

# Plastic Reduction Bill 2020

## Regulatory Impact Statement

Transport Canberra and City Services

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## Executive Summary

Single-use plastics create challenges for our environment, waste management and resource recovery systems.

Community concern about plastic waste is at an all-time high. Internationally, across Australia and in the ACT, there is community pressure and an expectation that governments and companies must do more to address the issues and challenges associated with single-use plastic. Feedback from the community, business and industry has shown people support, and expect, the ACT Government to lead action on this important issue.

In response to this feedback, the ACT Government proposes to introduce the Plastic Reduction Bill 2020. The Bill aims to reduce the use of plastic in the ACT, particularly single-use plastic, by prohibiting the sale, supply and distribution of ‘prohibited’ plastic products.

In the first phase of implementation this includes single-use plastic stirrers, cutlery and expanded polystyrene takeaway food and beverage containers (subsequently referred to as polystyrene containers). The Bill also establishes a framework for expanding the list of prohibited products in the future.

In addition to regulating key products, the Bill requires declared government and non-government public events (subsequently referred to as public events) to be single-use plastic free. To consolidate plastic reduction measures, the Bill will absorb the existing ban on light-weight single-use plastic shopping bags under 35 microns.

The reform ensures health and safety standards are maintained by providing a mechanism for the Minister to introduce exemptions in key sectors (e.g. exemptions for plastic cutlery in corrective services for safety reasons). While education will be the preferred reform approach, a range of offences have been developed to ensure compliance with the reform.

The ACT Government acknowledges that some people require access to single-use plastic straws as an accessibility tool (e.g. people with disabilities). Accordingly, the Government has delayed the phase out of single-use plastic straws to the second tranche of products to be phased out via regulation. Any future regulations will include exemptions to ensure these products remain available for the people who need them, with limited human rights impacts wherever possible.

The public consultation on the *Phasing out single-use plastics discussion paper* has indicated there are high levels of support for action, including regulatory action, on single-use plastics in the ACT. There were high levels of support for action on single-use plastic stirrers, cutlery and polystyrene containers, and for plastic-free declared public events; all of which are the subject of the reform.

Given the importance of reducing the consumption of these problematic single-use plastic products, adopting a regulatory approach which is supported by an effective community education campaign is considered to be the most effective way to delivering the objectives outlined in this regulatory impact statement (RIS). The qualitative analysis outlined in this RIS indicates that the reform, when considered in conjunction with the select exemption circumstances, will result in a range of environmental, social and economic benefits to the ACT. This is supported by high-level findings outlined in the quantitative social cost-benefit analysis, which indicate that a net benefit to the ACT can be achieved through the use of cost-effective plastic alternatives, combined with increased levels of consumer avoidance.

There will be some social and economic impacts from the implementation of the Bill. These costs include: costs to ACT Government as a result of implementing the reform; short-term operational costs to business to adapt to the changes; and a potential for moderate cost increases to consumers, community organisations and lower-income households as a result of increased costs associated with alternatives.

The social cost-benefit analysis demonstrates that the most effective economic savings are achieved through single-use product avoidance. This approach is consistent with the ACT's waste hierarchy and the Australian Government's 2019 *National Waste Policy Action Plan*, which sets national targets of reducing waste generated in Australia by 10% per person by 2030 and phasing out unnecessary and problematic plastic by 2025.<sup>i</sup> The analysis also demonstrates the Bill reduces the environmental impact associated with consuming plastic. Importantly, it showed that action to reduce the consumption of single-use plastic products always results in positive environmental outcomes, regardless of the cost of alternatives.

The Bill ensures the ACT Government proactively addresses the impacts associated with problematic single-use plastics in the ACT, while providing appropriate safeguards to maintain public health and safety standards, particularly in a COVID-19 context. Where possible, this RIS has taken COVID-19 impacts into account. Notwithstanding this, the approach is similar to those that continue to be adopted or developed in other Australian jurisdictions. As such, it responds to requests from peak bodies to maintain progress towards sustainability by phasing out single-use plastics, to harmonise where possible and achieve a consistent approach across Australia, while also recognising the impact that COVID-19 has had on industry, business and global supply chains.

This analysis outlined in this RIS supports the objectives of the Bill and the conclusion that the benefits associated with introducing the reform outweigh the costs imposed from the Bill.

The recommended option is to support the Plastic Reduction Bill.

## Need for a regulatory impact statement

ACT Government policy requires that a regulatory impact statement (RIS) is prepared for any new, or amending legislation proposals, that may impact on a stakeholder group, for example, Government, community group, the general public, industry or a business group.

Section 34 of the *Legislation Act 2001* provides that if the law is likely to impose appreciable costs on the community, or a part of the community, then, before the law is made, the Minister administering the authorising law must arrange for a RIS to be prepared for the law.

This RIS examines the regulatory impacts of the Plastic Reduction Bill and identifies where these may impact on Government, industry, business, community organisations or the community, and provides a cost-benefit analysis for each option likely to impose a cost.

## Introduction

Single-use plastics create challenges for our environment and waste management and resource recovery systems.

Community concern about plastic waste was at an all-time high even taking account of the recent need for additional hygiene practices resulting from the COVID-19 global pandemic. Internationally, across Australia and in the ACT, there is enduring community pressure and an expectation that governments and companies must do more to address the issues and challenges associated with single-use plastic.

Through the *Phasing out single-use plastics discussion paper*,<sup>ii</sup> the ACT Government sought to consult broadly with industry, business and the community about ways to avoid and reduce the consumption of single-use plastics. This included considering whether certain categories of single-use plastics should be phased out or banned in the ACT.

Feedback from the community, business and industry has shown people support, and expect, the ACT Government to lead action on this important issue.

Following careful consideration of the feedback received through this and subsequent consultation, the ACT Government will introduce a regulatory ban on the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT. These products have been targeted as they:

- are subject to high levels of consumption,
- contribute to the ACT's waste and litter streams,
- have readily available alternatives, and
- have high levels of support amongst the community, business and industry for action.

In addition, the ACT Government will lead by example and require declared public events to be single-use plastic free. For public events, this will require a whole-of-ACT Government approach to ensure event implementation is smooth and single-use plastic items can be avoided wherever possible, or replaced with sustainable alternatives, supported by relevant ACT Government policies as appropriate. The Bill will also absorb the existing ban on light-weight single-use plastic shopping bags under 35 microns. The reform ensures health and safety standards are maintained through the introduction of other necessary exemptions in key sectors (e.g. exemptions for plastic cutlery in corrective services for safety reasons).

Consideration will be given to expanding the phase out of single-use plastic stirrers, cutlery and polystyrene containers to other single-use items within the next 12-months. With this in mind, the Bill establishes a framework for expanding the list of prohibited plastic products in the future through regulations. Products under consideration include single-use plastic straws (noting exemptions will ensure these products remain available for the people who need them), oxo-degradable plastic products and fruit and vegetable barrier bags. Expanded polystyrene products used in packaging (e.g. meat trays, furniture packaging etc) are not to be managed through regulatory reform in the ACT at this time and will be addressed through continued support of the Australian Packaging Covenant Organisation's National Packaging Targets.

This RIS assesses the regulatory impact of banning the first tranche of plastic products in the ACT and makes a recommendation for Government consideration based on the cost-benefit analysis of introducing the Plastic Reduction Bill.

## Impact of single-use plastics

Plastic plays an important role in everyday life. It is used in a wide range of applications as a low-cost manufacturing option. Its uses include protecting food, keeping medical equipment clean and free of germs and making cars and planes lighter, which saves fuel and reduces greenhouse gas emissions. However, plastic has a number of downsides. It presents three key problems:

1. **Persistence in the environment** - commonly used plastics do not readily break down and can persist in the environment in some shape or form for hundreds or even thousands of years.<sup>iii</sup> Plastic pollution is compromising the safety of food supplies, soils, waterways and wildlife.
2. **Rising global plastic consumption** - global consumption of plastic is increasing and compounding its negative effects. Since the 1950s, plastic production has grown faster than any other material. Plastic production is expected to double again in the next 20 years and almost quadruple by 2050 based on current trends. It is also estimated that by 2050 there will be more plastic (by weight) in the world's oceans than fish.<sup>iv</sup>
3. **True cost of plastic** - the downstream costs and perverse outcomes of the consumption of plastic to the economy, environment and society are not accounted for, and are borne by the environment, waste management and health sectors. This means the consumption and disposal of single-use plastic products impacts the ACT's economy.

Much of the plastic consumed in the ACT is designed to be thrown away after a single use. Many of the single-use plastic products used cannot be recycled, and as a result, end up in landfills or as litter in the natural environment.<sup>v</sup>

For these reasons, the ACT Government considers it important to introduce policies and legislation that support the consumption of these products being avoided.

## Consultation statement

Over a period of 15 weeks, between 16 April and 31 July 2019, the ACT Government undertook extensive consultation on the *Phasing out single-use plastic discussion paper*. This extended consultation period aimed to ensure there was adequate time for meaningful engagement across industry, business and the community about problematic single-use plastic waste and pollution.

During the consultation period, the ACT Government invited people to comment on the *Phasing out single-use plastics discussion paper*. The discussion paper included information and a series of questions focused on:

- identifying opportunities and ideas for phasing out specific problematic single-use plastics and moving to more sustainable alternatives, and
- highlighting important considerations that would inform government decision-making, including:
  - potential impacts on manufacturers, importers and businesses that supply and use single-use plastics, and



- consumer impacts, including social equity concerns and practicalities.

Feedback was sought in a number of ways, including: online surveys for the community and businesses; written submissions, including through the YourSay website;<sup>vi</sup> community, business and government information sessions; and pop-up stalls across Canberra.

The outcomes of the consultation are summarised below and outlined in more detail at Attachment A and in the Consultation Engagement Report available at: [www.yoursay.act.gov.au](http://www.yoursay.act.gov.au).

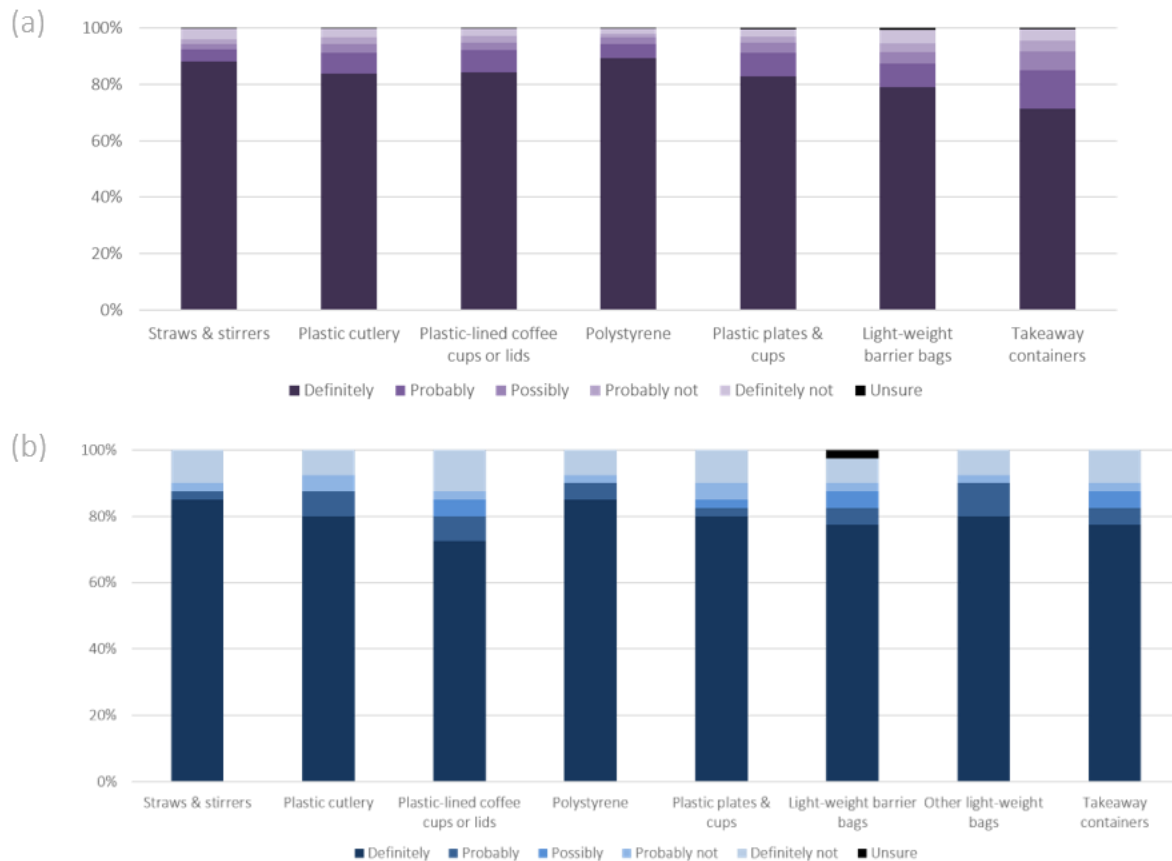
Additional targeted consultation has also occurred through the ACT Government's Plastic Reduction Taskforce and during the preparation of the social cost-benefit analysis.<sup>vii</sup> This includes public release of an Exposure Draft Bill and Explanatory Statement. Collectively, these additional targeted consultation activities have informed the Bill's development and ACT Government implementation activities.

### Key findings of consultation

There are very high levels of support amongst industry, business and the community for action to phase out single-use plastic products in the ACT. The highest levels of support were for action on polystyrene containers and plastic stirrers. Action on plastic cutlery also received high levels of support. In addition, the majority of community survey respondents think the events sector has an issue with single-use plastic and there was support through the consultation process for more plastic free events.

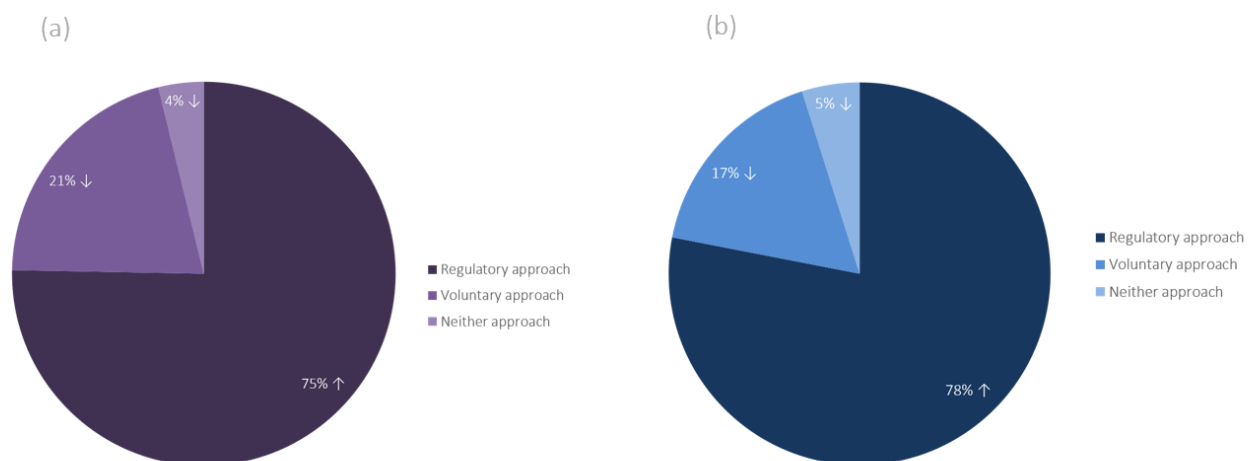
Over 90% of community survey respondents said they would 'definitely' or 'probably' support a phase out of polystyrene containers (94%), straws and stirrers (93%) and plastic cutlery (91%) (Figure 1a). Support amongst business respondents was also high, with respondents 'definitely' or 'probably' supporting a phase out of polystyrene containers (90%), plastic straws and stirrers (88%) and plastic cutlery (88%) (Figure 1b).

Figure 1: Community (a)<sup>viii</sup> and business (b)<sup>ix</sup> respondents support for phasing out single-use plastic products



Seventy-five per cent of individual community survey respondents said a regulatory approach would be most effective to reduce their consumption of single-use plastic products and 20% think a voluntary approach would be most effective (Figure 2a). Seventy-eight per cent of individual business survey respondents would prefer a regulatory approach to phasing out single-use plastic products and 17% prefer a voluntary approach (Figure 2b).

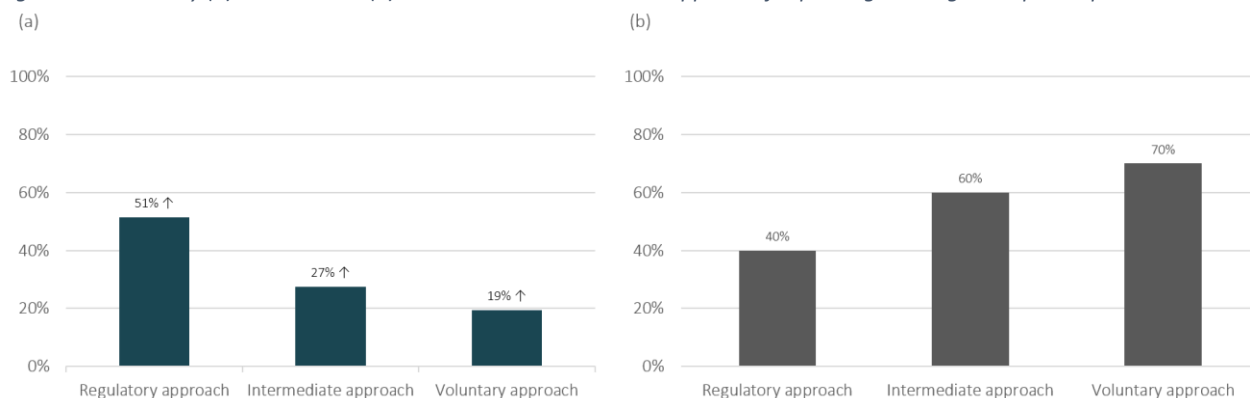
Figure 2: Community (a)<sup>x</sup> and business (b)<sup>xi</sup> approach for phasing out single-use plastic products



A regulatory approach was also supported amongst community groups and business organisation submissions (Figure 3). Over 50% of community group submissions support a regulatory approach to phase out single-use plastics, including 37% that recommended a regulatory ban on single-use plastic

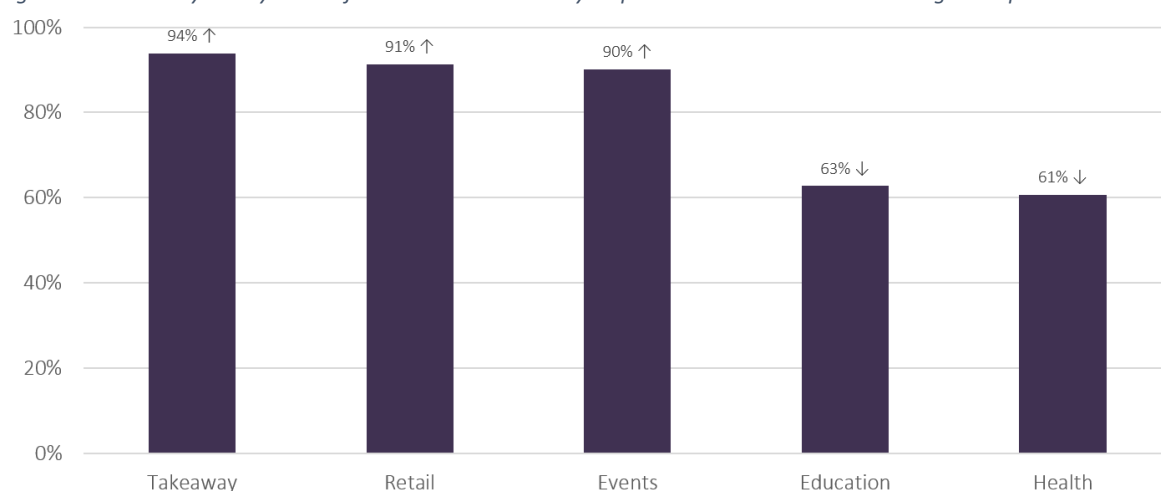
products. A total of 40% of business organisation submissions support a regulatory approach, including 25% that recommended a regulatory ban on single-use plastic products. Most of those respondents would also support an intermediate or voluntary approach. Taken together, the results in Figures 2 and 3 suggest that community individuals are providing the strongest push for a regulatory approach but that many organisations are also open to this proposal.

Figure 3: Community (a) and business (b) submissions recommended approach for phasing out single-use plastic products



Ninety-five per cent of individual community survey respondents provided information about which sectors they think have an issue with single-use plastics (Figure 4). Based on these responses, the survey respondents are most concerned about single-use plastics used in fast food and takeaway (94%), supermarkets and retail (91%), and events (90%).

Figure 4: Community survey results for sectors considered by respondents to have issues with single-use plastics<sup>xii</sup>



The consultation identified the importance of single-use plastic straws remaining available for people living with disabilities, and for some other groups in the community (e.g. people with medical conditions and the elderly):

- 20% of community survey respondents, who are either ‘probably’ or ‘definitely’ not supportive of phasing out single-use plastic, cite impacts to people living with disabilities, and
- 30% of organisational submissions and 8% of community submissions, recommend the ACT Government consider approaches to ensure people living with disabilities are not impacted.

A number of written submissions, including two organisational submissions from disability advocacy groups, highlighted that current alternatives to single-use plastic are considered to be unusable, high risk and dangerous for people living with disabilities, particularly those with high support needs.

There is concern amongst these groups that phasing out single-use plastic straws will require people with disabilities to carry their own straws. Advocates have indicated restricting access to plastic straws creates social equity issues, including:

- financial impacts that disproportionately and adversely affect people living with a disability, many of whom already experience financial hardship, and
- privacy and inclusion issues, where people with disabilities may need to prove a medical necessity to access single-use plastic straws.

A number of written submissions include suggestions to remove or limit these impacts. These suggestions have been carefully considered by the ACT Government. Based on this feedback and additional consultation with disability advocacy groups, the Government has decided to delay the phase out of single-use plastic straws to the second tranche of products to be phased out via regulation. Any future regulations will include exemptions to ensure these products remain available for the people who need them. The ACT Government will continue to work closely with disability advocacy groups, including through the Plastic Reduction Taskforce, to ensure potential impacts are limited wherever possible and that any associated impacts to human rights are limited and proportionate.

### Identifying the problem

The global use of plastic has grown exponentially since it was commercialised in the 1950s. Plastic has become ubiquitous in modern society due to its key qualities of strength, adaptability, stability, light weight and low cost, which can be applied to a wide range of products and packaging.

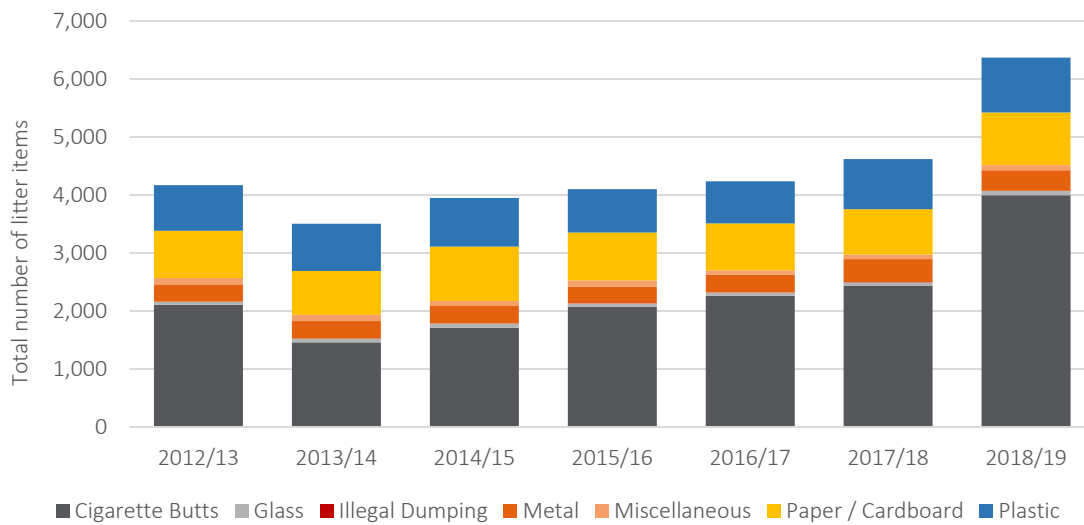
The features that make plastic so successful also generate significant environmental and human health impacts. The low price of plastic masks the environmental and human health costs associated with production, distribution and disposal of plastic. Its light weight allows plastic pollution to be widely distributed across the environment, its strength poses physical risks to wildlife and its stability means it is able to persist in the environment and as microplastics in the food chain.

In the ACT, the consumption and disposal of single-use plastic represents significant problems for the environment, in the form of litter, and for the ACT's waste management and resource recovery sector. The social cost-benefit analysis commissioned by the ACT Government estimated that approximately 25 million plastic cutlery, 17 million plastic stirrers and 19 million plastic food containers are consumed each year in the ACT.<sup>xiii</sup> Single-use plastics are considered a particular expression of convenience society, as they are highly consumed away from home and designed to be thrown away after a single use, in some cases after just a few seconds.

Canberrans are among Australia's best recyclers, with a household recycling rate of more than 70%. In 2011, the ACT became just the third jurisdiction in Australia to ban light-weight single-use plastic shopping bags. However, single-use plastic products remain a significant challenge for pollution in ACT waterways, city parks and bush landscapes. They also create significant problems when incorrectly sent to recycling, where they interfere with recycling equipment, contaminate clean recyclables and pose health and safety risks.

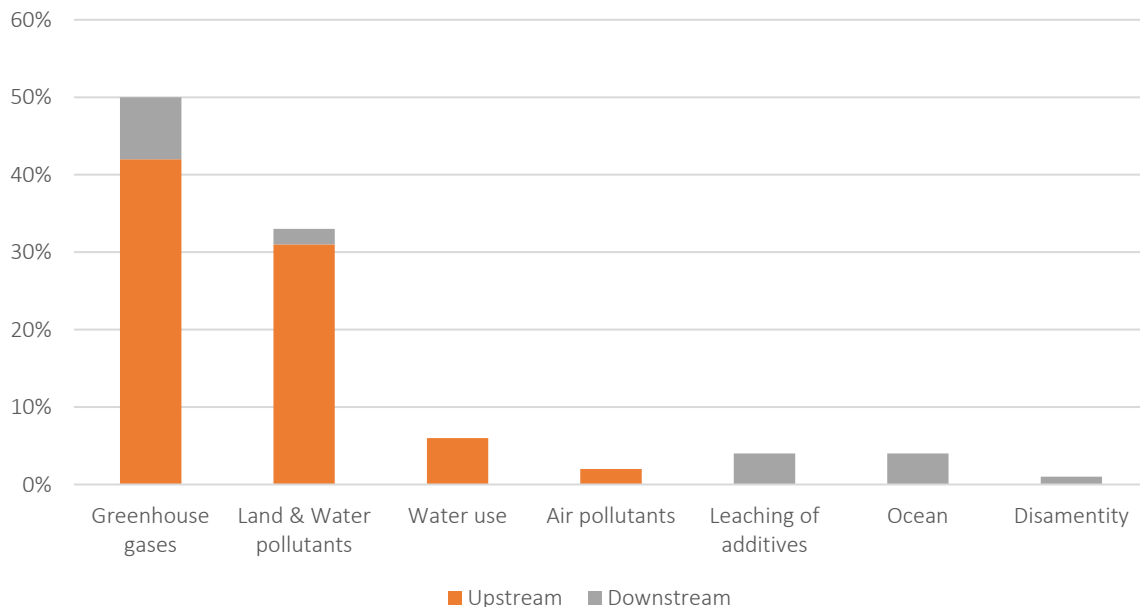
The National Litter Index survey indicated that from 2012 to 2019, the fraction of plastic items in the ACT litter stream fluctuated between 18 - 25% (Figure 5). This figure is somewhat skewed by the very high number of cigarette butts. If cigarette butts are removed from count, plastic increases from 19% to 38% of the ACT litter items in 2018/19.

Figure 5: Total composition and volume of ACT litter items<sup>xiv</sup>



Single-use plastic products are not just a litter challenge. The impacts are distributed along the supply and consumption chain based on the nature of the individual product, the dynamics of the industry and consumer behaviour. Analysis of the environmental impacts of plastic found the upstream impacts of plastic products significantly outweigh the downstream impacts, with the key impacts being greenhouse gases and land and water pollution (Figure 6).<sup>xv</sup> These challenges have implications for the ACT’s commitment to have 90% of waste being diverted from landfill by 2025 and a carbon neutral waste sector by 2020.

Figure 6: Contribution of plastic in products to upstream natural capital cost<sup>xvi</sup>



There are a number of alternatives to single-use plastic that are promoted as being more sustainable, particularly for the environment, when compared to commonly used plastic products. However, reducing the social, environmental and economic impact of single-use plastics is best achieved by reducing our consumption. This requires a conscious effort to consider how single-use products can be avoided completely. This is important because, while some single-use alternatives may appear more sustainable when compared to plastic products, there is still a significant environmental and

economic cost associated with creating, collecting and recycling single-use products – some are not recyclable at all and must be landfilled.

The principles of avoid and reuse are fundamental to the ACT's waste management hierarchy (Figure 9). Promoting these principles is an important part of educating consumers about the impacts of their behaviours. For example, feedback from public consultation indicates 70% of community survey respondents take their own reusable cup when buying coffee, however there is anecdotal evidence that people in the ACT are less likely to use a reusable cup, even in closed-loop systems like office buildings, because single-use coffee cups are accepted by the ACT's Material Recovery Facility. The rationale behind this consumption is that, if products are recyclable, they can be used and disposed of, without a significant environmental impact. While recycling is an important part of reducing the impact of single-use products, it is not preferred to waste avoidance and reuse.

There is still uncertainty about the sustainability of single-use plastic alternatives. There may not be suitable alternatives for all problematic single-use plastic products at this point in time, and the complete lifecycle impacts of available products are not well understood. Understanding the lifecycle impacts of alternatives is important to inform decision making. This includes considering whether the ACT currently has the infrastructure and waste processing capacity to manage alternative products without resulting in unintended impacts.

For example, biodegradable and compostable items need an appropriate waste capture system (e.g. a Food Organics and Garden Organics service) and an associated processing infrastructure to ensure effective collection and disposal. The possible introduction of these services in the ACT in the future, may result in biodegradable and compostable products becoming preferred alternatives to commonly recyclable single-use plastic products. However, biodegradable and compostable options do not provide an ultimate solution. A lack of understanding about the special conditions required for these products to biodegrade mean they:

- contribute to the litter stream when people expect these items to biodegrade in the natural environment,
- increase greenhouse gas emissions when they are not treated under special conditions, and
- can make FOGO systems less efficient as they take longer to biodegrade when compared to food and garden organics.

These challenges have been demonstrated through a decision by the City of Christchurch, New Zealand, to no longer accept biodegradable and compostable products through FOGO, despite having the necessary systems and infrastructure.<sup>xvii</sup>

## Objectives of Government action

The reform aims to:

- reduce the consumption and associated social, economic and environmental impact of problematic single-use plastic products in the ACT,
- raise the profile of problematic single-use plastic products by targeting three high profile products with readily available alternatives,
- demonstrate leadership by taking action to eliminate the consumption of additional single-use plastics at declared public events,
- encourage the development and uptake of innovative and sustainable alternatives to problematic single-use plastic products,
- support the delivery of ACT Government commitments and targets, including those outlined in the ACT's Waste Management Strategy<sup>xviii</sup>, ACT Climate Change Strategy<sup>xix</sup>, and the National Waste Policy Action Plan,
- minimise the impact of regulatory reform to Government, industry, business and the community through carefully considered action, and
- address public feedback that indicates action on single-use plastics is a priority.

## Summary of the reform

Through the consultation on the *Phasing out single-use plastics discussion paper*, industry, business and the community respondents indicated they want, and expect, ACT Government action to address the issues associated with single-use plastic. However, the consultation also found that action on some products, particularly those with limited alternatives, require additional consideration (e.g. plastic straws for people living with a disability, environmental impacts associated with incorrect disposal of compostable products).

The reform introduces an immediate regulatory ban on the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT. The reform also requires declared public events to be single-use plastic free. Through this reform, the ACT Government intends to address community, business and industry feedback, and the impacts associated with single-use plastics, in a practical and evidence-based manner.

The products to be banned are high profile, have readily available alternatives and will allow the ACT Government to build on the success of the ban on light-weight plastic shopping bags and continue to take action on single-use plastics. Addressing these products in the first instance provides an opportunity to raise awareness of the impacts of problematic single-use plastics, while minimising the risk of unintended environmental, social and economic outcomes associated with some types of single-use plastics. It also provides an opportunity to support the social behavioural changes required to avoid our consumption of single-use products and minimise our waste generation.

An important part of minimising the social impacts of the reform are exemptions for some ACT Government agencies and private organisations in order to maintain health and safety standards (e.g. ACT Corrective Services). Exemption provisions have been developed that allow the Minister, on application or their own initiative, to provide an exemption by disallowable instrument. Exemptions will be developed in consultation with the Justice and Community Safety Directorate, other relevant directorates (e.g. ACT Health and ACT Corrective Services), and other relevant stakeholders

(e.g. disability advocacy groups). This approach is consistent with the ACT Government's commitment to social inclusion.

Implementation of the reform will be supported by voluntary and intermediate measures, including a comprehensive education campaign, targeted consultation with business and industry, and continued support of the Australian Packaging Covenant Organisation's National Packaging Targets.

Further details on implementation activities is outlined in the *Implementation and evaluation* section of this RIS.

### Social cost-benefit analysis

The ACT Government commissioned an independent social cost-benefit analysis to assess options to phase out single-use plastic products in the ACT.<sup>xx</sup> This represents the first attempt to undertake a quantitative analysis of the phase out of single-use plastic products in Australia.

The analysis aimed to identify and then quantify the impacts of phasing out single-use plastic stirrers, cutlery and polystyrene containers. Coupled with avoidance scenarios, potential alternatives for single-use plastic items were developed using information on costs and sustainability of alternatives from other jurisdictions, both domestically and internationally. A social cost-benefit analysis aimed to assess the alternatives between 2020 and 2040.

The social cost-benefit analysis identified a number of high-level trends that can be used to inform decision making and complement the qualitative analysis outlined in the *Regulatory impact* section of this RIS.

### Mutual recognition principles

The *Mutual Recognition Act 1992* (Cth) (MR Act) and the *Trans-Tasman Mutual Recognition Act 1997* (Cth) (TTMR Act) aim to remove regulatory barriers to the free flow of goods and labour between Australian states and territories. These Acts apply as laws of the ACT by virtue of the *Mutual Recognition (Australian Capital Territory) Act 1992* (ACT) and the *Trans-Tasman Mutual Recognition Act 1997* (ACT), respectively.

In relation to goods, the MR Act and TTMR Act apply the 'mutual recognition principle'. The principle provides that goods produced or imported into one Australian jurisdiction can be distributed and sold freely throughout Australia.<sup>xxi</sup> The Trans-Tasman mutual recognition principle provides that goods produced in or imported into New Zealand that may be lawfully sold in New Zealand may be lawfully sold in an Australian jurisdiction.<sup>xxii</sup>

These Acts provide that sales of goods to which the principle applies do not require compliance with 'further requirements' of a type set out in the Acts that might otherwise be required under the laws of the importing jurisdiction. These include quality or performance standards, inspection requirements and labelling standards.

### Impact of the Bill on mutual recognition

Should the Bill pass the ACT Legislative Assembly, the Government will draft letters to other relevant jurisdictions enabling the commencement of a self-appointed 12-month exemption period for mutual recognition.



Once this short-term exemption is in place, the ACT Government will continue to work closely with other Australian jurisdictions to progress a permanent exemption. This involves undertaking a process to amend national legislation for mutual recognition; this is an established process for when states and territory actions place potential restrictions on cross-border trade. This process has been successfully completed for the ACT Container Deposit Scheme and plastic bag ban.

As other Australian jurisdictions also advance with phasing out single-use plastic items and cross-jurisdictional collaboration remains ongoing, the ACT Government is confident in its ability to progress the process for the required amendments.

### Transitional arrangements

The reform does not have retrospective effect. It will repeal and absorb the *Plastic Shopping Bags Ban Act 2010*. As such, no statutory transitional arrangements are necessary.

### Recommended option

Two options have been considered as part of this RIS; do not introduce regulatory reform at this time (option 1), or progress the Plastic Reduction Bill (option 2).

The option of not introducing regulatory reform is not recommended, because of the extremely high community support for taking regulatory action to phase out single use plastics. The lower level of organisational support for this approach can be effectively managed through engagement programs aiming to ensure that affected businesses have off-the-shelf solutions at the right time.

Option 2, of progressing is recommended to introduce a Bill which maintains the existing plastic bag ban in its entirety while also prohibiting the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT. The Bill will also provide the capacity for public events to be declared single-use plastic free, by disallowable instrument.

The recommended approach, outlined in option 2, ensures the ACT has a best-practice, contemporary and effective regulatory system that supports a reduction in the consumption of problematic single-use plastics in the ACT. This option introduces safeguards to ensure potential impacts to members of the community are adequately considered and appropriately managed. This approach is similar to interventions being adopted in other Australian jurisdictions and, as a result, responds to requests from peak bodies for a harmonised and consistent approach where possible to phasing out single-use plastics across Australia.

## Setting the scene

### What is plastic?

The United Nations defines plastic as ‘a lightweight, hygienic and resistant material which can be moulded in a variety of ways and utilised in a wide range of applications’.<sup>xxiii</sup>

Plastic can be flexible or rigid and varies in chemical composition. Plastic is usually synthetic and is most commonly made from petrochemicals (fossil-based); although some plastic can be made partially or fully from natural materials (bio-based).

Both sources of plastic, when found in some products, become immediate threats to wildlife in the environment due to their shape or form. For example, they can:

- be mistakenly consumed due to their resemblance to natural food sources which can result in death (e.g. plastic bags and bottle tops),
- cause physical injury or death (e.g. plastic fishing nets and bottle rings), or
- subvert natural ecosystem function (e.g. prevent light penetrating ocean waters).

### What is single-use plastic?

Single-use plastic, often also referred to as disposable plastic, is commonly used for plastic packaging and includes items intended to be used only once before they are thrown away or recycled.<sup>xxiv</sup>

Plastic packaging represents the largest slice of global plastic production. This single-use material makes up between 26%<sup>xxv</sup> to 36%<sup>xxvi</sup> of the world’s plastic and is designed for immediate disposal.

Common types of unnecessary, avoidable or replaceable single-use plastic items include; plastic bags (including those that are biodegradable and compostable), bottles, straws, disposable containers, disposable coffee cups, lids, straws and cutlery. By their nature, many of these items are designed to be disposed of, often within minutes, following just one use. Their brief use, often combined with an inability to be recycled,<sup>xxvii</sup> makes these kinds of single-use plastic particularly costly and damaging to our environment.

### Which single-use plastic products are being considered for this reform?

The reform will regulate the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers. It also requires declared public events to be single-use plastic free.

Plastic stirrers (Figure 7) are typically manufactured from polypropylene and are mostly used as drinking accessories. They are consumed at source and quickly disposed, typically after around five seconds.

*Figure 7: Single-use stirrers*



Disposable plastic cutlery (Figure 8, left) is typically made from polypropylene and polystyrene (both expanded and non-expanded), and primarily supplied with take-away food and beverages. In addition, disposable cutlery is also purchased for at-home and outdoor use as food serving items for picnics, parties, etc.

Figure 8: Single-use plastic cutlery and polystyrene containers



Disposable plastic cutlery is not easily recycled in Australia and not accepted by the majority of councils. This is primarily due to the unorthodox shape which can block recycling machinery, and partly due to the inconsistent composition nature of products. Polystyrene (PS-6) is not accepted at the ACT's materials recovery facility,<sup>xxviii</sup> although plastic cutlery is commonly placed in recycling bins where it becomes a contaminant and eventually ends up in landfill. Alternatives for plastic cutlery are becoming more widely available, including biodegradable products made from recycled paper, bamboo and sugarcane. Any switch to biodegradable or compostable alternatives needs to consider the availability of facilities and systems to process them in the ACT.

Polystyrene containers (Figure 8, right) are manufactured from expanded polystyrene (EPS – code 6), which is a lightweight form of styrene. They include products such as cups, bowls, plates and take-away containers, which are primarily used for take-away food and beverages. In the ACT each year, it is estimated that 400 - 500 tonnes of expanded polystyrene was used in foam packaging applications, such as food containers. These products cannot be recycled due to technical and contamination issues and are commonly littered in the ACT.

### What is the problem with single-use plastics?

Since 1964, plastics production has increased twenty-fold, reaching a global annual production of 311 million tonnes in 2014.<sup>xxix</sup> Plastics production is expected to double again in 20 years and almost quadruple by 2050.<sup>xxx</sup> There are a number of issues with single-use plastic products, including:

- **Plastic is made from non-renewable resources** - more than 99% of plastics are made from chemicals derived from oil, natural gas and coal, that once depleted, cannot be replaced. The UN estimates that by 2050 the plastic industry could account for a fifth of the world's oil consumption.<sup>xxxi</sup>
- **Making and discarding plastic has a significant carbon impact** - this impact is only going to increase in the future if there is no change in current practice. Changing the way single-use plastics are consumed in the ACT supports the delivery of the ACT Government's commitment to tackling climate change.<sup>xxxii</sup>
- **Plastic ends up in the environment** - in the ACT, the Keeping Australia Beautiful 2017/18 litter survey found that although there had been an 11.3% reduction in litter levels over the preceding 12 months, there has been a 21.3% increase in the level of plastic. This means that while there is less litter in our local environment, a greater proportion of that litter is plastic.<sup>xxxiii</sup>

- **Plastic has entered the food chain** - plastic has entered the food chain of a number of terrestrial and marine animals. This plastic kills over 100 million marine animals and harms over 600 marine species every year.<sup>xxxiv</sup> Plastic could also be harming humans through our food chain. Microplastics have been found in table salt and in tap and bottled water around the world.<sup>xxxv</sup> Researchers have recently found plastic in human stool and they estimate that over 50% of the world's population may be ingesting microplastics.<sup>xxxvi</sup> The associated health implications of this finding are not well understood.
- **Cleaning up plastic pollution is expensive** - the UN reports that the total economic damage to the world's marine ecosystem caused by plastic is at least \$13 billion every year.<sup>xxxvii</sup> Cleaning up plastic pollution in the ACT, including from local terrestrial and riverine environments and from Canberra's gross pollutant traps, is expensive. Ultimately, funds used to clean up plastic pollution in the ACT could be used to fund other important government initiatives. Taking action now to prevent plastic pollution is more cost effective than the future clean up.<sup>xxxviii</sup>
- **Plastic has an economic value that is lost when it is thrown away** - this value represents an opportunity for Australian industry and business to create innovative products and local jobs. It is estimated that 95% of plastic packaging material, with the value of approximately \$110 - \$165 billion, is lost annually after a short first use.<sup>xxxix</sup>
- **Single-use plastics are not easily recycled** - only 9% of all plastic waste ever produced has been recycled.<sup>xi</sup> Single-use plastic products are rarely made of recycled material (i.e. they are made from nonrenewable 'virgin' material) and cannot be easily recycled (e.g. in Australia only 3% of plastic bags are recycled and it currently takes 85 times more energy to recycle a bag than to make it).<sup>xii</sup>
- **Compostable plastic can have a significant environmental impact** - many bags labelled as compostable can only be composted in commercial composting facilities. Similarly, biodegradable, degradable and compostable bags cannot be recycled through existing initiatives such as RedCycle and pose contamination risks to this resource stream. This means that people who think they are doing the right thing by composting these bags at home, or recycling them via RedCycle, are inadvertently contributing to plastic pollution.
- **There is still uncertainty about alternatives** - some alternatives to single-use plastic may have a greater lifecycle impact when compared to single-use plastic products. This issue is exacerbated by the ACT lacking the infrastructure to collect and/or process certain alternatives (e.g. the lack of composting facilities in the ACT). Through the public consultation, community and business respondents indicated they want more information about the best alternatives and where they can source them.

## Waste management and resource recovery in the ACT

The ACT has some of the most ambitious waste management and resource recovery targets in Australia. This includes a target of achieving up to 90% of waste being diverted from landfill by 2025 and a carbon neutral waste sector by 2020.

### Waste management strategy

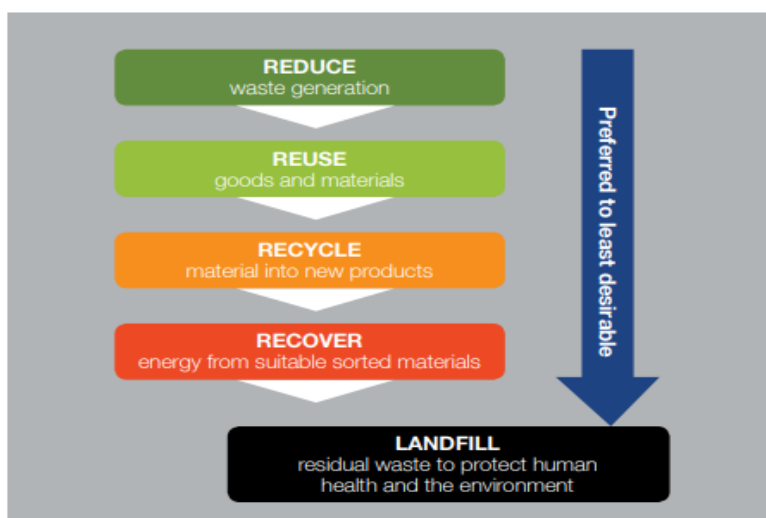
The ACT Government's approach to waste management and resource recovery is outlined in the ACT's Waste Management Strategy.<sup>xiii</sup> Developed in consultation with the public, it outlines a number of objectives, including; working to reduce the amount of waste we produce here in the ACT, and a shift to waste being viewed as a resource, rather than rubbish for landfill.

The cornerstone to effective waste management is the waste management hierarchy (Figure 9), which classifies waste management strategies according to their order of importance and aims to extract the maximum practical benefits from products while generating the minimum amount of waste. It does this by:

- avoiding products becoming waste (reduce and reuse),
- finding an alternative use for waste (recycle and recover), and
- ensuring safe and appropriate disposal as a last resort.

The ACT's waste management hierarchy is consistent with, and supports the principles of, a circular economy.

Figure 9: ACT Waste management hierarchy



## Waste legislation

The ACT's Waste Management Strategy is currently supported by a number of laws including:

- *Waste Management and Resource Recovery Act 2016*,
- *Plastic Shopping Bags Ban Act 2010*,
- *Litter Act 2004*, and
- *Clinical Waste Act 1990*.

The Minister for Transport and City Services is responsible for the administration of these laws. Consolidating these responsibilities has positioned the ACT Government to holistically consider environmental, waste management and resource recovery objectives and to streamline the regulatory and administrative approaches.

The Minister for Transport and City Services will have responsibility of the reforms through the Bill. The reform absorbs the current *Plastic Shopping Bags Ban Act 2010*, which will be repealed on commencement of the Bill.

## Plastic shopping bag ban

In 2011, the ACT ban on the supply of single-use plastic shopping bags with a thickness of less than 35 microns took effect. The current ban does not regulate biodegradable and compostable bags,

produce bags (e.g. bags used to separate fruit, vegetables and meat products), or bags that are an integral part of a product's packaging.

The plastic bag ban has been reviewed three times since its introduction. The first two reviews were conducted by ACT Government in 2012<sup>xliii</sup> and 2014.<sup>xliv</sup> The most recent review was independent and undertaken in 2018 by the ACT Commissioner for Sustainability and the Environment.<sup>xlv</sup> All three reviews have concluded that the ban has been successful in reducing the amount of plastic bag waste in the ACT.

The Commissioner's 2018 review is available at: <https://www.envcomm.act.gov.au/>.

## Container deposit scheme

The ACT Container Deposit Scheme came into effect in June 2018. There are currently over 20 return points in operation.<sup>xlvi</sup>

The industry-funded Scheme encourages recycling within the Canberra community and aims to reduce litter and waste to landfill. Under the Scheme, consumers are able to return eligible, empty beverage containers and receive a 10-cent refund for each container. Residents are able to collect the refund themselves or donate it to charity.

Most containers commonly found in the litter stream, including aluminium, glass, plastic (PET and HDPE), steel and liquid paperboard beverage containers between 150 millilitres and 3 litres, are eligible containers under the Scheme.

## Food Organics and Garden Organics

The ACT Government acknowledges the relationship between alternatives to single-use plastic products and an effective Food Organics and Garden Organics (FOGO) collection service.

The 2019 - 20 Budget provided dedicated funding for planning on a FOGO collection service. The ACT Climate Change Strategy 2019 - 2025<sup>xlvii</sup> has dedicated FOGO actions including:

- a food waste reduction campaign from 2020,
- a household FOGO collection service from 2023, and
- a scheme for large producers of organic waste, such as hospitality and food retail businesses, to have separate organic waste collection by 2023.

Compatibility will need to be ensured between alternatives to single-use plastics and any FOGO service.

## Climate Change Strategy 2019 – 2025

The ACT is a global leader on climate change action with some of the most ambitious emissions reduction targets in the world.

The ACT Climate Change Strategy outlines the next steps the community, business and Government will take to reduce emissions by 50% – 60% (below 1990 levels) by 2025 and establish a pathway for achieving net zero emissions by 2045.<sup>xlviii</sup> It includes actions to reduce emissions and to build resilience to climate change impacts, including for the transport, gas and waste sectors.

Given the significant carbon impact making and discarding plastic has, reducing the consumption of single-use plastics will help deliver the ACT Government's commitment to tackling climate change.

## ACT Government Procurement

The ACT Government understands the importance of leading by example on phasing out single-use plastics and is committed to supporting Territory entities to incorporate social, economic and environmental sustainability into their operations. As procurement accounts for a significant proportion of Territory budgets, it is important for ACT Government procurements to be conducted with sustainable outcomes in mind.

The ACT's *Sustainable Procurement Policy*<sup>xlix</sup> outlines the principles of procuring sustainably and provides guidance on how to conduct sustainable procurement of goods, services and works which is particularly important in the planning phase.

In September 2020, the ACT Government also released the Charter of Procurement Values (Charter).<sup>l</sup> The Charter includes an Environmental Responsibility value that embeds that ACT Government acquisition and disposal activities will use opportunities to reduce waste and single-use plastics through recycling and reuse.

## National Waste Agenda

### National Waste Policy and Action Plan

In 2018 all Australian Governments agreed to the National Waste Policy. The policy aims to promote a circular economy, making a shift away from 'take, make, use and dispose', to a more sustainable approach where the value of resources is maintained for as long as possible.

One of the key principles in the strategy is to avoid the creation of waste by prioritising waste avoidance and encouraging efficient use, reuse and repair.<sup>li</sup> Strategy 10 of the National Waste Policy specifically targets plastics and packaging and aims to '*reduce the impacts of plastic and packaging on the environment and oceans, reduce plastic pollution, and maximise benefit to the economy and society*'.<sup>lii</sup> This ambition is reflected in the national targets outlined in the 2019 National Waste Policy Action Plan to:

- reduce waste generated in Australia by 10% per person by 2030, and
- phase out problematic and unnecessary plastic by 2025.<sup>liii</sup>

In August 2019, the Australian Government announced they will introduce a ban on the export of waste plastic, paper, glass and tyres. More information on the ban and the timelines is available on the Australian Government's website.<sup>liv</sup>

In July 2020, the Commonwealth and ACT Governments announced co-funding supporting the urgent need to upgrade the ACT Materials Recovery Facility to respond to the Waste Export Ban. This co-funding has since been formalised by a National Partnership Agreement.

## Senate inquiry into waste and recycling

Established in mid-2017 the Senate Standing Committee on Environment and Communications Inquiry into waste and recycling considered issues relating to landfill, markets for recycled waste and the role of the Australian Government in providing a coherent approach to managing solid waste.<sup>lv</sup>

Released in 2018, the inquiry's report '*Never waste a crisis: the waste and recycling industry in Australia*' made a number of recommendations aimed at reducing waste, including single-use plastics. Recommendations include that the Australian Government prioritise the establishment of a circular



economy for plastic,<sup>lvi</sup> and that Australian and state and territory governments agree to a phase out of petroleum-based single-use plastics by 2023.<sup>lvii</sup>

The role of the inquiry became increasingly relevant following the Chinese Government's decision to restrict imports of 24 types of solid waste, including various plastics and the setting of more stringent standards for contamination levels.<sup>lviii</sup>

Inquiry submissions are closed, though public hearings appear to remain ongoing.

### Product Stewardship Amendment (Packaging and Plastics) Bill 2019

On 12 September 2019, the Senate referred the Product Stewardship Amendment (Packaging and Plastics) Bill 2019 to the Environment and Communications Legislation Committee for inquiry and report by 14 May 2020. The Bill sought a mandatory product stewardship scheme for packaging and plastic.

The ACT Government provided a response to the inquiry in December 2019<sup>lix</sup>, providing in-principle support for a mandatory scheme, however strongly recommending a cautious and considered approach. This recommendation sought recognition of the significant collaboration, commitment and effort at all levels of government over many years to address single-use plastic to ensure that any mandatory scheme aligns to and exists in synergy with progress to date to ensure it is valued and remains valuable.

Inquiry submissions are closed, though public hearings appear to remain ongoing.

### Recycling and Waste Reduction Bill 2020 (Cth)

In August 2020, the Commonwealth Government introduced the *Recycling and Waste Reduction Bill 2020*. This will provide a national framework to manage waste and recycling across Australia, and implements the export ban on waste plastic, paper, glass and tyres agreed by Commonwealth, state and territory governments in March 2020.

The legislation also incorporates the existing *Product Stewardship Act 2011* with improvements to encourage companies to take greater responsibility for the waste they generate, including through better product design and increased recovery and reuse of waste materials.

Reforms introduced in this Bill are expected to result in increased recycling and remanufacturing of waste materials, which will transform the waste industry and boost jobs. The waste export ban is expected to see the Australian economy generate \$1.5 billion in additional economic activity over the next 20 years.<sup>lx</sup>  
**National Packaging Targets**

In April 2018, Commonwealth, state and territory environment ministers committed to reducing the amount of waste generated and to making it easier for products to be recycled.

Through a joint statement, ministers endorsed a target of 100% of Australian packaging being recyclable, compostable or reusable by 2025 or earlier and committed to working with the Australian Packaging Covenant Organisation, representing over 900 leading companies, to deliver this target.<sup>lxi</sup>

In September 2018, the Australian Packaging Covenant Organisation Board announced three additional industry-led targets to be achieved by 2025, which were endorsed by the Australian Government:



- 70% of plastic packaging will be recycled or composted,
- 30% average recycled content will be included across all packaging,
- Problematic and unnecessary single-use plastics packaging will be phased out through redesign, innovation or alternative delivery methods.<sup>lxii</sup>

In 2020, the 30% target for recycled content to be included across all packaging was increased to 50%.<sup>lxiii</sup>

These ambitious National Packaging Targets are significant and will require the support of industry, business, government and individuals to succeed.

### What is happening in other jurisdictions?

In Australia, local issues with single-use plastic have been highlighted through Keep the Australia Beautiful annual litter index and television shows like the ABC's 'War on Waste'<sup>lxiv</sup> and the Four Corners expose 'Trashed'.<sup>lxv</sup> This concern has resulted in community pressure for governments and companies to do more.

### South Australia

In 2019, the South Australian Government undertook consultation on the impact of single-use plastics with the view to phasing out single-use plastic products.<sup>lxvi</sup> Similar to the feedback received in the ACT, this consultation indicated that there were high levels of support for action to address the impact of problematic single-use plastic products.

Based on this feedback, the South Australian Government have announced they will:

- introduce legislative reform to **immediately phase out single-use plastic straws, stirrers and plastic cutlery,**
- consider a phase out of **takeaway expanded polystyrene cups, expanded polystyrene food and expanded polystyrene beverage containers** (e.g. polystyrene coffee and soup cups, 'clam shell' containers) and all products made of **oxo-degradable plastic** (e.g. some plastic bags) within the next 12 months, and
- undertake further analysis and consultation to consider phasing out other problematic products (e.g. takeaway coffee cups, plastic bags and other takeaway food service items).

In addition, the South Australian Government will pilot voluntary business/retailer led plastic free precincts to trial a phase out of the items identified for intervention. They have also established a stakeholder taskforce, comprised of select business, industry, local government and interest group stakeholders, to ensure associated impacts are properly considered and inform the development of legislation.

In December 2019, the South Australian Government released the draft *Single-use and Other Plastic Products (Waste Avoidance) Bill 2019* for public comment. In September 2020, the Bill was passed with minor amendments and is expected to commence by proclamation within six months of passage. More information is available on the South Australian Government's website.<sup>lxvii</sup>

### Queensland

QLD introduced the *Waste Reduction and Recycling (Plastic Items) Amendment Bill 2020*<sup>lxviii</sup> on 15 July 2020 to phase out single-use plastic stirrers, straws, cutlery, plates and bowls in the first tranche.

The Bill was examined by a Parliamentary Committee, with their report<sup>lxix</sup> recommending that the Bill pass with amendments, most notably the inclusion of polystyrene containers in the first tranche.

Debate and passage were expected in September 2020, now delayed due to the 30 October 2020 Queensland Government election. It is uncertain whether reintroduction will be a priority to prior to the end of 2020, which is expected to affect (and delay) projected commencement.

## Northern Territory

On 1 January 2019, the City of Darwin banned single-use plastic from all events held on council land, including markets via the Plastic Wise program.<sup>lxx</sup> Items include disposable coffee cups, smoothie cups, lids, straws, cutlery, stirrers, plates, bowls and takeaway containers have been phased out, along with a ban on deliberate release of helium balloons. Council permits and leases have been updated to reflect these changes as conditions of hire.

The Northern Territory Government does not have any current policy initiatives related to the phase out of single-use plastic at the Territory level.

## Tasmania

In March 2019, Hobart City Council voted in favour of a by-law that would restrict the use of single-use plastic takeaway packaging including cutlery, straws, sauce sachets, plastic lined coffee cups and lids, and plastic takeaway hot food containers and lids.<sup>lxxi</sup> The draft by-law, supported by a Regulatory Impact Statement, is subject to public consultation until late November 2019. Hobart City Council has indicated that businesses will have 6 - 12 months after the enactment of the by-law to comply with the new requirements.

The Tasmanian Government does not have any current policy initiatives related to the phase out of single-use plastic at the state level.

## Victoria

In 2019, the Victorian Government indicated they intended to develop a broader plastic pollution plan to prioritise the most effective actions to reduce plastic pollution, such as plastic straws, food and beverage packaging and balloons.<sup>lxxii</sup> In February 2020, following a period of consultation, the Victorian Government released *Recycling Victoria: A new economy*. Recycling Victoria is the Victorian Government's action plan to reform waste and recycling systems over the next decade and includes targets to reduce waste, grow the Victorian economy and establish a reliable recycling system for Victorians.<sup>lxxiii</sup>

The Victorian Government does not have any current policy initiatives related to the phase out of single-use plastic at the state level.

## Western Australia

The Western Australian Government undertook consultation on phasing out single-use plastic in 2019 via the *Let's not draw the short straw issues paper*<sup>lxxiv</sup>, and policy development remains ongoing.

## New South Wales

The New South Wales Government undertook consultation via the Redirecting the Future of Plastic in NSW discussion paper<sup>lxxv</sup> between March and May 2020, informing development of a NSW Plastics Plan that is expected to include a single-use plastic phase. Policy development remains ongoing.

New South Wales remains the only Australian jurisdiction without a regulatory ban on single-use plastic shopping bags.

## Internationally

Global community concern about the impact of single-use plastic has been informed by international initiatives like World Environment Day,<sup>lxxvi</sup> ocean clean-up campaigns, and documentaries like the BBC's Blue Planet II,<sup>lxxvii</sup> which showed in detail the impact of plastic on our marine environment.

### *Global commitment to sustainable development*

In 2015, members of the United Nations, including Australia, adopted 17 Sustainable Development Goals to provide a shared blueprint for peace and prosperity.<sup>lxxviii</sup>

Each goal outlines specific targets to be achieved by 2030. Sustainable Development Goal 12 focusses on responsible consumption and production patterns. Relevant targets for single-use plastic include but are not limited to; efficient and sustainable use of natural resources and reduced waste generation.

Other Sustainable Development Goals are relevant to improved resource recovery and waste management (e.g. Sustainable Development Goal 14: Life Below Water). More information on the Sustainable Development Goals is available at: [www.un.org/sustainabledevelopment/sustainable-development-goals/](http://www.un.org/sustainabledevelopment/sustainable-development-goals/).

### *New plastics economy global commitment*

Led by the Ellen MacArthur Foundation in collaboration with UN Environment, the New Plastics Economy Global Commitment unites businesses, governments and other organisations behind a common vision to address plastic waste and pollution at its source.<sup>lxxix</sup>

Launched in October 2018, the Commitment has already united more than 350 organisations, working together to ensure that plastics never become waste – keeping them in the economy and out of the ocean, in a 'race to the top' to create a circular economy for plastic. The signatories currently represent over 20% of all packaging produced globally.

The Global Commitment and its vision for a circular economy for plastic are supported by the World Wide Fund for Nature, and have been endorsed by the World Economic Forum, The Consumer Goods Forum (a CEO-led organisation representing some 400 retailers and manufacturers from 70 countries), and 40 universities, institutions and academics. More than 15 financial institutions with in excess of USD\$2.5 trillion in assets under management have also endorsed the Global Commitment, and over USD\$200 million has been pledged by five venture capital funds to create a circular economy for plastic.

These companies, governments and institutions have committed to work towards 100% reusable, recyclable, or compostable plastic packaging by 2025. Australia is yet to sign up to the Commitment. However, the Commitment's packaging-related goal mirrors the National Packaging Targets.

### *Phasing out single-use plastic products*

Following pressure from their citizens, a number of countries are taking action on single-use plastics. While the specific approaches used vary from country to country, there are similarities in the suite of policy and legislative measures that have been demonstrated to successfully affect change. Recent examples (noting these may have since been affected by COVID-19) include:

- **Canada** introduced a regulatory ban on single-use plastic bags of 50 microns or less in 2018. In 2019, Canada announced it would aim to ban single-use plastics by 2021. Items being considered include plastic bags, straws, cutlery, plates, and stirrers.
- **Washington DC, USA** introduced a regulatory ban on disposable food containers made from expanded polystyrene (e.g. Styrofoam™) and non-recyclable/compostable material in 2016. A regulatory ban on single-use plastic straws and stirrers was introduced in 2018 and took effect in mid-2019.
- The **European Union** adopted the first-ever European Strategy for Plastics in a Circular Economy in 2018. The strategy aims to eliminate plastic pollution and change the way plastic is produced and consumed in the EU. Member states will have flexibility in how targets are met. The new rules will target the ten single-use plastic products most often found on Europe's beaches and seas, and include: cotton buds; cutlery, plates, straws and stirrers; balloons and balloon sticks; food containers; beverage cups; beverage containers; cigarette butts; plastic bags; crisp packets and sweet wrappers; and wet wipes and sanitary items. The rules will also target lost and abandoned fishing gear. Together these items make up 70% of all marine litter.
- The **United Kingdom** banned plastic straws, drink stirrers and plastic stemmed cotton buds in October 2020. Disabled people and those with medical conditions will also be protected, and will be able to request a plastic straw when visiting a pub or restaurant and purchase them from pharmacies.<sup>lxxx</sup>
- **France** introduced a regulatory ban on single-use plastic shopping bags in 2016. This ban was expanded in 2017 to include produce barrier bags.
- **India**, in 2018, announced a commitment to eliminate the use of all single-use plastic by 2022.
- **New Zealand** introduced a regulatory ban on plastic microbeads in 2017. In 2018, a regulatory ban on single-use plastic bags (with handles) up to 70 microns (including biodegradable and compostable bags) was introduced and took effect on 1 July 2019. In December 2019, New Zealand revealed plans to phase out more single-use plastics in favour of recyclable materials and as well as ban plastic fruit stickers, cutlery and cotton buds.<sup>lxxxi</sup> In August 2020, New Zealand commenced consultation via the *Reducing the impact of plastic on our environment consultation document*, with consultation expected to close in December 2020.<sup>lxxxii</sup>
- Pacific island of **Vanuatu**, in 2018, became one of the first countries to ban plastic drinking straws and foam food containers, as well as plastic bags.

## Reform

Two options have been considered as part of this RIS. The options are:

1. Do not introduce regulatory reform at this time.
2. Progress the Plastic Reduction Bill (recommended).

### Option 1: Do not introduce regulatory reform at this time

This option means that there will be no new laws introduced to regulate the sale, supply and distribution of single-use plastic stirrers, cutlery or polystyrene containers in the ACT. There will also be no regulatory requirement for declared public events to be single-use plastic free.

Under this option, the ACT Government could influence change through the introduction of voluntary and intermediate approaches to reduce the consumption of single-use plastic. For example, through education campaigns, voluntary industry commitments, ACT Government procurement processes, and continuing to work with the Australian Packaging Covenant Organisation to progress the National Packaging Targets.

The ACT Government plays an important role in educating the community and business to support a shift in consumer demand away from avoidable single-use plastics and toward more sustainable alternatives. The ACT Government uses a number of communications mediums and supporting resources to effect change. Examples include, media campaigns, site-specific advertising (e.g. targeting hospitality and food retail), guidelines and supporting tools (e.g. the online Recyclopaedia), and plastic free events. In addition, the ACT Government demonstrates leadership through proactive sustainable procurement measures (e.g. through the ACT's Sustainable Procurement Policy, by actively supporting innovative products, and by promoting single-use plastic-free events).

While voluntary and intermediate approaches are an important part of taking action on single-use plastic products in the ACT, if option 1 is pursued the status quo will likely be retained and the large majority of individual community members will be disappointed. Not pursuing legislative change means consumption of these products will remain at current levels and these products will remain represented in the litter stream. Under this option, the ACT Government:

- will need to rely on voluntary and intermediate approaches to support individuals and business to reduce their consumption of single-use plastics. Adopting these measures alone can have a limited scale of adoption and it can be difficult to measure outcomes,
- will only be able to influence single-use plastic consumption at public events through existing permitting and procurement processes,
- may have difficulty in meeting its targets for waste management, resource recovery and climate change, and
- may be subject to criticism for a lack of regulatory action, particularly given the clear support through the recent consultation, to phase out single-use plastics in the ACT.

### Option 2: Progress the Plastic Reduction Bill

This option means that the regulatory reform is supported, and the Plastic Reduction Bill will be introduced to the ACT Legislative Assembly. This is the recommended option.

If option 2 is pursued, the new Act will introduce a regulatory ban on the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT. It will also require declared public events to be single-use plastic free. The new Act will also absorb the existing ban on light-weight single-use plastic shopping bags under 35 microns.

Education campaigns will provide advice to affected stakeholders about the reform and associated timeframes to support them to make informed decisions and manage their stock levels ahead of the reform taking effect. Beyond this, the Minister will have the ability to make an exemption in situations of particular disadvantage resulting from existing stockpiles that cannot be used. Exemptions will outline clear conditions for the use of existing stock to ensure the social, economic and environmental impacts associated with the reform are minimised.

An analysis of the impacts of this option are provided in further detail below. This approach will be supported by a number of implementation activities, including an education campaign that targets consumer behaviour change in order to maximise consumption avoidance. Implementation activities are outlined further in the *Implementation and evaluation* section of this RIS.

The Bill has been developed in consultation with Parliamentary Counsel's Office and the Justice and Community Safety Directorate, to ensure consistency with the Guide to Framing Offences and human rights requirements. It has also been developed in consultation with all other Directorates across the ACT Government, acknowledging the impact of the reform across all government operations.

### Recommended option

The public consultation on the *Phasing out single-use plastics discussion paper* has indicated high levels of support for action, especially regulatory action, on single-use plastics in the ACT. There were high levels of support for regulatory action on single-use plastic stirrers, cutlery and polystyrene containers, and for plastic-free public events; all of which are the subject of the reform.

Given the importance of reducing the consumption of these problematic single-use plastic products, adopting a regulatory approach which is supported by a community and business education campaign, is considered to be the most effective way to delivering the objectives outlined in this RIS. The analysis included in this RIS has determined that the benefits associated with introducing the regulatory reform outweigh the costs imposed from the Bill.

The approach ensures the ACT Government proactively addresses the impacts associated with problematic single-use plastics in the ACT, while ensuring there are appropriate safeguards for the community. The approach is similar to approaches being adopted in other Australian jurisdictions and, as such, responds to requests from peak bodies for a harmonised and consistent approach where possible to phasing out single-use plastics across Australia.

Option two is recommended, and supports the Plastic Reduction Bill to be introduced into the ACT Legislative Assembly.

## Regulatory impact

Regulatory impacts of the reforms were assessed through a two-stage process. First, a qualitative assessment was used to identify a recommended regulatory reform. Then a quantitative assessment modelled the expected impacts of the recommended reform on the ACT economy. Both stages involved separate consideration of each of the three products and the plastic-free events for the first phase.

The first stage qualitative assessment considered the benefits and constraints of different regulatory options including regulatory bans, regulatory bans with exceptions, mandatory phase outs, and mandatory materials standards. A preferred option was identified and then subjected to further analysis of its likely benefits and costs on impacted sectors including government, industry, business, community organisations and the general community.

The conclusion from this assessment was that a regulatory ban enacted at the same time for each of the targeted items and events would be the most effective approach for achieving the policy objectives of reducing their impacts in the ACT.

The second stage was a detailed quantitative analysis of the environmental, social and economic impacts of the recommended regulatory ban, compared with a baseline scenario in which the ban was not applied<sup>lxxxiii</sup>. This analysis considered the costs of a range of alternatives for each of the three targeted plastic products, including bamboo, wooden and edible cutlery; bamboo, glass and wooden stirrers; and bamboo, paperboard and sugarcane bagasse alternatives to expanded polystyrene containers. It identified impacted parties, the range and types of expected impacts and assigned dollar values to the expected impacts. Future costs and benefits were discounted to determine net present values for each plastic alternative enabling a comparative analysis of single use plastics with available alternatives.

The conclusion from this quantitative analysis was that any reduced consumption of single-use plastic or identified alternatives also reduced economic, environmental and social costs to the ACT region. The assessment also identified optimal scenarios for the phase out of each item including a combination of direct substitution of plastic for cheaper non-plastic alternatives, and a combination of the least expensive plastic alternative with reduced demand to achieve a cost-neutral option.

The qualitative and quantitative impact assessments are presented below.

## Qualitative impact assessment

This section presents the qualitative impact assessment of the benefits and constraints of different regulatory options for phasing out each of the targeted plastic products including stirrers, cutlery and polystyrene containers. This analysis is also applied to the proposal to regulate plastic free events. It considers a range of options including regulatory bans, regulatory bans with exceptions (where relevant), mandatory phase outs and mandatory materials standards, and identifies a preferred option in each case. The likely benefits and costs of preferred options are then explored for impacted sectors including government, industry, business, community organisations and the general community.

### Plastic stirrers

Plastic drinking stirrers have come to be symbolic of the convenience culture driving single-use products. Plastic stirrers are difficult to recycle as they commonly slip through recycling machinery in Materials Recovery Facilities (MRF), including the ACT MRF, and are then landfilled. As a result, most recyclers do not accept them.

The main alternatives to plastic stirrers are bamboo and wooden single-use stirrers, however consumption of single-use stirrers is easily avoided, including through the use of reusable cutlery or straws. For these reasons, bans on plastic stirrers have been widely considered internationally.

Three options have been considered to regulate the sale, supply and distribution of plastic stirrers in the ACT. These include:

1. **Regulatory ban** – involves an immediate ban on the sale, supply and distribution of plastic stirrers.
2. **Mandatory phase out** – involves a staged ban, that can be achieved by progressively expanding coverage or tightening product requirements for plastic stirrers.
3. **Mandatory materials standard** – involves mandating standards for material composition through a regulatory instrument for plastic stirrers.

### Analysis of alternatives

Options:	Benefits and constrains
1. A regulatory ban on the sale, supply and distribution of single-use plastic stirrers (preferred)	<p><b>Benefits</b> – A regulatory ban provides broad coverage across the economy or supply chain and provides a high level of certainty and competitive neutrality. A regulatory ban is relatively simple to introduce and enforce in the ACT, particularly given its limited size and limited supply chain influence. Plastic stirrers have high levels of community and business support for action and a regulatory ban can be well supported by other voluntary measures (e.g. education about consumption avoidance and alternatives).</p> <p><b>Constraints</b> – A regulatory ban will have higher regulatory burden when compared to non-regulatory measures. This option will need to consider industry and consumer push-back and complacency. Generally, regulatory bans have the potential to have unintended consequences as they focus on the product to be banned rather than potential replacement products, which may result in worse impacts across the product lifecycle. However, given the use of</p>



Options:	Benefits and constrains
	plastic stirrers is easily avoided, and that there are readily available (some of which are as cost competitive as plastics stirrers), this impact is considered unlikely to be an issue for the reform. Enforcement and monitoring to ensure compliance with the reform will be necessary and will have some cost to ACT Government.
2. A mandatory phase out of single-use plastic stirrers	<p><b>Benefits</b> – A mandatory phase out provides a transitional period to develop policy and implementation approaches where product alternatives are not readily available, significant inventory is held or adaptation is otherwise onerous for plastic manufacturers, distributors, sellers and users. Given the ability to avoid plastic stirrers, the identified alternatives, and no local manufacturers identified in the ACT, this is not considered to be an important driver for this reform.</p> <p><b>Constraints</b> – Partial bans can have unintended consequences (e.g. the thickness limit for bags driving consumers to other single-use items, including thicker plastic bags that may have negative outcomes).</p>
3. Mandatory materials standard for stirrers	<p><b>Benefits</b> – This approach reduces retailer and consumer confusion and helps to ensure plastic alternatives are safe to humans and environment. There is the potential for this approach to be incorporated into a regulatory ban or mandatory phase out by including specific standards (e.g. compostable or biodegradable requirements) for exempted products.</p> <p><b>Constraints</b> – This approach may have limited market availability or affordability (at the time of introduction). Prescriptive standards may deter product innovation.</p>

#### *Cost benefit analysis of a regulatory ban (option 1)*

Sector	Costs	Benefits
Government	<ul style="list-style-type: none"> <li>• Prepare legislative reform, including any required regulations and amendments to national mutual recognition laws.</li> <li>• Develop and roll out initial education campaigns targeting avoidance of single-use stirrers.</li> <li>• Establish or improve baseline data on consumption and littering.</li> <li>• Undertake compliance and enforcement activities.</li> <li>•  </li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates action and leadership by ACT Government.</li> <li>• Expected to result in a reduction in litter for collection.</li> <li>• Reduced pressure on waste management and resource recovery systems as consumption and disposal of problematic single-use plastics will be reduced.</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• No local manufacturers identified.</li> </ul>	<ul style="list-style-type: none"> <li>• A regulatory ban provides a direct and uniform measure that</li> </ul>

Sector	Costs	Benefits
	<ul style="list-style-type: none"> <li>Wholesalers primarily convert to readily available single-use alternatives to meet large scale demand, plus potential product extension to reusable options.</li> <li>Avoidance and substitution with reusable options reduces overall demand. Uptake is unknown but potentially high given the nature of the product and public interest.</li> </ul>	<ul style="list-style-type: none"> <li>minimises unintended impacts and competitive distortion.</li> <li>Supports rapid scaling up of alternatives. This can encourage rapid implementation of new products or models, bringing immediate scale to potential solutions. This has the potential to benefit industry development; a key recommendation of the ACT Waste Feasibility Study.</li> </ul>
Business	<ul style="list-style-type: none"> <li>Short-term operational cost as businesses transition to the new arrangements.</li> <li>The regulatory ban is not expected to result in considerable cost to business. Single-use stirrers are easily avoidable and there are readily available alternatives that are cost competitive with single-use plastic products.</li> <li>There may be minor transition costs to provide new options. Costs to business will be minimised by providing a discretionary period to allow businesses to use their existing stock.</li> <li>The business impact from single-use stirrers is minor due to the low contribution of this product to the cost of sales and the potential for customers to easily avoid use.</li> </ul>	<ul style="list-style-type: none"> <li>Avoidance of plastic stirrers is likely to reduce procurement costs. The uptake rate is unknown but potentially high given significant public interest.</li> <li>Provides certainty for hospitality in regard to changing community expectations.</li> <li>Progressive businesses, with a clear and communicated strategy for reducing single-use products, may experience an increase in patronage from environmentally conscious consumers.</li> </ul>
Community organisations	<ul style="list-style-type: none"> <li>There is the potential for increased costs associated with alternatives to impact on community organisations (e.g. organisations that provide support to vulnerable people).</li> <li>However, this is expected to be minimal due to the availability of</li> </ul>	<ul style="list-style-type: none"> <li>Plastic stirrers are easily avoided and this is likely to reduce procurement costs for community organisations.</li> <li>There will be decreased burden to community organisations that contribute to environmental clean-ups as a result of</li> </ul>

Sector	Costs	Benefits
	<p>cost competitive single-use alternatives.</p> <ul style="list-style-type: none"> <li>The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>lxxxiv</sup></li> </ul>	<p>decreased single-use plastic litter.</p>
Community	<ul style="list-style-type: none"> <li>Negligible cost increase, given the product represents a small proportion of the cost of sales and the availability of cost competitive single-use alternatives.</li> <li>The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>lxxxv</sup></li> <li>Short-term cost associated with uptake of reusable items (if desired), however the scale of this uptake is unknown.</li> </ul>	<ul style="list-style-type: none"> <li>Improved environmental amenity as a result of reduced plastic pollution and litter.</li> <li>The social cost-benefit analysis identified a net positive benefit for the environment as a result of phasing out single-use plastic products.<sup>lxxxvi</sup></li> <li>A regulatory ban demonstrates that the ACT Government has considered and actioned feedback through the consultation period.</li> <li>Early action on this high-profile product may increase community engagement around problematic single-use plastic in general.</li> </ul>

### Plastic cutlery

Single-use cutlery is not easily recycled in Australia as MRFs cannot effectively sort plastic cutlery for recycling. This is mostly due to the unorthodox shape of cutlery, which can block recycling machinery, and partly due to its inconsistent composition nature. As a result, the majority of disposable cutlery ends up in landfill.

Alternatives for single-use plastic cutlery are becoming more widely available, including biodegradable products made from recycled paper, bamboo, palm leaf and sugarcane. One company in India has launched edible cutlery. Four options have been considered to regulate the sale, supply and distribution of plastic cutlery in the ACT. These include:

1. **Regulatory ban** – involves an immediate ban on the sale, supply and distribution of single-use plastic cutlery.
2. **Regulatory ban (with exemptions)** – involves an immediate ban on the sale, supply and distribution of single-use plastic cutlery with exemptions for some ACT Directorates and private organisations (e.g. ACT Corrective Services).
3. **Staged phase out** – involves a staged approach whereby the sale, supply and distribution of plastic cutlery would first be phased out in the hospitality sector, followed by a second phase to ban retail sale (timed to follow the bans on plastic stirrers). This option would require targeted engagement with the food service and events sectors to promote consideration of alternative business models.
4. **Mandatory materials standard** – involves mandating standards for material composition through a regulatory instrument for single-use plastic cutlery.

### Analysis of alternatives

Options:	Benefits and constrains
1. A regulatory ban on the sale, supply and distribution of plastic cutlery	<p><b>Benefits</b> – A regulatory ban provides broad coverage across the economy or supply chain and provides a high level of certainty and competitive neutrality. A regulatory ban is relatively simple to introduce and enforce in the ACT, particularly given its limited size and supply chain influence. A regulatory ban on disposable plastic cutlery can be well supported by other voluntary measures (e.g. education to encourage consumption avoidance).</p> <p><b>Constraints</b> – A regulatory ban will have higher regulatory burden when compared to non-regulatory measures. This option will need to consider industry and consumer push-back and complacency. A regulatory ban has the potential to have unintended consequences as it is focused on the product to be banned rather than potential replacement products, which may result in worse impacts across the product lifecycle. Advice from ACT Corrective Services indicates that single-use alternatives may be more easily weaponized when compared to current available single-use plastic products. As such, a blanket ban has the potential to impact work health and safety standards. Enforcement and monitoring to ensure compliance with the reform will be necessary and will have some cost to ACT Government.</p>

Options:	Benefits and constrains
<p>2. A regulatory ban, with exemptions, on the sale, supply and distribution of plastic cutlery (preferred)</p>	<p><b>Benefits</b> – In addition to the benefits outlined in option 1, a regulatory ban with exemptions for some ACT Government agencies and private organisations (e.g. ACT Corrective Services) provides safe-guards to support work health and safety standards (e.g. by supporting corrective services organisations to provide dinnerware and a safe environment for individuals).</p> <p><b>Constraints</b> – A regulatory ban with exemptions will have higher regulatory burden when compared to non-regulatory measures and will have more complicated compliance and enforcement requirements when compared to option 1. Careful consideration will need to be given to how exemptions are designed and implemented to avoid implementation issues, including potential impacts to work health and safety standards.</p>
<p>3. A staged phase out on the sale, supply and distribution of plastic cutlery</p>	<p><b>Benefits</b> – A staged phase out will provide a transitional period for the food services and events sectors to identify and source alternatives. Given there are identified alternatives and no local manufacturers identified in the ACT, this is not considered to be an important driver for this reform.</p> <p><b>Constraints</b> – A staged ban is likely to result in slow initial industry responses due to the long lead time. Given the readily available alternatives for plastic cutlery, this is not considered necessary. In addition, a staged ban does not provide a level playing field for all businesses and has the potential to create stakeholder consultation fatigue. The extensive public consultation has indicated that the community and business respondents want timely and uniform action on single-use plastic products.</p>
<p>4. Mandatory materials standard</p>	<p><b>Benefits</b> – This approach reduces retailer and consumer confusion and helps to ensure plastic alternatives are safe to humans and the environment. There is the potential for this approach to be incorporated into a regulatory ban or mandatory phase out by including specific standards (e.g. compostable or biodegradable requirements) for exempted products.</p> <p><b>Constraints</b> – This approach may have limited market availability or affordability (at the time of introduction). Prescriptive standards may deter product innovation. Mandating use of materials like bioplastic may not result in better environmental or economic outcomes as it is indeterminable from other forms of plastic. This creates issues with appropriate disposal and can limit the ability for industry to innovate.</p>

*Cost benefit analysis of a regulatory ban with exemptions (option 2)*

Sector	Costs	Benefits
Government	<ul style="list-style-type: none"> <li>• Prepare legislative reform, including any required exemptions, regulations and amendments to national mutual recognition laws.</li> <li>• Develop and roll out initial education campaigns targeting avoidance of disposable plastic cutlery.</li> <li>• Establish or improve baseline data on consumption and littering.</li> <li>• Synergies with the introduction of a FOGO service and requirements to ensure any processing facility accepts compostable options.</li> <li>• Undertake compliance and enforcement activities.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates action and leadership by ACT Government.</li> <li>• Expected to result in a reduction in litter for collection.</li> <li>• Reduced pressure on waste management systems as consumption and disposal of problematic single-use plastics will be reduced.</li> <li>• Exemptions ensure work health and safety standards are maintained (e.g. for corrective services organisations).</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• No local manufacturers identified.</li> <li>• Wholesalers primarily convert to readily available single-use alternatives to meet large scale demand, plus potential product extension to reusable options.</li> <li>• Costs for wholesalers may increase initially given alternatives are moderately more expensive and supply is more limited, however this is expected to reduce over time as supply catches up.</li> <li>• Avoidance and substitution with reusable options reduces overall demand. Uptake is unknown but expected to be lower when compared to plastic stirrers.</li> </ul>	<ul style="list-style-type: none"> <li>• A regulatory ban provides a direct and uniform measure that minimises unintended impacts and competitive distortion.</li> <li>• Supports rapid scaling up of alternatives. This can encourage rapid implementation of new products or models, bringing immediate scale to potential solutions. This has the potential to benefit industry development; a key recommendation of the Waste Feasibility Study.</li> </ul>

Sector	Costs	Benefits
Business	<ul style="list-style-type: none"> <li>• Short-term operational cost as businesses transition to the new arrangements.</li> <li>• The regulatory ban may result in moderately higher costs for alternatives, which will have a greater relative impact on costs when compared to plastic stirrers. This may result in marginally reduced sales of single-use plastic cutlery in retail stores.</li> <li>• There may be minor transition costs to provide new options. Costs to business will be minimised by adopting a discretionary approach which allows businesses to use their existing stock as part of a transitional period.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides certainty for hospitality in regard to changing community expectations.</li> <li>• Progressive businesses, with a clear and communicated strategy for reducing single-use products, may experience an increase in patronage from environmentally conscious consumers.</li> </ul>
Community organisations	<ul style="list-style-type: none"> <li>• There is the potential for increased costs associated with alternatives to impact on community organisations (e.g. organisations that provide support to vulnerable people, including the homeless).</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>lxxxvii</sup></li> </ul>	<ul style="list-style-type: none"> <li>• There will be decreased burden on community organisations that contribute to environmental clean-ups as a result of decreased single-use plastic litter.</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Prices expected to moderately increase for take-away food and drink, and for alternative options for home and outdoor use. This may have a disproportionate impact on lower-income households.</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-</li> </ul>	<ul style="list-style-type: none"> <li>• Improved environmental amenity as a result of reduced plastic pollution and litter.</li> <li>• The social cost-benefit analysis identified a net positive benefit for the environment as a result of phasing out single-use plastic products.<sup>lxxxix</sup></li> <li>• A regulatory ban demonstrates that ACT Government has considered and actioned</li> </ul>

Sector	Costs	Benefits
	<p>use plastic products will likely be passed onto consumers.<sup>lxxxviii</sup></p> <ul style="list-style-type: none"> <li>• Short-term cost associated with uptake of reusable items (if desired), however the scale of this uptake is unknown.</li> </ul>	<p>feedback through the consultation period.</p> <ul style="list-style-type: none"> <li>• Action on this product may increase community engagement around problematic single-use plastic in general.</li> </ul>

## Polystyrene containers

Feedback through the consultation process indicated that action to phase out single-use polystyrene containers had the highest level of support amongst community and business respondents (noting business respondents considered action on polystyrene to be equal with action on other light-weight plastic bags).

Importantly, the products considered as part the Bill are limited to single-use polystyrene takeaway food and beverage containers (e.g. clam shell containers, cups, bowls) and do not include polystyrene products used in packaging (e.g. meat trays, furniture packaging etc.). These packaging products will be addressed through the ACT's continued support of the Australian Packaging Covenant Organisation's National Packaging Targets.

Three options have been considered to regulate the sale, supply and distribution of single-use polystyrene containers in the ACT. These include:

1. **Regulatory ban** – involves an immediate ban on the sale, supply and distribution of single-use polystyrene containers.
2. **Mandatory phase out** – involves a staged ban, that can be achieved by progressively expanding coverage or tightening product requirements for single-use polystyrene containers.
3. **Mandatory materials standard** – involves mandating standards for material composition through a regulatory instrument for single-use polystyrene containers.



### Analysis of alternatives

Options:	Benefits and constrains
<p>1. A regulatory ban on the sale, supply and distribution of polystyrene containers (preferred)</p>	<p><b>Benefits</b> – A regulatory ban provides broad coverage across the economy or supply chain and provides a high level of certainty and competitive neutrality. A regulatory ban is relatively simple to introduce and enforce in the ACT, particularly given its limited size and limited supply chain influence. A regulatory ban on single-use polystyrene containers can be well supported by other voluntary measures (e.g. education to maximise consumption avoidance).</p> <p><b>Constraints</b> – A regulatory ban will have higher regulatory burden when compared to non-regulatory measures. This option will need to consider industry and consumer push-back and complacency. A regulatory ban has the potential to have unintended consequences as it is focused on the product to be banned rather than potential replacement products, which may result in worse impacts across the product lifecycle. Given single-use polystyrene containers have readily available alternatives, this impact is considered unlikely to be an issue for the reform. Enforcement and monitoring to ensure compliance with the reform will be necessary and will have some cost to ACT Government.</p>
<p>2. A mandatory phase out</p>	<p><b>Benefits</b> – A mandatory phase out provides a transitional period to develop policy and implementation approaches where product alternatives are not readily available, significant inventory is held or adaptation is otherwise onerous for plastic manufacturers, distributors, sellers and users. Given there are identified alternatives and no local manufacturers identified in the ACT, this is not considered to be an important driver for this reform.</p> <p><b>Constraints</b> – Partial bans can have unintended consequences, such as the thickness limit for bags driving consumers to other single-use items e.g. thicker plastic bags that may have negative outcomes.</p>
<p>3. Mandatory materials standard</p>	<p><b>Benefits</b> – This approach reduces retailer and consumer confusion and helps to ensure plastic alternatives are safe to humans and environment. There is the potential for this approach to be incorporated into a regulatory ban or mandatory phase out by including specific standards (e.g. compostable or biodegradable requirements) for exempted products.</p> <p><b>Constraints</b> – This approach may have limited market availability or affordability (at the time of introduction). Prescriptive standards may deter product innovation.</p>

*Cost benefit analysis of a regulatory ban (option 1)*

Sector	Costs	Benefits
Government	<ul style="list-style-type: none"> <li>• Prepare legislative reform, including any required regulations and amendments to national mutual recognition laws.</li> <li>• Develop and roll out initial education campaigns.</li> <li>• Establish or improve baseline data on consumption and littering.</li> <li>• Undertake compliance and enforcement activities.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates action and leadership by government.</li> <li>• Expected to result in a reduction in litter for collection.</li> <li>• Reduced pressure on waste management and resource recovery systems as consumption and disposal of problematic single-use plastics will be reduced.</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• No local manufacturers identified.</li> <li>• Wholesalers primarily convert to readily available single-use alternatives to meet large scale demand, plus potential product extension to reusable options.</li> <li>• Avoidance and substitution with reusable options reduces overall demand. Uptake is unknown but potentially high given public interest.</li> </ul>	<ul style="list-style-type: none"> <li>• A regulatory ban provides a direct and uniform measure that minimises unintended impacts and competitive distortion.</li> <li>• Supports rapid scaling up of alternatives. This can encourage rapid implementation of new products or models, bringing immediate scale to potential solutions. This has the potential to benefit industry development, a key recommendation of the Waste Feasibility Study.</li> </ul>
Business	<ul style="list-style-type: none"> <li>• Short-term operational cost as businesses transition to the new arrangements.</li> <li>• The regulatory ban is expected to result in some costs to business as readily available alternatives to polystyrene containers are more expensive.</li> <li>• There may be minor transition costs to provide new options. Costs to business will be minimised by adopting a discretionary approach which allows businesses to use their existing stock as part of a transitional period.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides certainty for hospitality in regard to changing community expectations.</li> <li>• Progressive businesses, with a clear and communicated strategy for reducing single-use products, may experience an increase in patronage from environmentally conscious consumers.</li> </ul>

Sector	Costs	Benefits
Community organisations	<ul style="list-style-type: none"> <li>• There is the potential for increased costs associated with alternatives to impact on community organisations (e.g. organisations that provide support to vulnerable people, including the homeless).</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>xc</sup></li> </ul>	<ul style="list-style-type: none"> <li>• There will be decreased burden on community organisations that contribute to environmental clean-ups as a result of decreased single-use plastic litter.</li> </ul>
Community	<ul style="list-style-type: none"> <li>• Some cost increase can be expected given alternatives to polystyrene containers are more expensive.</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>xc</sup></li> <li>• Short-term cost associated with uptake of reusable items (if desired), however the scale of this uptake is unknown.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved environmental amenity as a result of reduced plastic pollution and litter.</li> <li>• The social cost-benefit analysis identified a net positive benefit for the environment as a result of phasing out single-use plastic products.<sup>xcii</sup></li> <li>• A regulatory ban demonstrates that ACT Government has considered and actioned feedback through the consultation period.</li> <li>• Action on this product may increase community engagement around problematic single-use plastic in general.</li> </ul>

### Qualitative impact assessment summary

The discussion above suggests that introducing a regulatory ban at the same time for each of the targeted items would be the most effective approach to regulate the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT. This is because it provides a direct and uniform measure that minimises unintended impacts and competitive distortion, while achieving the policy objectives of reducing the impact of these products in the ACT.

A regulatory ban will have a significant operational impact on business in the short-term and require monitoring and enforcement from ACT Government to minimise non-compliance. Businesses along the supply chain, from wholesale distributors onwards, will need to source, supply, distribute and sell complying products. Given the availability of alternatives for these products, coupled with reusable options and avoidance strategies, the cost of living impact to the community is expected to be limited.

There will need to be some exemptions for the use of single-use plastic cutlery in some sectors (e.g. ACT Corrective Services). The details of these requirements are being discussed with relevant stakeholders to ensure there is no impact to safety or human rights. The Bill provides for these exemptions to be granted at the discretion of the Minister, either on application or by own initiative.

Importantly, there are a wide range of reusable options and readily available alternatives for these single-use plastic products, many of which are currently being implemented by businesses. In addition, single-use plastic stirrers, cutlery and polystyrene containers are easily avoided, and these products can be replaced by reusable items (e.g. BYO cutlery and containers, opting to dine in rather than take away). The impact on the ACT economy of transitioning to these other options is evaluated in the quantitative assessment below.

## Plastic free events

Feedback through the consultation processes indicated that 90% of community respondents think single-use plastics are an issue at events. In addition, 10% of organisational submissions suggested without prompting that ACT Government implement approaches to promote and support more plastic free events.

A requirement for declared public events to be plastic free is consistent with the ACT Government's Sustainable Procurement Policy and Charter of Procurement Values, particularly the Environmental Responsibility value which specifically refers to reducing waste and single-use plastics. Events declarations, particularly for government events, demonstrate leadership on efforts to reduce the consumption of problematic single-use plastic in the ACT.

A declared event is expected to be a government or non-government public event. Examples of government public events may include Floriade or the National Multicultural Festival, and examples of non-government public events may include festivals or major sporting fixtures. Events and additional single-use plastic items for phase out at those events will be declared by the Minister by disallowable instrument, ensuring oversight by the Legislative Assembly.

Prior to declaring non-government public events, it will be critical that an appropriate level of advance consultation is undertaken. The following restrictions have also been included in the Bill when declaring a non-government public event:

- declarations made for a public event that is not a government event must not be made less than three months from the start of the event;
- that there is an alternative product that is reasonably available to the organisers of the declared public event; and
- that the declaration will not have an unreasonable impact on the event.

Two options have been considered to require declared events to be single-use plastic free:

1. **Introduce a regulatory requirement for declared public events to be single-use plastic free** – the Bill would include a requirement that declared public events are single-use plastic free.
2. **Introduce a policy approach to encourage declared public events to be single-use plastic free** – sale, supply and distribution of single-use plastics at declared public events would be influenced through existing permitting/licensing arrangements and ACT Government procurement policies.

### Analysis of alternatives

Options:	Benefits and constrains
1. Introduce a regulatory requirement that declared public events are single-use plastic free (preferred)	<p><b>Benefits</b> – A regulatory requirement for declared public events to be plastic free provides a clear expectation to government entities, industry, business, community organisations and the community that declared public events will be single-use plastic free. This creates an even playing field for suppliers and reduces discretion and inconsistencies that may be applied through, for example, the application of government permits and procurement policies.</p> <p><b>Constraints</b> – A regulatory requirement for declared public events to be plastic free will have higher regulatory burden when compared to non-regulatory</p>

Options:	Benefits and constrains
	<p>measures. This burden is limited given the development of the Plastic Reduction Bill to address specific single-use plastic products. The most effective approach to limit the environmental and economic impact of this option is for individuals to bring their own reusable products to events. There is support for this approach in the community, however, this requires a Whole-of-ACT Government approach to ensure implementation is smooth and supported by relevant Government guidelines.</p>
<p>2. Introduce a policy approach to encourage declared public events to be single-use plastic free</p>	<p><b>Benefits</b> – This approach could be affected through event permits and/or licensing and/or procurement policies (where relevant) and does not require regulatory change.</p> <p><b>Constraints</b> – The effectiveness of single-use plastic reduction measures may be reduced by discretion being applied by decision makers. In addition, there are limited compliance approaches available under this option, particularly for events that are not subject to ACT Government procurement processes.</p>

*Cost benefit analysis of a regulatory requirement (option 1)*

Sector	Costs	Benefits
<p>Government</p>	<ul style="list-style-type: none"> <li>• Prepare legislative reform, including any required regulations.</li> <li>• Develop and roll out initial education campaigns, including by initiating and managing projects which provide support to stall holders regarding alternatives to single-use plastics, to make this as easy and cost effective as possible.</li> <li>• Develop internal and external guidelines for event organisation.</li> <li>• Potential for additional costs associated with procurement of alternatives, when compared to the cost of single-use plastics. This cost is expected to be offset by the avoidance of single-use products (e.g. encouraging individuals, community organisations and businesses to bring their own reusable products to events). It is not</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates action and leadership by ACT Government.</li> <li>• Expected to result in a reduction in litter for collection.</li> <li>• Reduced pressure on waste management and resource recovery systems as consumption and disposal of problematic single-use plastics will be reduced.</li> </ul>

Sector	Costs	Benefits
	<p>currently possible to quantify the extent of these savings.</p> <ul style="list-style-type: none"> <li>• Undertake compliance and enforcement activities.</li> <li>•</li> </ul>	
Industry	<ul style="list-style-type: none"> <li>• Wholesalers expected to convert to readily available single-use alternatives to meet large scale demand, plus potential product extension to reusable options.</li> <li>• Avoidance and substitution with reusable options reduces overall demand. Uptake is unknown but potentially high given public interest.</li> </ul>	<ul style="list-style-type: none"> <li>• A regulatory requirement for single-use plastic free declared public events provides a direct and uniform measure that minimises unintended impacts and competitive distortion.</li> <li>• Supports rapid scaling up of alternatives, including of products not specifically covered in the Bill. This can encourage rapid implementation of new products or models, bringing immediate scale to potential solutions. This has the potential to benefit industry development; a key recommendation of the Waste Feasibility Study.</li> </ul>
Business	<ul style="list-style-type: none"> <li>• Short-term operational cost as catering businesses transition to the new arrangements.</li> <li>• Potential for costs associated with cleaning community BYO reusable products.</li> </ul>	<ul style="list-style-type: none"> <li>• Provides certainty for hospitality in regard to changing government and community expectations.</li> <li>• ACT Government procurement guidelines encourage the support of businesses that provide plastic free catering. A regulatory requirement provides a level playing field for businesses. Progressive businesses may experience an increase in patronage.</li> <li>• Avoidance of single-use plastic products is likely to reduce procurement costs. The uptake rate is unknown but potentially high given significant public interest.</li> </ul>

Sector	Costs	Benefits
Community organisations	<ul style="list-style-type: none"> <li>• Short-term operational costs as catering at events requires the provision of alternatives (e.g. multicultural festival).</li> <li>• Potential for costs associated with cleaning community BYO reusable products.</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>xciii</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Avoidance of single-use plastic products is likely to reduce costs (e.g. encouraging the community to bring their own reusable products to events).</li> <li>• There will be decreased burden on community organisations that contribute to environmental clean-ups as a result of decreased single-use plastic litter.</li> </ul>
Community	<ul style="list-style-type: none"> <li>• May be a moderate cost increase to account for the provision of alternative products. This can be minimised by a broader ACT Government BYO policy.</li> <li>• The social cost-benefit analysis identified that the cost of adopting alternatives to single-use plastic products will likely be passed onto consumers.<sup>xciv</sup></li> <li>• Short-term cost associated with uptake of reusable items (if desired), however the scale of this uptake is unknown.</li> </ul>	<ul style="list-style-type: none"> <li>• Consistent with community feedback that they want ACT Government to lead by example to reduce the consumption of single-use plastics, more plastic free events and to be able to BYO reusable products to events.</li> <li>• Improved environmental amenity as a result of reduced plastic pollution and litter.</li> <li>• The social cost-benefit analysis identified a net positive benefit for the environment as a result of phasing out single-use plastic products.<sup>xcv</sup></li> <li>• A regulatory requirement demonstrates that ACT Government has considered and actioned feedback through the consultation period.</li> <li>• Action is expected to increase community engagement around problematic single-use plastic in general.</li> </ul>

### Summary of results for plastic free events

The preferred approach is consistent with feedback from the community and organisations that they want more single-use plastic free events in the ACT. Requiring declared public events to be single-use plastic free demonstrates that the ACT Government is committed to leading by example through reducing its own consumption of single-use plastic products at public events. It also provides certainty for food service and event sectors in regard to changing government and community expectations.



Given the significant volumes of waste that are generated at some events, allowing business, community organisations and individuals to supply their own reusable items is expected to have positive environmental outcomes. This will require a whole-of-ACT Government approach to ensure event implementation is smooth and to ensure the use of reusable alternatives (e.g. BYO containers, where safe to do so) is supported by relevant ACT Government guidelines.

Finally, government action to reduce single-use plastics at events is expected to increase community and business awareness of the issues with problematic single-use plastic. It is anticipated that leadership by the ACT Government will assist to develop community expectations that public events can, and should, be single-use plastic free.

## Quantitative Impact Assessment

The ACT Government commissioned an independent social cost-benefit analysis to provide economic analysis to the Territory on the impact of phasing out single-use plastic as in the Plastic Reduction Bill and *Phasing out single-use plastics: Next Steps Policy* to meet requirements of the *Legislation Act 2001*<sup>xvii</sup>. This represents the first known attempt by an Australian government to undertake a quantitative analysis of alternatives to single-use plastic products in Australia.

The analysis aimed to identify and then quantify the impacts of phasing out single-use plastic stirrers, cutlery and polystyrene containers. Coupled with avoidance scenarios, potential alternatives for single-use plastic items were developed using information from other jurisdictions, both domestically and internationally.

The social cost-benefit analysis aimed to measure the economic impact of using SUP alternatives between 2020 and 2040 and compare this with a business as usual baseline in which the ban was not applied. Several costs and benefits were considered, as shown in the table below.

The ACT has provided further leadership in this space, with ACT consultants collaborating with those engaged across other Australian jurisdictions also seeking to phase out single-use plastics. This has ensured that, where possible, methodologies for the quantification of phase outs are harmonised across Australia. Preliminary advice across jurisdictions indicates that results of these subsequent cost-benefit analyses have broadly aligned to ACT outcomes.

### *Potential costs and benefits of alternatives*

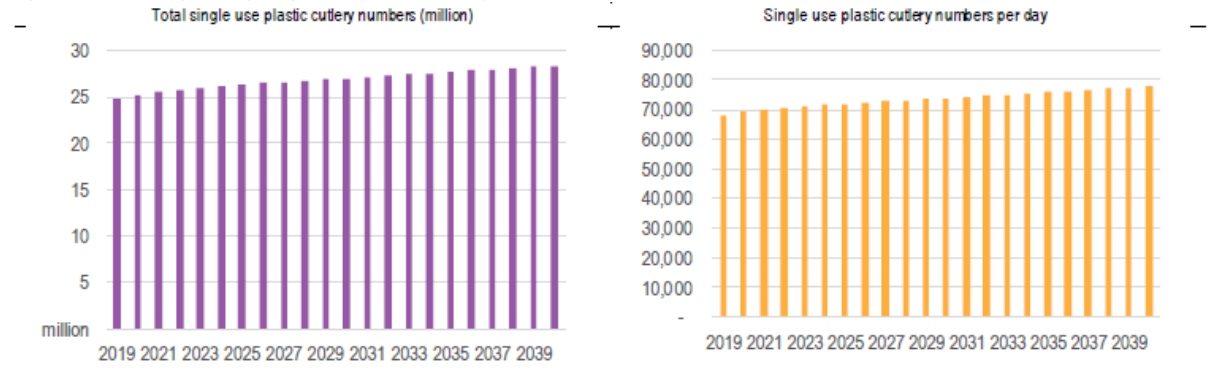
Costs	Who will be affected?	Benefits	Who will benefit?
Introduce legislation	Government	Avoided litter	Community, Environment
Introduce a code of practice	Government	Avoided landfill operating costs	Community, Environment
Monitoring and compliance costs	Government	Improved environmental value	Community, Environment
Education campaigns	Government	Improved health outcomes	Individuals, Community
Price increase for services	Government	Demand increase for services (additional patronage effect)	Industry
Cost of replacement	Industry	Improved profits for alternatives	Importers, Manufacturers
Legal costs (contract variation)	Industry		
Price increase for services	Consumers		
Loss of profits	Importers, Manufacturers		
Environmental externalities	Individuals	Improved environmental value	Individuals, Community

SOURCE: BASED ON THE ACT NOWASTE TERMS OF REFERENCE

*Assumptions and analysis*

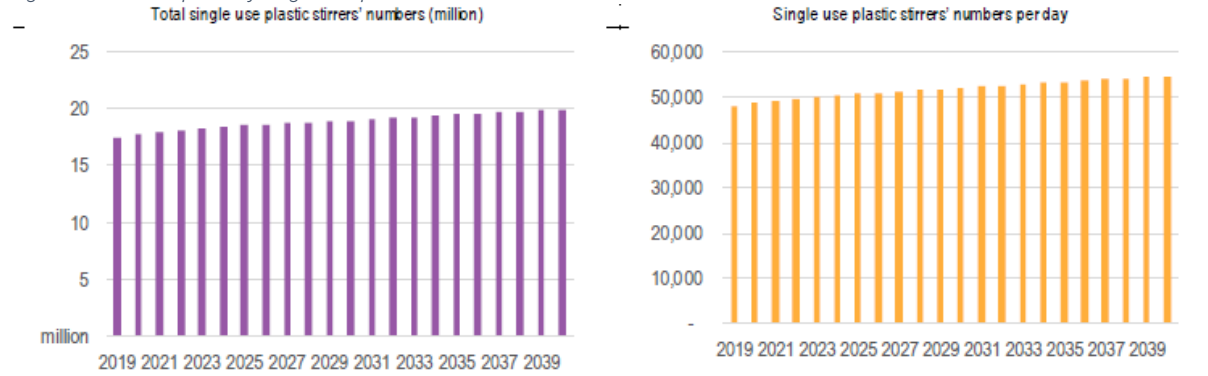
The following estimates for quantities of single use plastics in the ACT were obtained using the best available data. It is important to recognise that because of time, data variability, and data constraints associated with this assessment, the estimates provided in this Report are indicative and should be regarded as preliminary. Further detailed analysis is required to gain a better understanding of the consumption numbers, prices of alternatives suggested, consumer acceptance, industry costs and potential benefits of avoided litter, landfill, emissions and health benefits.

Figure 10 Consumption of single use plastic cutlery in the ACT



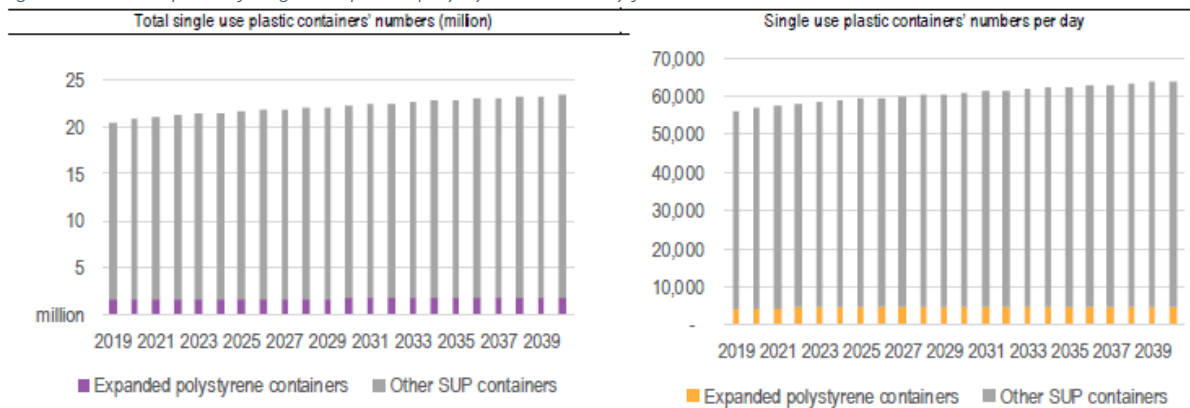
SOURCE: ACIL ALLEN ESTIMATES BASED ON THE 2017-18 AUSTRALIAN PLASTICS RECYCLING SURVEY – NATIONAL REPORT, ABS POPULATION PROJECTIONS

Figure 11 Consumption of single use plastic stirrers in the ACT



SOURCE: ACIL ALLEN ESTIMATES BASED ON THE 2017-18 AUSTRALIAN PLASTICS RECYCLING SURVEY – NATIONAL REPORT, ABS POPULATION PROJECTIONS

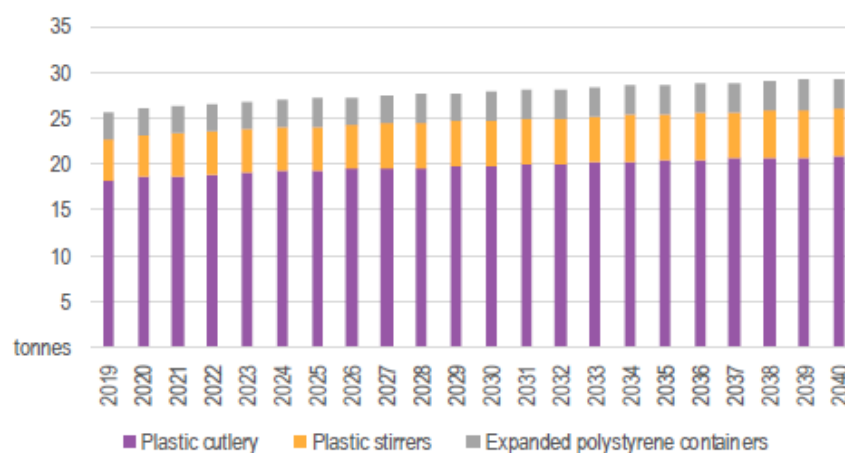
Figure 13 Consumption of single use plastic polystyrene takeaway food containers in the ACT



SOURCE: ACIL ALLEN ESTIMATES BASED ON THE 2016-17 AUSTRALIAN PLASTICS RECYCLING SURVEY - NATIONAL REPORT, ABS POPULATION PROJECTIONS  
NOTE: THESE FIGURES INCLUDE

Avoided litter is one of the key arguments for phasing out single-use plastic in the ACT. However, there was no data available on the quantity of litter within the Territory that was associated with the single-use plastic items targeted for the initial ban. The amount of potential litter reduction that may be achieved through the ban was derived by combining what is known about plastic waste, recycling and litter. The derived projections of the quantity of plastic litter in the ACT is in the graph below.

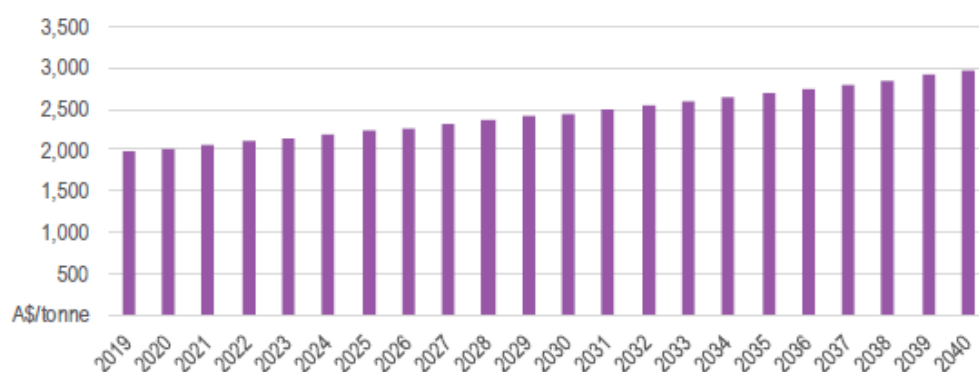
Figure 14 Estimated quantity of plastic litter in the ACT



SOURCE: ACIL ALLEN ESTIMATES BASED ON THE 2017-18 AUSTRALIAN PLASTICS RECYCLING SURVEY - NATIONAL REPORT, ABS POPULATION PROJECTIONS

Willingness to pay to avoid litter was estimated based on empirical evidence of volunteer behaviour in cleaning up litter, and surveys of householder willingness to pay for avoided litter. Projections of willingness to pay for avoided litter are presented below based on the average consumer price index growth rate for the ACT over the past 10 years.

Figure 15 Derived willingness to pay to avoid litter



SOURCE: ACIL ALLEN ESTIMATES BASED ON MARSDEN JACOB ASSOCIATES 2016 AND ABS CPI

The analysis also took account of the social cost of plastic, which considers environmental impacts, including to those who do not supply or use them directly. These social costs of plastic were accounted for in cost benefit analysis as a type of environmental externality incorporating the negative impacts of waste plastic being generally present in the environment and other impacts including air pollution, greenhouse gas emissions, and water emissions through leachate<sup>xcvii</sup>.

The monetised cost impact of these externalities depends on the waste collection system and waste management. Costs in the academic literature vary from negligible amounts to many thousands of dollars per tonne<sup>xcviii</sup>. Capturing the full cost for these impacts is difficult, given the many pathways in which plastic wastes can contribute to environmental damages and variances in waste management practices across domestic and international communities. A Nolan-ITU estimate of environmental externalities for the Australian context places the value at approximately \$185 per tonne, adjusted for inflation<sup>xcix</sup>. The degree to which waste is well managed will decrease these impacts, but this estimate was applied in this study.

Government costs to implement the reduction were estimated based on expected budget impacts. They included the staff and consultancy costs associated with introducing legislation, consumer and industry education programs, enforcement and monitoring costs.

Landfill costs associated with single use plastics were estimated for the purposes of this study at \$80 per tonne. This represents an average fee associated with managing plastic as a specific component of landfill material and operation, and not the cost of running the ACT municipal waste management system, which is reflected in landfill gate fees. The latest gate fee information is available from the ACT Government website<sup>c</sup>. These costs have been updated (using CPI growth data) in the projection period.

The analysis assumed that businesses affected by the plastic bans would pass the full costs of plastic alternatives through to consumers. It was realistic to assume there could be a likely decrease in demand for single-use plastic consumption as a result of any increased costs. The analysis therefore also took account of consumer demand responsiveness, or the potential for decreased consumer demand for single-use plastic alternatives as a result of increased community use of existing reusables (i.e. bringing cutlery from home rather than using alternatives, or a 'bring your own' option, dining in or eating at home/the office). In scenarios where consumers bring their own reusable cutlery, it was assumed that they provided a cost-neutral alternative, by using resources which already exist however are not currently being used as efficiently as possible. Because of the more efficient use of

resources the subsequent demand for single use-plastic alternatives was removed, and cost are saved for all parties.

The analysis compared the costs of the baseline single-use plastic products with plastic alternatives. The plastic alternatives considered here all met criteria for being currently available on the wholesale market, acceptable for use under the policy option and potentially acceptable to consumers. The unit prices were determined through two market research studies undertaken independently of each other. One was commissioned by the South Australian Government, and the other by the ACT government. Neither study is publicly available at this stage, but their results corroborated one another, suggesting that the unit price estimates are sufficiently robust for this analysis.

A summary of assumptions is in the table below.

*Assumptions for quantifying economic impacts*

Category	No of times a unit can be used in a year	Annual number of pieces consumed in the ACT (million)	Unit price \$/unit	Unit weight grams	Annual average efficiency %	Contamination rates at the material recovery \$	Landfill cost \$/tonne	WTP to avoid litter \$/tonne	Social cost of plastic \$/tonne	Attracting additional consumer base %
	Number	Number	\$/unit	grams	%	\$	\$/tonne	\$/tonne	\$/tonne	%
		In 2020	In 2020				In 2020	In 2020		
<b>1. Cutlery</b>										
Plastic cutlery	1	25.2	0.021	4.9		100%	80	2,025	185	
Bamboo cutlery	1	25.2	0.350	11.2	1%	0%				nil
Wood cutlery	1	25.2	0.030	4.5	1%	0%				nil
Edible cutlery	1	25.2	0.210	5.5	1%	0%				nil
<b>2. Stirrers</b>										
Plastic stirrers	1	17.8	0.019	1.7		100%	80	2,025	185	
Bamboo stirrers	1	17.8	0.034	1.3	0%	0%				nil
Glass stirrers	1	17.8	0.070	5.0	0%	10%				nil
Wood stirrers	1	17.8	0.012	1.1	0%	0%				nil
<b>3. Containers</b>										
Expanded polystyrene containers	1	1.6	0.244	11.9		100%	80	2,025	185	
Bamboo containers	1	1.6	0.225	21.7	0.00%	5.00%				nil
Paperboard containers	1	1.6	0.268	17.0	0.00%	5.00%				nil
Sugarcane bagasse containers	1	1.6	0.294	22.8	0.00%	5.00%				nil

SOURCE: ACIL ALLEN BASED ON VARIOUS SOURCES

Potential scenarios were considered that could deliver a cost neutral impact on the ACT economy. This was achieved by recognising that increased costs for individual plastic alternatives could be offset by a proportion of customers adopting ‘bring your own’ options which avoid the use of single-use items altogether. These options could include customers bringing their own plastic alternatives, eating takeaway food at home using their own equipment and eating at venues to avoid the use of single-use items.

The analysis also considered the distributional impacts, or how costs and benefits from the ban would be distributed across four impacted stakeholder groups including the ACT government, industry, consumers and the community/environment.

Finally, impacts were estimated for specific operations that would be impacted by the ban. This included ACT government operations of running hospitals, schools, and prisons. It also covered events that may be declared plastic-free.

### *Summary of key findings*

The social cost-benefit analysis identified optimal scenarios where:

- single-use plastic items could be directly substituted by an alternative that is already more cost effective; or
- a combination of direct substitution of the next most cost effective alternative and a percentage of reduced baseline consumption is required.

Overall, it found that any reduced consumption of single-use plastic or identified alternatives also reduced economic, environmental and social costs to the ACT region<sup>ci</sup>. This is the core intention of the *Plastic Reduction Bill* – to reduce overall plastic consumption.

The optimal scenario for each of the single-use plastic alternatives is detailed below.

- **Single-use plastic stirrers:** already cost more than some identified alternatives. Wood stirrers are cheaper than plastic and if directly substituted at current consumption rates, would provide an additional \$1.4 million in benefit to the ACT region.
- **Expanded polystyrene containers:** already cost more than existing alternatives available to the market. For example, directly substituting bamboo containers would provide an additional \$200,000 in benefits to the ACT region.
- **Single-use plastic cutlery:** remains cheaper than all identified alternatives. Wood cutlery is the cheapest alternative. Direct substitution of wood for plastic would cost \$2 million to the ACT region over 20 years. Cost-neutrality could be achieved through a combination of a 21% reduction in consumption, combined with direct substitution wood cutlery instead of plastic for the remaining demand.

The study also showed that the phase out could be cost-neutral or deliver financial benefits in hospitals, prisons and at events. The lower costs associated with some available alternatives could offset the higher costs of others in each of these settings. For example, results suggest that a cost-neutral outcome could also be achieved in schools if at least 13% of canteen users brought their own cutlery or ate with re-usable cutlery provided<sup>cii</sup>.

The following table provides a summary of all single-use plastic alternatives and reduced consumption required to achieve cost neutrality to the ACT economy.

## Summary analysis of cost neutral scenarios

	Discount rate (3.5%)		Discount rate (5%)		Discount rate (6.5%)	
	Average BCR	NPV = net benefit minus net costs	Average BCR	NPV = net benefit minus net costs	Average BCR	NPV = net benefit minus net costs
	Ratio	A\$m	Ratio	A\$m	Ratio	A\$m
<b>Plastic Cutlery</b>						
Petrochemical plastic cutlery (base case)	-	(8.0)	-	(7.0)	-	(6.2)
Bamboo & 93% BYO	1.1	0.1	1.0	0.0	0.9	(0.1)
Wood & 21% BYO	1.1	0.1	1.0	0.0	0.9	0.0
<b>Plastic Stirrers</b>						
Petrochemical plastic stirrers (base case)	-	(5.1)	-	(4.4)	-	(3.9)
Bamboo & 46% BYO	1.1	0.0	1.0	0.0	0.9	0.0
Glass & 74% BYO	1.1	0.0	1.0	0.0	0.9	(0.0)
Wood	3.0	1.6	2.9	1.4	2.7	1.2
<b>Plastic/Polystyrene Containers</b>						
Petrochemical expanded polystyrene plastic containers (base case)	-	(5.8)	-	(5.2)	-	(4.5)
Bamboo	1.7	0.3	1.6	0.2	1.4	0.1
Paperboard & 12% BYO	1.1	0.0	1.0	0.0	0.9	0.0
Sugarcane Bagasse & 20% BYO	1.1	0.0	1.0	0.0	0.9	0.0

\* indicates that no value of BYO will result in a cost-neutral way.

Note: BYO is a combination of Bring Your Own, eat-at-home and dine-in

Note 2: Some measures have positive or neutral impacts at a lower 3.5 per cent discount rate.

SOURCE: ACIL ALLEN ESTIMATES BASED ON VARIOUS SOURCES

## Reforms which will not impose any appreciable cost

In addition to the reforms described above, the following inclusions in the *Plastic Reduction Bill* will not impose any appreciable cost:

- Absorbing provisions for the ban of light-weight single-use plastic bags under 35 microns (as per the *Plastic Shopping Bags Ban 2010*).
- Discretionary approach for the use of existing single-use plastic stock, including longer-term exemptions if required in circumstances of particular disadvantage resulting from the Bill.

## Offences for non-compliance with the regulatory ban

An effective compliance and enforcement framework is fundamental to the success of the reform. The reform focusses on incentivising positive behaviours and introducing consequences and strict penalties for the small percentage of people who do the wrong thing.

To support compliance and enforcement activities, a comprehensive offence framework has been developed. Offences are outlined below and explained in further detail the explanatory statement. It is intended that an infringement notice framework will also be developed.

### Supplying prohibited plastic products

- The Bill includes a clause which relates to the supply of a prohibited plastic product.
- A person or plastic product may be exempt by the Minister under the relevant exemption provisions.

- A person that commits an offence under this clause has a maximum penalty of 50 units; it is deemed a strict liability offence.

#### *False representation of prohibited plastic products*

- The Bill includes a clause which relates to the supply and false representation of a product as a non-prohibited plastic.
- This section supports stakeholder concerns of ‘greenwashing’ of single-use plastic alternatives.
- A person that commits an offence under this clause has a maximum penalty of 50 units.

#### *Non-compliance with a notice to dispose of prohibited plastic products*

- The Bill includes a clause which relates to the authority of an authorised person to provide written notice to a person believed to have supplied prohibited products to dispose of the prohibited plastic product.
- The requirements of the Bill are outlined in further detail in the explanatory statement.
- A person commits an offence if notice is given and they fail to comply with this notice.
- A person that commits an offence under this clause has a maximum penalty of 20 units; it is deemed a strict liability offence.

#### *Supplying a prohibited plastic product in contravention of a condition of exemption*

- The Bill includes a clause which relates to the responsibility of a person and plastic product deemed exempt by the Minister.
- A person who has been exempt, will be deemed to have committed an offence if the person supplies a prohibited plastic product in contravention of a condition of the exemption.
- A person that commits an offence under this clause has a maximum penalty of 50 units; it is deemed a strict liability offence.

#### *Supplying a prohibited plastic product at, or in relation to, a declared public event*

- The Bill includes a clause which relates to the obligations of event vendors and event customers at declared public events.
- An offence is here deemed to have been committed by a person for the supply of a declared single-use plastic product. An offence under this clause is also said to have taken place if the supply of a declared single use plastic product is to a person at, or a person in relation to, a declared public event.
- A person that commits an offence under this clause has a maximum penalty of 50 units; it is deemed a strict liability offence.

#### *Failure of a person to return their identity card when they stop being an authorised person*

- The Bill includes a clause which details the identity card requirements for authorised persons, and offences relating to authorised persons. Appropriate identification of authorised persons will support confidence in and the operation of compliance and enforcement measures.
- A person commits an offence against this section if the person stops being an authorised person and does not return the relevant identity card within seven (7) days.
- A person that commits an offence under this clause has a maximum penalty of 1 unit; it is deemed a strict liability offence.
- Fraudulent behaviour under this section will be treated under the criminal code.



### *Interference with seized things, or anything containing a seized thing*

- The Bill includes a clause which establishes the power of authorised persons to seize anything at the premises where there is reasonable believe of contravention of the Act, or where it is consistent with the purpose of entry with the occupier's consent.
- It is an offence to interfere with things, or anything containing a seized thing, without the permission of the authorised officer.
- A person that commits an offence under this clause has a maximum penalty of 50 units; it is deemed a strict liability offence.

### *Failure to comply with a direction to give name and address*

- The Bill includes a clause which details what constitutes a person's failure to comply with an authorised person's request for name and address.
- The requirements of the Bill, including circumstances where this clause does not apply, are outlined in further detail in the explanatory statement.
- A person that commits an offence under this clause has a maximum penalty of 5 units; it is deemed a strict liability offence.

The maximum penalty of 50 penalty units has been carried over from the existing *Plastic Shopping Bags Ban Act 2010* which has been absorbed into and will be repealed on commencement of the Bill. The specific offences have been drafted in consultation with the Human Rights Commission and the Justice and Community Safety Directorate.

Prohibited plastic products that attract strict liability offences may be prescribed by regulation. However, before a regulation is made the Minister must give public notice of the regulation. The requirements of the notice, including the associated consultation period, has been provided in the Bill. This provides the Minister flexibility to respond to changes in policy, while also ensuring that sufficient public consultation is provided for when products that attract offences are changed. This is consistent with the approach in *South Australia's Single-use and Other Plastic Products (Waste Avoidance) Act 2020*.

To remove any doubt, it will not be an offence for individuals to use these single-use plastic products in the ACT. Consideration has been given to ensure offences interact appropriately with exemption provisions to mitigate risks of discrimination to individuals and risks to business of discrimination actions from consumers.

The offence framework will be supported by a compliance and enforcement strategy to ensure effective regulatory action can be taken to prevent, deter and enforce action against the sale, supply and/or distribution of prohibited single-use plastic stirrers, cutlery and polystyrene containers in the ACT and the sale, supply and/or distribution of additional single-use plastic products at declared public events.

Two options have been considered to establish a range of offences for non-compliance with the regulatory ban:

1. **Do not introduce offences for non-compliance with the Act** – the Act would be developed with no offences for non-compliance.
2. **Introduce offences for non-compliance with the Act** – involves drafting offences in the Bill to regulate the sale and/or distribution of regulated single-use plastic products.

### Analysis of alternatives

Options:	Benefits and constrains
1. Do not introduce offences for non-compliance with the Act	<p><b>Benefits</b> – Under this option there will be no compliance and enforcement cost to ACT Government.</p> <p><b>Constraints</b> – This approach is unlikely to deliver the outcomes of the reform. Under this option, industry, businesses, community organisations and individuals will be able to continue to sell, supply and/or distribute single-use plastic stirrers, cutlery and polystyrene containers without consequence and sell, supply and/or distribute single-use plastic products at declared public events. This will result in significant limitations to proactive compliance and enforcement and create issues with managing the consumption of problematic single-use plastic products. This option is not consistent with community or business expectations.</p>
2. Introduce offences for non-compliance with the Act (preferred)	<p><b>Benefits</b> – Offences are effective, practical and operational and will provide for the prevention and deterrence of the sale, supply and/or distribution of prohibited single-use plastic products in the ACT.</p> <p><b>Constraints</b> – The offences will have some impacts to individuals, including a reduction in individual rights and a higher onus on an individual to defend a prosecution for strict liability offences.</p>

### Cost benefit analysis of introducing offences for non-compliance with the Act (option 2)

Sector	Costs	Benefits
Government	<ul style="list-style-type: none"> <li>• Any compliance and enforcement activities will have an additional resource cost to the ACT Government.</li> <li>• These costs may be partially offset by savings from reduced litter collection and improved waste management and resource recovery processes, although it is not currently possible to quantify the extent of these costs.</li> </ul>	<ul style="list-style-type: none"> <li>• A reduction in the consumption and disposal of single-use plastic stirrers, cutlery and polystyrene containers, and single-use plastics at declared public events in the ACT.</li> <li>• Reduced litter and improved community outcomes.</li> <li>• Ability to enforce offences under the reform. A robust compliance and enforcement strategy, supported by appropriate offences for non-compliance, is expected to increase voluntary compliance with the reform.</li> <li>• Reduced burden to prosecutors as a result of establishing strict liability offences, including provisions to identify businesses and individuals that are</li> </ul>

Sector	Costs	Benefits
		<p>suspected of non-compliance with the Act.</p> <ul style="list-style-type: none"> <li>• Increase in community confidence that ACT Government is able to manage the consumption and associated impact of single-use plastics in the ACT.</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• There will be increased costs to industry who sell, supply and/or distribute prohibited plastic products in the ACT.</li> </ul>	<ul style="list-style-type: none"> <li>• The provisions provide certainty about regulatory obligations for industry.</li> </ul>
Business	<ul style="list-style-type: none"> <li>• There will be increased costs to businesses who sell, supply and/or distribute prohibited plastic products in the ACT.</li> </ul>	<ul style="list-style-type: none"> <li>• The provisions provide certainty about regulatory obligations for business.</li> </ul>
Community organisations	<ul style="list-style-type: none"> <li>• There will be increased costs to community organisations who illegally sell, supply and/or distribute prohibited plastic products in the ACT.</li> </ul>	<ul style="list-style-type: none"> <li>• The provisions provide certainty about regulatory obligations for community organisations.</li> </ul>
Community	<ul style="list-style-type: none"> <li>• There will be increased costs to individuals who sell, supply and/or distribute prohibited plastic products in the ACT.</li> </ul>	<ul style="list-style-type: none"> <li>• The provisions provide certainty about regulatory obligations for the community.</li> <li>• The provisions also reflect community expectations regarding the issues with the continued consumption and disposal of problematic single-use plastic products.</li> </ul>

### Summary

A comprehensive range of offences will ensure the reform is delivered and that the consumption and disposal of problematic single-use plastic products is reduced. These provisions are necessary to ensure the reform is successful and reflects community expectations that the ACT Government will ensure industry, businesses, community organisations and individuals comply with the reform.

The high-level findings outlined in the social cost-benefit analysis indicate that a net benefit to the ACT can be achieved through the use of cost-effective plastic alternatives, combined with increased levels of consumer avoidance. In addition, they indicate that the reform will result in positive environmental outcomes. Ultimately, these benefits are only able to be realised if the reform is successfully implemented and enforced.

Provisions have been drafted in conjunction with Justice and Community Safety Directorate to ensure they are appropriate. Industry and business are also supportive of enforcement and compliance to ensure a high level of competitive neutrality and to prevent ‘free-riders’ who benefit from the Bill without having to comply with it.

## Human rights analysis

Directorates are obliged under the *Human Rights Act 2004* (HR Act) to act and make decisions consistent with human rights.

This includes ensuring any amendments result in a law that is proportionate (as per s28 of the HR Act) – that is, that it limits rights in the least restrictive way possible to achieve the purpose of the legislation. This includes considering if any amendment is going to have a disproportionate impact on low income earners or other vulnerable people, engaging the right to equality under s8 of the HR Act.

Human rights have been considered in developing this RIS. The matters considered relevant from a human rights perspective are discussed in the following sections.

### Right to life

The Bill has been identified as engaging s9 of the HR Act which provides a right to life. This right requires government to take appropriate measures to safeguard life to protect its citizens and consider their right to life when making decisions that may affect an individuals’ life expectancy.

The use of single-use plastic cutlery may impact the right to life in specified circumstances. For example, where alternatives to single-use plastic cutlery are known to be more readily weaponised in correctional settings. Banning and/or limiting access to single-use plastic cutlery may impact on those in such settings (e.g. staff and those in detention).

The reform does not regulate the use of single-use plastic products in the ACT. As such, the reform does not regulate the use of these products by the people who need them. In addition, the ability for the Minister to introduce exemptions will ensure that people who require single-use plastic products will still have access to the products they need.

For these reasons the changes are not expected to impact this right and are considered to be reasonable and proportionate.

### Right to not have reputation unlawfully attacked

The Bill has been identified as engaging s12(b) of the HR Act which provides a right to not have one’s reputation unlawfully attacked. This right may be engaged through the ability for an authorised person to request the personal information, including their name and home address, of an individual if they are suspected of selling, supplying or distributing regulated single-use plastic products in the ACT.

Given the importance of being able to accurately identify individuals in order to support investigations, requiring individuals to provide this information is considered to support this right (i.e. there will be a reduced likelihood that individuals will be incorrectly identified as being subject to an investigation). In addition, the power for authorised people to obtain information also ensures that individuals are afforded an opportunity to provide evidence that an item is not a prohibited plastic product, supported by the abrogation of privilege against self-incrimination and that a warning must be given.

Given the serious nature of the illegal sale, supply and/or distribution of these regulated products, these provisions are considered to be reasonable and proportionate.

### Right to be presumed innocent until proven guilty

Strict liability offences engage the presumption of innocence under s22(1) of the HR Act by removing the fault elements from an offence. This means an accused will be automatically presumed guilty unless they successfully raise the defence of reasonable and honest mistake. The strict liability approach to offences and associated penalties has been carried over to the Bill from the Plastic Bag Ban Act.

The Bill includes strict liability offences which regulate the sale, supply and/or distribution of prohibited single-use plastic stirrers, cutlery and polystyrene containers in the ACT and the sale and/or distribution of additional declared single-use plastic products at declared public events. These provisions will affect industry, business, community organisations and individuals who sell, supply and/or distribute these regulated products in the ACT.

The offences that are to be strict liability all have simple criteria and allow for an escalating and proportionate offence framework. The specific offences have been drafted in consultation with the Human Rights Commission and the Justice and Community Safety Directorate.

A rationale has been included within this RIS, and will be included in the explanatory statement, which ensures there is a strong rationale to justify any new or amended strict liability offences and any future infringement notices.

For these reasons the changes are considered to be reasonable and proportionate.

### Rights in criminal proceedings

The Bill has been identified as engaging s22(2)(i) of the HR Act which provides rights in criminal proceedings, particularly the right not to be compelled to testify against oneself or confess guilt. The purpose of these provisions in the Bill is to assist authorised officers in their function as a truth-seekers and their ability to undertake full and proper investigations.

The restriction on the right against self-incrimination is proportionate. Any self-incriminating material directly or indirectly obtained as a result of a person being compelled to provide information cannot be used as evidence against that person in later court proceedings, other than an offence in relation to the falsity or the misleading nature of the answer, document or information or an offence against the Criminal Code, chapter 7 (Administration of justice offences).

These provisions support authorised officers to be able to fully consider all available information when exercising their functions, while protecting the people providing the information by conferring 'use immunity'.

Use immunity is a well-established practice in relation to investigative agencies in the ACT, including the Human Rights Commission, Integrity Commission and Inspector of Correctional Services. The limitation is further circumscribed by way of the Bill providing that an authorised officer must satisfy the reasonable belief test in exercising powers, and that a person must be warned that failure to comply is an offence.

## Summary

Human rights have been considered in developing this RIS and any limits to rights have been developed in the least restrictive way possible, while achieving the objectives of this RIS and the legislation.

When considered as a complete package, which includes the ability for the Minister to grant exemptions for people who require access to single-use plastic products, the impacts on people's rights, as a result of the reform, is considered reasonable and proportionate to the objectives of the legislation and the risks and outcomes for the community. These matters have been developed in consultation with Justice and Community Safety Directorate and are addressed in the explanatory statement.

The ACT Government acknowledges that additional human rights will require consideration as part of future tranches, particularly the phase out of single-use plastic straws *except for those who need them*. The right to recognition and equality before the law and the right to privacy have already been identified as future considerations for single-use plastic straws and will be addressed during that process.

## Preferred option

The recommended option is Option 2, which supports the Plastic Reduction Bill being introduced into the Legislative Assembly.

## Implementation and evaluation

The ACT Government has developed a detailed business case to efficiently and effectively implement the reform. The implementation and evaluation activities are outlined in further detail below. Many of these activities will occur concurrently to ensure the reform is successful and based on the best available information and data.

### Implementation

#### Improved governance arrangements

In addition to existing executive oversight arrangements within ACT Government, the reform will be supported by robust governance arrangements, including:

- establishing positions for dedicated officers in partner directorates, including Access Canberra and ACT Health,
- a formal process for the relevant director-general to appoint authorised people to undertake investigation, compliance and enforcement activities,
- continued engagement across government and peak industry, environment and disability advocacy groups through the Plastic Reduction Taskforce, and
- continued participation through various cross-jurisdictional forums to ensure implementation activities are contemporary and represent best practice.

#### Facilitate national legislation amendments for mutual recognition

Following the introduction of the Bill, the ACT Government will continue to work closely with other Australian jurisdictions to progress a permanent exemption to national legislation for mutual recognition; this is an established process for when states and territory actions place potential restrictions on cross-border trade.

This process was successfully completed for the ACT Container Deposit Scheme and plastic bag ban. Initial consultation with other Australian jurisdictions who are considering similar legislative approaches to reduce plastic consumption have been positive and the Government has confidence in its ability to work through the process for the required amendments.

#### Exemptions and regulations

The reform includes the ability for the Minister to grant exemptions and create regulations. These powers will be subject to the usual legislative processes in effect in the ACT.

#### Expanded phase-out of single use plastic products

The ACT Government will undertake research into, with the aim of legislating, an expanded phase out of single-use plastic products in the ACT. This initiative will deliver commitments announced in the ACT Government's 2019 *Phasing out single-use plastics: Next Steps Policy*,<sup>ciii</sup> including:

- phasing out barrier bags, oxo-degradable products and single-use plastic straws, and
- phasing out other single-use plastic products including, but not limited to, plastic-lined coffee cups and lids, dinnerware and other bags in the longer-term.

These future phase outs were reaffirmed in the August 2020 *Updated Next Steps Policy*.<sup>civ</sup>

## Consideration of alternatives

The ACT Government acknowledges that alternatives to single-use plastic products need to provide a positive environmental outcome when compared to currently used single-use plastic products.

An analysis of available alternatives to single-use plastic products, including their key lifecycle considerations, will need to form part of education campaigns. Various analyses undertaken to date and the high-level findings of the social cost-benefit analysis concluded the reform will have positive environmental benefits.<sup>cv</sup> The ACT Government is confident that the available alternatives for single-use plastic stirrers, cutlery and polystyrene containers are preferable to currently used single-use plastic products.

## Plastic free places trial

The ACT Government is exploring the option of leading a project with an external provider to implement plastic free places across the ACT – these could include a set of local shops, a marketplace, shopping centre or event. The trial would go beyond the prohibited single-use plastic items to include other items single-use plastic items, providing a critical opportunity to pilot items identified for future phase out. The trial would be on application, with the external provider working closely with selected places to provide advice and support and, ideally, changes made will be sustainable beyond the trial duration. The anticipated costs of this trial were included in the quantitative impact assessment.

## Plastic free events

The ACT Government is committed to leading by example during the implementation phase of the reform. Through the delivery of a number of plastic free events, the ACT Government will inspire and empower local businesses to become early adopters of avoidance and, where avoidance is not possible, plastic alternatives that support broader policy goals for recycling and waste reduction.

This initiative will be supported by the Plastic-free places project and be delivered in collaboration with Events ACT and Actsmart.

## Education campaigns

The reform will be supported by a comprehensive public education campaign targeted at educating consumers, and local business, about the reform. Education campaigns will be implemented ahead of the reform taking effect. This will ensure affected stakeholders, including affected businesses, are able to make informed decisions and implement required changes.

Given the importance of consumption avoidance, education campaigns will target changes in consumer behaviour and promote the plastic-free precincts trial.

## Baseline data and monitoring

Data on the consumption and littering of the targeted single-use plastic products is very limited. This is not unique to the ACT and this occurs because these streams are a relatively small fraction of overall waste generation and have typically been disposed in either public place bins, commercial premises or as litter in the environment. In each case, there is limited available data on composition and volume which was clearly identified by the social cost-benefit analysis.

The ACT Government will establish data baselines for each of the single-use plastic products to be phased out as part of the reform. This will involve commissioning studies to analyse:



- composition of litter streams,
- composition of public place waste and recycling streams, and
- waste to resource opportunities.

This work will facilitate and identify options and priorities for expanding the scope of plastic free events and places. It will draw on the experience of Actsmart programs delivering audits of waste and recycling from events and organisations.

### Compliance and enforcement strategy

The ACT Government will develop a compliance and enforcement strategy to ensure the reform is successful at incentivising behaviours that support the intent of the reform, while resulting in consequences and strict penalties for the small percentage of individuals who do the wrong thing.

The strategy will be developed in consultation with Access Canberra and ACT Health. It will include high profile initial enforcement activities to minimise non-compliance, incorporate approaches that support long-term monitoring and enforcement in order to understand trends and, if necessary, provide a baseline to inform any future amendments to the Act. There was support through the consultation process amongst community stakeholders for robust compliance and enforcement arrangements.

### Evaluation

#### Assurance framework

To ensure the delivery of the reform is smooth it will be informed underpinned by a strong assurance framework that will ensure objectives of the reform are delivered in an efficient and effective way, in line with best practice standards and community expectations. There are two elements of the framework:

- *Performance assurance*: will focus on the efficient delivery of the reform.
- *Outcomes assurance*: will focus on the effectiveness of the reform (i.e. its ability to reduce the consumption of problematic and unnecessary single-use plastics).

#### *Performance assurance*

Performance assurance focuses on the efficient delivery of the reform. There are a number of approaches to measure procedural assurance, including:

- Periodic evaluation of processes and systems.
- Provision of transitional and five-yearly reviews.
- Reporting mechanisms to provide confidence and transparency to the community.
- Ongoing monitoring and continuous improvement mechanisms.

#### *Outcomes assurance*

Outcomes assurance will focus on the effectiveness of the reform. Outcomes assurance may consider whether the objectives of the reform are being achieved and whether the anticipated environmental, social and economic outcomes of the reform, including changes consumer behaviours and a reduction in plastic pollution and litter, are being achieved.

Outcomes assurance will be informed by best practice standards and underpinned by clear and measurable targets. Achieving this will require the ACT to maintain access to good data and information. As outlined above, to support this, the ACT Government will establish processes to collect baseline information so it can effectively inform future decision making.

The final approach to measuring outcomes will be contingent on the outcomes of the studies on the litter and waste streams. As such, an assurance plan will be developed within 12 months to outline the approach.

### Transitional arrangements

The reform does not have retrospective effect. As such, no statutory transitional arrangements are necessary.

The implementation of the Bill will be supported by an initial education campaign to promote alternatives and encourage changes in consumer behaviour in order to maximise consumption avoidance. While alternatives are readily available, information on the options and associated issues will help businesses at all scales select more sustainable alternatives. This will complement existing initiatives being delivered across the ACT Government, particularly by the Actsmart Business and Public Events programs.

## Evaluation and conclusion

It is recommended that the changes to prohibit the sale, supply and distribution of single-use plastic stirrers, cutlery and polystyrene containers in the ACT, and a requirement for declared public events to be single-use plastic free, be introduced through the Plastic Reduction Bill. Absorbing the existing ban on light-weight single-use plastic shopping bags under 35 microns will help to streamline legislation related to reducing the impact of plastic in the ACT. This approach will ensure the ACT has a best-practice, contemporary and effective regulatory system that supports a reduction in the consumption of problematic single-use plastics in the ACT.

The recommended approach ensures the ACT Government proactively addresses the impacts associated with problematic single-use plastics in the ACT, while ensuring there are appropriate safeguards to ensure impacts members of the community are adequately considered and appropriately managed. The approach is similar to approaches being adopted in other Australian jurisdictions and, as such, responds to requests from peak bodies for a harmonised and, where possible, consistent approach to phasing out single-use plastics across Australia.

The recommended option is to support the Plastic Reduction Bill to be introduced to the ACT Legislative Assembly.

## Attachment A: Summary of consultation outcomes

With over 80 attendees at information sessions, 2,813 surveys completed and 432 submissions made from community, business and industry, interest in the consultation process was exceptionally high.

Feedback provided throughout the consultation has shown strong support from the community, business and industry to phase out problematic single-use plastic products, particularly when there are readily available alternatives.

There is a strong expectation amongst participants that the ACT Government will lead action to address this important issue. The consultation also identified that many individuals and businesses are already taking action, using innovative approaches to reducing their own plastic waste.

Among the response by business to the survey, hospitality (e.g. cafes and restaurants), retail stores, health and wholesale/importers were the most responsive, with limited engagement by single-use plastic product manufacturers, supermarkets and market stallholders. The key findings of the surveys are captured in Table 1. Caution should be used in interpreting the business result given the small sample size.

*Table 1: Key themes based on interim survey results, including a limited business sample*

Community Respondents	Business Respondents
<p>Action on single-use plastics is strongly supported:</p> <ul style="list-style-type: none"> <li>Polystyrene was considered the most important with 92% rating it important or very important, followed closely by plastic straws/stirrers and coffee cups/lids, both with 90% rating it important or very important.</li> <li>Out of those who nominated additional items for action, 42% wanted action on plastic packaging, 12% on bags (including &gt;35 microns, barrier bags and bin liners), and 11% on plastic bottles and containers.</li> <li>Interventions will need to consider exclusions for some individuals (e.g. disabled members of the community) and some organisations (e.g. aged care and corrective services).</li> </ul>	<ul style="list-style-type: none"> <li>Among business that provide single-use plastics, approximately 65% provide them for free, while 44% provide alternatives and 18% sell or charge consumers for plastic products.</li> <li>Providers of plastic cutlery and straws/stirrers are the most likely to provide alternatives, being primarily reusable options and paper and cardboard.</li> <li>Many businesses are already voluntarily taking action on reducing their consumption of single-use plastic.</li> </ul>
<p>A ban or phase out is very popular:</p> <ul style="list-style-type: none"> <li>&gt;83% 'definitely' support phasing out most products, with slightly lower support for barrier bags and takeaway containers.</li> <li>&gt;75% support a government-imposed ban or phase out rather than a voluntary approach.</li> </ul>	<p>A ban or phase out is very popular:</p> <ul style="list-style-type: none"> <li>85% 'definitely' support phasing out polystyrene and plastic straws and stirrers.</li> <li>80% 'definitely' support phasing out other light-weight bags, plastic plates and cups, and plastic cutlery.</li> <li>73-78% 'definitely' support phasing out barrier bags, plastic coffee cups and lids and takeaway containers.</li> <li>&gt;78% support a government-imposed ban or phase out rather than a voluntary approach.</li> </ul>

Community Respondents	Business Respondents
<p>Popular non-regulatory interventions include:</p> <ul style="list-style-type: none"> <li>● Leadership at a national level, primarily through the Australian Packaging Covenant Organisation, to ensure a harmonised and, where possible, consistent approach to reducing single-use plastic across Australia.</li> <li>● Additional education campaigns and resources providing information on: <ul style="list-style-type: none"> <li>– Issues and challenges associated with single-use plastics.</li> <li>– How the community can reduce their consumption.</li> <li>– Best-practice re-use and recycling of plastic.</li> </ul> </li> <li>● ACT Government to advocate product stewardship and extended user responsibility, including: <ul style="list-style-type: none"> <li>– Innovative design and production processes.</li> <li>– Government procurement processes.</li> </ul> </li> </ul>	<p>Popular non-regulatory interventions include:</p> <ul style="list-style-type: none"> <li>● Leadership at a national level, primarily through COAG, to ensure a harmonised and, where possible, consistent approach to reducing single-use plastic across Australia.</li> <li>● Additional education campaigns and resources providing information on: <ul style="list-style-type: none"> <li>– Issues and challenges associated with single-use plastics.</li> <li>– How the local businesses can reduce their consumption.</li> <li>– Best-practice re-use and recycling of plastic.</li> </ul> </li> <li>● ACT Government to advocate product stewardship and extended user responsibility <ul style="list-style-type: none"> <li>– Innovative design and production processes.</li> <li>– Government procurement processes.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>● Takeaway, retail and public events are seen as the key problem sectors: <ul style="list-style-type: none"> <li>– Each of these received &gt;90% of responses from respondents</li> </ul> </li> <li>● The education (63%) and health (61%) sectors were also considered to have issues with single-use plastics.</li> </ul>	<p>Barriers to reducing single-use plastic products are:</p> <ul style="list-style-type: none"> <li>● Costs of alternatives (51% of responses)</li> <li>● Availability from suppliers (37%)</li> <li>● Lack of knowledge (32%)</li> <li>● Lack of knowledge of alternatives (32%)</li> <li>● A hassle to change supply arrangements (27%)</li> <li>● Health and safety concerns (24%)</li> <li>● Perceived negative response from customers (22%)</li> <li>● Lack of trust in the quality of alternatives (20%)</li> <li>● No demand from customers (20%)</li> <li>● Lack of suitability/fit for purpose (17%)</li> <li>● Logo and rebranding concerns (12%)</li> <li>● Integral part of business process/model (7%)</li> </ul>
<p>Private actions by residents include:</p> <ul style="list-style-type: none"> <li>● 96% choose reusable bags when shopping</li> <li>● 77% generally avoid single-use plastic products wherever possible</li> <li>● 71% use reusable coffee cups</li> <li>● 35% opt for stores that use sustainable packaging</li> <li>● 20% use reusable containers for takeaway food.</li> </ul>	<p>Across all products (excluding NA responses):</p> <ul style="list-style-type: none"> <li>● 69% of respondents consider 12 months a suitable phase out timeframe, followed by 24 months, 18 months and 36 months.</li> <li>● Interventions need to be supported by a sound evidence base, including consideration of alternatives and their viability, associated lifecycle impacts, financial impacts to small businesses and how to best engage patrons to change consumer behaviour.</li> </ul>

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- <sup>iv</sup> United Nations Environment Programme (2018), *Single-use Plastics: A Roadmap for Sustainability*, accessed at: [https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic\\_sustainability.pdf?isAllowed=y&sequence=1](https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf?isAllowed=y&sequence=1) accessed on 7 October 2019, p5.
- <sup>v</sup> United Nations Environment Programme (2018) *Beat Plastic Pollution*, accessed at: <https://www.unenvironment.org/interactive/beat-plastic-pollution/> accessed on 7 October 2019.
- <sup>vi</sup> ACT Government, *Your Say*, accessed at: <https://www.yoursay.act.gov.au>.
- <sup>vii</sup> ACIL Allen Consulting (2020), *Impact Assessment – Phasing out single-use plastic in the ACT, Stage one phase out products*, Report to NoWaste, ACT Government, Canberra, p 17 - 18.
- <sup>viii</sup> Community survey response to “How important is it for the ACT Government to take action in reducing the following products in our community?” (Question 3).
- <sup>ix</sup> Business survey response to “As a business owner, how likely are you to support a phasing-out of the following products?” (Question 6).
- <sup>x</sup> Community survey response to “What phase-out approach would be most effective in reducing your usage/consumption of single-use plastic products?” (Question 7).
- <sup>xi</sup> Business survey response to “What phase-out approach would you prefer?” (Question 9).
- <sup>xii</sup> Community survey response to “Do you believe single-use plastics is an issue at any of the following?” (Question 12).
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- <sup>xiv</sup> Arcadis (2019), *ACT Single Use Plastic Options – Preliminary Regulatory Impact Statement (Final Report)*, Sydney, p 4.
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- <sup>xvii</sup> Christchurch City Council, *Organics – green bin*, accessed at: <http://www.ccc.govt.nz/services/rubbish-and-recycling/organics-green-bin/>, accessed on 17 October 2019.
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- <sup>xxi</sup> *Mutual Recognition Act 1992* (Cth), s9.
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- <sup>xxv</sup> World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company (2016), *The New Plastics Economy – Rethinking the future of plastics*, accessed at: <http://www.ellenmacarthurfoundation.org/publications> on 7 October 2019, p 17.
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