Title: **Testing our thinking - Developing an enduring National Infrastructure Plan**

Organisation: **Mercury NZ Limited**

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Summary of information submitted

Page 1 - Introduction

NIPC24-0002738

We're seeking feedback

Our Discussion Document, Testing our thinking: Developing an enduring National Infrastructure Plan, sets out our thinking as we begin work to develop a National Infrastructure Plan. The Discussion Document sets out what we expect the Plan will cover and the problem it's trying to solve, as well as the approach we're proposing to take to develop it.

We're sharing this now to test our thinking and give you the chance to share your thoughts. Let us know if we've got it right or if there are issues you think we've missed.

We'll use your feedback as we develop the Plan. We'll be sharing our thinking by presenting at events around the country, hosting workshops and webinars, and sharing updates through our website, newsletter, and social media. We'll also seek feedback on a draft Plan before publishing the final Plan in December 2025.

Submission overview

You'll find 17 main questions that cover the topics found in the Discussion Document. You can answer as many questions as you like and can provide links to material within your responses. On the final page (6. Next steps) you can provide any other comments or suggestions that you would like us to consider as we develop the National Infrastructure Plan. Submissions are welcomed from both individuals and organisations.

A few things to note:

- You can save progress using the button at the top right of this form.
- A red asterisk (*) denotes a mandatory field that must be completed before the form can be submitted.

- We expect organisations to provide a single submission reflecting the views of their organisation. Collaboration within your organisation and internal review of your submission (before final submission), is supported through our Information Supply Platform. You'll need to be registered with an Infrastructure Hub account, and be affiliated with your organisation to utilise these advanced features. Many organisations will already have a '*Principal respondent*' who can manage submissions and assign users at your organisation with access to the draft responses.
- Submissions will be published on our website after the closing date. The names and details of organisations that submit will be published, but all personal and any commercial sensitive information will be removed.

Further assistance

Each submission that is started is provided a unique reference identifier. These identifiers are shown in the top right of each application page. Use this identifier when seeking further assistance or communicating with us about this submission by using one of the following methods.

- Use info@tewaihanga.govt.nz to contact us with any questions relating to our Discussion Document and consultation.
- Use inform@tewaihanga.govt.nz for help managing roles and permissions of user accounts affiliated with your organisation in the Information Supply Platform (ISP).

Submission method

Our preferred method is to receive responses through this form. However, we anticipate some submitters will wish to upload a pdf document, especially where their submission is complex or long. If this submission method is necessary, please use this word template and save as a pdf. We ask that you retain the structure and headings provided in the template as this will support our processing of responses.

Select a submission method

To continue, select the method you will be using.

Online form

Page 2 - Context for the Plan

NIPC24-0002738

Testing our thinking

The Discussion Document includes five sections. Below we're seeking feedback on why we need a National Infrastructure Plan. We also want to test our thinking on our long-term needs and make sure we have a clear view of what investment is already planned.

Section one: Why we need a National Infrastructure Plan

A National Infrastructure Plan can provide information that can help improve certainty, while retaining enough flexibility to cancel or amend projects as circumstances or priorities change.

1. What are the most critical infrastructure challenges that the National Infrastructure Plan needs to address over the next 30 years?

Building new renewable electricity generation faces several significant challenges, including:

- *A. Grid capacity and integration: Renewable energy sources like wind and solar are intermittent and can cause grid instability.*
- *B. Planning and regulatory hurdles: The process of obtaining approvals and meeting regulatory requirements can be lengthy and complex.*
- *C. Public acceptance and localised objections: Local opposition to renewable energy projects, often due to aesthetic or localised environmental concerns, can be a barrier.*
- *D. Technological and infrastructure challenges: Developing and deploying new technologies, such as advanced energy storage and smart grids.*

To minimize these barriers, governments can:

- *· Grid modernization: Upgrading the grid to be more flexible and resilient and integrating energy storage solutions can help accommodate the variability of renewable energy sources.*
- *· Simplify regulatory processes: Streamlining permitting and regulatory processes can reduce delays and costs associated with renewable energy projects.*
- *· Enhance public engagement: Involving local communities in the long term planning of climate mitigation and the importance of renewable electricity generation to electrify our economy can increase public support for renewable energy projects.*
- *· Support innovation: Funding research and development in new technologies and infrastructure improvements can help overcome technical challenges. Funding and research of our natural environments is also necessary to better understand the benefits and impacts of renewable electricity generation on the ecosystems in which they are located. The data needs to be publicly available.*
- *By addressing these challenges, governments can facilitate the growth of renewable energy and help achieve sustainability goals.*

2. How can te ao Māori perspectives and principles be used to strengthen the National Infrastructure Plan's approach to long-term infrastructure planning?

No response provided

Section two: Our long-term needs

The National Infrastructure Plan will reflect on what New Zealanders value and expect from infrastructure. To do this, the Plan needs to consider New Zealanders' long-term aspirations and how these could be impacted over the next 30 years.

3. What are the main sources of uncertainty in infrastructure planning, and how could they be addressed when considering new capital investments?

Mercury's primary barriers and sources of uncertainty when planning for future renewable electricity generation infrastructure include:

A. Regulatory and Policy Uncertainty:

Changing Regulations: Frequent changes in energy policies and resource management regulations can create uncertainty, making it challenging to plan long-term investments.

- *Mitigation: Long-term policy frameworks that establish stable, long-term energy and resource management policies that define clear objectives and reduce the frequency of regulatory changes.*

Approval processes: Lengthy and complex consenting and approval processes can delay projects and increase costs.

- *Mitigation: Streamlined approval processes that simplifying and accelerate the consenting and approval processes to reduce delays and costs. Beware over-simplification as this can lead to overly complex interconnected/ interdependent 'simple' process that collectively are not simple (nor cost effective) to navigate or participate in.*

B. Technological Advancements:

Rapid innovation: The fast pace of technological advancements can make it difficult to choose the best technology for long-term projects.

- *Mitigation: Government and private investment in R&D to stay ahead of technological advancements and integrate the latest innovations.*

Integration challenges: Integrating new technologies with existing infrastructure can pose technical and operational challenges.

- *Mitigation: Implementing pilot projects to test new technologies and their integration with existing infrastructure and allowing for adaptive management or test and learn management approaches.*

C. Financial Constraints:

High upfront costs: Renewable energy projects often require significant upfront investment. There are several factors that need to align prior to the final investment decision, not least sufficient current and forecast demand, supply chain readiness, and regulatory approvals.

- *Mitigation: Stable, long-term policy settings and targets that set clear priorities for renewable electricity generation will help to attract investment.*

D. Environmental and Social Considerations:

Iwi and community opposition: Local opposition to infrastructure projects can delay or halt development.

- *Mitigation: Generators to engage with iwi and communities at place early in the planning process to address concerns and gain support. National priorities and policies that clearly communicate the importance of renewable electricity generation for mitigating climate change, keeping the lights on and keeping electricity affordable is also necessary.*

Environmental impact: Ensuring that projects do not negatively impact significant environmental values and comply with sustainability standards.

- *Mitigation: Investment in publicly available national environmental data to inform policy development, consent decision-making and developers of renewable electricity generation infrastructure will enable better environmental outcomes.*

E. Grid Capacity and Reliability:

Grid infrastructure: The capacity and reliability of the existing grid infrastructure can limit the integration of new renewable energy sources.

- *Mitigation: Invest in modernising grid infrastructure to enhance capacity and reliability, facilitating the integration of renewable energy sources.*

By addressing these barriers through a combination of regulatory stability, technological innovation, and community engagement, Mercury can better navigate the uncertainties and successfully plan for future renewable electricity generation infrastructure.

Section three: What investment is already planned

We already gather and share data on current or planned infrastructure projects through the National Infrastructure Pipeline. This data, alongside other information gathered by the Treasury or published by infrastructure providers, helps to paint a picture of investment intentions.

4. How can the National Infrastructure Pipeline be used to better support infrastructure planning and delivery across New Zealand?

No response provided

Section four: Changing the approach

We have used our research and publicly available information on infrastructure investment challenges to identify key areas for change. The next question and the following three pages seek further detail on the three themes in section four of our paper. Within each of the three themes, we explore some topics in more detail, outlining the evidence, discussing the current 'state of play', and asking questions about where more work is needed.

5. Are we focusing on the right problems, and are there others we should consider?

No response provided

Page 3 - Capability to plan and build

Changing the approach — Capability to plan and build

Section four looks at changes that we can make to our infrastructure system to get us better results. We've broken these changes down into three themes: capability to plan and build, taking care of what we have, and getting the settings right.

For the first theme, we look at three key areas:

- Investment management: Stability, consistency, and future focus
- Workforce and project leadership: Building capability is essential
- Project costs: Escalation means less infrastructure services.

Investment management: Stability, consistency, and future focus

We're interested in your views on how we can address the challenges with government infrastructure planning and decision-making.

6. What changes would enable better infrastructure investment decisions by central and local government?

No response provided

7. How should we think about balancing competing investment needs when there is not enough money to build everything?

No response provided

Workforce and project leadership: Building capability is essential

We're interested in your views on how we can build capability in the infrastructure workforce.

8. How can we improve leadership in public infrastructure projects to make sure they're well planned and delivered? What's stopping us from doing this?

No response provided

9. How can we build a more capable and diverse infrastructure workforce that draws on all of New Zealand's talent?

No response provided

Project costs: Escalation means less infrastructure services

We're interested in your views on further opportunities to improve our ability to deliver good infrastructure at an affordable cost.

10. What approaches could be used to get better value from our infrastructure dollar? What's stopping us from doing this?

No response provided

Changing the approach — Taking care of what we've got

The second theme in section four looks at how we can get better at taking care of what we have. It looks at three areas:

- Asset management: Managing what we already have is the biggest task
- Resilience: Preparing for greater disruption
- Decarbonisation: A different kind of challenge.

Asset management: Managing what we already have is the biggest task

Asset management means looking after our infrastructure. We are interested in your views on how we can improve planning for this.

11. What strategies would encourage a better long-term view of asset management and how could asset management planning be improved? What's stopping us from doing this?

No response provided

Resilience: Preparing for greater disruption

We are interested in your views on how we can better understand the risks that natural hazards pose for our infrastructure.

12. How can we improve the way we understand and manage risks to infrastructure? What's stopping us from doing this?

No response provided

Decarbonisation: A different kind of challenge

We're interested in your views on how we can improve understanding of the decarbonisation challenge facing infrastructure.

13. How can we lower carbon emissions from providing and using infrastructure? What's stopping us from doing this?

To lower carbon emissions from infrastructure, Mercury considers these complementary policies will be able to deliver reduced emissions within the timeframes set in the Emissions Reduction Plans (#1 and #2):

Area	***Policy ask***
Green finance	*Mobilise private sector investment to support industrial electrification and efficiency measures to better capitalise on New Zealand's abundant renewable electricity resources and strengthen climate resilience. While the Government is already working in this area, advancing green financing initiatives with urgency is crucial for implementing the Electrify NZ policy, a key component of ERP2.*
Resource management reform	*Reform the resource management system to better support electrification. To achieve the policy stability necessary to underpin long term investment decisions, bipartisan support of any new arrangements is key.*

Role of the smart system	*Prioritise a coordinated work programme to remove the regulatory barriers from shifting to a smart system. This smart system is essential for accelerating system development, enabling demand-side management, innovation, and addressing current security of supply challenges.*
Secure, reliable and affordable electricity supply	*Address remaining barriers to electrification occurring at the scale and pace required by taking a 'whole of system' approach to navigating the transition.* *Reestablish confidence in the gas market and support investment in firming generation to ensure reliability and affordability with increasing renewables.*

Page 5 - Getting the settings right

NIPC24-0002738

Changing the approach — Getting the settings right

The third theme in section four looks at how we can get our settings right to get better results from our infrastructure system. It looks at three areas:

- Institutions: Setting the rules of the game
- Network pricing: How we price infrastructure services impacts what we think we need
- Regulation: Charting a more enabling path.

Institutions: Setting the rules of the game

We're interested in your views on what changes to our infrastructure institutions would make the biggest difference in giving us the infrastructure we need at an affordable cost.

14. Are any changes needed to our infrastructure institutions and systems and if so, what would make the biggest difference?

No response provided

Network pricing: How we price infrastructure services impacts what we think we need

We're interested in your views on further opportunities to improve network infrastructure pricing.

15. How can best practice network pricing be used to provide better infrastructure outcomes?

Mercury supports the use of best practice network pricing to achieve better infrastructure outcomes through the following principles:

- · *Cost Reflective Pricing: Implementing cost-reflective pricing to ensure that users pay for the true cost of infrastructure use, promoting efficient usage and investment.*
- · *Dynamic Pricing Models: Utilising dynamic pricing models that reflect real-time supply and demand conditions, encouraging users to shift consumption to off-peak times and reduce strain on the network.*
- · *Incentives for Renewable Integration: Offering pricing incentives for the integration of renewable energy sources and distributed generation, supporting the transition to a low-carbon energy system.*
- · *Transparency and Fairness: Ensuring pricing structures are transparent and fair, providing clear signals to consumers and investors about the costs and benefits of different infrastructure options.*

Regulation: Charting a more enabling path

We're interested in your views on further opportunities to improve regulation affecting infrastructure delivery.

16. What regulatory settings need to change to enable better infrastructure outcomes?

From Mercury's perspective, several regulatory changes could significantly enhance infrastructure outcomes:

A. Streamlined Consenting Processes:

(i) Simplification and acceleration of consenting processes under the Resource Management Act (RMA) or replacement legislation, as current processes are often slow and complex. Streamlining these processes to reduce delays and costs would facilitate faster deployment of critical infrastructure projects.

(ii) Establishing clear standards and guidelines for infrastructure projects can reduce uncertainty and improve compliance efficiency.

B. Support for Renewable Energy Projects:

(iii) Remove regulatory barriers for renewable energy projects, such as solar and wind, can accelerate the transition to a low-carbon economy.

(iv) Ensuring fair and efficient access to the national grid for renewable energy providers is crucial. Regulatory frameworks should support the integration of distributed energy resources.

C. Enhanced Coordination and Planning:

(v) Developing integrated planning frameworks that align national, regional, and local infrastructure plans can improve coordination and optimise resource allocation.

(vi) Encouraging regulatory environments that support public-private partnerships can leverage private sector expertise and funding for public infrastructure projects.

D. Decarbonisation and Sustainability:

(vii) Strengthening carbon pricing mechanisms to reflect the true cost of carbon emissions can drive investment in low-emission infrastructure.

(viii) Updating building codes and standards to promote energy efficiency and sustainability in infrastructure projects.

E. Resilience and Adaptation:

(ix) Incorporating risk-based planning and resilience measures into regulatory frameworks can ensure infrastructure is designed to withstand natural disasters and climate change impacts.

(x) Providing dedicated funding for hazards and climate data, and modelling to inform design of infrastructure projects to enhance resilience and adaptation to climate change.

Page 6 - What happens next?

NIPC24-0002738

Additional information to support our development of the Plan

Section five in the Discussion Document is on the next steps. In this section, we're asking you for any additional comments, suggestions, or supporting documentation that we should consider in our development of the National Infrastructure Plan.

17. Do you have any additional comments or suggestions that you would like us to consider as we develop the National Infrastructure Plan?

Click 'Add another' to add multiple suggestions or comments.

Item 1

No response provided

18. Attach any documents that support your submission

Click 'Add another' to add multiple attachments in PDF format.

Document 1

No attachment

Thank you for your response

Thank you for providing feedback on our Discussion Document. We'll use your comments as we continue to develop the Plan. This will not be the only opportunity for you to provide feedback, but it is an important way to test our emerging thinking on the development of an enduring National Infrastructure Plan.

If you have prepared a submission on behalf of an organisation, you'll need to be an authorised *respondent* to make the final submission. If you entered a new organisation during sign-up, or your organisation does not already have a *Principal respondent* assigned, you will have been asked to nominate yourself or someone else for this role as you started this submission. Our team will have worked to verify these accounts allowing *Principal respondents* to manage access and assignment of requests for information to people within your organisation.

If you require any assistance please reach out to our team at inform@tewaihanga.govt.nz.