



# Petition 2014/22 of Rebecca Bird on behalf of Our Seas Our Future

Report of the Local Government and  
Environment Committee

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## **Petition 2014/22 of Rebecca Bird on behalf of Our Seas Our Future**

### **Recommendation**

The Local Government and Environment Committee has considered Petition 2014/22 of Rebecca Bird on behalf of Our Seas Our Future and recommends that the House take note of its report.

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### **Petitioner's request to phase out single-use plastic bags**

The petitioner is concerned about the negative environmental effects of single-use plastic bags. Her petition requests

That the House of Representatives note that 16,266 people have signed an online petition supporting action to include plastic bags as a priority under the Waste Minimisation Act 2008 and ultimately phase out their use in New Zealand by imposing a ban on single-use plastic bags, or introducing consistent charges for single-use plastic bags with a goal towards a total ban, and that the House support the aim of the petition.

The petitioner notes that single-use plastic bags meet the conditions under section 9 of the Waste Minimisation Act 2008 that would allow them to be declared a priority product. An accredited product stewardship scheme must be developed for all priority products.

The petitioner told us that environmental non-governmental organisations support her petition. These include the Royal Forest and Bird Protection Society of New Zealand, Greenpeace New Zealand, and WWF-New Zealand. The petitioner also noted that the Mayor of Wellington, Celia Wade-Brown, supports a compulsory levy.

### **Targeted overseas action against single-use plastic bags**

Massey University's Senior Environmental Anthropology Lecturer, Trisia Farrelly, spoke to us alongside the petitioner. Ms Farrelly told us that single-use plastic bags are used in huge quantities globally. We were told that, although many are reused, each bag is used only for 15 minutes on average before being thrown away.

The petitioner told us that more than 30 countries have legislated to regulate single-use plastic bags with levies or bans. The petitioner believes that these actions are effective in reducing plastic pollution. We were told that the number of bags used fell by 80 to 90 percent in the first year after a levy was introduced in Northern Ireland and Scotland. In China, a 66 percent drop in bag use is estimated since they were banned in 2008.

In England there was an estimated 85 percent drop in the amount of single-use plastic bags used at the biggest retailers (that have 250 or more full-time employees) since the

introduction of a 5 pence charge in October 2015.<sup>1</sup> This amounted to a saving of over 40,800 tonnes of plastic within the first 6 months. The 5 pence charge does not apply to

- paper bags
- bags used in airport shops, on board trains, aeroplanes, or ships
- bags containing items that could pose a food safety risk such as raw meat, prescription medicines, uncovered blades, seeds, bulbs, and flowers, or live fish.<sup>2</sup>

Biodegradable bags are not exempt from the 5 pence charge because of the range of standards for plastic bag biodegradability. However, an exemption is being considered for fully biodegradable bags.

The money raised from the 5 pence tax is donated to good causes chosen by the retailer. Retailers must report to the Department for Environment Food and Rural Affairs about these donations, and this information is published. From October 2015 until April 2016 over £29.2 million was donated.<sup>3</sup>

### **Why target single-use plastic bags in New Zealand?**

It is estimated that 1.6 billion single-use plastic bags are used in New Zealand each year and that about 40,000 are sent to a landfill each hour. Although the petitioner acknowledged that the bags make up a small proportion of New Zealand's overall waste, she stressed that the bags can be especially harmful when they get into the ocean.

The petitioner told us that plastic bags make up most plastic waste in the ocean. We were told that they take a very long time to break down and eventually disintegrate into micro-particles that are consumed by fish and marine fauna. We were told that, once consumed, the micro-particles attract heavy metals such as cadmium and lead. These metals could have negative health effects for humans and animals that subsequently consume affected fish and other marine fauna.

Ms Farrelly said that the environmental footprint of single-use plastic bags is further compounded by the fossil fuels used to produce them. She told us that this results in a considerable contribution to New Zealand's emissions, amounting to approximately 192,000 barrels of oil per year.

We were told that New Zealand is one of only a few countries that have not legislated against single-use plastic bags. Ms Farrelly said that people involved in community-based recycling initiatives are frustrated about the lack of a levy on single-use plastic bags.

<sup>1</sup> Katie Morley, 30 July 2016, *Britain banishes plastic bags as 5p 'tax' sees usage plummet by 6 billion*, <http://www.telegraph.co.uk/news/2016/07/30/britain-banishes-plastic-bags-as-5p-tax-sees-usage-plummet-by-6/>, as at 19 August 2016.

<sup>2</sup> Department for Environment Food and Rural Affairs, 2016, *Carrier bags: why there's a charge*, <https://www.gov.uk/government/publications/single-use-plastic-carrier-bags-why-were-introducing-the-charge/carrier-bags-why-theres-a-5p-charge>, as at 19 August 2016.

<sup>3</sup> Ibid.

### **Decomposition of single-use plastic bags**

We asked for more information about the decomposition process of single-use plastic bags. Ms Farrelly stressed that the micro-particles that are produced are so small they may seem to disappear. However, they are in fact still present and are more dangerous because of their small size.

### **New Zealand initiatives to reduce single-use plastic bags**

Ms Farrelly does not believe that the Soft Plastic Recycling project<sup>4</sup> will be effective. The project introduces drop-off recycling bins outside supermarkets and other retail outlets throughout New Zealand. Ms Farrelly noted that a similar initiative in San Francisco resulted in only a 1 percent reduction in single-use plastic bags. Despite this, Ms Farrelly does not wish to see the scheme discontinued and suggests it be funded through a plastic bag levy.

We note that organisations such as The Warehouse have imposed a small charge (five to ten cents) on single-use plastic bags to discourage their use. We asked whether there has been any noticeable difference in customer behaviour. Ms Farrelly told us that The Warehouse had recorded a 74 percent drop in demand for single-use plastic bags.

Recently, a supermarket chain announced that it would provide discounts to customers who bring reusable bags.<sup>5</sup> Ms Farrelly said that this approach had “huge results” in a Palmerston North New World.

Some of us consider that the use of incentives are an effective way of gradually encouraging customers to change their behaviour. We note that some incentive schemes have led to a decrease in demand for single-use plastic bags.

### **Substitutes for single-use plastic bags**

#### **Will substitutes create other problems?**

We note that single-use plastic shopping bags are often repurposed as rubbish bags in household bins. If these bags were to be discouraged or banned, people would seek other options such as plastic rubbish bin liners. Alternatives may be worse for the environment than single-use plastic bags.

We asked how worse alternatives could be avoided. Ms Farrelly stressed the importance of providing non-plastic options that are cheap and convenient so that consumers would not have to choose between making an ethical or an economic decision. Ms Farrelly said this could be avoided if, for example, non-plastic reusable bags cost the same as single-use plastic bags. Ms Bird added that a subsidy scheme for reusable bags, as well as a levy on single-use plastic bags, would be helpful.

#### **Are reusable bags a preferable solution?**

Some foods, such as meat, are often packed in separate single-use plastic bags at supermarkets for hygiene reasons. In California and Arizona, studies found that reusable

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<sup>4</sup> For more information: Soft Plastic Recycling, 2016, <http://www.recycling.kiwi.nz/soft-plastics>, as at 15 August 2016.

<sup>5</sup> Sunday Star Times, *New World serves up discounts for customers who bring own bag*, <http://www.stuff.co.nz/business/better-business/81584842/new-world-serves-up-discounts-for-customers-who-bring-own-bag.html>, as at 4 July 2016.

bags can harbour bacteria such as salmonella and *E. coli*, and that 97 percent of people do not wash reusable bags.<sup>6</sup> Given this, we asked how to mitigate the potential health risks posed by reusable bags. Ms Farrelly encouraged the use of new plastics without endocrine disruptors (harmful chemicals), which she said do not present any risk of transmitting *E. coli*.

We asked about the net environmental effect of producing and cleaning reusable bags. It has been found that reusable bags need to be used 173 times to match the net environmental cost of manufacturing one single-use plastic bag.<sup>7</sup> Ms Farrelly did not comment on the environmental effect of producing reusable bags, but she believes that the amount of energy required to wash them is minimal. She also suggested that, because reusable bags are fairly new, more research and cost-benefit analysis is needed to properly compare the net environmental effects.

We support the use of reusable bags. However, the majority of us remain concerned about the potential side-effects of replacing single-use plastic bags with reusable bags. We would prefer to have more evidence that they are a more environmentally friendly alternative.

## **Ministry for the Environment's response to the petition**

### **Why the ministry disagrees with the petitioner**

The Ministry for the Environment told us that a ban or blanket charge on single-use plastic bags would be impractical in New Zealand. The ministry reasoned that single-use plastic bags are versatile and are repurposed for transporting food products or collecting household waste. The ministry stressed that some businesses also use these bags to comply with food safety regulations.

The ministry argued that single-use plastic bags are often used more than once. An Australian study found that approximately 60 percent of bags are reused for waste disposal purposes, as lunch bags or carry bags, among other things.<sup>8</sup> The study concluded that the economic and environmental costs of banning or discouraging single-use plastic bags outweigh the benefits. The ministry stressed that intervention measures such as levies should be applied only if there is evidence to suggest there will be a positive net benefit.

The ministry disputes the petitioner's argument that single-use plastic bags are non-degradable. The ministry said that, according to best estimates, the bags can take between 20 and 1,000 years to fully degrade.

### **Landfill and fugitive waste**

The ministry said that between 1 and 1.6 billion single-use plastic bags are estimated to be used in New Zealand each year. However, it was stressed that they represent only

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<sup>6</sup> International Association for Food Protection, August 2011, *Assessment of the Potential for Cross-contamination of Food Products by Reusable Shopping Bags*, [http://www.foodlegal.com.au/uploads/Cross%20contamination%20of%20reusable%20shopping%20bags\\_i171.pdf](http://www.foodlegal.com.au/uploads/Cross%20contamination%20of%20reusable%20shopping%20bags_i171.pdf), as at 4 July 2016, p. 510.

<sup>7</sup> Wall Street Journal, October 2012, *Should Cities Ban Plastic Bags?*, <http://www.wsj.com/articles/SB10000872396390444165804578006832478712400>, as at 4 July 2016.

<sup>8</sup> Allen Consulting Group, May 2006, *Phasing Out Light-Weight Plastic Bags: Costs and Benefits of Alternative Approaches*, Report of the Environment Protection and Heritage Council, p. 21.

0.2 percent of landfill waste. The ministry assured us that landfill waste is “typically well managed”.

The ministry said that the most common cause of marine plastic pollution is from “fugitive litter” that is not captured by waste management systems. Fugitive litter can also cause flooding from blocked drains and sewer pipes. The ministry stressed that fugitive litter is not a significant problem in New Zealand.

We note that some local authorities dump recyclable plastics in landfills. This essentially overrides the efforts of ratepayers who separate recyclable plastics from other types of waste. Some of us would like to see measures to encourage local authorities to correctly manage recyclable materials. Some of us also support establishing an audit system to record the waste management practices of local authorities.

Findings published in an OECD report, “Environment at a Glance 2015”, claimed that New Zealand performs poorly in the amount of waste sent to landfill. We note that the ministry disputes—and has provided further information in response to—the findings published in the report. However, some of us consider that New Zealand’s waste data collection and reporting could be improved.

#### **New Zealand’s influence on marine pollution**

The ministry noted that countries with bigger populations add more waste into the environment and that New Zealand is not a big marine polluter. The ministry cited a 2015 article from the journal *Science* which found that 83 percent of plastic waste in the ocean originates from 20 countries.<sup>9</sup> New Zealand does not feature in the top 20, and the ministry stressed that New Zealand is in the “lowest possible ranking globally for its potential to contribute to the marine environment in terms of plastics”.

We understand that, on a global scale, New Zealand’s marine pollution is small. However, some of us do not think this should affect New Zealand’s policy on marine pollution. Some of us encourage New Zealand to be a global leader in preventing marine pollution.

#### **The ministry’s broad policy approach**

The ministry noted that several pieces of legislation manage plastic waste: the Waste Minimisation Act, the Resource Management Act 1991, and the Litter Act 1979.

The ministry’s broad policy approach to waste management focuses on all types of waste. The ministry justified this approach by highlighting the 2015 National Litter Survey, which found that single-use plastic bags make up only 1.5 percent of litter, with food packaging contributing a higher percentage of litter.

The ministry told us that a levy of \$10 a tonne is imposed under the Waste Minimisation Act on all waste sent to landfill. This levy amounts to \$30 million a year and targets a range of plastics, not just single-use plastic bags. The ministry argued that an additional levy on single-use plastic bags would not make financial sense.

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<sup>9</sup> Jambeck, J et al., February 2015, “Plastic waste inputs from land into the ocean”, <http://science.sciencemag.org/content/sci/347/6223/768.full.pdf?ijkey=BXtBaPzbQgagE&keytype=ref&siteid=sci>, Vol. 347, Issue 6223, as at 8 July 2016.

The ministry said that its non-regulatory approach is similar to Canada’s. This approach focuses on changing behaviour (through the promotion of slogans such as “Be a Tidy Kiwi”), community involvement, and voluntary initiatives. The ministry said that there are effective programmes, such as Enviroschools and Para Kore, that teach New Zealanders about waste reduction and recycling. Some of us consider that promoting reusable bags would also help to change consumers’ behaviour.

The ministry suggests that, in addition to voluntary measures and encouraging behaviour change, more waste minimisation infrastructure and services should be pursued.

### **Supporting local government waste management**

The ministry brought the 2010 revised New Zealand Waste Management Strategy to our attention. The strategy contains the Government’s long-term waste management and minimisation priorities. Its aims are to reduce the harmful effects of waste and to improve the efficiency of resource use by ensuring that “waste management and minimisation activities are appropriate for local situations”.<sup>10</sup>

The ministry told us it takes an approach that “encourages communities, industries, and businesses [to work] together”. The ministry emphasised its investment in local authorities, pointing out that it supports 67 recycling schemes, 12 accredited product stewardship schemes, and the Packaging Forum’s soft plastic recycling regime.

We note that 89 percent of local councils support either eliminating, or imposing a levy on, single-use plastic bags. The ministry said that councils had not brought any problems with current policy initiatives to its attention.

### **Local government and packaging industry perspectives**

#### **Local government support for a levy**

We were told that the members of Local Government New Zealand overwhelmingly support introducing a levy on single-use plastic bags. This position has become Local Government New Zealand policy.

Local Government New Zealand members support a targeted levy because they argue that single-use plastic bags

- cause environmental pollution
- may cause negative health side-effects for humans who eat contaminated fish and mammals
- are produced using fossil fuels
- are not easily recycled and do not currently have a “responsible means of disposal”
- “last for indefinite periods” in landfills
- impose litter collection, drain clearance, and other costs on local authorities.

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<sup>10</sup> Ministry for the Environment, October 2010, *New Zealand Waste Management Strategy*, <https://www.mfe.govt.nz/sites/default/files/wastestrategy.pdf>, p. 2.

Local Government New Zealand acknowledged the Government's partnership with the retail sector and packaging industry to recycle plastics. However, its members believe that a levy "is the next logical stage for the implementation of the Government's overall waste strategy" and has been an effective tool overseas.

Local Government New Zealand's members considered introducing bylaws to address single-use plastic bags. However, this was rejected because of section 155 of the Local Government Act 2002 (requiring bylaws to be used only when they are the most appropriate way of addressing a problem). A national legislative solution was considered to be more appropriate because the bags cause problems for all councils. Local Government New Zealand also stressed that it is unclear who is accountable and should be taking action: manufacturers, retailers, consumers, or local government.

### **Packaging industry cautious about introducing a levy**

The Packaging Forum and Packaging Council are unconvinced that a levy or ban on single-use plastic bags would be the best solution.

The Packaging Forum operates two voluntary stewardship schemes for packaging products, and told us that it is "committed to reducing packaging waste and increasing recycling ... in partnership with local and central government". However, the forum stressed that, although retailers actively try to reduce the number of single-use plastic bags in circulation, supply is driven by consumer demand.

The forum shared the results of its Soft Plastic Recycling scheme, saying it has "surpassed expectations" and that trends show New Zealanders embracing recycling. More than 21 tonnes of soft plastic packaging were collected under the scheme between October 2015 and May 2016, with single-use plastic bags making up more than 60 percent of the collected soft plastic.

The forum noted that packaging collected under the scheme is sent to Australia and converted into products such as bollards. We were assured that local alternatives in Auckland are being considered.

The forum established the Litter Working Group after the 2015 National Litter Count was released. The group consisted of local government representatives, recyclers, and other organisations. We were told that the group concluded that a multi-faceted response is needed to target infrastructure and consumer behaviour. Consequently, the group has developed a national education and community awareness campaign called "Litter Less, Recycle More". The campaign aims to

- reduce litter and increase recycling
- implement a national behaviour-change programme
- partner the "Love New Zealand" recycling brand with the rebranded "Be a Tidy Kiwi" slogan
- use various social media and other marketing platforms to promote and raise awareness about recycling in New Zealand.

The forum noted that, although its approach to litter is broader than single-use plastic bags, some of its retail members have introduced targeted point-of-sale charges, refunds, or bans.

The Packaging Council does not believe that additional regulatory intervention is needed. It considers that the following issues should be considered first:

- New Zealand's small and dispersed population
- the implications of targeting only single-use plastic bags
- whether alternatives to single-use plastic bags are more environmentally friendly.

The council supports point-of-sale retail initiatives that encourage customers to change their behaviour. It also promotes enforcing the Litter Act, and education initiatives condemning littering.

## **Conclusion**

We would like to thank the petitioners, the ministry, Local Government New Zealand, the Packaging Forum, and the Packaging Council for sharing their perspectives with us.

We acknowledge the negative environmental effects that fugitive litter such as single-use plastic bags can cause. However, single-use plastic bags are only one type of litter. The majority of us agree with the ministry's broader waste management policy, and we support waste initiatives led by the packaging industry, businesses, and communities. We consider that, together, these initiatives are best able to address all forms of plastic waste, including single-use plastic bags.

The majority of us are unconvinced that the benefits of targeting single-use plastic bags outweigh potential unintended consequences and costs. However, we support further cost-benefit analysis, as well as New Zealand-specific research into alternative solutions.

Some of us agree with the petitioner's requests and believe it is worth investigating an approach that targets and eliminates one waste problem at a time. Some of us do not believe that current policies and initiatives are enough, and would like the New Zealand Government to investigate the success of the UK initiative. Some of us believe that legislative change is desirable to implement consistent and targeted measures that address the environmental harm and other side-effects caused by single-use plastic bags.

## **Appendix**

### **Committee procedure**

Petition 2014/22 of Rebecca Bird on Behalf of Our Seas Our Future was referred to us on 12 August 2015.

We received written evidence from Our Seas Our Future, the Ministry for the Environment, the Packaging Council of New Zealand, and the Packaging Forum. We received oral evidence from Our Seas Our Future and the Ministry for the Environment.

### **Committee members**

Scott Simpson (Chairperson)

Matt Doocey

Sarah Dowie

Paul Foster-Bell

Joanne Hayes

Tutehounuku Korako

Ron Mark

Hon David Parker

Eugenie Sage

James Shaw

Meka Whaitiri

James Shaw was replaced by Denise Roche for this item of business.

Dr Megan Woods, Su'a William Sio, and Todd Muller participated in the consideration of this item of business.