Minister for Climate Change
Hon James Shaw
Ministry for the Environment
By email: zcb.submissions@mfe.govt.nz

Genesis Energy Limited

Genesis Energy backs the Zero Carbon Bill

Genesis supports the Government’s intention to create a meaningful, economy-wide plan to guide New Zealand’s transition to a low carbon future. To us, the question is how and in what order should New Zealand decarbonise, so that we act to maximise the benefits of investment in low emissions alternatives while minimising negative impacts on consumers.

The answer must lie in the clear prioritisation of decarbonisation efforts across the entire economy, with a strong focus on opportunities that have the greatest emissions reduction potential. In prioritising these efforts, consideration must be given to what is technically and commercially feasible; able to scale; and comes at least cost to consumers.

Prioritisation will require making trade-offs where necessary: for example, it may be of greater benefit to New Zealand to accept a lower renewable electricity target initially to accelerate the decarbonisation of transport, as this trade-off may deliver materially greater emissions reductions across the whole economy.

New Zealand has a range of unique opportunities and challenges in decarbonising that will require uniquely New Zealand solutions, and the importation of thinking and targets from other jurisdictions can only lead to detrimental outcomes. The foundations for success lie in appreciating the downstream effects on consumers of poorly targeted interventions, or a failure to prioritise our efforts appropriately from a New Zealand Inc. perspective.

In our view, the Zero Carbon Bill (the Bill) can provide a framework for prioritisation, but only if it breaks down siloed, at times protectionist thinking to understand what will most benefit consumers and what are the most economically rational interventions that will be required to get New Zealand from today to its 2050 goals. Accordingly, we support the Bill to:

- Set an emissions reduction target in legislation that sends signals for action across the whole New Zealand economy
- Establish an independent climate change commission that provides advice and holds law-makers and officials to account for their actions
- Provide for successive emission budgets that can be adjusted where appropriate as technology progresses or circumstances change
It is a positive step for New Zealand that there is publicly stated cross-party support for decarbonisation. We must now see that translate to the actions of government departments to ensure that the transition is effective, consistent, predictable and stable. Regulatory silos cannot exist if we are to achieve a successful net zero economy that continues to grow and proposer with positive investment throughout the transition and beyond.

The uniquely New Zealand challenge for the electricity sector

New Zealand’s current emissions profile is comprised of agriculture (49%), transport (19%), other (17%), industrial processing (6%), waste (5%) and electricity generation (4%).

As an electricity generator that generates 60% of its electricity through renewable resources and 40% from thermal resources, we have already halved our emissions footprint and reduced coal use by 80%. We are now focused on working with the sector to address the broader market dependence on coal and meet our intention to exit coal-fired generation altogether by 2030 at the latest. We are also looking to develop new renewable electricity generation and providing future-ready energy tools for our customers to help them manage, monitor and control their energy use.

The electricity sector will play a critical role in the decarbonisation of other sectors (e.g. transport) by leveraging New Zealand’s existing high penetration of renewable electricity generation, but it will be challenging to do so while also reducing its own emissions further until new technologies become available.

New Zealand’s electricity sector is already the third most renewable in the world. Accordingly, as a mature renewable market, it has different challenges to most other markets that are at the beginning of their renewable journey (e.g. Australia, UK) and it is important we do not misconstrue or confuse other’s challenges with our own.

The inconvenient truth for New Zealand is that with 60% of electricity generated from hydro-power stations, and with just six weeks of hydro storage, thermal plant (including at times coal) provides the crucial firming support that has allowed us to enjoy such a high level of renewable electricity. The multi-month ‘seasonal risk’ we face when the lakes are low is unique to New Zealand and will require longer-term technology solutions that are currently uneconomic.

This challenge can best be understood through the lens of the energy trilemma: providing sustainable, affordable and reliable energy to consumers:

**PRESENT**: While we already have a high penetration of renewables [sustainability] New Zealand currently relies on thermal generation as the least cost, most flexible option to meet peak demand during times of weather variability [reliability; affordability]

**FUTURE**: For further increases in renewable capacity [sustainability] we need to find viable alternatives to meeting New Zealand’s seasonal demand challenge [reliability] and anticipate the costs that will be borne by consumers to invest in the generation and storage needed [affordability]
In our submission to the Productivity Commission (the Commission) on its Draft Low emissions economy findings\(^1\), we highlighted there is no ‘silver bullet’ to replace gas and coal generation available today and it is likely we would need to significantly overbuild renewable capacity (at considerable consumer expense) to do so. This is because coal and gas have unique characteristics – they can be stored in large volumes, and turned on and off rapidly as needed. No other single technology option is currently available to match this flexibility.

These are not simple challenges that can be solved overnight, but a ‘just transition’ is not a ‘transition, tomorrow’. Rather, we must work together as a sector to take the next steps to decarbonisation - to invest in building the right renewable generation and storage solutions as technologies become available and improve, and as costs continue to fall through to 2050.

The risk to energy consumers during this transition is if policy increases the cost of thermal firming (back-up for hydro risk) before the alternative technology solutions exist, the cost of providing secure and reliable electricity for consumers will increase; in turn increasing household bills and reducing New Zealand’s competitiveness as a place to do business.

For investors to develop new renewable generation at the scale required we will need clear policy directives from Government with respect to resource management regulation. In our submission to the Commission we noted the challenges with the current planning framework, and urge the Government to consider whether changes are necessary to ensure new renewable projects can be appropriately consented and developed within reasonable timeframes.

**Setting an emissions reduction target in legislation**

We support legislating an emissions reduction target out to 2050 to send clear signals across the entire economy that collective action will be needed. In our view, any target must be supported by all sectors, with priority action in the transport, agricultural and forestry sectors as per the Commission’s report. We have already noted the challenges of specific policies targeting the electricity sector.

**Providing for consecutive emissions budgets**

As stepping stones to the 2050 target, Genesis supports the Government, following advice from the Climate Change Commission (CCC), to set three consecutive five-year emissions budgets each time, including defining points in time at which those budgets can be reviewed and adjusted, if appropriate.\(^2\)

Transparency and accountability as to the Government’s progress in meeting each budget is critical. When it sets a budget, Government should clearly outline how it intends for it to be met and the timeline for doing so. The CCC should then monitor and report annually, by way of delivery reports, on whether Government is meeting those budgets. This will allow much needed transparency across Parliament and an opportunity for Government to reset how it will meet the budgets.

**Establishing an independent Climate Change Commission**

Genesis believes clarity around the role of the CCC from the outset is crucial. In our view, it should be established as the primary source of climate change advice to the Government but not make

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\(^1\) Genesis Energy submission on Low emissions economy – draft report.

\(^2\) For example, as technology progresses and comes available at scale and reasonable cost, emissions budgets could be adjusted to spur greater adoption; or in the event of a major natural disaster an emissions budget could be adjusted to reflect this change in circumstance.
decisions in its own right; that is a role for elected law-makers who can balance cross-department advice. The CCC should, however, have scope to hold Government to account. \(^3\)

The CCC’s advisory role should include consideration of emissions budgets, whether the 2050 target should be revised over time, and the policy settings around the Emissions Trading Scheme. We also see an opportunity for the CCC to undertake targeted research projects as required that consider specific policy options.

We support the members of the CCC being politically independent and possessing a broad set of skills and expertise. \(^4\) We see having a diverse range of voices at the CCC table as essential to generating multi-lateral support and achievable outcomes.

What is not clear is the extent to which (and how) the CCC will interact with government agencies currently tasked with climate change matters. We recommend the Government provides guidance on how stakeholders can best engage with officials, now and in the future, in the interest of efficiency and policy cohesion.

We are very happy to speak to any element of this submission and look forward to further engagement as the Bill progresses. If you would like to discuss any of these matters further, please contact Margie McCrone by email:

Yours sincerely

Marc England
Chief Executive

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\(^3\) Government should be required to publicly respond to advice received from the CCC and explain why it deviates should it choose to. The CCC monitoring function plays an important role here.

\(^4\) For example, it is essential to have both business and community represented on the CCC, particularly business leaders with experience in the transport, forestry, agriculture and energy sectors. Scientists could come from climate and behavioural disciplines. There should be community representation for Maori and Pasifika, and for the next generation.