



Submission

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TO THE

Ministry for the Environment

ON

New Zealand's second emissions reduction plan (2026–30):
Discussion document.

BY

**Beef + Lamb New Zealand Limited and
Meat Industry Association Incorporated**

SUBMISSION ON THE:

*New Zealand's second emissions reduction plan (2026–30):
Discussion document.*

To: The Ministry for the Environment

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Executive Summary

Climate change, and the policy approaches chosen to manage our contributions to a warming world, are seen as existential threats across our sector. The Meat Industry Association of New Zealand (MIA) and Beef + Lamb New Zealand (B+LNZ)¹, therefore, appreciate the opportunity to comment on the discussion document outlining the Government approach to New Zealand's second emissions budget (ERP2) covering our emissions reductions between 2026-2030.

New Zealand's red meat sector is highly attuned to the demands of the market. Increasingly access to markets, shelves, and pockets are affected by responses to climate action. The impact of our production on the climate is framed as a key risk, for instance, among investors, insurers, and banks. Our sector, therefore, is committed to ensuring we continue to have access to markets, to retailers, and to consumers by responding to expectations regarding action on, or adaptation to, climate change.

Although the market signals are guiding our farmers to currently report, rather than reduce, their emissions, we have already seen significant reductions occurring in our sector as a result of the uncontrolled conversion of whole farms into carbon forestry. Our analysis indicates that by 2030, the sheep and beef sector is likely to have reduced its methane emissions by more than 10% from 2017 levels (the current methane target) as a result of stock losses from this land-conversion. . Thus, we do not believe that pricing is required to drive emissions reductions in our sector prior to 2030.

Overall, we support the discussion documents proposed technology-led approach, including improvement of the approval process for novel mitigation technologies. However, we want to ensure that these tools can be applied safely and effectively within our pasture-based farming operations as well as effectively included in our greenhouse gas (GHG) inventory. We are also concerned with the lack of clarity on the pathway to implement the tools and technology into New Zealand's pastoral production systems, especially during this budget period.

We continue to be concerned about the reliance on carbon forestry for removals of long-term greenhouse gas emissions, and the consequences this has on land use and food production. Changes must be made to the New Zealand emissions trading scheme (ETS) to manage the scale and pace of whole-scale farm conversions. Although the moratorium proposed could be an effective temporary fix, there still must be a fundamental discussion about the use and role of forestry offsets as part of our transition to a low-emissions economy.

As it stands, the burden of meeting this, and future emissions budgets disproportionately sits with the red meat sector, a sector that contributes approximately \$10billion in export revenue to the New Zealand economy each year. Emissions reductions and removals are primarily coming from our family farmers closing their gates. This approach is unsustainable for the sector; we cannot continue to try and plant our way out of the problem without seeing devastating long-terms consequences to our land use, food production, rural communities, and the economy as a whole.

¹ Information on our respective organisations can be found in Appendix 1.

Market signals are clear: climate action is the ticket to entry

Increasingly, red meat exporters are seeing demand for evidence of climate action through the supply chain for access to market, access to shelf, and access to pocket. A recent report¹ found that 80% of New Zealand's exports are destined for markets with mandatory climate-related disclosures (in force or proposed). In addition, free trade agreements (FTAs) have enforceable obligations on emissions, and investors and lenders are including climate change as a risk factor. The Government needs to be aware of the reputational effects that not meeting our emissions budgets may have in markets, as well as the legal risks this may pose under our free trade agreements with the EU and the UK.

In short, if we do not take responsibility for our impacts on climate change, there is a risk that New Zealand's products are either locked out of markets or receive lower values than our competitors. This risks our current, or future, generation of export revenue from our red meat products.

New Zealand is among the most efficient producers of sheep and beef² and is well-placed to meet demands for “climate-friendly” product. Market signals through reporting of emissions across the supply and value chain, as well as conditions of trade, are indicating that climate change is driving buying decisions. For instance, many major food processors and distributors globally are setting their own emissions reduction targets. For many these include scope 3 emissions, which is through the full supply chain.

In saying this, we note that the commercial drivers can lead to a focus on emissions efficiency – a comparison of one product as being more “climate-friendly” than another. While this may be an important driver for commercial reasons, emissions efficiency does not address volume of emissions and actually encourages greater emissions by discounting this based on the volume of product produced. While this has a commercial role, emissions efficiency is not suited in policy development where the intention should be to limit warming impacts. Demands from customers for credible information on the footprint of product means data collection and reporting is required. This can be burdensome for businesses particularly where there are multiple ways to estimate on-farm emissions.

We welcome further discussion on the Government's commitment to a standardised methodology for calculating on-farm emissions. Being able to measure and then act on that information will enable the sector to meet the demands from customers, and deliver market signals to producers through the supply chain. However, we want to ensure that measurement, reporting, and verification of on-farm emissions are as smooth as possible for our farmers and processors, regardless of the end demand for the data.

A technology forward approach is supported

The Government's technology-forward approach to climate change mitigation is welcome. MIA and B+LNZ welcome the prioritisation of streamlining the processes to approve new tools and technology. A key barrier to implementing mitigation technologies and tools is that they are untested for efficiency and efficacy in the New Zealand pastoral production system. So, streamlining processes to enable in-country trialling and testing is a key enabler.

We also support the work underway in Codex to develop international rules and standards on mitigation technologies and tools. This will assist in mitigating any market access and acceptance risks posed.

MIA and B+LNZ, however, question the assumption made that by 2030 major advances in methane reducing technology will be commercialised and implemented at scale. We consider this unlikely.

As well as some of the technology being untested in New Zealand conditions, there is no discussion as to the costs of these technologies and the trade-offs that would have to be made in farming systems to adopt them. The adoption costs of introducing technologies are not zero or minor - we would strongly encourage that specific, funded pathways be developed for technology adoption at scale.

For example, the assumption made in the discussion document is that uptake of low-methane sheep genetics of 10 percent of the national flock by 2030 will result in a reduction of 0.3 MtCO₂-e in the second budget period. An uptake of even this magnitude requires significant funding and extension support. Expert external reports indicate that it would take up to 14 years to achieve “peak adoption” covering 63 percent of the flock.²

Genetic improvements are how New Zealand has increased productivity and gained competitive advantage globally. Genetic tools to combat enteric methane emissions are permanent, cumulative and stackable. However, these tools add costs to farm businesses and may have as yet unknown effects on regulatory compliance and market access. These are key barriers to overcome and enable farmers to adopt low-methane genetics as part of their mitigation strategies.

The discussion document seeks specific ideas to incentivise uptake of technology, like that highlighted above. To that end, the AgriZeroNZ joint venture is a useful model. Public-private funding to develop and commercialise technology in this area is key. Neither can go it alone. In addition, however, more thought needs to be put into the uptake of that technology by farming businesses.

Access to capital for primary sector businesses is becoming more challenging as lenders build in the risk posed by climate change into their lending decisions. These require demonstrations of actions taken to mitigate emissions as part of the business model. While the private sector plays a role here offering pathways for “green investments” or “green financing”, the role of government cannot be underestimated. The government holds strong levers and could offer grants, tax breaks, or co-funding to adopt technology – to assist with initial capital costs that can be daunting. Ringfencing funds for the specific purpose of mitigation would assist with funding a technology adoption pathway (e.g. much like the Climate Emissions Reduction Fund).

While we are not calling for subsidies for low-emissions production – we would like to see consideration of an incentives approach for uptake that would lessen the risk borne by farmers in emissions management. In addition, robust support through farm advisors and other support

² See a B+LNZ and DINZ previous submission to the Climate Change Commission assessing the assumptions on low-methane sheep genetics use here: <https://beeflambnz.com/knowledge-hub/PDF/blnz-dinz-submission-ccc-31-may-2024.pdf>

services to enable technology adoption also plays an important role in uptake of technology. These groups can also assist with the assessment of efficacy and efficiency of mitigation technology in the New Zealand pastoral context.

Successful and effective technology development and uptake requires a high-quality, robust science system. While not a direct ask of the discussion document, a technology-first approach must be underpinned by a science system that works hand-in-hand with the objectives being achieved. This will contribute to certainty to attract investment, as well as provide an enduring framework for New Zealand-specific solutions.

Pricing is not an efficient or effective solution

The Government has signalled its intent to introduce a pricing mechanism for agriculture emissions by 2030. B+LNZ and MIA are members of the Pastoral Sector Group, and we welcome working with the government to come up with a solution that is pragmatic, science-based, fair, and equitable. While the group has yet to meet, and its Terms of Reference are yet to be agreed, we would like to comment on the management of agriculture emissions generally.

MIA and B+LNZ do not consider that a price on agricultural emissions is required, nor that it is the most efficient and cost-effective manner to manage warming impacts, given the uncertainty around the availability, effectiveness, and cost of mitigation tools.

Our analysis undertaken to date indicates the sector has already reduced its methane emissions by more than 6.5% on 2017 levels as a result of the reduction in stock numbers driven by the conversion of sheep and beef farms into forestry in the last couple of years. If there were a further conversion of 120,000 hectares of sheep and beef farms into forestry between now and 2030, the sector would reduce its methane emissions by more than 10% on 2017 levels by 2030³.

A stated assumption in the discussion document is that farmers will adopt mitigation technologies based on financial incentives. This naturally depends on the availability of mitigations for a sector, and the urgency to mitigate depends upon the warming impact of the sector's emissions. As a principle, we agree that adoption of mitigations should be encouraged as they become available but do not believe that emissions pricing is required to encourage this – in New Zealand or internationally. Additionally, there must be strong consideration of the (mis)alignment of emissions management policies in the land sectors. The adoption of mitigation tools and afforestation would both lead to overall methane emissions reductions. However, the adoption of mitigation technologies will maintain export returns flowing into our national and regional economies.

There is an opportunity to develop a broader strategy for New Zealand that focuses on sustainable land use, resilient and thriving communities, maintaining and growing food and fibre exports, and nature-based solutions. Such a strategy would support integration of land use and would explore how different policies and markets (such as the voluntary carbon market, the compliance carbon market (ETS), or a biodiversity market) could be brought together to add value to the integrated land use.

³ We note that we have long maintained that we do not support the 2030 or 2050 methane reduction targets and look forward to the review of these based on a warming approach.

Other jurisdictions⁴ are exploring or have implemented schemes that aim to support actions that will improve biodiversity for instance. Such schemes may also provide an incentive for investment in nature-positive actions, but are not predicated on pricing a single issue as a way to address the wider environment

Emissions pricing does not recognise or reward the co-benefits of on-farm mitigations. MIA and B+LNZ welcome a willingness to develop policy approaches, in or out of the ETS, to support non-forestry removals as well as the recognition of the additional benefits associated with farm-based removals. We urge that this work be accelerated and prioritised, particularly in light of a pricing mechanism being introduced by 2030. The work on non-forestry sequestration opportunities, especially available on pastoral lands, requires commitment to the completion of basic scientific endeavours that understand the carbon storage and accumulation rates of native forest based on different management approaches. This work needs to be completed with urgency to recognise these benefits within this emissions budget period.

We note that there is plenty of work already underway to measure and report the wide variety of vegetation classes which provide multiple benefits within farm systems. Tools relying on remote assessment of vegetation area, vegetation type, age and stage, and carbon accumulation are actively used and should be useful stepping stones for this work.

Land-use restrictions for productive land

Recent changes to our land use have short and long-term impacts that must be fully considered before decisions are made for this, or future, emissions budgets and pathways. These impacts include delayed long-lived gas emissions reductions, reduced resilience of our economy and rural communities, and reduced revenue from export receipts.

Changes to the status quo settings for carbon forestry are required and need to be enduring. While the rate of farm sales intended for forestry use have slowed due to market uncertainty, there is no certainty that this hiatus will continue.

We know that recent afforestation was driven by the potential returns from carbon forestry. We have seen rapid land use change on a wide variety of land-use classes (LUC), but in particular LUC 6 and 7, in the last 5 years. Restrictions are required to prevent further rapid afforestation of these multi-use landscapes.

To be clear, LUC 6 is suitable to both forestry and pastoral land uses. Both of these land uses can be profitable on this type of land but the unrestrained returns from carbon forestry mean that both types of export industries are outcompeted, and that land use flexibility is severely limited

Based on B+LNZ's modelled estimate, carbon prices would only need to be \$15/tonne to make conversions to carbon forestry (based on Net Present Value over a 30-year period) more profitable than sheep and beef farming on this land. Therefore, restrictions on carbon forestry are required even if prices are relatively "low"

⁴ Australia's Nature Repair Market, Biodiversity and Carbon Market; wetland banking in the US; private schemes such as through the Nature Conservancy.

Pastoral systems occur across a range of land-use classes, and the mosaic of classes are implemented to optimise the inherent productivity of the land. While higher LUC classifications have fewer productive uses available, it does not necessarily equate to lower profitability. The relationship between more farmland classed as higher LUC and profitability is not linear.

The discussion document suggests the price of carbon in the New Zealand ETS will be aligning strongly with costs of afforestation. It is unclear what would exactly be contributing to this price level, or how afforestation arising from it would be controlled. Although rates of afforestation for 2025 are anticipated to be lower than recent years due to uncertainty in the market, the fundamental driver remains: unrestrained use of carbon forestry offsets in the ETS.

We support the high-level proposal for a moratorium on certain land use classification's entry into the New Zealand ETS. Without any further details, however, we are unsure of the effectiveness of these proposals or their ease of implementation. We note that the ERP technical annex says that: "Conversion limits have no effect with current forestry projections" (pg 64). This is because the proposed annual limits via a moratorium are greater than projected total amounts occurring on a per year basis

We look forward to further engagement with government about what level of afforestation is truly required to meet our current emissions budgets and wider reduction targets. This was something that the Climate Change Commission has recommended in their advice to government but does not seem to be included in this draft ERP2.

At a high level, MIA and B+LNZ think that forestry offsets should not be used in place of real cuts to long-lived gas emissions, especially when they impact food production. Offsetting emissions should be used to mitigate the negative social, cultural, and economic consequences of emissions reductions instead of an 'easy out' in the short-term.

Comment on the wider government approach

The impacts of emissions reduction budget proposals disproportionately affect red meat farmers. Incentivising afforestation (on sheep, beef, and deer land) to achieve long-lived gas emissions reductions, undermines goals to double export value and improve the resilience of our economy.

Permanently changing our food producing land uses, rather than changing fundamentals like our approach to transport, is a policy approach that leads to perverse outcomes. New Zealand meeting emissions reduction targets by simply reducing food production is a poor outcome not only for rural communities, regional economics and the overall New Zealand economy, but also a poor outcome for global food security and the atmosphere. New Zealand reducing its food production through afforestation will simply increase the risk of emissions leakage to producers with higher footprints than ours.

New Zealand farmers should be empowered to farm better, not simply forced to farm less. New Zealand produces meat products in efficient, unsubsidised, and pasture-based systems where livestock are free to graze and move around outside. As a result, our meat is produced with levels of greenhouse gas emissions far below those seen in most other countries. Reducing efficient food production in New Zealand to meet domestic climate targets would lead to offshoring these emissions to less greenhouse gas efficient producers elsewhere, ultimately producing worse climate outcomes. Although there may be opportunities for some farmers to

diversify their business and have land used for carbon forestry, it is important to note there are many risks and limitations associated with land use change and its long-term impacts on New Zealand and our farming communities.

The sale of NZUs affords no added value to GDP or directly to rural communities. Thus, the sale of carbon units from these forests, does not generate any export revenue (unlike the red meat sector’s \$10 billion each year). Although landowners may choose to invest the income generated from the sale of carbon units back into the area, the money generated from NZUs is not making a “value-add” contribution.

Analysis completed by B+LNZ indicates that \$18.4billion worth of export returns will be lost by 2050 if the Climate Change Commission’s recommended planting amounts are seen in practice. Note that this amount of planting would see close to 1.5million hectares of forest planted, covering almost 30percent of sheep and beef grazed areas.

New Zealand is an export-facing economy. Without this export revenue coming into the country in the future, our ability to have a resilient and competitive economy is challenged. Additionally, as carbon-forested land requires permanent land-use change, it poses challenges to our ability to maintain our land use flexibility and resilience to the impacts of a changing climate (i.e. though pests, fires, weather events). Essentially, these areas become a liability, rather than a benefit, to landowners and investors in the future.

The NZ ETS is a tool to be used based on the objectives the Government set for it. For this tool to be effective a clear direction for the future is required. This includes clarity on the use of forestry offsets to meet domestic and international emissions reductions targets as well as how these offsets are intended to provide co-benefits for our natural world and rural communities.

Our farmers understand the benefits that can come by integrating trees within farming systems. However, it is harder for many farmers to integrate carbon forestry into their business than it is to sell their entire farming operation to carbon forestry investment proprietors. This choice is not an easy one given many of our farmers want to continue to provide export revenue, ecosystem services, and high-quality red meat products.

Comment on modelling assumptions

- B+LNZ reviewed some of the assumptions included within the ERP2 discussion document and technical appendices.
- Based on this review, we were concerned by a number of these assumptions. Namely, those indicating the availability and adoption of mitigation technologies in the red meat sectors and the anticipated stock numbers during the emissions reduction period.
- Below, we have summarised the key assumptions in the modelling used that we find relevant for our sectors and our assessment of these.

Assumptions	Tool/type	Govt. Assumptions	B+LNZ and MIA Comment
Uptake of tech or tool uptake	Coated Urea – Sheep and Beef	80% uptake by all S+B 2030 (49% currently).	Key metrics used in modelling the impact of mitigation tools and technology include the likely

Assumptions	Tool/type	Govt. Assumptions	B+LNZ and MIA Comment
	Low methane breeding - Sheep	Adopt in 2025, Peak adoption 4% in 2041. \$2/tCO ₂ -e cost. Efficacy up to 17% by 2050	<p>The rate of adoption, the likely pace of adoption, the likely impact of adoption, and timeframes for all of this. Although there are numerous factors that would change these metrics, B+LNZ and MIA consider that many of these will be improved through strong financial and implementation support.</p> <p>Based on recent research under the ‘Cool sheep’ programme, it is estimated that sheep genetics could be implemented across a maximum of 5% of the flock by 2025 and a maximum of 10% of the flock by 2030 if significant extension and funding support was provided.</p> <p>Alternative modelling by AgResearch indicates that sheep breeding could provide a 0.58% genetic gain per year if strong encouragement via incentives was provided. AgResearch’s analysis suggests that improved sheep genetics could provide a 2.9 -5% decline in emissions by 2030.</p> <p>However, results are only realistic if resources, funding and support (e.g. people) are available to implement this intervention. We note that cost estimates indicate that the upfront costs of implementation are higher</p>
	Low methane breeding - Beef	Adopt in 2035, Peak adoption 1% by 2052. \$6/tCO ₂ -e cost. Efficacy up to 8% by 2050.	
	Low methane breeding – sheep (<i>with support from govt</i>)	Adopt in 2025, Peak adoption 50% by 2030. Efficacy unclear. Reductions of .5 MtCO ₂ -e by 2030.	
	Methane inhibitor - Beef	Adopt in 2028, Peak adoption 2% by 2047. \$65/tCO ₂ -e cost. Efficacy up to 45% by 2050.	
	Methane inhibitor – Beef (<i>with support from govt</i>)	Adopt in 2025, Peak adoption of 50% in 30. Efficacy up to 60% by 2030. Reductions of 3.1 – 15.3 MtCO ₂ -e by 2030 (and 13.8-43.1 MtCO ₂ -e by 2035).	

Assumptions	Tool/type	Govt. Assumptions	B+LNZ and MIA Comment
			<p>than use over a longer period. Additionally, any commercial benefits must outweigh the costs for breeders and farmers for effective implementation.</p> <p>Genetic breeding changes are the only proven tools we have for commercial use in the next decade for enteric emissions across the red meat sector (sheep, beef, deer, and dairy beef). This tool is permanent, cumulative and stackable, with potential ongoing cost to farm expenses, residues, and regulatory and market access issues. We are less confident on the use and suitability of beef bolus technologies.</p>
Productivity Improvements	Sheep	Carcass weight increase of 13%/yr from 2022 baseline	This assumption is highly dependent on the baseline year chosen but long-term trends do indicate an increase in carcass weight overtime. However, market and biological constraints will likely prevent this trend continuing in a linear manner until 2050.
	Beef	carcass weight increase of 12%/yr from 2022 baseline	Rather than an increase in carcass weight, we forecast these weights will remain static (assuming this includes dairy cattle and bull beef production). We also note that a shift in the weighting of different livestock classes may have a greater impact on emissions estimates from beef cattle than carcass weight changes.

Assumptions	Tool/type	Govt. Assumptions	B+LNZ and MIA Comment
Total Stock numbers	Sheep	Decrease from 25.1m in 2022 to 21.2m in 2030	Assumptions should be real-time impact of afforestation rates. We would like to understand these rates better with officials, and understand what the impact of restrictions on afforestation.
	Beef	Decrease from 3.82m in 2022 to 3.5m in 2030	MPI's assumptions to be based on fairly high levels of afforestation. We would like to understand these rates better, and what kinds of restrictions on afforestation are going to happen.

Appendix 1: information on MIA and B+LNZ

Beef + Lamb New Zealand (B+LNZ) is the farmer-owned organisation representing New Zealand's sheep and beef farmers. It is the organisation with the legal mandate to speak on behalf of New Zealand sheep and beef farmers. B+LNZ is funded under the Commodity Levies Act 1990 through a levy paid by producers on all cattle and sheep commercially slaughtered in New Zealand. B+LNZ's vision is profitable farmers, thriving rural communities, valued by New Zealanders and its purpose is to provide insights and actions that drive tangible impact for farmers.

B+LNZ represents around 9,200 commercial farming businesses, creating around 35,000 jobs (wages, salaries, and self-employment) in the sheep and beef sector. Around three-quarters of pastoral land and just under a third of New Zealand's total land area is used for sheep and beef farming.

The Meat Industry Association of New Zealand Incorporated (MIA) is a voluntary trade association representing New Zealand meat processors, marketers, and exporters. It is an Incorporated Society (owned by members) that represents companies supplying virtually all of New Zealand sheepmeat and beef exports.

MIA member companies operate more than 60 slaughter and further processing plants employing 25,000 people throughout the country. Ninety percent of this production is further processed into value-added products. Over a million tonnes, or 86% of total production, is exported to nearly 110 overseas destinations generating \$10.6 billion in export revenue for the year ending December 2023.

MIA advocates on behalf of its members and provides advice on economic, trade policy, market access, employment relations, business compliance costs and technical and regulatory issues facing the industry, with a particular focus on food safety, trade, market access, and public policy impacting industry operations.