

Submission to the Senate Inquiry into Australia's waste management and recycling industries

November 2019



Status of this Submission

This Submission has been prepared through the Municipal Waste Advisory Council (MWAC) for the Western Australian Local Government Association (WALGA). MWAC is a standing committee of WALGA, with delegated authority to represent the Association in all matters relating to solid waste management. MWAC's membership includes the major Regional Councils (waste management) as well as a number of Local Government representatives. This makes MWAC a unique forum through which all the major Local Government waste management organisations cooperate.

This Submission therefore represents the consolidated view of Western Australian Local Government. However, individual Local Governments and Regional Councils may have views that differ from the positions taken here.

This Submission will be considered by MWAC at its meeting on Wednesday 11 December.

Introduction

The Association welcomes the opportunity to provide feedback to the Senate Standing Committee on Industry, Innovation, Science and Resources on the waste management and recycling industry. The Association would also like to note that there is a considerable amount of activity at a National level currently. The National Waste Policy Action Plan was recently released, there are two Senate Inquiries and a Discussion Paper on Export Bans, currently out for comment. Local Government considers it imperative that any changes need to be progressed in a cohesive way to avoid fragmentation and duplication of effort. Clear leadership from the Federal Government, working with States and Territories and Local Government will be essential.

The inquiry is into innovative solutions in Australia's waste management and recycling industries, including:

- Industrial, commercial and domestic waste
- Waste in waterways and oceans
- Landfill reduction
- Other related matters.

The Committees' focus is on opportunities presented by waste materials, including energy production, innovative recycling approaches and export opportunities, and to also consider current impediments to innovation. This Submission provides some background on the current situation in Western Australia, the role of waste avoidance and outlines some of the necessary conditions to foster innovation.

Background

In Western Australia, the State Government has put in a place the Waste Avoidance and Resource Recovery Strategy (WARR Strategy) 2030 which is underpinned by Circular Economy principles and the Waste Hierarchy. The Circular Economy principles and approach is one which has the potential to foster innovation as it requires new ways of approaching issues.

Recycling in Western Australia is largely dependent on export of materials to other countries for recycling into new products. For example, the most recent [Waste Authority Recycling Activity Report](#) shows:

- Tyres – 85% exported
- Paper – 99.4% exported (based on old news print and white office paper figures)

- Plastics – 72% exported.

Of material collected in the kerbside recycling bin, only glass is used within Australia (and the majority used within WA).

Role of Waste Avoidance

In looking at innovation it is important to focus first on waste avoidance opportunities and not just deal with the waste that is being produced. By focusing on waste production only, key innovation opportunities and substantial environmental impacts are ignored.

A key focus for the WARR Strategy is waste reduction, which targets a 10% reduction in waste generation per capita (based on 2014-15 data) by 2025. Waste reduction as a target is important as it focuses on avoiding waste generation in the first instance, which has potentially a far greater impact through the supply chain than simply disposing of the material correctly at end of life. Therefore programs such as Love Food, Hate Waste – which focuses on avoiding food waste – have considerable value as they not only reduce waste to landfill but consumption and ultimately generation of waste. The Fight Food Waste Cooperative Research Centre (CRC) is working on a range of initiatives that could assist Western Australia in reducing food waste and consequently reducing environmental and social impacts.

The substitution of waste derived products for raw materials can have significant greenhouse gas reduction benefits, for example using recycled construction and demolition waste instead of mining basic raw materials. The embodied energy savings for such substitutions are significant and were extensively documented in a report prepared for the Waste Authority on [Recycled Products in Local Road Construction and Maintenance Activities](#).

Foster new approaches to doing business

Circular Economy approaches call for a new way of undertaking business activities, so that a product is never a 'waste' but always an input into another system.

In Australia, the 2015 [Intergenerational Report](#), developed by the Commonwealth Treasury, highlighted that productivity growth has slowed in recent times – averaging 1.5% per annum through the 2000s compared to 2.2% per annum during the 1990s. Looking forward, the Report necessitates that ongoing GDP per capita growth will be almost entirely dependent on improving productivity – as opposed to population or participation increases. This means policies and reforms focused on promoting innovation, including the take up on new technology, will be critical to improving future living standards.

The [Ellen McArthur Foundation](#) provides a large number of case studies of innovative business approaches and models. For example, [procuring light](#), rather than lighting, options for [borrowing and lending](#) rather than owning and [food waste](#) reduction and use.

The Sharing Economy offers new ways to maximise the use of existing resources in new ways, leading to efficiency gains. For example car or ride sharing applications offer a way for people to only use a car when they need it. This means the car is a productive asset shared between people, rather than an underutilised resource. The growth of 'buy nothing' groups on Facebook or 'buy / sell' groups offers another example of the maximum utilisation of resources, where an individual no longer wants a material it is given away, traded or sold.

New technological platforms offer a way to track waste generation and link that to potential inputs from other systems. For example, the CSIRO developed the [ASPIRE](#) platform which provides an opportunity to track waste generation and use.

Challenges for innovation

Innovation necessitates approaching a problem in a different way and proposing a new way to address the issue. Inhibitors to innovation occur because this new way may not align with existing practices. Inhibitors include:

Procurement - Current procurement models often do not take into account full lifecycle costing for a whole project (e.g. a 5 year pay back period for solar power). The Tender analysis can relate to the cost for a shorter time period. The procurement system is based on seeking a particular product/service, rather than seeking the outcome. For example procuring light bulbs rather than procuring light. Many current approaches to procurement do not facilitate alternative business model approaches or take into account whole life cycle costing.

Regulation – in the Western Australian regulatory environment there is not a clear pathway for a waste product to stop being considered a waste (regulated under environmental legislation) and become a product (regulated under consumer protection legislation). The State Government is currently working on a regulatory framework to address this issue, based on approaches in other States.

Government Funding Programs - One way that innovation is facilitated is through Government funding programs, and some Programs have such a barrier to entry (or application processes which are complicated) that this inhibits those who may seek funding.

Export Bans – the Meeting of Environment Ministers has agreed a timetable for export bans relating to glass, tyres, mixed plastic and paper. The Association acknowledges the challenges with materials being transported to other Countries for recycling without a clear line of sight on the end destination, however there are potentially ways to address this which would allow ongoing innovation. It also needs to be acknowledged, particularly for Western Australia that markets for recycling in Asia are frequently more environmentally and economically cost effective than trading with Eastern States markets. Also for low volume materials, it is unlikely that recycling plants would be viable in Australia (or Western Australia).

Conditions for Success of Innovation

There are a number of conditions which need to be in place for innovation for the waste and recycling industry to flourish:

- Immediate action to determine destination of recyclable materials
- Clear definition of when a recyclable material becomes a product
- Effective product stewardship schemes in place
- Assessment of current and future infrastructure needs
- Investigation of economics of recycling, market development and contingency planning
- Development of incentives and funding Programs
- Effective regulation.

Immediate action to determine destination of recyclable materials

Recyclers in Western Australia are likely to continue to export recyclable materials, as there are still active markets in the Asia-Pacific region. To give greater certainty to the community, and Government, regarding the eventual destination of material immediate action needs to be taken to determine and track some of the material collected. For Western Australia, this action was highlighted as part of the Waste Authority Draft Waste Data Strategy (Action 2.7). There are also opportunities nationally for the Federal Government to work with other nations to ensure that end market uses of material are appropriate – this action has been identified in the National Waste Policy, but the implementation timeframe is 2022 – after the bans for materials have been put in place.

Clear definition of when a recyclable material becomes a product

Currently the material collected through kerbside recycling is sorted into different material streams, compacted and exported. No further processing is undertaken. However there is a strong argument that if the material is further processed, and there is a value add for the product, for example PET plastic bottles into a plastic flake, then it should be considered a new product (rather than a waste). For Western Australia, markets in Asia are frequently more economically and environmentally efficient to trade with than other areas of Australia. The necessary condition for this to continue is that appropriate safeguards are in place to ensure the material is being used in an environmentally sound manner following export.

In considering the definitions, the added value for the product and the understanding of environmental impacts at the end destination is vital. For example, the Recycling Activity Report identifies that export of whole baled tyres is one of the ways that tyres are diverted from landfill. The Association understands it is likely these materials are used as a fuel in developing countries. If the ban was introduced on export of whole baled tyres, but shredded tyres were still exported to the same destination and for the same use, this would not represent a more positive environmental outcome or a value added product.

Effective product stewardship schemes in place

In numerous Submissions, the Association has raised concerns regarding the effectiveness of both the [Australian Packaging Covenant Organisation \(APCO\)](#) and [Tyre Stewardship Australia \(TSA\)](#). APCO will need significant regulatory backing to ensure that packaging is redesigned to be recyclable, reusable or compostable by 2025 or before. The Association suggested that bringing APCO under the *Product Stewardship Act 2011*, would be one way to assist in implementing the Ministers' requirements. TSA has been operating for over 5 years and in WA there has been no marked improvement in market conditions or increase in the resource recovery and recycling rate. Both of these organisations will need to be operating effectively to assist in supporting export bans for the material types they cover.

Concurrent to this Senate Inquiry, an inquiry is also underway into Product Stewardship Bill (Plastic and Packaging). The Association Submission to that Inquiry is supportive of the mandatory product stewardship Scheme approach and a number of the initiatives identified. By setting clear environmental and social outcomes this Bill could lead to substantial innovation in the design space and greatly reduce the impact of products on waterways and oceans as well as the environment more generally.

Assessment of current and future infrastructure needs

An assessment of current recycling generation and infrastructure capacity and investigation of future infrastructure needs will assist in informing investment decisions for both Government and industry. The information needed includes the current market capacity to process additional material and the potential types of infrastructure needed to address any shortfalls – on a State/Territory basis. In this assessment it is vital that the location of the infrastructure is considered as this will have an impact on whether the potential capacity can be utilised in an economically and environmentally sound manner. This assessment will also need to be cognisant of the implementation of Container Deposit Schemes in various jurisdictions which has the potential to impact the market for recyclables and the destination for products, as there are requirements in some of the legislation to ensure materials are recycled.

Investigation of economics of recycling, market development and contingency planning

Both international (for processed recyclables) and national markets need to be considered. While there is a strong preference by Local Government for recycling to occur in Australia, this will not always be environmentally or economically preferable for all locations. The economics for different States and Territories need to be considered. For example, based on the infrastructure assessment there may be capacity for material from Western Australia to transport material to the Eastern States for processing – however the cost impact of that on Western Australian recycling should be modelled. Currently export of paper for recycling generates a financial return, if this material had to be recycled in Australia, paper could go from being an income to being a financial loss (due to transport costs).

In developing markets, contingency planning should also be considered. There is a risk if Australia becomes reliant on one dominant market player for a particular type of material, that if the recycler experience difficulty (e.g. through fire, natural disaster, financial troubles etc), a particular material type would then not be recyclable. In addition, in the absence of appropriate levels of competition or regulation, prices for recyclable products would be inefficiently set. For some material types, for example liquid paper board, there may only be enough material in Australia for one dedicated recycling facility. If this is the case, Government and industry will need to ensure that there are sufficient contingency plans in place.

Development of incentives and funding Programs

Funding programs from Government will be needed to incentivise investment in reprocessing and manufacturing infrastructure. In the WALGA Budget Submission more detail has been included on

the approaches which could be used and the quantum of funding required. There are a range of ways that incentives can be put in place to encourage the use of material/products derived from recycled material. Market pull for products made from recycled materials is a key element.

For this market to be developed, sufficient testing regimes and leadership from Government is essential – for example the Roads to Reuse Program currently underway with Main Roads. WALGA's Sustainable Procurement approach rates different suppliers based on a range of specific sustainability criteria. Local Government has purchasing power which could be used to influence the use of recycled materials, however each Local Government currently undertakes their own assessments relating to material purchased.

Approaches which support a circular economy should be explored and encouraged. Platforms and systems that enable a network of waste providers and re-users to connect should be supported and implemented. Federal, State and Local Governments have a role to play in this, both in the production and re-use of their own waste as well as supporting local businesses and the commercial sector to deliver better outcomes on waste. By aligning Local and State Governments suppliers, there is an opportunity to leverage the spending power of both tiers of Government and support the sustainable procurement framework. In future this could facilitate State agencies and Local Governments only engaging with, or at least giving preference to, suppliers that meet minimum standards regarding reduction of waste and use of recyclable material/products.

Effective regulation

Regulation of the market is a key component of ensuring that innovation succeeds. Business needs to be competing on an equitable basis and that can only occur where effective regulation is in place. For example, if a new business starts recycling construction and demolition materials into a new product, this will come at a cost, and a new business will not be able to compete with another business which is illegally disposing of the product.

Conclusion

Australian has an opportunity to foster innovation in the waste and recycling area which could lead to more jobs and investment, however there are a number necessary conditions for this opportunity to be realised. The recently released National Waste Policy Action Plan does include actions relating to a number of current issues which inhibit innovation, however the challenge for Government and Industry will be to implement the Action Plan and ensuring that the export bans do not have perverse outcomes in different jurisdictions.