T +64 4 381 4050 E enquiries@pamu.co.nz

Landcorp Farming Limited Level 2, 15 Allen Street PO Box 5349, Wellington, 6140 New Zealand

P A M U N E W Z E A L A N D . C O M

18 November 2022

PAMU

Ministry for the Environment PO Box 10362 Wellington 6143 Email: AgEmissionsPricing@mfe.govt.nz

Attention: Submissions Analysis Team

## Te tātai utu o ngā tukunga ahuwhenua

## **Pricing agricultural emissions Consultation**

- 1. Pāmu (brand name for Landcorp Farming Limited) welcomes the opportunity to provide feedback on the Pricing Agricultural Emissions Consultation (Consultation).
- 2. A table of each of the Discussion Document's questions together with our responses is Appended to this letter.
- 3. As a large and diversified business, Pāmu supplies meat, milk and timber processing companies and is a member of industry bodies relevant to our business (including Business NZ, Federated Farmers, DairyNZ, Beef + Lamb and the Sustainable Business Council). These organisations will submit on behalf of their suppliers and members.
- Pāmu acknowledges that the Proposal will have significant impact on agricultural practices in New Zealand and affect some farmers more than others due to their land attributes and enterprise mix. This submission comments on aspects of the Consultation that directly impact Pāmu's farming business and where we believe unintended consequences might arise.
- 5. Pāmu, a state-owned enterprise, has extensive involvement across the agricultural sector. Our portfolio includes farms that produce bovine and specialty milk, beef, lamb, venison, wool, velvet, avocados and timber, among other products. Pāmu's 110 farms cover 363,488 hectares and are dispersed nationally.
- 6. Pāmu stands for best practice in sustainable and safe farming, and for the unique provenance of New Zealand foods, nutrition products and fibre on global markets. As a State-Owned Enterprise, in addition to making commercial returns, Pāmu has an important role to play in evaluating technologies and demonstrating at a farm systems scale how these could reduce the environmental effects of farming and improve farming's social licence to operate.
- 7. Pāmu partners with others to develop best practice in farming systems and to design 'future fit' farming systems that deliver value across six capitals we monitor (and report on) and embrace Te Taiao, a deep relationship of respect and reciprocity with the natural world.

- 8. Pāmu is committed to reducing its climate impact through emissions reduction and strengthening climate resilience through adaption. Our work in climate response is evolving including setting a Science Based Reduction Target, ensuring climate risk mitigation is embedded in the organisation, and responding to market and consumer requirements.
- 9. Our FY21 GHG footprint was 722,237 tCO<sub>2</sub>e. We, like other farmers, face significant challenges in reducing our emissions; hence our strong focus on collaborating with others to identify technologies and practices that will enable this to be achieved efficiently.
- 10. Initiatives underway at Pāmu to reduce emissions include all 110 farms gaining Toitū 'carbon reduce farm certification', diversification of land use, and partnership with Focus Genetics and AgResearch to breed low methane emission livestock. Further work, developed as part of the Pāmu response to Action 13.4.2<sup>1</sup> of the Government Emissions Reduction Plan, includes:
  - Understanding the GHG efficiencies gained through the Dairy Beef breeding programme;
  - Exploring the establishment of new methane measurement facilities for livestock in the North and South Islands;
  - Identifying and implementing low emission technologies for dairy farm effluent ponds;
  - Hosting field days to share learnings and gain farmer and expert input; and
  - Undertaking scenario modelling of low emissions practices on farms (i.e., a digital twin approach to identify the optimal transition pathway).
- 11. In addition, Pāmu is continuing to work with research agencies and suppliers/customers to test and trial novel practices that could assist the sector to achieve emissions reduction targets.

Pāmu would be happy to discuss any aspect of this submission with the Ministry for the Environment.

Yours sincerely,

arhow

Dr Warren Parker Chair

LL.

Mark Leslie Chief Executive

<sup>&</sup>lt;sup>1</sup> Which requests Pāmu identify options to accelerate work in emissions reduction and demonstrate sector leadership

## Appendix: Responses to Consultation Questions

Question		Pāmu Response	
Sectio	Section 3		
1.	Do you think modifications are required to the proposed farm-level levy system to ensure it delivers sufficient reductions in gross emissions from the agriculture sector?	Pāmu supports the use of split gas methods, farm level measurement, use of levy funds for sector related R&D, and recognition of (and payment for) low emission practices and recognition of qualifying sequestration.	
		As a general comment, Pāmu considers that:	
		(a) The policy objectives of being Effective, Practical and Equitable (as outlined in the Regulatory Impact Statement) are well considered and analysed;	
		(b) However, there are some areas that require changes and/or clarification to ensure the right behaviour on farm is incentivised and rewarded – described further below for each consultation question.	
		Pāmu's overarching view is that the proposals should as much as possible empower farmers and reward their good choices to mitigate the effects of farming activities on climate change.	
		The Proposals should also be implemented in a manner that is equitable across the agricultural sector, recognise the other challenges currently faced (such as efficient data collection (enter once for multiple uses)) and reflect more holistic thinking with regards to environmental outcomes (e.g, not result in adverse outcomes for other environmental issues currently facing the sector in areas such as freshwater and biodiversity).	
		Thus, Pāmu strongly encourages thinking about farm-level change in an integrated way – as farmers do – rather than in a 'climate silo'. To illustrate, establishment of riparian plantings contributes to carbon sequestration, biodiversity, water quality, animal welfare (shelter, shade) and landscape aesthetics. Further, any farm-level solution to meet compliance should also be considered in relation to its impact on and value to market assurance and access, sustainable finance, and nature-based solutions. In this regard measures for regulation, markets and finance should as much as possible be consistent.	
2.	Are tradeable methane quotas an option the Government should consider further in the future?	Pāmu has no comments to make	



Question		Pāmu Response
3.	Which option do you prefer for pricing agricultural emissions by 2025? - A farm-level levy system including fertiliser - A farm-level levy system and fertiliser in the New Zealand Emissions Trading Scheme (NZ ETS) - A processor-level NZ ETS	<ul> <li>Pāmu has a strong preference for the farm-level levy system to include fertiliser. As noted above this directly recognises and rewards farmers for making adjustments that reduce emissions and improve other environmental and animal welfare outcomes.</li> <li>The inclusion of fertiliser at a farm level system would allow consistency for emissions measurement and control over outcomes, and reward good fertiliser management practices. Efficient inventory management on farm would also enable optimisation of purchase and application decisions.</li> </ul>
4.	Do you support the proposed approach for reporting of emissions?	Pāmu is pleased to see reference to aligning data collection requirements with other existing purposes. Data collection, management and use is currently a major administrative burden for the farming sector with a multitude of assurance (market) and compliance (regulatory) reporting and audit requirements, using numerous bespoke systems.
		Pāmu is concerned that independent systems, each requiring independent data entry by farmers, are emerging to meet climate, freshwater and biodiversity requirements and, it appears, without due consideration for market assurance, sustainable finance, ecosystem service farmer and other needs. Given there are already number of tools used by industry for data collection, there is a real need to coordinate and configure (and in some cases consolidate) these to maximise the value from prior investment and draw on the substantial farm level data already collected.
		The use of current digital assets in the industry and the gathering and sharing of data from them is technically feasible and cost efficient. As the Aotearoa NZ Agridata Syndicate has shown, this will assure faster progress with digitisation of farm level reporting than creating another data collection platform. This could include utilising systems such as FarmIQ, of which Pāmu owns 54% of the shares. We see farmers as being the owners and stewards of their data and providing data to regulators and service providers on a permissioned basis.
		The capacity to align with international standards for GHG reporting (such as IS014064-1) should be incorporated into farm level metrics and where possible terminology and reference to overlaps made explicit. Failure to do this could cause unintended confusion and will make tracking of progress relative to international agreements and market expectations unnecessarily difficult. For example, is an operational or financial control approach to be taken when accounting for livestock?
5.	Do you support the proposed approach to setting levy prices?	Pāmu recognises the tension in setting a price that encourages farm-level emissions reduction whilst also maintaining farm viability. Appropriate testing of the impact of price settings on farm viability must occur – and thus the farmer's capacity to invest to achieve the changes necessary – this requires careful design and models

Question		Pāmu Response
		that effectively reflect actual farm systems and in which the "price setter" can have high trust/confidence. Further development and ongoing improvement of robustly validated models to inform price settings should be a priority workstream. Here the link to data in the digital system, referred to above, and the ability to collate real- time financial performance from a large sample of farms, could be powerful relative to the lagged data sets often relied on.
6.	Do you support the proposed approach to revenue recycling?	Levy funds should be directed into existing research bodies rather than setting up another funding body. For example, these could be used to accelerate work already underway/proposed with the NZPGRC and the Centre for Climate Action.
		The use of the levy to support improvements in sequestration measurement and data reporting should also be considered. Improving these two areas would have benefits for the overall implementation of any programme (though it is acknowledged this would direct funds away from activities that reduce emissions).
		Levy funds should be used for both short term and longer-term initiatives. However, an initial focus on completing initiatives that are nearly ready for widespread sector use should be the priority, so farmers have options available as soon as possible.
7.	Do you support the proposed approach for incentive payments to encourage additional emissions reductions?	Pāmu believes this is an essential component of the system and would like to see those taking the risks/costs associated with trials offered a higher incentive payment until the initiative is proven and available for widespread adoption.
		The incentive payments should be designed in a way to minimise adverse outcomes such as forcing a farmer to choose emissions reduction over other environmental outcomes such as freshwater improvements, biodiversity etc. (see earlier comments in Q1 regarding integrated design of future farm systems).
8.	Do you support the proposed approach for recognising carbon sequestration from riparian plantings and management of indigenous vegetation, both in the short and long term?	The question of what is in scope for recognising carbon sequestration should consider the broader benefits that such areas provide beyond carbon. Although a narrow definition of sequestration categories has been proposed this may exclude areas which, if included, would further enhance biodiversity, freshwater management, shade and other beneficial outcomes – including emerging nature-based solution approaches and tools. Including these in the Proposal would further enhance their value and permanence in the rural landscape.
		Whilst Pāmu recognise the complexity and cost of including a wider range of sequestration categories, there are benefits from their inclusion. Benefits include further incentivising farmers to take action toward meeting broader national environmental goals (such as Biodiversity, freshwater). The onus on broader inclusion of

Question	Pāmu Response
	Sequestration plantings should be placed with the industry as part of the investment of the levy funds and could be used to establish sequestration rates per hectare for various vegetation and strengthen measurement techniques and digital assets. An agreed timeframe – say 3-5 years - to develop robust science underpinning carbon sequestration rates for different types of tree vegetation (such as work in progress with Tāne's Tree Trust), the cost-effective measurement (and verification) systems (such as are presently emerging with LIDAR, sensor and other technologies); and how these can be coupled to the ETS and international protocols is worth exploring.
	A baseline year of 2008 is proposed for riparian strips, because 2008 aligns with recommendations made by the HWEN due to better satellite imagery being available. Early adopters of mitigation actions would benefit from an earlier baseline year and reward those (such as Pāmu) who have proactively planted and retired areas. An early baseline year should be consistent with QEIIs and other conservation areas notwithstanding the measurement challenges. Alternatively, aligning to Paris21 dates (1990 or 2005) would be helpful.
9. Do you support the introduction of an interim processor-level levy in 2025 if the farm-level system is not ready?	A processor level levy is unlikely to recognise specific farm level reduction initiatives. It is also contrary to Pāmu's strong preference of supporting on-farm practices to drive change in reducing greenhouse gas emissions and recognising these improvements. Farmers are the principal drivers of on-farm change and should be empowered and rewarded for doing so.
	Pāmu believes establishing a processor level levy will create another cost (which will shortly be "sunk") and level of complexity to the system. Not enough consideration has been given to how this would be implemented, the costs and enforcement measures. Pāmu believe it would result in the further delay of, and distract from, a farm level levy. All efforts should be made to ensuring a farm level system, with clear data integration, is ready for 2025. Indeed, a short delay in getting to farm level measurement is preferred to loss of investment in a system that in a short timeframe is to be replaced (see also Q.5 on how digital tools for farm level reporting could be sped-up)
Section 4	
10. Do you think the proposed system for pricing agricultural emissions is equitable, both within the agriculture sector and across other sectors, and across Aotearoa New Zealand generally?	Pāmu agrees that all sectors of NZ must be involved in reducing GHG emissions. However, the current Proposal does not appear to be equitable across the agricultural sector. It impacts sheep and beef farmers the hardest without recognising the sequestration ability available on those farms, or recognise the lack of emissions reduction options currently available, nor the broader sustainability practices undertaken that have broader benefits.

Question		Pāmu Response
11.	In principle, do you think the agricultural sector should pay for any shortfall in its emissions reductions?	In principle, farmers who have met emission reduction targets should not be penalised for those who have not (or in some circumstance, where anticipated mitigation technologies have not eventuated in practice). Further, farm-level measurement (and the audit thereof) enables those who have not meet emission targets to be supported through the changes required (here MPI's extension service could play a valuable role). Early, active management of a farm's progress should seek to minimise non-achievement. Equity with non-agricultural sectors is important.
12.	What impacts or implications do you foresee as a result of each of the Government's proposals in the short and the long term?	These proposals will affect the whole sector. Submissions from industry organisations will detail the impacts on their relevant sectors in more detail. One-point Pāmu wishes to make is the balance between the compliance administrative effort required by farmers versus the steps farmers can take to meaningfully reduce emissions. Pāmu notes that in the short term there are limited options available to reduce emissions (beyond changing stocking rates) particularly for early adopters of mitigations. Improvements to GHG data accounting tools are needed to practically measure/recognise low emission practices on farm that cumulative can add over time (for example if a farmer is breeding for lower methane output livestock or using efficient fertiliser application techniques). Suppliers of sires will need to develop reliable breeding and production values for progeny in a commercial herds/flocks. Early effort should be directed to ensuring data capture recognises low emission opportunities and utilise existing platforms to minimise administrative requirements.
13.	What steps should the Crown be taking to protect relevant iwi and Māori interests, in line with Te Tiriti o Waitangi? How should the Crown support Māori landowners, farmers and growers in a pricing system?	Pāmu has no comment to make directly, however, through our Te Ao Māori Strategy will continue to engage through farm Field Days and other means to exchange information with Māori farming entities to support climate mitigation and adaption. Additionally, shared digital solutions (such as those designed through FarMax) are already used by a number of the prominent Māori Farming Trusts which will facilitate information sharing on the development of farm digital twins.
Sectio	on 6	
14.	Do you support the proposed approach for verification, compliance and enforcement?	Pāmu supports the reference to using existing audit programs and encourages the Government to consider creating a list of standards that would be accepted under the Proposal, to enable further administrative efficiency for farmers. For example, the Toitū 'carbon reduce farm certification' is a robust standard that provides a third-party verification of, and incorporates all, the data currently required under this Proposal. In situations where a

Question	Pāmu Response
	farmer already has recognised third party verification the data provided under the Proposal should be accepted as 'pre verified' and need no further auditing.
	Further consideration also needs to be given to ensuring verification and audit processes are not cost-prohibitive. In line with this Pāmu envisages farm-level data sharing to enable automation of audits and identifying outliers and a random sample for on-farm audits. This would support reduce overall compliance costs, address audit capacity constraints, and reward farmers for keeping data up to date. Further audits for regulatory compliance should not be incongruent with those required by Sustainable Finance (i.e. ESG metrics); market assurance; impact investment into Nature-base solutions or other needs.
	An integrated approach will be essential given the shortage of skilled people to undertake integrated farm planning as well as the independent audits. Standards for farm metrics are essential – a unit of CO <sub>2</sub> e should be same when reported for HWEN as it is for a rural loan or market assurance purposes.
15. Do you have any other priority issues	Two issues for consideration.
that you would like to share on the Government's proposals for addressing agricultural emissions?	First, more clarity needs to be provided over the definition of farms and farmer including how this would be different/overlap with the use of 'collectives'. For example, Pāmu operates 110 farms, but for the purposes of GST, tax etc. it is one business. It is assumed that Pāmu would file one return (as required in the proposals) which is the sum of all stock units across 110 farms, as opposed to a return for each farm. There will be other farmers and businesses in similar situations. Multiple farm enterprises should be rewarded for using their collective land resources efficiently with respect to climate response, resilience planning, freshwater improvement, increasing biodiversity and other environmental (and social) outcomes.
	Second, currently, farmers cannot net offsets within a fam to derive a net CO2e position under the Zero Carbon Act. We assume that this was due to the limitations in being able to capture this information. Pāmu believes digital systems, are sophisticated enough to capture farm-level offsetting. Farm-level measurement allows changes in methane, nitrous oxide and CO <sub>2</sub> to be calculated and reported separately consistent with agreed standards and measurement protocols. For example, a farm could record an increase CO <sub>2</sub> sequestered and reduce methane and nitrous oxide. Allowing verifiable farm-level offsetting would be administratively efficient and meaningful for landowners and encourage practices that achieve the overall objective of lowering GHG emissions.
Do you consent to your submission being published on this website?	Yes

Question	Pāmu Response
If yes to the above, clearly state if there are parts of your submission that you do not want published.	Nothing is required to be redacted