

Regulatory Impact Statement: Product stewardship for agrichemicals, their containers and farm plastics

Decision sought	Analysis prepared to inform final Cabinet decisions on product stewardship for agrichemicals, their containers and farm plastics.
Agency responsible	Ministry for the Environment
Proposing Ministers	Hon Penny Simmonds, Minister for the Environment
Date finalised	22 October 2025

Description of the Minister's regulatory proposal

The proposal is to make regulations under the Waste Minimisation Act 2008 (WMA) to enable an accredited and industry-led product stewardship scheme for agrichemicals, their containers and certain farm plastics.

Summary: Problem definition and options

What is the policy problem?

There are ongoing but avoidable practices for disposing of agrichemicals, their containers, and farm plastics, such as on-farm burning, burial or indefinite storage in some rural areas. This in turn risks harming the environment, human health and losing recyclable materials. Not all farmers have access to take-back and recycling services for these products.

What is the policy objective?

The policy objectives are to:

- increase resource recovery of agrichemicals, their containers and farm plastics
- reduce harm to people and the environment arising from agrichemicals, their containers, and farm plastics when they become waste.

What policy options have been considered, including any alternatives to regulation?

Three policy options have been considered:

- Option 1 — No action, maintain a voluntary product stewardship approach
- Option 2 — Enhanced voluntary option
- Option 3 — Introduce WMA regulations (the Minister's preferred option)

Option 1 proposes to maintain the voluntary approach with no WMA regulations introduced. Option 2 proposes to make improvements to the voluntary approach, such as increased education and awareness to support uptake. Option 3, the Minister's preferred option, is to create regulations under the WMA to support product stewardship with participation of producers and importers of all in-scope products, supported by regulated fees.

What external consultation has been undertaken?

We consulted on two options — maintaining a voluntary approach and introducing WMA regulations. Public consultation took place from March 31 to 1 June 2025 and resulted in 144 submissions. Eighty-nine percent of the submitters (including 83 percent of farmers) who answered this question supported a regulated national take-back and recycling scheme for agrichemicals, their containers and farm plastics. We did not explicitly seek feedback on option 2, the enhanced voluntary option, that was also considered in this assessment. The basis of the option was included in the consultation’s published discarded options list. We do however consider that ongoing engagement with industry and the consultation feedback provides sufficient insight and basis for assessment of the option.

Is the preferred option in the Cabinet paper the same as preferred option in the RIS?

Yes, the Minister’s preferred option (option 3) in the Cabinet paper is the same as the preferred option in the RIS.

Summary: Minister’s preferred option in the Cabinet paper

Costs

Description of costs and where they fall

Industry and rural sector consumers contribute an estimated \$8 million per year in service fees for Agrecovery and Plasback’s recycling services annually, on a voluntary basis.

The proposed regulated fees will cover all costs of the future national scheme, which will capture the current voluntary scheme free-riders,¹ increase and standardise service levels across New Zealand, and increase recovery rates for the in-scope products. Under a regulated approach, scheme fee revenues are expected to rise to \$13.15 million in year one.

While consumers are not obligated to participate, voluntary scheme fees/charges are already being passed on or are being paid as service fees for the recovery and recycling of in-scope products. Any additional regulated fee costs will likely also be passed on to consumers through the supply chain by producers and importers of the regulated products. Over a 30-year time horizon, the costs of a regulated scheme are estimated at \$80 million in net present value (NPV).

Cost-of-living impacts are considered minor, given that many producers and farmers already participate in the voluntary schemes. Impacts will be partially offset by investment in regional activities associated with scheme operations. Costs the Ministry incurs in monitoring the scheme would be recovered as a small portion of scheme fees.

Benefits

Description of benefits and where they fall

Benefits able to be quantified include the sale of recovered plastics and avoided landfill and land remediation costs. These benefits are estimated at \$38.5 million (NPV). There are also avoided carbon emissions of \$66.9 million (NPV) from the burning of fossil plastics.

Over a 30-year time horizon monetised benefits are estimated at \$105.4 million (NPV).

Significant further unquantified benefits can accrue. Reduced air and water pollution impacts from the burning of plastics were not able to be quantified. For famers and growers,

¹ Free-riders in this context include companies and brands that do not contribute towards the voluntary schemes and either directly or indirectly benefit from voluntary scheme recycling operations. Free-rider benefits include that their products do not include voluntary stewardship fee costs and are therefore cheaper, that their post-sale/consumer products may be recycled at the expense of others who contribute voluntarily; and through service provision of recycling services as a whole, which enables free-riding brands to market their products as recyclable when they do not contribute to the recycling service which is not viable without industry funding support.

access to premium markets can be supported through evidence of their participation in an accredited recycling scheme. Access to premium markets is of significant value but this has not been quantified.

Balance of benefits and costs

Does the RIS indicate that the benefits of the Minister's preferred option are likely to outweigh the costs?

Yes. Over a 30-year time horizon, the proposed regulated scheme (option 3) is estimated to have a benefit cost ratio of 1.31 (NPV), as well as additional non-monetised benefits.

Implementation

How will the proposal be implemented, who will implement it, and what are the risks?

The accredited scheme manager is the Agrecovery Foundation (Agrecovery).² The scheme manager will be responsible for delivering the accredited scheme scope, including the expansion and establishment of the nationwide network of take-back sites where farmers and other consumers can drop off in-scope products for recycling (or safe disposal for agrichemicals). The Ministry will be responsible for performance and compliance monitoring and enforcement activities.

The scheme manager will establish agreements with all producer/importers with fee paying obligations. After the regulations are enacted, a six-month transition period would be provided for the scheme manager and industry to make these arrangements and prepare, before regulatory obligations come into force.

The scheme builds on the voluntary approach and while there will be an expansion of take-back sites across New Zealand, many are already established.

Key risks and mitigations associated with a change to a regulated approach include:

- implementation risks: a detailed implementation plan will be developed after Cabinet makes its policy decisions.
- inaccurate forecast fees revenue: this would most likely stem from more or less plastic in the market in any given year. This financial risk to the scheme can be managed through adapting operational activities and costs to the volume being managed.
- some farmers and growers may continue to burn or bury plastics: farmers and growers will not be obligated to participate. Recent surveys and consultation has indicated support for a one-stop-shop national recycling scheme. Surveys have also shown those who continue to burn are frustrated with the status quo. Recent trials and surveys in Southland and Canterbury included testing communication channels, scheme design options and farmer/grower preferences in order to ensure optimised engagement and service delivery.

Limitations and constraints on analysis

The co-design process for the scheme included industry engagement on the proposed in-scope product types. Voluntary scheme data, industry insights and analysis by PricewaterhouseCoopers (PwC) on the volumes of each product type entering the market underpinned the co-design process in 2022, and subsequent cost benefit analysis. This data has been supplemented through industry insights, declarations and recovery rates of the voluntary schemes. Some uncertainties remain for overall sales volumes, and the proportion of plastic material that gets burnt or buried on farm. Regional councils have confirmed this is common practice and is permitted in many regions, but the underlying data stems from 2014

² The Agrecovery Foundation is a not-for-profit charitable trust governed by a board of trustees including representatives from Federated Farmers, DairyNZ, Horticulture New Zealand, Animal and Plant Health New Zealand, Rural Contractors New Zealand, distributors of agrichemical and animal health products, and local government.

and 2015 audits. Given the uncertainty, the assumptions for this analysis have been aligned with the New Zealand Greenhouse Gas Inventory, which assumes a 50:50 split between the proportion that is burnt and buried on farm. This is likely to be conservative as burning is likely to be more common than burial due to the bulky and non-biodegradable nature of plastics, making burial less efficient, which quickly fills void space in farm refuse pits. While data is limited, a 2022 survey³ undertaken by a Hawke's Bay farmer identified reasons farmers still burn plastics, including cost, convenience; limited understanding of harm to the environment from burning and burying; and lack of certainty about recycling outcomes.

I am satisfied that, given the available evidence, this RIS represents a reasonable view of the likely costs, benefits and impact of the preferred option.

Responsible Manager(s) signature:



Shaun Lewis
Waste System and Operations
Ministry for the Environment
22 October 2025

Quality Assurance Statement

Reviewing: Ministry for the Environment

QA rating: meets the quality assurance criteria

Panel Comment:

A Regulatory Impact Analysis Panel from the Ministry for the Environment consider the RIS and its stage 1 and 2 CRIS meet the quality assurance criteria. The problem and the objectives were clearly defined. Sufficient consultation informed the choice of the preferred option. A range of benefits were not able to be quantified but strengthen the positive cost benefit ratio.

³ Reynolds, S. 2022. Burning Plastic. [Understanding the behavioural patterns of Sheep and Beef farmers related to farm waste streams](#). Report prepared as part of the Kellogg Rural Leadership Programme.

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

Agrichemical containers and residual agrichemicals

1. Agrichemicals are any chemical product used in agriculture to support crop production or manage pests, weeds and diseases. These products are also used by others eg, forestry, conservation, recreation, local government, households, etc.
2. Agrichemicals can become surplus when land management or ownership changes, chemicals expire, or chemicals are deregistered. Agrichemicals are by intent toxic. They pose a risk to human health and the environment if inappropriately used, stored or disposed of.⁴
3. Over time, stored waste agrichemicals can enter the surrounding environment from perished containers,⁵ during natural disasters⁶ and through accidents or misuse. The release of toxic chemicals to air, soil and water can harm crops, livestock, humans and ecosystems.
4. Some agrichemicals can contain persistent organic pollutants (POPs). POPs do not degrade in plants, animals or the physical environment. Rather, they accumulate up the food chain, posing a long-term health risk to humans and ecosystems. Many agrichemicals declared as POPs have been deregistered for use in New Zealand but remain stored on farms.⁷
5. Unused or unwanted agrichemicals cannot be recycled. If they cannot be used legally for their intended purpose,⁸ they must be safely neutralised or destroyed, to reduce the risk to the environment.⁹
6. The packaging used to supply and mix agrichemicals is potentially toxic unless adequately cleaned. Some packaging can be recovered and recycled, if triple-rinsed to remove chemical residue.
7. Chemicals to control pests and weeds used by households pose similar risks to the environment and human health if poorly managed at end of life.

Farm plastics

8. It is estimated that over 13,000 tonnes of farm plastics were sold in New Zealand in 2019 and 16,700 tonnes in 2025 (see appendix 1), in the categories of agrichemical containers

⁴ Ministry for the Environment. 2019. [Proposed priority products and priority product stewardship scheme guidelines: Consultation document](#). Wellington: Ministry for the Environment.

⁵ Environment Canterbury Regional Council. 2015. [New Zealand Rural Waste Minimisation. Phase 1 Risk Assessment. Summary Report](#). Report No. R15/145, prepared for Environment Canterbury by True North Consulting Ltd.

⁶ For example, the 2023 cyclonic floods in Hawke's Bay, or the landfill spill-over into the Fox River in 2019.

⁷ For example, after decades of waste agrichemical collections co-funded by regional councils and the Government, the Government co-funded a DDT Muster to collect the remainder. This project found many examples of stored DDT which could not be collected for destruction, due to user-pays constraints (Ministry for the Environment. 2019. [Proposed priority products and priority product stewardship scheme guidelines: Consultation document](#). Wellington: Ministry for the Environment. p 40).

⁸ Note that this includes the appropriate use of 'second-hand' agrichemicals that some may consider a form of recycling.

⁹ Agrecovery works with commercial partners (companies) to provide services to safely manage agrichemicals at end-of-life.

and drums; bale wrap and silage sheet; and seed, feed and fertiliser bags.¹⁰ Sales of farm plastics in scope of regulation are projected to continue to increase.

9. Farm surveys indicate that many farm plastics are burnt, buried or stored indefinitely on-farm.¹¹ This may breach the legislation for hazardous substances and their disposal.¹² Open burning of plastics releases air pollutants and toxic substances, such as dioxins, which can contribute to significant health problems.¹³
10. Some farmers pay to send their waste to consented landfills. This poses a lower environmental risk than on-farm burning, burial or storage.
11. Farm plastics are a significant source of microplastics,¹⁴ which is increasingly recognised as a potential negative impact on plant productivity.¹⁵
12. Any disposal of farm plastics removes the opportunity to recover resources for recycling.
13. Possible underlying causes of current disposal practices include:
 - limited availability of convenient and free-to-use management alternatives
 - limited knowledge of available alternatives
 - lack of awareness of the potential impacts of burning and burying plastic wastes.
14. Opinion surveys consistently show majority support for better management of waste, including plastics.¹⁶

Regional council rules for on-farm waste disposal

15. Regional councils have used their powers under the Resource Management Act 1991 (RMA) to control on-farm waste disposal, which is typically a permitted activity. All regional councils have rules for disposal sites (also known as farm dumps or waste pits). The rules vary across councils but generally aim to avoid some of the negative effects.¹⁷
16. Some councils prohibit outdoor burning of all plastics, while others prohibit it for certain types (eg, chlorinated, polyvinyl chloride, or halogenated plastics). Enforcing rules associated with farm dumps and burning of materials can be a challenge for regional councils.

¹⁰ Agrecovery Foundation. 2022. [Green-farms Product Stewardship Scheme Co-Design Report](#). pp 15–16.

¹¹ Hepburn I, Keeling C. 2013. [Non-natural Rural Wastes - Site Survey Data Analysis: Summary Report](#). Environment Canterbury Report No. R13/97. Prepared for Environment Canterbury.

Matthews J. 2014. [Rural waste surveys data analysis Waikato & Bay of Plenty](#). Waikato Regional Council Technical Report 2014/55. Prepared for Waikato Regional Council by GHD Ltd.

Reynolds, S. 2022. Burning Plastic. [Understanding the behavioural patterns of Sheep and Beef farmers related to farm waste streams](#). Report prepared as part of the Kellogg Rural Leadership Programme.

¹² These requirements are outlined in the [Hazardous Substances \(Disposal\) Notice 2017](#) and [Health and Safety at Work \(Hazardous Substances\) Regulations 2017](#).

¹³ Verma R, Vinoda KS, Papireddy M, Gowda ANS. 2016. [Toxic Pollutants from Plastic Waste - A Review](#). Procedia Environmental Sciences 35: 701–708.

¹⁴ Food and Agriculture Organization of the United Nations (FAO). 2021. [Assessment of agricultural plastics and their sustainability: A call for action](#). Rome: FAO.

¹⁵ Galahitigama H. et al. Assessing the impact of micro and nanoplastics on the productivity of vegetable crops in terrestrial horticulture: a comprehensive review (2025) Environmental Monitoring and Assessment, 197 (4), art. no. 404, DOI: 10.1007/s10661-025-13820-1.

¹⁶ See, for example, Ministry for the Environment. [Research into attitudes to waste and recycling](#). Retrieved 21 March 2025.

¹⁷ All councils have some rules concerning on-farm waste disposal sites (in particular, regulating the location of such sites), as well as rules prohibiting the burning of plastics. Some councils prohibit burning of all plastics (Bay of Plenty, Canterbury, Hawke's Bay, Northland, Otago, Southland, Wellington), others only of chlorinated plastics/PVC or plastics containing halogenated materials (Horizons, Taranaki, Waikato, West Coast).

Voluntary product stewardship schemes are in place

17. Since 2006, two voluntary product stewardship schemes have offered take-back services for residual agrichemicals and their containers and some farm plastics. Some farm plastics are currently not covered by either scheme.
18. Agrecovery operates a scheme for agrichemical containers and drums, including their residual agrichemicals. Farmers can drop them off at any of the 160 collection sites throughout the country, mostly at agrichemical retailers or council sites. The scheme is funded through voluntary fees paid by participating producers. It collects around 50 percent of containers and drums sold by member companies (around 629.5 tonnes were collected in 2023).¹⁸ Currently, 120 agrichemical brands (estimated to represent the majority of the market) are Agrecovery members.
19. Plasback operates a user-pays scheme for collecting some farm plastics, mainly bale wrap and silage sheet. Farmers can drop off their plastics for a fee at a Plasback collection point. Alternatively, farmers can buy Plasback bins or liners, which Plasback then collects for a user-pays fee from the farm, once the liner is filled. Plasback collected around 5,500 tonnes of bale wrap and silage sheet for recycling in 2022, and around 6,100 tonnes in 2023.¹⁹ This is about half of the total quantity of bale wrap and silage sheet sold in each of the preceding years.
20. While recovery volumes through the voluntary schemes are increasing, this is in part because the schemes are taking on a wider range of product types (see appendix 2, some of which are out of scope for this RIS), and the total volume of plastic entering the market is also increasing. Consequently while recovery tonnages increased between 2021 and 2023, the overall recovery rate for the in-scope products plateaued, at approximately 45 percent of the volume estimated to be placed on the market.
21. Key overseas markets for New Zealand's meat, dairy and horticultural products (eg, major EU and UK supermarket chains) now require evidence of sustainable production. Farmers using Agrecovery and Plasback schemes have been able to document sustainable practices in initiatives such as Fonterra's Co-operative Difference programme,²⁰ and to benefit from higher payouts.

How is the status quo expected to develop?

22. We understand that use of plastics on farms is likely to continue to increase over time. In part, this is driven by changing feed systems, as farmers seek to maintain high levels of production and to buffer against the increased intensity of drought and flooding across New Zealand.²¹ We expect there to be continued and growing market expectations for sustainable farming practices, including recycling of farm plastics.
23. Without intervention of some sort, we do not expect substantial changes to current disposal practices for agrichemicals and their containers and some farm plastics (ie a mixture of disposal to landfill, burning, burying, and some participation in voluntary schemes). As such, we expect the harmful impacts of inappropriate disposal practices will continue.
24. For bale wrap, where user-pays recycling services are offered, the market is understood to be cost-sensitive. Based on feedback from the scheme manager, we understand that if

¹⁸ See table A2.1 in appendix 2.

¹⁹ See table A2.2 in appendix 2.

²⁰ For more information, see Fonterra. [Together we make the difference](#). Retrieved 21 March 2025.

²¹ <https://environment.govt.nz/publications/our-environment-2025/atmosphere-and-climate/>

the voluntary scheme increases prices, demand and recovered volumes fall. The Plasback scheme has been running at a loss for this reason, and the company's owners have suggested the scheme may be shut down if the status quo continues. If this scenario develops, it will see a significant decrease in the status quo resource recovery figures (see 'LLDPE' and 'bale wrap' values in appendix 2), and a corresponding increase in disposal to landfill, burning and burying on farm.

Barriers to improving end-of-life management

25. The current barriers to improving management of end-of-life agrichemicals, their containers and farm plastics include:
 - limited availability of convenient and low or no-cost alternatives to on-farm disposal
 - limited awareness among farmers (and other consumers) of available alternatives
 - limited incentives for the currently free-riding producers and importers to join voluntary stewardship schemes, which limits the funds available to collect and manage end-of-life products
 - lack of farmer awareness of the potential impacts of on-farm disposal such as burning and burial
 - difficulty of enforcing regional rules on burning and burying farm waste.
26. For household pest and weed products, the main barriers are similar and include:
 - limited availability of collection and recycling schemes that are appropriate for the take-back of containers and any residual chemicals that are convenient and free or low cost for consumers
 - limited awareness of alternatives to disposal in mixed rubbish
 - limited incentives for producers and importers to join voluntary stewardship schemes.

What is the policy problem or opportunity?

27. There are ongoing but avoidable practices for disposing of agrichemicals, their containers and farm plastics, such as on-farm burning, burial or indefinite storage in some rural areas. This in turn risks harming the environment and human health and losing recyclable materials. Not all farmers have access to take-back and recycling services for these products and there is an opportunity to address these issues.

What objectives are sought in relation to the policy problem?

28. The policy objectives are to:
 - increase resource recovery for agrichemicals, their containers and farm plastics when they become waste
 - reduce harm to people and the environment arising from agrichemicals, their containers, and farm plastics when they become waste.

What consultation has been undertaken?

29. From March 31 to 1 June 2025, the Ministry consulted on proposed product stewardship regulations under the WMA for agrichemicals, their containers and farm plastics. We consulted on two options (maintaining a voluntary approach and introducing WMA regulations). We did not explicitly consult on the third option considered in this regulatory impact statement, an enhanced voluntary approach, but we consider ongoing engagement with industry and consultation feedback also gives insights into what could be done to improve the current voluntary approach.

30. We received 144 submissions, from a range of stakeholders, including farmers and growers, rural contractors, producers and brand owners, industry bodies, councils, waste management service providers, retailers, and civil society organisations. The summary of submissions will be published on the Ministry's website²² and a summary table of results is provided in appendix 4.

Section 2: Assessing options to address the policy problem

What criteria will be used to compare options to the status quo?

31. The primary options will be considered against the criteria outlined in table 1.

Table 1: Criteria for assessing the options

Criterion	Description
Effectiveness	Is the option likely to support achievement of the policy objectives to: - increase resource recovery for agrichemicals, their containers and farm plastics when they become waste - reduce harm to people and the environment arising from agrichemicals, their containers, and farm plastics when they become waste
Supply chain responsibility	Is the option likely to: - move a fair share of costs and responsibilities for product impacts from the public and councils to the producers and consumers - encourage full sector participation and shared responsibility for achieving the policy objective?
Efficiency	How cost effective is the option likely to be at achieving the policy objectives?

32. The following objectives relate to the impact of the Trans-Tasman Mutual Recognition Act 1997 (TTMR Act), which would only be relevant to a regulatory approach (ie option 3):

- alignment with policy objectives (ie increased resource recovery and reduced harm)
- impact on single market supported by the TTMR Act (double weighting)
- certainty for regulated parties and the public.

33. The key for the symbols used in the multicriteria analysis is outlined in table 2.

Table 2: Key for options analysis

Symbol	Meaning
++	much better than doing nothing/the status quo/counterfactual
+	better than doing nothing/the status quo/counterfactual
0	about the same as doing nothing/the status quo/counterfactual
-	worse than doing nothing/the status quo/counterfactual
--	much worse than doing nothing/the status quo/counterfactual

²² Ministry for the Environment. 2025. [Summary of submissions](#) – published web link to be added.

What scope will options be considered within?

34. The Ministry ruled out several alternative options on the basis that they are not feasible under current legislation such as a polluter pays tax, or central government controlling the scheme. We do not consider improved education would be effective as a stand-alone option although it could be used to support any of the options considered.
35. Other possible options focused on improved management of disposal practices (such as improved rules or enforcement of regional council controls on burning and burial) may be more appropriate to consider after ensuring that farmers nation-wide have improved access to recycling services. Until the alternatives exist at national scale, there is likely to be limited benefit in this option.
36. Other possible remedies within the Waste Minimisation Act e.g. controlling or prohibiting manufacture or sale of certain plastic products, deposit-return requirements and quality standards could also be considered in the future if improvements to product stewardship do not sufficiently achieve the desired outcomes.
37. Further details on the discarded policy options can be found on the Ministry's website.²³

What options are being considered?

38. The 2025 public consultation sought feedback on the two options: no action, and to introduce WMA regulations.
39. Of the 122 submitters who responded to this question, 90 percent agreed the right options were presented (ie whether to regulate or not). Of those who did not agree four (3.2 percent) answered 'no' because, while they agreed with the two options presented, they did not support the full product scope within the regulated option.
40. The two primary options consulted on are presented below along with a third option, an enhanced voluntary scheme.
41. The preferred option (3) has also been modified to accommodate consultation feedback.

Option 1 – No action (maintain voluntary approach)

42. Under option 1, a voluntary product stewardship approach for agrichemical containers, residual agrichemicals and farm plastics could continue.²⁴
43. Two main factors influence participation in voluntary schemes and, consequently, recovery rates:
 - producers' incentives to join and fund a scheme
 - consumers' incentives to use a scheme.
44. Producers/importers may be reluctant to participate in voluntary producer-pays schemes when their competitors can opt out and gain market advantage through reduced costs. In turn, this limits the funds available to the scheme to cover the costs of collecting and managing the end-of-life products. As a result, the take-back service may not be convenient enough, or cover the full list of products, and some farmers are either dissatisfied with, distrusting or unaware of the voluntary schemes.²⁵
45. In the case of consumer-pays schemes, the fee-for-service model can discourage farmers from using the service.

²³ <https://consult.environment.govt.nz/waste/agrichemicals-their-containers-and-farm-plastics/>

²⁴ For clarity, the currently accredited "green farms" scheme would *not* be implemented under this option, as it was designed to be implemented with enabling regulations, including regulated fees.

²⁵ Reynolds, S. 2022. Burning Plastic. *Understanding the behavioural patterns of Sheep and Beef farmers related to farm waste streams*. Report prepared as part of the Kellogg Rural Leadership Programme.

Option 2 – Enhanced voluntary option

46. Option 2 would seek to improve farmer and producer participation in voluntary product stewardship for rural waste. This could involve increased education and communication activities addressing one of the identified barriers including distrust or lack of awareness.
47. Option 2 could also include an increase in the amount of voluntary/user-pays fees charged to fund the two schemes in order to improve the scheme coverage and service levels.

Option 3 – Introduce WMA regulations

48. Option 3 proposes using WMA regulatory powers to improve the end-of-life management of the in-scope products. Regulated fees, or an ‘advanced disposal fee’, would fund a national scale take-back service that has improved service levels across all regions, and is free-to-use.²⁶ Further details on the proposed regulations are in appendix 6.
49. WMA regulations would support the accredited scheme for the following product groups²⁷:
 - plastic agrichemical containers and drums for recycling and any residual agrichemicals²⁸ for safe destruction (including household pest and weed control products)
 - plastic bale wrap and silage sheet
 - small plastic bags containing agricultural products such as seed, feed, fertiliser, soil and crop inputs, and farm and animal supplements
 - all large woven polypropylene bags containing agricultural products.
50. More detailed definitions can be found in appendix 7.

²⁶ A “free-to-use” take-back service is recognised as being funded by regulated fees. For readability, this is not reiterated in every use of the term “free-to-use” hereafter.

²⁷ For readability, the full definitions for categories like “small bags” and “large bags” will not be used throughout this document.

²⁸ The scheme would cover residual agrichemicals, namely those that are surplus to use, were permitted to be sold in New Zealand at the time of purchase and are stored in their original packaging (so that the brand or supplier can be identified). Legacy agrichemicals that do not meet those criteria would not be covered because it would not be possible to identify if a regulated fee had been paid for those products. For non-residual/bulk agricultural chemical recovery and disposal, Agrecovery will continue to provide a user-pays service. It will also work with local government to support the agrichemical component of hazardous waste collections, where these are provided.

How do the options compare to the status quo/counterfactual?

Table 3: Assessment of options 1, 2 and 3

Criterion	Description	Option 1 – No action (maintain voluntary approach)	Option 2 – Enhanced voluntary option	Option 3 – Introduce WMA regulations
Effectiveness Is the option likely to support achievement of the policy objectives to:	increase resource recovery	0	+ <i>An enhanced voluntary option could increase resource recovery but our assessment is that it is unlikely to achieve much of an increase, because farmers have indicated they want a ‘one stop shop’ (ie to know that all products can be managed through a single service that has nationally consistent service levels, and without having to identify if it is a brand that is voluntarily participating or not). Perversely, under this option, a fee increase is also likely to see a reduction in voluntary participation for some of the larger volume product types.</i>	++ <i>A regulated scheme with regulated fees is likely to increase both accessibility and use, through improved national coverage and free-to-use take-back services. In-line with international examples, this approach is most likely to increase resource recovery and recycling.</i>
	reduce harm to people and the environment arising from agrichemicals, their containers, and farm plastics when they become waste	0	+ <i>An enhanced voluntary option could reduce burial and burning of plastics compared to the status quo. Education activities could be targeted at increasing farmers’ understanding of harms associated with burning and burial of plastics. Our assessment is that it is unlikely to achieve much of a reduction in harm without also improving the</i>	++ <i>A regulated scheme is likely to increase product collection and reduce the incidence of burning or burying on-farm because increased fee revenue will enable development of a more comprehensive collection network, and inclusion of all brands will make it simpler for farmers to identify what needs to be done with a given product at its end-of-life. The regulated scheme</i>

			<i>services available to farmers to appropriately manage these products.</i>	<i>would be funded by producer fees whereas user charges are currently used for some of the in-scope products.</i>
Supply chain responsibility Is the option likely to:	move a fair share of costs and responsibilities for product impacts from the public and councils to the producers and consumers	0	0 <i>An enhanced voluntary approach could try to involve more producers than currently participate, but there will be challenges in doing so. Some sub-sectors have informed Agrecovery that they do not intend to participate unless there is a mandatory requirement to do so.</i>	++ <i>The stewardship fee will likely be passed on to farmers and other consumers. However, the proposed fees are a small proportion of the overall product cost (typically around 1 percent or less). The take-back services would be free of charge to consumers.</i> <i>For consumers who currently pay for Plasback collections, the regulated fees will replace those costs and, in some cases, may result in savings.</i> <i>For councils currently investing in agrichemical and household pest and weed product management, the regulated fees will replace those costs and result in savings.²⁹</i> <i>The end-of-life costs are therefore shifted from council and communities to producers and consumers.</i>
	encourage full sector participation and shared responsibility for achieving the policy objective	0	0 <i>An enhanced voluntary scheme could make further efforts to encourage full sector participation (from both producers/importers and farmers). It is difficult to achieve full sector participation with a voluntary</i>	+ <i>All producers and importers must participate in and comply with the accredited scheme. Farmers would not have a mandatory obligation to participate but their participation would be encouraged through</i>

²⁹ Note, this excludes legacy product management, for which regulated fees may not be used.

			<i>approach, given that the schemes have already been operating for close to twenty years and some producers have communicated they will not participate unless required to do so.</i>	<i>provision of convenient take-back services and better funded education and communication initiatives. If farmer participation did not substantially increase after the scheme has been implemented, additional regulatory interventions such as improved rules for on-site burning and burying could be considered.</i>
Efficiency	How cost effective is the option likely to be at achieving the policy objectives	0	+ <i>This option would be only marginally more expensive than option 1, but lower cost than development of regulations. We consider this option would achieve greater benefits than the status quo, but significantly less than option 3. This option risks negatively impacting on the policy objectives because increased scheme fees (necessary to fund improved communications) could lead to a drop in demand and increase volumes of plastic buried, burnt or landfilled. Plasback may cease to operate if it continues to operate at a loss based on current user-pays fee levels.</i>	++ <i>This option is highest cost relative to non-regulatory options. This option is most likely to address barriers for both participating and non-participating farmers and growers through the provision of a national scale, convenient and free-to-use take-back service, supported by funded education and communication initiatives. A provisional cost-benefit analysis indicates a positive cost-benefit ratio (see paragraphs 83-86 for further details).</i>
Overall assessment		0	+	++

51. If the Minister agrees to option 3, there are additional sub-options to consider regarding product scope and coverage of the TTMRA.

Product scope sub-options

52. There was broad support for inclusion of all proposed product categories. Most farmers/growers who answered this question were supportive (79 percent for agrichemicals, 80 percent for bale wrap and silage sheet, and 77 percent for small bags and bulk bags) (see appendix 4 for more detail).
53. Most rural sector organisations supported all four product categories being included. However, six retail sector submitters including Foodstuffs NZ, The Packaging Forum, New Zealand Food and Grocery Council (NZFGC), Retail NZ and two other retailers expressed concerns about the inclusion of products intended for use in households rather than on farms, and the potential overlap with a proposed Plastic Packaging Product Stewardship scheme.
54. Product categories these submitters did not support were household pest and weed products and small bags. For these categories, there is potential that fees will be charged for products that are not used by farmers and growers, and household customers paying fees within a purchase price may not have easy access the take-back services, which are more focused on servicing rural areas. These submitters also noted that for small bags, the future proposed Plastic Packaging Product Stewardship scheme could be cheaper than the proposed scheme for farm plastics.
29. Small bagged products (e.g. small bags of grass seed and fertiliser) are unlikely to be used by farmers and growers. The Warehouse Group suggested excluding the category or raising the lower limit to 25kg.
55. Take-back options for small bags already exist at big box retailers across New Zealand which are largely located in, or near urban settlements, however the recycling outcomes are not guaranteed or sufficiently evidenced for farmers and growers and offshore markets. Further, Farmlands and PGG Wrightson's stores offer volume take back options and can often be found in commercial zoning not dissimilar to Bunnings, Mitre 10 and the Warehouse Group stores.
56. Household pest and weed products are proposed to be recovered through new and existing drop-offs at transfer stations. This system is designed to ensure that containers with potentially hazardous residues are being managed by households and safely recovered.
57. The current Plastic Packaging Product Stewardship scheme design report estimates the proposed costs of the scheme, exceed benefits. The proposal also relies on a future extended producer responsibility framework (proposed to be established as part of amendments to waste legislation). It is therefore uncertain what the actual costs will be, and it is likely to take some time to implement a future scheme. Possible regulatory scope overlap can be considered in that future scenario if required and the below options include those that would minimise any overlap.

Small bags scope options

58. The Ministry has considered feedback in relation to the small bag category. The options to address this matter include:
- Option 3A: retain the product category scope consulted on
 - Option 3B: remove the product category from the regulatory proposals entirely
 - Option 3C: adjust the product category scope to exclude smaller "small bags" that are more likely to be sold to and used by households (15kg and below)

- Option 3D – adjust the lower threshold for small bags. A threshold adjustment to exclude smaller “small bags” (20kg or 25kg and below)
59. The voluntary scheme receives sales declarations from large rural retailers like Farmlands, PGG Wrightson’s, etc. Analysis of those sales declarations (figure 1) suggests most bags under 40kg sold to farmers and growers across New Zealand are in the 16-20kg range. Personal communication with Farmlands staff suggests this is in part due to the health and safety reasons (lifting risk for solo workers) with products 20kg and above increasingly moving towards lighter weight bagged options.

Figure 1: Distribution of small bag size by number of units sold



60. This distribution of product sizes suggests that setting a weight limit of 20kg or 25kg or over would exclude a substantial portion of the small bags product range, which would reduce resource recovery for these products and make it more difficult to provide a ‘one stop shop’ approach for farmers.

Table 4: Criterion assessment for options to change the small bag product scope (3A – 3D)

Criterion	Description	Option 3A – Retain the product category scope of 0-40kg for the small bags (i.e. no change)	Option 3B – Removing the product category from the regulatory proposals entirely	Option 3C – Adjust the lower threshold for small bags to exclude smaller “small bags” (15kg and below)	Option 3D – Adjust the lower threshold for small bags to exclude smaller “small bags” (20kg or 25kg and below)
Effectiveness	Is the scope likely to support achievement of the policy objectives to: increase resource recovery	++ <i>This option theoretically maximises resource recovery, however some in-scope products sold to households, eg <15kg bagged products of grass seed, fertilisers, etc may be recovered by the scheme.</i>	0 <i>Excluding small bags from the regulated product scope for the scheme is unlikely to increase resource recovery.</i>	++ <i>This option maximises resource recovery opportunities for the bulk of product sold by agricultural retailers while leaving small bags largely intended for households out of scope. Small bags <15kg could be included voluntarily.</i>	0 <i>This option does not maximise resource recovery opportunities for the bulk of product sold by retailers like Farmlands, PGG Wrightson, and Farm Source. Small bags would continue to operate as a voluntary initiative.</i>
	reduce harm to people and the environment arising from agrichemicals, their containers, and farm plastics when they become waste	++ <i>This option theoretically maximises opportunities for harm reduction, however some in-scope products would currently be sold to households eg <15kg bagged products of grass seed, fertilisers, etc and are less likely to be disposed of through burning or burial on farm</i>	0 <i>Excluding small bags from the product scope for the scheme is unlikely to reduce harm.</i>	++ <i>This option maximises opportunities for harm reduction associated with the bulk of product sold by retailers like Farmlands, PGG Wrightson, and Farm Source, while leaving small bags largely intended for households out of scope.</i>	0 <i>This option excludes most small bag products sold into the rural sector and is less likely to reduce harm.</i>
Supply chain responsibility	Is the option likely to: move a fair share of costs and responsibilities for	++ <i>This option shifts costs to the responsible supply chain, but also captures</i>	0 <i>This option does not shift costs or bring in any free-riders. Small bags would</i>	++ <i>This option shifts costs to the responsible supply chain, and excludes most</i>	+ <i>This option shift costs for only very limited proportion of the market >20kg. Small</i>

	product impacts from the public and councils to the producers and consumers	<i>products largely sold to households eg <15kg bagged products of grass seed, fertilisers, etc.</i>	<i>continue to operate as a voluntary initiative.</i>	<i>products sold to households e.g. <15kg bagged products of grass seed, fertilisers, etc.</i>	<i>bags would continue to operate as a voluntary initiative.</i>
	encourage full sector participation and shared responsibility for achieving the policy objective	++ <i>This option obligates all suppliers and retailer types of in-scope products, irrespective of their target market, to participate in the scheme. This option has the broadest scope of product sizes and therefore includes products that are more targeted towards household consumption.</i>	0 <i>This option places no obligations on any suppliers for small bagged products.</i>	++ <i>This option obligates all suppliers and retailer types of in-scope products, irrespective of their target market, to participate in the scheme. This option has a narrower scope (16kg-40kg) of product sizes and therefore removes most products from the scope that are targeted at households.</i>	+ <i>This option obligates all suppliers and retailer types of in-scope products to participate in the scheme. The narrower scope (20kg or 25kg – 40kg) of this option removes nearly all products that are targeted at households, but it also removes most bagged products sold to farmers and growers.</i>
Efficiency	How cost effective is the option likely to be at achieving the policy objectives <i>Note: costs and benefits have not been quantified and are presented as a qualitative assessment.</i>	+ <i>A broader scope that includes smaller bagged products (<16kg) is likely to be less efficient for collection of products sold to households, because the take-back network is more focused on rural areas (typically located at rural retailers such as Farmlands).</i>	0 <i>This option has no direct costs or benefits. However, the voluntary scheme currently experiences free-rider costs from non-participating brands.</i>	++ <i>A scope that includes small bagged products 16-40kg is likely to have more benefits as the take-back network is most convenient for customers of the rural retailers, such as Farmlands.</i>	+ <i>The benefits are likely to be lower as the majority of products sold by rural retailers would be out of scope.</i>
Overall assessment		+	0	++	+

61. Given the unintended capture of products targeting households in the “small bag” product category, the option initially consulted on (option 3A) is assessed as suboptimal. Analysis of current sales declarations shows that a 15kg and below exemption captures the majority of product used rurally, without capturing too many products predominantly sold to households.
62. This assessment is based on data for products sold by rural retailers like Farmlands, PGG Wrightson and Farm Source. Retailers like Bunnings, the Warehouse Group and Mitre 10 may sell some products in this size range. Online research suggests 20kg plastic bags of chicken feed would likely be the main regulated small bag product sold by these retailers under this option, much of which would be sold to households rather than rural users.³⁰
63. Households who purchase these heavier bagged products may not be aware of the drop off locations for the rural small bags scheme currently, meaning this could represent unfair regulatory capture (a fee is being charged for a service that the consumer is unlikely to access). This could be mitigated in part through improved marketing and communication of the scheme. Some of the existing and new drop-off locations planned as part of the rural recovery network will also be accessible to households. Retailers could also choose to alter the product range they stock.³¹

Household pest and weed products

64. While not a rural sector product type, household pest and weed products require specialist handling due to their hazardous contents. The voluntary scheme is already managing agrichemicals for the rural sector and is set up to do that safely and efficiently.
65. Some retailers oppose this in favour of the future possible Plastic Packaging Product Stewardship scheme. The Plastic Packaging Product Stewardship scheme does not operate currently and it is unclear if and when it will be operational; and if it is implemented, whether it will be able to manage post-consumer containers used for toxic household pest and weed products. The Ministry considers that there is no viable alternative for managing these materials at this time.

Other scope options considered

66. Other scope questions that came up in submissions or in subsequent refinement of options include that some product categories are used in both agricultural and (more widely) in non-agricultural applications (such as cleaning products used in dairying and also in other commercial operations/premises).
67. The regulated scope needs to be as clear as possible so that all participants understand their obligations, and scheme fees are paid on products likely to be managed by the scheme at end-of-life. While it may be desirable to capture as many products as possible that are used in the rural sector, in cases of mixed use where the rural sector is not the main user of a product, the scheme will need to cover the products on a voluntary rather than a regulated basis. Definitions have been updated to minimise the risk of unintended capture with the regulation scope.

Impact of the Trans-Tasman Mutual Recognition Act 1997

68. The Trans-Tasman Mutual Recognition Arrangement (TTMRA) is an arrangement between the New Zealand Government and the Australian Commonwealth, States, and Territory Governments that aims to promote economic integration and facilitate trans-Tasman

³⁰ NZFGC members indicated that 5-23 per cent of their sales by volume in the small bag category (40kg or less) are to non-household consumers.

³¹ Chicken feed bags currently stocked by retailers such as Mitre 10 up to 20kg from the same brand can be purchased in either paper or plastic packaging. The paper bags would be out of scope.

trade. It is implemented into law in New Zealand under the Trans-Tasman Mutual Recognition Act 1997 (TTMR Act).

69. Under the TTMRA, goods that can be legally sold in and produced in or imported into Australia can legally be sold in New Zealand and vice versa, regardless of differences in regulatory sale requirements between the two places. It generally works by over-riding any domestic laws that regulate the production or the sale of goods (with certain exceptions).
70. In the case of these proposals, it would mean that goods in these four product categories that are imported into New Zealand from Australia could continue to be sold on the New Zealand market under the TTMRA without complying with domestic regulatory sale requirements (including payment of scheme fees).
71. A permanent exemption can be made to the TTMRA to prevent this from occurring. A permanent exemption requires the agreement of all participating jurisdictions including the Australian State and Territory Governments. Exemptions must meet stringent requirements. The New Zealand Government's publicly stated position is that the TTMRA's strength in contributing to New Zealand's economic and regulatory objectives lies in its broad coverage. Any new exclusions or exemptions could create a significant precedent, and New Zealand would need compelling reasons to support any move to reduce the TTMRA's coverage.³²
72. We have analysed whether an exemption should be sought for some or all of these product groups. The criteria in relation to these options are outlined at paragraph 31 (see also table 5).
73. The options are to not seek exemptions (option i) or to seek permanent exemptions for some or all products (option ii). Based on information provided by the scheme manager on products on the New Zealand market, for most product categories we consider there to be a low risk that goods imported from Australia would be sold on the New Zealand market without participating in the scheme. This is because Australian brands generally form a small portion of the market for most product groupings and many already participate voluntarily and we expect them to continue to do so.
74. Australia also has product stewardship requirements for some of these products, although the specific requirements may differ.³³
75. For some specific subcategories, Australian or cross-Tasman brands who do not currently participate voluntarily in the scheme make up a larger market share.³⁴

³² [Submission 47 - New Zealand Government - Mutual Recognition Schemes - Commissioned study](#)

³³ This includes:

- small bags: a voluntary scheme was established in Victoria in 2025 and intends to expand to other states
- large bags: covered by a mandatory national co-regulatory framework for packaging.
- silage and bale wrap: trials have been undertaken but no mandatory system is in place
- agrichemicals and their containers: The Agricultural and Veterinary Chemical Products (Collection of Levy) Act 1994 contains provisions for the collection of levy on agricultural and veterinary chemical products. A national product stewardship programme managed by AgSafe is also in place.

³⁴ Commercial in confidence: this includes aquaculture feed, and some types of seeds and supplements.

Table 5: Options analysis for application of the Trans-Tasman Mutual Recognition Act 1997

Criterion	Description	Option i – do not seek exemptions for any product	Option ii: seek permanent exemptions for some or all products
Alignment with policy objectives	Alignment with objectives to: - increase resource recovery - reduce harm to people and the environment from agrichemicals, their containers and farm plastics when they become waste.	- Partial alignment – it would be possible for these products to legally enter New Zealand from Australia without participating in the scheme (assessed as low risk because most already comply voluntarily, and there is already partial alignment with Australian market because agrichemicals are subject to a levy in Australia).	+ If a permanent exemption is sought, Australian products entering New Zealand would need to comply with product stewardship requirements including fee payment permanently.
Impact on single market supported by the TTMRA (double weighting)	The TTMRA's purpose is to facilitate movement of goods and people in registered occupations between Australia and New Zealand.	++ Does not undermine the integrity of the TTMRA common market, because there would be no barrier to Australian products being sold in New Zealand	-- Exemption would erode the benefits of the TTMRA and would create a barrier to trans-Tasman trade, because there would be an ongoing requirement for Australian companies to comply (different market requirements in Australia and New Zealand).
Certainty for regulated parties and the public	How clear obligations are for regulated parties and the public	- Could create some confusion – Australian companies would not legally need to comply, but the public (and other regulated parties) may view them as non-compliant or otherwise unfairly advantaged.	+ All companies selling in New Zealand would be subject to the same requirements, which would be clearer for regulated parties and the public (although obligations would not be consistent between Australia and New Zealand so certainty would be lower across the common market).
Overall assessment		++ This option is the best for maintaining the integrity of the TTMRA and the common market approach (the primary criterion). It has a slightly reduced alignment with overall policy objectives and regulatory certainty, but these risks can be mitigated.	-- This option more closely aligns with policy objectives and could provide regulatory certainty, but New Zealand would need compelling reasons to reduce the TTMRA's coverage. This bar is likely not met here. A TTMRA permanent exemption requires the agreement of all participating jurisdictions including the Australian State and Territory Government, which is not guaranteed.

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

76. Option 3 - Introduce WMA regulations is the preferred option. Option 3 is expected to provide significant benefits in comparison to option 1 and 2. Regulatory requirements will improve producer/importer participation and regulated fees will provide a more sustainable funding basis for the scheme. If farmer participation did not substantially increase after the scheme has been implemented, additional regulatory interventions such as improved rules for on-site burning and burying could be considered.
77. The preferred scope for option 3 is sub-option 3C — Adjust the lower threshold for small bags. A threshold adjustment to exclude smaller “small bags” (15kg and below); the preferred option in relation to TTMRA exemptions is to not seek any exemption (option i).
78. Option 3 is likely to increase product collection since the fees paid by producers and importers placing the regulated products on the New Zealand market will generate the funding for a national scale free-to-use take-back service that the farmers, growers and other consumers can use without additional end-of-life disposal charges.
79. Increased collection would reduce inadequate disposal, such as burning or burial. This translates to lower emissions of toxic substances, with a corresponding drop in the risk of harm to the environment and human health. If the collected waste is recycled rather than sent to landfill, the option also prevents a lost economic opportunity associated with landfilling of recyclable waste.
80. By ensuring national coverage of take-back services compared to the voluntary schemes, a regulated scheme would make it easier for farmers to safely dispose of their residual agrichemicals and waste plastics, and to meet market demand for sustainably produced farm products.
81. Options 1 and 2 - maintain or improve the voluntary approach are unlikely to achieve the policy objective. If the current voluntary approach continues, producers’ and importers’ participation in stewardship is unlikely to increase significantly. Some parts of the country would remain poorly serviced. It is not guaranteed that the voluntary schemes would continue to operate, meaning on-farm disposal of in-scope products is unlikely to decrease under these options (and could even increase if Plasback ceases to operate).

Cost Benefit Analysis

82. Cost benefit analysis was undertaken on the costs and benefits of option 3 in comparison to the status quo (ie, option 1, the existing schemes operating on a voluntary basis). Over 30 years, and at an 8 percent discount rate,³⁵ the marginal benefits are estimated to exceed the marginal costs with a net benefit of \$25 million (Net Present Value). The benefit-cost ratio is estimated at 1.31 (NPV).
83. The costs include the regulated scheme fees which predominantly flow back into the regions to fund the take-back services and associated activities (e.g. take-back sites, consolidation, transport, processing, bailing, shipping, etc.). The fees also cover the

³⁵ Where relevant (emissions, landfill), Treasury CBAX values were used to inform the cost benefit analysis (<https://www.treasury.govt.nz/publications/guide/cbax-spreadsheet-model> - accessed 20 October 2025). Farm waste disposal assumptions (the ratio of materials burnt and buried) was sourced from the 2025 New Zealand greenhouse gas inventory (<https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-19902023/>).

scheme managers staff and office costs.³⁶ Benefits include avoided landfill costs, avoided emissions,³⁷ sale of recovered plastics and avoided land remediation costs.

84. Significant further unquantified benefits accrue from these recycling schemes given they support access to premium markets which offer higher commodity prices for New Zealand grown export products. International customers seeking sustainable lower footprint products from New Zealand, require evidence from farmers of recycling their waste plastics. While this is happening today and therefore not an additional benefit of a regulated approach, option 3 will prevent the possible loss of this recycling service through the current voluntary schemes faltering, which is a credible risk. The owner of the voluntary scheme for the largest volume material, bale wrap, has advised the recycling scheme may not continue if regulations (option 3) do not proceed.

How does the benefit-cost ratio change over time?

85. The benefit-cost ratio calculations include assumed growth in tonnes of plastic materials managed by the scheme being higher over the first decade following commencement of the scheme (averaging 8 percent per year, years 2-9). This is due an assumed increase in participation by farmers and growers in the free-to-use national scheme, recovering more of the plastic that is already on the market that is not recycled today. After the first decade, growth is assumed plateau, falling back to 1 percent per year, in line with expected growth in use of agricultural plastics overall (note, assumed annual material growth rates apply to both costs and benefits calculations).
86. The growth rate assumptions (in volume of materials managed) drives an increase in estimated costs for the scheme over its first decade of operations. Table 6 shows how this assumption impacts on the estimated benefit-cost ratio for differing time horizons.

Table 6: benefit cost ratios for different time periods

	Year 1 to 30	Year 1 to 20	Year 1 to 10	Years 11 to 30
Benefit-cost ratio (NPV)	1.31	1.22	0.98	1.75

87. The Cost Benefit Analysis³⁸ estimates the regulated scheme costs as nearly equal to but outweighing the scheme's quantified benefits over the first decade. However, it is more likely that if a regulated scheme proceeds, market demand will continue to drive the need for the scheme for at least several decades to come. Thus, a longer-term time horizon of 30 years is a more appropriate time horizon over which to consider the costs and benefits of this proposal. The market demand context includes that:
- the voluntary schemes have already been operating for 20 years, and while the voluntary approach has limits, this is because the scheme has attracted free-riders which increase scheme costs
 - plastics are increasing in their use across farming and growing systems because they provide benefits for productivity and resilience

³⁶ See Appendix 5 for further detail of the regulated scheme's regulated fee revenues and implementation costs.

³⁷ The estimated abatement from the scheme is derived from the avoided burning of plastics on farms. If option 3 is implemented, new data from the regulated scheme including: tonnages of plastic placed on the market, scheme resource recovery rates, and farmer/grower surveys, will provide for improvements to the New Zealand Greenhouse Gas inventory. This may see a reduction in estimated emissions, noting that, the option 3 policy estimates falls below the CIPA threshold of 0.5Mt CO₂e over the first ten years (0.17 Mt CO₂e).

³⁸ The CBA was developed with input and peer reviews by Agrecovery and True North Consulting

- export market drivers and market access requirements are becoming more stringent and are likely to increase (the services the scheme provides that verifies recycling outcomes is likely to be needed by more farmers and growers in the future)
- the strong rural sector support for a regulated scheme recognises these drivers and the uptake of the new scheme is likely to be well supported by industry.

Distributional impacts

88. The impacts of the regulated scheme will largely fall on New Zealand's agricultural sector including farmers and growers, and the suppliers of products and services to the sector.
89. Consumers of regulated products (farmers, growers, and for household pest and weed products, households) may see small price increases on in-scope products where the company/brand is not already participating and passing those costs on through a voluntary scheme.
90. Producers/importers of regulated products will be obligated to pay regulated fees proportional to their sales declarations and market share (see expected fee revenue table by product type in appendix 5). The impacts will vary by product type, however many large brands are already participating in voluntary schemes.
91. The scheme manager's obligations include providing a service in line with the scheme's accreditation. This will require upscaling of Agrecovery's existing voluntary services and operations model to a full regulated national scheme. This includes oversight and management of collection services currently managed through Plasback. Plasback will continue as a service provider (contractor) to the accredited scheme.
92. Rural sector retailers are already voluntarily participating in the scheme as part of the take-back network. This is largely seen as beneficial by these retailers, because their customers are calling for better 'one-stop-shop' solutions which these retailers are already voluntarily supplying.
93. General retailers such as Bunnings, Mitre 10, the Warehouse group and garden centres which sell liquid household pest and weed products in plastic containers may see small price increases if fees are passed through on in-scope products.³⁹ This would largely only affect household pest and weed products and a few "larger" small bagged products such as chicken feed in plastic bags 16kg and over.
94. Existing voluntary scheme arrangements may also change, and impact on service providers such as collections contractors which feed into the current Plasback scheme. However, as a result of a different approach to logistics, these changes are likely to deliver significant cost savings for farmers and growers on the cost per tonne of material managed. The recent Southland trial highlighted the on-farm collection model costs ~\$420/t managed, whereas the drop off model cost ~\$225/t managed. Further, independent collection contractors may still bid for collections contract work from the new scheme and offer 'premium' user-pays collections from the farm gate, as they do today. This approach ensures that collection services are cost effective (procurement-led) and provide equal opportunities.
95. The cost impacts of the scheme will fall on rural sector consumers, in a way that is largely proportional to their use of the regulated products. Of the scheme fee revenues, 46 percent will be directly spent in the regions.

Is the Minister's preferred option in the Cabinet paper the same as the agency's preferred option in the RIS?

³⁹ Key brands like Bayer, Nufarm and Yates are in support of the regulated scheme.

96. Yes, the Minister's preferred option is option 3: Introduce WMA regulations.

What are the marginal costs and benefits of the preferred option in the Cabinet paper?

97. The CBA is on the additional costs and benefits of a regulated scheme over a 30-year period, relative to the status quo (the voluntary scheme approach).

Table 7: Costs, benefits and evidence certainty by affected group for the preferred option

Affected groups	Comment	Impact	Evidence Certainty
Additional costs of the preferred option compared to taking no action			
Regulated groups and Consumers: Regulated fee costs borne by producers and importers of regulated products are the primary revenues and cover all costs of the regulated scheme. While consumers are not obligated to participate, voluntary scheme fees/charges are already being passed onto consumers, and it is most likely that any additional regulated fees cost (where they arise) will also be passed on.	Scheme fee costs are annual and ongoing. Many producers and importers are already participating and have incorporated costs into their products. The 'additional' cost of a regulated scheme is estimated and is likely to fall on brands and companies not contributing currently.	\$80 million (NPV, over 30 years)	Medium: Regulated fee cost estimates and associated projections rely on national sales estimates for four different product groups. We have some confidence in the estimates as Agrecovery and Plasback have been operating for 20 years and the scheme was developed with input from industry. Scheme members also already include most leading brands. While the market intelligence is considered reliable, some annual variation in sales may occur, impacting total fee revenues (and scheme costs).
Regulators The Ministry's scheme performance monitoring costs	The Ministry's scheme performance monitoring costs are included within, and will be recovered from, the regulated fee costs (above). This is likely to be up to 1 FTE per annum.		Medium, while FTE costs are well understood, the needs of scheme performance monitoring could be higher initially, as the accredited scheme gets established
Total monetised costs		\$80.4 million (NPV)	
Society	Avoided emissions	\$66.9 million (NPV)	Medium, the volume of plastics being burnt and therefore the potential benefits from abatement on farms is uncertain. However, recent farmers surveys and communications with regional council officers confirm the practice is common and ongoing (ie a key source of complaints, even though the activity is permitted), and Option 3 addresses the key barriers for those farmers that do burn plastics. ⁴⁰

⁴⁰ Barriers identified in this survey <https://ruralleaders.co.nz/wp-content/uploads/2022/04/Burning-Plastic-Sam-Reynolds.pdf>

Farmers and growers	Avoided landfill and land remediation costs, sale of recovered plastics	\$38.5 million (NPV)	For avoided landfill and remediation costs, the values are certain (within ranges), however the uptake of these services is uncertain. These benefits have been calculated on a very conservative basis to manage the uptake uncertainty and therefore, the uncertainty mainly pertains to how understated the benefits are. Because the value of recovered plastics varies a conservative average estimate ⁴¹ of commodity values has been used.
Total monetised benefits		\$105.4 (NPV)	

98. Drive time for farmers and growers to use the drop off service is a consideration. Recent trials of the scheme in Southland and Canterbury found that most farmers and growers were happy to drive 30-50 km to a drop off site and would prefer to do this than pay for an on-farm collection. Some were also dissatisfied with on-farm collections, given the model tends to focus on higher volume areas which leaves some farmers with suboptimal service options.
99. On-farm collections cost around twice as much, per tonne managed over drop-offs (refer to paragraph 94). The locations of drop off sites are also intended to ensure that farmers and growers would be able to do this as part of a trip they are already taking, ie on a trip to buy more products and services from retailers and the supply chains of the waste products they are dropping off for recycling. Time costs are therefore not assessed as additional.

Section 3: Delivering an option

How will the proposal be implemented?

100. If Cabinet agrees to the proposed policy, regulations will be developed under sections 22 and 23 of the WMA. Following a decision to regulate, a detailed implementation plan will be developed by the scheme manager.
101. Agrecovery are a trusted organisation with over 20 years' experience in the industry and are governed by a board of trustees including Federated Farmers, DairyNZ, Horticulture New Zealand, Animal and Plant Health New Zealand, Rural Contractors New Zealand, distributors of agrichemical and animal health products, and local government.
102. Pilot studies have been completed in Southland and Hurunui to test the core operational aspects of the scheme. Both pilots clearly demonstrated that the accredited scheme as currently designed is workable, cost effective, efficient, flexible and sustainable. The two pilots received good support from the local farming community.⁴²
103. The Ministry will work with the scheme manager to ensure the regulated parties are notified and informed of their obligations under new regulations. It is proposed that following the scheme regulations coming into force, at least a six-month transition period

⁴¹ \$93 per tonne

⁴² Agrecovery. 2025. Green-farms products stewardship scheme: Report on the findings from the Southland and Hurunui Green-farms Product Stewardship Scheme Pilots (Note this is unpublished as of 10 October 2025).

be provided to allow for the scheme manager to make arrangements and communicate with all affected parties of their new obligations under the scheme.

104. The Ministry will publish guidance on how to comply with the regulations on our website, including the requirements to about what it means to comply with an accredited scheme.

Key risks identified

105. A detailed implementation plan has not yet been developed. This risk is noted here for transparency but is assessed as low and can be managed through development of an operational plan prior to the regulations coming into force (as was the approach for the now regulated Tyrewise scheme). The plan would require review and approval by the Ministry ahead of a finalised deed.⁴³
106. The forecasted fees revenues could be higher or lower than expected. This would most likely mean that there is more or less plastic in the market in any given year than forecast. This financial risk to the scheme can be managed through adapting operational services (costs) to the volume being managed.
107. Some farmers and growers will continue to burn plastics. While farmers and growers will not be obligated to participate, recent surveys and consultation have indicated support for a national recycling scheme. Further, surveys have shown that barriers for those who continue to burn include frustration with and/or misinformation about the voluntary schemes. In addition to provision of a one-stop-shop national take-back service, communication and transparency around recycling outcomes will be key to secure both engagement with and trust in the new accredited scheme.
108. Recent trials and surveys in the Southland and Canterbury regions tested detailed scheme design options and farmer/grower preferences, including take-back network options and communications approaches. These findings will help inform a national scheme roll out.

How the regulated scheme would work

109. Once regulated, the accredited scheme will expand on the existing nationwide network of sites where farmers and other consumers can drop off their waste in-scope products. The sites will be in or near places that farmers would already be using, such as towns and urban centres, rural supplies merchants, and service providers for the rural sector. More remote farmers and growers, with enough waste, will be offered free on-farm collection. Farmers could also contract private waste collectors for more frequent or out-of-scope services.
110. There will be at least eight regional recovery hubs⁴⁴ for farm plastics, where plastics would be sorted, cleaned, and baled for domestic recycling or export. This could also be supported by wash plant services in the future. They will be managed under contract by the scheme manager. The scheme will recycle as much of the collected material as possible. It may be necessary to landfill non-recyclable materials or components.
111. Management of residual agrichemicals involves safe disposal of the active ingredients and recovering the plastic container. The scheme manager will provide two operating models for residual chemicals and their plastic containers based on the type and amount (see further information below).

⁴³ The 'scheme delivery deed' is an agreement between the Ministry for the Environment and the product stewardship organisation that outlines key obligations for both parties including procedural and operational requirements.

⁴⁴ The eight regions are: Southland and Otago; Canterbury; Nelson, Marlborough and the West Coast; Wellington, Manawatu and Whanganui; East Coast, North Island; Waikato and Central North Island; Bay of Plenty and Thames Valley; Auckland and Northland.

Stewardship fee

112. The regulated parties liable to pay the fee would be the producers, importers or brand owners that first place the product on the New Zealand market. For agrichemicals and their containers, the fee would be per container of packaged product, based on volume and the chemical management group assigned to that product. For bale wrap and silage sheet, the fee would be collected on rolls of sheet, by weight. For small and bulk bags, the fee would be per bag of the packaged product.
113. The fee would cover the costs of running the scheme and managing the products at end of life (eg, setting up and running the take-back services, transporting and processing the collected products). A small part of the fee revenue would be transferred by the scheme manager to the Ministry, to cover the cost of monitoring the scheme's performance. This cost is likely to be up to one full-time equivalent staff member per year (plus overheads).

Collecting the fee

114. The scheme manager would be responsible for collecting the fee. Producers and importers would be required to pay the stewardship fee for regulated products at entry into the market. As is the case now for the Agrecovery agrichemicals scheme, fees would typically be collected from companies associated with the different brands of product within the responsible supply chain.
115. Producers, importers or downstream suppliers would have to declare to the scheme manager (for example, every three months) the number or volume of products sold or imported. Based on these self-declarations, the scheme manager would charge the applicable fee (as is currently the approach with the voluntary Agrecovery scheme). The scheme manager would verify the self-declared data (eg through independent audit as required) and resolve any discrepancies.
116. The scheme manager would collect and provide data to the Ministry about the fees paid by producers and importers, so the Ministry can monitor compliance. This reporting would be commercial-in-confidence – in aggregate at set intervals, and in detail if enforcement of regulations was required.

Proposed fee rates

117. The scheme manager calculated a fee rate for each product stream, taking into account the total estimated costs of delivering the take-back and recycling services for each product category at a national scale, and the forecast sale quantities of the products. Appendix 5, table 1 sets out the proposed fee rates. The fee would likely be passed on to consumers through the sale price of the in-scope products. Since the proposed fees are a relatively low proportion of product cost, the cost impact on consumers is expected to be low and to some degree, offset by scheme investment in services across all regions e.g. jobs, infrastructure, contractors, etc.). In some cases, where voluntary fees are already being paid, regulated fees may result in reduced costs.
118. The impact of the fee on the price of in-scope products will depend on how much of the fee the producer passes on to the consumer. The full cost of the fee is generally estimated at less than one percent of the product price (see table 8).

Table 8: Examples of proposed stewardship fees relative to product cost⁴⁵

Product	Fee per product (\$)	Typical purchase price per unit of full product	Fee as a percentage of product cost (%)
Bale-wrapped feed	0.52	\$30–\$60 per bale ⁴⁶	0.87–1.73
Large fertiliser bag	3.58	\$400–\$1,000 per bag	0.36–0.9
Small feed or fertiliser bag	0.20	>\$100 per bag	<0.2
20 litre container of agrichemicals in Group 2	2.60	Ranges widely (eg, \$181–\$1,516 for products sold by the biggest provider of agrichemicals in New Zealand)	0.17–1.4

Take-back service

119. The scheme manager would be required to provide a take-back service for the products within particular parameters such as ensuring sufficient geographical coverage. Farmers and other consumers of agrichemicals would be able to:
- drop off agrichemical containers (including residual agrichemicals) at no charge at one of the collection sites, during scheduled events (weight limits would apply)
 - have the agrichemical containers (including residual agrichemicals) picked up from their premises during scheduled events at no charge if they meet criteria for remoteness and product weight
 - drop off agrichemical containers that have been triple washed (no residual agrichemical) at some sites year-round
 - free drop off for household pest and weed control agrichemicals at specific transfer stations year-round.
120. Farmers and other consumers of farm plastics would be able to drop off in-scope farm plastics during seasonal recycling events, or year-round at some sites, under certain conditions.

Responsibilities of participants under the proposed regulations

121. The regulated parties would be the accredited scheme manager, and those that sell and distribute in-scope agrichemicals and farm plastics. Farmers, growers and other consumers would not be regulated. For further details on the proposed regulations and participant obligations see appendix 6.

How will the proposal be monitored, evaluated, and reviewed?

122. Monitoring and enforcement will not be delegated to the accredited scheme, but the scheme manager is likely to carry out their own monitoring procedures, having contractual relationships with the obligated parties.
123. The scheme manager would set up agreements with participants, covering such matters as record-keeping, declaring product quantities sold, paying the stewardship fee and informing consumers at point-of-sale about the recycling services. If regulated parties do not meet their obligations, the scheme manager may escalate the matter to the Ministry for potential investigation. Generally, the Ministry's approach to enforcement of regulations is communication and education, with enforcement action as necessary.

⁴⁵ Product cost estimates provided by Agrecovery, and for bale wrap by Plasback. For bale wrap, the proposed fee on a full roll of stretch film would be about \$11.50, which would make about 22 large bales. This results in an estimate of \$0.52 per bale to run an expanded take-back and recycling system.

⁴⁶ This is the typical charge to farmers for cutting, baling and wrapping a bale of feed.

124. The Ministry would be responsible for any monitoring and enforcement related to the proposed new regulations under the WMA. The WMA allows for enforcement proceedings. Infringement offences are not provided for. Where there are alleged breaches or non-compliance, WMA enforcement tools may be used to bring about positive behaviour change and to deter future offences. Enforcement measures would be proportionate to the seriousness of the non-compliance, following an investigation. Penalties for contravening regulations include fines of up to \$100,000 ([sections 65](#) and [67](#) of the WMA).
125. In the case of a successful prosecution, the Ministry is aware that potential financial penalties are potentially less than what scheme fees would be for a larger producer/supplier. However, most larger producers are already contributing to the voluntary schemes, and there are provisions in section 67 for applying additional penalties for breaches involving commercial gain, which could allow the courts to consider a penalty amounting to any scheme fees owing.
126. The scheme manager will conduct surveys with farmers and growers in order to monitor progress towards the objectives of the scheme.⁴⁷
127. The Ministry will monitor implications of the TTMRA and consider whether there is any risk of Australian brands selling their products in the New Zealand market without participating in the product stewardship scheme. As noted above, this is currently considered to be low risk.

Scheme and fees review

128. It is planned that the proposed fees will be reviewed after the first three years of the scheme being operational.
129. The Ministry also proposes a maximum review period of four years. This review will cover the overall efficacy of the scheme and regulations. This will also include scheme product scope, and definitions, in order to ensure regulatory capture is appropriate for the scheme's intent. The Ministry will use the information provided by the scheme manager and scheme participants to review the effectiveness of the scheme, and to inform future reviews.
130. Legislative change at a national or international level could trigger a review of the product stewardship scheme requirements. For example, the WMA is currently being reviewed and includes options to create an enabling framework for Extended Producer Responsibility schemes. Should the amendments progress, transitional arrangements for the accredited scheme would need to be further developed and implemented.

⁴⁷ Agrecovery Foundation. 2022. [Green-farms Product Stewardship Scheme Co-Design Report](#). pp 87 – 88.

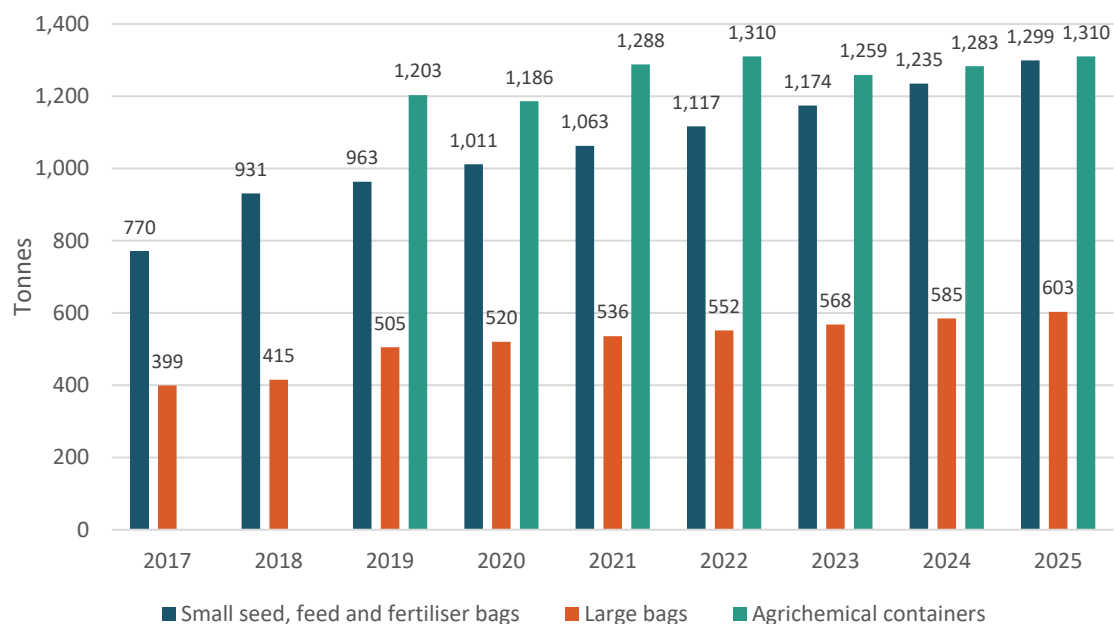
Appendix 1: Annual sale quantities of agrichemical containers and other farm plastics

The figures below show the estimated product quantities sold in New Zealand for the categories covered by the accredited scheme.

The 2017–2019 data for small bags, large bags, bale wrap and silage sheet is based on a survey of retailers and producers by PwC for Agrecovery in 2020.⁴⁸ The results were extrapolated for subsequent years by applying an estimated annual growth rate per product type.⁴⁹

For agrichemical containers, the data are based on actual sales data from companies participating in Agrecovery's current voluntary scheme, as recorded in their Statement of Service Performance Report 2019. These data were increased by 25 percent to account for non-participating brands. The quantities were extrapolated for subsequent years by applying an estimated annual growth rate of 6 percent.

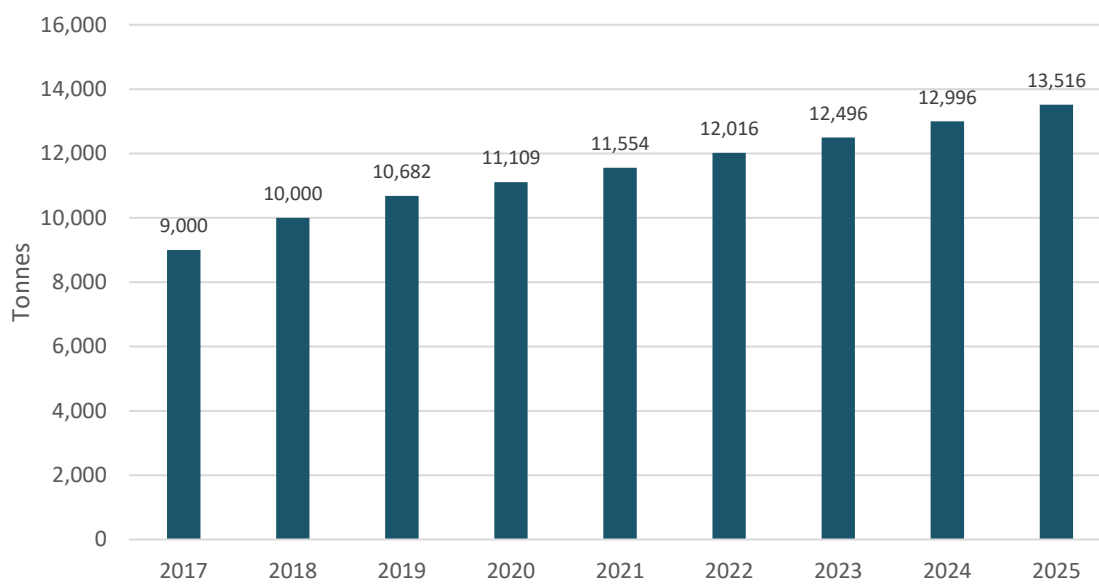
Figure A1.1: Quantity of bags and agrichemical containers sold annually



⁴⁸ Agrecovery Foundation. 2020. [Farm Plastics Priority Product Stewardship Scheme: Materials Flow Analysis](#). Prepared for the Agrecovery Foundation by PwC.

⁴⁹ Small feed bags: 6 per cent per year; small seed bags: 5 per cent per year; small fertiliser bags: 0 per cent per year; large bags: 3 per cent per year; bale wrap and silage sheet: 4 per cent per year.

Figure A1.2: Quantity of bale wrap and silage sheet sold annually



Appendix 2: Amount of farm plastics collected by Agrecovery and Plasback

Table A2.1: Agrichemical containers and other farm plastics quantities collected by Agrecovery, 2021–23 (tonnes)

Product	Plastic type	2021	2022	2023
Bale wrap	Linear low-density polyethylene (LLDPE)	-	-	826
Small bags	Low-density polyethylene (LDPE)	3	5	27
Small bags	Woven polypropylene (PP)	-	4	18
Containers and drums	High-density polyethylene (HDPE)	473	532	629.5
Bulk bags	PP	125	146	82
Wool fadges	HDPE	-	111	34
Twine	PP	-	-	25
Animal health products	HDPE and LDPE	-	-	0.5
Hail netting	HDPE	-	-	20
Total		601	798	1,662

Source: Agrecovery. 2024. Personal communication.

Table A2.2: Farm plastic quantities collected by Plasback, 2021–23 (tonnes)

Plastic type	2021	2022	2023
LLDPE	2,100	4,900	5,500
LDPE	22	16	83
Medium density polyethylene (MDPE)	-	120	21
HDPE	150	45	138
PP	329	412	370
Total	2,601	5,493	6,112

Source: Plasback. 2024. Personal communication.

Appendix 3: Co-design of the Green-farms Product Stewardship Scheme

The Agrecovery Foundation led two co-design processes with stakeholders (funded by the Waste Minimisation Fund) for product stewardship schemes covering:

- agrichemicals and their containers, reporting in 2020
- farm plastics (including an update to the co-design for agrichemicals and their containers), reporting in 2022.

The elements of both schemes were combined into the Green-farms scheme and proposed to the Ministry in June 2022.

Table A3.1 lists the stakeholders consulted in the two co-design processes.

Table A3.1: Stakeholder engagement in the Green-farms co-design⁵⁰

Dates	Activity	Participating stakeholders
1 April 2019 17 June 2019 26 August 2019	Three stakeholder meetings, as part of the co-design process for a scheme covering only agrichemicals and their containers	• 3R Group • Agcarm • Agrecovery • Ballance Agri-Nutrients • Chemwaste Industries • Ecolab • Federated Farmers • GEA FIL • Fonterra • Gisborne District Council • Horticulture New Zealand • MSD • PGG Wrightson • Ravensdown • Rural Contractors • Sustainable Winegrowing NZ • Syngenta • Synlait Milk • Timaru District Council • True North Consulting • Wairarapa Weedsprayers • Waste Management Technical Services • WasteMINZ
November–December 2019	Survey of agrichemical brand owners on proposed fee rates for different categories of agrichemicals, to understand financial impact	Survey circulated to 61 brand owners, of which about 50 percent responded
22 June 2020	Webinar: Farm Plastics Product Stewardship	Attended by 56 stakeholders

⁵⁰ Agrecovery Foundation. 2022. [Green-farms Product Stewardship Scheme Co-Design Report](#). pp 110–114.

Dates	Activity	Participating stakeholders
June–July 2020	Survey (by PwC) to quantify farm plastics used in 2017, 2018 and 2019, and gather perceptions of existing services for farmers and growers to manage disposal of farm plastics	Survey sent to 42 retailers and producers of seed, feed and fertiliser bags and crop packaging films, who together represented the largest participants in the sector – response rate was 71 percent, including all major sector participants
19 August 2020 4 May 2021 15 December 2021	Farm Plastics Advisory Group meetings	Producers, industry associations in the agricultural sector
2 November 2020	Farmer Reference Group Meeting, discussing scheme options	Six representatives from farmer and grower groups
November 2020	Nine one-stop shop events in Canterbury, trialling drop-off centres for farm plastic waste Interviews with farmers and growers to understand their preferences and determine if the centres would work	Farmers and growers
January 2021	Farmer and grower survey, gathering feedback on preferences for farm plastics recycling schemes	Survey sent to all members of Federated Farmers and Horticulture NZ – 132 responses received
24–25 March 2021	Sixteen interviews with farmers and growers during the South Island Agricultural Field Day in Kirwee, Canterbury	Farmers and growers
14 May 2021	Meeting with Plasback, discussing scheme options and Ministry guidelines for product stewardship schemes	Plasback
14 June 2021 17 November 2021	Bale Wrap and Silage Film Reference Group meetings	Six producers of bale wrap and silage film
25 August 2021	WasteMINZ webinar, presenting an update on the Farm Plastics Project	WasteMINZ Product Stewardship Sector Group
15 September 2021	WasteMINZ webinar to the Territorial Authorities Officers Forum, updating on the Farm Plastics Project, followed by one-on-one engagement with several territorial authorities	Territorial Authorities Officers Forum
4 November 2021	Visit of farm retail stores in Fielding to understand the small seed, feed and fertiliser bag market	Farm retailers (Farm Source, PGG Wrightson, Farmlands)
11 November 2021	Presentation to Between the Domes Catchment Group, giving an overview of the Farm Plastics Project, with a pitch to run a trial in Southland to test the design thinking	Between the Domes Catchment Group
17 March 2022	Presentation to the NZ Feed Manufacturers Association	NZ Feed Manufacturers Association

Appendix 4: Consultation feedback

Table A4.1: Percentage of submissions supporting the consultation proposals

Consultation question (and number of respondents)	'Yes' answers (percentage of those answering the question)
Do you agree with the description of the problem posed by agrichemicals, their containers, and farm plastics? (<i>n</i> = 129)	90
Do you support the scheme name <i>Green-farms</i> ? (<i>n</i> = 114)	52
Do you agree the options presented (<i>Option 1 – Introduce WMA regulations; Option 2 – No action</i>) are the appropriate ones to consider? (<i>n</i> = 122)	90
Do you support a national take-back and recycling scheme for agrichemicals, their containers, and farm plastics? (<i>n</i> = 123)	89
Do you support the proposal to only allow sale of the following products in accordance with an accredited product stewardship scheme?	
• Agrichemicals sold in containers and drums of 1,000 litres or less (including household pest and weed control products) (<i>n</i> = 124)	82
• Plastic bale wrap and silage sheet (<i>n</i> = 127)	89
• Small plastic bags (40 kilograms or less when full) containing products such as seed, feed, fertiliser, soil and crop inputs, farm and animal supplements (<i>n</i> = 123)	80
• Bulk woven polypropylene bags (over 40 kilograms when full) containing products such as seed, feed, fertiliser, soil amendments, minerals and bulk nutrition (<i>n</i> = 124)	85
Do you support the proposal to set a product stewardship fee on the following imported or domestically manufactured products, to cover their end-of-life management?	
• Agrichemicals sold in containers and drums of 1,000 litres or less (including household pest and weed control products) (<i>n</i> = 123)	84
• Plastic bale wrap and silage sheet (<i>n</i> = 126)	87
• Small plastic bags (40 kilograms or less when full) containing products such as seed, feed, fertiliser, soil and crop inputs, farm and animal supplements (<i>n</i> = 123)	80
• Bulk woven polypropylene bags (over 40 kilograms when full) containing products such as seed, feed, fertiliser, soil amendments, minerals and bulk nutrition (<i>n</i> = 124)	84
Do you think that any particular products in the four proposed categories should be exempt from regulation? (<i>n</i> = 118)	23 ⁵¹
Do you support the inclusion of these products in a regulated product stewardship scheme in future, subject to further government consideration?	
• Irrigation piping (<i>n</i> = 110)	83
• Shrink/pallet wrap (<i>n</i> = 116)	87
• Tunnel house covers (<i>n</i> = 111)	87
• Wool fadges (<i>n</i> = 108)	83
• Potted plant pots (<i>n</i> = 108)	86
• Vineyard netting (<i>n</i> = 106)	89
• Hail netting and other coverings (<i>n</i> = 106)	88

⁵¹ Percentage represents the number of submitters who responded 'yes' to the question. Most provided specific examples, such as one or all four product types proposed for regulation, or products that are imported to New Zealand then exported again without being used in the New Zealand market.

Consultation question (and number of respondents)	'Yes' answers (percentage of those answering the question)
• Other agricultural plastic products (<i>n</i> = 92)	77
Do you support the proposal to require the product stewardship organisation to provide a take-back service for in-scope products, and to prescribe requirements for that service? (<i>n</i> = 124)	91
Do you support the proposal that the Ministry will charge the accredited scheme to recover the costs of monitoring the performance of the scheme? (<i>n</i> = 122)	68
Do you agree with the description of the expected impacts of Option 1: <i>Introduce WMA regulations</i> ? (<i>n</i> = 118)	86
Do you agree with the description of the expected impacts of Option 2: <i>No action (maintain the voluntary approach)</i> ? (<i>n</i> = 111)	80

Appendix 5: Stage 1 and 2 Cost Recovery Impact Statement: Product stewardship for agrichemicals, their containers, and farm plastics

See link: [Stage1-and-2-cost-recovery-impact-statement-Agrichemicals-their-containers-and-farm-plastics.docx](#)

Appendix 6: Summary of proposed regulations for option 3

131. The following sub-sections set out how it is proposed to use the regulatory powers in sections 22 and 23 of the WMA to support product stewardship.

*Obligation to participate*⁵²

132. Regulation would prohibit the sale of in-scope products except in accordance with the accredited scheme. To sell a product ‘in accordance with the scheme’, producers (including onshore manufacturers, brand owners and importers) would be required to abide by scheme rules, including registering with the scheme and reporting sale or import volumes, and pay a stewardship fee to the scheme per unit of product sold or imported.⁵³
133. Mandatory participation by producers and importers would help to overcome the problem of free-riders.

*Take-back service*⁵⁴

134. Regulation would require the scheme manager to provide a take-back service for in-scope products. This would help ensure the scheme provides a convenient, free-to-use service. The scheme would be required to meet targets laid out in the scheme accreditation.

*Product stewardship fee*⁵⁵

135. Regulation to require producers to pay a fee to cover end-of-life management. A mandatory fee proportionate to the amount of products placed on the market ensures an equitable distribution of those costs across producers/importers. In the co-design process the sector supported this approach.
136. Through the increased revenue from fees, the scheme could expand take-back service coverage. The scheme would also raise awareness of available services among farmers and other users. Improved user access and awareness is expected to lead to increased collection of end-of-life residual agrichemicals and their containers and farm plastics.

*Providing information*⁵⁶

137. Regulation to require the scheme manager to collect and provide to the Ministry information relating to the above requirements (eg, the fees collected). This information would assist the Ministry to monitor the scheme.

*Recovering costs of monitoring scheme performance*⁵⁷

138. The Ministry would monitor the performance of the accredited scheme and recover the monitoring costs from the scheme manager, using part of the stewardship fee revenue. These costs would be covered by producers and importers rather than taxpayers.

⁵² WMA section 22(1)(a): Prohibiting the sale of a priority product, except in accordance with an accredited scheme.

⁵³ Such a requirement has recently been put in place for tyres. [See Waste Minimisation \(Tyres\) Regulations 2023](#), which entered into force on 1 March 2024.

⁵⁴ WMA section 23(1)(c)(i): Requiring the scheme manager to provide a take-back service for regulated products, and prescribing requirements for that service.

⁵⁵ WMA section 23(1)(d): Setting fees payable for managing regulated products.

⁵⁶ WMA section 23(1)(i): Setting requirements for specified persons to collect and provide to the Ministry specified information relating to regulations made under WMA sections 23(1)(a) through to (e).

⁵⁷ WMA section 22(1)(e): Prescribing charges payable to the Ministry for monitoring an accredited scheme.

Appendix 7: In-scope products and associated definitions for the regulated scheme

Table A7.1: In-scope products and definitions

Accreditation scope:	Consultation scope:	Updated proposed scope
The product stewardship scheme is confined to the collection and treatment and further processing of farm plastics and orphan agrichemicals only. The scheme has been co-designed to initially collect, treat and process the four most used and concerning farm plastic waste streams by volume, and expand to other farm plastic waste streams later. The first four streams are: • agrichemical and anthelmintics containers and drums, including orphan agrichemicals • bale wrap and silage sheet • small seed, feed and fertiliser bags • large grain and fertiliser bags (bulk woven polypropylene (PP) bags).	• agrichemicals sold in plastic containers and drums of 1,000 litres or less (including household pest and weed control products) • plastic bale wrap and silage sheets • small plastic bags (40 kilograms or less when full) containing products such as seed, feed, fertiliser, soil and crop inputs, farm and animal supplements • bulk woven polypropylene bags (over 40 kilograms when full) containing products such as seed, feed, fertiliser, soil amendments, minerals and bulk nutrition.	• agrichemicals sold in plastic containers and drums of 1,000 litres or less (including household pest and weed control products) • all plastic bale wrap and silage sheets • plastic bags containing agricultural products including, but not limited to seed, feed, fertiliser, soil and crop inputs and farm and animal supplements, in either: - o small plastic bags (16-40 kilograms when full) - o large woven polypropylene bags (over 40 kilograms when full).

Table A7.2 Proposed updated definitions

Term	Definition/scope
Agrichemicals	Liquid and solid chemical products used for agricultural purposes such as plant protection (herbicides, insecticides, fungicides), veterinary medicines such as anthelmintics.
Household pest and weed control products	Liquid and solid agrichemicals that are intended for domestic use around the home or garden to manage or eliminate pests, weeds, and other unwanted organisms, and available to the public through standard retail outlets.
Residual agrichemicals	For the purposes of the scheme take-back services, residual agrichemicals are defined as: - being surplus to use, and - are permitted to be sold in New Zealand at the time the fee was paid, and - are stored in the original plastic container that displays a brand/supplier that has paid a regulated fee for end-of-life management. The two categories of residual agrichemicals that will correlate with take care options provided, are: - Household pest and weed control chemicals (any amount) - Agrichemicals used by commercial and lifestyle farmers, growers or other commercial operators such as foresters and landscapers (weight limits apply).
Legacy agrichemicals	Legacy agrichemicals are those that do not meet the criteria of a residual agrichemical.

Empty agrichemical containers	For the purposes of the scheme take-back services, empty agricultural chemical containers are those that have been triple rinsed with no residual chemical remaining in the container.
Bale wrap	LLDPE (Linear Low-Density Polyethylene) to encase bales of feed for the purpose of feeding livestock.
Silage sheet	LDPE (Low Density Polyethylene) sheeting for covering silage feed pits for the purposes of feeding out to livestock.
Agricultural product types contained within plastic bags	
Seed	Includes all seeds used in the primary sectors for sowing such as pasture, arable, horticultural, and specialty crop seeds.
Feed	Covers livestock, equine, and poultry feeds. Including grain-based rations, protein and energy supplements, and specialty feeds.
Fertiliser	Encompasses conventional and specialty fertilisers used to enhance horticultural production, crop and pasture growth.
Soil and crop inputs	Includes inputs to improve soil structure, fertility, and overall productivity, including soil conditioners such as lime, gypsum, biochar, and zeolite. Excludes home garden products used for improving soil structure, including potting and planting mixes, mulch, pumice, vermiculite and perlite
Farm and animal supplements	Covers mineral supplements, lick blocks, electrolytes, and other products used to support livestock health, performance and nutrition such as mineral supplements, lick blocks and electrolytes.