



29/6/18

The Director  
Environment Standards Division  
Stewardship and Waste Section  
Department of the Environment and Energy

**Re: Port Phillip EcoCentre submission to Product Stewardship Act Review**

Dear Director, Environment Standards Division,

Port Phillip EcoCentre is a not-for-profit organisation with a strong focus on empowering local communities to engage in environmental stewardship where they live. Consequently, the **Product Stewardship Act review** is of particular relevance to our organisational mission and we welcome this opportunity to contribute. We apply an evidence-based approach to our work and conduct a range of citizen science programs to monitor and record plastic in the environment.

We are concerned that **Terms of Reference for the Review** do not provide for addressing products that are increasingly identified as having detrimental impacts on the environment and on human health and safety. Specifically, we wish to draw attention to increasing international and local evidence of the environmental and human health impacts of plastic pollution.

**Recommendation 1.** Create a regular process to review arising concerns based on emerging evidence regarding material type, manufacturing or disposal process, in addition to product-specific review recommendations.

**Recommendation 2.** Product stewardship of plastics and particularly single-use plastics are of highest priority due to their impact in freshwater, soils and food chains.

Our research on microplastic pollution in the Yarra and Maribyrnong Rivers has found the annual combined load of litter items in excess of 828 million items, 74% of which were microplastics <5mm. Due to prevailing winds and tidal currents, Port Phillip Bay effectively acts a 'sink' for most of these items once they reach the Bay. We note that there has been little if any research to quantify micro- and nanoplastic ingestion by fish in the Bay and the implications for human health. In view of the current policy to significantly increase the number of people fishing in the bay this absence of research warrants urgent attention.

We are conscious of the fact that three quarters of Victorians live in catchments around Port Phillip Bay; and that litter dropped in these catchments can ultimately make its way via the stormwater system to the Bay. Our observations are that there are numerous single use 'food and drink' items that warrant inclusion in the Product Stewardship Act. We note that plastic microbeads are already included, demonstrating that the impacts of plastic pollution are acknowledged. The negative externalities of plastic products are estimated globally at US\$40 billion per year<sup>1</sup> and range from health, to ecological, to tourism loss.

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<sup>1</sup> *The new plastics economy: Rethinking the future of plastics*, 2014, McKinsey, the Ellen MacArthur Foundation, and the World Economic Forum

Considering the projected 100% increase of consumer plastics over the next 20 years, it is imperative that stringent controls be adopted to manage the availability and disposal of plastic products in general, as opposed to ad hoc attention to individual product types.

**Recommendation 3.** Insert the words “and contaminated” into Division 4 (3) (b), to now read, “to contribute to reducing the amount of greenhouse gases emitted, energy used and water consumed *or contaminated* in connection with products and waste from products.

**Recommendation 4.** Insert the words “during any phase of their lifecycle” into Division 5 (b) (iii), to now read, “there is the potential to significantly reduce the impact that the products have *during any phase of their lifecycle* on the environment, or that substances in the products have on the environment, or on the health or safety of human beings.

Internationally, countries like Britain and Scotland are implementing an increasing number of bans on problematic litter items such as straws and plastic bags. Costa Rica (by 2021) and India (by 2022) have announced phase out of single-use plastic items. At the time of writing, the Victorian State Government has joined most other Australian States by announcing the implementation of a ban on plastic bags, sparking the largest number of public consultation submissions ever received by the Department of Environment, Land, Water and Planning (DELWP 2018, *pers. comm.*). An overwhelming majority (over 90%) of the thousands of respondents were in favour of the ban.

Although banning items such as straws and ubiquitous packaging of fruit and vegetables in supermarkets is a start towards preventing these items from getting into the environment, we recommend future bans are implemented on a higher level materials-based approach, rather than by individual end product, to avoid perverse incentives (such as offering thicker plastic bags for a price). This means that rather than product-by-product bans, the Act needs to implement higher level regulations that require materials and designs to fulfil a set of sustainability criteria at all stages of their life cycle. Products that do not fulfil these criteria could then be amended or phased out by an agreed date.

For single use products, in order to be manufactured or imported to Australia, the criteria should include demonstrated necessity or health benefits as a single use product - for example, medical or legal contexts.

“Single use” thinking contributes to numerous problems including economically. Currently, single-use plastic packaging comprises approximately 25% of plastics by volume; but through litter and landfill around 95% of the value of plastic packaging material (worth US\$80-210 billion annually) is lost after a single use. Much of this chokes our waterways; by 2050, there will be more plastics in the ocean than fish.

**Recommendation 5.** Convene an advisory panel to consider mandatory sustainability standards for product categories, including plastics, with particular consideration of criteria to distinguish necessary and/or permissible single-use products.

Following the reduction of offshore recycling, Waste To Energy is being advocated by some as a solution. We are concerned that it does not return materials back into the economy, or reduce the need for virgin resources. Australians are consuming resources at 4x the planet’s regenerative capacity<sup>2</sup>. This has imminently detrimental and interconnected consequences to our own future health and Australia’s liveability; and deep moral implications for globally shared resources such as clean air and potable water. The shift to reduce our consumption of water, energy and bio material requires simultaneous shifts in reduced citizen consumption, and improved design standards, manufacturing efficiency and circular end of life processing. Waste to Energy is not a renewable resource; it creates a demand for ‘waste’ and only provides a single re-use of incinerated materials.

**Recommendation 6.** Waste To Energy by incineration is not considered Product Stewardship.

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<sup>2</sup> <http://www.abc.net.au/news/2017-08-03/earth-overshoot-day:-today-the-earth-goes-into-the-red/8770040>

**Recommendation 7.** The Act integrate a commitment to funding education and community initiatives that bring everyday Australians along in the thinking and behaviour shifts that accelerate and complement sustainability-driven shifts by industry.

In closing, for your consideration we list the following extracts from '*European Strategy for Plastics in a Circular Economy*' (2018). We believe these measures would apply equally in the Australian context. The strategic visions include:

- Moving decisively towards a more prosperous and sustainable plastics economy could deliver considerable benefits.
- Plastics and products containing plastics are designed to allow for greater durability, reuse and high-quality recycling. By 2030, all plastics packaging placed on the EU market is either reusable or can be recycled in a cost-effective manner.
- EU plastics recycling capacity is significantly extended and modernised. By 2030, sorting and recycling capacity has increased fourfold since 2015, leading to the creation of 200 000 new jobs, spread all across Europe.
- Thanks to improved separate collection and investment in innovation, skills and capacity upscaling, export of poorly sorted plastics waste has been phased out.
- Substances hampering recycling processes have been replaced or phased out.
- More plastic recycling helps reduce Europe's dependence on imported fossil fuel and cut CO2 emissions, in line with commitments under the Paris Agreement.
- Plastic waste generation is decoupled from growth. Citizens are aware of the need to avoid waste, and make choices accordingly. Consumers, as key players, are incentivised, made aware of key benefits and thus enabled to contribute actively to the transition.
- The leakage of plastics into the environment decreases drastically. Effective waste collection systems, combined with a drop in waste generation and with increased consumer awareness, avoid litter and ensure that waste is handled appropriately. Marine litter from sea-based sources such as ships, fishing and aquaculture are significantly reduced. Cleaner beaches and seas foster activities such as tourism and fisheries, and preserve fragile ecosystems.
- Higher levels of plastic recycling, comparable with those of other materials, will only be achieved by improving the way plastics and plastics articles are produced and designed. It will require increased cooperation across the value chain: from industry, plastics manufacturers and converters to public and private waste management companies. Specifically, key players should work together to:
  - improve design and support innovation to make plastics and plastic products easier to recycle;
  - expand and improve the separate collection of plastic waste, to ensure quality inputs to the recycling industry;
  - expand and modernise the EU's sorting and recycling capacity;
  - create viable markets for recycled and renewable plastics.

Please contact our team with any questions or for clarifications.

Yours sincerely,



April Seymore  
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Port Phillip EcoCentre