



Feedback to Infrastructure Victoria Recycling and resource recovery infrastructure evidence base report October 2019

Thank you for the opportunity to submit feedback on your October 2019 *Recycling and resource recovery infrastructure: Evidence base* report. Tetra Pak supports the outcomes identified in the report and the approach Infrastructure Victoria has taken to arrive at these outcomes. However, we do wish to highlight three key areas for further development. These are:

1. Further consideration on food safety and quality impacts of virgin materials targets
2. Ensure any container deposit scheme is inclusive of all dairy and beverage containers
3. Acknowledge the additional lifetime carbon footprint associated with limiting certain virgin materials in manufacturing.

Who is Tetra Pak?

Tetra Pak is the world's leading food processing and packaging solutions company and we welcome Victoria's pursuit of a more circular economy. Sustainability is a key priority to us; we have committed €80M to invest in the development of sustainable products to replace fossil-fuel based plastics between 2019 to 2021, and we spent €20m between 2012 and 2018 to improve recycling infrastructure globally. Our business is designed to minimise waste and optimise use of resources.

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 export dairy products in Tetra packages make up 18% of our Oceania business. Recycling infrastructure in Victoria is an important part of meeting our own recycling targets, and we are active members of the Australian Packaging Covenant Organisation with the aim to increase the recycling of our products.

We are aware that this process is critical to turn waste into a valuable resource and appreciate the seriousness with which you have listened to stakeholders during the first phase of your review.

What we support

Tetra Pak agrees with the list of potential outcomes shown in Figure 3 of the report, particularly:

- Supply-demand dynamic equilibrium
- Strong end markets and innovation
- Waste infrastructure network is effective, efficiency, planned, protected, timely and safe,
- Regulations relevant to markets are fit-for-purpose and inclusive.

Supply-demand dynamic equilibrium: we believe that any robust recycling program must be commercially viable and dynamic to deal with changes in the market.

Strong end markets and innovation: In order to create a dynamic recycling program, an increase in investment in new sorting technology, reprocessing infrastructure, and support for a reprocessed goods market is needed.

Waste infrastructure network is effective, efficient, planned, protected, timely and safe: Most critically, the network must work in the long-run. A strong research-base and consultation process will support this.

Regulations relevant to markets are fit-for-purpose and inclusive: Any changes to regulations must prevent free-riders in order to maintain a level playing field and encourage more extended producer responsibility.

Materials Recovery Facilities

Tetra Pak is also pleased to see Infrastructure Victoria identify decentralisation as a key issue in the Victorian recycling industry. The over-reliance on MRF's, many with outdated technologies and a lack of regulation, has forced producers to become price-takers.

MRFs are currently an important node in the recycling value chain. While 95% of Victorian households have access to kerbside recycling¹, not all household recycled materials are accepted at MRFs.

The Australian Packaging Covenant Organisation (APCO) estimates an average packaging waste recovery rate of 56% in 2018 (32% for plastics and 72% for paper streams)².

Currently, MRFs can choose to accept or refuse different types of recyclable materials at their own discretion. This leads to good quality recyclable material being unnecessarily sent to landfill and low recovery rates.

¹ Analysis of Australia's municipal recycling infrastructure capacity. Department of Energy and Environment (Oct 2018)

² APCO Packaging Material Flow Analysis 2018

We have found this to be either because of misinformation on the recyclability of the material, a perception of a lack of market for the material, or inefficiency in the MRF's processes. In APCO's 2018 Packaging Material Flow Analysis, it found:

“There are different opportunities for improving the overall performance for the different material streams. For example, glass collection efficiency is relatively high, however system performance diminishes when the glass waste is sorted at the MRF with sorting efficiency dropping to 54%. This indicates that MRF sorting is inefficient for glass packaging, and efforts should be taken to either improve collection and MRF sorting of glass, or diverting recyclable glass away from MRF”.

Investing in our own solution

We are also pleased to see a strong focus by Infrastructure Victoria on the reprocessing sector and development of end-markets for recycled materials. Tetra Pak acknowledges the responsibility that producers have to limit the environmental impact of their products. We are currently partnering with other industry participants to build a recycling reprocessing solution for our cartons in New South Wales. This solution will transform our cartons into usable construction materials. We believe there is a strong alignment of values between industry and government on this topic, and the Victorian Government can make more of these industry-led projects possible through increasing grant programs.

Areas for further development

The areas we would like Infrastructure Victoria to explore further in its advice to the state government are food quality and safety, ensuring any proposed container deposit scheme includes cartons, and an increased focus on the lifetime carbon footprint of recycled materials.

Protecting Food Quality and Safety

In the current report, recycled content targets and associated financial incentives or penalties are considered without regard for product safety.

As a producer of paperboard-based food and drink packaging, we hold food safety and quality as a top priority. Board with recycled content has to fulfil the same food safety requirements (and meet the same regulatory standards) as board with virgin fibres. Recycled fibres may contain chemical contaminants such as MOHs, phthalates, phenols, PCB and toxic metals.

In terms of the waste avoidance preference outlined in the report through *Figure 1: Waste Hierarchy*, maintaining an appropriate level of food packaging integrity will avoid not only

packaging waste, but also food waste. This is particularly relevant to the supply of food and beverages to regional and remote areas with less reliable supply chains.

Necessary food and beverage packaging must maintain an appropriate recycled content target to mitigate these risks. **We ask that your final advice ensures food safety is not put at risk.**

Minimise lifecycle carbon footprint of materials

We also recommend that your advice aims to minimise the lifecycle carbon footprint of materials and encourage the use of renewable materials. When responsibly managed, renewable resources are carbon-neutral and the only long-term resource alternative to achieve security and 'circularity' in supply.

The current report supports mandatory recycled content targets. Our global experience shows this can, in fact, increase the carbon emission footprint for many products. In our paperboard products, we must increase the weight of the paperboard to protect against integrity loss caused by the shortening of paper fibres in the recycling process. This increased weight means heavier shipments and fewer units of product fitting in each shipment. The increase in transport emissions from this, combined with an increase in product defect rates and risk of product recalls, means a greater amount of greenhouse gas emissions and waste in the lifetime of the material.

In addition to the carbon footprint associated with delivering products made with recycled materials, the report must also take into account the transport and processing emissions of the recycling itself.

While renewable materials are shipped from source once, non-renewable but recyclable materials are often shipped large distances several times. They also undergo emission-producing processing once recycled. Sustainability Victoria has said in their August 2019 report *Greenhouse gases from the waste sector and opportunities for reduction* that glass and plastics recycling in Victoria is actually carbon negative. This is a key reason for our concerted efforts to source renewable materials for our products.

With these larger environmental conditions in consideration, **we ask that any advice on recycled content targets take into consideration the lifecycle carbon footprint of the materials and promote the use of renewable materials, whether virgin or recycled.**

Ensure an inclusive container deposit scheme

The report suggests a container deposit scheme to support cleaner recycling streams for reprocessing. We ask that any deposit-refund system considered include dairy and beverage cartons and meet the following:

- **Mandatory requirements:** the deposit-refund system for all dairy and beverage containers must be mandatory, not voluntary. This will ensure the system is fully financed, there are no free-riders and fair competition between brands and products irrespective of type and origin.
- **Ownership of the system:** the most effective option is a system owned and operated by the dairy and beverage industry (brand owners and packaging manufacturers without dominance from a single sector or player) because they can consider utilising existing logistic and supply chain networks for delivering packaged products. Each partner of the system should take part in the funding. If retailers own the collection process, we run the risk that retailers control the system and money and specify which materials they want to take-back.
- **Scope:** all dairy and beverage containers, regardless of material composition and regardless of the type of product should be included to maximise consumer participation and ensure a level-playing field.
- **Funding:** it should be transparent and auditable, with all funds retained to operate the system and support recycling education and awareness. Unredeemed deposits should remain within the scheme and be used to offset programme costs. However, the scheme should not be designed to be reliant on unredeemed deposits since return rates are likely to rise, meaning the funding from unredeemed deposits will fall.
- **System design:** depot systems (non-retailer premises) should be considered since most retailers do not have the floor space or may not want to act as a collection point without significant financial support. However, for semi-automated scanning and collection systems, supermarkets and similar car parks are ideal.
- **Effective legislation:** so that the necessary infrastructure is put in place to separately collect used packaging which is essential in developing a more circular economy.

Developing markets for secondary raw materials

In our experience, we understand that to encourage MRFs to accept all recyclable materials, industry initiatives and collaborative projects to develop markets for secondary raw materials should be actively supported by state and local government.

Materials such as our own used beverage cartons are transformed into usable materials such as chipboard and wood plastic composites (a timber substitute) to be used in more sustainable building construction. A local manufacturer of such materials would become a new buyer for recyclable materials and will increase the local demand for recycled goods and help protect local recyclers from global price volatility. With government support,

manufacturers will also be better equipped to develop these recycling solutions or partner with other institutions to find local solutions for their products.

On Future Waste Scenarios

Tetra Pak believes, of the options given in the report, the most beneficial scenario for the recycling industry, for producers and for Victoria is the Circular Stewards scenario.

This scenario will allow for industry to take the appropriate steps to improve resource recovery and recycling in a realistic timeframe. Without a period of adjustment to build onshore reprocessing solutions, recyclable materials will be sent to landfill at rates unseen since Australia's first recycling push. This will further damage household perceptions of the recycling sector and lead to a drop in recycling rates.

To improve consumer recycling behaviour we must demonstrate as an industry that recycling is managed effectively.

According to Planet Ark, in Australia, approximately 97% of local councils accept our used chilled (non-foiled) cartons for recycling. For our aseptic cartons (foil-lined), 76% of local councils accept the used cartons for recycling.

Tetra Pak has recycling partners in India and South Korea that accept used beverage cartons and recycle them into useful materials such as chipboard; kraft paper and corrugated cardboard and roof sheets.

To help reduce dependency on waste export channels and ensure beverage cartons continue to deliver value after use, we are actively investing in a local reprocessing solution. These solutions take time to establish.

A lack of policy reform (Out of Sorts Scenario) or a high focus on organics (FOGO FOMO Scenario) will not improve recycling rates, and Victoria will miss its sustainability commitments.

Tetra Pak fundamentally believes the packaging industry must help to reduce its impact on the environment and consumption of natural resources. A Packaging Crackdown scenario may work effectively for many types of unnecessary packaging; however, this scenario would not be very effective for necessary packaging for food and beverages. We therefore do not advocate for a reliance on these policy measures.

Finally, as stated in the report, Energy from Waste is less desirable than recycling and a focus on it (High Energy Scenario) may lead to a greater than optimal diversion of recyclables to Energy from Waste facilities.



Conclusion

Tetra Pak is supportive of the Infrastructure Victoria evidence base report as a basis for advice to the Victorian Government on recycling infrastructure with a few specific amendments. Food quality and safety, an inclusive container deposit scheme, and an increased focus on the lifetime carbon footprint of recycled materials will improve the effectiveness of the recycling system for our products.

With these amendments, we support a Circular Stewards policy scenario, and ask to continue to be involved in discussion on the development and implementation of policies related to recycling and sustainable industry in Victoria.

We hope to continue our engagement and partnership with the Victorian Government to advance its circular economy agenda.

13 December 2019