



# EECA submission on the Commerce Commission's DPP4 draft decision

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**EECA**  
TE TARI TIAKI PŪNGAO  
ENERGY EFFICIENCY & CONSERVATION AUTHORITY



# About EECA

The Energy Efficiency and Conservation Authority (EECA) is a Crown entity established under the Energy Efficiency and Conservation Act 2000 (the Act). As set out in the Act, EECA exists to encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy.

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

## Our Strategy

### Our Mission

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

#### Focus areas



##### Energy efficiency first

Efficient energy use is the first option users adopt.

##### Outcomes

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



##### Empower energy users

Users are empowered to control their energy.

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



##### Accelerate renewable energy

Users transition to low-emissions energy.

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

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

# Submission on DPP4 Draft Decision

The Commerce Commission is seeking feedback on its 29 May 2024 “*Default price-quality paths for electricity distribution businesses from 1 April 2025 – Draft decision*”.

Thank you for the opportunity to provide feedback. EECA’s key points are outlined below, we welcome the opportunity to meet and discuss our comments further.

## EECA’s key points on the DPP4 Draft Decision:

### **1. We agree that electricity networks need to grow to support increasing demand.**

Electrification of our economy is a critical enabler to meet emissions reduction targets, and we know that electricity networks need to continue to grow to accommodate new loads and demand growth. Networks also need to be able to cope with increasing complexity as demand flexibility, home solar and batteries, and other emerging technology trends become more widely used.

We acknowledge and agree that the Commission needs to increase the amount of revenue available to Electricity Distribution Businesses (EDBs) to grow and future-proof this increasingly critical infrastructure. We also agree that it is essential that this is balanced by safeguards to protect the consumer from unnecessary price increases.

**We support the overall direction and balance of the draft price path decisions described in Chapter 4.**

### **2. The Commission has an important kaitiaki role in ensuring transparent, fair and reasonable consumer costs over the next five years and beyond.**

Energy affordability and hardship is a concern, and we acknowledge that the Commission has a difficult task ahead in striking the right balance between sufficient investment, and safeguards to not put a disproportionate amount of pressure on households during this time.

The attempted smoothing approach aims to spread the recovery of revenue by EDBs and Transpower over a longer period to soften the impact of initial price increases on consumers.

**We support the smoothing approach (draft decision P3) and recommend that the Commission carefully monitors that this is working as intended.**

### **3. Network growth must therefore be on the basis that new and existing loads and connections are managed efficiently and charged cost-reflectively.**

### **4. It is essential that cost-effective energy efficiency and distributed flexibility measures are used to a much larger extent than is the case today.**

To avoid the full extent of expensive electricity infrastructure upgrades and the consequent high consumer power bills, energy efficiency measures are an essential first step. The cheapest form of energy is the energy we do not use. Energy efficiency measures provide an opportunity for people and businesses to reduce their energy use while still being able to produce the same output

or service. This not only helps users save money on energy costs – it increases New Zealand’s productivity too and makes the best use of existing assets.

EECA modelling in the 2019 report “Energy Efficiency First: The Electricity Story”<sup>1</sup> showed nationwide uptake of energy efficient technology could significantly reduce costs. The study showed the savings from system wide uptake of modern technologies like LEDs, heat pumps, energy efficient water heating and electric motors could provide the system with the equivalent of 4,000 GWh of extra capacity.

Likewise, a key part of the answer to avoiding the full extent of electricity infrastructure upgrades lies in establishing a smart grid with distributed flexibility. Participating connected smart devices can be dynamically coordinated to shift demand and utilise storage resources as a balancing service to the network. This can effectively lower the required demand capacity on the network, reducing the need for significant infrastructure upgrades across our electricity networks and empower consumers to save on their power bills and monetise their demand flexibility as a service.

For example, EECA modelling shows that widespread use of smart charging technology could help manage the increased peak electricity demand that will come from private electric vehicles, potentially saving \$4 billion in grid infrastructure costs by 2050<sup>2</sup>.

The electricity system would still need to undergo some modernisation to be able to coherently support the dynamic management of demand and supply across the millions of distributed smart energy-using and producing assets. However, done well, such a “smart grid” with distributed flexibility provides for a more efficient, renewable and affordable energy system.

We believe the value stack of distributed flexibility will only be realised if costs and value are clearly identified, and all market participants have transparency. These are therefore key first tasks.

We suggest a national map showing where non-network solutions are most beneficial to New Zealand could be useful to prioritise and encourage action. This is potentially an area for collaboration between agencies.

Relatedly, we see battery-based solutions at a household and community level as promising ways to support affordability by reducing network infrastructure and storing least-cost electricity. We anticipate that batteries will become increasingly affordable (along with solar PV) in New Zealand. The Commission is pivotal in ensuring barriers aren’t created to these (and other) non-network solutions.

We note that the Commission has revised innovation allowances. EECA is strongly in support of allowing a greater focus on innovation, as current levels of investment are not

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<sup>1</sup> [EECA-Energy-Efficiency-First-Overview.pdf](#)

<sup>2</sup> [Residential smart EV chargers and demand flexibility | EECA](#)

geared towards supporting innovative solutions in distributed flexibility and energy efficiency.

**We support the decision to introduce an Innovation and Non-traditional Solutions Allowance (INTSA) (draft decision U1).** We would like to see a strong push to incentivise and prioritise demand management and energy efficiency, and see the INSTA playing an important role in this. However, we are concerned that the innovation allowance cap of 0.6% is small and will be insufficient to address the significant need for innovative solutions. **We recommend increasing the INSTA cap.**

**We support the decision to incentivise energy efficiency and demand-side management incentives through the INSTA (draft decision U2).**

**We support the decision that outages directly associated with an INTSA project would be able to be excluded from assessment against the quality standards and incentives up to a specified limit (draft decision RP7).**

**5. There is a balance to be struck between EDBs investing directly in distributed flexibility and holding ownership/control, versus encouraging/requiring third parties in this space.**

At one end of the spectrum, a large, regulated revenue allowance could make it challenging for third parties to compete in a distributed flexibility system, and there is a risk that any distributed flexibility technology would then be ‘locked in’ to the existing centralised framework. This could limit consumers’ ability to gain financial benefit from distributed flexibility. However, this approach would ensure that progress would be made in encouraging the uptake of distributed flexibility systems and solutions. These costs and benefits need to be carefully considered.

**6. We note that the work EECA and others are doing to increase market saturation of smart products will likely have an impact on, and need to be considered in, DPP5.** The opportunities presented by distributed flexibility (DF) resonate strongly with EECA’s strategic objective to Empower Consumers. We have provided below examples of current initiatives focused on supporting the shift towards greater utilisation of DF:

- a. **FlexTalk 2.0:** Alongside industry and the Electricity Engineers’ Association (EEA), EECA recently completed the FlexTalk 1.0 project, which installed smart charging functionality on three electricity networks - Orion, Aurora and WEL Networks. The project provides a template for EDBs to enable smart EV charging on their networks quickly and cheaply.

We are now planning a second iteration of the pilot. FlexTalk 2.0 is intended to build on the smart communication platform created by adding further technologies where electricity demand can be managed remotely. This will include seed funding to trial installations of electric hot water cylinders, heat pump connectivity and smart inverters e.g. solar batteries. We have collaborated with the EEA and EDBs to identify pinch points on their low-voltage systems to help locate where the FlexTalk 2.0 project would be most effective (focusing on the subdivisions beyond these

pinch points).

Project planning of FlexTalk 2.0 is underway and should be completed within Q1.

- b. Smart EV charging:** EECA is working to promote the use of more efficient smart EV chargers which have the capacity to respond to peak electricity demand, helping to manage the load on the electricity grid and reduce user charging costs. EECA has developed and published an **approved list** of smart EV chargers that are recommended for residential and commercial use<sup>3</sup>. The list has been developed to help New Zealanders identify and purchase smart, efficient EV chargers. To feature on the voluntary approved list, chargers need to be efficient and capable of two-way (smart) communication, based on EECA's technical specifications. The list has been well received by the market, with over 15,000 page views since its publication in mid-March.

Alongside the list publication, EECA released an **insights resource** outlining the advantages of smart charging technology for EV owners, including increased speed of charge and cost savings from automated off-peak charging<sup>4</sup>. The report also details how widespread smart EV charging technology could reduce New Zealand's winter evening peak demand by almost 18% and save \$4 billion in network costs by 2050.

EECA has also conducted **consumer research** into what EV owners, and people considering buying an EV, currently understand about smart chargers<sup>5</sup>.

- c. Distributed Flexibility research:** EECA is commissioning research to examine current utilisation of DF across identified sectors, and future opportunities to build upon. This is likely to involve analysis, by region, of peak demand contributions, and will identify untapped potential for demand-side flexibility within the current grid scenario. It will also analyse the potential for demand-side flexibility in future grid scenarios, considering the impact of electrification.

- 7. Clear and coordinated signals are needed across government.** We stress the importance of giving proactive long-term signals that set clear expectations, so that industry can plan and make timely upgrades to electricity infrastructure. It is critical that these signals are aligned across government, to avoid conflicting or confusing messages. Agencies need to work together in unity to ensure an end-to-end solution is made available for New Zealand consumers.

We think flexibility mechanisms such as the reopener application process are important elements to get right as EDBs navigate uncertainty and changes over the next 5 years. We recommend ensuring that the process is well understood with a logical assessment criteria and timely decision-making.

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<sup>3</sup> [EV Smart Charger Approved List | EECA](#)

<sup>4</sup> [Residential smart EV chargers and demand flexibility | EECA](#)

<sup>5</sup> [Knowledge and awareness of residential smart EV chargers | EECA](#)

- 8. We look forward to continuing to work with agencies, particularly the Commission, the EA and MBIE, to foster a coherent, fair and competitive flexibility market that empowers the consumer.**