Meat Industry Association of New Zealand (Incorporated)

Submission on:

Gene Technology Bill

17 February 2025

1. Introduction

1) The Meat Industry Association (MIA) is a voluntary, membership-based organisation representing processors, marketers, and exporters of New Zealand red meat, rendered products, and hides and skins. MIA represents 99 percent of domestic red meat production and exports. With export revenues of $9.86 billion (2024), the red meat industry is New Zealand's second largest goods exporter.

2) The meat processing sector is New Zealand's largest manufacturing sector that employs over 25,000 people in about 60 processing plants, located mainly in the regions. The sector is a significant employer in many of New Zealand's rural communities and contributes over $4 billion in household income.

3) A list of members is appended (Appendix 1). In drafting this submission, MIA members were consulted, and a range of perspectives about the proposals was received. Individual members may have also made their own submissions.

2. Executive Summary

I. MIA is appreciative of the opportunity to provide feedback on the proposals.

II. MIA considers reform of gene technology a strategic issue for New Zealand and the red meat sector. It is therefore disappointing that preparation of the Bill has been rushed, limiting the opportunity for engagement on the opportunities, risks and issues involved in this important and highly complex area.

III. MIA notes that gene technology offers potential solutions to some of the most significant biological challenges facing New Zealand's red meat sector. However, gene technology also poses risks to trade and market access for primary sector exports which underpin the New Zealand economy.

IV. MIA is supportive of establishing a risk-based regime to enable greater use of gene technology in New Zealand, understanding that with proper controls the Bill will be of considerable benefit to many sectors.

V. **MIA recommends that section 3 of the Bill (Purpose) be amended to include risks to regulated market access for primary produce** because:

a) international trade in meat products from gene edited or modified animals is not currently undertaken (and is likely to initially be unacceptable to regulatory agencies overseas); and
b) the suitability of existing regulatory frameworks to manage these risks is unclear and has not been sufficiently explored

VI. MIA considers it vital that the application of any gene technology to ruminants, or the use of imported germplasm of such, that poses a risk to trade be subject to regulatory oversight.

VII. To ensure this, **MIA recommends that section 163 (Power to make further exemptions from operation of Act and non-regulated activities) be amended to require the consideration of risks to the regulated market access of primary produce before any exemption applicable to use of gene technology in farmed animals, or imported germplasm, is made.**

VIII. **MIA recommends that the Bill be amended to require the establishment a Regulated Market Access advisory committee**, comprised of trade and market access specialists from MFAT and MPI, to advise the regulator when considering decisions related to primary products.

IX. To address changes in patterns of uptake and trading partners' acceptance of gene modified organisms, **MIA recommends that a mechanism allowing for review of previous licensing decisions and any controls imposed must be accessible via the gene technology regulatory process.**

X. **MIA recommends that the definition of '*environment*' in the Bill be amended to allow for consideration of biological risks to domesticated species and primary production systems.**

3. Overview

4) MIA welcomes the opportunity to comment on the proposed Gene Technology Bill ('the Bill'). While the Bill traverses many applications of gene technology (e.g. in the health and medical fields), this submission will focus specifically on the impact the proposed Bill may have on the red meat sector.

5) Gene technology presents a raft of potential opportunities for the red meat sector. Some of these are uncertain, yet may prove very substantial, but the potential benefits are difficult to quantify. Examples are presented in the table below:

Application in red meat sector	Potential Benefits
Disease resistant crops and animals	• Improved productivity • Better animal welfare • Reduce use of agri-compounds and veterinary medicines • Lower GHG emissions
Novel livestock and forage varieties	• Increased sustainability, e.g. metabolizable ryegrass and clover for reduced GHG emissions and N-loss • Increased value from products, e.g. meat with enhanced omega-3 fatty acid profile
Drought, flood, heat and cold resilient pasture, forage and livestock	• Improved productivity • Better animal welfare • Reduced use of water
More nutrient efficient plants and animals	• Improved productivity • Lower GHG emissions
Control of pests and diseases	• Allows potential for eradication of pests, e.g. possums • Improved productivity • Better animal welfare
Novel remediation of farm and processor wastes	• Improved productivity • Increased sustainability • Reduced waste
Improved or novel processing aids & enzymes	• Improved productivity • Novel products
Improved or novel packaging	• Improved productivity and reduced waste • Enhanced food safety, e.g. phage in packaging

6) As shown above, gene technology offers potential solutions to some of the most significant biological challenges facing New Zealand's red meat sector, including the amelioration of ruminant-based emission of greenhouse gasses.

7) However, it is also well understood that use of gene technology in food production is publicly contentious, seen as undesirable by many consumers and is highly regulated worldwide.

8) Recognising that New Zealand's prosperity relies on the production, processing, and export of livestock and horticultural products to international markets, MIA emphasises the importance of considering and managing the risks gene technology may pose to market access (see below).

4. Commentary on process

9) MIA considers reform of gene technology to be a strategic issue for New Zealand's primary production and healthcare sectors. Noting this, it is unfortunate that little appears to have been done by the Government to inform New Zealanders or engage them in a conversation about these proposals.

10) Given the significance of the policy shift - from a regime that ostensibly applied a precautionary principle approach to one that is considerably more permissive - we would expect that the development of the policy choices would have been more robust.

11) MIA notes numerous references in the Regulatory Impact Statement[1] (RIS) to limitations in the consultation process and options development and analysis imposed by the timeframes set by Ministers.

12) The release of a 131-page Bill, on a complex subject and immediately prior to the Christmas Holiday has made analysing and seeking feedback from meat processors and exporters challenging. MIA understands this will have been even harder for representative organisations with bigger and more diverse constituents.

13) Further to the above, MIA is also disappointed that no consultation document has been prepared to assist the public in formulating and providing feedback.

14) The process to date – characterised by minimal engagement, insufficient analysis of alternatives, risks, costs and benefits and the time constraints imposed on providing feedback – has made undertaking a fully informed assessment as it pertains to our sector difficult.

15) Accordingly, MIA has had few opportunities until now to highlight areas of concern and gaps that remain. We urge the Committee to address these points in their report, and for the Government to take heed of them as the Bill progresses through the House.

5. Commentary on the Proposals

16) MIA is broadly supportive of the intent to establish a risk-based regulatory regime governing the use of gene technologies that is consistent with analogous regulatory systems internationally.

[1] One example: RIS (p10) '*The policy development process has been limited by a timeline seeking to (sic) Cabinet approval of policy decisions to enable the introduction of a Bill into the House before the end of 2024, to in turn enable the regime to be operational in 2025. This has compressed the analysis able to be undertaken in a highly complex area, and may mean options, impacts, and consequences were not (or not fully) considered.*'

17) Rather than provide feedback on every aspect of the Bill, MIA has chosen to prioritise commentary on the parts where we believe changes are required or where important issues need to be brought to the attention of the Committee.

Issue – Gene technology poses risks to regulated market access of primary products

Risks to trade are real and these risks and their potential management options have not been adequately analysed

18) MIA is concerned that use of gene technology in New Zealand poses tangible risks to the access of associated products to international markets. MIA notes that these risks are identified by the Ministry for Foreign Affairs and Trade (MFAT), as cited in the RIS:

> *'The regulator should be required to consider trade and market access risks in assessing organisms for environmental release. This is due to the complex assurance processes for gene technology in key export markets, and the unpredictable nature of the international trading environment where gene technology has been historically controversial.'*

19) An example of these complex requirements cited above can be found in the high-value EU market. In the EU, gene edited food, including animal products, is subject to stringent and time-consuming safety assessments that need to be passed before sale to the public is permitted.

20) Noting that there are currently formal barriers to the international trade in animal products where gene technology has been used, then MIA considers the level of analysis presented in the RIS about these risks wholly unsatisfactory.

21) MIA understands that the Animal Products Act 1999 affords tools that may be sufficient to manage risks to regulated market access for animal products, specifically via section 60 provisions for Regulated Control Schemes, which are used to manage risks associated with hormonal growth promotants (HGPs) and cloned animals[2]. However, no reference to this and its applicability (or otherwise) to the management of risks gene technology poses to the trade in primary produce is presented.

22) In addition, the RIS provides no assessment of the potential resourcing challenges MPI and other regulatory agencies may experience if faced with industries seeking to have market-access risks managed by regulatory control schemes or other measures.

[2] https://www.mpi.govt.nz/legal/compliance-requirements/regulated-control-schemes-rcs/#rca-docset

New Zealand's primary production context is different from other countries

23) In the list of policy decisions[3] taken in the preparation of the Bill, the following statement is made:

> *".....the regulator should not consider trade and market access risks when deciding an approval application as these can be adequately managed by implementing assurance and supply chain separation programmes that are used successfully in Australia and North America."*

MIA has concerns about this statement.

24) First, the market contexts are very different, where New Zealand's primary products are considerably more trade-exposed than Australian or North American counterparts that have domestic consumer markets many times greater than New Zealand.

25) Second, the gene modified crops approved for environmental release in these countries are predominantly commodity cereals, soy, cotton or canola, where market acceptance of genetic modification has been established. This is not the case for the global trade in red meat products where, as far as we are aware, no precedent exists for the international trade in sheepmeat or beef from genetically modified or gene edited animals. Under the proposed regime this would be permitted and, in some cases, unregulated.

26) Third, gene modified crops approved for release in these other countries are considerably easier to contain than would be the case for pasture and forage species in New Zealand because they:

I. do not constitute the majority of the farmed landscape, and;
II. are not grazed rotationally and in situ, i.e. in other countries feed and forage is transported to animals living in confinement. In New Zealand cattle and sheep are generally moved to consume the forage where it is grown. This makes it unlikely that cultivation of gene modified forage will be concentrated in any particular area and more challenging to provide assurance about the specific categories of pasture and forage that animals have had access to throughout their lives.

Risks to regulated market access must be considered by the regulator

27) Noting that:

[3] Office of the Minister for Science, Innovation and Technology (2024). Cabinet Paper – Regulation of Gene Technologies – Policy Decisions https://www.mbie.govt.nz/dmsdocument/29938-regulation-of-gene-technologies-policy-decisions-proactiverelease-pdf

I. international trade in meat products from gene edited and modified animals is not currently undertaken and may be unacceptable to regulatory agencies overseas; and
II. insufficient reassurance about the suitability of existing legislation to manage these risks has been presented

then:

MIA recommends that section 3 of the Bill (Purpose) be amended to include risks to regulated market access[4], as follows (proposed changes underlined):

'The purpose of this Act is to enable the safe use of gene technologies and regulated organisms by managing their risks to –

(a) the health and safety of people; and
(b) the environment' and
(c) regulated access of primary produce to overseas markets

For the avoidance of doubt, MIA is not recommending that the scope of these risks include customer or consumer preferences.

GM product labelling is a risk to trade

28) Mandatory product labelling can be required by trading partners on a blanket basis where country assurances about product provenance are perceived as insufficient. This occurred in recent years where New Zealand red meat products exported to Switzerland were erroneously labelled '"*May have been produced using non-hormonal performance-enhancing substances such as antibiotics*"', owing merely to inconsistencies in how Switzerland and New Zealand regulate the use of ionophores[5].

This is a significant concern and MIA maintains that the potential for non-prohibitive trade barriers, such as labelling requirements, must be considered by the regulator when assessing market risks (and the conditions necessary to manage them) associated with the use of gene technologies.

Gene technologies used in, or imported as live animals or germplasm into, New Zealand must not be unregulated without consideration of risks posed to regulated market access of primary produce

29) Considering that risks to the access of New Zealand's livestock products to overseas markets are likely to be posed by gene editing or modification in ruminants, then MIA considers it vital that the application of any gene technology

[4] MIA notes accompanying amendments to the section 11 (Interpretation): relevant risks, and elsewhere would also be required to give effect to this.
[5] Compounds used to treat bloat and coccidiosis in New Zealand but are used overseas to increase production efficiency.

to ruminants, or the use of imported germplasm of such, be subject to regulatory oversight.

To achieve this, **MIA recommends that section 163 (Power to make further exemptions from operation of Act and non-regulated activities) be amended to require the consideration of risks to the regulated market access of primary produce before any exemption applicable to use of gene technology in farmed animals, or imported germplasm, is made.**

30) Further, to manage risks posed to regulated market access of livestock products stemming from the importation of germplasm (or live animals) from gene modified animals elsewhere (including Australia), **MIA recommends that section 163 (Power to make further exemptions from operation of Act and non-regulated activities) be amended <u>to remove</u> subsection (4)(c):**

> *'any of the following:*
>
> (i) *organisms specified in Schedule 1 of the Gene Technology Regulations 2001 (Aust):*
>
> (ii) *techniques specified in Schedule 1A of the Gene Technology Regulations 2001 (Aust).'*

The regulator should be supported by an advisory committee with expertise in trade and market access

31) MIA considers the arguments advanced in the RIS in support of not including risks to trade and market access to be unsound.

'Risks to existing trade and market access sit within the context of the potential benefits of gene technology / GMOs. A risk-only approach focuses on threats to existing producers without considering the opportunities offered by innovation. However, this would require the regulator to make a speculative economic judgement outside of its scientific expertise.' (RIS, p74)

32) MIA notes that the position of trading partners about what is permitted to cross their borders and be sold to consumers are matters of fact, rather than 'speculative judgement'. Concerning the availability of expertise, MIA considers that not having this is not a legitimate reason to discount assessing these important risks. The expertise exists within MPI and MFAT.

Rather, **MIA recommends that the Bill be amended to require the establishment a Regulated Market Access advisory committee, comprised of trade and market access specialists from MFAT and MPI.**, to advise the regulator when considering decisions related to primary products.

33) In addition, the RIS doesn't adequately characterise comparable regulatory regimes elsewhere. For example:

'..... however, the requirement to assess trade and market access risks goes beyond the scope of most other international regulatory regimes.' (RIS, p75)

This statement fails to recognise that other international regulatory regimes circumscribe the scope of their assessments in different ways. For example, the European Union (proposal 2023/0226) focusses solely on plants and the reform of legislation in the UK excludes monera, protists and fungi.

34) Therefore, MIA considers that in toto, amending the proposals to include the assessment of risks to regulated access of primary produce to overseas markets would not make the regulatory regime unduly restrictive when compared with overseas approaches.

Assessment of risks to regulated access of primary produce need to be balanced, like the assessment of other risks

35) MIA is not advocating that risks to regulated market access should result in an automatic prohibition on the use of any particular technology or species. Rather, we believe it entirely appropriate for the relative costs and benefits, and the manner and extent to which risks can be managed, to be weighed by the regulator before reaching a decision.

36) In the absence of formal consideration of trade access risks, the industries may face a gene technology adoption free-for-all followed by the industries and regulators struggling to implement potentially costly private and official assurance schemes on a reactive basis.

Issue – Co-existence requires managing competing interests

37) In advocating for the gene technology risk assessment and management to include risks to regulated market access, MIA is aware of the challenges presented in deciding who should bear the of costs of organism separation and traceability (assuming a license for release is granted but with controls).

38) MIA contends that separation and traceability necessary to satisfy only (a) customer preferences or (b) official recognition of GE-free or organic claims should remain solely the responsibility of those seeking to make the claims, as proposed by the Bill.

However, in circumstances where an application for authorisation of a GE organism is viewed by the regulator as posing a risk to regulated market access for an entire sector, then the regulator must have the ability to impose traceability or other controls on farmers / owners of modified organisms and their products.

39) MIA understand that if its request for the Bill to be amended to require the regulator to consider risks to regulated market access is granted, then this would allow for requirements enabling organism and product identification and tracing to be

imposed as controls under Section 15 (n) *(Conditions that may be imposed in relation to authorisation – 'any other measures to manage and control relevant risks'.)*

40) In circumstances where controls are imposed to manage trade risks, three principles to guide decision making appear to be most relevant:

I. 'Polluter Pays' Principle (burden on GE farmers)
II. 'Freedom to Farm' Principle (burden on GE-free farmers)
III. 'Economic efficiency' (least regulatory burden to be applied)

MIA believes that an optimal situation arises where market-risk management costs are borne by GE adopters where they are, and are likely to remain, in a minority owing to formal barriers to market access (e.g. further assessments of safety etc).

41) Conversely, where the benefits of the GE organism are significant enough to promote widespread adoption, considerations of efficiency mean that the best approach would be to shift the burden to private assurances if desired by those still choosing to remain GE-free to supply niche markets or products. For instance, were gene modified ryegrass to become the industry norm, then considerations of efficiency would mean the burden of cost should fall to those outside that norm. Widespread technology uptake implies commercial viability for the products from that system, and market acceptance.

42) This approach is consistent with Government manifesto commitments for *'the legislation to consider……economic consequences of research and applications of gene editing and modification*'[6]. This would also allow for flexibility, enabling the New Zealand regulatory regime to evolve in step with trading partners' acceptance of gene technologies.

43) To address changes in patterns of uptake and trading partners' acceptance of GE organisms, **MIA recommends that a mechanism allowing for review of previous determinations and any controls imposed must be accessible via the gene technology regulatory process.**

44) The ability to design the gene technology authorisation process and regulator to be flexible is a further benefit of explicitly considering, from the outset, market-access risks (and subsequent mitigation). If market access risks are managed using existing legislation, as proposed, then existing pathways for revision of control measures, e.g. in response to changes in market acceptance, may not be available or sufficiently agile.

[6] National Party (2023). Harnessing Biotech. p4. https://assets.national.org.nz/Plan_Biotech.pdf

Issue – Biological risks to farming systems and domesticated species

45) MIA is concerned that assessment of biological risk posed by modified organisms to domesticated species and farming systems may not be adequately enabled because these are not explicitly referred to in the definition of '*environment'*.

46) A robust hypothetical example is challenging to formulate but could include future attempts to modify plants to be toxic to pest ruminants such as deer and goats, which may also impact farmed sheep and cattle. Gene technologies presenting risks to domesticated species that are important to New Zealanders has the potential to undermine public support for beneficial applications and, therefore, these risks must be considered.

47) MIA maintains that pastoral farms are themselves '*ecosystems'* and the inclusion of this term in the definition of '*environment*' allows for biological risks to farm systems and domesticated species to be assessed.

48) However, MIA fears this may be open to debate and, therefore, **MIA recommends that the definition of '*environment'* in the Bill be amended** as follows (proposed changes underlined):

'environment includes —

(a) ecosystems, <u>including primary production systems</u>*, and their constituent parts; and*

(b) natural and physical resources; and

(c) the qualities and characteristics of locations, places, and areas'

49) To remove any doubt, the purpose of proposing this amendment is to account for the risk to New Zealand's pastoral system. MIA does not intend for the amendment to be interpreted as any risk beyond biological harm (e.g. to protect GE-free status of produce etc).

Issue – Regulation of trade in gene modified germplasm

50) MIA considers it essential that the trade in seeds and germplasm continues to be adequately managed to prevent New Zealand's regulatory approach to gene technology from being undermined by imported modified organisms or genetic material.

51) At present, gene modification of animals is tightly controlled worldwide, with exports being largely prohibited and risks to New Zealand are minimal. However, increased use of gene technology among trading partners and deregulation of techniques like gene editing may quickly alter this risk profile.

52) This appears to be a particularly challenging issue and MIA would like to be reassured that the regulator will liaise closely with MPI and other countries – because many others are in a similar position – on strategies for its management.

MIA Contact

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Appendix 1

MIA members and affiliate members as at 17 February 2025

Members	
Advance Marketing Limited Exporter Membership	Waimarie Meats Partnership
AFFCO NZ Ltd - Membership Levy	Wallace Group LP
Alliance Group Limited	Wilbur Ellis NZ Ltd
Ample Group Limited	Wilmar Trading (Australia) Pty Ltd
ANZCO Foods Ltd	
Ashburton Meat Processors Limited	
Auckland Meat Processors	**Affiliate Members**
Bakels Edible Oils (NZ) Ltd	Abattoirs Association of NZ
Ballande NZ Ltd	AgResearch
Black Origin Meat Processors	Alfa Laval New Zealand Ltd
Blue Sky Meats (NZ) Limited	Americold NZ Ltd
Columbia Exports Ltd	Aon New Zealand Ltd
Crusader Meats	AsureQuality NZ Ltd
Davmet NZ Limited	AusPac Ingredients NZ ltd
Fern Ridge Ltd	Beca Ltd
Firstlight Foods Limited	Centreport Wellington
Garra International Limited	CMA CGM Group Agencies (NZ) Ltd
GrainCorp Commodity Management	CoolTranz 2014 Ltd
Greenlea Premier Meats	G-Tech Separation - Bellmor Engineering
Harrier Exports Ltd	Global Life Sciences Solutions New Zealand
Intergrated Foods Consortium	Haarslev Industries New Zealand
Kintyre Meats Ltd	Hapag-Lloyd (New Zealand) Ltd
Lean Meats Oamaru	IBEX Industries Limited
Lowe Corporation Ltd	Intralox LLC
Mathias NZ Limited	Kemin Industries Ltd
Ovation NZ Ltd	Liquistore
Peak Commodities Limited	Maersk A/S
Prime Range Meats	MJI Universal Pte Ltd
Progressive Meats Limited	Oceanic Navigation Ltd
PVL Proteins Ltd	Port of Napier
SBT Marketing (2009) Ltd	Port of Otago Ltd
Silver Fern Farms Ltd	Pyramid Trucking Ltd
Standard Commodities NZ Limited	Rendertech
Taylor Preston Limited	SCL Products Limited
Te Kuiti Meat Processors Limited	Scott Technology Ltd
UBP Limited	Sealed Air - Cryovac
Value Proteins Ltd	Suncorp New Zealand Services Limited