31 May 2024

Climate Change Commission
By email: haveyoursay@climatecommission.govt.nz

2024 Draft advice to the Government on the fourth emissions budget period

Meridian Energy Limited (**Meridian**) appreciates the opportunity to comment on He Pou a Rangi – Climate Change Commission's (**Commission**) consultation on their 2024 Draft Advice to the Government on the fourth emissions budget period (2036-2040).

Introduction

Meridian strongly supports the budgets proposed in the Commission's draft advice. In our opinion, the Government must pick up the pace with decisive (and politically stable) policy action. Priority areas for action include increasing the number of electric vehicles on our roads and increasing our total renewable energy use, particularly in industrial process heating. We see a fully developed and all-encompassing Emissions Trading Scheme (ETS) as the key policy tool but we also strongly believe that additional policies will be necessary – for example in respect of transport and industrial heat, additional polices are needed to ensure that investments in long-lived assets such as vehicles and industrial heating infrastructure today do not lock in emissions for the next 30 years. We also strongly support policies to ensure that Aotearoa goes through this transition in an equitable and inclusive way, to build a thriving future for all New Zealanders.

This submission comments on the budgets proposed by the Commission. We have focused on sectors and policies where Meridian has experience and expertise. The Appendix of this submission briefly addresses the specific consultation questions asked by the Commission.

Comment on the Commission's proposals

Meridian supports the Commission's proposals to recommend the Government set the fourth emissions budget at 134 $MtCO_2e$ and amend the first three budgets to account for the significant changes and methodological adjustments described by the Commission.

Comments on direction of policy

The choices that Government has in how it meets the proposed fourth emissions budget are critical and will have significant implications.

The Climate Change Response Act requires the Commission's advice on the fourth emissions budget to include information on how the budget, and the 2050 target, could be realistically met – and show the corresponding levels of gross emissions reductions and removals. Meridian has a keen interest in the Commission's demonstration pathway and the policy assumptions that will deliver on the budgets and targets. We recognise that governments will have policy choices to make over time and through political cycles and that comments on policy settings may sit best alongside advice on the second emission reduction plan. However, we make some initial observations below on how current policy settings may not be well aligned with the Commission's demonstration pathway and how this may affect New Zealand's ability to meet the proposed budgets. For the avoidance of doubt, we do not think this means the advice on budgets should change but rather that policy settings require further consideration by the Government.

As the Commission recognises, driving gross emissions reduction is essential for achieving the 2050 target in a meaningful and sustainable way. Effective policy in this space entails ETS settings that appropriately incentivise gross emissions reductions alongside removals; as well as complementary policies or incentives which directly encourage decarbonisation by influencing the investments made by would-be emitters and which are (ideally) stable across political cycles.

Meridian agrees with the Commission that the current ETS settings in respect of forestry removals may dilute the effectiveness of the ETS in influencing both the cost of emitting and the rate of reduction of gross emissions. As the Commission noted in its 2023 Advice on the direction of policy from the Government's second emissions reduction plan, the ETS as it is currently structured is highly unlikely to drive the gross emissions reductions consistent with the Commission's recommendations and the demonstration pathway.[1] In addition, a present

[1] He Pou a Rangi Climate Change Commission "2023 Advice on the direction of policy for the Government's second emissions reduction plan" at p 41, and chapter 5 generally.

lack of supportive policies fails to stimulate the reduction of gross emissions associated with transport and industrial and space heating.

Meridian believes that the electricity sector plays a central role in the decarbonisation of transport, and process and space heating. To supply the demand created by the electrification of transport and heating, Meridian and companies like it will need to build much more new renewable generation – a responsibility and opportunity we take very seriously.

We have not seen new demand come online at quite the rate which we might have hoped for. We believe that this is largely due to the mix of policies in place to date. This demand will inevitably arrive at some point (and will have to sooner rather than later if New Zealand is to meet its emissions targets). The more predictable the trajectory of this demand growth, the better able renewable developers will be to have renewable supply online to meet it – and to do so at the lowest cost for the end consumer.

Forestry

Relying heavily on forestry before 2050 is likely to make maintaining net zero long-lived greenhouse gas emissions after 2050 difficult, and currently risks delaying action on fundamental reductions in gross emissions, leading to higher cumulative emissions and making the job ahead of us more difficult.

In our opinion, careful policy action to adjust the role of forestry removals could have benefits in driving gross emissions reductions.

Transport

Uptake of EVs in New Zealand has been relatively good compared to the demonstration pathway. We are eager to see this continue. It is too early to determine whether recent policy changes have had a chilling effect on EV uptake, but by and large we are not optimistic that enough policy measures are in place to incentivise gross emissions reductions in the form of EVs and mode shifting.

The Government’s proposals on public charging infrastructure show promise and we are interested to see what further details are announced. Meridian has significant experience building and operating public charging infrastructure through its Zero brand which is now the second largest charging network in New Zealand. We have found securing new network connections for charging infrastructure (and the associated upgrades that might be required) to be the largest challenge in this area. An aspect of this challenge is the diversity of approach across the 29 Electricity Distribution Businesses. The industry is currently working together on potential solutions such as an access regime for network access seekers (including providers of public charging infrastructure) and regulated pricing methodologies for new distribution network connections.

Industry and heat

Meridian has helped to deliver, or has customer commitments in place to support, electrification of around 617GWh p.a. of industrial process heat, including recently announced partnerships with Fonterra and Open Country Dairy. In total these commitments will remove 200,000 tonnes of CO_2 from the atmosphere each year. A further 263GWh p.a. of industrial electrification is subject to Memorandums of Understanding – but we note that much of this may be at risk of not eventuating, particularly as the now disestablished Government Investment in Decarbonising Industry ("**GIDI**") fund was a key enabler of the underlying economics for these projects, many of which are contingent on that funding being received.

These opportunities not only cut emissions at the source but represent new electricity demand which helps to support business cases for investment in new renewable generation, and may come with demand response options which help to ensure security of supply. Further opportunities for gross emissions reductions in this area remain.

Price seems to be the main barrier to industrial decarbonisation. The GIDI fund was having an impact on this barrier and the pace of electrification. Some of our customers have now abandoned or shelved decarbonisation projects. Under the current ETS settings it does not appear that ETS prices alone will be sufficient to maintain the pace of industrial emissions reductions.

Electricity generation

Our impression is that the creation of renewable generation is not presently the "rate limiting step" for the decarbonisation of transport and heating processes. Work recently commissioned by the Electricity Authority found that new generation developments committed as at the end of 2023 will produce an additional 5,000 GWh per annum. Looking forward to 2027, an estimated 2,700 GWh per annum of new generation will need to be constructed on top of what has already been completed or committed. The outlook is positive as the pipeline of "actively pursued" generation projects that could be completed by 2027 totals around 20,800 GWh per annum of production (over seven times the amount of new generation per annum that we expect to need by 2027).

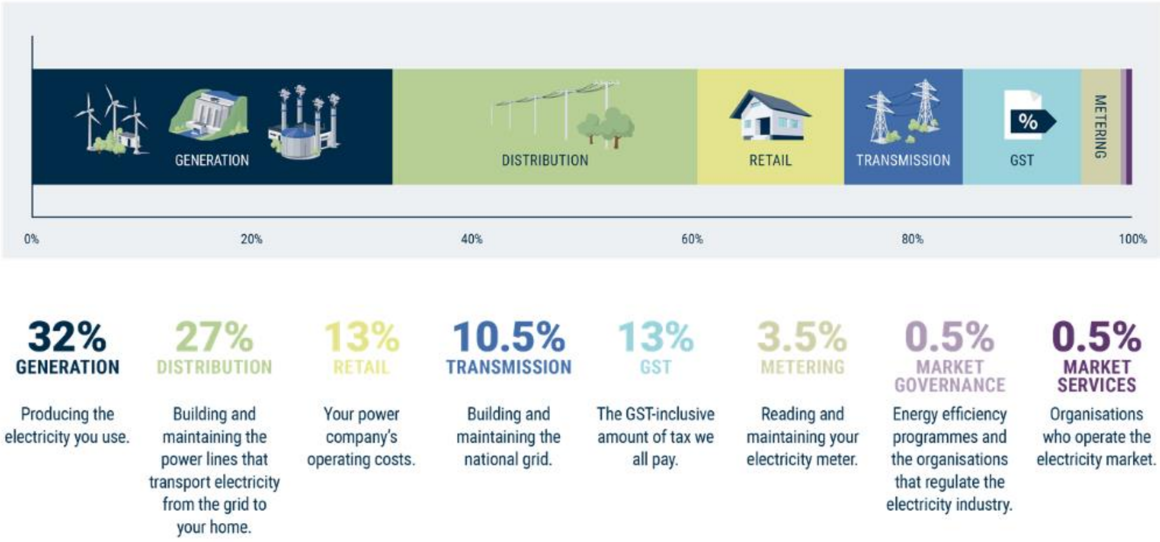
Meridian itself has a goal of “7 in 7” – seven new large renewable projects before 2030 (7 years away at the time the goal was adopted). The first 2 of these – Harapaki wind farm (176 MW) and Ruakākā battery (100 MW / 200 MWh) are both due for completion this year.

Meridian has (despite small reservations in respect of the proposed ministerial approval process) welcomed the broad intent and ethos of the fast-track consenting regime and is hopeful that it will drive improvements in the consenting timeframes and consenting costs of renewable energy projects. We also see a need for wider resource management reforms to enable renewable infrastructure and recognise its national significance and importance in meeting emissions reduction budgets.

Social impacts of change and need for Government support

While Meridian broadly agrees with the Commission’s comments on the effects of the transition on households and whānau,[2] we caution that the Commission may be optimistic in suggesting that “Electricity bills are unlikely to significantly change due to meeting the fourth emissions budget”. The Commission’s analysis seems focused on wholesale electricity prices, which comprise around 32% of a household electricity bill. Meridian agrees that significant changes in wholesale prices seem unlikely and our long term expectation is for prices to converge on the cost of new entrant generation plus firming costs. However, the more significant change is likely to come from the distribution and transmission component (together comprising around 37.5% of a household electricity bills). Increases to the regulated revenues of these monopoly networks is expected to have a significant impact on electricity bills from 2025 due to inflation, increases in the regulated cost of capital, and (over the longer term) increased investment needs.[3]

[2] Starting at p 122 of the subject advice.
[3] In this respect we note the Commerce Commission’s 29 May 2024 draft decisions indicating a 40 - 50% jump in distribution and transmission revenues in the next 5 years: Commerce Commission - Commission balances necessary investment in electricity networks against rising consumer prices (comcom.govt.nz).



Source: Electricity Authority

The Boston Consulting Group has estimated around $100 billion of electricity transmission and distribution infrastructure expenditure will be required by 2050.

The industry expects this to increase the per kWh price of electricity. However, this increase in electricity prices should be offset by decreases in liquid fuel costs as households switch from combustion engine vehicles to electric vehicles. The expected outcome is that while electricity prices will be higher, the total household energy spend will be reduced.

The fact that better-resourced consumers will have the easiest access to these savings presents a real challenge for the equitability of the transition which the Commission is clearly well aware of. We commend and echo the Commission's comments that "Government support targeted to those people who are most challenged to make changes will be important to manage impacts".[4]

Concluding remarks

This submission is not confidential. I can be contacted to discuss any of the points made.

Nāku noa, nā

James France

Legal / Regulatory Counsel

[4] At p 126 of the subject advice.

M: +64 21 194 3135

Appendix

Responses to consultation questions

	Question	Response
	Chapter 2	
2.1	Do you agree with our assessment of the considerations that have informed our proposed budget level, including key judgements? If not, why not?	Yes. Meridian has nothing to add to the Commission's assessment.
2.2	Are you aware of any further evidence that the Commission should consider in making its assessment of feasibility, cost, and implications of potential abatement options in the fourth emissions budget period?	Meridian has no additional evidence to provide at this time.
	Chapter 3	
3.1	Do you agree with the approach we have taken to developing our EB4 demonstration path? If not, why not?	Yes. Meridian has nothing to add to the Commission's approach.
3.2	Is there anything we haven't considered that we should be including in this approach?	Meridian has no additional evidence to provide at this time.
	Chapter 4	
4.1	Do you agree the changes we assume for each sector are plausible and achievable? If not, why not?	Meridian broadly agrees with the Commission's assumptions for the electricity sector. In particular we note the Commission's view that there will be some role for fossil gas electricity generation out to 2050 (on p 87). Meridian agrees that gas peaking is likely to be the lowest cost solution to peak demand in the medium term at least. In the longer term, Meridian believes that demand response (including from large-scale hydrogen production) and biofuels will have an increasingly significant role to play in peaking – a role which we expect to become more prominent as ETS prices increase and demand for green

		hydrogen grows both domestically and internationally. There may be significant challenges ensuring investor confidence and supply chain adequacy for gas to assist the electricity sector out to 2050. This is a problem the sector is currently working to address.
4.2	Do you have any evidence or insights that could contribute to our analysis?	Meridian has no further evidence to contribute at this time.
	Chapter 5	
5.1	Do you agree with our assessment of the impacts?	Yes. We have made some specific comments on electricity costs for consumers in the body of this submission.
5.2	Are there other impacts the Commission should consider, or give more prominence to?	None that occur to Meridian at this time.
5.3	Are there other specific effects on iwi/Māori we should be considering? Are there other matters about the Crown–Māori relationship, or for te ao Māori, that we should be considering?	None that occur to Meridian at this time.
	Chapter 6	
6.1	Do you agree with the Commission's approach to assessing changes to emissions budgets which have already been set? If not, why not?	Yes. Meridian agrees with the Commission's approach.
6.2	Do you agree that all set budgets should be revised to account for methodological changes?	Yes, where those changes are likely to drive material impacts for the achievability, effectiveness, or other relevant aspects of the budget.
6.3	Do you agree with the Commission's assessment of the significant changes that have occurred? If not, why not?	Yes. Meridian agrees with the Commission's assessment.
	Chapter 7	

7.1	Do you agree with our assessment that the Government should continue with the existing accounting approach? If not, why not, and what accounting approach should be used instead?	Yes. Meridian has nothing to add to the Commission's discussion.
7.2	Is there any additional evidence that would support reviewing the existing approach?	Meridian has no additional evidence to provide at this time.
7.3	Do you agree with our assessment of what the Government should be considering when it sets a reference level for forest management?	Yes. Meridian agrees with the Commission's assessment.
7.4	Do you agree with our assessment of what the Government should be considering as it develops accounting methodologies for inclusion of additional sources and sinks in budgets and target accounting?	Yes. Meridian agrees with the Commission's assessment.