RESPONSE TO THE PRODUCTIVITY COMMISSION'S INQUIRY INTO OPPORTUNITIES IN THE CIRCULAR ECONOMY

Tetra Pak in Australia

Tetra Pak is one of the world's leading food processing and packaging solutions companies. Sustainability is a key priority to us and our business is designed to minimise waste and optimise use of resources. We believe the packaging industry must help to reduce its impact on the environment and the consumption of natural resources through responsible design, sourcing and recycling of packaging.

In Australia, Tetra Pak has supported the development of the Australian dairy and beverage industry for the last 60 years – by providing fit-for-purpose processing and packaging solutions. These include creating value from Australia's milk resources and facilitating export growth through our milk processing business and pioneering shelf-stable packaging solutions for the Australian and export markets. Today, Australian domestic and export dairy products in Tetra Pak packages make up 50% of our Oceania business.

Introduction

Thank you for the opportunity to submit a response to the Australian Productivity Commission's inquiry into *Opportunities in the Circular Economy*. Tetra Pak strongly supports the Australian government's efforts to transition to a productive circular economy, and we strive to ensure waste, recycling systems and policies work together to achieve this goal. Following the inquiry's outlined information requests, we have presented below a series of comments and examples on:

1. Circular economy success stories
2. Priority opportunities to progress the circular economy
3. Hurdles and barriers to a circular economy
4. Governments' role in the circular economy

We believe this inquiry is timely, and as a key player in the food and beverage packaging industry, we welcome the opportunity to collaborate with the Productivity Commission to improve materials productivity and efficiency in ways that benefit both the economy and the environment.

Circular economy success story – saveBOARD's case study

The most common method to recycle beverage cartons globally is repulping, turning the fibres back into fibre-based products such as tissues. However, in Australia, there is an oversupply of recovered paper and 40% to 60% of recovered paper in any given year is exported to markets where the demand for fibre is higher.

Tetra Pak has supported a local recycling solution, saveBOARD, which transforms Tetra Pak's used beverage cartons into boards for use in construction. These are a like-for-like replacement for construction panels such as plywood. They have a negative carbon footprint because they are made from recycled wood fibre. They are also a full-carton solution, meaning that they use all parts of the carton including caps and straws. These plastic elements are incorporated in the structure of the boards as the bonding agent, eliminating the need for any added chemicals or adhesives.

Thanks to a combination of federal and state government grants, the first facility using this solution was commissioned in New South Wales in 2022 and a second is scheduled to be completed in Victoria. There is also an existing facility operating at Te Rapa in New Zealand since November 2021. These facilities convert various types of liquid paperboard waste, including used beverage cartons such as those for juice poppers and alternative milk products, coffee cups, and ice cream containers into high-performance sustainable building materials. saveBOARD has 6 low carbon fit for purpose building products sold in the market currently.

Initiatives like this not only support the construction industry to participate in the circular economy, but also reduce the amount of waste sent to landfill. We would be delighted to collaborate with other state governments to develop similar alternative recycling solutions for recovered fibre.

The next step must also include government procurement initiatives. Government procurement is a crucial piece in making low-carbon, sustainable solutions successful, as it can ensure an innovative recycling solution can scale up and survive the difficult first years of a start-up business by driving down marginal costs. We believe more can be done in collaboration with government procurement teams to boost the market for recycled goods including playing a pivotal role in promoting awareness and adoption of new alternative materials, for example in the construction sector.

We also see a role for government in reducing red tape and increasing funding for certifications for those remanufactured products that are used for certain functions. In our experience, the burden to prove products are suitably, carbon effective, and code-compliant can be costly and deter some solutions from reaching the final stages of commercialisation.

Priority opportunities to progress the circular economy
Packaging plays a critical role in reducing food waste throughout the food supply chain.

Beverage cartons has a significant role to play in the Australian dairy industry, which is the third largest rural industry in the country, employing approximately 46,200 people. Australia exports 30% of its milk production, valued at A$3.7 billion (300-500 million litres of UHT is exported in cartons) and plant-based milk is growing at a double-digit rate. There is no viable way to export ready-to-drink milk or plant-based milk with a shelf life of 12 months without aseptic cartons. Dairy producers rely on fibre-based packaging options because they provide more efficient transport through their brick shape and lack of need for refrigeration.

For example, aseptic beverage cartons allows beverage cartons to preserve highly perishable liquid food products such as milk and juice for up to 12 months without the need of a cold chain or preservatives. This not only significantly reduces food loss, it also reduces the carbon emissions associated with the transportation of food and beverages by eliminating or reducing requirements for refrigeration, refrigerants and transport fuel.

Appropriate use of packaging plays an integral part in improving productivity in the food system. In implementing circular economy policies, the government must consider exemptions or transitional arrangements for essential packaging where it cannot meet circularity requirements without compromising its functional requirements. This specifically includes packaging required to meet or to guarantee food safety, availability and distribution and so, food security.

Circular Economy policies also often focus on recycled content as an enabler of end-markets for recyclable materials. This is highly relevant for non-renewable resources. However, this has no merit when applied to renewable materials which are circular by nature. This means policies and or targets for recycled content must allow choosing renewable resources as an alternative. Renewable resources, due to their biogenic carbon content are inherently low carbon, and support building a low-carbon circular economy.

Paper and paperboard, which are made from wood fibre, already have the highest recycling rates within Australia. Application of recycled content targets for fibre-based packaging disincentivizes substitution of non-renewable and high carbon materials with renewable materials. Material Economics[1] shows that substitution of plastics with fibre-based packaging is one of the biggest levers for de-carbonizing packaging. In the case of fibre-based packaging, inappropriate recycled content targets will only increase the prices of packaging with no commensurate environmental protection or public good.

Hurdles and barriers to a circular economy

The case of beverage cartons clearly exemplifies some of the barriers to a circular economy the carton and paperboard packaging industry is currently facing. Australia's resource recovery ecosystem is currently not working to its potential. While packaging manufacturers can design and produce the best possible packaging options, resource recovery will not be possible without the right recycling infrastructure.

Beverage cartons are designed for recycling in line with voluntary industry best practices[2] and third-party standards[3]. However, higher recycling rates continue to face significant headwinds under the current system. This is because the costs associated with collecting, sorting and recycling these cartons are not recovered within the local market because the local market is dominated by a limited number of large MRF operators and incumbent re-processors, some vertically integrated, which means they can set the specifications and prices for recyclable commodities.

As stated earlier, there is an oversupply by 40% to 60% of recovered paper in any given year in Australia. APCO estimated an average paper and paperboard packaging waste recovery rate of almost 70% in its latest review[4], but it expects a 30% shortfall of reprocessing capacity for paper and paperboard in 2024-25 (based on supply only).

The single biggest barrier to achieving circular economy for packaging is that the cost of end-of-life for packaging is not included in the cost of the products, and there is no mechanism to make such recovered costs available to the resource recovery value chain.

Governments' role in the circular economy

Extended Producer Responsibility (EPR)

Government support and legislation are essential for advancing Australia's transition to a circular economy. Effective and enforced waste management and Extended Producer Responsibility (EPR) legislation for packaging is needed to increase recycling rates. EPR legislation has become a key component in government policy for the transition to a more circular economy and to their climate change response.

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[1] Sustainable Packaging - The Role of Materials Substitution; Material Economics (McKinsey), 2018; https://materialeconomics.com/node/37

[2] *European ACE Design for Recyclability Guidelines*

[3] *Circularity by Design Guidelines*, 4evergreen

[4] *Australian Packaging Consumption & Recovery Data 2021-2022*, APCO

Recycling of course has a climate benefit and can be a significant enabler of a low-carbon circular economy, particularly if recycling policy is adopted with measures to decarbonise packaging materials.

Countries with the highest levels of recycling all have legislation in place that formalises requirements for municipal waste collection, treatment, disposal and recycling. In addition, EPR policy for packaging, where it exists, has proven to be an effective tool for increasing recycling rates – though EPR needs to be applied to all consumer packaging types, not just beverage containers. We have been working for decades with governments, business partners and NGOs around the world to improve recycling for our packaging.

Globally, legislated Extended Producer Responsibility schemes achieve the highest recycling rates at the lowest cost to the economy because 'end-of-life' (collection, sorting, storage, transport and recycling) is fully funded for all packaging.

- Producers pay in proportion to the tonnage of packaging they place on the market and the nett cost of end-of-life.
- This internalises the full cost of end-of-life while allowing other external costs, such as carbon, to be internalised over time.
- This internalisation of end-of-life costs drives innovation in design of packaging for recycling. Unlike attempting to regulate packaging design, it does not inhibit packaging science & technology but creates a direct financial incentive for innovation.
- Funds collected to manage end-of-life for packaging can then be used to let long-term contracts for collection, sorting and recycling, giving companies and their investors certainty and allowing them to invest in new technologies and processes to improve collection, sorting and recycling outcomes.
- By making the financials of EPR fully transparent, it drives trust and credibility in delivering a public good, as well as public participation.
- It also drives consumer behaviour change over time by including the cost of end-of-life in the cost of the packaging. It does not limit product differentiation or consumer choice.
- There are many examples of high performing EPR schemes. For example, the Belgian scheme delivers an overall recycling rate of 84% at a cost of 15€ per person per year.

Container Deposit Schemes (CDS)

Tetra Pak supports the inclusion of beverage cartons in deposit-refund systems and kerbside collections in Australia to increase the recycling of cartons. We believe the schemes can be improved to enhance container recycling. CDS plays a critical role in incentivising collection of packaging associated with away-from-home or on-the-go consumption and thereby reducing litter.

We believe all recyclable packaging, regardless of their type, size and material composition, should be included in these schemes to maximise consumer participation and ensure a level-playing field. Limiting the products, and the type and size of containers in CDS creates confusion, limits participation, reduces collection, and impacts the viability of local recyclers.

As deposit schemes continue to be discussed and expanded in Australia, Tetra Pak also advocates for a harmonisation of these schemes such that they can be effectively and efficiently implemented across the country. We applaud the federal government for exploring ways to harmonise CDS across the country.

Packaging Product Design
The federal government is developing new product design standards to improve product recyclability. We do not support the development of implementation of multiple policies to achieve said circular outcomes. A legislated EPR which internalises the cost of end-of-life necessarily also drives improvement in packaging design for recyclability. Multiple instruments, only add complexity and create compliance burdens and overheads.

We are collaborating with the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to align their proposed standards with global best practices. We currently see significant deviation in approach from other jurisdictions driven by large incumbent Material Recovery Facility (MRF) operators and re-processors. Creating design standards which are different from other international jurisdictions creates complexity, compliance burden and restricts economic activity.

A key focus for us is to prioritise and incentivise packaging with the lowest possible climate impact, while also ensuring there are no unintended consequences for food safety or the dairy export industry as Australia moves toward circular economy packaging. We would like to see continued investment by government and the waste industry in improving collection and sorting infrastructure to handle more materials.

In the government's efforts to develop packaging standards for fibre-based packaging, we also strongly caution against arbitrary fibre content or recycled content thresholds – proposed by MRF operators or large incumbent re-processors with a financial incentive not to upgrade their practices to international best-practice – which may encourage brand owners to switch from fibre-based packaging to plastic options.

Conclusion
We thank the Australian Productivity Commission for providing us with the opportunity to submit our response to its inquiry into *Opportunities in the Circular Economy*.

We believe that by supporting recycling solutions, driving demand for recycled products and enacting effective product design legislation, governments and public institutions can strengthen the entire recycling value chain, advance the transition to a circular economy, and reduce their own environmental impact in line with existing targets.

We hope to continue positive engagement and partnership with the Productivity Commission to develop robust circular economy policies that will progress Australia's transition to a circular economy.

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