Vector submission –
Natural and Built Environment Bill Exposure Draft

Executive Summary

Vector Limited (Vector) welcomes the opportunity to comment on the Natural and Built Environments Exposure Draft (Exposure Draft). We congratulate the Government for providing an opportunity to comment on sections of the proposed Natural and Built Environments Act (NBA) ahead of its introduction as a bill.

We support the goals of the Resource Management Act reform. Achieving them requires us to re-set our collective priorities, and to change the way we do things.

We support the programme of work to reform the Resource Management Act 1991 (RMA) regime and the goals of:

- Protecting and restoring the environment and its capacity to provide for the wellbeing of present and future generations;
- better enabling development within natural environmental limits;
- giving proper recognition to the principles of Te Tiriti o Waitangi and provide greater recognition of te ao Māori including mātauranga Māori;
- better preparing for adapting to climate change and risks from natural hazards, and better mitigating emissions contributing to climate change; and,
- improving system efficiency and effectiveness, and reducing complexity while retaining appropriate local democratic input.

Achieving these objectives requires the new regime to align its kaupapa – purpose – with process. It must be concerned with the right things, and it must engage them in the right way. We view climate change as a central goal that requires rapid change to the way that we use land and resources and critically to the way that we design and deliver infrastructure services to both enable the reduction in emissions, as well as to ensure continued resilience in the context of a changing climate.

The electricity system – including distribution – will play a key role in our climate change response

Electricity will play an increasingly important role for both climate change mitigation and adaptation – through the affordable electrification of transport and process heat, the strategic expansion of renewable generation, and by ensuring more electricity is delivered to more homes and businesses. In addition, to support every-day choices to electrify emissions intensive energy, households and businesses must have confidence that the electricity system is resilient to the physical effects of climate change.

The Climate Change Commission's final advice is clear that replacing fossil fuels with electricity is essential and "requires an expansion of the electricity system that needs to start now"[1] and that

[1] Climate Change Commission,Ināia tonu nei: a low emissions future for Aotearoa, page 138.

"diverse energy sources will also be needed to maintain energy security"[2] including the rapid expansion of wind and solar as we meet increasing demand for electricity while increasing our reliance on renewables. The pathway favoured by the Climate Change Commission includes the electrification of 46% of light vehicle travel by 2035 and implementing this would result in the rapid convergence of transport and electricity. This requires significant change to our electricity system to manage new demand as affordably as possible.

Electricity distribution infrastructure and services are central to achieving these outcomes and ensuring that our networks are ready for:

- New demand and complexity on the network driven by the convergence of our transport and electricity sectors;
- higher physical risks (extreme weather impacts); and
- the greater integration of distributed renewable generation – including solar and battery systems to increase reliance on renewables and the electrification of industrial processes.

Delivering these goals requires a fundamental change in our electricity supply chain – we must start with communities rather than the traditional top-down focus on remote electricity generation to increase resilience and efficiency. We must respond to new demand through the integration of new technologies and solutions as well as forward-looking network planning. The cost implication of electrifying key sectors of our economy is still uncertain – however, reducing this impact as much as possible to strengthen affordability requires us to do things differently.

Affordable electrification is about enabling the right kind of activity – not just preventing the wrong kind

Executing this transformation is critically about enabling the right kind of activity – not just about preventing the wrong kind. We therefore support the shift away from the effects management 'avoid, remedy, mitigate' framework which served as a 'north star' of the RMA, as well as the intention to focus on outcomes and integrate a stronger national planning direction. There is a need to ensure that the decisions made under the NBA align with – rather than obstruct – our wider policy goals. As recognised by the Climate Change Commission:[3]

"To ensure the fast-paced and sustained build of low-emissions electricity, Resource Management Act processes, other national and local government instruments, and settings for transmission and distribution investment decisions need to […] be aligned with the required pace for build."

Levers to achieve this currently include National Policy Statements (*NPS*) or National Environmental Standards (*NES*) – and in the future the National Planning Framework (*NPF*) will play a key role in ensuring that our Natural and Built Environment Plans (*NBEP*s) (standing in place of existing unitary and regional plans) are aligned with our national direction. We support this and perceive the NPF as critical to the effectiveness of the future resource management and planning regime. The development and implementation of this framework will take a number of years –

2 Climate Change Commission; pg 287.
3 Ibid; pg 281.

however, investments for our electricity system's response to climate change must start today. We therefore support the development of an NES which provides for the strategic expansion of our electricity infrastructure – including distribution and distributed solar – and not just transmission and wind farms. This can support the progression of our development goals whilst we transition to a new regime and can also inform crucial details of the NPF. It will likely take several years for the NPF to be made operative and to inform NBEPs. That is time that cannot be squandered if our emission reduction targets and budgets are to be achieved.

This submission: how we respond to the exposure draft of the Natural and Built Environments Bill

In terms of legislative structure, we support the three primary legislative vehicles proposed for this reform:

- the NBA
- the Strategic Planning Act (SPA)
- and the Climate Adaptation Act (CAA).

We look forward to providing input on each of these proposals upon the release of consolidated Bills.

This submission is primarily concerned with the NBA and responds to the terms of reference set out by New Zealand Parliament in seeking feedback for the Exposure Draft. Informed by the Parliamentary Paper on the Exposure Draft, this submission is structured as follows:

> **Section One**: Feedback on the Exposure Draft and the extent to which its provisions will support the reform objectives. This includes proposed amendments to the Exposure Draft to address our comments are shown in **Annex 1**;
> **Section Two**: "Improving system efficiency and effectiveness, and reducing complexity, while retaining appropriate local democratic input"; and,
> **Section Three:** Ideas to "for making the new system more efficient, more proportionate to the scale and/or risks associated with given activities, more affordable for the end user, and less complex compared to the current system".

Vector's submission may be publicly disclosed, and Vector's contact person for this submission is:

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1. Feedback on the exposure draft

1.1 The RMA reform process is an opportunity to shift the focus from just avoiding the wrong outcomes to enabling the right ones

The 'avoid, remedy mitigate' framework under Part 2 of the RMA is geared to avoid local/short-term adverse effects, rather than promote longer term positive societal

outcomes. This has resulted in a system that arbitrarily gatekeeps activities, delaying or limiting essential works even where there are negligible adverse environmental effects. The positive systems-level effects of an activity are often overlooked or undervalued, and we cannot continue this approach when those system-level effects include enabling affordable electrification for climate change mitigation. The current approach also results in greater weight being placed on impacts of development during construction rather than long term, enduring and widespread benefits of projects.

We seek a resource management framework which is foundationally orientated to enable the construction, operation, maintenance and upgrading of infrastructure for affordable and accelerated electrification. The NBA carries the promise of this through the shift to "environmental outcomes". However, as is further discussed, the specific drafting of the outcomes and how they are given effect to in the NPF needs to be carefully considered. For the reasons outlined above we believe that the infrastructure and climate change outcomes are too weak.

We welcome the Exposure Draft's proposed definition of 'mitigation' as a useful tool in shifting the system towards proactively enabling outcomes. We strongly support the inclusion of the concepts of compensation and offsetting within that definition and note that treatment of such concepts separately was both artificial and failed to harness the potential for net positive environmental effects management. Notwithstanding this support, we do suggest that the definition should be clarified with respect to how it will be applied throughout the NBA and NPF and in particular, as a general term, outside of the 'avoid, remedy, mitigate' framework.

Clause 5 Purpose

We support the NBA's purpose and strategic direction including in particular the importance placed on concepts related to the well-being of future generations. However, the well-being of future generations needs to be more clearly and forcefully reflected in the clause 7 "environmental limits", clause 8 "environmental outcomes" and the definition and application of the "'precautionary approach". These types of provisions would traditionally favour protectionist language, but it is critical that neither the precautionary approach nor environmental limits have the unintended consequence of constraining activity that is necessary for decarbonisation. There is also a need to ensure that the long term societal-level benefits of activities are given at least equal weight to local, and short-term effects.

In light of the above, we support the Purpose of the Act – upholding Te Oranga o te Taiao, including by protecting and enhancing the natural environment, and that people and communities use the environment in a way that supports the well-being of present generations *without compromising the wellbeing of future generations.* Achieving this purpose requires environmental limits and outcomes to adequately reflect this outcome.

However, in the Exposure Draft, clause 5 provides a stronger direction to support the well-being of present generations and a much weaker direction for future generations ('support' versus 'without compromising'). This should be changed so that present and future generations are equally supported, noting the critical importance renewable electricity generation and distribution has for both future population demand, and on climate change. We therefore support the below changes to clause 5:

> *5 Purpose of this Act*
> *(1) The purpose of this Act is to enable-*
> *(a) Te Oranga o te Taiao to be upheld, including by protecting and enhancing the natural environment;*
> *(b) people and communities to use the environment in a way that supports the well-being of present and future generations ~~without compromising the well-being of future generations~~.*

There is a need to ensure that environmental limits do not constrain essential works, or electricity system development that is needed for accelerated and affordable electrification

To achieve New Zealand's pathway to a low emissions future, the NBA must strongly provide for electrification projects and the retention of electricity infrastructure. There is also a need to ensure that future settings – reflected in both the NPF and environmental limits – avoid constraining renewable electrification including in particular New Zealand's nascent solar market. Ensuring that activity which supports affordable and accelerated electrification can progress requires alignment of the new environmental limits with essential works and electricity system development. This is also consistent with the changes sought above to strengthen the terminology used for climate change related outcomes.

Environmental limits should include a climate limit

Section 7(4) sets out a list of topics that environmental limits must be prescribed for. Vector considers that specific environmental limits should be prescribed in relation to greenhouse gas emissions, given the importance of climate change to this reform. Inclusion of limits on greenhouse gas emissions would also be able to tie the NBA into the limits set at a national level in relation to New Zealand's wider emissions targets, budgets, and plans. Including this in section 7 will ensure the directive for renewable generation appropriately trickles down into the relevant plans.

Accordingly, we suggest that clause 7 is amended as follows:

> ***7 Environmental limits***
> *(4) Environmental limits must be prescribed for the following matters:*

[…]

(g) the climate system and greenhouse gas emissions (in each case in a manner that is consistent with the Climate Change Response Act 2002 and the emissions targets, budgets, and reduction plans made thereunder)

…

1.2 Network businesses have a critical role to play as infrastructure for affordable electrification

Definitions of "infrastructure" and "infrastructure services" requires specific considerations in the case of the electricity system

Overall legislative definitions play a critical role in determining how infrastructure services' activities are categorised in planning rules and standards – including when local planning documents are developed. In the existing regime, definitions have led to unintended compliance standards.[4] It is important that definitions used in the NBA consider the implications of their subsequent usage in NBEPs.

Confusion or uncertainty about the meaning of terms under the RMA has resulted in unnecessary litigation and there is an opportunity to ensure that definitions are fit for purpose to avoid unintended consequences when rules and standards are created in planning documents. In general we encourage the Ministry for the Environment to work closely with affected parties in developing definitions – particularly definitions which contain technical categories such as the definition for "infrastructure". We support a clear pathway around how existing provisions will be carried over into the new regime. This includes making sure that existing national direction terminology is carried through into the NBA and NPF.

We note the Exposure Draft's apparent distinction between "Infrastructure" and "Infrastructure Services". We do not have a clear line of sight over what the distinction is that will be drawn between these, however, our view is that utilities – including electricity – will increasingly transition to as-a-service models, delivering consumer efficiencies, benefits and system wide optimisation – rather than just the conveyance of commodity products such as electricity and/or water.

For this reason, we query the merit of the distinction between infrastructure (pipes, poles) and infrastructure services (the product they convey i.e. water or electricity). We consider that meeting the needs of consumers and our climate change response increasingly requires a whole systems approach to our electricity supply chain. The current state of electricity market regulation – which imposes artificial silos at critical

[4] For example, the definition of 'industrial and trade activities' currently captures Vectors' transformers, subjecting them to associated oil containment standards. Because Vector is already subject to relevant requirements under the Hazardous Substances provisions of the Unitary Plan, this imposes additional compliance standards and cost with no meaningful impact on environmental outcomes.

junctures of our electricity supply chain, inhibits rather than supports the integration of technologies needed for the transition from a commodity-based supply chain to one which rewards efficiency and in turn supports consumer affordability and decarbonisation. In this way our existing electricity market framework should serve as a blue-print of what our future resource management and planning regime should avoid. In place of this approach it is important that our regulation enables, rather than inhibits, a whole-systems approach for electricity in the future.

If however, separate definitions are to apply to "infrastructure" and "infrastructure services", it is critical that both terms are used in clause 8(o) of the Exposure Draft.

Specifically in relation to the definition of "infrastructure", we oppose any definition that would result in any uncertainty regarding the categories of infrastructure that are covered. The NBA itself must ensure that infrastructure owners and operators are clear as to which outcomes apply to them. It is essential that the full electricity system, including its structures and ancillary activities, are included in the definition of "infrastructure".

We also have a strong preference to retain RMA definitions where such definitions are settled and well understood. The RMA definition of "infrastructure" is well understood and clearly includes the electricity system. We therefore suggest that this definition is retained. Changes to such definition would not only be unjustified but would likely add confusion and the re-litigation of settled concepts.

The only departure from this principle that we consider is justified with respect to the definition of "infrastructure" is that the definition could usefully be expanded to also include another well settled existing definition, being the definition of "lifeline utility" in section 4 of the Civil Defence Emergency Management Act 2002. Such category includes many of the existing RMA definitions but also includes greater detail regarding activities included which provides further certainty to regulators and utility operators.

We therefore recommend that the definitions of "infrastructure" and "infrastructure services" are as follows:

> *"**infrastructure** means—*
> *(a) pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy*
> *(b) a network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001*
> *(c) a network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989*
> *(d) facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person—*

(i) uses them in connection with the generation of electricity for the person's use; and
(ii) does not use them to generate any electricity for supply to any other person
(e) a water supply distribution system, including a system for irrigation
(f) a drainage or sewerage system
(g) structures for transport on land by cycleways, rail, roads, walkways, or any other means
(h) facilities for the loading or unloading of cargo or passengers transported on land by any means
(i) an airport as defined in section 2 of the Airport Authorities Act 1966
(j) a navigation installation as defined in section 2 of the Civil Aviation Act 1990
(k) facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988
(l) anything described as a network utility operation in regulations made for the purposes of the definition of network utility operator in section 166
(m) anything within the meaning of lifeline utility in section 4 of the Civil Defence Emergency Management Act 2002

"Infrastructure services" *means the output, product, utility, facility or use of infrastructure."*

In addition to these definitions, for the reasons set out above, Vector considers that it is essential that the environmental outcome in clause 8(o) refers to both infrastructure and infrastructure services (see proposed drafting below).

Environmental outcome 8(j) should refer to electrification specifically and align with climate legislation

The NBA exposure draft refers to environmental outcomes which the NPF and all plans must promote. Whilst this includes at outcome 8(j) that "*greenhouse gas emissions are reduced and there is an increase in the removal of those gases from the atmosphere*", a more tactical outcome would be to focus on *accelerated and affordable renewable electrification* as a means of achieving greenhouse gas emissions reductions. The addition of an outcome which is more targeted towards 'accelerated and affordable electrification' would address:

- The need to rapidly expand renewable generation (including solar and wind);
- the need for transmission and network development to meet additional demand; and
- importantly, the need to integrate new solutions and technologies into the network to respond to new demand efficiently.

Whilst we appreciate that the reduction and removal of greenhouse gas emissions is the higher order goal which accelerated and affordable electrification must serve, ensuring that our new resource management and planning framework aligns with our

climate change response - which clearly anticipates and is reliant on renewable electrification - requires a clear and practical line between desired outcomes and how the planning framework will achieve that outcome.

We also note that other outcomes listed are more specific and in some cases overlapping i.e., "areas of indigenous vegetation and significant habitats of indigenous fauna are protected" and "ecological integrity is protected". Whilst the former is arguably covered by the latter we understand the value in specifying such outcomes to ensure they are carried through into the NPF. After all, protecting our natural environment is a key purpose of our resource management and planning framework – as is enabling our response to climate change.

In addition, we consider that the outcomes that are specific to climate change and emissions should also be aligned with existing statutory targets. Specifically, we consider that climate change outcomes should link through to the Climate Change Response Act 2002's 2050 targets, emission budgets and emission reduction plans, which will in turn give effect to New Zealand's contribution towards the Paris Agreement 1.5 degree target. In addition to the amendments to the outcomes proposed below, we encourage the Select Committee to explore such alignment with reference to the final advice of the Climate Change Commission. As noted above, that advice is clear: replacing fossil fuels with renewable electricity *is essential and requires a significant expansion of the electricity system that needs to start now*.

We therefore recommend that outcome 8(j) be amended to read as follows:

> *8(j) "greenhouse gas emissions are reduced (directly or indirectly) in accordance with the emissions targets, budgets and reduction plans under the Climate Change Response Act 2002, (including through the displacement of greenhouse gas emissions achieved by increased electrification) and there is an increase in the removal of those gases from the atmosphere"*

Additionally, we consider that further clarification and guidance will be required with respect to *how* this outcome will be assessed and implemented in plans and consent applications. Clarity will be needed around how greenhouse gas emissions are accounted for and by whom and whether greenhouse gas emissions are considered at a macro level (i.e. national/international) level or a project level. For example, while a single activity may result in emissions it may be part of a system or sector that overall would enable emissions reductions (handprint vs footprint). Other questions arise with respect to the scope of the emissions from an activity and how broadly indirect emissions should be assessed and attributed to a specific activity (i.e., are scope one, two and/or three emissions relevant?). We recommend the Select Committee engage closely with industry in defining the scope of what amounts to 'reducing greenhouse gas emissions'. Wherever possible, methods for emissions assessment should align with existing carbon reporting requirements e.g., the Greenhouse Gas Protocol.

There is a need to ensure that the interdependency of activities is recognised as part of a systems approach to reducing emissions. That is – if definitions are too stringent this may result in the perverse outcome of part of a project which will reduce GHG emissions being consented – but not an adjacent activity which is needed to enable this project, but which would not, in itself, be understood as reducing emissions. For example, installing an electrolyser which is needed to integrate green biogases into a reticulated gas network (which currently is used for fossil gas) will increase the (scope one and two) emissions of the gas infrastructure provider – however those minor increases in emissions may be critical to enable far greater overall downstream GHG emissions reductions (which would be accounted for as scope one emission reductions for gas consumers). It is critical that interdependencies – and downstream impacts – are carefully considered to avoid perverse outcomes.

While clarification of the above issues should be provided in the NPF, given the changes to the RMA resulting from the Resource Management Amendment Act 2020 (particularly the pending repeal of section 104E relating to the relevance of greenhouse gas emissions), we suggest that such guidance should be provided in the interim. We consider that this level of guidance could usefully be incorporated into the non-statutory guidance that the Ministry for the Environment is understood to already have underway with respect to climate change considerations under the RMA.[5] We suggest that such interim guidance, could be incorporated into the NPF to assist with an easy transition between the RMA and the NBA with respect to the planning approach related to greenhouse gas emissions.

Environmental outcome 8(o) should provide for electricity distribution

Outcome 8(o)(ii) refers to the "*ongoing provision of infrastructure services to support the well-being of people and communities, including by supporting an increase in the generation, storage, transmission and use of renewable energy*"

However, the generation, storage and transmission of electricity will not impact the well-being of people and communities without distribution of that electricity.

As highlighted by Transpower on new technology integration – once the uptake of EVs increases, it could accelerate quickly. Transpower's report *Whakamana I te Mauri Hiko* makes the case that we must prepare for this future now. We agree with this. The need to plan for rapid electrification is particularly apparent in the context of increased policy support for EVs – such as the EV rebate. These policies will continue in accordance with the Climate Change Commission's demonstration pathway to electrify transport and process heat.

[5] As referred to in: Ministry for the Environment. 2021. Phasing out fossil fuels in process heat: national direction on industrial greenhouse gas emissions consultation document. Wellington: Ministry for the Environment.

The impact of new, high demand – and in some cases, power-exporting devices (i.e., a vehicle-to-grid enabled EV charger) will be concentrated on the low-voltage distribution network (LV network). This is the part of the network which connects homes and businesses to our wider electricity system. Falling capital costs and the need to electrify industry processes is also likely to increase demand for network-connected solar – including commercial and some industrial scale projects. It is critical for affordable and accelerated electrification that networks are ready for this new demand and for bi-directional flows of power through future-focused network planning and investments, and through the integration of smart solutions to flatten peak demand, increasing network utilisation and reducing cost. Such solutions include network batteries, for example.

Network management of electrification and growth is pivotal to decarbonisation – and in some cases must change significantly from traditional asset management approaches and quickly. As communities rely more on electricity for transport, and residential and industrial purposes, the impact of any network disruption will be more pronounced and less accepted. Our planning systems needs to recognise that future and allow us to plan for it.

We therefore urge the Select Committee to ensure that outcome 8(o) captures electricity distribution. As noted above, it is critical that the outcomes specified are clear and are able to give effect to the purpose of the NBA, in particular in clause 5(1)(b) "*people and communities use the environment in a way that supports the wellbeing of present generations without compromising the well-being of future generations*".

Additionally, to ensure that outcome 8(o) is as directive as the other outcomes in clause 8, we suggest that more directive language (specifically "protect and enable") should be included. This will ensure that the important electrification outcome is placed at least on a level playing field as the other important clause 8 objectives.

Finally, it is important that outcome 8(o) include recognition of both new and existing infrastructure and the support that such activities provide for future as well as current people and communities. It is also essential that the outcome ensures that existing electricity infrastructure is valued and its continued use and upgrade is supported. Existing infrastructure is a valuable asset and the NBA outcomes should, where possible, recognise upgrades to existing assets as well as focus on new proposed activities.

Accordingly, we seek that section 8(o) is amended as follows:

> *8(o) protect and enable the ongoing provision, development, maintenance, use and appropriate upgrade and enhancement of existing and new infrastructure and*

infrastructure services to support the well-being of current and future people and communities, including by supporting-
(i) the use of land for economic, social, and cultural activities:
(ii) new and existing infrastructure and infrastructure services that support an increase in the generation, storage, transmission, distribution, and use of renewable energy;.

'Amenity' should be expressly excluded from the definition of 'environment'

Under the RMA, the approach to amenity values has resulted in inappropriate and inefficient outcomes that have obstructed infrastructure resilience. Examples of this can be seen in relation to the interaction between electricity lines and urban trees, where their poorly considered planting and maintenance (or lack thereof) has resulted in outages and unnecessary cost for consumers, as well as inefficiency for electricity distribution businesses in ensuring the safety and security for their lines and infrastructure. The RMA's bias towards the status quo has resulted in short-term thinking and has hampered the ability to plan for the infrastructure and infrastructure services that people and communities will require in future.

We agree with the Ministry for the Environment's comments made in the context of consultation on the National Policy Statement for Urban Development that:[6]

"some planning decisions on urban development appear only to consider the effects on the natural environment or specific amenity considerations, and not how the urban environment meets the social, economic and cultural needs of people and communities…and that the barriers to facilitating development appear to be from the emphasis local authorities put on the 'present state' and built form of amenity, rather than any future environment that would result in an area, and the social and physical infrastructure".

We support the integration of a 'wellbeing', rather than amenity focus, in the NBA. To support that position we recommend that amenity is expressly excluded from the definition of 'environment' in the NBA. This will ensure avoidance of the experience under the RMA where perverse outcomes have occurred to protect amenity values, rather than consideration of higher order environmental and social impacts. Such perverse outcomes include outages driven by an inability to manage vegetation where it poses a risk to security of supply, and, by planting trees where they are likely to cause outages in the future. Such planting – in conjunction with existing vegetation management regulation – has been a significant driver of community outages.

We therefore recommend the following change to the definition in clause 3:

6 Ministry for the Environment. 2019. Planning for successful cities: A discussion document on a proposed National Policy Statement on Urban Development. Wellington: Ministry for the Environment.

environment *means, as the context requires,—*

(a) the natural environment

(b) people and communities and the built environment that they create

(c) the social, economic, and cultural conditions that affect the matters stated in paragraphs (a) and (b) or that are affected by those matters

but excludes visual, aesthetic and amenity values.

In addition, we support the review of the Electricity (Hazards from Trees) Regulations 2003 currently being led by the Ministry of Business, Innovation and Employment (*MBIE*) and urge this to be continued. There is a further opportunity to drive greater reliability (and to also reduce the unnecessary disturbance of trees) through the integration of preventive planting guidelines into the NPF. We recommend that this recommendation for efficiency be taken up by the Committee in relation to the broader aspects of its Terms of Reference.

1.3 There is a need to ensure that our future planning regime aligns with other strategic policies and other key pieces of legislation and regulation

We recommend a process to help resolve conflicts or inconsistencies with other regulatory regimes within the NPF – and that the NBA set out a process for this to occur

There are currently situations where the RMA framework conflicts with other regulatory provisions. For example, New Zealand Electricity Code of Practice 34 (ECP34) prescribes a distance that new builds must be from electricity assets. However, new development allowed for within the RMA does not reflect these limits, and electricity distribution networks are not notified of breaches. Moving forward, we recommend that the NPF be required to align with and give effect to other regulatory regimes related to the management and protection of infrastructure assets, including the ECPs, and that the NBA direct how conflicts should be addressed in the NPF.

Clause 13 (3) of the Exposure Draft only provides for the NPF to "help" resolve conflicts between or among any of the environmental outcomes. Our view is that this is too weak and we recommend that this is strengthened.

Similarly, clause 22 of the Exposure Draft states that NBEPs must "help to resolve conflicts" relating to the environment in the region, including the section 8 outcomes.

Vector suggests that both these sections are amended to provide clear direction that the NPF and regional plans must seek to resolve conflicts, and not leave it to decision-makers on a case by case basis. It may be the case that conflict resolution cannot be achieved in every instance, but the legislative driver should still remain the achievement of such conflict resolution.

Accordingly, the clauses 13(3) and 22(1) should be amended to read:

> *13(3) In addition, the national planning framework must include provisions to ~~help~~ resolve conflicts relating to the environment, including conflicts between or among any of the environmental outcomes described in* ***section 8***
>
> *22(1) The plan for a region must -*
> *(g) ~~help to~~ resolve conflicts relating to the environment in the region, including conflicts between or among any of the environmental outcomes described in section 8; and*

There is a need to ensure that the NPF incorporates / gives effect to existing and anticipated future national policy direction and national environmental standards

There currently is a lack of alignment between policy goals and the outcomes provided for through resource management and planning documentation. We support the future NPF as an opportunity to strengthen the alignment between the future NBEPs and national direction. However, we note that there are no transitional provisions which concern how our national direction will be carried over to the new NPF. We recommend the NBA include provisions which set out how the NPF will incorporate existing (and any newly developed) national direction through lower order plans – including the Natural and Built Environment Plans.

There is a need to ensure that the national direction reflects clearly our 'whole electricity system' – including the critical role of localised infrastructure and generation

The RMA currently includes national policy direction and rules for electricity transmission but not distribution. This is a significant omission given that transmission projects will not achieve anything of national or regional significance without distribution networks delivering power to consumers.

There is a need for our future regime to take a whole-systems view of our electricity system, and to effectively capture distribution as part of that system. This whole-systems view should also include recognition of the critical and growing role of solar generation in meeting the future goals of our electricity system, including: increasing our reliance on renewables; strengthening community resilience (by way of integrating more distributed systems for solar and battery solutions); and strengthening electricity affordability by way of integrating new sources of generation.

It is important that any future national direction is incorporated into the NPF. As noted above, the scale of electrification requirements is such that interim national direction will be required and cannot wait for the implementation of the NBA, NPF and NBEPS. Specific national direction is needed now to provide for both distribution and solar

installations. This is about looking to the very near future – and considering strongly the settings that will be needed for emerging markets – such as solar.

2. Improving system efficiency

There is an opportunity to significantly change consenting processes through the NBA – and to resource them

The NBA should provide a consenting pathway that actively enables the prompt and flexible consenting of electricity projects as well as the continued operation, maintenance and upgrading of existing infrastructure (including to respond to market demands, new technologies and other changes).

There is a need for a new process which limits:

- The amount of information required;
- additional information requests; and
- the extent of notification.

In relation to non-notified consents, this new process should also be framed within appropriate processing times supported by appropriate council resources. We regularly come across issues where the time taken to identify and allocate a consent application to a planner, just to *begin* consent processing, exceeds the maximum processing timeframe for non-notified consents. This reflects a clear need for more resourcing for Council planning

Delays, notification, information requirements and requests all serve to increase cost and uncertainty for critical infrastructure works. Those costs and information requirements are in many instances not justified by the negligible environmental impacts of a proposal and the considerable public benefit that it provides to the functioning of a network utility.

The process indicated in the Parliamentary Paper has a stronger focus on decisions at the upfront plan-making process rather than being left to subsequent consenting processes. We support this shift and a process whereby there is a stronger focus on the projects themselves – including their positive impacts and the outcomes they achieve for communities and our infrastructure system.

As noted above, there is potential litigation risk following the NBA which could slow down the reform process significantly

To minimise this risk, we suggest that public participation in the implementation of the NBA (i.e. the preparation of the NPF and NBEPs) should be targeted to where it could contribute real value. Opportunities for litigation should be avoided unless there is a need for challenges based on new issues or directly affected parties who operate assets for public good. This also applies to the process for developing the NPF and NBEPs.

We recommend that the NBA provides for the continuation of the Designation and Outline Plan of Work processes and delivers some targeted improvements to its implementation

Urban development in Auckland has been relatively dynamic and doesn't always align with network planning. For example, the RMA's 5-year default lapse date for designations does not allow sufficient time for long term infrastructure planning. Vector has some designations which are at risk of lapsing in the next 2-3 years. There is a need for continued designation tools in consenting pathways, and, there is an opportunity for the NBA to provide more flexibility for designations in the future – in terms of the application, amendment and timing of designations – including provisions related to the rollover, great scope for extension and longer default lapse periods. We also support the NBA including a clear s176(b) equivalent process that streamlines engagement between requiring authorities and those undertaking third-party works. Multiple overlapping designations for public infrastructure works without consistent processes for approvals currently creates an unnecessarily complex environment for delivering linear infrastructure – particularly in Auckland, where there are 31 requiring authorities.

Regulatory alignment should be provided throughout the reform process

Vector suggests that the Committee ensure that everything possible is done to avoid siloed approaches to the reform. We have recommended changes to the Exposure Draft to ensure that the Climate Change Response Act 2002 is included in outcomes that seek to achieve emissions reductions. We suggest that this is provided for throughout the NBA and that where matters related to electrification and emissions reductions are addressed, that these include appropriate consideration of and cross reference to existing legislation and processes, targets, plans and budgets under that legislation.

Similarly we note that MBIE's review of the Electricity (Hazards from Trees) Regulations 2003 represents an opportunity for the NPF to provide direction of greater consistency.

Consistency with ECP34 could also helpfully be provided so that the NPF and NBEPs ensure that new builds are appropriately set back from electricity assets. The RMA does not reflect these limits, which results in inefficiencies for developers and higher risks and costs for electricity distribution network operators who are not notified of breaches. Moving forward, we recommend that the NPF be required to align with and give effect to other regulatory regimes related to the management and protection of infrastructure assets.

Overall we consider that the NPF can be used as a tool to ensure planning provisions are supportive of the drive towards greater reliability of infrastructure in a manner that is consistent with these and other regulations and standards. However, the extent to which it is an effective tool depends on the extent of careful alignment with anticipated drivers and existing regulatory structures.

Processes and national direction to hasten renewable electrification is needed

To achieve New Zealand's pathway to a low emissions future, the NBA must strongly provide for electrification projects and the retention of electricity infrastructure. There is also a need to ensure that future settings – reflected in both NPF and NBEPs – avoid constraining New Zealand's nascent solar market.

Solar has a critical role to play in increasing renewable generation; supporting resilience; and increasing competition in the wholesale market. NZ's solar industry is already faced with high upfront capital costs and recent supply chain constraints related to Covid-19. To support this emerging industry careful thought should be given to limiting or precluding notification of consents, any increases in consent notification should be avoided for solar projects (and, probably, for renewable generation more broadly given New Zealand's target to reach 100% renewable generation by 2030). Just as we support a range of network utility and renewable generation operations to be included as permitted activities, we perceive an opportunity for an NES to support needed development of our electricity system – including distribution and distributed solar – whilst the reform process is underway. This can also inform the further development of an NPF – by clearly signalling the activities that are needed for affordable and accelerated electrification.

3. Other ideas

1. Our idea: Allow for more network innovation

   How?

   - Ensure that thresholds rather than hard limits (i.e., for size and noise restrictions) are prescribed within future NBEPs to accommodate changes in technologies. This could be achieved through the NPF specifically recognising the need for flexibility when it comes to infrastructure that is likely to need to respond to changing demand or technological drivers.
   - Include provisions for the simple grant of temporary/trial consents or permits for solutions which enable affordable electrification. Such consents should be able to be granted without notification but subject to specific temporal limits.
   - Ensure a process through which NBEPs are amended to incorporate minor changes, in between the nine-year review cycle recommended by the Exposure Draft, and without requiring significant plan changes involving public consideration.
   - Explicitly protecting infrastructure from 'reverse sensitivity' concerns.

   Why?

   Hard limits prescribed within plans – and an inability to update them efficiently – currently obstructs the integration of new network solutions and innovation which can enable affordable electrification. For example, in 2018 Vector sought to install berm batteries into the network for peak management. The project stalled as the batteries marginally exceeded height and (intermittently) noise limits prescribed in the Auckland Unitary Plan. These limits were designed around traditional assets and did not reflect current technologies – nor did it provide adequate scope for flexibility to accommodate new solutions. Networks need to increasingly integrate non-traditional assets. Vector trialled a bespoke solution by grouping together inverters used for solar installations to overcome these restrictions. This alternative however was cost prohibitive.

Furthermore, the interpretation of rules can change over time and a process is required to rapidly correct and/or clarify objectives, policies and rules. We note that Exposure Draft suggests that NBEPs (which will replace the Unitary Plans) will be reviewed every nine years. While process and timelines for these reviews and changes are not set, the Parliamentary Paper's expressed intention is that NPF will be able to be updated/changed without full process. We support this intention and the development of a clear process to enable it.

When it comes to 'reverse sensitivity risk' (whereby development emerges after infrastructure has been built – bringing with it sensitivities to impacts that infrastructure could have – i.e., noise), designation processes largely protect network assets (for example zone substations in growing residential areas). However, when it comes to smaller assets – such as the berm batteries referred above – this protection is currently less clear as they are likely to fall out of scope of protected designations.

2. Our idea: Ensure that NBEPs are guided by a nationally consistent and comprehensive set of provisions for distribution infrastructure

   How?

   We support the proposal for the NPF to achieve this. We propose the preparation of a National Environmental Standard (NES) for electricity distribution as an interim measure without waiting for the new NBA to be implemented. The new NES would provide a blueprint for the future NPF – in addition to enabling our electrification under the existing RMA regime while supporting the transition for the NBA.

   Why?

   There is currently a risk of re-litigation through local level planning and consenting processes, as NBEPs are developed further to the NPF. This will ensure clear alignment between the outcomes sought (including for electrification) and those which are delivered through future plans. This would also ensure that necessary network development can progress alongside the continued progression of the RMA reform.

3. Our idea: Provide local or central Government funding for iwi and hapū to support consultation with resource management and planning processes.

   Why?

   Currently some iwi have no dedicated resource for engagement with consultation processes which undervalues the potential benefit of such engagement – for example, for Cultural Impact Assessments. We recommend this is remedied to support the NBA's purpose to enable Te Oranga o te Taiao and to give effect to the principles of te Tiriti o Waitangi.

Appendix A: Proposed Changes to the NBA

Vector Limited's proposed changes (shown in black underline and ~~strikethrough~~)	Comment
3 Interpretation … **environment** means, as the context requires, - (a) the natural environment: (b) people and communities and the built environment that they create: (c) the social, economic, and cultural conditions that affect the matters stated in **paragraphs (a) and (b)** or that are affected by those matters, but excludes visual, aesthetic and amenity values	The focus on amenity has contributed to a bias towards the retaining status quo levels of development, which does not recognise or allow for the changing nature of the environment, changing needs/challenges etc. Accordingly, Vector supports not including 'amenity' in the definition of 'environment' in the NBEA. However, the definition of environment is very wide and could be argued to encompass amenity. The exclusion of amenity from the NBEA should be explicit.
3 Interpretation … **infrastructure** means *(a) pipelines that distribute or transmit natural or manufactured gas, petroleum, biofuel, or geothermal energy* *(b) a network for the purpose of telecommunication as defined in section 5 of the Telecommunications Act 2001* *(c) a network for the purpose of radiocommunication as defined in section 2(1) of the Radiocommunications Act 1989* *(d) facilities for the generation of electricity, lines used or intended to be used to convey electricity, and support structures for lines used or intended to be used to convey electricity, excluding facilities, lines, and support structures if a person—* *(i) uses them in connection with the generation of electricity for the person's use; and* *(ii) does not use them to generate any electricity for supply to any other person* *(e) a water supply distribution system, including a system for irrigation* *(f) a drainage or sewerage system* *(g) structures for transport on land by cycleways, rail, roads, walkways, or any other means* *(h) facilities for the loading or unloading of cargo or passengers transported on land by any means* *(i) an airport as defined in section 2 of the Airport Authorities Act 1966*	Vector opposes any definition of "infrastructure" that would result in any certainty regarding the categories of infrastructure that are covered. The full electricity system, including distribution must unequivocally be included. Vector also has a strong preference to retain RMA definitions that are well settled and well understood – such as the definition of 'infrastructure'.

(j) a navigation installation as defined in section 2 of the Civil Aviation Act 1990 *(k) facilities for the loading or unloading of cargo or passengers carried by sea, including a port related commercial undertaking as defined in section 2(1) of the Port Companies Act 1988* *(l) anything described as a network utility operation in regulations made for the purposes of the definition of network utility operator in section 166* *(m) anything within the meaning of lifeline utility in section 4 of the Civil Defence Emergency Management Act 2002* **infrastructure services** means the output, product, utility, facility or use of infrastructure	
5 Purpose of this Act (1) The purpose of this Act is to enable- (a) Te Oranga o te Taiao to be upheld, including by protecting and enhancing the natural environment; (b) people and communities to use the environment in a way that supports the well-being of present and future generations ~~without compromising the well-being of future generations~~.	In the current drafting of section 5, the Ministry provides a stronger direction to support the well-being of present generations and a much weaker direction for future generations ('support' versus 'without compromising'). This should be changed so that present and future generations are equally supported, noting the critical importance renewable electricity generation and distribution has for both future population demand, and on climate change.
7 Environmental limits *(4) Environmental limits must be prescribed for the following matters:* *[…]* *(g) the climate system and greenhouse gas emissions (in each case in a manner that is consistent with the Climate Change Response Act 2002 and the emissions targets, budgets, and reduction plans made thereunder)*	Vector considers that specific environmental limits should be prescribed in relation to greenhouse gas emissions, given the importance of climate change to this reform. Inclusion of limits on greenhouse gas emissions would also be able to tie the NBA into the limits set at a national level in relation to New Zealand's wider emissions targets, budgets and plans. Including this in section 7 will ensure the directive for renewable generation appropriately trickles down into the relevant plans.
8 Environmental outcomes … (j) greenhouse gas emissions are reduced (directly or indirectly) in accordance with the emissions targets, budgets and reduction plans under the Climate Change Response Act 2002, (including through the displacement of greenhouse gas emissions achieved by increased electrification) and there is an increase in the removal of those gases from the atmosphere	Outcomes that are specific to climate change and emissions should also be aligned with existing statutory targets. Climate change outcomes should link through to the Climate Change Response Act 2002's 2050 targets, emission budgets and emission reduction plans, which will in turn give effect to New Zealand's contribution towards meeting our goals to reduce emissions in line with the Paris Agreement 1.5 degree target.
8 Environmental outcomes … *8(o) protect and enable the ongoing provision, development, maintenance, use and appropriate upgrade and enhancement of existing and new infrastructure and infrastructure services to support the well-being of current*	Vector seeks to ensure that outcome 8(o) is as directive as the other outcomes in clause 8. Accordingly, Vector suggests that more directive language (specifically "protect and enable") should be included, to ensure that the important electrification outcome is placed at least on a level playing field as the other important clause 8 objectives.

and future people and communities, including by supporting- *(i) the use of land for economic, social, and cultural activities:* *(ii) new and existing infrastructure and infrastructure services that support an increase in the generation, storage, transmission, distribution, and use of renewable energy;.*	The generation, storage and transmission of electricity will not impact the well-being of people and communities without electricity distribution of that electricity. The NBA requires a whole of system approach. Accordingly, 'distribution' should be added to the drafting. To avoid inappropriate silo-ing of infrastructure versus infrastructure services, as well as ensuring a whole of system approach is taken in the NBA, Vector seeks inclusion of both 'infrastructure' and 'infrastructure' services in this outcome. Vector seeks appropriate recognition of existing infrastructure services and adds "existing and new" to ensure this translates into the NBA.
13 Topics that national planning framework must include … (3) In addition, the national planning framework must include provisions to ~~help~~ resolve conflicts relating to the environment, including conflicts between or among any of the environmental outcomes described in **section 8**, any limits in the NPF and with other legislation. **22 Contents of plans** (1) The plan for a region must - (g) ~~help to~~ resolve conflicts relating to the environment in the region, including conflicts between or among any of the environmental outcomes described in **section 8**; and	Vector suggests that both these sections are amended to provide clear direction that the NPF and regional plans must seek to resolve conflicts, and not leave it to decision-makers on a case by case basis. It may be the case that conflict resolution would cannot be achieved in every instance, but the legislative driver should still remain the achievement of such conflict resolution.