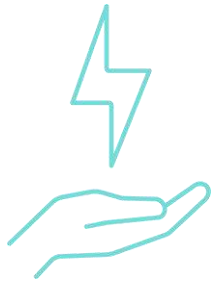
Our desired outcome

Energy users save energy, money and reduce emissions.

Energy productivity and resilience improves.

Energy efficiency first

Efficient energy use is the first option users adopt.



Empower energy users

Users are empowered to control their energy.

Accelerate renewable energy

Users transition to low emissions energy.

NZ faces complex energy challenges

...but we're not alone. And there are smart solutions.

Supply side

- Shrinking gas supply
- Growth in variable renewable generation (wind/solar)
- Costly electricity infrastructure upgrades & local network constraints

Demand side

- Rising electricity demand
- Electrification of industry & buildings
- Growth of electric transport
- Data centres & cooling/heating needs
- Stressed household and business finances

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The opportunity is bigger than decarbonisation

Where is the current momentum ?

Flexibility

LNG, gas, and energy security

Biofuels

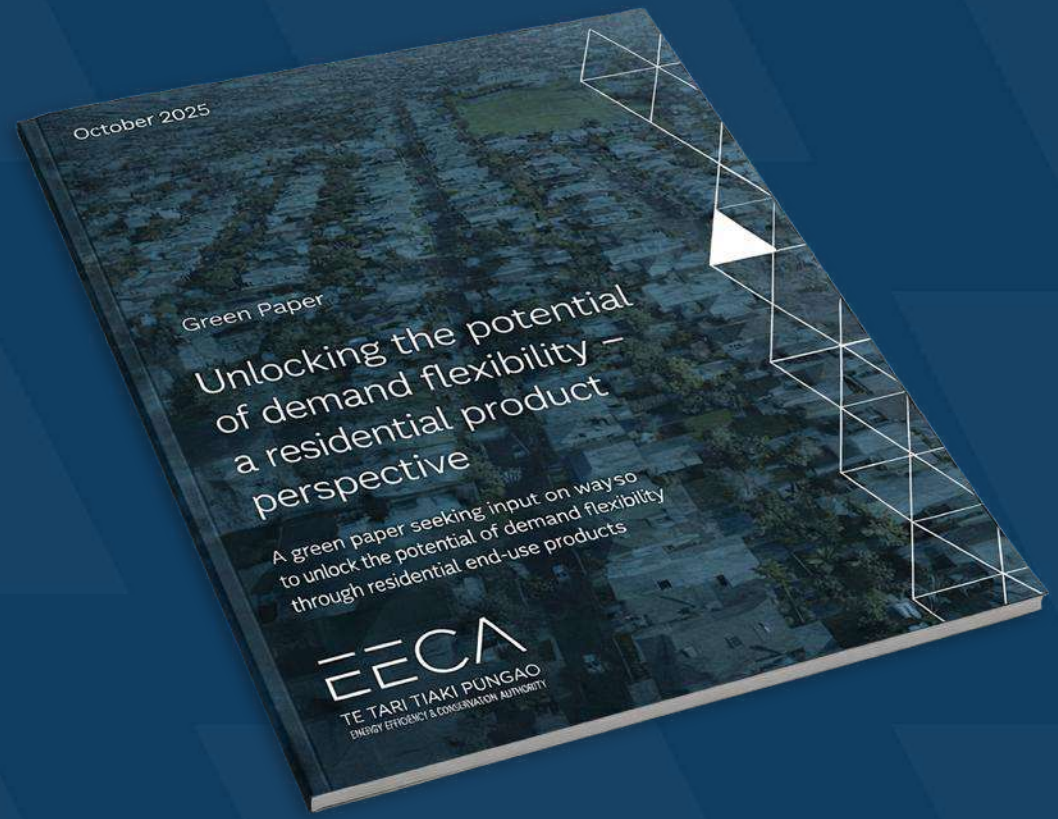
Electrification

Solar

Flex will be a major part of our energy system

We’re collaborating on settings to help flex thrive

- Green Paper on appliances + demand flexibility – 25 submissions supportive of some standardisation.
- Joint letter from 3 x NZ Regulators– EECA, EA and ComCom.
- 2+2 ministers’ meetings with Australia - collaboration on standards for solar, V2X charging.
- EECA’s next steps – working groups on flexibility specifications, changes to EEC Act, regulating ‘smart/ EV chargers and more.



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Businesses shouldn't assume abundant, low-cost gas will return

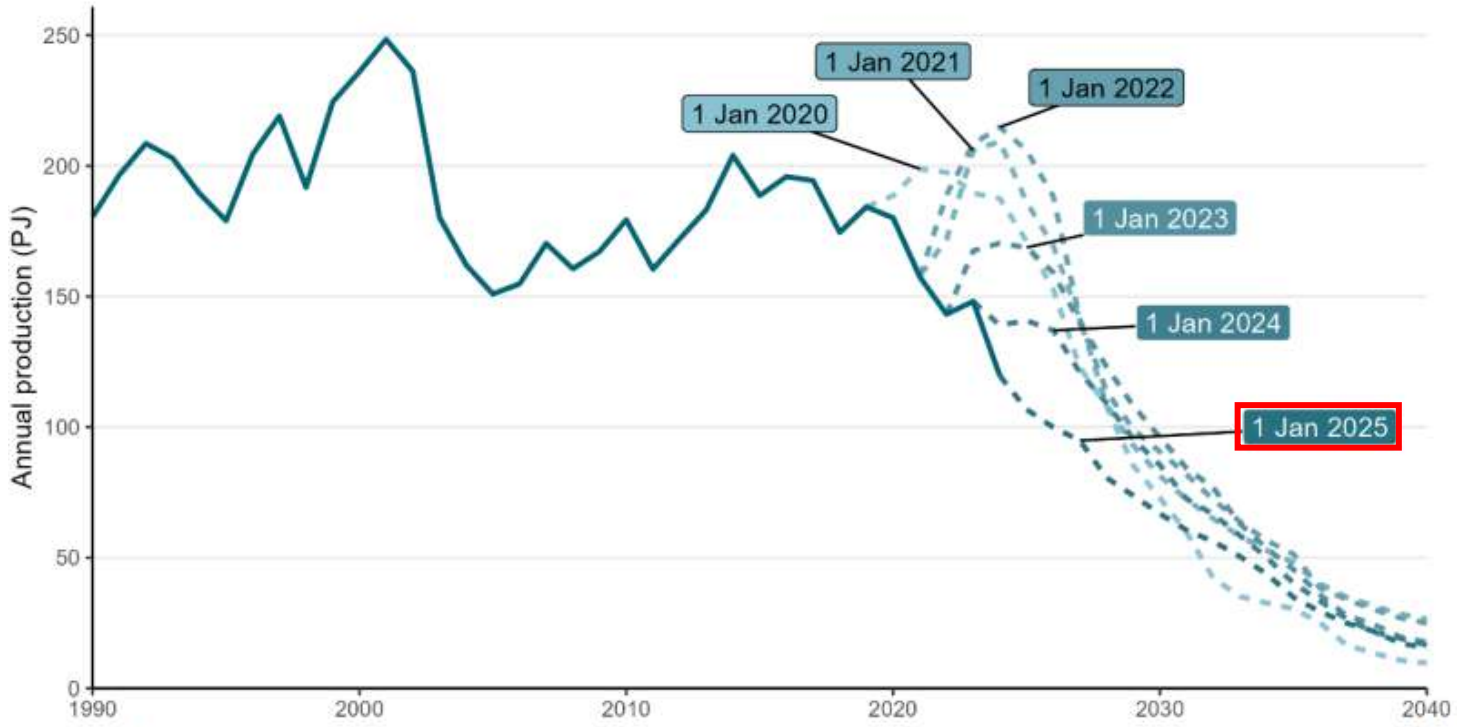

Figure 19. Gas production profiles as reported from 1 January 2020 through 1 January 2025.

Energy in New Zealand 2025 | Ministry of Business, Innovation & Employment

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Biomass is a key opportunity, especially for gas-powered industrial process heat

RETA work shows potential for wood energy projects

350
Sites with biomass boilers in the economic pathway

2.4 GW
Biomass boiler capacity

31 PJ
Annual biomass energy demand

4 Mt
Annual biomass demand (‘green’ basis)

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Biogas can play an important role but feedstock information is key

EECA is leading work to deliver a robust, independent, region-by-region assessment of organic waste feedstocks across New Zealand -– starting in Taranaki, Auckland and Hawke's Bay.

This will provide an evidence base for a range of renewable energy pathways, including anaerobic digestion (AD) and biomethane production.

Heat pumps are being taken up by industrial processes

Goodman Fielder heat recovery project

- Two 450 kW packaged heat pumps capturing refrigeration waste heat.
- COP up to 4, displacing gas-fired water heating.
- 35% reduction in gas for secondary hot water production.
- Approximately 1,200 tonnes of CO_2e saved annually.
- A 3.5-year payback.

Solar is becoming increasingly viable and interest is growing

Solar on farms programme

37
Farms around the country

10
Farm types

3751 kWp
Total solar capacity

14
New Zealand regions

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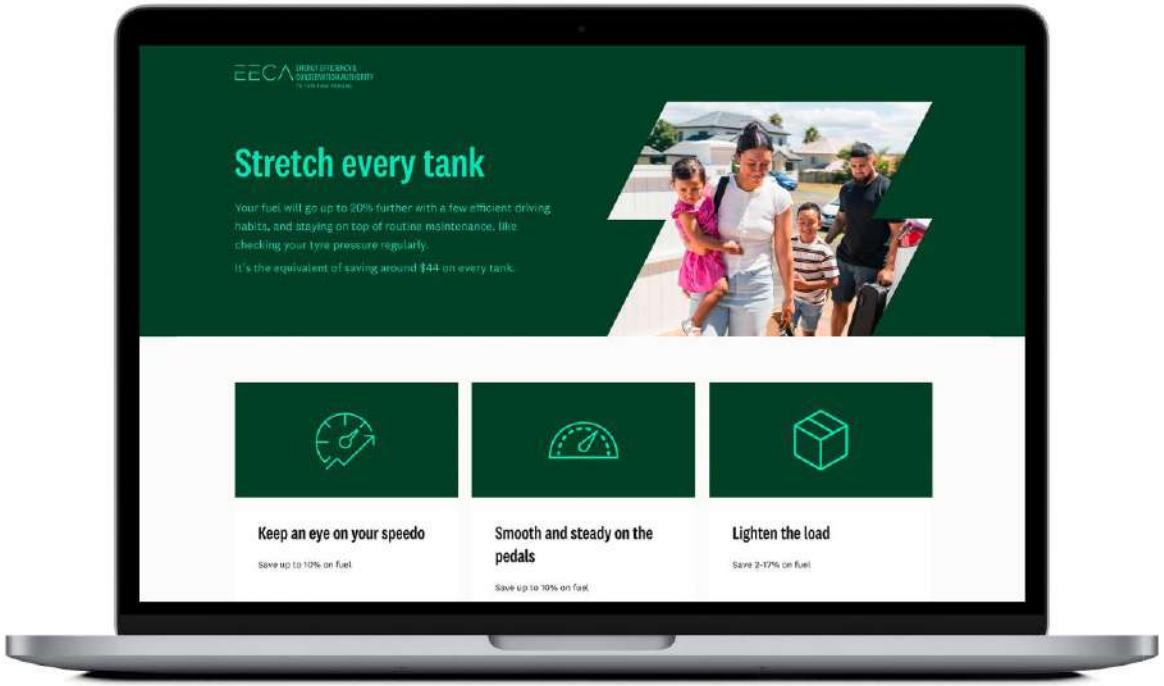
We’re helping organisations move from awareness to action – using credible evidence and practical examples.

After 7 weeks:

72% of drivers recall the campaign

A half of all road users have taken at least one action because of the campaign

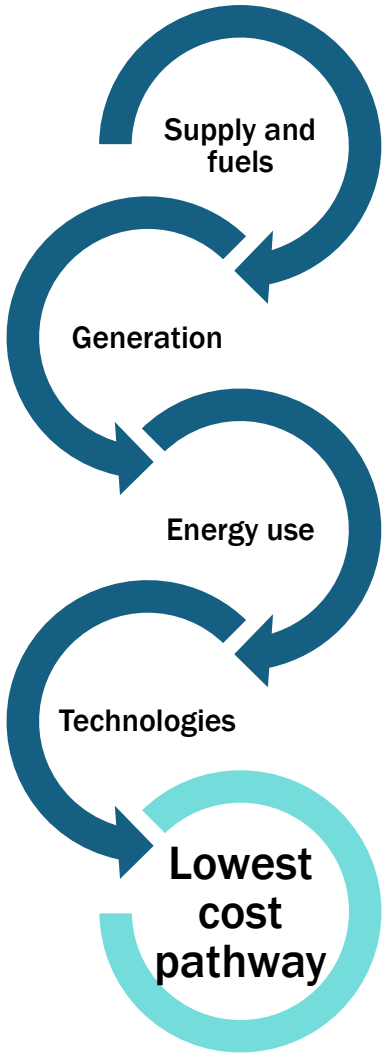
The campaign is estimated to have helped save Kiwis **$50m** and **15m litres of fuel**



EECA insights can help solve the big energy challenges of the day

New Zealand Energy scenarios tool for system optimisation

- Energy system optimisation
- Identifies least-cost pathways to meet demand
- Built on bottom-up database of supply, distribution, and demand technologies
- International TIMES framework allows for detail and flexibility
- Custom constraints to represent policy or other frameworks



Targeted investment to support the market where it is not yet moving on its own.

Increasingly, our role is about working proactively with industry to identify opportunities that can unlock larger system benefits.

Budget 2026: New loan guarantee scheme to support reticulated natural gas users

The Treasury-led Gas Transition Loan Guarantee Scheme is expect to support up to $1.2 billion of bank loans for business to eliminate or reduce dependency on reticulated natural gas

- Open to businesses that use at least 1,000 GJ of reticulated gas a year.
- Supports fuel-switching and energy projects that reduce gas use by at least 15%
- The Crown will guarantee 80% of each loan in return for banks passing on lower interest rates to borrowers
- The maximum value of a loan under the scheme will be $50m of new lending
- The scheme would be available for three years with loans expected to be repayable within 10 years, subject to terms agreed between banks and borrowers

The right regulations will support market consistency, investment, and confidence

Enabling smart energy use to become the norm across homes and businesses.

For example: Smart charging requirements

By 2050, smart EV charging could:

- **Reduce household power bills by up to $220 a year**
- **Save up to $4 billion in electricity network costs**

EECA maintains the EV smart charger approved list for chargers that already meet the current voluntary standards for smartness and energy efficiency.

Scaling many of these opportunities will depend on industry confidence, investment and leadership.

That’s where you come in

Ngā mihi

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