

RE: Urgent Concerns About Gene Technology and Glyphosate Bills Affecting New Zealanders' Health and Food Safety

Summary:

1. Two proposed bills—the Gene Technology Bill and the Glyphosate MRL Increase Bill—pose significant risks to public health, food safety, and New Zealand's environment.
2. Independent research has linked glyphosate and gene-edited crops to hormone disruption, cancer, changes in the gut microbiome, biodiversity loss, and increased chemical residues in food.
3. Economic and social consequences could affect sustainable sectors, organic markets, responsible investment, and tourism.
4. Strong public concern exists, as surveys show that 75–89% of New Zealanders prefer to avoid GMOs and sectors linked to environmental degradation.
5. Responsible policy alternatives exist.

Your Name

Insert District Constituents

18.08.2025

Dear (Insert Name)

CC: (Insert any CC'd contacts)

We are writing as concerned constituents regarding two government proposals that would significantly impact public health, food safety, and New Zealand's environmental integrity:

- **The Gene Technology Bill** is awaiting the Select Committee's review **on August 22**.
- **The Glyphosate Increase Bill** (Maximum Residue Level (MRL) Increase).

Both initiatives are being advanced with minimal public awareness, yet they have far-reaching implications for our health, food quality, and international reputation. Please find relevant research studies in the footer.

Gene Technology Bill – Risks of Deregulation

The proposed changes are being presented as “science-based” innovation. However, they bypass internationally recognised biosafety standards, including risk assessment, long-term ecological monitoring, and transparency. Gene-edited plants—engineered for pesticide resistance—could reach supermarket shelves with minimal oversight.

Independent studies indicate that such crops lead to:

- Increased pesticide use
- Soil degradation and biodiversity loss
- Higher chemical residues in food
- Hormone disruption and increased cancer risks
- Other health diseases, such as Parkinson's

New Zealand's organic sector has grown to around NZ\$1.8 billion in revenue (2025 Organic Market Report), reflecting strong consumer demand for chemical-free, safe food. A more sustainable path forward includes supporting organic and chemical-spray-free farming, as well as strengthening transparency in food labelling. However, awareness of these bills is

limited because, while the organic sector is valuable annually, many Kiwis can't afford to buy organics regularly. They may miss news circulating within organic and sustainability circles.

But many NZ home gardeners often reject chemical sprays and genetically engineered foods. 'Spray-free' produce is in demand at local and online markets. Organic, GE, and market group sectors actively promote these choices, and the turnout and social media comments for natural expos, which draw tens of thousands of attendees each year, demonstrate a strong and growing public interest.

Economic and Sectoral Risks

There are economic risks: The Sustainable Business Council's members collectively represent NZ\$169 billion in annual turnover, reflecting the significant economic scale of businesses committed to sustainability in NZ.

These bills could threaten key sectors:

- **Sustainable construction:** NZ\$5 billion/year, projected NZ\$142 billion by 2050, dependent on healthy biodiversity and uncontaminated natural resources.
- **Responsible investment:** NZ\$153.5 billion in ESG-aligned funds, with NZ\$4.74 billion in impact investments. Many exclude high chemical/GMO exposure; these changes could trigger divestment.
- **Sustainable tourism:** Tourism contributes around NZ\$40 billion annually to New Zealand's economy. The sustainable and eco-tourism sectors are growing rapidly. The New Zealand sustainable tourism market is projected to grow from USD 12.7 million in 2025 to USD 57.7 million by 2035, representing a Compound Annual Growth Rate (CAGR) of 16.3%.

A 2024 survey shows that 75% of New Zealanders want to avoid investing in companies involved in genetic engineering (GMOs).

These sectors depend heavily on New Zealand's clean environment, biodiversity, and food integrity to attract discerning international visitors. Pristine landscapes and natural food systems, prized especially in markets sensitive to GMOs such as the EU and Japan, are key assets for sustaining this growth.

Glyphosate Proposal – Escalating Health Risks

The proposal to increase glyphosate residue limits—by up to 100 times in certain crops—is concerning, given growing evidence of its health risks. International research suggests glyphosate:

- Can accumulate in breast milk and body tissues
- Disrupts gut health, hormone balance, and DNA integrity
- Could impair cognition and behaviour in adolescents
- Increases the risk of non-Hodgkin lymphoma

Approx. 20 countries worldwide are banning or phasing out the use of glyphosate. With many EU countries that have voted against it for upcoming reforms.

New Zealand should align with international safety standards, not permit higher exposures to a known carcinogen.

A Call for Responsible Policy

It is possible to support farmers while prioritising public health, environmental protection, and sustainable food production. Transparent labelling, stricter monitoring, and investment in organic and regenerative farming are proven ways to achieve these goals.

Please consider the independent scientific research and public concern regarding these proposals. Protecting New Zealanders' health and food safety should be a top priority.

Thank you for your time and attention to this matter.

Sincerely,

Your Name.

References & Supporting Scientific Studies (Footnote)

Glyphosate Health Risks

- Ramazzini Institute (2018) – Early-life exposures disrupt development, gut microbiome, hormone levels, and DNA integrity:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5972398/?utm_source
- Panzacchi et al., 2025 – Lifetime exposure to glyphosate at low doses in rats caused benign and malignant tumours: <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-025-01187-2>
- NHANES Analysis, 2013–14 – Higher urinary glyphosate associated with memory loss, depression, and hearing difficulties:
<https://www.sciencedirect.com/science/article/abs/pii/S001393512301664X>
- Ecuador Teen Study – Adolescent glyphosate exposure linked to poorer attention, memory, language, and inhibitory control: <https://www.eurekalert.org/news-releases/1003778>
- Rodent study – Maternal glyphosate exposure caused autism-like behaviours in offspring: <https://pubmed.ncbi.nlm.nih.gov/32398374/>
- Environmental Health (2022) – Glyphosate detected in 99% of pregnant women; higher exposure associated with shorter pregnancies:
https://ehjournal.biomedcentral.com/articles/10.1186/s12940-022-00906-3?utm_source
- Oxidative organ damage – Glyphosate provokes oxidative damage in rat liver and kidneys: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4756530/?utm_source
- Glyphosate in breast milk – Linked to infant deaths in India:
<https://beyondpesticides.org/dailynewsblog/2023/02/pesticides-in-breast-milk-linked-to-over-100-newborn-deaths-in-less-than-a-year/>

Gene Technology & GMO Concerns

- Gene-edited crops lead to increased pesticide use, soil degradation, biodiversity loss, and the presence of chemical residues in food.
- Monte Maíz, Argentina – High glyphosate exposure linked to cancer incidence 225% above national average; mortality 232.7% higher; spontaneous abortion 10% vs 3%; congenital abnormalities 4.3% vs 1.4%: https://www.scirp.org/html/4-6703530_83267.htm
- International GMO bans/restrictions: EU member states, Australia, Japan, Bhutan, Turkey, Russia, Switzerland, parts of Africa, Belize, Ecuador, Mexico, Peru, Venezuela, China, India.
- Pesticide effects on human health, from acute intoxication to chronic diseases that include various types of cancer (brain cancer, breast cancer, prostate cancer, bladder cancer, and colon cancer) [11,12], Alzheimer's disease (AD) [13], Parkinson's disease [14], neurotoxicity [15,16], infertility [17,18], leukemia [19] and diabetes"
<https://www.sciencedirect.com/science/article/pii/S2405844024051594>
- A medical study published in the Journal of the American Medical Association about Parkinson's Disease (PD) finds that: "Living within 1 mile of a golf course was associated with 126% increased odds of developing PD compared with individuals living more than 6 miles away from a golf course." These findings suggest that pesticides applied to golf courses may play a role in the incidence of PD for nearby residents.
https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2833716?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jamanetworkopen.2025.9198

Sustainable Investment Preferences:

- 75% want to avoid investing in companies involved in genetic engineering (GMOs).
- Shows public opposition to GMOs, directly supporting resistance to the Gene Technology Bill that would deregulate oversight of gene-edited agricultural products.
- 89% want to avoid sectors linked to environmental degradation (air, land, and water damage).
- Strengthens the case against the Glyphosate Increase Bill, as glyphosate use is tied to soil degradation, biodiversity loss, and water contamination.

Refs:

- https://cdn.prod.website-files.com/67a17dcc2362afe3723b9c97/6850b4471db834eb99a1a8da_RIAA-Responsible-Investment-Benchmark-Report-Aotearoa-New-Zealand-2024_compressed.pdf
- https://cdn.prod.website-files.com/67a17dcc2362afe3723b9c97/67da52588efb4602d3e83ed6_Voices-of-Aotearoa-Demand-for-Ethical-Investment-in-New-Zealand-2024.pdf

GLYPHOSATE REGULATION INCLUDES:		
Country/Region	Restriction	Notes
Belgium	Partial ban	Banned for household use
France	Partial ban	Banned for household use
Germany	Partial ban	Banned in public spaces; full nationwide ban planned for 2024.
Netherlands	Partial ban	Banned for household use Restrictions against full-field applications of glyphosate shortly before harvest in crops like cereals, peas, pulses, linseed, oilseed rape, and mustard,
Vietnam	Full ban	Nationwide ban announced in 2019
Mexico	Glyphosate ban and ban on genetically modified (GM) corn,	Nationwide ban announced 2024
Bermuda	Partial ban	Over 2% strength; temporary suspension
Canada	Restricted use	Restrictions vary by province; some provinces have implemented bans or restrictions
Portugal	Partial ban	Banned in public spaces
Gulf Cooperation Council: Bahrain Kuwait Oman Qatar Saudi Arabia UAE	Full ban – 6 countries	Full ban Implemented in 2016.
Scotland (UK)	Partial ban	Cities like Aberdeen and Edinburgh phased out or reduced use; national policy varies.
Slovenia	Proposed ban	Signed a letter calling for an EU-wide exit plan for glyphosate.
India	Restricted use	Restrictions in certain states; national policy varies.
Italy	Banned the use of glyphosate as a pre-harvest treatment. Restricted use. Voted against glyphosate.	In 2016, the Italian government banned the use of glyphosate as a pre-harvest treatment and placed restrictions on glyphosate use in areas frequented by the public. In November of 2017. Italy was one of many EU nations to vote against relicensing glyphosate.

COUNTRIES THAT HAVE BANNED THE CULTIVATION OF GENETICALLY MODIFIED (GM) CROPS DESIGNED TO BE PESTICIDE-RESISTANT, WITH SOME ALSO RESTRICTING IMPORTS:

European Union:

A significant number of EU member states have banned or restricted GMO cultivation, including France, Germany, Austria, Greece, Hungary, the Netherlands, Latvia, Lithuania, Luxembourg, Bulgaria, Poland, Denmark, Malta, Slovenia, Italy, and Croatia.

Other European Countries:

Russia and Switzerland also have bans or restrictions on GMO cultivation.

Asia-Pacific:

Australia, Turkey, Kyrgyzstan, Bhutan, Japan, and Saudi Arabia are among the countries with restrictions or bans.

Example: Japan has no domestic cultivation of food crops

*(In Japan **Mandatory Labelling**: Designated imported GM crops like soybeans, corn, potatoes, rapeseed, cottonseed, alfalfa, and sugar beet, as well as certain processed foods, are subject to mandatory labelling if GM DNA or protein is detectable).*

Africa:

Many African countries have either banned or have significant restrictions on GMO cultivation. Countries like Algeria and Madagascar are mentioned as having bans in place.

Americas:

Belize, Ecuador, Mexico, Peru, and Venezuela have also banned or restricted GMO cultivation.

Other notable examples:

China and India are also mentioned as having bans or restrictions, according to the National Institutes of Health (NIH).

Trade Concerns:

Some countries are concerned about potential impacts on trade with countries that have stricter GMO regulations, particularly within the EU.

World Refs: According to official government regulations and international reports from bodies such as the European Commission, the Food and Agriculture Organization (FAO), and national agricultural and environmental ministries, many countries have implemented bans or strict restrictions on glyphosate use and the cultivation of genetically modified crops designed to be pesticide-resistant.