

JOINT SUBMISSION OF ELECTRICITY SECTOR ENVIRONMENT GROUP

- This paper has been prepared as a joint submission by New Zealand's principal electricity generators,¹ collectively referred to as the Electricity Sector Environment Group (ESEG), to the Exposure Draft of the Natural and Built Environments Bill (the Bill).
- 2. The ESEG seeks to ensure that the Natural and Built Environments Act (**NBEA**):
 - (a) Does not repeat the failure of the RMA to deliver on its desired environmental and development outcomes;
 - (b) Achieves the following specific reform objectives² namely to:
 - (i) Better enable development within environmental biophysical limits including a significant improvement in housing supply, affordability and choice, and timely provision of appropriate infrastructure, including social infrastructure.
 - (ii) Better prepare for adapting to climate change and risks from natural hazards, and better mitigate emissions contributing to climate change; and
 - (iii) Improve system efficiency and effectiveness, and reduce complexity, while retaining appropriate local democratic input; and
 - (c) Delivers on the once in a generation opportunity presented through this 'whole of system' reform to decarbonise the economy and meet New Zealand's international and statutory climate change commitments, including as now set under the Climate Change Response Act 2002 (CCRA).

¹ Meridian Energy, Mercury NZ, Contact Energy, Trustpower, and Genesis Energy, together with the New Zealand Wind Energy Association.

² Natural and Built Environments Bill – Parliamentary Paper on the Exposure Draft, Appendix 1 (**Parliamentary Paper**).

- 3. The nature and range of amendments which the ESEG submits are critical to achieve these objectives and avoid the principal failings of the RMA, are summarised below.³
- 4. Before doing so, the ESEG records that it supports those aspects of the Bill which would establish and require:
 - (a) **Mandatory national direction** within a **single comprehensive national planning framework**, including strategic goals as to the vision, direction **and priorities** for integrated management and provision for wellbeing;⁴
 - (b) **An outcomes focus**, to be directed through the national planning framework (**NPF**);⁵
 - (c) **Consolidation of lower order plans at a regional scale**, better providing for 'line of sight', coherence and consistency, with reduced "clutter" across the overall planning landscape;⁶
 - (d) **A focus on the biophysical and physical elements of the environment** rather than subjective amenity values;⁷
 - (e) Consistency between regional spatial strategies and natural and built environment plans (NBEPs), with spatial strategies needing to "give effect to" the NPF⁸, to provide greater certainty and alignment regarding infrastructure planning and funding decisions, and
 - (f) Specifically including offsetting and compensation within the definition of mitigation.

Summary of ESEG Position regarding the Bill

5. Accelerated electrification through renewable electricity generation represents New Zealand's best opportunity to meet our international and statutory climate change commitments, including as now set under the CCRA. The economic, environmental and social case for this is undeniable.

³ Noting that individual ESEG members intend to submit in greater detail on specific amendments to the Bill, on a 'clause by clause' basis, expanding on the intent summarised in this paper.

⁴ Clause 14 (a) and (b) of the Bill.

⁵ Clause 8 and 13 of the Bill.

⁶ Clause 19 of the Bill.

⁷ Refer proposed definition of environment in clause 3 of the Bill, by comparison with the much broader definition in the RMA

⁸ Clause 15(1) of the Bill

- 6. *He Pou a Rangi* (the Climate Change Commission) has recommended an economy wide energy target that 50% of all energy consumed, is to come from renewable sources by 2035.⁹
- 7. The Commission's demonstration pathway for actions identified as being critical for meeting the 2050 targets, assumes 3.8TWh of currently committed generation projects being built between 2020 and 2024, followed by 1TWh per year of additional wind, solar and geothermal generation from the late 2020s. This rate and extent of generation development is greater than that achieved at any time under the RMA and represents a major challenge for the NBEA.
- 8. The Commission recommends enabling a "fast paced and sustained build of low emission electricity generation and infrastructure by ensuring resource management processes, other national and local government instruments, and settings for transmission and distribution investment decisions, are aligned to the required pace for build".¹⁰
- 9. The rate and extent of new generation required may in fact be even more challenging than the Commission anticipates. The Commission's advice models a brief hiatus in new generation demand from 2025 2030 on the assumption that electricity supplied to the Tiwai Point aluminium smelter will become available to the grid upon an assumed closure in 2024.¹¹ However, given current aluminium prices and recent announcements related to alternative uses of Tiwai Point's electricity generation,¹² there is a genuine possibility that significant additional renewable generation will be required before 2030, i.e., even beyond the level assumed by the Commission.
- 10. To achieve accelerated electrification at the necessary scale and pace, Transpower has estimated that New Zealand will need 20 new grid connected generation projects by 2035, and 30 by 2050. In other words, it would be necessary to build generation greater than New Zealand's largest windfarm every year from the late 2020's to supply an additional 1TWh to meet the 2050 electrification target.¹³
- In recent years there has been investment committed or made by the electricity sector for the equivalent of 8 percent of New Zealand's annual generation representing a value of around \$1.8 bn¹⁴.

⁹ Ināia tonu nei: a low emissions future for Aotearoa, page 278, paragraph 27.

¹⁰ Ināia tonu nei: a low emissions future for Aotearoa, at page 287.

¹¹. Ināia tonu nei: a low emissions future for Aotearoa, at page 112.

¹² The New Zealand Hydrogen Opportunity: A perspective on New Zealand's potential role in the emerging global hydrogen economy. July 2021. Available here: <u>https://www.datocms-assets.com/49051/1626295071-the-nz-hydrogen-opportunity.pdf</u>

¹³ These forecasts assume the continuation of the Tiwai Aluminium Smelter or alternative uses being found for the equivalent demand such as a hydrogen production or data centres.

¹⁴ Tilt (Genesis PPA) Waipipi windfarm www.tiltrenewables.com, Top Energy Ngawha OEC4 geothermal plant, Mercury Turitea windfarm www.nzx.com, Contact Tauhara Stage 1 geothermal plant www.nzx.com, and Meridian Harapaki windfarm www.nzx.com.

- 12. In light of this, the NBEA must enable the merits of renewable electricity generation projects to be assessed so as to reconcile meeting energy, environmental and climate change limits and targets. This reflects the unavoidable reality that renewable electricity generation and transmission projects of the necessary scale to meet projected demand will come into conflict with environmental limits, of the kind being now mandated under clause 7 of the Bill.
- 13. They would also very likely conflict with overly directive *outcomes* regarding the natural environment, such as may result from the requirement in clause 8 to "preserve and protect" outstanding landscapes and natural character areas. Directives of that kind under the RMA have led to 'bottom line' 'de facto' environmental limits,¹⁵ which any renewable energy project of scale currently (and seriously) struggles to meet; wind farms and geothermal developments in particular.
- 14. Such projects would almost certainly be unable to meet immutable limits set to protect "ecological integrity" as defined under the Bill,¹⁶ applying a precautionary approach.¹⁷ Indeed it is unlikely that any infrastructure of scale, including as needed to sustain a meaningfully increased and affordable housing supply, could do so.
- 15. In short, inappropriately set environmental limits which are absolute in their application will prevent achievement of the reform objectives and frustrate decarbonisation of the economy and New Zealand's overall response to climate change.
- 16. A blanket 'all limits always apply' approach might be appropriate in a preservation or conservation statute and for the conservation estate. It is not appropriate for the environment more broadly across rural and urban New Zealand, and certainly not for the built environment which the NBEA expressly seeks to sustain, with key outcomes for housing supply and well-functioning urban areas which are responsive to growth, that can only be met through substantially accelerated electrification, at the same time as meeting decarbonisation imperatives.
- 17. As the Bill stands, **the NBEA risks scoring an** '**environmental own goal**' whereby climate change imperatives are defeated, through an overly rigid approach to environmental limits, that ultimately will be to the substantial detriment of what is sought to be protected and achieved through them.
- 18. For the range of reform objectives to succeed, and for CCRA budgets and targets to be achievable, the NBEA must instead resolve the inevitable degree of conflict or tension that will arise between the kinds of renewable energy developments needed to meet the decarbonisation objective, and more general limits set to protect and

¹⁵ Particularly as a result of the Supreme Court decision in *Environmental Defence Society v King Salmon*.

¹⁶ Clause 7(1) of the Bill, and as defined in clause 3.

¹⁷ Clause 16 of the Bill.

enhance the natural environment. This will mean, at times, putting climate change mitigation, first.

Overview of Amendments required to NBEA

- 19. For these principal reasons, the ESEG submits that the provisions of the Bill need to be amended in order to:
 - Ensure that the purpose of the NBEA (cl 5) expressly references the <u>built</u> <u>environment</u>, including critical infrastructure needed to sustain it, and support the social and economic wellbeing of present and future generations.
 - Put climate change first, through the inclusion of:
 - Environmental limits (cl 7) linked to the 2050 emission targets, and relevant emissions budgets and emission reduction plans set under the CCRA.
 - Express outcomes (cl 8) for decarbonisation/ accelerated electrification at sufficient scale to achieve the Climate Change Commission's recommended consumption-based energy target (50%, economy wide).
 - A more ambitious outcome (cl 8) for the extent of increase in the generation, storage, transmission, distribution and use of renewable energy required to meet that target.
 - A specific outcome to protect, maintain and enhance the storage, output and capacity of existing renewable electricity generation to underpin the growth in future generation needed.
 - More directive language for climate change mitigation outcomes such as "achieve" and "secure", and less directive language for outcomes relating to landscapes and natural character (than "protect" and "preserve").
 - Direction within the Act requiring that, in the event of conflict between these specific (climate change mitigation) outcomes and other environmental limits set under cl 7, the outcomes can prevail, to the extent and in the manner prescribed by an NPF (as addressed further below).¹⁸
 - Require that limits principally be set to achieve the broader purpose of the NBEA and the strategic priorities in clause 14, rather than solely to protect ecological integrity and human health (clause 7). An inflexible focus on protecting ecological integrity and human health, particularly at a local scale, without the context of

¹⁸ Clause 5(2), 7 and 13(3) of the Bill would need to be amended to provide for this approach.

strategic goals and the purpose of the NBEA, risks unintended consequences arising.

- Subject to that, require that **limits be only set where** <u>necessary</u> to protect either ecological integrity or human health and delete the requirement (cl 16) to apply the precautionary approach.¹⁹
- Delete cl5(2)(a), and amend cl 7 (6) as follows:

All persons using, protecting, or enhancing the environment must comply with environmental limits [insert] to the extent directed by the National Planning Framework.

- **Consolidate the outcomes in cl 8**, and rationalise the language used throughout the clause, to achieve greater certainty for the delivery of those outcomes through the NPF, including internal conflict resolution.
- Ensure environmental outcomes are applicable to all decisions under the NBEA including in respect of Natural and Built Environment Plans (NBEPs) and consenting decisions under the NBEA (i.e. an equivalent obligation to cl 7(6) for environmental limits).
- Expressly link the NPF with broader Government strategy (cl 14) documents relating to the energy sector, to enable a **holistic** "whole of Government" strategic response across all relevant policy settings.
- Require the NPF and NBEPs to protect, maintain and enhance the storage, output and capacity of existing renewable electricity generation, including as part of the existing environment for reconsenting purposes.

Conflict resolution

- 20. The following further points are made on the topic of resolving conflicts between outcomes and limits, with reference to the Parliamentary Paper (**the Paper**) on the Exposure Draft of the Bill:
 - (a) As the Paper acknowledges, a key criticism of the RMA is that limited, and sometimes apparently conflicting, national direction has led to inconsistent policy in RMA plans, and unresolved conflict between national priorities.²⁰ The resolution of these conflicts has been devolved to local authorities, resulting in inconsistent approaches, or has been determined by the Courts, which involves considerable cost, time and intervening uncertainty. The ESEG submits that

¹⁹ Note the definition of 'precautionary approach' (clause 16 as defined in clause 3) should also be amended to ensure that limits are not set with unjustified safety margins (see the Regulatory Impact Statement, page 67).

²⁰ Paragraph 132 of the Paper.

this situation is intolerably inefficient and uncertain, and if that scenario is repeated under the NBEA, the reform will fail to deliver on its objectives.

- (b) The Parliamentary Paper also acknowledges that the NPF will play a critical strategic role, setting limits and outcomes for natural and built environments, and ways to enhance the wellbeing of both present and future generations. It then records that *where possible,* the NPF will resolve conflicts, or give direction on resolving conflicts across the system.²¹
- (c) The Paper records that it is not feasible for either the NPF or NBEPs to foresee and conclusively resolve all tensions in advance, ²² and the Bill only requires the NPF to 'help' to resolve conflicts (clause 13(3)).
- (d) The ESEG nevertheless submits that in relation to the specific context of renewable electricity generation and electricity transmission infrastructure, the NPF can and must direct how those conflicts should be resolved (including through the prioritisation of outcomes and reference to strategic goals). The ESEG submits that the NPF must be directed to do so within the NBEA, from the outset.
- (e) This will be critical not only to sustaining the wellbeing of people and communities (as well as future generations, and an expanded housing supply), but also to delivering on the essential decarbonisation imperatives set by the CCRA.
- (f) While the Bill contemplates an NPF resolving conflicts between competing outcomes,²³ this does not address conflicts between *limits and outcomes*.
- (g) The ESEG submits such conflicts can and must be resolved through policy pathways in the NPF, to give certainty and direction to all participants and actors in the reformed system, as to how competing outcomes, limits and targets are to be approached and further reconciled in NBEPs and consenting decisions.
- (h) The ESEG wishes to partner with or support Ministry for the Environment officials to develop the NPF, for this purpose. In the meantime, the Bill must be amended to accommodate this approach (as set out above).

Precautionary Approach

21. The ESEG has significant concerns that the repeated references to the precautionary approach within the NBEA²⁴ (with that term being so broadly defined in cl 3), will lead

²¹ Paragraph 43.

²² Paragraphs 123 and 202.

²³ Clause 13(3) of the Bill.

²⁴ Clauses 16, 18, and 24(3).

to a 'default setting' regulatory response which unnecessarily restrains activities through both consenting decisions, and the status applied to activities under the NPF and NBEPs. By contrast, an adaptive management approach²⁵ to uncertainty or incomplete information may (for the same scenario and activity) enable consent to be safely granted (subject to appropriate management conditions) or a more permissive activity status to be set in the NPF or NBEPs.

22. The ESEG seeks removal of duplication in the reference to the precautionary approach, refinement of the definition of that term under cl3 (to situations of genuine scientific uncertainty and significant irreversible harm) and express provision for adaptive management in the NBEA, to address situations of scientific uncertainty or incomplete information.

Overall System reform

- 23. The ESEG records that it has necessarily confined this submission to those parts of the NBEA which are included in the Exposure Draft. While these provisions will be the 'engine room' of the new legislation, there are many subsequent parts and sections of the NBEA which will be of major significance to the ESEG members, particularly in relation to NPF and NBEP preparation as well as consenting procedures, resource allocation including water allocation, and transitional arrangements.
- 24. The ESEG also wishes to observe that the *relationship* between the three principal components of the reformed resource management system will be equally critical to the effective achievement of the overall reform objectives.
- 25. The ESEG requests an opportunity for direct engagement regarding the relationship and interaction between the NBEA, the Strategic Planning Act (**SPA**), and the Climate Adaptation Act, and regarding the subsequent Parts of the NBEA to follow, before formal introduction of the complete Bill in 2022.

Spatial Planning

- 26. The ESEG makes the following high level points in relation to spatial planning, noting that more detailed consideration will be possible upon the release of the SPA in 2022:
 - (a) Spatial planning is supported as a useful, even powerful and appropriate, planning method for longer term strategic planning as envisaged by the Resource Management Review Panel, to coordinate infrastructure and direct urban growth, taking into account key environmental constraints, including high value resource areas.

²⁵ Such as established under s34 the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (**EEZ Act**).

- (b) While spatial planning can be effective and appropriate for general infrastructure including social infrastructure, and to recognise and accommodate **existing** renewable electricity generation infrastructure, that is simply not the case for **new** renewable electricity generation infrastructure.
- (c) The ESEG is particularly concerned that spatial planning could in effect 'zone' areas for renewable generation; when future decisions about what are necessarily highly locationally constrained investments,²⁶ are best made with full information regarding the ever changing competitive electricity market, economic, technological, transmission and other constraints; necessitating flexibility over time. This information will not be available to those preparing spatial plans and will vary so frequently as to make long term strategic planning largely impossible.
- (d) The NBEA and SPA risk becoming a 'licencing regime'²⁷ undermining effective competition in the market as well as overall system resilience and responsiveness, if future renewable electricity investment decisions are unduly constrained by spatial plans.
- (e) In summary, the efficient and timely allocation of resources for new renewable generation infrastructure requires the relationship between spatial plans, NPFs and NBEPs to be <u>very</u> carefully considered in the result and regional spatial plans should be prepared before the NBEP's.

System Efficiency

- 27. Finally, the ESEG takes this opportunity to offer suggestions in the context of paragraph 3 of the Terms of Reference for the Select Committee Inquiry,²⁸ as to how the new resource management system can be made more efficient and less complex, particularly in relation to consenting pathways for infrastructure, and both existing and new renewable electricity generation and transmission infrastructure.
- 28. These suggestions are as set out in Appendix 1 to this summary paper.

²⁶ Simply put, the energy resource being harnessed, necessarily 'is where it is'.

²⁷ The mischief sought to be cured by restrictions on trade competition under the RMA.

²⁸ Appendix 1 to the Parliamentary Paper.

Appendix One

Methods to improve efficiency and/or reduce complexity

Significant investment in new renewable electricity generation and transmission is needed to meet the Government's decarbonisation targets within the desired timeframes. In addition to a clear policy pathway through the NPF and NBEP's, this requires an efficient consenting and approvals process to deal with new and renewal of existing renewable electricity generation and transmission infrastructure in a timely and cost-effective manner.

Efficient consenting pathways

Given the urgency to meet decarbonisation targets, supported by the development of new renewable electricity generation, there is a need for efficient consenting pathways for infrastructure projects. Key elements for these consenting pathways include robust decision-making alongside time and cost elements. One option is the use of a dedicated 'infrastructure panel' to hear and make decisions on infrastructure projects that make a positive contribution to the Government's targets for climate change, emissions reductions and renewable electricity generation. Other tools and processes include those already used in the RMA, such as applications under the Covid recovery fast-tracking process, and direct referral to the Environment Court.

Offsetting and compensation

Greater clarity is needed on issues and conflicts through national and local policy frameworks. This includes greater recognition and flexibility regarding offsetting and compensation for adverse effects, where it is supported by the policy framework and guidelines, and noting that it is not practical or feasible for all adverse effects to be offset or compensated.

Efficiency gains for regulatory process involving existing renewable electricity generation infrastructure

Significant efficiency and cost improvements, and reduction in uncertainty, could be achieved through the regulatory processes for existing renewable electricity generation infrastructure with respect to upgrading of existing infrastructure, reconsenting (renewal) of existing infrastructure where there are no significant changes in its operation and use, and the repowering of wind farms (replacing out-of-date and less efficient turbines). These matters all point to the need to maintain and increase generation capacity. The starting point for any assessment on these matters should be the existing environment with the generation infrastructure in place as the baseline, so as to focus only on material changes related to the upgrade, reconsenting or repowering. That is, the 'zero base' assumption for reconsenting (whereby the existing generation activity is deemed not to be part of the existing environment, as established under RMA case law) should be reversed by the NBEA, Any regulatory process, including the activity status for reconsenting and repowering proposals, should be proportionate to the material changes relative to the existing environment.

Similarly, variations to unimplemented consents triggered by operational improvements or changes in technology (e.g. to deploy more efficient wind turbines at the time of construction), should focus only on material changes compared to the original consent, and subject to the

consideration of such material changes, should not be constrained to the effects envelope of the original application .

More enduring and fit-for-purpose consents

There are many efficiency gains enabled by ensuring consents for renewable electricity generation and transmission activities are more durable and fit-for-purpose, recognising their longevity (in some cases built to last over 100 plus years) and their fundamental importance to the wellbeing of society.

Firstly, provide longer default lapsing periods (beyond the current default 5-year lapse) for electricity generation and transmission infrastructure (both for consents and designations) due to the long lead times associated with the detailed design, the need to source funding and to arrange procurement for major energy projects. This is of particular relevance to projects that assist in achieving decarbonisation targets.

Secondly, making provision for unlimited or substantially longer consent durations (in excess of the current default 35-year maximum) for activities involving renewable electricity generation and transmission infrastructure. For example, recognising the permanency of riverbed structures, and the associated water takes, diversions and discharges for hydro-electric power schemes.

Thirdly, restricting the scope and frequency of consent reviews for renewable electricity generation infrastructure so as to reduce the level of churn, cost and associated uncertainty in the outcome of the review. Consent reviews should be limited to situations where there is a change in an external or predetermined threshold trigger (e.g. a threshold reached in monitoring specific ecological parameters directly associated with the operation) or an unforeseen or new environmental effect.