TO

Ministry for the Environment

ON THE

Transitioning to a low-emissions and climate resilient future; Have your say on the Emissions Reductions Plan

BY

Beef + Lamb New Zealand Ltd and Deer Industry New Zealand

Key asks

- The Emission Reduction Plan should focus on the warming potential of emissions, rather than just the net volume of emissions. Current methane targets don't take into account the most recent IPCC report which states that biological methane emissions only need to reduce by 0.3 percent each year for no new warming.
- The agricultural sector should be supported to reduce emissions through new technologies, policies, and actions. Continued Research and Development will be paramount to this along with support for delivery of these mitigations once they are understood or otherwise become available.
- The world-leading approach taken by New Zealand agriculture, iwi, and government through the He Waka Eke Noa partnership should be recognised and receive continued support..
- Farmers must be included as a valued part of a New Zealand climate change response strategy that recognises the ability of agriculture to reduce and reverse warming through sequestration and efficiency improvements.
- A comprehensive 'Warming' Reduction Plan needs to take a coherent and balanced approach across sectors and recognise the need for urgent gross fossil fuel emissions reduction, rather than allowing wholesale offsetting through forestry. Offsetting should not be seen as an alternative to meaningful cuts in fossil fuel emissions. We need to see strong limits put in place on the use and placement of carbon-only forestry.
- An approach that ensures informed land use decisions. Climate change is an important goal but where possible should support integrated land use decision making in order to improve water quality and native biodiversity.

Executive Summary

Beef + Lamb New Zealand and Deer Industry New Zealand welcome the chance to comment on the Ministry for the Environment discussion document "Transitioning to a low-emissions and climate resilient future; Have your say on the Emissions Reductions Plan."

Climate change, and some of the policy approaches chosen to manage its influences and impacts, are seen as existential threats to our farmers and their businesses. Our farmers are committed to playing their part in preventing warming and continuing their land stewardship roles.

We are founding members of the He Waka Eke Noa partnership seeking to ensure that all farmers have a plan to manage their emissions by 2022 and are participating in a emissions pricing programme by 2025. We have also contributed to research and development initiatives that seek to provide technologies that can be adopted on-farm and at scale to manage methane and nitrous oxide emissions.

However, we are concerned with the focus within the consultation document on emissions, rather than warming impacts. The Paris Agreement on Climate Change is focussed on limiting the global increase in temperature to 1.5 degrees above pre-industrial temperatures which means we must change our framing of the task at hand from 'managing **emissions**' to 'managing **warming**.'

We are also concerned with the lack of detailed plan of action to decarbonise our economy by making gross carbon dioxide emission reductions rather than relying on offsetting mechanisms within the Emissions Trading Scheme. New Zealand must significantly decrease its reliance on exotic forestry to offset its gross emissions and meet its climate change targets. Clear limits on carbon offsetting are required and measures must be put in place to achieve this through the ETS.

Our farmers can respond to the call to establish more trees on their lands. However, to do this, they must be recognised for the sequestration and broader environmental benefits their existing on-farm vegetation and activities provide. The must also have access to support, advice and tools to enable them to optimise their land use in a way that also improves biodiversity, water quality and supports rural communities.

Our farmers must have viable tools that they can integrate within their business to manage their contribution to warming. This requires a long-term, sustained, research and development plan to deliver on future technologies and how these will be applied on-farm. This along with support for adaption to a changing climate and policy environment is key to success.

We look forward to working with the government to develop strategies related to the land based primary industries in detail. We note that the discussion document is not the ERP and there will not be a chance to provide comment on the draft ERP before it is finalised. We are troubled by this, and seek the opportunity to work with officials to test some of the policy levers and approaches to achieve shared objectives.

1. Introduction

1.1 Our sectors

Thank you for providing Beef + Lamb New Zealand (B+LNZ) and Deer Industry New Zealand (DINZ) with the opportunity to provide feedback on the Ministry for the Environment's Emission Reduction Plan consultation document.

The New Zealand sheep and beef sector is New Zealand's second-largest goods export income earner, with more than $10 billion in export revenue for the year ending September 2021. This accounts for 16% of the total value of New Zealand's goods exports, behind only dairy. New Zealand exports over 90% of sheepmeat production and over 80% of beef production to over 120 countries worldwide.

Beef + Lamb New Zealand is the farmer-owned organisation representing New Zealand's sheep and beef farmers. Our farmers represent around 9,000 commercial (750+ stock units) farming businesses, creating around 35,000 jobs (wages, salaries and self-employment) in the sheep and beef sector. 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.

Sheep and beef livestock production is essential to maintaining the vibrancy of rural communities and their cultural, societal, and environmental wellbeing, as well as contributing regionally and nationally to the country's economic wellbeing.

B+LNZ is actively engaged in environmental management, with a particular emphasis on building farmers' capability and capacity to support an ethos of environmental stewardship, as part of a vibrant, resilient, and profitable sector based around thriving communities. Protecting and enhancing New Zealand's natural capital and economic opportunities and the ecosystem services they provide is fundamental to the sustainability of the sector and to New Zealand's wellbeing for current and future generations. 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.

New Zealand is also the world's largest producer of farmed deer. The main products marketed from deer are venison and deer antler velvet and approximately 95% of products are exported. In the year ending 30 September 2018, deer products were worth $322 m in export receipts to New Zealand.

Deer Industry New Zealand is a levy funded industry-good body established by the Deer Industry New Zealand Regulations 2004 under the Primary Products Marketing Act 1953 to promote and assist the development of the deer industry in New Zealand. DINZ's levy payers are producers and processors of venison and velvet. There are roughly 1,400 deer farmers and 9 venison processing plants.

The industry is the youngest pastoral-based industry in New Zealand (the first deer farm licence was issued in 1970) but provides diversified markets and additional revenue to and complementary land use with other pastoral farming industries. Indeed about 80% of deer farmers also farm other livestock species and/or arable crops.

The deer industry shares concerns with all the other pastoral-based industry bodies but has particular affinity with the sheep and beef industry:

a. deer farms tend to be multi-species;

b. products derived from deer farms are similar (venison alongside beef and lamb, annual velvet harvesting alongside wool);

c. deer farms occupy the same land classes, run similar production systems (breeding, venison finishing/velvet), and have similar levels of stocking rates and inputs.

1.2 Our shared views

Our sectors support the Paris Agreement and the ambition to keep global warming below 1.5 degrees. We are committed to playing our part to make this happen. To do this, our farmers need to be recognised and empowered to make the changes necessary. On top of this, the rest of the New Zealand economy must also be committed to making changes in a way that is fair and equitable across all sectors.

Taking a global leadership position on climate change will be difficult, but for this to happen government policy must be clear, consistent, and based on sound evidence. Policies must provide people and businesses time to plan and understand what their role is and must also be flexible enough to adapt when new science and understanding of issues is available and proven.

Pastoral agriculture is one of the few sectors that has the potential to not only reduce its contribution to global warming, but to reverse it through modest methane reductions and carbon sequestration. Understanding how this can be achieved and recognised, as well as appropriate incentives, should be a priority area for any national plan to achieve the targets set out in the Paris Agreement.

While the agricultural sector is a significant emitter of greenhouse gases, this does not mean that it is responsible for the equivalent amount of global warming. The IPCC recognises that short-lived gasses, such as biogenic methane (methane originating from ruminant animals as part of natural fermentation during the digestive process), does not have the same impact on the climate as methane originating from fossil fuel sources.

Because of this, the IPCC in its AR6 report said that: new emission metric approaches such as GWP* and CGTP are designed to relate emission changes in short-lived greenhouse gases to emissions of CO2 as they better account for the different physical behaviours of short and long-lived gases. The IPCC goes on to therefore recommend that the GWP100 metric developed in the 1980's not be used for biogenic methane, and instead a more modern metric such as GWP* or CGTP be used to measure the warming effect of biogenic methane,[1].

We mention this not to shirk our responsibility for playing our part in achieving New Zealand's Paris Agreement commitments but because understanding how our sector impacts climate change and regulating and incentivising appropriately will be crucial for keeping global temperature rises to 1.5 degree below preindustrial levels while profitably producing food that is farmed sustainably and within expected environmental limits.

Focusing on net emissions, rather than warming effects of methane and nitrous oxide is likely to alienate farmers, many of which are well-versed in the latest climate science. Farmers are agronomists who understand biological, ecological, and agricultural systems. It is this knowledge which needs to be recognised and directed into finding solutions for climate change without compromising food production.

The Koronivia Joint Work on Agriculture recognises the unique potential of agriculture in tackling climate change and the importance of food security. New Zealand is one of the most efficient producers of food in the world and supplies high quality food to over 100 countries, improving food security and nutrition worldwide. Because of this, we consider that the current targets for reductions for New Zealand's agricultural emissions do not adequately take the Koronivia Joint Work on Agriculture into account, let alone reflect current science (refer above).

As people who work on the land all year round, farmers understand the climate is changing and will be among the first people to be impacted by climate change professionally, economically, and socially. Already these impacts are being felt with extreme weather patterns, such as floods, droughts, and wildfires. A warming climate will also have other

[1] https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf chapter 7, pg 1738

impacts on farmers, such as changing animal health and welfare requirements, grass and crop production, and exotic pests establishing in New Zealand more easily while existing ones expand their range. These challenges are a result of a changing climate and cannot be avoided, only prepared for. What can be avoided, are policy and regulatory settings that exacerbate impacts on rural communities, such as unconstrained carbon farming.

While there is still significant work to do globally to meet a goal of limiting warming to 1.5°, farmers need to be recognised for their efforts (both past and future) in achieving this.

New Zealand drystock farmers are world leaders in their efficiency and their approach to working with nature, rather than against it. This has resulted in low input, low emission production methods that incorporate water quality and biodiversity into farming systems. The Farm Assurance Programme Plus, which includes these areas and is audited by third parties, will verify this to the New Zealand public and international consumers. This approach is not novel and would be described as regenerative overseas - in New Zealand it is just how we do things here.

The below submission will cover how the Emission Reduction Plan relates to sheep, beef, and deer farming and how our sectors see our contribution towards New Zealand achieving its commitments to keep warming under 1.5°.

2. Our work on Biological Emissions

2.1 Previous Gains

New Zealand sheep and beef farmers are among the most efficient in the world, with a reduction of GHG emissions of 30 percent since 1990, including methane reductions of 31 percent. 1990 is used as the base year as it is when we consider the effects of the subsidy system of the 1970's and early 1980's had completely disappeared, meaning emission reductions since then have come about as a result of productivity and efficiency gains, rather than just a change in a subsidy policy causing a change in farming practices.

Over this time sheep and beef production of product has only reduced by 6 percent. These efficiency gains have come from improvements in management practices such as lambing percentages through increased survivability and fertility, genetics, feed efficiency and growth rates. New Zealand sheep and beef farmers are justifiably proud of these improvements and now have one of the lowest carbon footprints in the world, calculated to be around half of the global average (Ledgard et. al, 2011)[2].

These "technology" improvements have produced more with fewer inputs, provided eco-efficiency gains, and in terms of the drystock sector substantially reduced their warming impact. However due to low hanging fruit already being picked, this rate of improvement may not be able to be sustained. It should not therefore be assumed that this can continue at the same pace. Looking to the future, drystock farmers will require increasingly sophisticated support and land management advice, should climate science call for additional warming reductions from their farm businesses.

Present day New Zealand farmers have an in-built capacity for change- reflecting the variable landscapes, climates, livestock species, and markets they farm in and for. The shifts in the industry following the removal of production subsidies in the late 1980s are an extreme example that resulted in new farming systems being developed to maximise economic opportunities within the constraints of the natural environment. These changes saw sheep and beef farmers adapt to climatic, societal, consumer and regulatory requirements, provided there was the flexibility and time to do so. However, the reforms of the 1980s were not without

[2] Note that an updated Lifecycle Analysis of New Zealand's Sheep and Beef sector emissions is expected to be released by January 2022.

significant social and economic costs to the industry, farming businesses, and the rural communities they supported.

2.2 Current Work

Sheep, beef, and deer farmers are committed to playing their part in the actions needed to achieve New Zealand's climate change objectives.

He Waka Eke Noa

We are an active participants in *He Waka Eke Noa* – the Primary Sector Climate Action Partnership, which aims to implement a framework by 2025 to price agricultural greenhouse gas emissions and build the agriculture sector's resilience to climate change. This includes ensuring that 25% of farmers are measuring and managing their emissions by the end of 2021 and that 100% of farmers are measuring their emissions by the end of 2022.

It is our hope that He Waka Eke Noa can be an example of farmer-driven climate action that can not only succeed in New Zealand, but also serve as a template for similar agricultural climate change action internationally. While the outcomes of the He Waka Eke Noa partnership are not yet finalised; we would encourage the New Zealand Government to embrace the principles that underpin this historic partnership and promote cooperation with farmers to develop bottom-up agricultural climate policies.

The aim of He Waka Eke Noa is to develop a system for measuring, managing and reducing agricultural greenhouse gas emissions, rather than simply putting farm products in the ETS. We can agree as a partnership that pricing emissions only at the 'processor' level is not an effective way to provide an incentive for farmers to adopt effective and diverse mitigation activities on-farm. The partners are aiming to consult with farmers and growers on the emissions pricing options in February 2022. The feedback from this consultation will help inform the Government's Emissions Reduction Plan content.

The Government could support sheep, beef and deer farmers by promoting New Zealand's world leading split gas approach internationally.

Farm Assurance

This year B+LNZ has rolled out our Farm Environment Plan and supported the implementation of the Farm Assurance Programme Plus (FAP+), which both include content on greenhouse gas budgets, as well as biodiversity and water quality modules. The greenhouse gas budget aims to identify methods to measure and manage emissions on farm and we are on-track to have 25% of our farmers complete this module (or an equivalent) by the end of 2021.

GHG Calculation

Beef + Lamb NZ has also designed a greenhouse gas calculator that farmers can use to understand their emissions and is currently working with partners to provide workshops where farmers can get help using the calculator and create an action plan to manage greenhouse gas emissions. These workshops are in partnership with meat processors and other industry bodies such as DairyNZ.

2.3 Needs for the Future

Currently options for farmers to reduce and manage emissions are limited and will continue to be so until relevant science can be completed, quantified, and rolled out to farmers. For many livestock farmers the only ways emissions can be managed are to:

a. reduce the feed intake by their livestock either by reducing total numbers or decreasing their time on-farm. This seems inequitable for farms with stable or declining livestock numbers given current science on biological methane (see the 6th IPCC report) suggests that such farmers are not contributing to warming;

b. plant trees in order to sequester carbon and offset the warming impact of long-lived gasses such as nitrous oxide.

Because New Zealand farmers are already among the most efficient in the world, with a greenhouse gas footprint of around half the global average for both sheepmeat and beef there is concern that any reduction in New Zealand production will be made up elsewhere, by less efficient producers. In short, not only would New Zealand farmers potentially be asked to reduce production when it is not contributing to warming, but that food production is likely to shift to less efficient producers offshore.

New Zealand's food & fibre sector is committed to being the most efficient producer of low emissions, high quality, and safe food & fibre in the world. Our focus as a sector is sustaining our success, as consumers and communities increasingly seek sustainably produced food. New Zealand farmers' hard work and investment over decades has contributed to this world-leading status. Our unsubsidised grass-based, outdoor grazing system is unique globally and is critical to our success.

Financial support for industry initiatives such as Taste Pure Nature – where the purpose is to raise the awareness, preference and ultimately increase value from our natural and sustainable farming systems would strongly benefit farmers and the countries long-term prosperity.

The Paris Agreement recognises the importance of safeguarding food production and New Zealand is a vital part of the international food production system. Red meat production through pastoral grazing is an extremely efficient way of producing highly nutritious food with minimal inputs. Much of New Zealand's land is not suited to crop production, and therefore sheep, beef, and deer systems provide a viable and sustainable means of providing food.

Given our strong ability to provide quality protein sources efficiently and effectively, it is key that our farmers have viable options to support their actions on farm to reduce or limit their warming impacts. Continued efficiency gains will not be able to deliver on emissions reductions in the same way as previously. We must support the development of technologies that can provide a way to ensure warming impacts are limited without negatively impacting farm productivity and profitability.

These technologies and tools must be developed and implemented at pace. As we stated in our submission on the Climate Change Commission's initial advice, we do not agree that the reductions proposed for biological methane are reasonable given their increased ambition from what is legislated within the CCRA.

We, along with other industry bodies, are partners in the Pastoral Greenhouse Gas Research Consortium (PGgRc), which exists to provide knowledge and tools for New Zealand farmers, so they can mitigate greenhouse gas emissions from the agricultural sector.

Despite already being among the most climate friendly farmers in the world, New Zealand farmers are working hard to be even better. Since 2003 the Pastoral Greenhouse Gas Research Consortium (PGGRC) has directed about $75 million of industry and Crown funding to the challenge of lowering New Zealand agricultural emissions. This includes by attempting to decouple the relationship between the feed consumed by a ruminant animal and the methane produced.[3]

While the program has yet to commercialise a breakthrough technology, valuable knowledge has been gained and exciting progress has been made in developing the following potential mitigation tools, which could be applied to not only New Zealand farms, but to all farms globally:

- A methane vaccine.
- Methane feed inhibitors.

[3] PGGRC & NZAGRC, 'Reducing New Zealand's greenhouse gas emissions: How We are getting there', 2019.

- Nitrification inhibitors
- Low methane sheep genetics; and
- Low nitrous oxide producing feeds.[4]

New Zealand can make the greatest contribution to reducing global emissions without harming global food security by accelerating the investment in the research and development of agricultural emissions mitigation tools. Any tool that is able to come onto the market must be able to be included into the Greenhouse Gas Inventory and Ministries must be resourced to do this at pace.

The New Zealand Government is demonstrating leadership in coordinating international efforts to do this. The Global Research Alliance (GRA) is an international organisation that was launched by New Zealand in 2009 and now has 62 member nations from all regions. However, there are many global forums where New Zealand can showcase the leadership position we have in this space. The government has a role to be at these and promote the good work that our farmers and partners are doing.

The GRA is focused on research, development and extension of technologies and practices that help deliver ways to grow more food (and more climate-resilient food systems) without growing greenhouse gas emissions.[5] New Zealand continues to host the secretariat of the GRA and is also co-chairing the livestock Research Group.[6] We strongly support the leadership position taken in the GRA by the New Zealand Government

We recommend that the Government continue to support research and development on mitigation tools via industry partnerships and accelerate support for the research and development on mitigation tools via Crown Research Institutes (CRIs), such as the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC). We also request that the Government continue to support the GRA.

We also recommend that industry partners can work with others, including the Aotearoa Circle and MPI to consider where access to additional finance would overcome transition barriers (see pg 36 in discussion document).

In order to support farmers and understand and manage their emissions, these activities need to be scaled up and expanded. Farmers want to do their part in meeting NZ's targets and adapting to a changing climate but need to have the tools, land information and research to support them.

3. Comments on the Emissions Reductions Plan

New Zealand farmers want to play their part in achieving warming neutrality but do not consider that the methane reduction targets legislated for in the CCRA are based on the best available science. We strongly support the split gas approach taken in the CCRA and have been very disappointed in an unwillingness of the Government to complement the split gas approach taken in domestic targets with a split gas Nationally Determined Contribution (NDC).

Within the discussion document, there is no distinction made between the targets for short- and long-lived gases by 2030 which we find fundamentally concerning. The Emissions Reduction Plan must separate out the goal of net zero carbon dioxide and nitrous oxide by 2050 from a goal of achieving a robust, science-based reduction target for methane. As the Paris Agreement focuses on limiting global warming rather than limiting emissions, all emissions reduction targets, emissions budgets, and climate policies should therefore also

[4] https://www.pggrc.co.nz/about

[5] https://globalresearchalliance.org/

[6] https://globalresearchalliance.org/country/new-zealand/

focus on the warming effect of those emissions, not simply the volumes of emissions themselves.

The IPCC has made it clear that treating short-lived and long-lived gases using a GWP100 method is inappropriate, given what we know about how methane behaves in the atmosphere. The more appropriate GWP* metric should be used for reporting and setting targets to better reflect the warming impacts of short- and long-lived greenhouse gases.

We have said before that we believe that the targets for 2050 in the CCRA are asking the agricultural sectors to do more than simply achieve no warming. If the Government's current targets are maintained, the actions of the agriculture sector to reduce methane would have a cooling, rather than warming effect – in effect cross-subsidising other sectors through reductions to pastoral farming.

This, and any future Emissions Reductions Plan should focus on what our warming targets should be over 5, 10, 15 years and beyond, and then use the warming contribution of different gases to calculate appropriate reduction targets for gases based upon that. This will ensure alignment with the 'split-gas' approach taken within the CCRA.

Ensuring that the warming from various emissions is being accurately accounted for is fundamental to the integrity of climate policy in New Zealand. Lumping all gases together into a single emissions budget is simply not suitable given our split gas targets. **We therefore do not support the Government's proposed emissions budgets, as set out in table 2 on page 10 of the document.**

Our farmers also see that current targets are asking more of them than for other sectors and are concerned about the significant costs and lost production that they will need to occur to meet these targets. In order for farmers to be part of the solution, previous reductions in emissions should be acknowledged, as well as the part that agriculture has to play in meeting future targets. Any targets and policies should be clearly explained, fair and equitable. If one sector is being asked to make sacrifices for another, they should be rewarded for doing so and their contribution acknowledged.

Again, we must take a science and evidence-based approach to managing our contribution to global warming and reducing our greenhouse gas emissions.

4. Extension Resources

The increasing demands of New Zealanders and consumers will require a change in mind set for many farmers, as well as support to understand these new requirements and where they have come from. Beef + Lamb NZ and DINZ, along with other industry partners, is working hard to prepare farmers for this new regulatory environment through research, extension activities, communicating requirements and tools for farmers.

We are eager to work with government, and other partners, to ensure that roles and responsibilities are shared effectively. This is especially true for 'extension programmes' mentioned within the discussion document.

Note that these kinds of farmer knowledge building and sharing programmes have been supported by central, territorial, and industry bodies at different points in time. In recent times, industry bodies like ourselves have been key and trusted advisors that many of our farmers turn to. We do not expect advice on emissions management and climate adaptation to be any different. However, we do see it will be important to work with partners to ensure that there is the right support delivered by suitable people as we see potential for demand for advice on a scale that our organisations could not meet on our own.

Information and guidance will help prepare farmers, so they that they know their greenhouse gas numbers, have a management plan and knowledge of the options they can take. We are committed to supporting our farmers but may not be able to meet demand given resource restraints. Farmers must be given confidence that they can access the tools and knowledge

they need and this requires commitment to a well-funded, robust research and development programme to provide mitigation solutions on the horizon.

5. Forestry and Carbon Offsetting

5.1 Previous works

There is a significant amount of carbon sequestration already happening on pastoral farmland, including land used for dairying. This sequestration has resulted from retiring land that was unsuitable for farming and letting it revert to native bush. Since 1990, the land area for sheep and beef farming has reduced by 2.57 million ha. While not all of this reverted to native bush as some of it has gone into dairy, forestry, or horticulture, farmers have also retired and covenanted land that is uneconomic or unsuitable to farm.

Research completed in 2019 found that almost a quarter of native vegetation in Aotearoa is on sheep and beef land. Additional research done in 2020 found that this vegetation is storing anywhere from 10,394 to 19,665 kilotonnes of carbon which equates to being 63% to 118% carbon neutral. Much of this vegetation also provides valuable habitat that in turn enhances the country's provides indigenous biodiversity resource.

Our farmers are also active participants in the Queen Elizabeth II Trust. As stewards of covenanted sites our farmers are collectively spending an estimated $25 million of their own money (including the opportunity cost of not using the land in other ways) every year maintaining and enhancing their existing covenants." This also includes an estimated overall financial commitment of around $1.1 – $1.3 billion to establish and protect open space covenants. " [7]

We have been, and can continue to be, part of the solution. Our levy payers are active stewards of the trees on their lands and are eager to integrate more trees into the landscape. There is a critical need to expand native forest establishment to provide long-term carbon sinks. These planting and restoration activities provide a wide array of other benefits as well that our farmers are very conscious of given the benefits associated with their existing vegetation.

However, farmers need to have confidence that land-use decisions will not be made in isolation and without due diligence for the need to have continued land-use flexibility and rural community wellbeing.

5.2 Forestry in the Emissions Reductions Plan

Aotearoa is at the relative beginning of its transition to a low emissions economy. A price on some greenhouse gas emissions via the Emissions Trading Scheme (ETS) has been in place since 2008. However, there is little evidence that the ETS has driven emissions reductions in the sectors subject to a carbon price (MfE, 2015).

The relatively 'low' price faced previously by emitters, the ability to receive a 'two for one' deal on their obligations, and the flood of offshore units within the scheme in the late 2000s have all been identified as contributors to the ETS's lack of delivery (MfE report). However, it is arguably the unlimited ability to 'offset' emissions with carbon forestry units which is limiting emissions reductions within the scheme.

As part of meeting the emissions reductions budget set for 2030 and beyond, real carbon emissions reductions must be made. As noted within the discussion document these reductions are intended to occur mostly in the energy and transport sectors (pg 12, 2021).

However, as long as unconstrained forestry offsets are allowed within the Emissions Trading Scheme, there will be a drive from emitters and investors to plant forests instead. This drive to plant our way out of the problem, rather than reduce carbon emissions, will become more

[7] https://qeiinationaltrust.org.nz/protecting-your-land/

pronounced as the price for carbon units increases within the NZ ETS (Climate Change Commission, 2021).

B+LNZ and DINZ do not agree that the increased generation of carbon units from forest planting "is a low-cost way to meet our 2050 net zero target (pg 116, disc doc)." A rising price within the NZ ETS is not a true indicator of the price associated with land use change or the price paid by current and future generations for not making emissions reductions now. There are very real consequences for rural communities, and their long-term viability, if current planting rates are not restricted.

Evidence from research completed in Gisborne and suggestions from the Wairoa district highlight that the consequences of afforestation can be felt disproportionately within rural communities. These impacts are based on the assumption that large swathes of land are converted with little promise of human involvement in the land and its management over the long term. Thus, it is predominantly exotic carbon forestry operations, where there is no intension to harvest, that the key concern of B+LNZ and DINZ.

Based on the most recent estimate by MPI, an estimated 45,300ha were established in 2021 with 77% being production forestry and 23% being for 'permanent' or carbon forestry[8]. This is a change from previous forest plantings, where most are intended to be harvested.

The amount of exotic pine planting completed this previous winter is almost double the Climate Change Commission recommended planting rate of 25,000ha/yr until 2030. Based on evidence commissioned by Beef and Lamb New Zealand in 2021, there was an estimated 127,376ha converted to exotic plantation forestry between 2017 and 2020, 73% of which has been whole farm conversions (92,118ha). This equates to close to 32,000ha of planting on average per year; 7,000ha more per year than recommended by the Climate Change Commission.

This conversation has not occurred purely on 'marginal' land. Rather, planting has predominantly occurred on LUC Class 6 (52%) which is prime sheep and beef breeding country. In other words, whole farms have been converted to forestry rather than parcels of land within a farm that are unsuitable for livestock. It is not clear based on the evidence we were able to gather how many of these forests are purely 'carbon forestry' as compared to production forest.

This kind afforestation is not sustainable. Unmanaged monoculture carbon forests are unlikely to be climate resilient or provide the best habitats for our native flora and fauna. Additionally, they are unlikely to provide the variety of wellbeings, that is needed to ensure rural communities can thrive.

The discussion document also highlights estimations that no more 'suitable' afforestation land will be available for planting within 30-50 years if current planting rates continue. This 'suitability' is only defined as being land that is relatively close to port and on non-highly erodible lands. The Land Use Classification or productivity of this land is not considered in these estimates. This assessment is short-sighted and does not reflect the wide range of values for our land nor the ability for production forestry to be integrated within farming businesses and communities.

Decisions on land-use made today will have serious consequences for future land users and emitters. The severity of these consequences will be determined by how we determine the 'right tree, for the right place'. As highlighted by the Climate Change Commission, the impacts of any afforestation will "depend on the scale, pace, and species of trees that are grown, the purpose for which the trees are grown, the type of land that is afforested, and the land use that is displaced" (pg 162, Climate Change Commission Final Advice to Government, 2021).

[8] https://www.mpi.govt.nz/dmsdocument/46564-Afforestation-and-Deforestation-Intentions-Survey-2020

Immediate action must be taken. The intention to provide advice by the end of 2022 that may not result in changes until 2025 is too little too late. Given the pace of change we are seeing, and the likely increase in the carbon price in the future, decisions will need to be made in the first half of 2022, prior to winter planting.

To be clear, B+LNZ and DINZ are supportive of integrating exotic and native vegetation within the landscape and pastoral farming systems. However, the scale and pace of change currently unfolding is not sustainable for our communities or ecological systems and there is an immediate need to adjust existing policy settings.

5.3 Alternative Carbon Farming Policy Settings

Currently, there is too much opportunity for carbon emitters to 'buy their way' out of emissions reductions at the expense of rural communities. To get 'the right tree in the right place', or match land use to the land, we need a considered plan of action based on providing people with the tools and information to make the right decisions. This is not in place and must be included as part of the Emissions Reductions Plan.

There is a plethora of ideas on how to best manage the amount of exotic forest planting, determine its location, and support new (mostly native) plantings. The government must work with industry groups and other experts to develop policy options and implementation needs. A summary of options for limiting the scale of carbon forestry activities include:

- Limitations on the supply of carbon forestry offset units, especially those tied to exotic 'carbon-only' forestry operations.
- Limits or additional charges on the ability of emitters to surrender forestry offset units
- Limits on the number of forestry participants or area of forest that can be entered in the scheme
- Increased scrutiny of investment activities within carbon forestry operations, especially those as approved by the OIO.

We do not wish for any policy changes to reduce the certainty provided to landowners that integrating a variety of forest and tree types into their pastoral production systems is always going to provide a variety of benefits. We also do not wish to limit farmer's ability to establish exotic forestry (and carbon forestry systems) on parts of their landscape that are well suited to these kinds of production systems.

We are happy to work alongside government and other affected parties to identify and implement options for tackling this issue. We see significant opportunity for carbon farming limits, alongside collective community decision-making around land management, as a platform to support robust, long-term land management decisions. for communities to be engaged and supported when facing the challenges ahead.

5.4 Transition Support

B+LNZ is committed to supporting its farmers to increase on-farm plantings and protect existing vegetation to provide nature-based solutions to global warming.

A summary of options for increasing the scope of on-farm planting, and particularly native planting, as part of an integrated landscape include:

- Create a premium Permanent Forest Unit, in addition to the permanent forest category in the NZ ETS.
- Developing an ecosystem services (i.e biodiversity) payment scheme that provides recognition for work already being completed on-farms to preserve and protect native vegetation.
- Re-establishing grant schemes to support farmers manage the upfront costs associated with plantings

- Increase support for seasonal as well as year-round labour forces able to prepare sites, grow plants, establish plants, manage pests, and maintain sites to ensure successful establishment.
- Increase support for programmes which support the protection of existing native bush, such as the QEII trust (which is currently unable to meet demand) to enable farmers to preserve precious native forests and ecosystems.
- Increase support for programmes and labour forces which provide on-farm advice for the integration of trees within the farming landscape whether this be for carbon removal, timber/fibre source, erosion control, habitat provision, animal welfare, or alternative fodder reasons.

Farmers will need to be recognised for their existing stewardship activities which have had a positive impact on the climate (e.g, a sustained decrease in emissions and/or an increase in their carbon sequestration) in order to expand planting and protection activities. Programmes such as the Ballance Farm Environment Awards or the Deer Industry Environment Awards are one way of doing this but the above list of supplementary measures deserve careful consideration.

This is because we see a variety of policy approaches will need to be implemented at the same time in support of transition. One kind of 'lever' is not enough – we need a coherent plan of action that sets out the roles and expectations of different policy levers and support programmes. Such a plan should have the following overall objectives:

a. Ensure that land use decisions are made with short and long term interests in-mind
b. That permanent forests are able to provide multiple nature-based solutions
c. That land use flexibility is enabled within the landscape
d. That there are not disproportionate impacts faced
e. That support is provided to those farmers who are interested in taking advantage of the benefits that trees within their farm system can provide for their climate resilience, business resilience, water quality risks, and biodiversity provision.
f. Offsetters (not investors) have clarity about the availability of offsets and when these would be available to utilise.
g. Land use decisions for forest systems (permanent or not) are made considering the likely impacts of a changing climate within those landscapes.

The proposal to have a 'broad' package to support the establishment of native vegetation in place by the end of 2023 needs to be brought forward to ensure that farmers have the skills, capital, labour, and tools earlier. We are eager to co-develop this with officials and other parties to ensure effective delivery and implementation.

6. Other Matters

It is important that unique challenges being faced by rural New Zealanders are acknowledged and considered when developing policy. As highlighted by Federated Farmers, the rural proofing guidance developed for use by policy officials should not sit dormant. It must instead be prioritised to ensure that central government policy is not only fit-for-purpose for those in urban centres, but for all New Zealanders. Valuing, prioritising, and applying the rural proofing guidance across all climate policy will go a long way towards ensuring that such policy does not unnecessarily and disproportionately impact rural New Zealanders.

The government must give particular attention to the consequences for already stretched or struggling rural communities from intended reforms. Better implementation of the rural proofing policy should help, as would direct engagement with affected communities to work through both the consequences that need to be avoided and options for addressing those

impacts that cannot. We look forward to working with officials on how this engagement can best be supported.

When considering the principles used to determine the actions and plans we put in place for the Emissions Reductions Plan, we support the principles highlighted but note that clear criteria and definitions will be required in order to ensure effective trade-offs. This is particularly the case for the principle of having a 'fair, equitable, and inclusive' transition as well as 'a clear, ambitious and affordable path.' These could be very challenging to deliver in practice. Thus, further clarity is required on how these potentially mutually incompatible criteria will be traded off across and within sectors and communities.

We also request that the Government consider adding the following as an additional principle:

Principle 6: Aligns with the United Nations Sustainable Development Goals.

The actions New Zealand takes to meet emissions budgets and targets should recognise that tackling climate change goes hand-in-hand with achieving improvements across other sustainability objectives, as outlined in the 2030 Agenda for Sustainable Development

This principle will support the incorporation of nature-based solutions as well as integration of policy approaches.

When considering the suit of proposed strategies and actions planned for within this discussion document, a core consideration must be the provision of certainty. This certainty will provide the confidence that farmers need to ensure that their planting or emissions reductions decisions made today will not harm their position in the future. There has been a great deal of churn in climate change policies in recent years, as different aspects of the overall programme of policies have been reviewed, adjusted and in some cases newly-introduced. Further complicating matters has been the habit of central government decision makers to announce the decisions they have made well in advance of the policy work having been done to demonstrate the what, to whom, and how such policy will occur on the ground.

We also do not think that the waste proposals in the discussion document should be extended to farm dumps. These proposals would be impractical, unreasonable, and not cost-effective for farm dumps and would limited methane emissions reduction potential.

Lastly, the assumption that the implementation of integrated farm planning will automatically decrease the compliance burden and costs for farmers is unfounded. We do not have confidence that settings proposed are detailed enough to ensure effective and efficient implementation. We look forward to working with officials on how best to deliver our shared objective of ensuring all farmers have a farm plan within the next decade.

7. Conclusions

A long-term strategic lens to our research and policy settings is needed so that the critical questions and actions can be addressed.

The big challenges we are facing like improving water quality, managing warming, adapting to a changing climate and adding increased value to our products, require substantial, coordinated and consistent long-term research investment, investment and policy certainty, as well as political ambition. This investment should be based on a shared strategy that brings together the expertise of our best researchers and practioners to achieve our collective economic, social, and environmental aspirations. The goal posts cannot continually shift as this will likely pause action and dent confidence. We note that there are signals from the market too, but getting the regulatory environment correct is as equally important.

This strategic lens to our short- and long term decision making must focus on managing our contribution to **warming** and ensuring effective and efficient food production in a warming world.

Current and previous governments have not limited the extent of carbon forestry, given it is a 'low cost and easy' option. We must find ways to limit carbon forestry offsetting and decrease our fossil fuel emissions. This will require a wider approach towards emissions reductions and removals than reliance on the NZ ETS alone.

B+LNZ is committed to supporting its farmers to increase on-farm plantings and protect existing vegetation to provide nature-based solutions to global warming. We are also committed to supporting our farmers to increase the efficiency of their farming systems that can result in overall emissions. However, farmers could easily be put into a position of being asked to do more, without the right tools on-hand.

Continued investment in research, development, implementation, and extension is key. Our actions must be science-based and reflect the most up to date data and research, especially with regards to the warming effects of pastoral food production.

As part of our low emissions transition, we must consider our land as precious and in need to have continual stewardship, regardless of the current or future land-use. We also must acknowledge our farmers as key stewards of their land and leaders in providing the solutions we need as part adapting to a warming world.

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