



COVERSHEET

Minister	Hon Barbara Edmonds	Portfolio	Economic Development
Title of Cabinet paper	Refreshed Agritech Industry Transformation Plan: Release for Public Consultation	Date to be published	26 April 2023

List of documents that have been proactively released

Date	Title	Author
December 2022	Refreshed Agritech Industry Transformation Plan: Release for Public Consultation	Office of the Minister for Economic Development
7 December 2022	Refreshed Agritech Industry Transformation Plan: Release for Public Consultation DEV-22-MIN-0295 Minute	Cabinet Office

Information redacted

YES / NO [select one]

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Some information has been withheld for the reasons of confidential advice to Government and legal professional privilege.

BUDGET SENSITIVE

Office of the Minister of Agriculture

Office of the Minister for Economic and Regional Development

Cabinet Economic Development Committee

Releasing the refreshed Agritech Industry Transformation Plan for public consultation

Proposal

- 1 This paper seeks agreement to release for public consultation the refreshed Agritech Industry Transformation Plan (ITP). We plan to release the Agritech ITP for six weeks of public consultation starting in February 2023.
- 2 The refreshed Agritech ITP builds on the initial Agritech ITP that was released in 2020. Confidential advice to Government

Issue identification

- 3 The underinvestment in agritech and lack of coordination across the whole agritech ecosystem has meant that New Zealand has not optimised both domestic and international opportunities to adopt and develop innovative technology-driven practices in order to drive greater productivity and improve the overall performance of the sector.

Relation to government priorities

- 4 The Agritech Industry Transformation Plan seeks to grow New Zealand's agritech sector in support of Government's economic plan to become a high wage low emissions economy that provides economic security in good times and bad. Agritech is a strategically important sector for economic growth due to its direct economic value and its potential to reduce emissions and increase productivity in our food and fibres sectors.
- 5 The Agritech ITP aligns with and supports priorities including the *Fit for a Better World* roadmap the Emissions Reduction Plan (ERP), and the Māori Economic Resilience Strategy. Through its implementation, we will ensure the ITP also aligns with broader priorities such as the Reform of Vocational Education (RoVE), the Immigration Rebalance, and Te Ara Paerangi – Future Pathways.

Executive summary

- 6 The Agritech ITP provides a vision and purpose for the growth of the agritech sector and a series of actions to accelerate this growth. These actions align

with the government's high-wage, low-emissions economic strategy. The decision to develop an ITP for the agritech sector recognises the strategic importance of the sector and the opportunity for growth due to increasing global demand for agritech [DEV-20-MIN-0110; DEV-21-MIN-022 refers].

- 7 New Zealand's agritech sector is growing fast. The 22 largest agritech firms have a combined revenue of approximately \$1.6 billion, building on a 5-year compound annual growth rate (CAGR) of 14.6%.¹ We aim to maintain and accelerate this growth via the actions of the ITP.
- 8 The Agritech ITP seeks to build on the New Zealand agritech sector's success to date and potential by growing its contribution to the New Zealand economy to \$8 billion by 2030 from a current value of around \$2-3 billion.² Its vision is of '*a globally recognised agritech sector creating solutions for a better world*'.
- 9 Government's role in the Agritech ITP is supported by \$5 million in contingency funding in Budget 2022, on top of the initial \$11.4 million allocated in Budget 2020.
- 10 We propose to release the refreshed Agritech ITP for public consultation as soon as possible. This consultation will be supported by a series of workshops led by AgriTechNZ and officials implementing the ITP. Public consultation is proposed to seek feedback on actions in the following areas:
 - 10.1 Enabling company growth by ensuring business capability services are provided consistently and well
 - 10.2 Building skills for diversity and growth and ensuring effective coordination with the education sector
 - 10.3 Enabling a smart ecosystem through collaboration that attracts international interest
 - 10.4 Increased Māori interests and participation that ensure Māori aspirations are realised
 - 10.5 Building a supporting and patient investment environment suited for agritech
 - 10.6 Increasing global connections for growth to build a globally connected sector.

Background

The agritech sector is poised for further growth

- 11 Broadly speaking, agritech is the development and use of technology to improve the productivity, and therefore the value, of the food and fibre

¹ Technology Investment Network (TIN) Agritech Insights Report 2022. Available at <https://tin100.com/product/2022-agritech-report/>

² A rough estimate of New Zealand's agritech exports placed these at around \$1.1 billion to \$1.2 billion, though this estimate should be treated with caution due to it relying on exports of agritech for pastoral farming. The TIN Agritech Insights Report 2022 noted that the sector's 22 largest firms alone had revenues of \$1.6 billion, including exports of \$814.9 million. We estimate there are 700-900 agritech firms in New Zealand, which suggests the sector's total revenue could be in the order of \$2-3 billion.

sectors.³ This includes digital technologies (eg, farm management apps), biotech (eg, animal vaccines), and manufacturing (including applications spanning from recycled plastic fence posts to autonomous modular vehicles). The ITP defines the value added through agritech broadly, including increased yield, efficiency, profitability, sustainability, reliability, and quality.

- 12 The agritech sector is increasingly important for Aotearoa New Zealand. It is a broad and diverse sector with a growing contribution to the economy, jobs, and communities, particularly in regions such as the Waikato, where over \$1 billion of agritech revenue is located. It is a key enabler of a productive, sustainable and world-leading food and fibre sector.
- 13 Measurement of the agritech sector remains imperfect and an area for work through the ITP. From existing data sources, we know that the largest 22 agritech companies' revenue totalled approximately \$1.6 billion in 2022, with a 5-year compound annual growth rate of 14.6%. A continuing action under the ITP is building more comprehensive measurement of the sector's size and performance, accounting for its smaller firms. This will be available in 2023.
- 14 A thriving agritech sector will see greater productivity, thus leading to higher wages, more jobs, lower emissions, and have broader economic spillover benefits. For example, the Technology Investment Network (TIN) Agritech Insights Report 2022 indicated an average wage of around \$94,000 for the sector's 22 largest firms, which is significantly higher than Aotearoa New Zealand's average wage.
- 15 More focus than ever before is being placed on economic activity that is sustainable, circular and low emissions, which the agritech sector supports.
- 16 The agritech sector is poised for growth and the relationship between the sector and our primary industries is symbiotic – a strong globally engaged agritech sector supports a strong globally competitive primary sector (and vice versa). This will be particularly important in solving domestic (and global) challenges such as labour shortages, food security, emissions reduction, water quality and efficiency of water use, and adapting to the impacts of climate change.

The original Agritech Industry Transformation Plan

- 17 The decision to develop an ITP for the agritech sector in 2019 recognised the strategic importance of the sector and the opportunity to accelerate its growth. Some of the ITP's achievements to date include:

³ Note that the Agritech ITP excludes forestry and wood processing applications as these are the focus of the Forestry and Wood Processing ITP.

- 17.1 identifying, validating, and demonstrating nutrient management and water contamination technologies⁴ by funding \$850,000 worth of nutrient trials through the global Farm2050 initiative;
 - 17.2 improved business support through collaboration between New Zealand Trade and Enterprise (NZTE) and Callaghan Innovation to better enable agritech firms to aim for and execute on scaling their operations for global markets;
 - 17.3 launch of the *Finistere Aotearoa Fund* worth up to NZ\$40 million, with New Zealand Growth Capital Partners (NZGCP) and Finistere Ventures each providing half of this total figure;
 - 17.4 development of the Aotearoa New Zealand Agritech Story, *Powered by Place*, which is a resource that can be used to promote Aotearoa New Zealand's agritech sector to domestic and international audiences;
 - 17.5 improved measurement of the sector; and
 - 17.6 a strong, enduring partnership between Government and the agritech sector.
- 18 The partnership we have established through the ITP, combined with its lessons learned, set us up well for a further phase of action through the ITP.

The refreshed Agritech Industry Transformation Plan

- 19 After two years of implementation, it is timely to refresh the ITP by both building on existing successes and exploring new ones. This refreshed Agritech ITP envisions '*a globally recognised agritech sector creating solutions for a better world*'.
- 20 It seeks to continue to accelerate the success of the sector and grow its contribution to the New Zealand economy to \$8 billion by 2030, in a global agritech market where investment is expected to almost double by 2027.⁵
- 21 The Agritech ITP is underpinned by a strong partnership and this refresh has been conducted alongside industry. Six focus areas for actions are proposed in the refreshed Agritech ITP that have been agreed for priority by Government and industry:
- 21.1 Enabling company growth by ensuring business capability services are provided consistently and well

⁴ This is done by using a global approach to leverage year-round seasonality to speed up the process of proving technologies across broad acre crops, horticulture, and pasture-based dairy in collaboration with agritech investors, farmers, researchers, and start-up companies. CropX, Pastoral Robotics, and Eko360 are the three New Zealand-based firms participating in these trials.

⁵ World Agritech Innovation Summit, London, September 2022

- 21.2 Building skills for diversity and growth and ensuring effective coordination with the education sector
- 21.3 Enabling a smart ecosystem through collaboration that attracts international interest
- 21.4 Increased Māori interests and participation that ensure Māori aspirations are realised
- 21.5 Building a supporting and patient investment environment suited for agritech
- 21.6 Increasing global connections for growth to build a globally connected sector.

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Timeline for finalising the Agritech ITP

- 23 Below is our proposed timeline for finalising the Agritech ITP:

Action	Timeframe
Draft Agritech ITP to Cabinet	December 2022
Agritech ITP released for public consultation	February 2023
Public consultation with regional workshops	February 2023 – April 2023
Confidential advice to Government	

- 24 We propose that Cabinet delegate approval of the final ITP to the Minister of Agriculture and the Minister for Economic and Regional Development, unless there are substantive changes to be made following public consultation.

Implementation

- 25 The Agritech ITP is implemented collaboratively by MBIE, MPI, Callaghan Innovation, NZTE, AgriTechNZ, and the broader agritech industry. Other agencies are included in delivery where needed.

- 26 Legal professional privilege

Financial Implications

- 27 The Agritech ITP's implementation has been funded through \$11.4 million provided in Budget 2020. This initial funding is expected to be spent fully by the end of FY22/23. A further \$5 million in contingency was provided through Budget 2022, to be released for drawdown by agreement between the Minister of Finance and Agriculture and the Minister for Economic and Regional Development. This drawdown will take place after the ITP is finalised, to enable Government delivery of ITP actions over Financial Year 2023/24.

- 28 Confidential advice to Government

Legislative Implications

- 29 This paper has no legislative implications.

Impact Analysis

Regulatory Impact Statement

- 30 A regulatory impact statement is not required.

Climate Implications

- 31 The ITP does not currently propose specific actions related to reducing emissions. However, growing New Zealand's agritech sector will likely encourage the development and scaling-up of emissions-reducing technologies for use in our primary industries.

Population Implications

- 32 The Agritech ITP includes a focus area to encourage and increase diversity and inclusion within the agritech sector as part of its workforce development. This is particularly true for Māori, with a focus area in the ITP dedicated to having their aspirations for the sector realised.
- 33 Māori play an important role in Aotearoa New Zealand's agritech sector as workers and increasingly as leaders and owners of agritech and food and fibre businesses. Māori perspectives, including te ao Māori, will strengthen the growth and transformation of the sector. Given the prominence of the primary industries in the Māori economy's, the ITP is a vehicle to ensure that Māori stand to benefit from agritech. To support this aspiration, a Māori Advisory

Group was also established in August 2022 to feed directly into the ITP's actions .

- 34 Given the sector's high average wages and high-skill nature, a thriving sector will see more jobs of this nature being created throughout Aotearoa New Zealand, particularly in regional and rural communities.

Human Rights

- 35 There are no implications under the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

- 36 The Agritech ITP was developed in partnership with the ITP Steering Group, Māori Advisory Group, and Operations Taskforce which includes representatives from government, industry, and Māori.
- 37 The following government agencies were consulted on the Cabinet paper and Agritech ITP: Ministry of Business, Innovation and Employment, Ministry for Primary Industries, Te Puni Kōkiri, Ministry for the Environment, Ministry of Foreign Affairs and Trade, the Tertiary Education Commission Treasury, and the Department of Prime Minister and Cabinet.
- 38 New Zealand Trade and Enterprise and Callaghan Innovation were also consulted on the Agritech ITP.
- 39 Subject to Cabinet agreement, we plan to release the Agritech ITP in February 2023 for public consultation until around April 2023. Officials from MBIE and MPI, along with AgriTechNZ, will support public consultation with a series of workshops around the country.

Communications

- 40 We intend to release this Agritech ITP by way of media release followed by public consultation until April 2023.
- 41 The Agritech ITP and any supporting documents will be available at the URL: [to come].

Proactive Release

- 42 We intend to release this Cabinet paper proactively based on current content, subject to appropriate redactions, such as Budget sensitive material.

Recommendations

The Minister of Agriculture and Minister for Economic and Regional Development recommends that the Committee:

- 1 **Note** in July 2020, Cabinet approved the launch of the Agritech Industry Transformation Plan [DEV-20-MIN-0110], aiming to scale up the value of New Zealand's agritech sector to aid our economic recovery from the COVID-19 pandemic.
- 2 **Note** the Agritech Industry Transformation Plan has seen business, government, Māori, and wider stakeholders co-create and co-own a refreshed Agritech Industry Transformation Plan (Appendix One) to accelerate the growth of New Zealand's agritech sector.
- 3 **Note** that the priorities and actions in the Agritech Industry Transformation Plan align with the government's economic strategy of a high-wage, low-emissions economy that provides economic resilience.
- 4 **Note** the refreshed Agritech Industry Transformation Plan proposes actions across six focus areas, which are:
 - 4.1 Enabling company growth by ensuring business capability services are provided consistently and well
 - 4.2 Building skills for diversity and growth and ensuring effective coordination with the education sector
 - 4.3 Enabling a smart ecosystem through collaboration that attracts international interest
 - 4.4 Increased Māori interests and participation that ensure Māori aspirations are realised
 - 4.5 Building a supporting and patient investment environment suited for agritech
 - 4.6 Increasing global connections for growth to build a globally connected sector.
- 5 **Agree** to release the Agritech Industry Transformation Plan for public consultation.
- 6 **Agree** for Minister of Agriculture and the Minister for Economic and Regional Development to release the final Agritech Industry Transformation Plan following public consultation, subject to minor and technical changes.

Authorised for lodgement

Hon Damien O'Connor
Minister of Agriculture

Hon Stuart Nash
Minister for Economic and
Regional Development

Appendices

Appendix One: Refreshed Agritech Industry Transformation Plan