

Feedback form: New Zealand's draft National Infrastructure Plan

Your details

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About you

Please tell us which best describes you
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Sector or topic of interest

Please list or briefly describe the topics or sectors you are providing feedback on:

Chapters 1 to 4

Recommendations 1 to 10

Part 7.4.8



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Signature	Vivienne Wilson	
Date	5/08/2025	



Your feedback

- When providing your feedback, please let us know which chapter/recommendation/topic you are responding to.
- Alternatively, you may indicate that you are addressing challenges, gaps or opportunities not covered by the draft National Infrastructure Plan.
- Please explain, and if possible, provide examples or evidence.
- Please also include any proposed change or improvements that would address your feedback.
- 1. Thank you for the opportunity to make a submission on the Draft National Infrastructure Plan. Orion New Zealand Limited (Orion) also participated in the consultative process "Testing our Thinking" in December 2024.
- 2. In this submission we provide some comment on various matters in chapters 1 to 4 including the recommendations, and also make some comments on the assessment of the Electricity and Gas discussion at chapter 7.4.
- 3. Overall, we think the Draft National Infrastructure Plan is a good summation of the issues New Zealand is facing in relation to infrastructure and provides helpful recommendations when considering the way forward. However, we think some of the recommendations could be enhanced to ensure that we do get "bang for our buck" from our infrastructure spending.
- 4. In preparing this submission we have also drawn on the Energy Transition Framework. Orion New Zealand Limited is a signatory to the Framework. The Framework represents the energy sector joining together to create a shared approach to transforming and decarbonising Aotearoa New Zealand's energy system.¹

Submissions on recommendations

Recommendation 1

- 5. We agree that changes are needed to ensure that New Zealand develops an infrastructure workforce that has the right capacity and capability to deliver on future investment demands. In relation to the electricity sector, given the investment required to achieve our decarbonisation goals, and the fact that most of this investment is front-loaded in the next 10 to 15 years, our view is that the electricity sector workforce capacity and capability will need to scale up relatively soon. As noted on page 51 of the Draft Plan, the occupation of electrical engineering technician has one of the highest cohorts of workers aged 55 and older. This provides further impetus to scale this sector workforce.²
- 6. We suggest amending recommendation 1 so that it refers to timeframes for different sectors. Our suggested wording is as follows:

Workforce development: Workforce development planning and policy is informed by infrastructure investment (which may differ in time and scope for different sectors), and asset management plans and the New Zealand Infrastructure Commission's independent view of long-term needs.

¹ See <u>2025-04 Energy Transition Framework.pdf</u>

² Ensuring sector workforce development, so that there is improved diversity and capacity to deliver on the energy system transition is a priority theme of the Energy Transition Framework.



Recommendation 4

- 7. The Draft Plan notes that oversight and accountability mechanisms must be fit for purpose across all infrastructure sectors. We agree with this proposition, and recommendation 4, but we also suggest an additional recommendation.
- 8. The electricity industry is highly regulated, via multiple regulatory agencies.
- 9. We note that there can be stress points where the different regulatory agencies have an overlap of regulatory responsibilities. For example, in relation to electricity distribution businesses, the Commerce Commission has statutory functions under the Commerce Act 1986 and is responsible for information disclosure regulation and default/customised price quality regulation. The Electricity Authority, which is established under the Electricity Industry Act 2010, has its main objective to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers. There can be confusion where these regulatory regimes intersect (often in the Electricity Industry Participation Code 2010), and it can be unclear whether one or both regulatory agencies have effectively consulted with each other and discharged their stewardship responsibilities for the regulatory systems they work within.
- 10. Given the comments in the Draft Plan that it's time to get smarter about how we do infrastructure, we suggest that there should be an additional recommendation relating to regulatory design, as follows:

Recommendation 4A

Regulatory design: Infrastructure regulation is appropriately configured to ensure that new policy works in conjunction with existing policies, and regulators do not have conflicting and overlapping responsibilities.

Recommendation 6

- 11. Recommendation 6 provides that funding tools are matched to asset type (user-pays for network infrastructure, ...) to keep the overall capital envelope affordable. It also states that user pricing principles are applied across all network sectors, so user charges fully fund investment, quide efficient use of networks and distribute the benefits of network provision.
- 12. Orion supports a principle-based approach, and generally we agree that user pricing principles should be applied across the energy sector so that user charges fully fund investment, guide efficient use of networks and distribute the benefits of network provision. However, it is a question of balance and what is appropriate for each sector. For example, fully applying a user-pays approach for network infrastructure, potentially requires increasingly locational and granular pricing which may not be acceptable or bearable to our consumer groups or our consumers as a whole.³

³ We note that the Electricity Authority states that "before engaging in locationally differentiated pricing, the distributor should have regard to the consumer impact of this change and balance this against the efficiency gains of this approach. Avoiding bill shock using an appropriate transition period if the difference is likely to be significant would also be appropriate. If distributors decide not to engage in locational differentiation, they should be transparent about the degree of any cross-subsidisation that is occurring between different locales. Consideration of the appropriateness of locational pricing should be shown in their pricing roadmaps." See Distribution Pricing: Practice Note Second Edition v 2.2, 2022 <u>Distribution pricing practice note.pdf</u>
Also see the Energy Transition Framework and the objective of affordability which is that "the scale of investment required over the coming decades is significant, which could result in affordability challenges for electricity consumers. Framework participants and qovernment agencies are committed to ensuring that competitive markets and network regulation results in efficient prices, and that



- 13. In terms of our pricing strategy, following the Electricity Authority's Distribution Pricing Principles, our goal, every pricing year is to set prices that signal the efficient use of our electricity distribution network for the long-term benefit of consumers. Over the last few years, we have been looking at ways our pricing (within the cost reflective pricing approach) can support decarbonisation of our economy, as well as addressing inequity, by recognising and mitigating the impact on vulnerable customers.⁴
- 14. In this respect, we recognise the vulnerable consumers within our community, consumers that do not have the resources to accommodate additional costs particularly in adoption of new technology, nor to adapt their usage to mitigate the additional cost. We observe that more than 20% of our residential consumers (~40,000) live in areas with a high deprivation index.
- 15. Certainly our modelling at the moment shows that consumption of households in low deprivation areas is about 1.2 times those who are in high deprivation areas. Similarly, households in mid-deprived areas consume around 1.1 times those who are in high deprivation areas and still less (0.95 times) than all of the households in this population. Households in mid and high deprivation areas tend to have almost same consumption except for peak time.
- 16. In this respect we agree with the statement on page 45 of the Draft Plan that "in general, higher income households use more electricity ... so in dollar terms, they will pay more towards future investment needs. However, as a share of household income, lower income households will pay modestly more ...". Nevertheless, looking forward, we note that higher income households, will be more likely to adopt technologies that decrease their energy bills, such as solar panels, energy storage systems and EV transport. Lower income households are more likely to live in older housing stock that tends to be less efficient and can lead to higher costs.
- 17. Our current pricing strategy has an implementation roadmap. Our roadmap seeks to:
 - develop prices transparently and consider transaction costs, consumer impacts, and uptake incentives
 - provide predictability for consumers to make investments with certainty and for retailers and aggregators to design market offers
 - use the right tool for each consumer segment's required behaviours and controls, including simplicity where possible
 - acknowledge the market value stacking opportunities and materiality when designing prices
 for cost recovery and behavioural response by understanding the interaction of our prices
 with the rest of the supply chain costs, benefits and market signals
 - treat consumers equitably and ethically.
- 18. Given our comments above, we suggest amending recommendation 6 so that it provides as follows:

Funding pathways: Funding tools are matched to asset type (user-pays for network infrastructure, commercial self-funding for economic development assets, and tax funding for social infrastructure) to keep the overall capital envelope affordable. User pricing principles

both sector participants and government agencies maintain a focus on affordability of energy for households (prices in relation to household incomes) and businesses." The Framework also includes a priority theme of ensuring that electricity is affordable. See 2025-04 Energy Transition Framework.pdf

⁴ See our Pricing Methodology https://www.oriongroup.co.nz/assets/Our-story/Pricing/Orion-pricing-methodology-2025.pdf



- are applied across all network sectors so user charges fully fund investment,
- guide efficient use of networks, and
- distribute the benefits of network provision, and
- recognise the particular characteristics of network sectors and maintain a focus on affordability for users.

Recommendations 7 and 8

- 19. We agree that infrastructure providers must be able to coordinate to deliver and operate cost effectively. We support recommendations 7 and 8 relating to spatial planning and maximising use. However, we suggest that these recommendations could be enhanced by referring to collaboration and coordination in a new recommendation. (We note that there may be some cross over with recommendation 9 in this regard please see our comments below.)
- 20. From our point of view, an integrated planning system must provide for electricity distribution networks. Population growth, and subsequently an increased rate of infill housing and subdivision could significantly affect our network as instead of a low voltage feeder supplying 20 standalone homes, a number could be replaced by multiple apartment units, increasing electrical load and triggering network reinforcement.
- 21. The cost to upgrade infrastructure to service infill housing in older established areas is typically greater on a per-house basis than the cost to connect a new standalone house in a new subdivision. Infill and intensification require more land to be allocated for transformer kiosks and other infrastructure as a direct result of the greater demand for services. In addition, an increase in residential density requires a greater focus on line clearances for both high and lower voltage lines where higher density land use inevitably results in an increase in potential for conflict with lines.
- 22. Furthermore, we note that electricity distribution businesses, together with local government, will be key entities in delivering decarbonisation. A recent report from the United Kingdom highlights that taking a more locally led, place-based approach may be able to deliver a net zero transition better tailored to local needs, bringing local economic and social benefits.⁵
- 23. Canterbury is taking the first steps in developing a strategic energy plan for the region. The Canterbury Mayoral Forum has released the Canterbury Energy Inventory which offers a point-in-time snapshot of Canterbury's energy system, examining electricity generation, transmission, and consumption across sectors. It identifies regional opportunities and challenges, and places Canterbury within the broader national and global shift toward renewable energy. Developed in collaboration with the energy sector, local industries, major energy users, councils, and with input from Ngāi Tahu Holdings, the Inventory marks the first phase of a two-stage initiative. It lays the foundation for a strategic energy action plan to support sustainable development and decarbonisation across the region.⁶
- 24. With all of this in mind, we are proposing an additional recommendation which we think will enable investment to deliver the right services in the right places at the right times:

⁵ See the Briefing of the Parliamentary Office of Science and Technology on "Local area energy planning: achieving net zero locally" at <u>Local Area Energy Planning</u>: achieving net zero locally

⁶ See <u>Canterbury-Energy-Inventory-2025.pdf</u>



Recommendation 8A

Collaboration and coordination: Ensure collaboration, coordination and integration between infrastructure providers so that there is alignment to achieve the right services in the right places at the right times.

Recommendation 9

- 25. Section 4.5 contains two recommendations relating to ensuring a predictable policy environment, noting that when policies and regulations are uncertain or unstable, it is harder to invest. We agree with these statements.
- 26. We also note the specific discussion about the Resource Management Act 1991 reforms and the need for a stable approach to reform, supported by broad public and political consensus. We agree that reforming resource management legislation is costly and disruptive. The next set of reforms providing for the Planning Act and the Natural Environment Act must be enduring so that infrastructure providers can proceed with certainty. New legislative proposals are costly to review in terms of staff time and expert advice, and it would be desirable to have a settled policy environment in this regard.
- 27. We agree that critical success factors for effective infrastructure provision in the new system will need to include investment in data about the natural environment and hazards to support spatial planning.
- 28. In our view, there are gaps in industry-specific data and standards related to climate change risks. This results in an inability to manage and apply this information in context. Continued funding and improvement of public data sources, such as the datasets NIWA have recently released, are critical. The datasets that NIWA publishes are constantly improving and are invaluable for informed decision-making. Simply put, we support central, open access, standard data funded by the Government to enable everybody to plan and make decisions from the same starting points.
- 29. In light of our comments, we suggest the following changes to recommendation 9, and a new recommendation relating to climate change adaptation data.

An enabling environment: The resource management system is settled and enduring and enables infrastructure with national and regional benefits, while managing interactions with surrounding land uses and negative impacts on the natural environment.

Recommendation 9A

Access to data: There is readily available, open access to climate change adaptation data to support spatial and resilience planning.

Recommendation 10

- 30. This recommendation relates to policy stability, and has a specific reference to energy investors.
- 31. We need cross-party consensus and policy certainty between political cycles to maintain momentum and enable New Zealand to meet its climate targets. Significant fluctuations in policies between Governments do not provide investment certainty and it creates risks of sunk costs. We acknowledge that significant policy work is currently underway and we are awaiting the release of the Frontier Report and the Government decisions on that report.



32. Stable, supportive policy and regulation is one of the guiding principles of the Energy Transition Framework. As the perspective paper notes⁷

"Policy and regulation play a vital role in enabling a competitive system that supports economic growth and contributes to our low emissions goals. Clear, consistent, and durable policy settings provide the predictability needed for long-term investment and innovation.

The energy transition must be guided by a focused policy framework that avoids conflicting objectives, remains fuel- and technology-agnostic and uses robust market signals, such as carbon pricing, to drive efficient outcomes.

Government's role is to set direction, enable access to new technologies, ensure regulatory processes are transparent and the market operates effectively, proportionate, and aligned with broader national goals. Policy stability across political cycles is essential to build investor confidence and unlock both domestic and international capital."

- 33. We would like to see one change with respect to the recommendation and that is to change the reference from energy investors to energy stakeholders. We think "energy stakeholders" better encompasses all individuals, groups, and organisations involved in the energy sector, including investors/developers, generators, distributors, consumers, retailers, flexibility providers, and other interested parties.
- 34. This also reflects one of the objectives of the Energy Transition Framework which is collective action. The objective states that "Moving towards a more renewable energy system will involve all Kiwi families, businesses and communities. The transition to a low carbon energy system requires collective and urgent action on emissions reduction. We want to make sure that everyone has a say to ensure our choices benefit the future of New Zealand as a whole."⁸
- 35. This means that recommendation 10 will read as follows:

Policy stability: <u>Energy investors stakeholders</u> have predictable policy and consenting settings that support affordability, security of supply and the decarbonisation of the economy.

Chapter 7 The sectoral view

Part 7.4 Electricity and gas

36. Chapter 7.4 of the Draft Plan contains a summary of the sector as it pertains to infrastructure investment. We think part 7.4.8 would benefit from a further bullet point relating to flexibility under the heading Key issues and opportunities". Currently the bullet point related to coordination states that "Electricity is expected to play a major role in meeting our 2050 legislated emissions goals. Coordination between increased investment in generation, transmission distribution and distributed energy resources (for example, home solar and batteries) will be required." However, there is nothing about flexibility being a key opportunity for the sector. As noted in the FlexForum Insight Maximising the value of flexibility relies on making that value easily and routinely available to households, businesses and communities,

⁷ See https://www.poweringchange.nz/assets/250603-An-energy-sector-perspective-on-the-Governments-proposed-Energy-Strategy.pdf

⁸ See <u>2025-04_Energy_Transition_Framework.pdf</u>



"The value or prize of deploying flexibility is worth chasing. An estimate from Boston Consulting Group (BCG) reckons about 2 gigawatts (GW) of flexibility is needed in Aotearoa New Zealand by 2030 and 5.8 GW by 2050, underpinning \$10 billion plus savings (net present value) available from a smarter and more flexible electricity system that minimises the costs of electrification."9

37. As further stated in the Insight,

"Importantly the value and benefits of flexibility are shared between the resource owners, the electricity supply chain and across the community and economy.

- People with flexible resources benefit because they spend less to keep their lights on, homes warm, vehicles running and to produce things ranging from accounting services to cherries.
- The electricity supply chain benefits because it has an extra tool that is sometimes cheaper than the traditional options used to operate the power system getting power to the people safely, reliably and affordably, e.g., building more network or building a new power station."
- 38. We suggest adding the following bullet point under part 7.4.8 as follows:
 - Flexibility: There is an important opportunity in leveraging the flexibility of things like electric vehicles (EV), EV charge points, solar, battery storage, heating and cooling equipment and energy management systems by integrating these resources into the electricity system and market. Flexibility potentially helps defer or avoid infrastructure upgrades by balancing supply and demand locally.

Conclusion

39. Thank you for giving us the opportunity to make this submission. Please let us know if you have any questions.

Vivienne Wilson

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⁹ See <u>240531-there-is-a-hole-in-my-value-stack-insights-1272024.pdf</u>