

Coversheet:

Regulatory Impact Assessment

Phasing out single-use plastic shopping bags

Advising agencies	The Ministry for the Environment
Decision sought	Whether to confirm agreement in principle to a mandatory phase out of single-use plastic shopping bags and, if so: <ul style="list-style-type: none"> the thickness of plastic shopping bags to be phased out and any exemptions retailers covered by the phase out timeframe before commencement (after Gazettal and before regulations take effect).
Proposing Ministers	Minister for the Environment David Parker Associate Minister for the Environment Eugenie Sage

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Summary: Problem and Proposed Approach

Problem Definition

Single-use plastic shopping bags have a negative impact on the environment at end of life. When inappropriately disposed of, these lightweight bags can easily be blown into freshwater and marine environments, where they can be a hazard to wildlife for decades and become harmful microplastics in the food chain.

The prevalence of single-use plastic shopping bags has been encouraged by the common retail practice of providing the bags free of charge. Consequently the cost is borne by all shoppers, including those who bring multi-use bags. Convenient and free access to single-use plastic shopping bags encourages and reinforces linear resource thinking and behaviour and consequent inefficient use of natural resources.¹

The money New Zealand spends on single-use plastic shopping bags results in only a temporary consumer benefit, and contributes to long-lasting environmental problems. The current 'throwaway culture' of the linear economy also occurs at a much larger scale in other New Zealand economic sectors. Single-use plastic shopping bags are an easily addressed example of this broader culture.

Key Limitations or Constraints on this Analysis

The scope for this RIS was determined by Cabinet, which has agreed in principle to a mandatory phase out of single-use plastic shopping bags subject to the outcome of consultation [CBC-18-MIN-0076 refers].

Public consultation took place from 10 August to 14 September 2018. A clear majority of submissions (92 per cent) agreed with the proposed mandatory phase out.

This is an Implementation Regulatory Impact Statement. It considers additional information gathered from public consultation to assess the most appropriate implementation specifics to best meet the objectives. These are:

- how to define 'single-use plastic shopping bags' in regulation (eg, materials and thickness) and any exemptions to this
- how widely the measure should be applied (all retailers or only larger retailers)
- commencement date (when regulations take effect after Gazettal).

The appendix contains a summary of the assessment criteria used to assess six regulatory and non-regulatory options to arrive at the proposed measure. It was published in the consultation document in August 2018.

Scope: single-use plastic shopping bags

The term '**single-use plastic shopping bags**'² was defined in the consultation document as:

A new plastic bag (including one made of degradable plastic) which has handles and is below a maximum level of thickness. The terms 'plastic' and 'degradable'

¹ Set out in further detail in the public consultation document www.mfe.govt.nz/node/24338

² In some jurisdictions with bag control measures the term 'carrier bags' refers to shopping bags, and the retail trade uses the term 'singlet bag' for bags with integrated handles.

(including ‘biodegradable’, ‘compostable’ and ‘oxo-degradable’) would be defined in regulations with reference to international standards.

It is well understood that while these bags are designed to be single-use, not all are strictly ‘single-use’ in practice. For example, a proportion is used briefly for waste bin liners, pet waste collection, carrying wet sports gear and the like. We do not have New Zealand data but overseas life-cycle analyses estimated around 40 per cent of ‘single-use’ bags are reused once. Overall it represents a fleeting use of resources compared to a shopping bag designed for multiple use that can be used for years.

The terms ‘single-use’ and ‘multi-use’ refer primarily to the design or purpose of the bag. In a practical sense, it relates to the type and thickness of materials. We intend to use these more measurable terms for defining the scope of any regulations.

Proposed Approach

The Government proposes to institute a mandatory phase out on the sale and distribution of single-use plastic shopping bags to consumers.

This follows the banning of microbeads in wash-off products (another contributor to microplastics, with multiple more sustainable alternatives), which took effect in June 2018.

Alternatives to other plastics that contribute substantially to microplastics (eg, fishing gear, takeaway food packaging) will take longer to develop and each may require different mechanisms. The Government proposes to develop an overarching plastic waste strategy that will take a circular economy approach to developing alternatives.

Section B: Summary Impacts: Benefits and costs

Who are the main expected beneficiaries and what is the nature of the expected benefit?

The primary beneficiary of this policy will be the environment, both locally and regionally, as the proposed approach will mean fewer plastic shopping bags entering the environment and contributing to adverse effects.

Less litter and a cleaner marine environment is also a public benefit. Local government submitters note they anticipate the proposals would lead to improved waste management (eg, reduced contamination of other recyclables).

At present retailers recoup costs of ‘free’ single-use bags in the price charged for goods. Alternative, multi-use bags will be more costly upfront. Retailers may choose to stop providing free bags altogether (benefiting from reduced costs, although this would be weighed against any potential impact on their business operation if customers are inconvenienced). Retailers may also gain a new revenue stream if they choose to charge consumers for new multi-use bags.

Some importers and local manufacturers will also benefit from a new market for multi-use carry bags, although others will have interim impacts while they find alternatives to meet changing market demand.

The precise benefits will depend on retailer and consumer responses that are difficult to quantify, but we consider there may be net benefits compared to the *status quo*.

Where do the costs fall?

Costs could fall on retailers, manufacturers or importers of plastic shopping bags and on consumers.

How each of these groups will be affected by the proposals depends on decisions about the coverage of the phase out. It also depends on the extent to which they have already started to change their practices to respond to growing public demand to move away from single-use plastic shopping bags.

For example, both major supermarket chains (Foodstuffs and Countdown) have already taken steps to phase out single-use plastic shopping bags in their stores. The additional cost to these operators is therefore likely to be low.

Retailers who have not yet moved away from single-use plastic shopping bags will likely be subject to some costs. These costs will depend on whether they continue to offer customers a free bag for their purchases (at higher cost to the retailer); no longer provide a free bag, or charge customers for a bag (which may inconvenience customers, thus affecting their business).

Small retailers who hold significant surplus stock may also have a short-term sunk cost because they will not be able to distribute single-use plastic shopping bag stock they already hold. Any such costs are likely to be passed on in due course to consumers.

The proposed implementation period is intended to allow sufficient time for changes to most commercial contracts (as advised by business submitters), although some contracts with a long lead-in time may still be affected. Retailers will also bear the costs of changes to store layout for example, checkout configuration, staff training, consumer information, potential shopping delays during the adjustment period.³

Another group likely to incur direct costs is manufacturers and importers of single-use plastic shopping bags. In a few cases, single-use plastic shopping bags make up a significant percentage of the company's overall business. The current suppliers of single-use shopping bags to major retail chains may lose a significant proportion of their business during the transition to new markets.⁴ Manufacturers and importers will also bear the costs of any unused single-use plastic shopping bags they hold and will not be able to sell. Suppliers cannot accurately predict whether current customers will continue to use them to supply compliant multi-use bags (a potential boost to their business), or if they will turn to alternative suppliers (at potential cost to their business).

One submitter considers that the costs of packaging to retailers and consumers would go up considerably based on the need to provide thicker bags. This submitter considers the amount depends on the thickness adopted (50 or 70 microns), but considers this could easily increase packaging spending (and potential cost recovery from consumers) by 200-300 per cent.

³ We do not have New Zealand data. An Australian study reported a supermarket sector estimate that the use of reusable bags will increase transaction time by 5 seconds per transaction, which could result in additional costs of \$82 million annually to consumers nationwide. (NOLAN-ITU Pty Ltd 2002).

⁴ For example, one such supplier who wished to remain anonymous has advised that imported single-use plastic shopping bags comprise some 25 per cent of their business turnover. In contrast another manufacturer that imports bags does so to offer a full product range in their catalogue and it is a small and easily phased out share of their business turnover. In total, five businesses submitted there was potential for their business to suffer a loss of sales as a result of the phase out.

A few companies have expressed concern for the future of alternatives to non-degradable plastic single-use plastic shopping bags they have developed, such as compostable or oxo-degradable bags. Single-use plastic shopping bags made of these materials would be covered in the proposed phase out, but other products made of these materials manufactured or imported by these companies would not, such as rubbish bags, bin liners, pet waste bags and product packaging.

Some costs will also fall on consumers who will now be required to pay for shopping bags if they do not currently own multi-use bags, or have forgotten to bring them. At present, the cost of the 'free' single-use bags is included in the price of the other items they buy. Consumers who are not already using multi-use bags will also face inconvenience costs of forming a new habit of taking reusable bags on each shopping trip. In some shops, free alternatives are available, such as boxes, or community-based bag manufacture and sharing alternatives, such as Boomerang Bags.

The Ministry for the Environment (and therefore the taxpayer) will bear the costs of making the required regulations, providing education material for the mandatory phase out, and monitoring and enforcement.

During public consultation, information was specifically sought on impacts to importers and manufacturers of single-use plastic shopping bags. While we received some additional quantitative information, comprehensive quantitative impact data remains unavailable. In many cases, businesses did not wish to be drawn further on data they considered to be commercially confidential.

What are the likely risks and unintended impacts, how significant are they and how will they be minimised or mitigated?

Depending on the commencement date chosen, it is possible that importers, manufacturers and smaller retailers will be unable to dispose of their existing stocks of single-use plastic shopping bags by the end of the mandatory phase-out period. This risk will be mitigated by a number of proposed measures.

- an education and information campaign to ensure all affected parties have early warning
- facilitating local recyclers to run a collection service for surplus single-use plastic shopping bags that can be recycled into new products (rather than being disposed of to landfill)
- retailers will not be prevented by the proposed regulations from selling or distributing surplus stock for purposes other than carrying away sold goods (eg, bin liners or clean recycling feedstock).

Requiring consumers to pay up-front for new multi-use shopping bags could disproportionately affect lower-income consumers. This could be mitigated by retailers allowing consumers who have Gold Cards or Community Service Cards a discount or exceptions. We propose to help facilitate emerging partnerships between food banks and donors to distribute free multi-use bags with food parcels.

While the intention of the phase out is to encourage a shift from single-use to multi-use methods of transporting sold goods, it is not possible to control how individual consumers will respond. If multi-use bags are not reused by the consumer to the design lifetime of the bags, net resource use may increase – resulting in greater inefficiency and loss of resources

compared to the status quo. To mitigate this risk, proposed supplementary non-regulatory actions include:

- selecting the thickness of bag to discourage so-called ‘emergency bags’ (thicker plastic bags designed to be used multiple times but are not as sturdy as most multi-use bags), which may be more likely to be used only once or twice due to their cheap price.
- providing public information, particularly about the number of times certain types of multi-use bags need to be used to have a net environmental benefit compared to single-use plastic shopping bags. This information would help consumers and retailers to make good choices about alternatives.
- working with retailers to encourage and incentivise desired behaviours (for example, New World supermarkets’ current discount of 5c per reusable bag).

Identify any significant incompatibility with the Government’s ‘Expectations for the design of regulatory systems’

There are no significant incompatibilities with the Government’s ‘Expectations for the design of regulatory systems’. The proposed approach will impose some limited costs on retailers, manufacturers and importers, and consumers. However, it will contribute to transitioning to a more sustainable economy, which will in due course use New Zealand’s resources much more efficiently and provide opportunities for innovative product design and manufacture.

Section C: Evidence certainty and quality assurance

Agency rating of evidence certainty

The original assessment of regulatory and non-regulatory options was based on information from overseas experience, which does not completely cover the assessment criteria. As some large retailers have already started phasing out plastic shopping bags in their operations, we have access to direct on-the-ground local experience of potential impacts on retail operations and their customers.

There is also some uncertainty about the precise figures of plastic shopping bags imported and used in New Zealand, as well as their costs – these are estimates not precise data.

These potential gaps were addressed by a national consultation exercise, which specifically requested evidence and data from retailers and included visits and discussions with potentially affected parties, such as bag importers and manufacturers, and large retailers. Where possible, the results of this consultation have been integrated into the Regulatory Impact Statement. However, the evidence base is suitable for a qualitative but not quantitative assessment.

To be completed by quality assurers:

Quality Assurance Reviewing Agency:
The Treasury
Quality Assurance Assessment:
The Regulatory Quality Team (RQT) at the Treasury has reviewed the Regulatory Impact Assessment “Phasing out single-use plastic shopping bags” produced by the Ministry for the Environment and dated 23 October 2018. The review team considers that it meets the Quality Assurance criteria.
Reviewer Comments and Recommendations:
The problem definition is clear and the options are well set out, drawing on overseas and local experience. There is some uncertainty around consumer behaviour in response to medium-weight bags and this would need to be carefully monitored by the Ministry for the Environment.

Impact Statement: Phasing out single-use plastic shopping bags

Section 1: General information

Purpose

This analysis and advice has been produced for the purpose of informing policy decisions to be taken by Cabinet on how to implement a proposed mandatory phase out of single-use plastic shopping bags.

Key Limitations or Constraints on Analysis

Cabinet has made the decision in principle to proceed with a mandatory phase out of single-use plastic shopping bags, subject to the outcomes of public consultation (CBC-18-MIN-0076 refers).

The evidence drawn on for this RIS on the environmental harms caused by single-use plastic shopping bags is not comprehensive, and draws strongly from overseas experience to supplement incomplete local research and data.

The options considered to address these harms, both prior to Cabinet’s in-principle decision and in this RIS, are informed by overseas experience. There is, therefore, some uncertainty about likely consumer behaviour in New Zealand, in particular how consumers are likely to use medium-weight plastic shopping bags – whether they would treat them as reusable or as single-use bags.

The impact analysis in this RIS has been completed with the information available, and with the results of the consultation based on the discussion document.

The Ministry for the Environment is solely responsible for the analysis and advice set out in this Regulatory Impact Statement (RIS), except as otherwise explicitly indicated.

Responsible Manager (signature and date):

Hinemoa Awatere
Hono Tātaki – Resource Efficiency and Innovation
Mana Honohono – Investments and Partnerships
Ministry for the Environment

Section 2: Problem definition and objectives

What is the context within which action is proposed?

'Linear' versus 'circular' economy approaches to resource use

Our current global and New Zealand economic systems are largely 'linear' economies (take–make–dispose). Symptoms of market failure for this linear system include: pollution to air, water, and land; climate change; release of persistent toxic materials; unsustainable rates of harvest for food and materials; and loss of species and ecosystems.

The capacity of Earth is finite, while the human population and our aspirations for material consumption keep growing. As a result, global consumption of raw materials and natural ecosystem services⁵ is increasing rapidly in a degrading environment. Current evidence indicates that we have already stepped over a number of safe planetary boundaries.⁶

Countries around the world, including many of New Zealand's trading partners, are challenging the linear economic model. The 'circular economy' provides an alternative model for creating prosperity. It values resources for their intrinsic worth, respects and restores the natural cycles for biological materials (make–consume–enrich), and creates nature-inspired cycles for human-made materials (make–use–return).

Plastic bag use in New Zealand

Plastics are widespread throughout the economy – for example, in packaging, consumer goods, construction and transport. A form of plastic most familiar to the public is single-use plastic shopping bags, usually given free of charge to consumers. They are useful for carrying purchases, because they are resilient to moisture and relatively heavy loads. Estimates of current single-use plastic shopping bag consumption in New Zealand range from 154 to 323 bags per person per year. This totals about 750 to 1,570 million bags per year. The lower estimate of 750 million bags per year accounts for only about 0.01 per cent by weight of the total waste in levied landfills. However, bags which are not contained in landfills (either because of inappropriate disposal, or leakage from containment) may have a disproportionate impact on freshwater and marine environments, initially as physical risks to certain species, and then in the form of microplastics.⁷

Source of shopping bags used in New Zealand

Available information indicates that the majority of single-use plastic shopping bags are imported. The value of imported single-use plastic shopping bags made of polyethylene in

⁵ 'Ecosystem services' are the benefits people obtain from ecosystems. Ecosystems are widely considered to provide four categories of services: supporting (e.g. nutrient cycling, soil formation and primary production); provisioning (e.g. food, fresh water, wood, fibre and fuel); regulating (e.g. climate regulation, flood and disease regulation, and water purification); and cultural (aesthetic, spiritual, educational and recreational). (Roberts, L.; Brower, A.; Kerr, G.; Lambert, S.; McWilliam, W.; Moore, K.; Quinn, J.; Simmons, D.; Thrush, S.; Townsend, M.; Blaschke, P.; Costanza, R.; Cullen, R.; Hughey, K.; Wratten, S. 2015: The nature of wellbeing: how nature's ecosystem services contribute to the wellbeing of New Zealand and New Zealanders. Department of Conservation, Wellington. 145 p.)

⁶ Steffen W, Richardson K, Rockström J and 15 others. 2015. Planetary Boundaries: Guiding human development on a changing planet. *Science* 347(6223). DOI: 10.1126/Science 1259855.

⁷ Small pieces of plastic less than 5 mm in size, which are mistaken for food by aquatic organisms and are implicated through emerging research in contamination of the food chain.

2017 was \$15 million.⁸ Some paper and heavier-weight multiple-use plastic shopping bags are manufactured in New Zealand. Multiple-use bags of woven material that require some manual construction (eg, woven polypropylene, jute, cotton) are primarily produced overseas. A number of volunteer community recycled fabric sewing projects have emerged in New Zealand to encourage local people to create bags from recycled fabric to use and share for reuse.

Availability of alternatives

A wide range of alternatives are now available, often at points of purchase, such as supermarkets. Options include multiple-use bags in heavier-duty plastic (polyethylene, polypropylene, nylon, polyester), composite bags of hessian with other materials, and bags made of cotton, recycled fabric or jute. Paper shopping bags are available, but not resilient to moisture. Shoppers can also bring their own carriers, such as wheeled trolley bags, kete, backpacks and home-made bags.

The price of alternatives is generally in keeping with how long bags are likely to last: bags made of more substantial materials last longer than single-use plastic shopping bags and cost more.

What regulatory system, or systems, are already in place?

The resource efficiency regulatory system

The proposed mandatory phase out of single-use plastic shopping bags would be implemented through Waste Minimisation Act 2008 (WMA) regulations. The WMA is the key statutory instrument in the resource efficiency regulatory system and is implemented by the Ministry for the Environment and territorial authorities.

The WMA encourages waste minimisation and the reduction of waste disposal by:

- imposing a levy on all waste sent to landfills that accept household waste
- distributing the funds received to territorial authorities and the Waste Minimisation Fund to reduce the amount of waste going to landfills
- accrediting product stewardship schemes, and
- making regulations to control the disposal of products, materials or waste, require take-back services, deposit fees, or labelling of products.

Single-use plastic shopping bags that enter the litter stream fall under the Litter Act 1979, which gives public and territorial authorities the ability to make by-laws and appoint enforcement officers for litter.

Why is Government regulation preferable?

New Zealand retailers have undertaken many voluntary initiatives to respond to public concerns about plastic shopping bags. These initiatives have enjoyed mixed success.

- Over 2004–2009 under the New Zealand Packaging Accord a Brand Owners and Retailers Sector Action Plan was created to reduce plastic shopping bag use by a

⁸ Tariff code 3923-21-0100: “Ethylene polymers: bags made of plastic sheeting, whether or not printed, with handles, for the conveyance or packing of goods, not designed for prolonged use”. Total value in 2017 including freight and insurance was \$15,249,971, and the value for duty was \$14,798,069.

minimum of 20 per cent by 2008. Over 2004–2007, participating retailers achieved a 9.5 per cent reduction in single-use plastic shopping bag use.⁹

- In 2009, New World attempted to completely end the use of single-use plastic shopping bags in its stores. However, it reintroduced them after experiencing a loss of business to other supermarkets. This points to the need for Government regulation to overcome competitive pressures that make voluntary action more difficult. The main supermarket chains both submitted in support of mandatory action for this reason.
- Pak n Save, the Warehouse and Bunnings have all previously put in place alternatives to free plastic shopping bags. In 2017/18, some major retailers announced a commitment to phase out single-use plastic shopping bags: Countdown, New World and Warehouse Group by the end of 2018 and Z Energy and Mitre 10 by the middle of 2018.¹⁰ The Warehouse announced it will replace plastic with 'compostable' plastic single-use shopping bags, for which consumers must pay a charge. The results of these commitments are still pending. It is unclear what proportion of the total estimated 750 to 1,570 million single-use plastic shopping bags per year will be reduced through the present approach. It is also unclear whether this estimate includes single-use plastic bags, which are provided by a wide range of retailers (not just supermarkets).
- The Packaging Forum's Soft Plastics Recycling project targets a full range of post-consumer soft plastics in New Zealand, including single-use plastic shopping bags. In 2015, the scheme received \$700,000 from the Ministry for the Environment's Waste Minimisation Fund funding to expand collection bins. An estimated 70 per cent of the population live within 20 kilometres of a collection bin. Initially the scheme was collecting about 1.7 per cent of the estimated total 6,000 tonnes of plastic bags generated per year from fast-moving consumer goods (including single-use plastic shopping bags as well as other plastic packaging and bags). Its target was to achieve a 10 per cent recycling rate by 2018, and a 35 per cent recycling rate by 2024. Some of the collected plastics are being recycled in Australia but most are being stored while the scheme is exploring local recycling options. Options may become more limited following China's ban on imported recyclables.

What is the policy problem or opportunity?

Single-use plastic shopping bags have a negative impact on the environment at end-of-life. When inappropriately disposed of, these lightweight bags can be easily blown into freshwater and marine environments, where they can be a hazard to wildlife for decades and become harmful microplastics in the food chain.

The prevalence of single-use plastic shopping bags has been encouraged by the common retail practice of providing the bags free of charge. Consequently, the cost is borne by all shoppers, including those who bring multi-use bags. Convenient and free access to single-

⁹ Ministry for the Environment 2004, Packaging Council of New Zealand 2007

¹⁰ <https://www.countdown.co.nz/community-environment/our-commitment-to-phasing-out-single-use-plastic-carrier-bags/>; <http://www.newworld.co.nz/about-us/news/whats-next-for-bags/>; <https://z.co.nz/about-z/what-matters/sustainability/saying-goodbye-to-plastic-bags/>; <https://www.mitre10.co.nz/news/mitre-10-to-ditch-plastic-bags/>; <https://www.thewarehousegroup.co.nz/news-updates/warehouse-group-ditches-single-use-plastic-bags-checkouts>. The Warehouse Group includes The Warehouse, Warehouse Stationery, Noel Leeming, and Torpedo 7.

use plastic shopping bags encourages and reinforces linear resource thinking and behaviour, and consequent inefficient use of natural resources.¹¹

The money New Zealand spends on single-use plastic shopping bags results in only a temporary consumer benefit, and contributes to long-lasting environmental problems. The current 'throwaway culture' of the linear economy also occurs at a much larger scale in other New Zealand economic sectors. Single-use plastic shopping bags are an easily addressed example of this broader culture.

Are there any constraints on the scope for decision making?

The scope of the RIS was determined by Cabinet, which agreed in principle to a mandatory phase out of single-use plastic shopping bags subject to the outcome of consultation (CBC-18-MIN-0076 refers). The assessment of regulatory and non-regulatory options which informed this decision was published in the consultation document and is appended to this RIS (Appendix).

A clear majority of submissions agreed with the proposed mandatory phase out but varied on bag thickness, coverage, and timeframe. The scope of decision making for this RIS, therefore, is practical implementation options of the proposed regulatory measure.

What do stakeholders think?

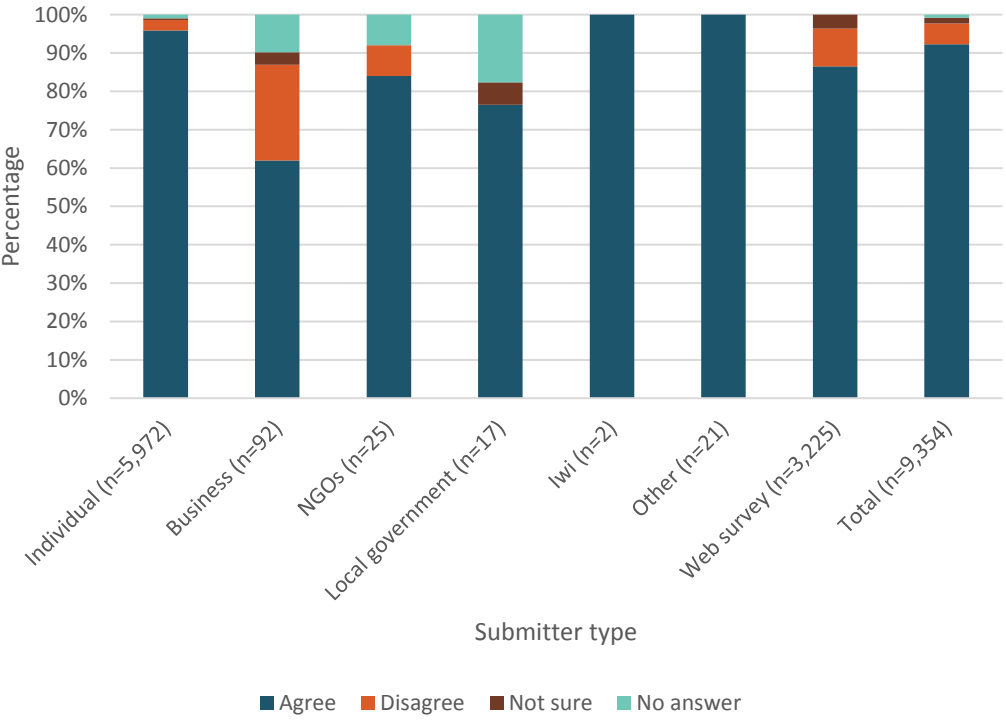
Plastic waste as a whole, and plastic bags in particular, have captured media and public attention in recent years in New Zealand.

Public consultation on a proposed mandatory phase out of single-use shopping bags ran from 10 August to 14 September 2018. A total of 9,349 responses were received: 6,124 submissions and 3,225 responses to a short web-based survey.

An overwhelming majority of responses (92 per cent) agreed with the mandatory phase-out proposal. Majority support was evident in all types of submitters, from individuals (96 per cent), non-governmental organisations (NGOs) (84 per cent), local government (76 per cent), and businesses (62 per cent) (see figure 1).

¹¹ Set out in further detail in the public consultation document www.mfe.govt.nz/node/24338

Figure 1: Responses to the proposed mandatory phase out of the sale or distribution of single-use plastic shopping bags in New Zealand by submitter type



Support for the proposal to phase out single-use plastic shopping bags

Common messages emerging from the consultation included the need to act quickly to phase out plastic bags, and for the proposed phase out to have a wide scope. For example, many individual submitters (including those using a Greenpeace form submission) considered all ‘single-use’ plastic shopping bags should be covered, rather than just those below a specified thickness.

Local government submitters generally reiterated the problems that single-use plastic shopping bags cause in the litter stream, and that they may contaminate recycling. Some local government submitters note there may be limited local alternatives (such as soft plastics recycling) in their region.

NGOs generally supported the proposal for environmental reasons (noting that although plastic shopping bags are only one of many types of plastics entering the environment, they are a great starting point as an everyday item).

A number of submitters note they support the proposal as part of a first step towards wider action on plastic packaging.

Business submitters who supported the proposals also outline environmental reasons. For example, Kmart submitted that banning single-use plastic shopping bags will reduce litter and plastic pollution, resulting in reduced impacts on wildlife and the environment.

Other reasons given include that single-use plastic shopping bags are a waste of resources; and because plastic takes a long time to degrade.

A small number of submitters supported a move away from single-use plastic shopping bags, but preferred other means such as a levy rather than a ban. These submitters pointed to the revenue-raising potential of a levy, or felt it provided more consumer choice.

Arguments against the proposal to phase out single-use plastic shopping bags

One hundred and eighty-six long-form submitters and a further 318 who answered the short online survey (5 per cent altogether) disagreed with the proposed phase out.

A common theme in these submissions was that New Zealand's single-use plastic shopping bags are only a small contribution to pollution. Some submitters felt there was insufficient evidence of problems caused by single-use plastic shopping bags in New Zealand.

Various submitters who disagreed with the proposal stated that 'single-use' is a misnomer. Submitters commonly said that single-use plastic shopping bags are reused as bin liners, for pet waste, and other purposes. If replaced with thicker plastic bags, then the outcome could be more plastic going to landfill. Similarly, some submitters were concerned that if alternatives to single-use plastic bags are not reused a sufficient number of times, they will have a greater environmental impact than single-use plastic bags.

Those not in support considered further efforts could be put into litter and waste management instead.

Comment

Although some retailers have already taken voluntary actions to reduce single-use plastic shopping bags use, overseas and local evidence shows that voluntary actions are vulnerable to being reversed due to commercial pressures. Overseas evidence also points to levies achieving lower overall reductions in single-use plastic shopping bag usage, compared to bans. Large retailers submitted in favour of a ban rather than a levy, as did local government and NGOs.

The proposed phase-out of single-use plastic shopping bags will occur alongside other steps to improve New Zealand's waste and litter management systems. Associate Minister for the Environment Sage recently announced her work programme, which includes comprehensive changes to the waste disposal levy (to create greater economic incentives to reduce waste), exploration of mandatory product stewardship for specific product groups (to require businesses to take responsibility for their products at end-of-life), as well as improvements to waste data and the way in which funds are invested to achieve waste minimisation.

Objectives

Overall objective: Practical step toward a circular economy

The primary objective is to address, in a practical way, widespread reliance on a single-use everyday item that can be easily replaced by accessible and more sustainable alternatives. This will serve to build experience in, and public support for, practical measures to reduce our reliance on linear approaches that provide temporary benefits and lasting costs, and design waste and pollution out of the system while maintaining prosperity.

International trade obligations

The policy approaches under consideration will be developed to be consistent with New Zealand's international legal obligations.¹²

¹² Before recommending making regulations under the Waste Minimisation Act 2008, the Minister for the Environment must be satisfied that those regulations are consistent with New Zealand's international obligations (section 23(3)(b)(iii) of the Waste Minimisation Act 2008). We have provided WTO notification for the consultation and will also notify any promulgated regulations, have proposed a phase-out timeframe that is in keeping with WTO requirements, and are liaising with the Ministry of Foreign Affairs and Trade and the Ministry of Business, Innovation and Employment to ensure appropriate design to accommodate TTMRAs.

Section 3: Options identification

Criteria

The criteria used to compare regulatory and non-regulatory phase-out mechanisms prior to Cabinet decision in principle and public consultation are set out in the appendix. The options considered included:

- mandatory phase out of sale or distribution
- levy, tax or minimum charge, such as:
 - levy at point of sale, collected by central government
 - mandated minimum charge at point of sale, retained by retailer
 - levy or minimum charge at point of sale, set by local authorities
 - tax at point of entry into market (pre-consumer)
- deposit-refund system
- formal agreement between industry and Government
- mandatory product stewardship
- ad hoc voluntary action (status quo).

The first two criteria have been used to assess implementation details of the proposed phase out (without weighting):

- substantially advance the phase out of a single-use plastic product that contributes to litter, and the risks associated with marine plastics, while over the longer term take a circular economy approach to design waste out of the system (*primary purpose of intervention*)
- be implemented without placing undue costs on the community, business, or public funds (*key regulatory principle*).

The options considered for coverage of a mandatory phase out of single-use plastic shopping bags are summarised in table 1.

Table 1: Options considered for phase out of single-use plastic shopping bags

Coverage	Options considered
Thickness of bags to be phased out	Option 1 – Less than 50 microns
	Option 2 – Less than 70 microns
Retailers to be covered	Option 1 – All retailers
	Option 2 – Retailers employing 6 or more people only
Commencement date	Option 1 – Six months from Gazettal
	Option 2 – Nine months from Gazettal
	Option 3 – Twelve months from Gazettal

Section 4: Coverage and timeframe identification

Thickness of bags to be phased out





The term ‘single-use plastic shopping bags’, used in the consultation document was defined as:

A new plastic bag (including one made of degradable plastic) which has handles and is below a maximum level of thickness. The terms ‘plastic’ and ‘degradable’ (including ‘biodegradable’, ‘compostable’ and ‘oxo-degradable’) would be defined in regulations with reference to international standards.

This definition left open for feedback the maximum level of thickness to be covered by the mandatory phase out.

The consultation document asked whether respondents preferred a phase out for bags under 50 or under 70 microns in thickness. Included in the consultation document was a description of different types of plastic shopping bags’ thicknesses, to show what different options would cover (see table 2).

Table 2: Examples of shopping bags: single and multiple use, by thickness and material

	Thickness in microns	Bag type	Design usage	Material
	Less than 35	Singlet-style checkout bags	Single-use	HDPE (high density polyethylene) Can include ‘compostable’ and ‘degradable’
	35 or more, and less than 50	Heavier weight singlet bags, and light-weight boutique-style shopping bags	Single- or multi-use	LDPE (low density polyethylene) Can include ‘compostable’ and ‘degradable’
	50 or more and less than 70	Boutique-style shopping bags Includes ‘emergency’ LDPE multi-use bags, and some nylon multi-use bags	Single- or multi-use	LDPE (low density polyethylene) Can include ‘compostable’ and ‘degradable’, Some lightweight nylon fabrics
	70 or more	Heavier weight reusable bags of a range of fabrics and composites These types of bags are typically measured by weight (gsm – grams per square metre) not thickness	Multi-use	Non-woven polypropylene, plain or coated Hessian with plasticised lining and padded cotton handles Canvas, hessian, recycled fabric, woven polypropylene Lightweight nylon fabric

Note: 1 microns is 0.01 millimetre (eg, 1,000 microns = 1 mm).

Photo credit: Miranda Grimmer

Jurisdictions overseas that have phased out different thicknesses of single-use plastic shopping bag include:

- South Australia, Tasmania, Northern Territory, ACT, Queensland and Western Australia and some USA states and cities ban bags below 35 microns in thickness
- The European Union and Montreal (Canada) regulate bags below 50 microns in thickness

- England has included shopping bags under 70 microns thick in its mandated minimum charge.¹³

The proposal for 50 or 70 microns, as opposed to 35 microns as used in many jurisdictions, was based on the desire to avoid unintended consequences which have been experienced elsewhere. For example in Tasmania, Queensland, and Western Australia, there have been concerns about retailers being sold ‘barely compliant’ bags just over 35 microns in thickness.¹⁴ There have also been concerns about heavier weight single-use plastic shopping bags becoming more prevalent in litter in some states with bans (eg, Northern Territory and South Australia) compared to states without bans, potentially increasing the volume of plastic in the litter stream.

Analysis

Option 1 – Bags less than 50 microns

Phasing out bags below 50 microns (but continuing to allow use of thicker bags, including in the 50-70 micron range) would provide consumers and retailers with more options for bags to use. The Waste Advisory Board preferred 50 microns, as did a number of large retailers (eg, Foodstuffs and Kmart).

A number of large retailers (eg, Foodstuffs, Kmart) note that while they will encourage customers to bring their own reusable bags, in their view customers will still need an ‘entry level’ multi-use but lightweight bag that is economic to purchase. Countdown provides an ‘emergency bag’ that is 55 microns, and costs 15 cents. The bag has been tested at around 20 uses. Foodstuffs is considering a similar bag (at 65 microns).

If bags less than 50 microns are phased out, some light-weight boutique-style bags would be covered, but heavier boutique-style bags would not be. This means few retailers overall would likely have to change their existing practices. While this would reduce costs for individual operators, it may cause consumer confusion and lower overall support for the phase out (as bags would still be available from some retailers but not from others). There is also potential for retailers who currently offer a lighter-weight bag to switch to offering heavier weight boutique-style bags, thus increasing the amount of plastic in circulation.

A key factor in comparing impacts of the thickness options is the likely consumer behaviour for using medium-weight plastic shopping bags 50 to 70 microns – that is, whether consumers would treat them as reusable bags, or as single-use bags. If consumers treat them as single-use bags, the unintended consequence will be that more resources are used to create the bags, and more plastic is disposed of to landfill or litter stream (or recycled through the soft plastic recycling scheme for those that bring them back for that purpose).

This was one reason that many submitters favoured phasing out bags below 70 microns. Some direct evidence of bags in the 50-70 micron range being used in a similar way to thinner single-use plastic shopping bags is available both in New Zealand and overseas. For example, as noted above heavier weight single-use plastic shopping bags have become more prevalent in litter in some Australian states with bans. In New Zealand, the Packaging Forum, which runs a soft plastics recycling scheme, submitted that it has already seen an increase in ‘emergency bags’ being returned to the recycling scheme.¹⁵

¹³ http://ville.montreal.qc.ca/portal/page?_pageid=7418,142803238&_dad=portal&_schema=PORTAL; https://www.gov.uk/guidance/carrier-bag-charges-retailers-responsibilities.

¹⁴ <http://qldbagn.com.au/the-risk-of-using-lightweight-plastic-singlet-bags; https://bagbanwa.com.au/the-risk-of-barely-compliant-bags/>.

¹⁵ While it is not possible to determine how many times each bag had been used prior to being returned for recycling, the timing would indicate that at least some bags were being recycled rather than first being reused.

Option 2 – Bags less than 70 microns

The majority of submitters wanted all 'single-use' plastic bags banned, regardless of thickness. For those that specified a micron thickness the clear preference was 70 microns, across all submitter types. Umbrella organisation Retail New Zealand also supported 70 microns.

Regulating bags that are under 70 microns is likely to have the strongest positive effect on advancing the phase-out of single-use plastic shopping bags, as this will cover the vast majority of single-use bags currently used. This will leave only 70 micron and thicker bags in use, which will encourage consumers to use them more carefully and more often.

A 70 micron level also proves a greater incentive to remember to bring and reuse multi-use bags. Depending on the size of their shop, customers who do not remember to bring their own bags may have to buy five to ten multi-use bags, at costs ranging from \$1 per bag up to \$6 or more (totalling \$5 to \$60, depending on the bag chosen and number bought). Compared to the 55 micron option above, at 15c per bag, it is likely to provide a greater incentive to bring multi-use bags.

Non-regulatory factors will be important to ensure the overall success of the proposed phase out. In particular, we propose to provide information and support for retailers and consumers to make good choices about the alternatives to single-use plastic shopping bags, and to encourage re-use of heavier weight (ie, above 70 microns) bags.

Either option, 50 or 70 microns, is unlikely to place undue costs on the wider community, business or public funds. Consumers will need to use alternative means of transporting their purchases, as free single-use plastic shopping bags will no longer be available. A range of options is available, including various multi-use bags made from a wide range of materials. Individual businesses may need to adapt their practices to help their customers get used to not having free single-use bags available (eg, changes to checkout layout). Individual importers would adapt to selling other styles and types of bags.

Option 2 (70 microns) would likely impose somewhat higher one-off costs on importers, manufacturers, and retailers as they are more likely to hold stock that they would be unable to sell (in the case of importers and manufacturers) or provide to customers anymore (in the case of retailers). This is because option 2 covers a wider range of bags. Option 2 may also have some higher ongoing adjustment costs for retailers, because thicker bags (above 70 microns) generally come at a higher cost. Retailers would need to decide whether to continue to provide a free bag for customers (at a higher cost to the retailer), or to charge customers for a bag (or no longer provide a bag).

Either option may place proportionately higher costs on low-income people who do not already have their own bags. New carry bags offered for sale in shops will be somewhat thicker and more expensive under the 70 micron compared to the 50 micron cut-off, but prices are also generally commensurate with the lifetime of the product. Measures to reduce this impact could also include offering exceptions or discounts to customers with Gold Cards or Community Service Cards and providing multi-use shopping bags with food parcels.

Advice from the Waste Advisory Board highlighted a potential unintended consequence for lightweight (under 70 micron) synthetic fabric multi-use shopping bags that are designed to fold into a small parcel for ease of putting in a purse or pocket to make it easy to have a reusable bag on hand for shopping. These bags are designed for long life but are also typically made of fabric which is between 50 and 70 microns, and can be under 50 microns. The Waste Advisory Board recommended an exemption for these bags.

Impact Analysis: Bag thickness

	Bags under 50 microns	Bags under 70 microns
Substantially advances the phase-out of single-use plastic shopping bags	+	++
No undue costs on community, business or public funds	-	-

Key:

- ++ much better than the status quo
- + better than the status quo
- 0 about the same the status quo
- worse than the status quo
- much worse than the status quo

Proposed option

We recommend Option 2 – to implement a mandatory phase-out of plastic shopping bags of a thickness of 70 microns and under. This is because this option substantially advances the phase-out of single-use plastic shopping bags and is supported by the majority of submissions that addressed the question of thickness, including Retail NZ, businesses, and local authorities. This option will also provide a greater market incentive to consumers to reuse their shopping bags.

Proposed exemption

It is proposed to exempt lightweight (under 70 micron) synthetic fabric multi-use shopping bags that are designed to fold into a small parcel for ease of putting in a purse or pocket.

Type of retailers to be covered

In establishing a phase out, it is essential to define who and what the new rules would apply to. Most plastic shopping bag control models from overseas require retailers to implement the changes. This means that the liable parties are retailers, not consumers.

Some jurisdictions that have controlled single-use plastic shopping bags began with large retailers.¹⁶ An argument can be made that smaller businesses may face disproportionate costs of changing over to a new regime, that a majority of single-use bags by count are distributed by larger retailers due to their large sales volumes, and that enforcement costs will be higher with more retailers covered.

Conversely, it can also be argued that the bags that particularly contribute to environmental degradation (for example, by being littered in vulnerable environments) can disproportionately come from smaller businesses (for example, dairies, takeaway shops and other fast food establishments), and more importantly that a bag from any retailer entering the environment can create adverse effects.

Regardless of the size of the retailer they are all likely to pass on any implementation costs to consumers.

¹⁶ The Hong Kong levy, which began in 2009, applied only to 3300 larger retailers. When it became clear that this was not achieving the desired outcomes, the system was extended in 2015 to apply to all retailers. In England, the mandated charge on single-use plastic shopping bags only applied to large retailers. In 2018 however, the British Government announced it would raise the levy, and extend it to all retailers (subject to the outcomes of consultation). <https://www.gov.uk/government/news/plastic-bag-charge-set-to-be-rolled-out-to-all-retailers>.

Analysis

The public consultation asked whether large retailers or all retailers should be covered, and if the former how many employees would be used to define coverage.

We have defined a 'small' retailer as one that employs fewer than 6 people to allow an adequate difference to be drawn between smaller family-run retailers (such as dairies, fish and chip shops, etc) and larger retailers.

Two choices are compared for implementing a mandatory phase-out of single-use shopping bags covering:

- all retailers, or
- retailers employing six or more people.

Option 1 – Including all retailers

The majority of submissions (95 per cent) supported this option.

This option would cover single-use plastic shopping bags distributed by all retailers. Therefore, this option will best help advance the phase-out of plastic shopping bags, and best enable the transition to a circular economy.

A number of large retailers are already taking voluntary actions to move away from using single-use plastic shopping bags. This has yet to be seen to the same extent amongst smaller retailers.

Larger retailers are most likely to be able to absorb any costs of a mandatory plastic shopping bag phase-out. Smaller retailers may find this more difficult. In addition, more public funds will be needed to enforce this proposal with all retailers.

Extending the mandatory phase out to all retailers will strengthen the financial incentive for consumers to reuse and recycle their shopping bags, compared to the status quo or limiting it to larger retailers only. It will also provide consistency and reduce confusion for consumers.

Option 2 – Including retailers employing six or more people

This option would cover the majority of single-use plastic shopping bags that are distributed by retailers, due to the volume of goods sold by larger retailers. The size of this share has been estimated at 75 per cent by industry sources, but detailed data is not available.

There are also a great number of smaller businesses and collectively they likely account for a significant quantity of single-use plastic shopping bags. The most recent Statistics New Zealand business demography report shows that 81 per cent of all retail enterprises had five or fewer employees, along with 67 per cent of accommodation and food services (these categories together account for 36,972 businesses with five or fewer employees).¹⁷

This option would incur no implementation costs for smaller businesses.

This option would also have a lower demand for public funds required to monitor and enforce the proposed phase out, as many retail establishments would not need to be covered.

Impact Analysis: Retailers covered by the mandatory phase-out

	Option 1: All retailers	Option 2: Retailers employing 6 or more people only
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¹⁷ <https://www.stats.govt.nz/information-releases/new-zealand-business-demography-statistics-at-february-2017>

Substantially advances the phase-out of single-use plastic shopping bags	++	+
No undue costs on community, business or public funds	-	0

Key:

- ++ much better than the status quo
- + better than the status quo
- 0 about the same as the status quo
- worse than the status quo
- much worse than the status quo

Recommended option

The recommended option is Option 1 – extending the mandatory phase-out to all retailers. While this option does impose some costs on smaller retailers and policy implementers, it provides the greatest benefits in advancing the phase-out of plastic shopping bags.

Mandatory phase out commencement date

A lead-in time before commencement is proposed to allow retailers and importers to use existing stocks of single-use plastic shopping bags; importers to alter their contracts without incurring penalties; and to allow customers who do not already use multiple-use bags to adapt to alternatives.

New Zealand is a party to the World Trade Organisation (WTO) Agreement on Technical Barriers to Trade (TBT Agreement). The single-use plastic shopping bags we use are imported, and the proposed mandatory phase out would fall under the TBT Agreement. This agreement requires a reasonable interval between the publication of technical regulations and their entry into force to allow time for producers in exporting countries, particularly in developing countries, to adapt their products or methods of production. This period is usually six months, as was the case for the plastics microbeads ban. This means that at least six months will be required between Gazettal and regulations coming into effect.

It is possible, however, that six months may not be enough time for some retailers to use their existing stocks of plastic shopping bags or complete existing supply contracts. The consultation document and this RIS also consider longer phase-out periods.

A phase out period of two months was preferred by the majority of submitters (4,289 or 70 per cent). It is however contrary to our WTO Agreement on Technical Barriers to Trade so we have not considered it as an option. Public opposition to lengthy timeframes is, however, a consideration in choosing the proposed option.

Retail NZ advised in their submission that although major supermarkets and retailers already moving to phase out lightweight carry-bags will not need more than a six-month period, some of their smaller members typically buy a two year or more supply of bags to get a cost-effective price. Consequently, they support at least a one-year phase in, and preferably more, to reduce the risk of perverse outcomes, such as dumping surplus bags.

The affected retailers will not be prevented from selling or distributing surplus stock for purposes other than carrying away sold goods (eg, bin liners or clean recycling feedstock). It is also proposed to work with local recyclers to run a collection service so that unused single-use plastic shopping bags can be recycled into new products (rather than being disposed of to landfill).

Three potential phase-out periods are considered:

- six months

- nine months
- twelve months or longer.

Common to all options is that as long as it is adequately enforced, the phase-out period chosen (whether six, nine or 12 months) would not have a substantial effect on advancing the phase-out of single-use plastic shopping bags. Longer elapsed times will of course mean status quo impacts will continue for longer.

Option 1 – Commencement six months from Gazette

Conceivably, a phase-out period of six months would inconvenience some retailers (who are not able to use up all their existing stocks of single-use plastic shopping bags) and consumers (who are not able to adjust to reusable bags in time).

A six-month timeframe would better satisfy the public demand for shorter timeframes than would the other two options.

Bringing in a six-month phase-out period would provide a financial incentive to reuse or recycle shopping bags earlier than the other two options.

Option 2 - Commencement nine months from Gazette

Choosing a phase-out period of nine months would provide more time to retailers to use up all their existing stocks of plastic shopping bags and place no undue costs on communities and businesses.

This option would provide an earlier financial incentive to reuse or recycle shopping bags than a 12-month phase-out period. It would also better satisfy the public demand for shorter timeframes than 12 months, but less so than 6 months.

Of interest is the recent experience in Queensland and Western Australia, in which each chose a phase-out period of nine months. In Western Australia, submitters to the public consultation considered a longer phase-out period was required for retailers to use existing stocks of single-use plastic shopping bags. In response, the imposition of fines for non-compliance was extended an additional six months.¹⁸

Option 3 - Commencement twelve months from Gazette

Choosing a phase-out period of 12 months would most likely provide more than enough time for retailers to use up all their existing stocks of plastic shopping bags.

A phase-out period of 12 months is unlikely to place undue costs on communities and businesses, as it is most likely to provide them with more than enough time to make the transition. It would not adequately address the public demand for shorter timeframes.

¹⁸ <https://www.legislation.qld.gov.au/view/html/asmade/act-2017-031;www.perthnow.com.au/news/environment/plastic-bag-ban-wa-retailers-will-not-be-fined-until-2019-ng-b88866396z>.

Impact Analysis: Timeframe for commencement of mandatory phase out

	Option 1 – 6 months	Option 2 – 9 months	Option 3 – 12 months
Substantially advances the phase-out of single-use plastic shopping bags	++	++	+
No undue costs on community, business or public funds	-	-	-

Key:

- ++ much better than the status quo
- + better than the status quo
- 0 about the same as the status quo
- worse than the status quo
- much worse than the status quo

Recommended option

To comply with international obligations, it is necessary to allow a period of at least six months between Gazetting and commencement of the mandatory phase out. Allowing more time than six months would allow consumers and retailers more time to make the necessary changes.

Section 5: Conclusions

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

Thickness of bags to be phased out

We recommend a mandatory phase out of plastic shopping bags of a thickness under 70 microns (option 1). This option is likely to have the strongest positive effect of the options considered on advancing the phase out of single-use plastic shopping bags, because it will cover the majority of plastic shopping bags currently used by consumers. In addition, the increased cost to consumers of plastic shopping bags that are 70 or more microns in thickness will encourage consumers to reuse them.

Coverage of the mandatory phase out

We recommend extending the mandatory phase out to all retailers (option 1). While this option will impose greater costs on monitoring and enforcement, it will best ensure that all plastic shopping bags currently distributed by retailers will be covered, reduce confusion for consumers and retailers, best advance the phase out of plastic shopping bags, and provide a step toward a circular economy.

Commencement mandatory phase out

To comply with international obligations, it is necessary to allow a period of at least six months between Gazetting and commencement of the mandatory phase out. Allowing more time than six months would allow consumers and retailers more time to make the necessary changes.

Summary table of costs and benefits of the preferred approach

Affected parties (identify)	Comment <i>nature of cost or benefit (eg ongoing, one-off), evidence and assumption (eg compliance rates), risks</i>	Impact <i>\$m present value, for monetised impacts; high, medium or low for non-monetised impacts</i>	Evidence certainty <i>(High, medium or low)</i>
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Additional costs of proposed approach, compared to taking no action			
Regulated parties	Retailers – costs of unused stock by phase-in date	Low ⁱ	Medium
	Retailers – staff training, consumer information, potential delays	Medium during adjustment period ⁱⁱ Low thereafter	High
	Importers / manufacturers – Loss of business in medium-weight (50-70 micron) shopping bags	\$500,000p.a. ⁱⁱⁱ	Medium ^{iv}
	Consumers – purchasing thicker reusable bags	Low ^v (although higher impact for lower-income consumers)	High
	Consumers – forming habit of taking reusable bags	Low ^{vi}	High ^{vii}
	Consumers – replacement bags for secondary uses	Low ^{viii}	High
Regulators	Central Government – making the regulation	Low	High
	Ministry for the Environment – education, monitoring and enforcement – 1.9 FTE initially (0.5 FTE in outyears)	\$190,000 ^{ix}	High
Other parties	Shopping bag manufacturers – adjusting to creating thicker bags	Medium	Low
	Plastic bag importers – loss of revenue stream for thinner bags	Medium	Low
Monetised costs		Y1: \$690,000 Outyears: \$550,000 per annum	
Non-monetised costs		Low - Medium	Medium

Expected benefits of proposed approach, compared to taking no action			
Regulated parties	Retailers: No need to import single-use plastic shopping bags for free distribution	\$15 million ^x	Medium ^{xi}
	Retailers – offering a new product line of thicker reusable shopping bags	Low ^{xii}	Medium
Wider government	Local Government – improved waste management eg, less contamination of recycling	Low	Low-medium ^{xiii}

Other parties	Plastic bag importers – new revenue stream for thicker bags	Medium	Low ^{xiv}
Total Monetised Benefits		\$15 million	Medium
Non-monetised benefits		Medium	Low

ⁱ As single-use plastic shopping bags are generally provided for free at present, retailers will not incur any direct cost but will no longer receive a benefit (being able to provide a service for customers) for bags they have already paid for. We understand small retailers may buy bags in bulk to receive better prices so may have a considerable number of bags in reserve. This would be a one-off impact.

ⁱⁱ We received some submissions on this topic, including one large retailer that has already phased out single-use plastic shopping bags and submitted the cost to change store configuration was \$500,000 across its New Zealand and Australian operations. Two submissions drew attention to the potential for additional store thefts where customers are bringing their own bags.

ⁱⁱⁱ This estimate is an annual figure and is based on the submission of one anonymous company. The company is a supplier of plastic shopping bags, and has advised that imported single-use plastic shopping bags currently comprise some 25 per cent of its annual business turnover (around \$100,000). In contrast another manufacturer that imports these bags does so to offer a full product range in their catalogue and notes it is a small and easily phased out share of their business turnover. In total, five businesses submitted there was potential for their business to suffer a loss of sales as a result of the phase out. The figure provided by a single company is conservatively extrapolated to the other companies. In addition, there is potential for one-off losses if any import orders cannot be cancelled before the regulations take effect (ie, if a product is purchased that can no longer be sold). A longer period before the commencement date would mitigate this.

^{iv} It is hard to predict ongoing impacts on business operations, as it depends whether existing customers continue to source multi-use bags from importers (a potential increase in business), or turn to other suppliers (a potential loss of business).

^v Reusable bags above 70 microns in thickness are available for as low as \$1 each (with an upper price for \$10-\$20 depending on materials and style).

^{vi} Some free options are available, for example, boxes, community-based schemes such as Boomerang Bags.

^{vii} Many submitters commented they have already adjusted to taking reusable bags. Media reports indicate that in the early stage of single-use plastic shopping bags being phased out at ten Countdown stores, sixty per cent of customers brought their own reusable bags with them (<https://www.stuff.co.nz/business/104871241/almost-half-countdown-shoppers-forgetting-reusable-bags-at-plastic-bag-free-stores>). It could be expected that numbers bringing their own bag will increase over time, as people become used to the change.

^{viii} Some supermarkets offer free replacements for their branded reusable bags, so an initial outlay of \$10-\$15 could be sufficient to cover present and future needs.

^{ix} This is an annual figure for the first financial year (assuming \$100,000 per FTE); costs in out-years are \$50,000 per annum. This does not include any additional costs such as communications spending.

^x Based on import statistics. This cost is currently recouped from consumers within the price of their groceries or other retail purchases, rather than in direct charges in most cases.

^{xi} Certainty is medium rather than high because the import statistics do not provide information on number or weight of bags, just the total dollar value of imports; any local manufacturing (believed to be limited) is not included.

^{xii} Retail prices of reusable bags range from \$1 to \$10 or more. Such bags are likely to be only a small component of any given retailer's sales. Some retailers may choose to provide the bags effectively at cost, while others may make a profit.

^{xiii} Local government submitters outlined their view that this would be a benefit but this is based on predictions rather than data. Local government has good information on current problems they experience with plastic bags.

^{xiv} Submissions from importers noted they couldn't predict whether existing customers would want to be supplied with multi-use bags, or would turn to alternative suppliers.

What other impacts is this approach likely to have?

Adopting the proposed options will have additional environmental impacts, which are not captured in the cost-benefit analysis above. If a mandatory phase out is adopted, the 750 million – 1,570 million single-use plastic shopping bags that are currently estimated to be used annually in New Zealand will no longer end up in landfills, rivers and the marine environment. This will have numerous ecological and aesthetic benefits.

In addition, if plastic shopping bags are successfully phased out with broad public support, it will help to build experience in, and support for, a broader move to a circular economy.

Is the preferred option compatible with the Government's 'Expectations for the design of regulatory systems'?

The preferred options in this RIS are compatible with the Government's 'Expectations for the design of regulatory systems'. While the preferred options will bring new costs to consumers, in the long term they help to eliminate the inefficient use of resources expended on a product that is used once before being discarded.

Section 6: Implementation and operation

How will the new arrangements work in practice?

Regulations under the WMA

The preferred options will be implemented by making regulations under the WMA. To make any regulations under the WMA, the Minister for the Environment must be satisfied that certain tests have been met. The Minister must be satisfied that:¹⁹

- a reasonably practicable alternative to the specified materials subject to the control or prohibition is available
- the benefits expected from the regulations are greater than the costs
- the regulations are consistent with New Zealand's international obligations
- the regulations are consistent with the purpose and relevant Part of the WMA.

The Ministry for the Environment will lead the process of creating these regulations.

Enforcement

The Ministry will work with retailers and importers to assist with implementing the phase out. For example, the Ministry can facilitate collection of surplus new stock as clean feedstock for New Zealand-based recycling operations. The new regulations would not preclude surplus stock being sold or distributed for purposes other than carrying away sold goods (eg, rubbish bin liners, feedstock for recycling).

¹⁹ Section 23(2)(b), (3)(b)(ii) and 3(b)(iii) of the Waste Minimisation Act 2008. Note that, before making the regulations, the Minister must also obtain and consider advice of the Waste Advisory Board and be satisfied that adequate consultation has occurred (section 23(3)(a) and (b)(i)).

Industry and local government submissions called for the Government to play a role in providing guidance to consumers and retailers about alternatives including standards, life cycle impacts and appropriate applications for certified compostable or biodegradable bags. The Ministry will include this information in guidance given to stakeholders during the phase-out period.

Relevant offences are set by statute. If the regulation proceeds, any person knowingly contravening the regulation will be liable, on conviction in court, for a fine not exceeding \$100,000 (Waste Minimisation Act 2008 section 65(1)(d)). In order to investigate offences, the WMA empowers enforcement officers to seize goods and inspect properties in certain circumstances. However, we anticipate that ongoing enforcement activities will primarily consist of responding to complaints from the public and taking appropriate actions.

Enforcement officers appointed under section 76 of the Waste Minimisation Act 2008 would be responsible for monitoring and enforcing the regulations. This activity is proposed to be resourced through the Ministry's baseline funding; a budget proposal is currently underway that covers this and other activities. The Ministry proposes 1.9 full time equivalent staff (FTEs) in the 2019/20 financial year and 0.5 FTEs in the outyears up to 2022/23. Our experience with enforcing the waste levy is that early years require the most effort as regulations bed down.

The Ministry for the Environment's ongoing activities will primarily consist of responding to complaints from the public and taking appropriate actions.

Education and publicity

To help consumers understand the regulations, the reasons for a phase-out, and to normalise reusable bag behaviour, the Ministry for the Environment will launch an education and publicity campaign, once the regulations have been finalised. This will be launched across the country, to ensure maximum possible rates of compliance.

More specifically, retailers will incur costs if they still have targeted plastic shopping bags in stock when the regulations enter into force. These costs can be minimised through good communications with retailers, including small businesses. There is a small risk that a smaller retailer may be caught unawares and come to the attention of the enforcement officer. If there is a proof of purchase, the enforcement officer would be obliged to investigate the retailer, and a prosecution could ensue. It will, therefore, be important to communicate the regulations to all retailers well ahead of the entry into force date.

What are the implementation risks?

- *What issues concerning implementation have been raised through consultation and how will these be addressed?*
- *What are the underlying assumptions or uncertainties, for example about stakeholder motivations and capabilities?*
- *How will risks be mitigated?*

The risks from the proposed regulatory measure will be mitigated by a range of non-regulatory support mechanisms.

Potential net costs to consumers relate to costs to purchase new multi-use bags, inconvenience when consumers forget to bring re-usable bags with them when shopping,

and loss of a 'free' option for short-term second uses (eg, bin liners). Net costs are not considered to be large, as higher costs for multi-use bags are offset by their functional lifetime and consumers already pay some \$15 million a year for 'free' bags through the cost of their purchases. These risks will be mitigated by early information on alternatives and cooperation with retailers offering incentives and groups providing free reusable alternatives.

Potential net costs to businesses relate primarily to adjustments to adapt to changing market demand, as discussed in more detail in earlier sections. These risks will be mitigated by early notice of changes and an appropriate time frame for phase out. Submissions from businesses provided information on the likely timeframes required for suppliers and retailers to run through existing stock. This is reflected, on balance with the public call for prompt implementation, in the proposal for a phase-out period of either six or nine months.

The sheer number of shopping transactions and retail outlets means there is a high likelihood for potential non-compliance. Penalties cannot be levied without conviction in court which requires a high test for evidence with limited resources for enforcement. This risk will be mitigated by early information on the nature of the regulations, relying on concerned citizens to report suspected breaches and ensuring resources for response and enforcement as required.

Consultation revealed widespread support for a mandatory phase out amongst the general public, businesses, local authorities and NGOs. This implies that compliance with the phase out will be widespread and instances of non-compliance will be quickly reported. The risks of inadvertent non-compliance by consumers and smaller retailers will be mitigated through an education and information programme.

Submissions from business and councils highlighted the need for better information on the environmental impacts of alternatives to reduce the risk of unintended consequences from choices that retailers made in good faith as a result of the mandatory phase out. Unintended consequences for environmental impact may result if alternative shopping bags chosen by retailers and consumers have higher net life cycle impacts particularly if multi-use bags are not used to the end of their functional design lifetime. These risks will be mitigated by providing practical life cycle impact information to stakeholders for a wide range of options and cooperation with retailers offering incentives for repeat use of bags.

We can also monitor consumer behaviour, including through information received from the manager of the soft plastics recycling scheme, local government, and ongoing litter surveys.

Section 7: Monitoring, evaluation and review

How will the impact of the new arrangements be monitored?

Monitoring progress

The Ministry, as the regulatory steward of New Zealand's environment, seeks to ensure New Zealand's continued prosperity does not compromise the needs of future generations and that environmental regulation achieves this aim as effectively and efficiently as possible.

In the resource efficiency regulatory system, the Ministry for the Environment is focused on providing direction on transitioning to a circular economy. A mandatory phase-out on single-use plastic shopping bags would provide an important community engagement contribution to this focus.

To understand the success of the mandatory phase out, the Ministry for the Environment considers that monitoring and evaluating the implementation of the proposed regulations will

include baseline and ongoing monitoring of the number of plastic shopping bags (under 70 microns in thickness) including

- plastic shopping bags designed for single use imported into the country (Statistics New Zealand baseline)
- distributed by retailers to consumers (extension of current voluntary disclosure network)
- proportion of plastic bags found in the coastal environment (baseline and monitoring system for coastal litter by April 2021 through a Sustainable Coastlines project supported by the Waste Minimisation Fund²⁰).

When and how will the new arrangements be reviewed?

The Ministry for the Environment proposes to review the success of the mandatory phase out within three years of gazettal.

²⁰ Funding of just under \$2.7 million will provide by April 2021: design and build an open-sourced national litter database, and train and support citizen scientists to gather beach litter data nationwide; design and build a litter education curriculum, and train and support educators to deliver it. Agency partners include Ministry for the Environment, Statistics New Zealand and the Department of Conservation.

Appendix: Excerpt from public consultation document on proposed mandatory phase out of single-use plastic shopping bags

Assessment of options for New Zealand²¹

The following proposed criteria have been used to compare options to reduce the impacts of single-use plastic shopping bags in New Zealand. Each option has been assessed as to whether it can:

- substantially advance the phase out of a single-use plastic product that contributes to litter, and the risks associated with marine plastics, while over the longer term take a circular economy approach to design waste out of the system (*primary purpose of intervention: triple weighting*)
- be implemented without placing undue costs on the community, business, or public funds (*key regulatory principle: double weighting*)
- be progressed under existing legislation
- provide a financial incentive to return used shopping bags for reuse or recycling
- transfer funds for community or environmental benefit.

Table 7: Summary of potential options to reduce the impacts of single-use plastic shopping bags

Option	How
1. Mandatory phase out of sale or distribution	Regulations under WMA (s 23(1)(b))
2. Levy, tax or minimum charge 2A – Levy at point of sale, collected by central government	New legislation: amend the WMA
2B – Mandated minimum charge at point of sale, retained by retailers	New legislation: amend the WMA
2C – Levy or minimum charge at point of sale, set by local authorities	New legislation: amend the WMA or other
2D – Tax at point of entry into market (pre-consumer)	New legislation: amend the WMA or other
3. Deposit-refund system	Regulations under WMA (s 23(1)(e))
4. Formal agreement between industry and Government	Non-regulatory
5. Mandatory product stewardship	<i>Gazette</i> notice under WMA (ss 9 and 12), and regulations under WMA
6. Ad hoc voluntary action (<i>status quo</i>)	Non-regulatory

Note: s = section; ss = sections; WMA = Waste Minimisation Act 2008.

²¹ This was published as Appendix 3 in August 2018: www.mfe.govt.nz/node/24338