

10 December 2024

Infrastructure Commission

via e-mail:

Submission on Developing an enduring National Infrastructure Plan

Introduction

1. Energy Resources Aotearoa is New Zealand's peak energy sector advocacy organisation. We represent participants from across the energy system, providing a strategic sector perspective on energy issues and their adjacent portfolios. We enable constructive collaboration to bring coherence across the energy sector through and beyond New Zealand's journey to net zero carbon emissions by 2050.
2. This document constitutes our submission on the Infrastructure Commission's (the 'Commission') discussion document "Testing our thinking – Developing an enduring National Infrastructure Plan".

Key messages

3. We welcome the opportunity to engage with the Commission on this important work. Energy is the lifeblood of the economy. It is essential that we can safely, reliably, and affordably meet our energy needs for the prosperity and well-being of all New Zealanders, that is resilient to climate-related events and other shocks.
4. New Zealand has recently struggled in its ability to provide businesses and households with reliable, affordable energy and our industrial base has been seriously undermined by high energy prices. Deindustrialisation leads to an erosion of the skill base, which in turn lowers productivity and increases costs as the necessary skills are sourced from overseas or rebuilt.
5. The effect of decisions made today will have consequences felt far into the future. Given the difficulty of anticipating these effects, we recommend the Commission adopt a view of "build and maintain" to preserve the ability to adapt to changing circumstances. Such optionality has substantial value.
6. Critical to the success of the National Infrastructure Plan is bipartisan support to ensure it will endure across political cycles. The differing political views on energy policy settings. This is a significant impediment to the long-term investment our

energy infrastructure requires, and the National Infrastructure Plan is an opportunity to secure cross-party alignment on this and other essential aspects.¹ The recent cross-party agreement on the use of Public-Private Partnerships is a welcome development that we believe could be extended to other policy areas.

Submission

7. Energy security and affordability underpins a flourishing economy. Every action we take requires the transformation of energy from one of its many forms in some measure. In particular, our use of fossil fuels has been fundamental to economic growth and technological advancement.² For a society to be well functioning and efficient we need to be aware of how energy flows through our economy.³
8. Our submission focuses on the essential role our energy distribution systems play in moving towards a lower emissions future. This includes the role that developing our indigenous natural resources will continue to play in ensuring we have a vibrant, prosperous economy. We also comment on how the deindustrialisation of our provinces will ultimately lead to the erosion of our skills base, higher costs and skills shortages.

Conflating energy policy with climate policy has damaged our economy and eroded our skills base

9. Critical to understanding many of the issues we are facing in our energy system is the understanding that climate policy cannot displace energy policy. Certainly, there are overlaps in the choices that we make in how to meet our energy needs, but conflating policy objectives ultimately leads to unsatisfactory policy outcomes.⁴ Instead, we prefer to see climate and energy policies as complementing each other.
10. Much of the previous government's energy policy effort appeared to focus on measures to encourage gross emissions reduction, rather than focusing on net reductions and the New Zealand Emissions Trading Scheme (the 'NZETS'). This approach unfairly and disproportionately pressured energy intensive sectors such as upstream oil and gas, and large industrials, as well as the agricultural sectors to lower emissions or even to shutter production. We cover much of this

1 We draw your attention to the differences across the House on the Lake Onslow pumped hydro scheme, future access to petroleum exploration acreage, and the previous Government's goal of 100% renewable electricity generation by 2030 as examples of significant policy points of difference.

2 It might be a useful reminder that electricity is *not* a fuel, but the result of the transformation of fuels.

3 The flows of energy through our lives are varied. Flows may be obvious, such as natural gas moving through pipelines, physically moving ourselves around by car, or electricity through overhead wires - or these flows may be embedded energy in our mobile phones or washing machines.

4 The 'Tinbergen Rule' is relevant here: originally applied to monetary policy, it states that the number of achievable policy goals/targets cannot exceed the number of policy instruments.

in our submission the Climate Change Commission's draft advice on the second Emissions Reduction Plan.⁵

11. An unrelenting focus on gross emissions reductions, to the exclusion of other policy objectives and options, also meant we missed the opportunity to advance our thinking on climate change *adaptation*. The damaging effects of Cyclone Gabrielle in February 2023 brought this lack of planning for extreme weather events sharply into focus. We are pleased to see adaptation included in the Commission's thinking in regard to our current and future infrastructure needs.

Deindustrialisation of our provincial manufacturing hubs...

12. New Zealand's provincial centres have experienced a degree of deindustrialisation as firms shutter their production, often citing unsustainable increases in input costs, particularly higher energy prices.⁶ While we appreciate that there are inevitably a range of factors at play in industrial closures, this winter saw Winstone Pulp and Paper shut two central North Island mills and Oji Fibre Solutions close their Penrose mill. New Zealand's largest natural gas user, Methanex has also indefinitely closed one of its plants due to an inability to secure gas volumes at an affordable price.
13. While the loss of jobs and income is devastating for those workers directly affected, these closures also have secondary, negative impacts that ripple through local businesses and supporting industries. This has the effect of eroding the critical mass of businesses and services needed to support industry in the region leading to further job losses and migration from the regions.

... leads to erosion of our skills base and increases costs

14. A non-trivial example of this from the upstream sector is the recent sale of the only dedicated Dive Support Vessel (DSV) by its New Zealand based owners to an Australian company. The loss of this vessel means the visual inspection of subsea pipelines and cables by divers will require repurposing non-specialist vessels or mobilising a vessel from overseas – at significantly more cost.
15. Our September 2024 submission on the proposed vocational education and training reforms provides additional context on the need to protect and grow our skills base.⁷ We are pleased to see the Commission giving this serious consideration while formulating a National Infrastructure Plan.

5 Our submission is available here: <https://www.energyresources.org.nz/dmsdocument/288>

6 Reporting in the New Zealand Herald (paywalled) discusses the effects of high electricity markets and the decisions by some firms, such as Oji Fibre Solutions to close production after recording substantial losses over a number of years, see: <https://www.nzherald.co.nz/nz/politics/what-went-wrong-in-the-new-zealand-electricity-market-and-why-it-will-get-worse-before-it-gets-better>

7 Available here: <https://www.energyresources.org.nz/dmsdocument/292>

Our existing energy distribution infrastructure needs to be protected

16. The discussion document asks the question of whether to 'build or maintain' existing infrastructure. This is a fair question, that importantly recognises decisions made in the past have consequences far into the future. We see this most acutely with transport infrastructure decisions in our major cities, for example in the 1940's where decisions to not develop on road and rail links are still being felt today.⁸
17. Much of our existing energy infrastructure has been built over an extended period, often with support from government – as was the case for the North Island's gas transmission system. In our view, it would be difficult to develop much of this infrastructure in today's policy environment. At least not without huge costs and significant delays.
18. Our natural gas transmission system, low pressure domestic gas reticulation, and even our hydroelectric dams would likely be non-starters if proposed today.
19. With the closure of the Marsden Point refinery, we are now wholly reliant on imports of finished products to meet our hydrocarbon fuels and bitumen needs. Despite the closure, Marsden Point remains a critical site in the receiving and distribution of fuels. The existing tanks and fuels pipeline to Auckland are essential for the safe, efficient movement of fuels south to New Zealand's largest city. These import facilities are located all around the country and serve as fuels distribution points for rural and urban businesses.
20. We make these points to highlight the need to preserve flexibility. Manufacturing a point-of-no-return, or 'burning the boats' as the Spanish conquistador Hernan Cortez did in 1519, has heroic appeal. But as we have seen with the confusing of climate policy with energy policy, picking winners isn't as easy as it seems.
21. We urge the Commission to consider means of preserving the flexibility our existing energy infrastructure provides when formulating an enduring National Infrastructure Plan. In this regard, we recommend reframing the question to one of "building **and** maintaining" our existing energy infrastructure.

Fossil fuels will remain a critical part of our energy mix beyond the 2050 target

22. New Zealand's electricity system is one of the most renewable in the world, with around 88% of our generation needs met by renewable energy sources. In 2023, natural gas provided 9% of our generation, and coal 2%. The renewable component of our world-class electricity system is only set to increase as we develop our abundant renewable energy resources.

⁸ See <https://www.greaterauckland.org.nz/2020/05/16/flashback-saturday-how-everything-went-wrong-for-auckland/> for a summary of transport planning, and a comparison with similar decisions in Wellington.

23. The recent decline in natural gas production, which dropped by 12.5% in 2023 and 27.8% for the first three months of 2024, reinforced the importance of natural gas production. This had a dramatic impact on both the gas and electricity markets, resulting in Methanex shuttering production for three months. It is now consulting with staff on the closure of one of its two remaining methanol trains at Motunui.
24. Recognising this, the government is currently investigating measures to protect and grow our gas reserves by encouraging further exploration. The potential for Liquefied Natural Gas ('LNG') is also being studied. At the same time the viability of biogenic methane for supply to domestic users via low pressure, suburban gas reticulation systems is being investigated by Powerco and Ecogas.
25. While our reliance on fossil fuels, including natural gas, will diminish over time, as it stands, natural gas will continue to play a vital role in the security of our electricity system, providing crucial 'peaking' and 'firming' to back-up other less reliable intermittent energy sources, such as wind and solar. With New Zealand looking to nearly double its electricity generation capacity over the next 30 years, natural gas will enable us to electrify our economy safely and securely.⁹
26. Transport infrastructure also plays a vital role in ensuring fuel is available for thermal generation. The Genesis operated Huntly power station currently relies on an imported coal stockpile to shore up our energy security. This requires thousands of coal truck movements to Huntly to keep the lights on. With growing interest in biomass as an alternative fuel, efficient, reliable road and transport networks will be vital for the collection of and distribution of these growing sources of energy.
27. In light of the above, we believe that natural gas must play a positive role in achieving New Zealand's climate goals. The viability of our existing infrastructure is an important consideration in the development of the National Infrastructure Plan and should not be prematurely consigned to history.

An infrastructure plan needs to have enduring, bipartisan support

28. Over recent years, New Zealand's reputation as an investment destination with stable policy settings, and strong governance, has taken a hit. 2018 was a watershed year for the upstream petroleum sector in New Zealand when the Labour-led coalition government introduced restrictions on access to acreage for petroleum explorers – this became known as the 'offshore ban'.
29. These changes were not signalled during the campaign and were rushed through the House under urgency. One of our concerns at the time was the precedent set by the truncated policy process, and the reduction of the Select Committee

⁹ See: <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-modelling/electricity-demand-and-generation-scenarios>.

process to a 'box-ticking' exercise. At the time of the offshore ban there was about 100,000km² of permitted offshore exploration acreage around New Zealand. With Labour being returned for a second term, investors headed for the exits. Now only about 5% (5,400km²) remains.

30. Restrictions on allocating new exploration permits outside of the onshore Taranaki region are in the process of being repealed.¹⁰ The government is also looking at measures to restore investor confidence in the sector at a time when the opposition has already stated their intention to 'reverse the reversal' on their return to the Treasury benches.
31. Our intention is not to argue the merits of the offshore ban, but to highlight the risk of capital flight in a volatile policy environment.
32. Investment in the development of efficient, durable infrastructure needs to survive the election cycle. Unless support is enjoyed across the House it is unlikely New Zealand will repair its reputation as a sound jurisdiction to invest.

Concluding comments

33. We thank the Commission for their proactive engagement in developing thinking on this important topic, and we welcome the opportunity to discuss our feedback further.

10 At the time of writing the Crown Minerals Act Amendment Bill 2024 is at its third reading and is expected to be passed before the House rises for Christmas.