

Submission to the

**SA Turning the Tide on
Single-Use Plastic Products
*Discussion Paper***

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Appendix: Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging

What is the AIEN?

The Australian Industrial Ecology Network (AIEN) is a vibrant network of like-minded individuals, companies and institutions with a common interest in sustainable development through the study and practice of industrial ecology. We advocate the principles and concepts of industrial ecology in policy formation and business practice. The AIEN actively engages with organisations to facilitate improved performance and environmental benefits.

The AIEN is also a forum in which people can discuss ideas, seek advice from one another, connect with resources associated with the practice and study of industrial ecology or simply keep in touch through the network with developments and best practice in their areas of interest.

The AIEN was established as a proprietary limited company in October 2014 to promote and facilitate industrial sustainability through the application of industrial ecology. The company aims to provide a 'window on the world' of industrial ecology by relaying news, canvassing new ideas, producing 'position papers' on topics, such as energy from waste, organising events and alerting people to developments in academia and in practice. In effect, AIEN aspires to become the 'go-to' organisation for all things to do with industrial ecology, including collaboration on the design, planning and implementation of IE projects.

Introduction

Thank you for the opportunity to provide comment on the *Turning the Tide on Single-Use Plastic Products Discussion Paper*. We congratulate the Government of South Australia on the leadership it has consistently demonstrated in addressing many environmental issues including those related to packaging and resource reuse.

However, much remains to be achieved if Australia is to genuinely move toward the realisation of a circular economy through significantly improved resource utilisation. Key among individual materials to be addressed are the various plastics with “single-use” plastic products deserving of particular focus.

The AIEN published a communique in October 2018 entitled ‘*Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging*’. The document specifically addresses the broader question of plastics but its tenets are equally applicable to single use plastics where more sustainable reusable options are not readily available. Some of the commentary within this response to the *Turning the Tide on Single-Use Plastic Products Discussion Paper* reproduces elements of the ideas developed within the October 2018 AIEN communique. However, the AIEN requests the October 2018 communique be read in conjunction with this targeted response in order to ensure maximum clarity surrounds the communication of the positions being articulated.

Below we have provided a summary of our feedback in response to the Discussion Paper. We would be pleased to provide additional information or clarification of any points if required.

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Responses to questions raised in the discussion paper

1. Do you consider single-use plastic products are causing environmental problems?

There is absolutely no doubt regarding the environmental, social and health menace posed by many plastic products, specifically including those that would be rightly also classified as single-use plastic products. The indisputable adverse environmental consequences associated with single-use plastic products include:

- **Littering.** The establishing of a mind-set of items being considered as “disposable”. That mind-set needs to be reset to ensure what we purchase maintains a resource value throughout its life cycle. The Government of South Australia has clearly demonstrated a degree of leadership through its establishment and maintenance of its container deposit regime.
- **Marine and terrestrial pollution (other).** It’s called waste because it’s not wanted where it’s located and it has no identifiable positive commercial value. Leakage from the established waste/resource recovery systems and indeed the entire absence of waste/resource recovery systems (mainly in the developing world) are all inevitable outcomes where a resource is considered valueless. We are coming to an increased understanding of the impacts of this on animal life and the entire food chain.
- **The increased GHG and resource footprints associated with the production of virgin plastic materials.** Various LCA analyses have shown the carbon footprint of single-use plastic items reporting to landfill is roughly 20 times the carbon footprint associated with manufacturing those same products using available plastic recycling technologies.

2. What do you consider to be the most important problem associated with single-use plastic products that needs to be addressed?

The most acute problem we collectively confront is the pollution being experienced as a consequence of our utilisation of plastics including single-use plastics. Plastics in general and single-use plastics in particular, inevitably result in pollution as a result of:

- Leakage/loss from material/resource management systems; and
- The almost total absence of material/resource management systems in many developing countries where plastics and single-use plastics are utilised.

The fundamental problem is the ‘value’ of the spent resource is less than the cost associated with collection, separation, shredding, washing, drying, granulation, etc, etc.

In part, we can collectively address this issue with bans on various applications for plastics. But realistically, the health security and convenience advantages (eg for maintaining food freshness) will always result in the utilisation of plastics and single-use plastic items.

The utilisation of single-use plastics must be minimised and the design of products must facilitate disassembly and separation/segregation of components. There is much to be achieved/improved upon in addressing these issues. However, lower cost recycling options are inevitably required because collectively, we simply will not forgo the health advantages and convenience of plastics.

To solve the most pressing pollution/litter issue, inevitably value adding recycling options must be developed. If the introduction of consumer deposit legislation teaches us nothing else, pollution and littering will be reduced where the waste plastics are assigned a 'value'.

Plastic bags

3. What are your views on extending South Australia's ban on lightweight single-use shopping bags to include thicker plastic bags? What would be the consequences of such action for community, businesses and the environment?

The answer to 2. above already summarises the AIEN position. A reduction in the rate of pollution/littering can be achieved through reduced consumption of plastic bags (and other single-use plastic items). People may also be able to feel good about taking action but the real question is whether those actions have the desired effect in terms of outcomes and scale.

Banning plastic bags alone will not achieve the outcome required. We must certainly avoid using plastics and single-use plastics where possible. However, to minimise pollution/littering a value must be applied to the plastics after their initial use. Ideally that value will be achieved through the development of products, markets and technologies that 'value add' what is currently and generally without value. See the attached AIEN communique from October 2018 entitled '*Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging*'.

4. Should all checkout bags and produce bags (i.e. for grocery items) be made from compostable (Australian Standard 4736-2006) material? What would the impacts be for retailers, consumers and industry? Would there be demand and flow-on benefits in establishing new industry to produce compostable bags here in SA?

Designing for oblivion is not considered the best option when considering:

- Minimising our environmental footprint in terms of GHG inventories; and
- The desirability of achieving the highest net resource value (HNRV) (see definition in attached AIEN communique from October 2018 entitled '*Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging*'). Maximising the HNRV minimises the environmental, social and economic impacts of consumption.

If bio degradable plastics are the **only** means of avoiding pollution, they deserve to be supported. However, the AIEN is supportive of the development of products, markets and technologies that 'value add' whereby the inherent value of the plastic's properties is utilised again and again. It is considered such value adding technologies exist and the pursuit of these options should be given preference.

5. What do you do with biodegradable, degradable or compostable bags once you have finished using them? What do you think about the idea of banning lightweight single-use shopping bags even those made from biodegradable, degradable or compostable substances, as has been proposed in other Australian jurisdictions?

If bio degradable plastics are the **only** means of avoiding pollution, they deserve to be supported. However, the AIEN is supportive of the development of products, markets and technologies that 'value add' whereby the inherent value of the plastic's properties is utilised again and again. It is considered such value adding technologies exist and the pursuit of these options should be given preference. This prioritisation applies to South Australia as much as it does to any other jurisdiction.

Straws, coffee cups and other items

6. Do you think South Australia should introduce measures to address items such as single-use plastic straws and plastic-lined takeaway coffee cups? What other single-use plastic items or single-use products would you like to be considered for possible government intervention?

The utilisation of single-use plastics must be minimised and the design of products must facilitate disassembly and separation/segregation of components. There is much to be achieved/improved upon in addressing these issues. However, lower cost recycling options are inevitably required because collectively, we simply will not forgo the health advantages and convenience of plastics.

Banning plastic straws and plastic lined coffee cups will not ultimately achieve the outcome required. We must certainly avoid using plastics and single-use plastics where possible. However, to minimise pollution/littering a value must be applied to the plastics after their initial use. Ideally that value will be achieved through the development of products, markets and technologies that 'value add' what is currently and generally without value.

Excluded items

7. What are your views on the list of items excluded (see page 30) and do you think there are others that do not require additional action or should be exempt from possible government intervention, and why? Are there exclusions that should be included? Why?

The best thing the government could do is address the issues where market failure will stop/inhibit the development/emergence of a circular economy. This includes clear, unequivocal education messaging.

See the attached AIEN communique from October 2018 entitled '*Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging*'. The communique highlights the most beneficial points for government intervention in moving toward a circular economy. The communique particularly focusses on those intervention points with specific reference to issues surrounding plastics and plastic packaging.

Labelling

8. Do you think that labelling describing how to recycle or dispose of a product, or parts of the product is helpful to consumers? For which products would better product labelling enable better disposal?

Consumers require information that is clear, concise and unambiguous. The systems and messages conveyed must be as consistent as is possible to ensure the messages do not become mixed-up and corrupted over time due to population mobility overlaying differences between the various jurisdictions. The AIEN calls on all Governments to get uniform systems and labelling working on a national basis.

With regard to information about product recycled content, Recommendation #2 within Key Area 4 – *End markets and Procurement* within the attached AIEN communique recommends: *"The Australian Government introduces a mandatory labelling scheme for recycled content in packaging."*

This requirement for increased information is equally applicable to the education of consumers regarding how and where to recycle various purchased products and packaging items.

However, as emphasised within the communique, we must work at all of the key areas in the closing the Circular Economy and should not continue to place the onus on consumers to comply with rules and protocols for separation, segregation and aggregation alone. Implementing such practices is of little benefit if appropriate attention is not paid to:

- Product and packaging design (Key Area 1 in attached communique);
- Collection and segregation (Key Area 2 in attached communique);
- Reprocessing with emphasis on local capacity (Key Area 3 in attached communique); and
- End markets and procurement (Key Area 4 in attached communique).

The AIEN urges both Government and Industry to give appropriate emphasis to all of these key areas.

Business, retailers, manufacturers and importers

9. If you are a South Australian based manufacturer or importer of any of the single-use plastic products mentioned in this discussion paper, what are your views on this topic? Do you have access to alternatives? Are there cost impacts that need to be considered as part of this discussion?

NA

10. If you are a retailer or business that sells, offers or provides single-use plastic products mentioned in this discussion paper, what are your views on this topic?

NA

Community

11. As a consumer of single-use plastic products mentioned in this discussion paper, what are your concerns? What would you like to see done to address the problem(s) or concern(s)?

The unequivocal messages of the AIEN are summarised in the attached October 2018 communique.

12. Do you think government intervention is required in relation to single-use plastic products or other single-use items? If so, what type and in what timeframe?

The unequivocal messages of the AIEN with respect to appropriate areas for government intervention, are also summarised in the attached October 2018 communique.

13. Do you think that restricting the sale or supply of some single-use plastic or other single-use products for which there are more sustainable alternatives available is a good idea?

Absolutely. We should always actively support more sustainable alternatives.

The AIEN seeks to look beyond incremental improvements in sustainability such as restrictions and bans on narrow ranges of products each contributing only slightly to the much wider problem. (The AIEN invites Government and Industry to adopt a similar position.)

Rather, the AIEN is focussed on the most sustainable end position for plastics and all other components of the 'waste' stream. The most sustainable end point is defined as approaching (to the maximum extent possible) a true circular economy in the management of all resources. All goods and/or services being reused/recycled to the maximum extent and in turn being able to be reused and recycled to the maximum extent possible.

The concept of striving to maintain the highest net resource value (HNRV) encompasses this. (see attached AIEN communique from October 2018 entitled '*Accelerating the Transition to a Circular Economy: A Blueprint for Action on Plastics and Packaging*', page 3.)