



## **Inquiry into waste reduction and recycling policies**

[ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Australia Federal Government

Friday 12<sup>th</sup> April 2024

Dear Committee,

Samsara Eco is a Canberra based start-up focused on developing solutions for climate repair through our infinite recycling technology. Samsara Eco uses enzymes to attack complex plastics (polymers), reverting them back to their original chemical building blocks (monomers). By reverting complex polymers into simple monomers, we can make new, virgin-grade plastics without needing fossil fuels again.

By 2030, Samsara Eco has the ambition of our technology being used to process over 1.5 million tonnes of plastic per year and saving 2.5 million tonnes of emissions (equal to planting 2.5 million trees over ten years). In 2024, we have demonstrated circularity of both polyester and nylon 6,6 clothing.

With our focus on circularity, we have a vested interest in waste reduction and recycling policies. As we progress through our commercialisation journey, which includes construction of an R&D facility in Australia which will require feedstock for processing, we welcome the opportunity to provide a submission to the inquiry into the effectiveness of current waste and reduction policies in delivering a circular economy.

**Whilst we are able to recycle a range of feedstocks, our submission is focussed on the circularity of clothing textiles and the progress against the actions identified.**

The current approach is lacking consistency and whole-of-industry engagement. We acknowledge the proposed a Seamless Clothing Stewardship Scheme and its plan to transform how clothing is made, used, reused and recycled in Australia to create circularity by 2030 however note that it has not been fully embraced by all participants of the industry in Australia, and does not go far enough. Furthermore, some textile industry participants are actively pursuing alternative solutions.

There is evidence of a high degree of variability in approach to how circularity is being designed for, pursued and delivered in Australia.

We believe the following core policy directions below will have the biggest impact on driving the development of circularity across the textile industry in Australia:



1. Deliver regulation that encourages design for circularity, this includes encouraging use of easy to recycle materials with clothing ranges and increased recycled content.
2. Drive a consistent national approach to end-of-life clothing, across all categories, that delivers collection, sortation, and pre-processing of the textiles into a format that can be easily recycled.
3. Ensure engagement of textile recyclers, such as Samsara Eco, in the design of the scheme to ensure the outcome delivers a recyclable feedstock solution.
4. Ensure policies drive circularity behaviour across all participants in the textile industry.
5. Deliver regulation that deters downcycling of end-of-life clothing.
6. Encourage domestic investment in infrastructure to deliver domestic circularity and until this occurs, facilitate a regulatory environment that supports regional circularity in clothing textiles.

A consistent national approach to circularity in the textile industry should deliver a stewardship scheme that is easy to engage with by the consumer, industry participants and recyclers alike.

The packaging industry is one of the more progressive industries in terms of recycling, with many examples of effective and ineffective policies and actions. Learnings can be taken from this industry by the textile industry as it develops its circularity solution to ensure the actions adopted are both sustainable and economical for all parties.

Sincerely,

Sarah Cook  
**Chief Commercial and Operations Manager**

Paul Riley  
**Founder and CEO**