MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

BRIEFING

Encouraging EDB efficiency

Date:	21 May 2025	**Priority:**	Medium
Security classification:	In Confidence	**Tracking number:**	BRIEFING REQ 0013881

Action sought		
	Action sought	**Deadline**
Hon Simon Watts **Minister for Energy**	**Indicate** if you would like to discuss this with officials **Forward** this briefing to the Minister for Resources **Forward** this briefing to the Minister of Commerce and Consumer Affairs	At your convenience

Contact for telephone discussion (if required)			
Name	**Position**	**Telephone**	**1st contact**
Tamara Linnhoff	Manager, Electricity Markets Policy	[redacted]	✓
Charlie Sheppard	Senior Policy Advisor		

The following departments/agencies have been consulted
Commerce Commission

Minister's office to complete:

- ☐ Approved
- ☐ Noted
- ☐ Seen
- ☐ See Minister's Notes
- ☐ Declined
- ☐ Needs change
- ☐ Overtaken by Events
- ☐ Withdrawn

Comments

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Purpose

This briefing responds to your request to MBIE for advice on encouraging electricity distribution business (EDB) efficiency and potential learnings from economic regulation of the water sector.

Developed in collaboration with the Commerce Commission (Commission), this briefing provides additional thinking on EDB amalgamation to support this topic as covered in BRIEFING-REQ-0013791, submitted last week, which seeks your initial direction on recommendations in the draft Frontier Economics (Frontier) Review of Electricity Market Performance.

Executive summary

Greater scale could improve efficiencies for EDBs and result in consumer benefits

Given the size of New Zealand, having 29 EDBs has sparked debate about whether the sector could operate more efficiently with fewer, larger EDBs.

Efficiencies could occur through lower capex and operating costs (so lower distribution charges) and harmonisation of standards and customer-facing processes (eg for new connections). However, there is limited robust evidence showing widespread inefficiencies across EDBs.

Options to improve the efficiency of EDBs range from large structural reforms to incremental Code changes

Whilst quantitative evidence is limited, commentary on the potential for greater EDB efficiency is common.

The Frontier draft report identifies three options for EDBs to be rationalised, identifying the first option of amalgamation as the best option:

a. **Amalgamate the existing 29 EDBs** - establish five ‘super EDBs’

b. **Amalgamate EDBs without private ownership** - resulting in nine EDBs in total

c. **Require coordination within defined regions** - require coordination within defined regions, such as joint procurement and shared services.

We have identified additional options to improve EDB efficiency:

Free and frank opinions

Free and frank opinions

While amalgamation of EDBs may offer efficiency gains, it may face similar resistance as 'Three Waters'

Learnings from the ongoing water sector reform can help guide work to improve EDB efficiency. However, unlike electricity distribution, the water sector faced clear efficiency and quality problems and many water entities have struggled to access finance, making it easier to justify structural reform.

Widespread public opposition to centralisation led to Local Water Done Well (LWDW), which retains local control while still aiming to improve outcomes. For EDBs, 'co-management' or collaborative models may be more acceptable and practical alternatives to structural amalgamation.

The new water regime aims to apply a more flexible toolkit, aspects of which could be useful for EDBs

The toolkit for water provision will allow for proportionate and targeted regulation, aspects of which could be adopted for a more fit-for-purpose regulation of EDBs:

- provision for 'quality-only' regulation and standalone performance requirements, allowing more specific performance concerns to be targeted
- greater flexibility for adding or removing types of regulation if performance changes
- explicit powers to consider a broader range of material when analysing disclosed performance information
- powers to consider whether a supplier's unregulated activities might compromise the financial sustainability of its supply of regulated services
- no restrictions on benchmarking regulated suppliers on their efficiency.

We (MBIE) consider there is real potential for greater alignment across EDBs to lower overall costs

Work is already happening that aims to improve efficiency through harmonisation and incentives for innovation. However, there are no workstreams looking at the structural reform necessary to drive significant efficiency benefits.

The next step is to provide further advice on EDB efficiency in the cabinet paper being developed in response to Frontier's Review of Electricity Market Performance.

Recommended action

The Ministry of Business, Innovation and Employment recommends that you:

a **Indicate** if you would like to discuss this with officials

Yes / No

b **Forward** this briefing to the Minister for Resources

Yes / No

c **Forward** this briefing to the Minister of Commerce and Consumer Affairs

Yes / No

Tamara Linnhoff
Manager, Electricity Markets Policy
Building, Resources and Markets, MBIE

21 May 2025

Hon Simon Watts
Minister for Energy

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Background

1. There are 29 electricity distribution businesses (EDBs) in New Zealand. The majority of EDBs are trust or community owned, in full or in part. The remainder being owned by local bodies or private investors.

2. All EDBs are subject to information disclosure regulation, which incentivises efficiency and innovation by publicly shining a light on their performance. In addition, 16 EDBs are subject to price-quality regulation that limits their revenue and provides incentives to reduce costs, while still meeting quality standards. More background on EDBs and the current regulatory regime is in **Annex Two**.

3. Given the country's size, the fact that we have 29 EDBs has sparked debate about whether the sector could operate more efficiently with fewer, larger EDBs. There has also been concerns about whether trust ownership affects EDB efficiency.

There is scope to improve the efficiency of EDBs

Greater scale could improve efficiencies for EDBs and result in consumer benefits

4. Frontier's draft Review of Electricity Market Performance claims that the New Zealand EDB industry is too fragmented, with most EDBs operating well below minimum efficient scale.

5. Greater scale could lead to efficiencies across several areas:

    - **investment** – larger EDBs may be better placed to plan and finance long-term infrastructure due to stronger balance sheets and more predictable revenue streams
    - **innovation** – larger EDBs have more capacity to trial and adopt new technologies and systems
    - **procurement and operations** – costs could be lowered through bulk purchasing and shared services
    - **access to skills** – larger organisations based in cities are more likely to attract and retain specialised staff
    - **technical processes and standards** – standardisation can improve consistency and interoperability which can reduce costs
    - **connection processes and prices** – consistent rules and terms for new connections could reduce costs and confusion for customers
    - **core network pricing** – consistent approaches to setting core network charges.

The ownership model of EDBs may also affect efficiency, as trust and local government-owned EDBs are not subject to shareholder discipline of the market

6. Concerns have arisen in the past when some trust owned EDBs invested in non-electricity businesses that lost money. Whether ownership is linked to efficiency needs further investigation. In particular, whether a problem exists with the composition of trust boards (eg skills), whether the issue is trust boards not communicating or representing consumers well, or whether the issue is trust boards lack of control or too much control over EDB management.

There is limited robust evidence showing widespread inefficiencies across EDBs

7. Collating a robust quantitative evidence base to compare EDB performance is challenging due to differences in geography, customer density, and network characteristics which can significantly affect costs and service levels.[1]

8. In addition, the Commerce Commission is not currently permitted to benchmark EDB efficiency when setting default price paths. This is due to historical concern that inaccurate comparisons could lead to unfair regulatory decisions. However, this has led to limited sector studies assessing the efficiency of individual EDBs.

Some research suggests that EDB size does not determine efficiency or service quality

9. Previous studies, though funded by industry and potentially biased, highlight that there is no conclusive evidence of significant economies of scale in electricity distribution.[2] In contrast, smaller EDBs may be more innovative out of necessity.

EDBs charge different customers different rates for a number of reasons

10. The charges EDBs set for customers comprise a connection component and a charge for a share of core network costs. These currently differ across customers for many reasons.

11. Connection charges differ as EDBs have a variety of approaches to deciding what's included in a connection charge. Connection rates also differ with the connection capacity, whether it's solo-use or shared and the age of the connection assets

12. Core network charges differ as EDBs use different distribution pricing methodologies across EDBs and across areas within an EDB. EDBs also use network charging to signal to users, for example setting higher rates for capacity constrained areas, or for peak network use times. This variation in approach is consistent with the EA's current distribution pricing guidelines.

13. The EA is currently working on developing regulation relating to connection charges and is developing an approach to better alignment on core network charges, as detailed in **Annex One**.

Options to improve the efficiency of EDBs range from large structural reforms to incremental Code changes

14. Whilst quantitative evidence is limited, commentary on the potential for greater EDB efficiency is common and we (MBIE) consider there is real potential for greater alignment across EDBs to lower overall costs. In particular, smaller and more remote EDBs may struggle to be operating at full efficiency on the dimensions highlighted in paragraph 5 above.

15. The Frontier draft report identifies three options for EDBs to be rationalised, identifying the first option of amalgamation as the best option:

    a. **Amalgamate the existing 29 EDBs** – establish five 'super EDBs' all of similar size with each one headquartered in a major New Zealand city.

    b. **Amalgamate EDBs without private ownership** – the four EDBs with private ownership would remain the same and all other EDBs would be amalgamated into 5 EDBs. This would result in nine EDBs in total.

    c. **Require coordination within defined regions** – maintain the existing 29 EDBs but require coordination within defined regions, such as joint procurement and shared services.

[1] The Commerce Commission do collect data for quality of service like SAIDI and SAIFI.
[2] G. Yarrow: The International Energy Agency's 2017 Review of New Zealand, 2018.

16. We have identified additional options to improve EDB efficiency:

21. There are many initiatives underway across the Commission and Electricity Authority (EA) to improve pricing, standardise connections, and encourage innovation, as detailed in **Annex One**.

22. MBIE considers that further action to ensure better alignment and efficiency across EDBs could slow the price increases that relate to network (and non-network) infrastructure investments.

Enhanced incentives for efficiency could result in management consolidation

23. Factors specific to local communities often play a significant role in decisions around EDB structure and ownership. As such, current and enhanced incentives for EDB efficiency and innovation might be more likely to result in management consolidation.

24. Ownership (structural) amalgamation into a small number of EDBs could lead to greater efficiency gains but is also likely to meet the most opposition from industry and communities.

Regulation of EDBs can learn from recent water reforms

Centralised reform of water faced strong opposition

25. Unlike electricity distribution, the water sector faced clear efficiency and quality problems, making it easier to justify structural reform. The original 'Three Waters' model proposed consolidating water services into a few national entities to improve quality and efficiency through scale. Widespread public opposition to centralisation led to Local Water Done Well (LWDW), which retains local control while still aiming to improve outcomes.

26. While amalgamation of EDBs may offer efficiency gains, it is likely to face the same level of resistance. Collaborative models may be more acceptable and practical alternatives.

Water entities have been motivated to align in order to improve access to finance

[3] In April 2025, the ENA's Future Network Forum commissioned Baringa to review potential models for distribution system operation (DSO) in Aotearoa. The EA plans to release the next consultation on Future System Operation (FSO) in mid-2025.

27. The water sector faces many issues some EDBs have already addressed, including a large backlog in necessary spend, significant under-pricing, and constraints on borrowing. In the preliminary stage of LWDW, councils must submit water service delivery plans outlining infrastructure needs, investment gaps, and delivery models. Forming Council Controlled Organisations (CCOs) is improving access to finance – councils can access better borrowing terms via the Local Government Funding Agency.

28. Free and frank opinions

The water regime provides a broader and more flexible toolkit for proportionate and targeted regulation, aspects of which could be adopted for a more fit-for-purpose regulation of EDBs

29. The Local Government (Water Services) Bill proposes the Commerce Commission be given a range of tools starting with information disclosure and providing for revenue thresholds and financial ringfencing. Additional tools can then be used if needed subject to Ministerial approval. These tools include 'quality only' regulation, performance requirement regulation and price quality regulation.

Confidential advice to Government

Confidential advice to Government

Confidential advice to Government

Next steps

33. Further advice on EDB efficiency will be included in the cabinet paper being developed in response to Frontier's Review of Electricity Market Performance. This paper will go to the Cabinet Economic Policy Committee on 25 June.

34. Given the overlap with Part 4 of the Commerce Act, we are engaging with MBIE competition branch colleagues on this matter, and any next steps relating to Part 4 would need to be discussed with the Minister of Commerce and Consumer Affairs.

Annexes

Annex One: Relevant work currently underway across agencies

Annex Two: Background on EDBs and current regulation

Annex One: Relevant work currently underway across agencies

Workstream	Details
Improve pricing	
Workstreams to align connection and distribution pricing across EDBs	• Reform of pricing: connection pricing (EA) • Reform of pricing: network pricing (EA) • Reform of pricing: distributed generation pricing principles (EA)
Pricing that incentivises load shifting and DER uptake	• Updates to pricing rules to ensure networks and retailers incentivise consumers to shift their demand or inject electricity to the network through adequate payment or bill savings (EA/Energy Competition Task Force) • Phasing out low fixed charge (LFC) regulations to enable more innovative network tariffs (MBIE) • Enabling consumers to choose different retailers for their consumption and generation to drive competition in pricing (EA)
Standardise connections	
Workstreams to align connection processes across EDBs	• Improving the efficiency of network connections for large load and distributed generation (EA)
Technical and product standards	• Expanding the permitted voltage range (MBIE) • Updating product regulation and mandating the sale of smart EV chargers so networks can rely on smart functionality in devices (MBIE/EECA) • Improving the costs of solar adoption through clarifying building consent requirements and reduced fees, and updates to electrical safety standards (MBIE)
Encourage Innovation	
Support for innovation	• Government funding for industry trials (EECA, Ara Ake) and a dedicated Power Innovation Pathway process to provide industry support and potential code exemptions for innovative trials (EA) • New innovation allowances from 1 April 2025 (Commission) • Requiring networks to explain how they considered alternatives to traditional upgrades if they apply for large step changes in allowable revenue (Commission)
Better information	• Ensuring networks publicly disclose information on network constraints, and their approach to and spend on non-traditional solutions (Commission, EA) • Consumer information provision on the benefits and ways to ensure their smart devices are capable (EECA, MBIE) • Enabling better access to data by consumers and consent arrangements for third parties through a consumer data right (MBIE, EA)
Future operation of New Zealand's power system	• Reviewing future system operation. Plans to release the next consultation on issues and high-level options on Future System Operation (FSO) in mid-2025 (EA)
Review of Common Quality requirements in the Code	• Review and amendment of common quality requirements to enable new technologies and address the effects of bi-directional power flows

Annex Two: Background on EDBs and current regulation

Before the legislative reforms of the EDB sector in the 1990s, like the water sector now, there were more than 60 suppliers

Structural consolidation of the EDB sector mostly occurred prior to 2004, well before the regulatory provisions under the current Part 4 regime applied to EDBs. Changes were driven by the removal of statutory supply area boundaries, active mergers and acquisition activity from offshore investors, and the separation of network functions from retailing and generation.

The Part 4 regulatory toolkit inherently incentivises efficiency and innovation

All 29 EDBs are subject to information disclosure regulation, which incentivises improved efficiency and innovation by publicly shining a light on their performance. Sixteen EDBs are subject to price-quality regulation. Those 'non-exempt' EDBs are under default or customised price-quality paths that limit their revenue, providing incentives to reduce costs while still meeting quality standards.

The Commission's regulatory decisions build on the inherent incentives for efficiency and innovation

The following sets out some examples of the Commission's ongoing and recent initiatives that build on the regime's incentives for increased EDB efficiency and innovation:

- Periodic reviews of EDB asset management plans, scrutiny of non-exempt EDBs' capital and operating expenditure proposals, and enhanced delivery reporting (for EDBs on customised paths), encourage prudent and efficient investment supported by sound asset management policies and practices.
- The 'incremental rolling incentive scheme' rewards non-exempt EDBs for finding efficiencies and aligns the financial incentives for spend on traditional poles and wires with spend on 'non-network solutions' such as flexibility services.
- New information disclosure requirements relating to non-network solutions, innovation practices, network constraints and low voltage (LV) network visibility, as well as a new allowance for non-exempt EDBs' LV monitoring, should encourage greater use of flexibility services and more effective utilisation of the LV network.
- An expanded innovation allowance provides for non-exempt EDBs to test the viability of new technologies, processes etc, before rolling them out at scale, and requires EDBs to share their findings with other industry stakeholders.
- Disclosure requirements about EDB pricing, pricing methodologies and connection practices promote a greater understanding of the efficiency and alignment of pricing approaches and connection practices.
- rolling series of EDB site visits by staff, as well as broader engagement with industry stakeholders, provide an opportunity for constructive dialogue about specific aspects of EDB performance.

The Commission recently 'reset' the default price-quality paths (DPPs) for non-exempt EDBs for a 5-year regulatory period from April this year. The Commission has since initiated a review of the DPP reset process and will be exploring opportunities for additional efficiency and innovation incentives to potentially take effect as part of the next DPP. For instance, the Commission might explore setting DPPs so that it is more challenging for EDBs to transition to more modern demand management systems unless they work more closely together.

In support of such changes, the Commission could assess whether consumers likely face additional costs, or miss out on some opportunities, due to current industry arrangements such as 29 EDBs ranging from around 5,000 to 600,000 connections.