

Submission by



to the

Ministry of Business, Innovation & Employment (MBIE)

on the

Strengthening national direction on renewable electricity generation and electricity transmission

1 June 2023

– SUBMISSION BY BUSINESSNZ ENERGY COUNCIL –
STRENGTHENING NATIONAL DIRECTION ON RENEWABLE ELECTRICITY GENERATION
AND ELECTRICITY TRANSMISSION

Introduction

1. BusinessNZ Energy Council (BEC)¹ welcomes the opportunity to provide feedback to the Ministry of Business, Innovation and Employment (MBIE) on the proposed National Policy Statement for Renewable Electricity Generation (NPS-REG) and Electricity Transmission (NPS-ET). This submission comments on certain aspects raised in the consultation document.
2. Overall, **BEC SUPPORTS strengthening both statements**, and acknowledges that the Government understands that to build, maintain and upgrade our electricity system to help meet our emissions targets, requires a faster, cheaper, and more certain consenting regime. However, BEC outlines several problems with the proposed statements that could likely undermine its effectiveness in practice.
3. Notwithstanding both statements, BEC stresses the need for a truly streamlined resource management regime, not just for matters involving renewable electricity generation and transmission, but for other renewable and thermal energy projects. For this to occur, the regime must be agnostic, uphold the fundamentals of property rights, establish a framework that practically allows for remediation and mitigation, thoughtfully considers trade-offs, grandparents existing rights and embeds a strong costs and benefits test.

A faster, more certain, and less costly regime is essential

4. Achieving New Zealand's climate targets – a 50% reduction in net greenhouse gas emissions by 2030, and net-zero by 2050 – requires decarbonising a large portion of total energy consumption. Over the coming ten years, and beyond, to meet New Zealand's climate aspirations, the country is likely to experience an unprecedented build of new renewable energy projects.
5. In BEC's TIMES-NZ² model, the percentage of renewable energy demand under Kea – a scenario where climate change is prioritised – could expand to 78.5% by 2050, and under Tui – a scenario where climate change is one of many pressing issues – renewable energy could expand to 58.6%. Among this increase in renewable energy, is a likely unprecedented build of electricity generation and transmission infrastructure. The Climate Change Commission (CCC) has suggested in its recent advice to inform the Government's second emissions reduction plan, that New Zealand needs over 10.5TWh of extra generation capacity by 2030 to align with our emission budgets.
6. Currently, New Zealand's electricity demand sits close to 43TWh each year. In Kea, electricity demand could increase to 75TWh by 2050, and demand under Tui could increase to 83TWh by 2050. This potential increase in demand is reflected in many models. Modelling from Transpower estimates electricity demand could increase by 20% by 2030 and 68% by 2050.³ Boston Consulting estimates New Zealand needs an extra 4.8GW of additional capacity by 2030 and 15.1GW by 2050.⁴
7. This new generation requires building more geothermal power plants, wind, and solar farms to name only a few. Connecting this generation to the grid involves new and upgraded transmission and network infrastructure, requiring new substations, power lines and transformers. For instance, Powerco alone has around 1,000MW of new distribution generation connections at various stages of application. This new generation, transmission and network infrastructure will be built across land and spaces with varying environmental characteristics and natural resources. However, the resource management regime is not, and has not been, fit-for-purpose for a long time. It has

¹ More information about BEC can be found in APPENDIX ONE

² More information on [TIMES-NZ](#)

³ Whakamama i Te Mauri Hiko Transpower, March 2020

⁴ The Future is Electric, p14, Boston Consulting Group, 2022

created an intrusive, expensive, and unnecessary barrier to building the required renewable electricity infrastructure New Zealand will need over the coming decades.

8. Business entities or individuals exploring any energy project of scale, find it difficult to comply with, and usually in conflict with, the RMA's defacto environmental limits of 'bottom lines.' It is inevitable that any project is going to have some impact on the environment and deciding whether a project goes ahead will involve trade-offs. The RMA's application across the country over the past three decades has done a poor job of assessing the trade-offs that are inherently involved in any project. The Act's ill-defined and conflicting outcomes, objectives, and principles have created a muddling of processes, and inconsistent policies in RMA plans, leading to costly disputes and litigation.
9. This cumbersome situation is detrimental to New Zealand's attractiveness for investment in energy projects. Achieving New Zealand's emissions targets will require a significant level of investment. The extent of the required investment is unprecedented. Boston Consulting's analysis shows investments of \$42 billion will be needed in generation, transmission and distribution in this decade alone.⁵
10. **Foreign Direct Investment (FDI) plays a vital role in providing necessary capital. But to attract this capital, the regulatory environment must be conducive to investment. A slow and costly regime does the opposite, repelling investment. Bloomberg's Climate Scope ranks NZ 73rd of 136 countries for the most attractive markets for renewable energy project investment.**⁶
11. A Sapere report published in 2021,⁷ noted the cost of obtaining consents by infrastructure developers is close to \$1.29 billion per annum. Complex projects, like many energy projects, can take between 365 – 425 days to receive consent.⁸ With each additional day in delay, projects grind to a halt, timelines for completion are extended, and additional costs are compounded. These costs are inevitably passed on to consumers in higher prices.
12. Amendments to the Act over the past three decades, aimed at making the legislation workable and less complicated, have unintentionally made the Act more unworkable and further complicated. **The regime's cost to business and consumers continues to grow. Direct consenting costs have risen 70% since 2014. The time to obtain a consent has grown by 150% since 2010-14.**⁹
13. The Electricity Authority (EA), in its issues paper on promoting competition in the wholesale electricity market, noted that the difficulty of obtaining consents, getting consents renewed, and subsequent delays, pushes out the pipeline for new generation, noting that it can take more than 3+ years for wind farms to obtain consent.¹⁰ This has implications for competition, the cost of electricity and the economics of electrification.
14. BEC is pleased to see the Government, and MBIE, acknowledge that the NPS-REG and NPS-ET, introduced in 2011 and 2008 respectively, have not improved the time and cost of obtaining resource consents. The Government rightly understands that neither statement has provided a consistent national direction – where weaker language compared with stronger and more directive language in other statements and local plans, makes it extremely difficult to obtain a consent. For example, in many instances, visual amenity can easily override the development of necessary renewable electricity generation without a full and considered examination of a project's costs and benefits.

⁵ The Future is Electric, p14, Boston Consulting Group, 2022

⁶ [Climatescope's ranking of the most attractive markets for energy transition projects investment](#), Climatescope, BloombergNEF, 2022

⁷ [The cost of consenting infrastructure projects in New Zealand](#), David Moore, Jeff Loan, Sally Wyatt, Kelvin Woock, Sally Carrick, Zabard Hartmann, Sapere, 2021

⁸ Ibid, p6

⁹ Ibid, p6

¹⁰ [Promoting competition in the wholesale electricity market in the transition toward 100% renewable electricity](#), Electricity Authority, EA, 2022

BEC SUPPORTS strengthening both National Policy Statements.

15. The proposed statements provide decision-makers some additional weight to have regard to provisions under the NPS-REG and NPS-ET – acknowledging the benefits of new renewable electricity generation and transmission in helping to meet New Zealand’s emissions targets – while providing the opportunity for more national consistency across regional plans. In respect to some of the wording, the statements could be a promising step in the right direction for *new* renewable generation and could possibly help speed up hitherto slow and cumbersome processes. However, in many respects, the statements’ wording and the lack of specific wording in certain areas could indicate this statement is a step in the wrong direction. This is especially true for existing generation and transmission infrastructure.

BEC SUPPORTS provisions for small-scale sites and repowering REG solar and wind assets with amendments.

16. Section 3.9 outlines that decision-makers must enable the timely and efficient upgrade and repowering of solar and wind-powered REG assets. In doing so, they must have regard to the benefits of repowering wind and solar: the efficiency gains and environmental benefits of increasing renewable electricity output. BEC supports this provision.
17. Section 3.8 acknowledges the role distributed small-scale REG assets will increasingly play in the future, including its benefits of enhancing local security of supply, community resilience, reducing greenhouse gas emissions, and its wider economic and social contribution to communities. The statement highlights that decision-makers must have regard for these wider benefits. This is a positive development, and BEC supports this provision.
18. Yet the statement notes that the effects on the environment, including local amenity values must be avoided, remedied, and mitigated to the extent practicable. However, BEC is concerned that in practice, this could unduly limit developments – as many projects will undoubtedly have some impacts on amenity values that cannot be avoided. The discussion document identifies this consequence, but it does not sufficiently follow through in the NPS-REG statement. This is especially true in policy 5 of the NPS-REG which adds the need to avoid, remedy and mitigate the impacts on amenity values. Both mentions of amenity values, section 3.8 and policy 5, might not adequately enable the needed development.

BEC is CONCERNED about the lack of national direction for existing electricity generation and transmission

19. The NPS-REG’s objective section does not include the current NPS-REG wording regarding ‘existing’ generation. This will have large and negative implications for New Zealand’s existing generation – especially for the upgrading, maintenance or building of hydro generation.
20. Hydro plays an important role in the electricity mix, both today, in twenty years and beyond. In Tui and Kea, notwithstanding the importance of demand response and natural gas, hydro contributes a sizeable role in providing flexibility in an electricity system that is increasingly intermittent, as shown in Figure 1 and 2.
21. To ensure hydro continues to provide this solid contribution to New Zealand’s total electricity generation, significant investment in upgrading and maintaining legacy unit equipment is required. Over the next ten to fifteen years, the pipeline for maintaining, rehabilitating and upgrading hydro assets is extensive. For example, Mercury’s investment pipeline in maintaining and upgrading legacy assets is close to \$475 million from 2017 to 2032. This is important as it helps underpin New Zealand’s decarbonisation drive, while also increasing capacity in many instances. Mercury’s \$80 million investment at its Karapiro power station will replace its three generating units, while at the same time increasing its capacity from 96MW to 112.5MW.

22. To ensure investment occurs in a timely and cost-effective manner, the consent process must run smoothly. The proposed NPS-REG does not cater for this existing generation and does not adequately acknowledge the importance and national significance of existing capacity and baseload.

Figure 1: Electricity generation for all subsectors, electricity production and all technology, PJ (Kea)

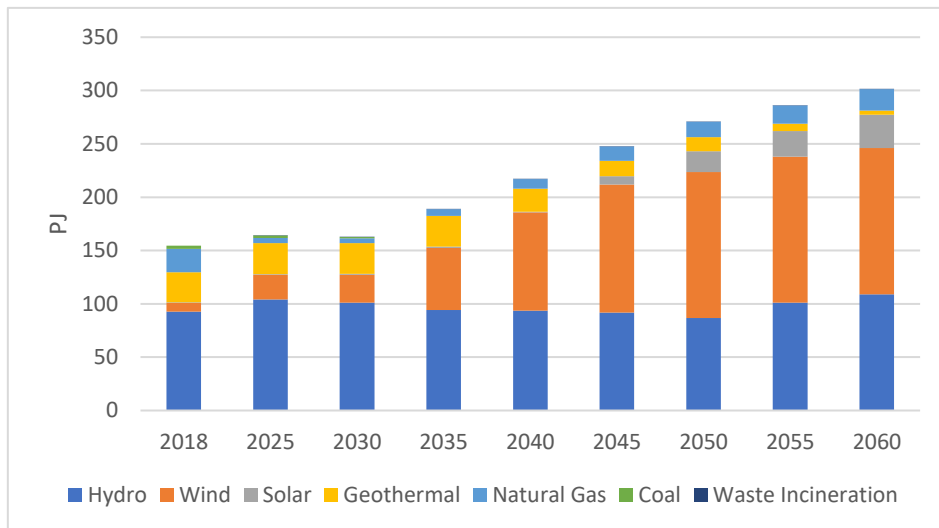
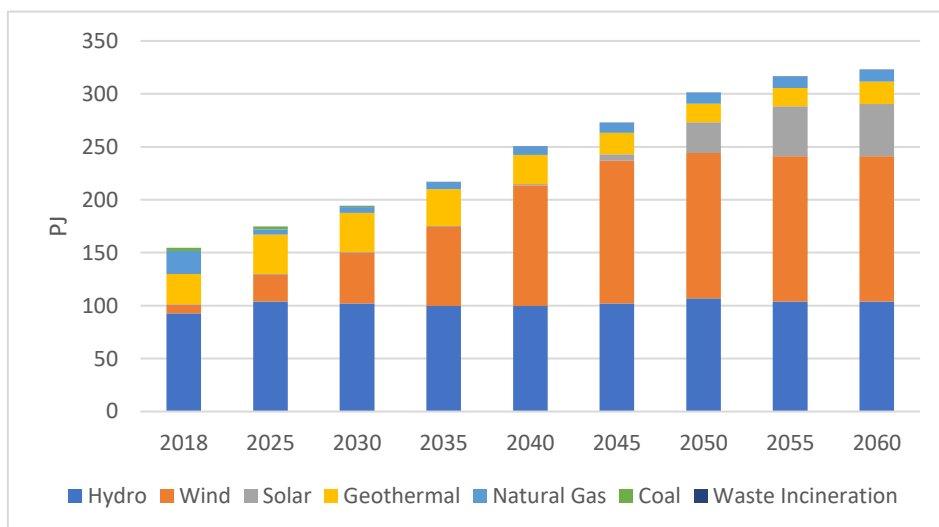


Figure 2: Electricity generation for all subsectors, electricity production and all technology, PJ (Tui)



23. Section 1.4 of the NPS-REG notes that the NPS for Freshwater Management 2020 (NPS-FM) prevails over the provisions of the NPS for renewable electricity generation if there is conflict between them. As it stands, the NPS-FM is much stronger than the proposed NPS-REG. This will likely therefore squash and undermine the ability to receive the necessary consent needed for existing hydro generation. The new NPS-REG should help resolve conflicts with other statements, by at least putting them on an equal footing. Deferring this conflict to the NPS-FM is not an improvement.

24. Furthermore, policy 8, under the NPS-REG section for policies for renewable electricity generation, inadvertently allows for reductions in existing generation, like hydro, when new generation is added in a region. The existence of section 1.4, the lack of a clear provision for existing generation, and the wording of policy 8, combine to take hydro backwards relative to the existing NPS-REG. This

will be a significant step in the wrong direction for the necessary investment in hydro legacy assets and other renewable electricity assets that will need to occur over the coming decades.

BEC EMPHASISES that it is vital New Zealand protects and secures existing generation, transmission and network infrastructure

25. This can occur by way of ensuring Transpower, EDBs and electricity generators, of all types and sizes, can maximise the value of their existing infrastructure. Both statements, as currently written, will likely make it more difficult to obtain consents for extending the life of – and maximising the value of – existing infrastructure. Inevitably this will render the need for even more generation and transmission infrastructure to be developed on additional green fields and on landscapes with natural character with the subsequent impacts. This result is not an efficient outcome. It will ultimately be borne by consumers in the higher cost of electricity.

BEC is CONCERNED that the proposed statements are likely to conflict with other National Policy Statements

26. The NPS-REG also faces uncertainty and risk from regional councils' and the courts' interpretations of its wording in relation to other National Policy Statements, in the case of solar and wind, the National Policy Statement for Highly Productive Land 2022 (NPS-HPL). Some developers will seek to develop and obtain consents for wind and solar farms on land used for primary production or agricultural, pastoral, horticultural or forestry activities. The NPS-REG notes the national significance of solar and wind, but the NPS-HPL notes the importance of protecting highly productive land from 'inappropriate' use and development, as provided in section 3.9 of the statement.
27. How regional councils and the courts will navigate the interaction between these two NPSs is uncertain. Solar and wind projects could possibly not obtain consents because of the NPS-HPL. This conflict between national policy statements, and say, choosing between land used for a solar farm or growing potatoes, highlights one of the fundamental and underlying problems of the RMA, and its replacement as it stands: the ability to adequately assess trade-offs between activities, and subsequent outcomes, is missing. National Policy Statements help create national direction, but do not solve the underlying problems with the RMA.

BEC EMPHASISES that the proposed NPS-ET contains several problems that must be addressed.

28. Considerations for mitigating, remedying and avoiding the impacts on amenity values remains a large barrier in building new and necessary transmission infrastructure. Transmission lines undoubtedly impact the amenity value of outstanding natural landscapes, with visual effects being used repeatedly to oppose projects. The new NPS-ET has not solved this underlying problem. The assumption that New Zealand can avoid impacts on sensitive environments, while at the same time building the required new generation and transmission infrastructure to help meet the country's targets, is vastly unrealistic. The current regime, and the NPS-ET, is not fit-for-purpose if New Zealand is to build the projected demand outlined earlier.
29. The new NPS-ET raises several unanswered questions, especially about the consideration for visual amenity. The statement outlines an effects management hierarchy, and compensation if offsetting minor adverse effects is not practicable. Regarding section 3.8, option 2A and option 2B, compensation at face value seems a fair and reasonable consideration for those impacted, especially for significant adverse effects. However, how Transpower is going to offset the visual impact of its long-linear infrastructure, and how redress will be provided, and who would receive this compensation for visual amenity losses remains unanswered and uncertain. Even if these questions could be answered (which is unlikely), any costs are likely to be significant, and ultimately borne by the electricity consumer.

30. Section 3.10 and 3.11 of the NPS-ET discusses the impact of reverse sensitivity effects. However, the statement does not reference and address the largest issue facing transmission and distribution lines of direct effects. This will inhibit and compromise Transpower's ability to maintain, upgrade and build its necessary infrastructure. Transpower's assets require regular maintenance. If they cannot access and maintain their infrastructure, this remains a significant problem.
31. Section 3.3 of the NPS-ET outlines that consents for electricity transmission infrastructure must consider the functional and operational need for such infrastructure. New generation requires transmission infrastructure, and existing infrastructure requires routine and non-routine work. Demonstrating this need provides extra and unnecessary steps to obtain consent.

The Resource Management Act's replacement

32. There is uncertainty about how the statements will function in relation to the new bills – the Natural Built Environment Bill (NBE) and the Spatial Planning Bill (SP) – proposed to replace the RMA. We acknowledge that the NPS will only remain relevant under the current regime. The new system will provide national guidance through the National Planning Framework (NPF).
33. However, the NPS will remain relevant during the transition period – possibly ten years or more – from the old regime to the new regime, assuming the Bill passes. BEC expects content in the new NPS-REG and ET will be reflected in the NPF. This highlights the need to ensure the NPS-REG and ET improve, as weak language and conflicting provisions in both statements could be reflected in the NPF. Furthermore, the transition to the new regime is a long period. A weak and ineffectual NPS-REG and ET could likely slow the development of renewable electricity over this period. This would risk New Zealand's climate aspirations and achieving the country's emission budgets and targets.
34. As outlined in BusinessNZ's submission on both pieces of legislation,¹¹ the NBE Bill is complex, and it remains difficult to see how decision-making will occur faster, as the Bill's outcomes and principles remain contradictory and ill-defined. It includes a long list of outcomes (clause 5) with no clear hierarchy – while there appears to be little ability to make cost and benefit decisions in terms of tradeoffs between potentially competing outcomes.
35. For example, building a wind farm on a ridge will inevitably conflict with the protection of outstanding natural features and landscapes outlined in clause (5)(a)(iii) of the Bill. The inability to assess trade-offs, combined with harder environmental limits that are absolute in their application (clauses 37-46), indicate the environment overrides anything else, irrespective of economic implications or climate change.
36. Despite issues with the RMA's replacement not being directly within the scope of this consultation document, it is crucial that the fundamental problems of New Zealand's resource management regime are addressed if the intent of the NPS-REG & ET strengthening – the acceleration of obtaining consents for renewable electricity – is to be realised in practice.

Recommendations

37. **BEC RECOMMENDS that the NPS-REG must include strong provisions for existing generation.** This is immensely important to maximise the value of existing generation, and helps to ensure New Zealand has sufficient electricity supply and supports flexibility in the case of hydro, especially as additional intermittent electricity enters the market over the coming years.
38. **BEC RECOMMENDS clarifying and amending the interpretation of *significant environmental values*.** The NPS-REG mentions that generation may need to be, and will in many

¹¹ [Spatial Planning Bill](#), and the [Natural and Built Environment Bill](#), BusinessNZ, 2023

cases, built in areas with 'significant environmental values.' However, the definition of significant environmental values is broad. The NPS-REG defines significant environmental values as:

- a) Areas with natural character in the coastal environment:
- b) Outstanding natural features and landscapes, both within and outside the coastal environment:
- c) Areas with historical heritage, including sites of significance to Māori and wahi tapu:
- d) Significant natural areas

39. As shown in a), natural character needs to be tightened. There is no indication of what these natural characters are or will be. It is reasonable to conclude that a significant portion, if not all coastal environments, contain natural character. Regarding b), again, most, if not all coastal environments contain outstanding natural features and landscapes. Yet coastlines with outstanding features and landscapes – or in other words, all coastlines – should not be treated the same. The regime should treat each project on a case-by-case basis through assessing trade-offs. If this amendment is not provided, and properly defined, there is a risk of locking out projects with significant benefits relative to their impact on the environment.
40. **BEC RECOMMENDS amending policy 5 and section 3.8 of the NPS-REG to soften language for local amenity values.** The discussion document rightly outlines that building new generation will inevitably conflict with local amenity values. However, the statement does not adhere to this issue. Policy 5 and section 3.8 notes that the effects on the environment, including local amenity values are avoided, remedied and mitigated to the extent practicable. This seems reasonable. However, in practice, this wording could mean consents are not obtained because amenity values are not avoided, remedied and mitigated.
41. This is problematic because there will be many, if not most, new renewable generation will have an impact on local amenities that cannot be avoided, mitigated and remedied. For instance, a wind farm's impact on the local amenity value of a surrounding view cannot, in most cases, be realistically mitigated, remedied, and avoided.
42. **BEC RECOMMENDS amending the NPS-REG and ET objective to include building sufficient generation and transmission infrastructure to meet demand.** As it stands, the statement's current objective outlines that renewable resources need to significantly increase in a timely manner to achieve New Zealand's emissions reduction targets. BEC agrees with this objective. However, BEC believes the objective is missing wider-contextual factors. BEC notes that the objective of the NPSs should also enable sufficient electricity supply to meet demand, acknowledging the foundational, and fundamental, role electricity plays in society – through living standards to the quality of life. Decision-makers and local plans should consider this factor because electricity is not exclusively about reducing emissions but the value it provides across New Zealand's economy and society.
43. **BEC RECOMMENDS that the NPS-REG/ET must be, at least, of equal footing to other national policy statements.** BEC notes that other National Policy Statements are still much stronger in their wording relative to the proposed NPS-REG and ET statements, especially the National Policy Statement for Freshwater Management. Yet this recommendation highlights that strengthening policy statements, in general, has limited impacts on improving the timeliness and cost-effectiveness of the country's consenting process – as a National Policy Statement still conflicts with other statements and the Act itself. Solving this problem requires fundamental change outlined below in paragraph 45.
44. **BEC RECOMMENDS including an objective for a more cost-effective and timely process.** Considering the scale of new capacity is expected to be unprecedented over the next decade and beyond, the number of consents for new generation, but also maintaining and upgrading electricity infrastructure, is expected to be unprecedented. The processes for obtaining consent must be faster, less costly and more predictable. This objective should be embedded in the NPS-REG and ET.

45. **BEC REFERS to BusinessNZ’s two submissions on the Bills.**¹² To encourage efficient investment in natural resource and infrastructure development for the economic, social, environmental, and cultural well-being of current and future generations of New Zealanders, the new regime must:
- a) **recognise the importance of upholding property rights to encourage efficient investment and to determine how existing use rights will be treated.**
 - b) **grandparent current rights to resource use, where practical, and providing for the trading and transfer of rights within a specified framework**
 - c) **introduce a compensation regime for regulatory takings to encourage better decision-making from regulators when affecting private property in the public interest,**
 - d) **provide for merit appeals/review rights where regulatory decisions impact on existing property rights,**
 - e) **provide for a cost/benefit analysis of plan changes (e.g., an enhanced Section 32 of the RMA).**
46. **BEC emphasises that simplifying and clarifying the resource management regime** by embedding a strong cost and benefit test and upholding the principles of property rights, also ensures projects that are needed for New Zealand’s decarbonisation – which are not renewable electricity generation – can be assessed and weighed fairly based on their tradeoffs. These projects outside of renewable generation are equally important. They include critical energy infrastructure, like gas pipelines or for example, a continued role for thermal generation, and the possible need for new fast start gas peakers.
47. **BEC suggests keeping the regime agnostic.** Our TIMES-NZ model, both in Kea and Tui (Figure 1 & 2), shows New Zealand’s electricity system will still need thermal generation. For instance, TIMES-NZ shows the likely need for natural gas, with gas peakers playing a role beyond 2030, ensuring a backup to intermittent sources. In Tui and Kea, coal generation plays a role, but to a lesser extent, out to 2030 to help firm intermittent supply. It is clear the more renewables New Zealand builds, the more demand response and more agile thermal capacity is needed in the system. In this example, the planning regime must adequately provide the opportunity for projects like fast start peakers to be considered, not dismissed without reflecting on trade-offs, such as providing security of supply to firm intermittent sources. The regime must be agnostic to technology, and instead allow the Emissions Trading Scheme (ETS) to determine whether a project is built.

¹² [Spatial Planning Bill](#), and the [Natural and Built Environment Bill](#), BusinessNZ, 2023

APPENDIX ONE – BACKGROUND INFORMATION ON THE BUSINESSNZ ENERGY COUNCIL

The BusinessNZ Energy Council (BEC) is a group of leading energy-sector business, government and research organisations taking a leading role in creating a sustainable, equitable and secure energy future.

BEC is a brand of BusinessNZ and represents the World Energy Council in New Zealand. Together with its members, BEC is shaping the energy agenda for New Zealand and globally.



BusinessNZ is New Zealand's largest business advocacy body, representing:

- Regional business groups: [EMA](#), [Business Central](#), [Canterbury Employers' Chamber of Commerce](#), and [Business South](#)
- [Major Companies Group](#) of New Zealand's largest businesses
- [Gold Group](#) of medium sized businesses
- [Affiliated Industries Group](#) of national industry associations
- [ExportNZ](#) representing New Zealand exporting enterprises
- [ManufacturingNZ](#) representing New Zealand manufacturing enterprises
- [Sustainable Business Council](#) of enterprises leading sustainable business practice
- [BusinessNZ Energy Council](#) of enterprises leading sustainable energy production and use
- [Buy NZ Made](#) representing producers, retailers, consumers of NZ-made goods

BusinessNZ is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy. In addition to advocacy and services for enterprise, BusinessNZ contributes to Government, tripartite working parties and international bodies including the International Labour Organisation ([ILO](#)), the International Organisation of Employers ([IOE](#)) and the Business and Industry Advisory Council ([BIAC](#)) to the Organisation for Economic Cooperation and Development ([OECD](#)).

