

Submission to the

***ACT - Phasing out single-use plastics
Discussion Paper***

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Attached: October 2018 AIEN Communique '*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.

Industrial Ecology (IE) and Sustainability

The overarching aim of IE is the sustainability of economically developed and developing societies. Theoretical IE is concerned with the principles, concepts and techniques for analysis that help us understand the myriad interactions between humans and the natural environment. It is axiomatic that for human existence to be sustainable, human activities must be compatible with environmental sustainability. If we wipe out the species on which we depend for survival or destroy their habitat or render unviable the natural resources that support our way of life, then our species will not be sustainable.

Sustainable development is the route to achieving sustainability, essentially by bringing about intended changes in human behaviour. That is the focus of IE in practice and arguably its ultimate objective. If IE is not applied in practice, and particularly with stakeholder 'license to operate', sustainable development has no chance of happening either.

Introduction

Thank you for the opportunity to provide comment on the *Phasing out single-use plastics* discussion paper. The AIEN congratulates the Government of the ACT 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 *Phasing out single-use plastics* 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 agree with the consumer single-use plastic items listed on page 21 being considered as part of this paper? If so, which items do you think are the most important to address (e.g. plastic bags, straws, cutlery, disposable coffee cups, takeaway containers)?

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.
- 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.

The AIEN is not philosophically opposed to bans being placed on any/all of the items listed on page 21 of the discussion paper. However, if the ACT Government focusses solely upon introducing bans, consultation regarding bans and the politics of introducing bans, the potential for demonstrating national leadership in introducing circular economy principles will be lost.

The balance of this submission will be to encourage the ACT Government to examine the issues around single-use plastics within the context of addressing the issue of plastics holistically. It is a holistic approach to introducing a circular economy for plastics that will solve the broader issue of plastic pollution. With the broader issues being addressed, decisions regarding the phasing out of individual single-use plastic items can be made without those decisions being considered as “all or nothing” decisions by ban proponents in particular. Once genuine plastic recycling options are introduced and products are being produced from that recycled content, the focus increasingly shifts to the question of human/consumer behaviours and the appropriateness/necessity of bans assessed in this context.

Responses to questions raised in the discussion paper

2. What regulatory or other approaches do you support to address consumer single-use plastic in the ACT? When do you think action is needed, and why? and

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'.

In assessing the "waste" model largely in operation within Australia to this point, it must be accepted the model (driven by supply push) exists simply because there is more "waste" supply, than there is demand for those materials as a resource. The consequence of resource oversupply (be it components of the waste stream or anything else) is a fall in value. In fact, in its extreme, oversupply could mean the resource in question has a negative value with owners required to pay to relieve themselves of the excess resource. This situation characterises the model we have collectively built around "waste". The only way out of the above described nexus is to implement policies to establish (or re-establish) value in relation to the resource in question.

The transition to a circular economy must successfully navigate the society from the existing "waste" sector, driven by gate fees to a quality assured "recyclate" manufacturing sector, making virgin replacement raw materials that the brands can absolutely rely on for quality and reliability of supply. All of this must additionally be based upon recycled material values remaining competitive relative to virgin raw material equivalents. This transition will require careful management to ensure the endeavours of all participants are fully co-ordinated. The ACT Government has the opportunity to appropriately marshal all participants (including the brands) at the highest level. The AIEN believes government policy must be directed to all key participant groups in order to realise the circular economy we seek.

Responses to questions raised in the discussion paper

Questions 3 to 7

Although each of these questions is of genuine interest to the AIEN, the responses sought by the ACT Government should rightly be answered by the respective business and resident interest groups

Responses to questions raised in the discussion paper

8. What else do you think needs to be considered as part of this discussion?

The ACT Government is a signatory to the National Waste Policy which includes a target for 30% recycling (into products!!!) of all recovered resources by 2030. This include 30% recovered content in ACT Government purchases by 2030. Investigating how this commitment can rapidly be actioned would be of considerable benefit in moving toward a circular economy.

Government spending in the ACT (over \$7.8 B in 2018) represents almost 20% of the entire Territory's Gross Regional Product (approx. \$40 B in 2018) according to the Economic Development Australia website. In terms of market development, commanding that amount of purchasing power should allow for the mandating of certain goods to be procured only from recycled content. To do less is to forego a position of leadership the ACT Government could easily occupy. There are many examples of SMEs in the resource recovery sector taking surplus resources from Corporate Australia on the proviso they purchase, or cause to be purchased an equivalent tonnage of their products made from the recycled content. It is exactly this type of market support that will grow a Circular Economy and the ACT Government is encouraged to genuinely deliver on the possibilities available.

The deals are set up as follows:

1. The large corporate (or Government Agency) provides information regarding the specifications and price points for various products they could procure in exchange for the SME guaranteeing to take a certain quantity of "excess resource" for each unit of product.
2. The SME commits to a specification and production level to satisfy the large corporate (or Government Agency) at an agreed price. That guarantees the SME market volume, eliminates the cost of waste disposal for the large corporate (or Government Agency), creates really interesting tight examples of the Circular Economy in action and the large corporate (or Government Agency) still obtains the goods it was required to procure at a market competitive rate.

Everyone wins in such a scenario and most critically, the developing SME with the innovative technology or product manufacturing process receives the necessary product market support.

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.)