# Waste Reduction and Recycling Amendment Bill 2017 – Submission to Parliament

Bulimba Electorate Youth Advisory Panel

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### Acknowledgements

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# Introduction

Plastic is a synthetic material which has an extensive and diverse range of applications. Plastic use and disposal has become normalised in day-to-day human activity as it is the primary material used in packaging, containers and retail carry bags. There are many benefits of these products at the individual scale, however, the costs, such as environmental externalities, are experienced at much larger scales beyond the individual (NSW EPA 2016). These costs are difficult to comprehend by the user as they are deflected spatially and temporally. This concept can be contextualised by considering a consumer purchasing groceries. The average consumer will only use their plastic carry bags for 12 minutes (NSW EPA 2016). After this, the bags are discarded and the cost of this waste is out of sight, out of mind. However, these bags will take hundreds of years to break down and will affect organism health at all scales, macro to micro, along the way (NSW EPA 2016).

The rate of plastic production and disposal is increasing world-wide. This is not a smart or sustainable dynamic as these are incredibly difficult to capture and break down. It is imminent that this issue will cumulate and compound, left to be dealt with by future generations. The following submission has been put forward by the Bulimba Electorate Youth Advisory Panel (BEYAP). This document reflects the values, attitudes and beliefs of 7 members aged 16 to 25. BEYAP recognises that Issues pertaining to plastic pollution demand urgent action. The Waste Reduction and Recycling Amendment Bill 2017 proposed by Hon Dr Steven Miles MP is the sort of action that is fundamental to curving this serious environmental issue. Queensland's environmental health, community well-being and economic development are three key areas of importance to BEYAP that have been chosen for deconstruction in this submission.

# Personal implications

Plastic pollution and the subsequent single use plastic bag ban has many implications for people at the individual scale. Stronger regulation, coupled with a tailored communication campaign encourages people to think about the life cycle of their waste and the urgency of environmental issues. This is a positive shift in attitudes and behaviours that is increase as the ban is put into action.

On the other hand, one of the key motivations for using plastic bags is the convenience of transporting goods. This individual cost will underpin resistance to the proposed amendment (NSW EPA 2016). People will feel uncomfortable not being able to rely on what they are used to, such as using single-use bags for bin liners and to transport difficult to carry goods. This argument does not consider the wider and more important externalities to the environment, community and economy.

# Implications to sustainability

#### **Economy**

Environmental economics is an effective tool in expressing the value of an environmental cost or benefit. Plastic pollution impacts Queensland's economy in a variety of ways. The key impact is to visual amenity which indirectly reduces revenue through Queensland's tourism industry. Tourism in the Great Barrier Reef (GBR) provides a 5 to 8 billion dollar boost to the economy each year. Pollution is a threat to this revenue. Furthermore, costs to clean up pristine areas like the GBR, beaches and rainforest are not manageable or sustainable.

Land value is also impacted by the visual amenity of an area. Plastic pollution is not desirable and thus could impact economic development and community wellbeing of complete regions. In both of these

examples clean-up costs are huge and not sustainable. A plastic ban targets the root cause of this pollution, saving and preventing costs of down-the-line band aid solutions.

#### **Environmental**

Plastic pollution has a profound effect on the environment, from ecosystem function to species survival. Queensland's environmental protection legislation forefronts the precautionary principle. However, each year there is new research highlighting the newfound impacts of plastics. Plastics can persist for hundreds of years, yet it is unsure exactly what this decomposition will be like outside of controlled experiments. Recent studies have suggested that much of this plastic pollution will be heated and compressed through time to form sedimentary rocks. The new discovery of and classification of plastiglomerate rocks support this trend (Corcoran, Moore & Jazvac 2013). It is reasonable to assume that there are many other environmental impacts that are currently unknown, therefore, persistent synthetics should be regulated more stringently, especially when produced and used in a matter of minutes.

Bio accumulation of plastic toxins is a significant environmental impact of plastic pollution. This occurs when plastics breakdown and their chemical's pass into the lipids of small organisms. Predators of these organisms concentrate these toxins. This will continue for hundreds of years as plastic breaks down and will magnify up the trophic levels. This will result in contaminated toxic marine life that pose health risks if consumed by humans. Furthermore, this can have many possible trophic cascade effects. Skewing the population of interacting species and regrading ecosystem function.

Plastic pollution can be explained by Hardin's Tragedy of the Commons (1968). This unrestrained self-interest humans exhibit to exploit plastic usage will result in sever degradation or destruction of natural resources (Hardin 1968). Research suggests that privatisation or government regulation are key solutions to this Tragedy (Hardin 1968). The proposed ban is key in addressing the environmental externalities of the plastic Tragedy.

# Recommendations

The Waste Reduction and Recycling Amendment Bill 2017 should be approved as a critical first step in transitioning norms and values towards more sustainable forms of living. It is recognised that this amendment, on its own, may have 'teething' issues if the general public are not supported in this transition. Ultimately it should be easy and convenient for members of the public to not use single use plastic bags and to recycle.

Communication campaigns should be used to inform and educate people of the issues around plastic waste. This must include substitutes for single use plastic bags. If this knowledge gap is not filled, companies and individuals may retract into their default method; using plastics.

A key consideration to the proposed ban is that some companies may find loopholes in the prescribed regulations in section 3A of the proposed bill. The definition of banned plastic shopping bags should be stated widely to encompass more types of plastic bags distributed by retailers, with subsequent regulatory powers to exempt or include certain types if considered necessary. If a ban is to be implemented, it ought to be comprehensive in order to achieve its purpose. A wider definition of banned plastic bags can only serve to further achieve the purpose of the Bill. This applies also to the distinction between the thickness of bags. The Explanatory

Note states, they should be included in the initial ban rather than providing for subsequent regulation should the risk of substitution be realised. Companies may be able to dodge these bans by changing the thinckness of single use bags outside of the specific threshold stipulated in the bill.

This bill does not provide for many enforcement mechanisms. It does not provide for effective oversight of the ban, save for a review in 2020. Sections 99E and 99D propose penalties be imposed on retailers who fail to comply with those sections, but do not provide for the creation of an oversight body to monitor compliance. If it is the public who is expected to report retailers for non-compliance, to whom are they supposed to report and how are they to know the difference between a 35 micron bag or otherwise? To ensure compliance following the implementation of the ban, a monitoring and enforcement body should be created. See for example, the South Australian Plastic Shopping Bags (Waste Avoidance) Act 2008. This Act is explicitly intended to be read in conjunction with the Environment Protection Act 1993, which established the Environmental Protection Authority. The EPA is responsible for compliance monitoring of the plastic bag ban.

Studies on the effects of plastic bag bans in other Australian jurisdictions have shown significant increases in the purchasing of bin liners following the bans. The environmental impact of this can negate the success of a ban, and shows that the ban doesn't necessarily change the attitudes of consumers towards plastic products. Effort should be made to simultaneously change the attitude towards waste disposal behaviour, or possibly to implement industry regulations regarding the environmental impact of bin liners.

Incentives are another tool that can promote reduced plastic usage. Examples of this could be Queensland Government publically acknowledging reductions in plastic usage or innovative solutions. This attaches a positive recognition system to people who go above and beyond expectations. Incentives can promotive intrinsic motivation to reduce plastics. This alleviates the demand for compliance audits and inspections. Furthermore, public acknowledgement creates a commercial advantage for companies. This form of incentive information regulation empowers the public to put pressure on poor performing companies.

The community must have assistive initiatives to transition after the ban is implemented. One such example could be allowing public to bring in their plastic bags to centralised areas. Every certain number of single use plastic bags they bring in they get a reusable non-plastic bag. Another approach could be to hold art shows themed at recycling. Arts illicit an emotional response whilst symbolising the value of recycling and re-using.

There are new innovations that have the potential to clean up plastic pollution in water bodies (ABC News 2015). A pair of Australian men have created an automated rubbish bin device called Seabins. This start-up company used crowd funding to develop this device (ABC News 2015). It is recommended that these innovations are supported by governments as they can make a significant impact on cleaning up water ways. A Queensland grants scheme would assist these programs so they don't fizzle trying to get crowd funding.

# Conclusion

Plastic is changing the planet at an alarming rate. These plastics find their way into the environment and can't be retrieved or broken down easily. These consequences will accumulate therefore the BEYAP recognise that now more than ever, we need to make sure we don't deflect problems for future populations to deal with. Queensland has pristine natural resources that attract people from all over the world. It is not just within the best interests of Queensland, but within the best interests of the world to impose relevant plastic bag bans.

The population of Queensland is growing rapidly. Therefore environmental issues will only be exacerbated. Furthermore, it cannot be expected for developing nations to impose plastic bag bans unless states like Queensland lead by example.

Queensland cannot afford to fall behind on this issue. Environmental Protection Authorities around the world have been imposing this ban. It's time Queensland gets on board or else it will fall behind and lose credibility. A legacy of a pristine rainforests and GBR is a better alternative to plastiglomerates, plastic islands and choking marine life.

# References

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