

Implementing a lightweight plastic shopping bag ban in Queensland

Discussion paper





Message from the Minister

Queensland has one of the most beautiful and iconic natural environments in the world. Every year tens of thousands of people visit the Great Barrier Reef and every weekend scores of Queenslanders take to our beaches, waterways and bushland to relax and re-energise.

The Queensland Government is committed to protecting this unique environment and there are a number of actions that we can take to achieve this.

One of the most obvious actions is addressing the amount of plastic litter that we find in the environment. Plastic bags are the most conspicuous plastic litter item and they easily find their way onto our beaches and into our parks.

Plastic bags are a convenient way for us to carry all sorts of things home from the shops and they have become a big part of our everyday lives. But we tend not to think about the consequences if they end up in the wrong place.

All the scientific evidence is showing us that there is plastic at all levels of the food chain in our oceans. Plastic bags have one of the biggest impacts on our environment—and particularly on our marine environment and fauna. When plastic bags get into our waterways and marine environment animals like sea turtles and sea birds can ingest, or become entangled in, them.

Beyond the amenity problem with plastic litter, the cumulative effect of plastic bags in our environment is a very real concern to the community. The good news is that we know we can do something to reduce the impact of plastic in the environment.

When major supermarkets around Australia took voluntary action several years ago, consumers responded well to the message that we needed to find alternatives to the single-use plastic bag. In the three years of voluntary action, the number of lightweight bags in use was reduced by around 44 per cent. Unfortunately once the voluntary actions stopped our use of plastic bags started to increase.

This is why four Australian states and territories have passed legislation banning the supply of lightweight plastic bags.

The Queensland Government is introducing a similar legislated ban on lightweight plastic bags. What we are doing is certainly not new. Bans have been in place for many years around the world and individual companies and towns have been implementing voluntary initiatives for some time.

The time is right for Queensland to take action to reduce the amount of plastic that is getting into our environment. The scientific evidence about the harmful impacts of plastic in the environment is growing every day. The Queensland Government sees a plastic bag ban as a critical step in a long term plastic pollution reduction plan.

We also want to take the next step and take a lead role in working with retailers nationally to develop voluntary initiatives to reduce the use of the thicker department store-style bags.

Complementary to the introduction of a lightweight plastic shopping bag ban, the Queensland Government will introduce a container deposit scheme. These two initiatives will work together to help reduce the amount of plastic litter in the environment.

I invite you to have your say about the government's plan to ban lightweight plastic bags by visiting www.getinvolved.qld.gov.au

Dr Steven Miles MP

Minister for Environment and Heritage Protection

Minister for National Parks and the Great Barrier Reef

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Overview

This discussion paper seeks feedback on the Queensland Government's decision to introduce a ban on the supply of lightweight single-use supermarket-style plastic shopping bags to consumers. The paper also seeks to start a discussion around the options for voluntary action to reduce the use of heavier-weight 'department store' plastic bags.

The concern

- » Approximately 900 million single-use lightweight plastic bags are used in Queensland each year.
- » The majority of these bags end up in landfill; however around 2 per cent of the bags are littered—which means up to 16 million bags entering the environment in Queensland each year.
- » Although they represent only a small proportion of the litter stream, plastic bags are a highly conspicuous source of plastic pollution that can be avoided.
- » Recent CSIRO research has shown that plastic pollution in coastal waterways is killing and seriously impacting on marine wildlife, notably endangered leatherback turtles, vulnerable green turtles and seabird chicks.
- » The research notes that some marine turtles will preferentially eat plastic bags.
- » When plastic bags break down in micro-pieces, the chemical additives and plastic compounds are able to more easily enter food chains creating cumulative risks for animals and humans.
- » Research is also indicating that the Great Barrier Reef is suffering from the impacts of plastic litter pollution.
- » Apart from discarded fishing gear, plastic bags are the most dangerous item of marine debris in terms of potential for wildlife to become entangled in or ingest the bags.
- » When they are littered, plastic bags also significantly impact on the visual amenity of an area.
- » Restricting the number of plastic bags is part of work in Australia and internationally to reduce the total plastic load in the environment.



International and national responses

- » Governments in Australia and around the world have taken action to reduce plastic bag pollution.
- » International and national policy measures to date have tended to focus on lightweight 'supermarket' shopping bags as these account for the bulk of bag usage and littering.
- » Between 2003 and 2005, major Australian supermarkets voluntarily reduced the use of lightweight plastic shopping bags by around 44 per cent. However, by 2007 numbers were rising and approaching four billion.
- » Since the end of the national voluntary Code in 2005, there has been no successful co-ordinated national approach to restricting the supply of plastic bags.
- » South Australia, the Northern Territory, the Australian Capital Territory and Tasmania have all introduced legislated bans on the supply of lightweight plastic shopping bags, with exemptions for biodegradable bags.



Queensland's response

- » The Queensland Government has decided to introduce a legislated ban on the lightweight supermarket-style plastic shopping bags which make up the bulk of plastic bag use.
- » At the same time the government wants to lead national action to work with department stores on voluntary initiatives to reduce the use of the heavier plastic bags.



Your views

- » Your feedback on how the government should go about implementing a plastic bag ban is sought. The government is also interested in your views on voluntary measures that could be introduced to reduce the use of the heavier department store plastic bags.
- » Go to page 17 to Have your say.

Definitions

Barrier bag	<p>Smaller bags without handles used to contain unpackaged perishable food, including fruit, vegetables, meat and fish.</p> <p>Other types of bags without handles include bin liners, bread bags etc.</p>
Biodegradable bag	<p>A bag made from natural material such as corn-starch (rather than petrochemical HDPE or LDPE plastic) which breaks down into organic material and water in the environment.</p> <p>This includes compostable bags.</p> <p>Biodegradable bags are different from (but are commonly confused with) bags made of degradable material. (Refer degradable bag).</p>
Department store plastic bag	<p>A heavier-weight plastic bag designed for single-use, commonly provided by department and specialty stores such as electronic and clothing retailers. These bags are often made of LDPE plastic.</p>
Compostable bag	<p>A type of biodegradable bag made of material that has been assessed as compostable in a commercial composting environment in accordance with Australian Standard 'AS 4736—2006 Biodegradable plastics—Biodegradable plastics suitable for composting and other microbial treatment'.</p>
Degradable bag, including oxo-degradable or hydro-degradable	<p>Petrochemical-based plastic bags designed to break up into fragments when triggered by light (oxo-degradable) or water (hydro-degradable).</p> <p>These are different from biodegradable or compostable bags made from natural materials.</p>
Green bag	<p>A type of reusable bag with handles designed for multiple reuses, often made of woven polypropylene and commonly sold by supermarkets as a single-use plastic shopping bag alternative.</p>
Macroplastics	<p>Plastic litter consisting of packaging, fishing debris and other items.</p>
Microplastics	<p>Tiny plastic fragments, less than five millimetres in size, principally resulting from the breakdown of plastic litter or macroplastics in the environment.</p>
Plastic HDPE bag	<p>A plastic bag made of high density polyethylene (HDPE), typically a lightweight single-use plastic shopping bag.</p> <p>This includes degradable bags.</p>
Plastic LDPE bag	<p>A plastic bag made of low density polyethylene (LDPE). Often a single-use heavier-weight department store plastic bag, although some reusable bags are also made from heavy-duty LDPE.</p>
Retailer	<p>A business or person that sells goods to a consumer as opposed to selling to another business.</p>
Reusable bag	<p>A bag with handles that is specifically designed for multiple reuses and is made of washable cloth or fibre, or other long-wearing material including heavy-duty LDPE plastic.</p> <p>This includes green bags.</p>
Single-use lightweight supermarket-style plastic shopping bag	<p>A thin (less than 35 microns) plastic bag with handles that is designed for single-use, principally to enable the consumer to transport purchases from the point-of-sale to another destination. Usually provided by supermarkets, convenience stores, liquor stores or takeaway food and other retail outlets.</p> <p>Also commonly referred to as supermarket, singlet, checkout or carry bags.</p> <p>May be a plastic HDPE, biodegradable or degradable bag.</p>

Types of plastic bags

There are many different types of plastic bags that have a wide range of uses. The pictures following illustrate the types of bags that will be included in a ban and those that fall outside the scope of a ban. Each type of bag is more fully described in the Definitions section of this discussion paper.

The Queensland Government's ban relates to single-use lightweight shopping bags, whether made of HDPE plastic, biodegradable, or degradable material. The ban does not cover bags without handles such as fruit and vegetable bags or barrier bags, or bags that have been designed to be used multiple times.

The proposed complementary voluntary initiative would focus on reducing the number of single-use heavier-weight plastic department store bags. These bags, while lower in numbers than lightweight supermarket-style bags, still form part of the litter stream which impacts on the environment and in most cases can readily be replaced by non-plastic alternative bags.

Lightweight single-use plastic supermarket-style bags included in the ban:



HDPE plastic bag



Biodegradable and compostable bag



Degradable bag

Heavier-weight plastic bags included in proposed voluntary measures:



Heavier-weight (≥35 micron) department store bag (LDPE plastic)

Examples of plastic bags without handles—not included in the ban:



The nature of the problem

In Australia and internationally, there is increasing evidence about the cumulative impact that plastic has on soils, waterways, marine environments and fauna. Impacts include entanglement and ingestion. Over time plastics in the environment break down into smaller and smaller pieces, so compounding the problem.

Marine debris is recognised under the *Environmental Protection and Biodiversity Conservation Act 1999* (the Act) as a ‘key threatening process’ which is a process that ‘threatens or may threaten the survival, abundance or evolutionary development of a native species or ecological community’.

The Threat Abatement Plan for the Impacts of Marine Debris on Vertebrate Marine Life was established under the Act in 2009. Following a review a revised plan is currently under development that is intended to better address the impact of plastics.

Work is currently underway through the national Environment Ministers forum to address single-use plastic packaging and microplastics in the environment. The immediate focus of the microplastic work is on microbeads present in personal care products such as toothpaste and face scrubs.

Restricting the number of plastic bags is an important part of the response to reduce the overall amount of plastic entering our environment. Around 900 million lightweight plastic shopping bags are estimated to be used annually in Queensland.

These plastic bags are designed to be used as single-use carry bags for people to use to take goods from the shops to their homes.

The majority of plastic bags end up in landfill and 1–2% are littered—which means almost 20 million plastic bags could enter the Queensland environment each year.

Plastic in the environment

Numerous studies have shown that plastics, including plastic bags, are persistent in the environment and have significant aesthetic and wildlife impacts.

Because they can take hundreds of years to break down, plastics can have long-term impacts on the environment, including posing a threat to marine life and contributing to flooding due to blocking drains and waterways.

In addition, many plastics will break down into small fragments, which increase the plastic (and chemical) load in the environment.

When plastic bags break down into small fragments (known as microplastics) the chemical additives are able to enter the environment. Environmental and health exposure to plastic-related chemical compounds does not occur in isolation but as a ‘cocktail effect’ of mixed plastics in the environment.

Plastics in the ocean also absorb other chemicals and toxins that may be present. If these chemicals are ingested by marine animals, humans will also ingest them by eating the contaminated fish.

Aside from chemical toxicity, plastics in the marine environment pose significant ingestion and choking hazards to numerous marine species, including turtles, birds, zooplankton and corals. Plastic does not break down in the animals’ digestive system so its presence, even in small amounts, can cause starvation and a build-up of gases in the body cavity that contributes to floating disease in turtles.

Impact of plastic bag litter

The impact of plastic bag litter on wildlife is well documented. A South East Queensland study found 54% of pelagic and 25% of benthic marine turtles had ingested plastic marine debris. Studies also indicate that turtles select clear or white soft buoyant plastics, some of which resemble their natural prey such as jellyfish.

A 2016 assessment of the ecological threat posed by the most common types of coastal litter found that, apart from discarded fishing gear, plastic bags posed the greatest threat to seabirds, turtles and marine mammals through ingestion, entanglement and contamination. The report noted that:

‘Plastic bags generally have handles which pose an entanglement risk as well as a three-dimensional structure that creates a space in which an animal or parts of an animal can become entwined; indeed plastic bags have been shown to entangle pinnipeds [seals] ... compared to most other consumer plastic items, plastic bags pose one of the greatest impacts to ocean wildlife and thus, from an environmental impact perspective, plastic bags warrant the specific attention they have received from governments and advocates to address their usage.’ (Wilcox et al 2016).

Plastics, including plastic bags, have significant littering potential. Plastics are a significant contributor to the litter stream and marine debris and contribute the largest volume of scattered material found in open spaces such as beaches, highways and recreational parks.

Flexible plastics such as bags are highly mobile and easily blown into inaccessible places on land and into waterways.

As well as the impact on wildlife, plastic bags are unsightly in the environment, creating visual pollution.

Amount of plastic bag litter

By volume, plastic bags contribute around 3.5% of the total of plastic litter. According to Clean Up Australia reports, plastic has remained the most common category of rubbish picked up on Clean Up Australia Day over the past 20 years. In 2009, it made up 29% of all rubbish found. Of the plastic rubbish found, plastic bags accounted for 17.6% with an average of 40 plastic bags found at each Clean Up site, totalling 500,000 bags every year.

Lightweight single-use plastic bags make up the largest proportion of littered plastic bags. Although bags are small in volume, they rate highly in terms of overall impact. Evidence from littering and behaviour surveys also suggests that people will litter more in places where litter is already visible, as they view that area as already degraded. This means that the presence of plastic bag litter can also exacerbate the litter problem.

Marine debris surveys along the Queensland coast between 2011 and 2015 resulted in an average of 12 to 24 bags per site, with a maximum of over 640 items at one location.

While lightweight plastic bags make up the largest proportion of plastic bags in the litter stream this is most likely due to the fact that lightweight plastic use is far greater than heavier-weight department store bag use.

Not all litter is deliberate. An estimated 47% of wind-borne litter escaping from landfills is plastic with the majority of this being plastic bags.

Persistence and 'biodegradable' plastics

While plastic bags are only part of the total litter stream they have the potential to significantly add to the plastic load already present. This is due to the persistent nature of plastics and the fact they can fragment, with subsequent potential to significantly harm marine life.

All existing plastic bag legislation in Australia exempts biodegradable bags from the ban where they meet the Australian Standard for compostability. However, while there has been considerable research into biodegradable plastics studies have shown there is no significant difference between standard and 'biodegradable' plastics in the way these plastics behave when ingested. These studies suggest that biodegradable plastics bags do not break down any faster when ingested than a 'normal' petrochemical plastic bag.

For food scrap recycling purposes, compostable biodegradable bags are becoming increasingly useful. However, as shopping bag, single-use biodegradable bags and oxo-degradable plastic bags are not considered to be a suitable substitute for conventional HDPE plastic bags. Oxo-degradable bags in particular fragment into small plastic pieces or powder residue, adding more plastic load to the environment.

Plastic bags and consumer behaviour

In 2002 a Nolan ITU Report *Plastic Shopping Bags: Analysis of Levies and Environmental Impacts* stated:

'The production of 6.9 billion plastic shopping bags consumes approximately 36,850 tonnes of plastic, or 2% of total plastics produced in Australia each year. This is a small percentage of the total amount of packaging consumed in Australia each year, which is estimated to be around 3 million tonnes. It has been estimated that plastic shopping bags make up 2% of all items in the litter stream, however, they pose real ecological impacts and hazards and as such need to be effectively addressed along with other components of the litter stream.'

Six billion of the estimated 6.9 billion bags were lightweight plastic shopping bags. The report went on to identify that:

'Plastic bag litter is not actually coming from the supermarket retail sector but predominately from away-from-home destinations and retail such as convenience stores and takeaway food outlets. While these bags make up a relatively small number in plastic bag consumption, they contribute a relatively high number to the litter issue. These outlet operators did not by and large participate in or support the ARA Code.'

A 2014 CSIRO report *Understanding the effects of marine debris on wildlife* identified general consumer behaviour and illegal dumping as the main factors contributing to the release of plastic litter into the ocean. The report also suggested that local education campaigns may help to reduce the amount of plastic debris found in coastal areas.

Data on the number of plastic bags used in Australia is difficult to obtain. In 2002, an estimated 6.9 billion plastic bags were used in Australia each year. Six billion of these were lightweight bags with the remainder being heavier-weight, department store bags. Plastic bags are Australia's highest volume of add-on packaging and the use of plastic bags has become habitual.

The service life of the single-use plastic bag is relatively short. The majority of lightweight bags are reused as bin liners or as secondary wrapping/carry bags for other items. Most of these bags will ultimately end up in landfill where they present a problem both as a wasted resource and as a potential litter management issue. Each year more than three billion bags—or around 20,000 tonnes of plastic (or equivalent to 12 family cars)—are disposed of in landfills throughout Australia.

Supplying plastic bags costs Australian retailers millions of dollars annually. This price is built into product costs, however, plastic bags are perceived by customers to be 'free of charge'. This cost applies to all consumers regardless of whether they bring reusable bags or not.

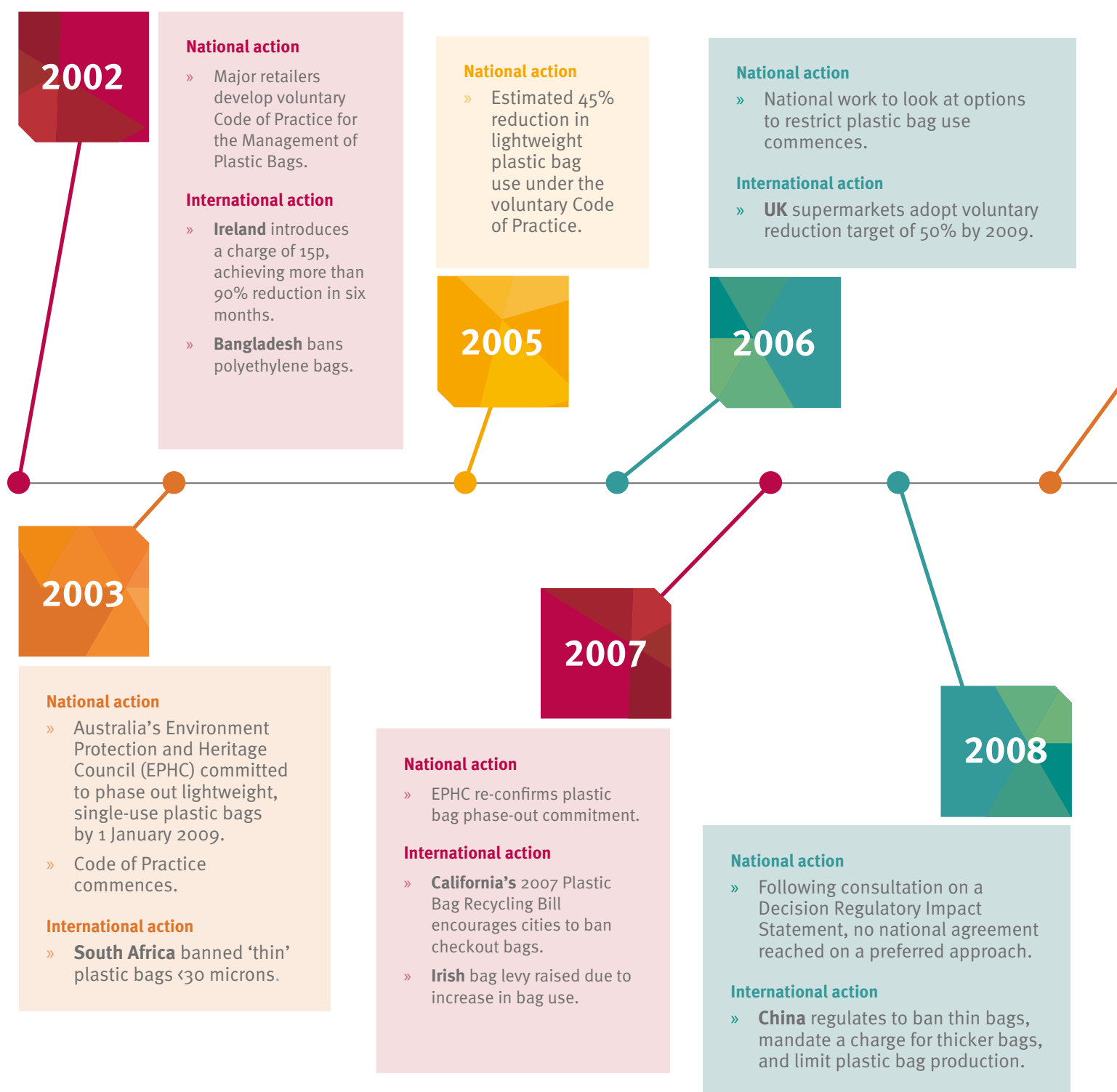
The cost to government, principally local governments and transport departments, of cleaning up plastic bags and other types of litter is borne by the community through rates and taxes, but is not a visible cost to consumers.

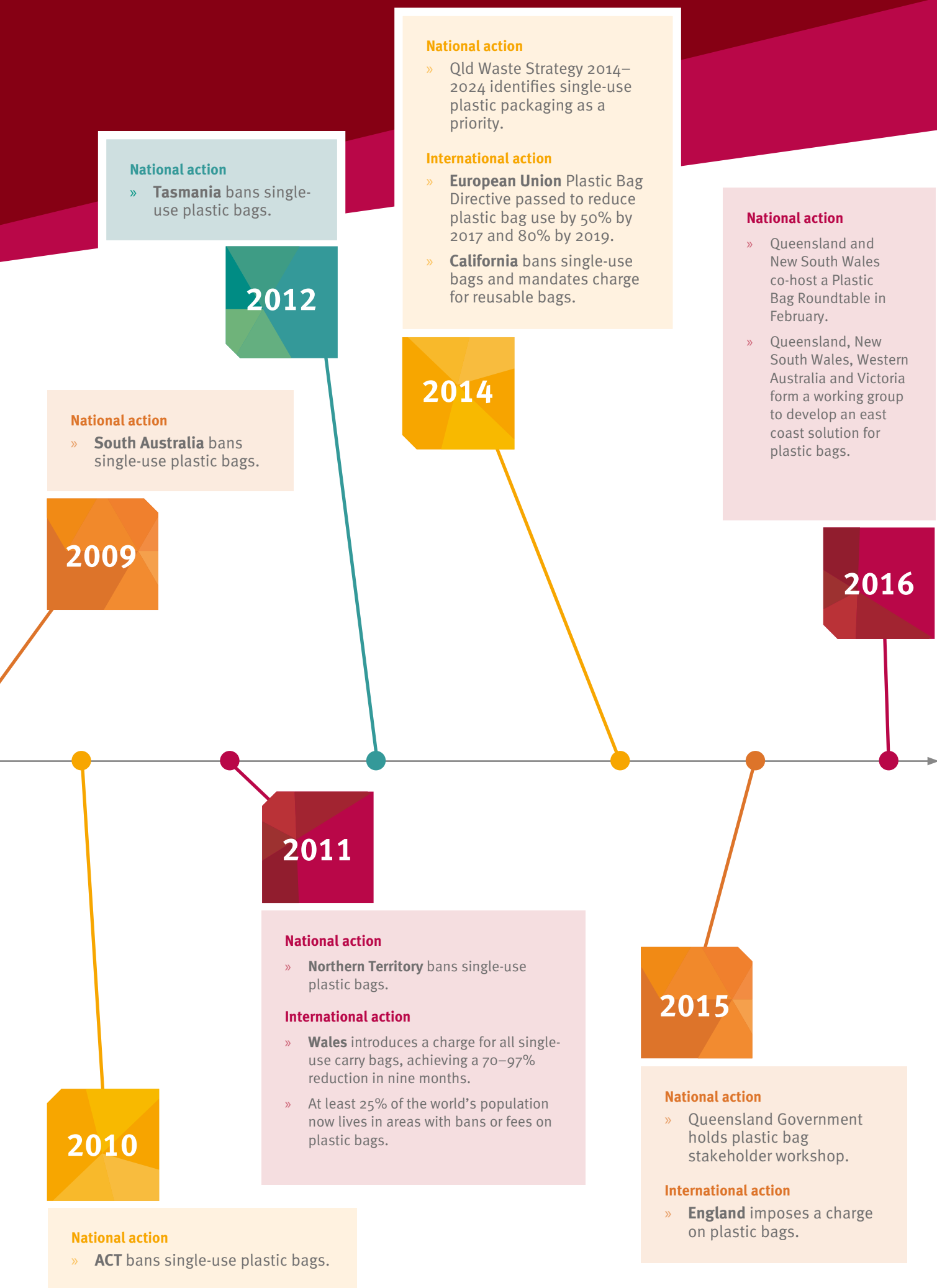
Replacing HDPE plastic bags with biodegradable bags may also send the wrong message to the consumer. If people believe that the bags will biodegrade quickly then it may not be seen as that much of a problem if it is littered.



National and international responses

It is not just Queenslanders who are concerned about plastic pollution and plastic bags in the environment. Governments elsewhere in Australia and around the world have taken action to reduce plastic bag pollution. This provides an opportunity to learn from the experiences in other places and select the best features of these policies that are most suited to Queensland.







International action

More than 30 countries and 18 states in the USA have some form of voluntary or regulatory approach to restricting the use of single-use plastic bags. The most common regulatory approach is a direct point-of-sale charge on plastic bags. However no one intervention has been used exclusively—voluntary measures, bans and charges have been introduced at various points with a mix of actions often implemented.

There have been various drivers for this action. In Bangladesh there was a need to prevent plastic litter entering drains which had been found to contribute to the severity of flooding. In South Africa, plastic bags became known as 'the flower of South Africa' due to their prevalence in the environment and there was a need to reduce the aesthetic impact of plastic bags.

In many countries, new industries in reusable bags have been established, creating jobs in some of the poorer areas of the country.



National action on plastic bags

In 2003, Australia's Environment Protection and Heritage Council committed to phase out lightweight, single-use plastic bags by 1 January 2009. It reaffirmed this commitment in June 2007.

Consultation on a Regulatory Impact Statement in 2007 indicated that while retailers expressed concern over any regulation, they did state that any option needed to allow them to continue to provide their customers with a choice. In light of all the considerations, the most appropriate option at the time was considered to be the introduction of a mandatory charge on the supply of a plastic bag by a retailer.

Following the release of a Decision Regulatory Impact Statement in 2008, no national agreement was reached as some states supported a ban while others preferred a Commonwealth charge.



Business and voluntary responses

Voluntary retailer Code of Practice

Between 2003 and 2005, major supermarkets reduced the use of lightweight plastic shopping bags by around 44% under a Voluntary Code of Practice for the Management of Plastic Bags.

During this time, numbers fell from close to six billion in 2002 to around 3.4 billion in 2006.

However, by 2007 numbers had started to increase once again.

In 2008, the Australian National Retailers' Association conducted a trial levy of 10 cent per plastic bag at Coles and Woolworths Supermarkets and IGA retailers in Narre Warren, Wangaratta and Warrnambool in Victoria. The trial was approved by the Australian Competition and Consumer Commission. During the four weeks of the trial there was a 79% reduction in plastic bag use at these supermarkets and the funds raised were channelled into environmental projects.

Several towns across Australia have introduced voluntary bans on the use of plastic bags. In 2003, Coles Bay in Tasmania became the first Australian town to introduce a voluntary plastic bag ban. In November 2012, Woorabinda Shire Council in Central Queensland became the first local government area to introduce a plastic bag ban to reduce the amount of litter in the community.

A number of retailers, including Bunnings, IKEA, Aldi and Super Retail's BCF and Supercheap Auto stores, has also voluntarily stopped using single-use plastic bags. Target phased out 'free' plastic bags in 2009, instead charging for heavier bags based on size. However, they reintroduced the lightweight bag in 2013.

Retailer case study: Bunnings

In September 2003, Bunnings became the first major retailer to impose a charge on plastic bags in their stores. In a joint initiative with Keep Australia Beautiful (KAB), Bunnings added a 10 cent levy to disposable plastic bags distributed in its stores throughout the country.

This action achieved an 80% reduction rate by the end of 2003 and raised around \$180,000 for KAB.

In 2008 single-use plastic bags were removed altogether from Bunnings stores as plastic bag use had reduced by 99% over the five years since the introduction of the charge.

Community case study: Coles Bay

In April 2003, Coles Bay retailers decided to reduce the number of plastic bags used in the area and stopped supplying them to customers.

Instead they introduced ecologically sensitive alternatives including Australian-made recycled paper bags and reusable calico shopping bags.

In the first 12 months, they stopped the use of 350,000 plastic checkout bags.

The Tasmanian Government moved to ban plastic bags 10 years later and promotes Coles Bay as Australia's first 'plastic bag-free town'.



Jurisdictional action on plastic bags

As a result of failure to reach national agreement on action, and following a steady increase in the use of plastic bags after the end of the voluntary Code of Practice, two states and two territories have banned the supply of lightweight single-use plastic shopping bags.

In 2008, the South Australian Government became the first Australian state to introduce legislation that banned the supply of single-use lightweight plastic shopping bags. Legislation banning the use of plastic shopping bags has now been enacted in the Northern Territory, Australian Capital Territory and Tasmania (Table 1).

At a late 2015 Meeting of Environment Ministers, Ministers agreed that Queensland and New South Wales would co-convene a ministerial roundtable to inform a harmonised approach to reducing the environmental impact of plastic shopping bags. At the plastic bag roundtable held in February 2016, stakeholders examined the scientific evidence, the experiences of jurisdictions that have banned plastic bags, and next steps for government. Queensland, New South Wales, Victoria and Western Australian formed a working group to guide discussion on the development of a joint solution to reducing the impact of plastic bags on the environment.

Table 1: Summary of regulated plastic shopping bag bans in Australia

	Date of ban	Coverage	Exemptions	Applies to all retailers	Results
South Australia	2009	<35 micron plastic bags	Biodegradable bags	Yes	Reports of reduction of almost 400 million plastic bags per year, and substantial reduction in shopping bag litter.
Northern Territory	2010	<35 micron plastic bags	Biodegradable bags	Yes	Review in 2014 claimed annual reduction of 31 million banned bags.
ACT	2011	<35 micron plastic bags	Biodegradable bags	Yes	Review in 2014 indicated amount of landfilled plastic bag waste decreased by one-third.
Tasmania	2013	<35 micron plastic bags	Biodegradable bags	Yes	Reduction in shopping bag litter.

Australian case study: Australian Capital Territory plastic bag ban

The Australian Capital Territory brought in a ban on lightweight single-use shopping bags in November 2011. A survey of consumers and grocers in 2012 found that:

- » Most primary shoppers (84%) reported taking reusable bags always or most of the time.
- » The majority of shoppers (58%) supported the ban, with support strongest amongst younger age groups.
- » Most shoppers (73%) did not feel they had to plan their shopping trips as a result of the ban, with 85% more likely to bring their own reusable bags.
- » Most shoppers (69%) did not want to see the ban extended to cover all plastic bags.
- » Two-thirds of shoppers would like the ban to be implemented nationally.

A review of the ban in 2014 found it had reduced the plastic bag material going to landfill and had been successful in reducing the incidence of plastic bags as litter.

Developing a Queensland Government response

Queensland policy context

In 2015, the Queensland Government committed to investigate possible restrictions on single-use plastic bags. Single-use plastic bags represent the most obvious packaging item that needs to be addressed and the item where the options to restrict use are known and demonstrable.

Beverage containers are another highly littered item, and are increasingly made of plastic. The Queensland Government is introducing a container deposit scheme, in order to prevent littering and improve recycling rates.

These two initiatives are part of an overall plastic pollution reduction plan for Queensland aimed at reducing the amount of plastic entering the environment.

It is acknowledged that plastic is a bigger issue than bags and bottles and that the end-of-life management of other problematic plastic items will need to be investigated in the future; however action on these two issues provides a starting place for future work.

Marine debris is recognised as a threat to the Great Barrier Reef in the Reef 2050 Long-Term Sustainability Plan. The Great Barrier Reef Marine Park Authority five-yearly Outlook Report identifies land-based run-off, including marine debris, as one of the four highest risks to the Reef's ecosystem. Based on these findings, the Reef 2050 Long-Term Sustainability Plan notes that marine debris continues to affect the Reef, including species of conservation concern.

Preliminary consultation on options for Queensland

The Queensland Government convened a plastic bag stakeholder workshop in October 2015 in Brisbane. The workshop involved representatives from the business and retail, resource recovery, environmental and local government sectors.

Workshop participants were asked to provide feedback on three options to improve the management of plastic bags:

- » voluntary reduction measures
- » banning plastic bags
- » requiring a charge for plastic bags.

The three broad options considered by workshop participants, and the advantages and disadvantages of each, are summarised at Appendix 1. More information on the consultation to date can be found on the Department of Environment and Heritage Protection website at www.ehp.qld.gov.au/waste.

Following the workshop, bilateral meetings were held with key stakeholders and written submissions on the options for managing plastic bags were received from workshop participants.

In February 2016, Queensland also co-hosted a Plastic Bag Roundtable with the New South Wales Government.

Feedback from consultation to date

Feedback from discussions at these forums indicated that consistency with other states is extremely important to industry.

Additional feedback indicated that:

- » The retail sector prefers voluntary measures, but agrees that any government regulation should be consistent with other jurisdictions and apply to all retailers who distribute single-use, lightweight plastic shopping bags.
- » If regulation is introduced, the retail sector favours a ban on the supply of lightweight plastic bags, rather than a charge.
- » There is no support for exempting degradable or biodegradable bags from a ban, due to concerns over their environmental impact.
- » There is consensus in the environment sector for measures to also restrict the use of other plastic bags, principally heavier-weight department store bags.
- » All stakeholders agreed on the need for an effective communication and education program to support any regulation, and a lengthy transition period to allow the retail sector and consumers to make preparations.

The way forward for Queensland

Based on the preliminary consultation and the feedback received to date, a lightweight plastic bag charge is not being considered. The Queensland Government's preferred approach is to:

- » ban the supply of single-use, lightweight plastic bags (with no exemption for biodegradable bags), and
- » work with retailers on voluntary actions to reduce the use of heavier-weight department store bags.

The main advantages of a ban are ease of administration, simplicity for retailers and customers, certainty of environmental outcome (including over time), and consistency with other jurisdictions that have implemented bag bans.

International and national experience indicates that in banning plastic bags consideration needs to be given to:

- » Clear description of the banned bags including specification of thickness and material.
- » Exemptions from the ban, such as for biodegradable bags.
- » Suitable alternatives to replace the banned bags.
- » Type of retailers the ban applies to (e.g. large supermarkets only, or all retail outlets including convenience stores, take-away restaurants, and non-grocery retailers such as chemists).
- » The use of complementary reduction measures for thicker bags or bags made out of other materials.
- » Careful planning, and extensive education and awareness campaigns to assist retailers and consumers prepare for the transition to the ban regime.



Inclusion of biodegradable plastic shopping bags

Those Australian states and territories that have legislated to restrict plastic bags have all allowed 'biodegradable' bags to continue to be used if they comply with the Australian Standard for biodegradable plastics suitable for composting.

Increasingly, plastic packaging products carry 'environmentally-friendly' labelling such as degradable, biodegradable, oxo-degradable or compostable. These competing claims are confusing for retailers and consumers alike. Retailers in jurisdictions with plastic bag bans have experienced difficulty sourcing genuine Australian Standard compliant biodegradable products.

In addition, these products do not avoid some of the most concerning environmental impacts. As litter, prior to totally breaking down, they are just as much an eyesore as the non-degradable bags.

Petrochemical-based oxo or hydro-degradable bags that break down into tiny pieces of microplastic can actually spread contamination in the environment. This is now a growing concern in overseas countries which have seen a proliferation of degradable bags.

Even fully biodegradable or compostable plastics can still have the same physical impacts as conventional plastics when they are eaten by animals. Plastics that comply with the Australian Standard are only biodegradable under commercial composting conditions that do not exist generally in the environment. Research shows these plastics do not break down quickly when ingested by animals.

Biodegradable plastics can also contaminate loads of plastic collected for recycling. They are not easy to identify or separate out and can end up causing faults in products manufactured with recycled plastics.

Some of the most recent international laws on controlling plastic bags have not exempted biodegradable bags. The UK Department for Environment, *Food and Rural Affairs 2015 Review of standards for biodegradable plastic carrier bags* found that:

'It is not currently possible to assemble a standard specification that would ensure that plastic bags claiming to be biodegradable would biodegrade in all environments, in particular in the open environment.'

The review found that further detailed research would be needed before any types of carrier bag could be excluded from the charge on the grounds of biodegradability.



Voluntary reduction measures

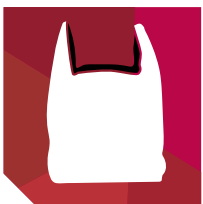
There are a number of voluntary mechanisms that can help reduce the use of plastic bags. A number of towns and communities, and individual retailers, have taken their own voluntary action to ban plastic bags.

Industry's preference is for voluntary measures. However, while some large businesses have already adopted voluntary measures, others have not.

Rising numbers of shopping bags following the end in 2005 of the Code of Practice showed the effect of this voluntary initiative wearing off and indicates that ongoing action is needed to have a lasting impact. As not all retailers took part in the voluntary Code, some retailers were affected more than others.

Previous voluntary programs have focused on lightweight bags. However, given that heavier-weight plastic 'department store' bags also pose a littering risk and environmental hazard, there is an opportunity to begin a new voluntary process partnering with department stores and other retailers to phase out heavier-weight single-use plastic bags.

These heavier-weight plastic bags are lower in numbers than lightweight supermarket bags and so present in the litter stream at a lower rate. There may be a risk that acting to restrict lightweight plastic supermarket bags would lead to an increase in the number of heavier-weight bags in the environment. As plastic department store bags can readily be replaced by non-plastic alternatives, voluntary measures are likely to be an effective way to reduce their usage. There are already numerous examples of shops moving from heavier-weight LDPE plastic department store bags to cardboard or reusable alternatives.



Research

The Queensland Government intends to facilitate further research to collect detailed baseline data on plastic bag use, plastic bag litter and environmental impacts. This will help to understand the effects of the interventions—both regulatory and voluntary—that are put in place, and assist with the evaluation of the interventions.

What will a plastic bag ban in Queensland look like?

The intention is to introduce a regulation that prohibits any retailer in Queensland from providing consumers with single-use lightweight plastic shopping bags.

To ensure consistency for the retail sector, Queensland is seeking to adopt a similar law to South Australia, the Australian Capital Territory, Tasmania and the Northern Territory.

However, unlike other jurisdictions, biodegradable bags would be included in the ban in Queensland, as these bags still pose a risk to aquatic fauna such as turtles.

The ban will apply to the following bags:

- » lightweight bags, less than 35 microns thick, with handles ('singlet' bags)—consistent with other states
- » biodegradable singlet-style bags.

The regulation will apply to all retailers—including supermarkets, convenience stores, take-away food stores, pharmacies, liquor stores, and other retail businesses.

The ban will not apply to the following bags:

- » barrier bags (typically fruit and vegetable and deli-style bags without handles)
- » reusable bags
- » heavier-weight department store bags
- » bags that are integral to a product's packaging (such as a bread bag)
- » kitchen tidy bags.

Surveys in other jurisdictions show that householders and retailers quickly adjust to a plastic bag ban and that there is a high degree of support for the environmental objective of reducing plastic litter.

What would a ban mean for consumers?

Consumers would no longer be able to obtain lightweight plastic shopping bags at supermarkets, convenience stores, service stations and other retail outlets.

Reusable bags would still be available, or consumers could bring their own bags.

A ban will mean that the so-called 'free' plastic bag is no longer available to the consumer. The single-use plastic bag is currently not free to the consumer. The cost of a bag is incorporated into the price of goods purchased. While a ban may mean that the consumer will have to purchase reusable bags, this should usually be a one-off cost.

What would a ban mean for retail businesses?

Retailers would be prohibited by legislation from supplying single-use lightweight shopping bags made from any kind of plastic, and fines would apply.

Any ban would only come into effect after extensive consultation and preparation, with sufficient lead time to allow retailers and consumers to adjust to the change.

What might the voluntary approach for heavy weight bags look like?

The Queensland Government will lead a national initiative on behalf of all jurisdictions to work with department store retailers on voluntary measures to reduce the use of the heavier weight bags.

At the same time the Queensland Government will work with department stores to implement voluntary actions to reduce the supply of the heavier single-use plastic bags.

This may take the form of a Code of Practice similar to that implemented by major supermarkets in 2003; however, the government is interested in hearing about the available actions that have been and could be developed. A number of stores have already voluntarily stopped using plastic bags and the government wants to build on these approaches.

Key dates

25 November 2016	Release of discussion paper 'Implementing a lightweight plastic shopping bag ban in Queensland'
27 February 2017	Close of public consultation on discussion paper
Early 2017	Development of legislation for lightweight plastic bag ban Commence consultation with retail sector on voluntary measures to reduce the numbers of heavier-weight department store plastic bags
Mid-2017	Introduction of legislation to ban lightweight shopping bags Development of measures for heavier-weight plastic bags
Mid-2017 to end-2017	Preparation for ban on lightweight bags, including education and training for retailers and consumers
1 July 2018	The ban on lightweight shopping bags comes into force



Have your say

Your feedback on how the government should go about implementing a plastic bag ban is sought. The government is also interested in your views on voluntary measures that could be introduced to reduce the use of the heavier department store plastic bags.

A carefully-planned transition period is required before the ban comes into force on 1 July 2018. This transitional period will mean that:

- » retailers will have time to adjust their operations and practices and source alternatives to plastic bags
- » consumers will have time to purchase reusable bags and know when they will no longer be provided with a single-use plastic bag
- » new business opportunities can be identified and developed
- » a public awareness program on the new arrangements can be delivered well before the changes take effect.

Consultation questions

What implementation issues should the government take into consideration when introducing the ban?

1. Do you think that 1 July 2018 allows enough time for consumers and retailers to transition to plastic bag alternatives? Why/why not?
2. Do you agree that biodegradable bags should be included in a ban? Why/why not?
3. Do you support the Queensland Government working with other states and territories to encourage industry to reduce the number of heavier-weight plastic department store bags? Why/why not?
4. What else can be done by the Queensland Government to address plastic pollution?

Make a submission

Submissions are encouraged from interested parties including members of the public, environment and community groups, local councils, and retailers and retail associations.

You can provide your feedback on the consultation questions by:

- » completing the online survey at www.getinvolved.qld.gov.au, or
- » emailing a written submission to waste.paper@ehp.qld.gov.au
- » posting a written submission to:
Department of Environment and Heritage Protection
ATTN: Waste Policy and Legislation
GPO Box 2454
Brisbane QLD 4001

Submissions close 5pm 27 February 2017.

Important note about confidentiality

In the interests of transparency and to promote informed discussion, the Department of Environment and Heritage Protection would prefer submissions to be made publicly available where this is reasonable to do so. However, if a person making a submission does not want that submission to be published publicly, that person should indicate that the document (or any part of the document) is confidential. Confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document (where applicable) can be published. In this circumstance, it would be appreciated if two versions of the submissions could be provided (i.e. the complete version and a version excising the confidential information).

While the Department of Environment and Heritage Protection will endeavour to identify and protect material claimed as confidential as well as exempt information and information disclosure which would be contrary to the public interest (within the meaning of the *Right to Information Act 2009*), it cannot guarantee that submissions will not be made publicly available. There is a possibility that the Department of Environment and Heritage Protection may be required to reveal confidential information as a result of a right to information request.



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Appendix 1

The following table summarises the main options for managing plastic bags and their relative advantages and disadvantages.

Table 2: Summary of advantages and disadvantages

Desired outcome	Voluntary reduction measures	Banning single-use plastic bags	Requiring a charge for plastic bags	Inclusion of single-use biodegradable bags in a ban or charge
Litter prevention	✓	✓ ✓ ✓	✓ ✓	✓ ✓
Resource conservation	✓	✓ ✓	✓ ✓	✓
Convenience (for consumers)	✓ ✓	✓	✓ ✓	✓
Consistency across states	✓	✓ ✓		
Equity (for business)		✓ ✓	✓	✓ ✓
Enforceability (for government)		✓ ✓	✓	✓ ✓ ✓

