



AUSTRALIAN  
**FOOD &  
GROCERY**  
COUNCIL

## **AFGC SUBMISSION**

### **ACT PHASING OUT SINGLE USE PLASTICS**

July 2019

*Sustaining Australia*

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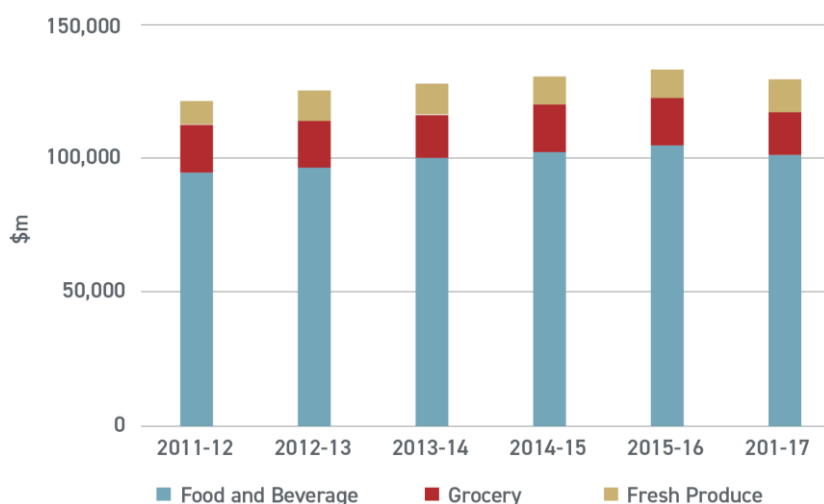
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## PREFACE

The Australian Food and Grocery Council (AFGC) is the leading national organisation representing Australia’s food, drink and grocery manufacturing industry.

There are over 180 member companies, subsidiaries and associates who together comprise 80 per cent of the gross dollar value of the processed food, beverage and grocery products sectors.

Composition (2016-17) of industry turnover



With an annual turnover in the 2016-17 financial year of \$131.3 billion, Australia’s food and grocery manufacturing industry makes a substantial contribution to the Australian economy and is vital to the nation’s future prosperity.

The diverse and sustainable industry is made up of over 36,086 businesses and accounts for over \$72.5 billion of the nation’s international trade. These businesses range from some of the largest globally significant multinational companies to small and medium enterprises. Industry made \$2.9 billion in capital investment in 2016-17 on research and development.

Food, beverage and grocery manufacturing together forms Australia’s largest manufacturing sector, representing 36 per cent of total manufacturing turnover in Australia.

The food and grocery manufacturing sector employs more than 324,450 Australians, representing almost 40 per cent of total manufacturing employment in Australia.

Many food manufacturing plants are located outside the metropolitan regions. The industry makes a large contribution to rural and regional Australia economies, with almost 42 per cent of the total persons employed being in rural and regional Australia.

It is essential to the economic and social development of Australia, and particularly rural and regional Australia, that the magnitude, significance and contribution of this industry is recognised and factored into the Government’s economic, industrial and trade policies.

## EXECUTIVE SUMMARY

The Australian Food and Grocery Industry (AFGC) acknowledge the impact plastic can have on the environment when disposed of in an irresponsible manner. We support the ACT Government, Transport Canberra and City Services Directorates (TCCS) initiative to investigate and address the issues of low plastic recycling rates and the negative impacts of terrestrial and marine litter. We believe these are distinct issues with individual causes and effects and therefore need to be assessed and addressed independently to obtain the best outcome for the community and the environment.

The food and grocery industry believes any proposed action to reduce litter and increase recycling rates needs to be assessed through a criteria based on a community benefits test. Together, industry and government are responsible to the community to provide services and products that result in a net community benefit. When assessing the impacts of single use plastics we also need to be conscious of the community benefits of packaging; reduced food waste, providing food safety, food quality, product stability and extending product expiry dates. Therefore, when addressing the issues raised in this discussion paper, TCCS needs to ensure environmentally superior product substitutes are available that do not inadvertently result in detrimental community and environmental outcomes, such as increasing food waste, increasing health risks or increasing carbon emissions.

Whilst we support TCCS for initiating the discussion paper to gain community and industry feedback, we recommend TCCS use the information gathered to inform the development of the National Waste Policy and the Australian Packaging Covenant Organisation (APCO) projects on phasing out unnecessary and problematic single-use plastics. As APCO continues to collaborate with all stakeholders on these issues, and has developed 22 sustainable packaging related project plans, we believe the greatest national community benefit will be achieved if all stakeholders collaborate and engage in the APCO led process. This will enable the community, industry and government to develop effective fact based national objectives that can be tailored and implemented at a state level with the support of industry.

We thank TCCS for the opportunity to provide feedback on behalf of our member companies.

## RESPONSE TO QUESTIONS

**1. DO YOU AGREE WITH THE CONSUMER SINGLE USE PLASTIC ITEMS LISTED ON PAGE 21 BEING CONSIDERED AS PART OF THIS PAPER? IF SO, WHICH ITEMS DO YOU THINK ARE THE MOST IMPORTANT TO ADDRESS?**

**2. WHAT REGULATORY OR OTHER APPROACHES DO YOU SUPPORT TO ADDRESS CONSUMER SINGLE USE PLASTIC IN THE ACT? WHEN DO YOU THINK ACTION IS NEEDED, AND WHY?**

The AFGC supports the aims of the National Packaging Targets and is collaborating with APCO, Commonwealth and State Governments, and the packaging and waste industries to reduce the use and impact of unnecessary and problematic single-use plastics when irresponsibly disposed of, or littered, in terrestrial and marine environments.

When reviewing each item, the AFGC recommends TCCS take into account the following considerations to guard against unintended consequences that have the potential to result in negative environmental and community outcomes:

3. Clarity of policy aims: Reduce litter or increase recycling, as the actions for each can differ greatly,
4. Ensure environmentally superior substitutes are available,
5. Do not jeopardise food safety or product hygiene, and
6. Do not increase food waste

Each of the above considerations are expanded upon in Question 8 below.

Please find below a table summarising the items the AFGC believes should be included, their importance and the recommended approach in dealing with them.

Diagram 1.1 – Product priorities

Items to be considered			
Items	Priority	Options	Rationale / Comment / Timing
<b>Takeaway food containers &amp; implements</b>			
Polystyrene – plastic food containers	1	Phase out with substitutes	As environmentally superior substitutes for polystyrene cups and clam shells are readily available and already in use in the majority of quick service restaurants and cafés, we believe phasing these out should be a priority. <b>Note:</b> as environmentally superior fit for purpose substitutes for beverage cups are not readily available, they are included with coffee cups below.
Plastic straws and stirrers	2	Voluntary agreements with business and industry	As all these items have environmentally superior substitutes that are readily available, we believe a voluntary process to replace these items is preferred. The key reason for preferencing this option over an outright ban is (1) the need to keep plastic straws with flexible necks for the disabled and aged as a ban could be interpreted as discriminatory, and (2) sourcing substitutes may take several years as suppliers transition from plastic and build manufacturing capacity of paper based alternatives.  Additionally, straws attached to CDS drinking containers should be exempted as they do not pose a real environmental risk and are already contained within a litter scheme.  Our recommended timing is 1-2 years to provide sufficient time for industry to scale up to provide consistent supply of substitute products. <b>Note:</b> as environmentally superior fit for purpose substitutes for plastic cups are not readily available, they are included with coffee cups below.
Plastic cutlery	3		
Disposable plastic plates	4		
Microbeads	5	State-wide ban	Due to the success of the voluntary removal of micro beads from 94% of cosmetic and personal care products implementing a ban that includes all products would be beneficial to the environment.  A time period of 2 years would allow manufacturers to source substitute product ingredients.

Items requiring further consideration			
Items	Priority	Options	Rationale / Comment / Timing
Disposable plastic-lined coffee cups and lids  Polystyrene beverage cups  Plastic cups		Sustainable design &/or reuse	<p>The solution for reducing the impact of litter and increasing recycling rates of coffee cups is not simple due to the nature of the item being purchased in one location and consumed and disposed of in another location. Furthermore, current disposable paper beverage cups and coffee cups cannot be recycled due to the plastic lining that is necessary to contain fluids and to provide consumer safety from burns.</p> <p>However, as several new packaging technologies and collection systems are now emerging (e.g. <a href="#">recycle me</a> &amp; <a href="#">simply cups</a>) as well as a Keep Cup exchange program, the AFGC, in consultation with APCO, are planning a comprehensive trial project to assess the environmental, economic benefits and the community acceptance of each scheme. These trials will also incorporate replacing the above plastics items with fit for purpose substitutes and would recommend 2 years be provided to allow these trials to implemented and the results assessed.</p>
Polystyrene - gravy and mashed potato containers		Voluntary agreements & Sustainable design	<p>Replacing polystyrene containers for serving hot gravy and potato has proven problematic for some quick service retailers. Due to the high temperature of these items, it is critical to provide packaging that insulates and protects the consumer from potential burns. Currently, the only alternative available is corrugated, plastic lined containers that use the same construction as many problematic coffee cups.</p> <p>Therefore we recommend that voluntary agreements be introduced that allow sufficient time for the development of fit for purpose substitutes that protect community safety.</p>
Light-weight fruit and vegetable bags		Labelling requirements & education campaign	<p>This items needs to be assessed with item by item decisions based on lifecycle assessments (LCA's) that include the impact of food waste and account for food safety risks. As many perishable products are placed in plastic in order to prevent contamination and provide food safety, extend shelf life, plastic should only be removed if there is a clear net community &amp; environmental benefit of doing so.</p> <p>Examples of unintended consequences may include cross contamination of meat and/or seafood products, and the reduced shelf life and increased food waste of fresh food items. Limiting the ban to only fruit and vegetables may mitigate this risk however the AFGC recommends obtaining input from the retail sector due to the potential for increased health risks.</p> <p>Substituting lightweight plastic bags with biodegradable or compostable bags often results in unintended negative environmental outcomes, including:</p> <ul style="list-style-type: none"> <li>* Failure to compost in the litter or marine environment. As compostable certified packaging (home and industrial) requires heat and time to compost, placement in the terrestrial or marine environments causes harm similar to regular plastics.</li> <li>* Contaminating Redcycle when mistaken for plastics</li> </ul> <p>The use of paper bags also presents retailers with heightened risk of theft as consumers could conceal higher value items (eg: razors, beauty products) at the base of fruit and vegetable bags. Currently this risk is minimised as plastic bags are transparent.</p> <p>The AFGC believes a national food waste education campaign would be beneficial to reduce community confusion and to increase their understanding of the importance of packaging in relation to providing food safety and reducing food waste. Furthermore, to increase the recycling rates of barriers bags, use of the ARL will educate consumers to recycle barrier bags via RedCycle rather than disposal to landfill.</p>

Items not to be considered			
Items	Priority	Options	Rationale / Comment / Timing
Plastic beverage containers		CDS - Extended producer responsibility scheme	The AFGC supports the introduction of the CDS in the ACT, as this combined with the increased recycled content of many containers (See Coca Cola <a href="#">press release</a> ), will provide a clean stream of plastic to stimulate a circular economy. Therefore, we recommend they be exempted from further regulation.
Reusable plastic bags above 35 microns in thickness including 'green bags', biodegradable' and compostable' bags		Labelling requirements & education campaign	<p>As the light weight ban is currently being embedded in the retail sector the AFGC believes that greater long-term community acceptance and buy-in will be achieved if thicker bags remain available in the medium term, combined with (1) education of shoppers to purchase &amp; re-use reusable shopping bags and (2) the addition of labelling instructions on heavy weight plastic bags highlighting the REDcycle program via use of the Australian Recycling Logo (ARL).</p> <p>Furthermore, substituting plastic bags with biodegradable or compostable bags often results in unintended negative environmental outcomes, including:</p> <ul style="list-style-type: none"> <li>✘ Failure to compost in the litter or marine environment. As compostable certified packaging (home and industrial) requires heat and time to compost, placement in the terrestrial or marine environments causes harm similar to regular plastics.</li> <li>✘ Contaminating Redcycle when mistaken for plastics</li> </ul>
Cotton buds (with plastic shafts)		Voluntary agreements with business and industry	Due to the success of the voluntary micro bead removal program and as cotton buds do not appear to be a litter issue within Australia, the AFGC recommends establishing a voluntary agreement to replace cotton buds with plastic shafts with cotton buds constructed with alternate environmentally superior materials.
Health related sterile items (e.g. Syringes)		Exempted with a focus on labelling and improved collection systems	<p>The AFGC believes healthcare or medicinal items, including those managed by the Therapeutic Goods Administration (TGA), should be exempted from any single use plastic regulation due to the health benefits they provide to the community in the form of sterilisation and hygiene. Removing plastic from these products would result in increased health and hygiene risk to the community.</p> <p>If incorrect disposal is an issue, improved labelling and education will be beneficial. The use of the ARL in conjunction with improved collection options in the medical sector will reduce incorrect disposal practices and increase recycling rates.</p>
Sanitary items			
Nappies and incontinence products			



**3. IF YOU ARE AN ACT BASED MANUFACTURER, IMPORTER OR RETAILER OF CONSUMER SINGLE-USE PLASTIC PRODUCTS, WHAT COST AND OTHER IMPACTS DO YOU THINK NEED TO BE CONSIDERED AS PART OF THIS DISCUSSION?**

**4. IF YOU ARE A LOCAL BUSINESS THAT SELLS, OFFERS OR PROVIDES CONSUMER SINGLE-USE PLASTIC IN THE ACT, WHAT DO YOU THINK NEEDS TO BE CONSIDERED AS PART OF THIS DISCUSSION?**

There are four costs to be considered when substituting single use plastic items as detailed below:

- i. **Financial Cost:** Information gathered from AFGC members indicates that many substitute products are available but at a higher cost. For example, the cost to replace plastic cutlery with bamboo substitutes on a national basis is estimated to be approximately \$30M per annum. Ultimately, this cost will be borne by the community resulting in an inflationary impact.
- ii. **Availability:** As single-use product substitutes are identified, consistent supply need to be ensured which may take several years to establish as Australian businesses will aim to make a national transition. Additionally, imported substitutes may be in short supply due to similar changes occurring across the globe.
- iii. **Collection Systems:** In the case of replacement single-use coffee cups, alternate collection systems may need to be implemented in a region. For example, both [Recycle Me](#) and [Simply Cups](#) offer unique coffee cup collection systems to provide source separated collections that enable recycling of coffee cups which will increase costs to industry and the community.
- iv. **Consumer response:** In consumer marketing, it is well documented that consumer intent and actual consumer behaviour vary dramatically. If a community survey asked individuals if they planned/intended to litter, the likely answer from all participants would be “no”, however, today, we have a real litter issue. Similarly, when asking consumers would they switch to purchase environmentally superior products at a higher price, the majority of survey participants would respond “yes”, but the list of product launches is littered with failed environmentally friendly products.

When consumers are faced with paying a higher price for functionally similar products with superior environmental features, the greater majority will make a purchase decision based on price. It is due to this that retailers may stock a range of items in order to prevent consumers moving to another retailer. Stocking only higher priced environmentally friendly products, risks the loss of consumers to other retailers providing a greater range of lower priced items. Similarly, brand owners who move to environmentally superior products prior to their competitors may face increased costs and declining sales and potentially deletion from retailers if sales fall below ranging thresholds.

To maximise the uptake of environmentally superior products, brand owners and retailers will require support from governments to assist reducing the cost of product substitutes so there is little or no additional cost for the consumer. This has the added benefit of reducing the inflationary impact on the community.

To assess many of the above considerations, the AFGC, in collaboration with APCO, is developing a project where a defined list of single-use plastics will be phased out of all fast food and take-away outlets in a regional town in order to measure the impacts on litter reduction and work through any in-store operational issues. We are happy to share details of this trial with TCCS as the project develops over the coming months.

## 5. HAVE YOU TAKEN STEPS TO REDUCE YOUR USE OF SINGLE-USE PLASTIC? IF SO, WHAT HAVE YOU DONE?

Many of our members have already commenced phasing out problematic and unnecessary single use plastics in their products and operations. Examples include major Quick Service Restaurant chains phasing out polystyrene in 1990's and more recently, [McDonalds](#), [Nestle](#) and [Coca Cola](#) have committed to phasing out plastic straws in support of the National Packaging Targets. Globally, Nestle have published a list of [problematic plastics](#) they have commenced phasing out of product packaging.

Other examples of brand owners reducing or removing single use plastics include Coca Cola's [announcement](#) stating, *The world's largest beverage company said 70 per cent of the plastic bottles manufactured in Australia will be made entirely from recycled plastic by the end of 2019. This will double Coca-Cola Amatil's use of recycled plastic across its beverage range. It includes all small packages 600ml and under, including brands like Coca-Cola, Sprite, Fanta, Mount Franklin and Pump 750ml.*

The effect of this is to ensure PET bottles are not only used once, but recycled into new food grade bottles and as a result stimulate demand for a circular economy. To support this initiative further, Coca Cola has made the global commitment to *collecting and recycling as many bottles and cans as it sells each year.*

Similarly, Unilever have [announced](#) plans to *introduce Australian sourced post-consumer recycled plastic for bottles of locally made and well-known Home and Personal Care brands such as OMO, Dove, Surf, Sunsilk and TRESemmé.* In the U.S., Unilever is trialling a re-use, refill model for some of the brands as a partner to the [LOOP](#) initiative in consultation with TerraCycle.

In recent weeks Johnson and Johnson has ceased manufacturing plastic cotton buds and moved to a more sustainable design.

AFGC members are currently collaborating with APCO and will utilise the revised Sustainable Packaging Guidelines to make informed changes to their product packaging once they are issued by APCO at the conclusion of the current whole of supply chain project.

**6. WHAT ALTERNATIVES TO SINGLE-USE PLASTICS HAVE YOU USED AND ARE THEY PRACTICAL?**

As detailed above in questions one and two, the AFGC believes there are three classifications for phasing out problematic and unnecessary single use plastics:

1. Items with available substitutes that can be phased out in the near future,
2. Items requiring further consideration and therefore time to validate that environmentally superior fit for purpose substitutes are available, and
3. Items not to be considered for reasons of greater community and/or environmental benefits, including health and safety, circular economy development or greater benefits being available by taking a long-term approach.

Diagram 6.1 – Product substitutes

Items with available substitutes	
Items	Substitutes
Polystyrene –plastic food containers	As demonstrated by the larger quick service restaurants in the 1990’s, cardboard clamshells are readily available as a substitute to polystyrene.
Plastic straws	Paper or metal straws
Plastic stirrers	Timber or bamboo stirrers
Plastic cutlery	Bamboo cutlery. It must however be noted that the additional cost to replace plastic with bamboo is estimated be in excess of \$30m per annum.
Disposable plastic plates	Paper plates
Microbeads	As evidenced by grocery brand owners, environmentally superior substitutes are readily available to replace microbeads
Cotton buds (with plastic shafts)	Compressed fibre shaft

Items requiring further consideration	
Items	Rationale / Comment / Timing
Disposable plastic-lined coffee cups and lids. Polystyrene –beverage cups Polystyrene –beverage cups Polystyrene -gravy and mashed potato containers	As detailed above, replacing plastic or plastic lined cups and containers can prove problematic for several reasons including, health and safety risks, complex collection systems, and an inability to sort through existing MRF’s.  However, the leading options include: <ul style="list-style-type: none"> <li>• Recycle Me:</li> <li>• Closed Loop:</li> <li>• Keep Cup exchange:</li> </ul>
Light-weight fruit and vegetable bags	As the light weight ban is currently being embedded in the retail sector the AFGC believes that greater long-term community acceptance and buy-in will be achieved if thicker bags remain available in the medium term, combined with (1) education of shoppers to purchase & re-use re-usable shopping bags and (2) the addition of labelling instructions on heavy weight plastic bags highlighting the REDcycle program via use of the Australian Recycling Logo (ARL).

Items not to be considered	
Items	Rationale / Comment / Timing
Plastic beverage containers	The AFGC supports the introduction of the ACT CDS, as this combined with the increased recycled content of many containers (See Coca Cola <a href="#">press release</a> ), will provide a clean stream of plastic to stimulate a circular economy. Therefore, we recommend they be exempted from further regulation.
Reusable plastic bags above 35 microns in thickness including 'green bags', biodegradable' and compostable' bags	As the light weight ban is currently being embedded in the retail sector, the AFGC believes that greater long-term community acceptance and buy-in will be achieved if thicker bags remain available in the medium term, combined with (1) education of shoppers to purchase & re-use re-usable shopping bags and (2) the addition of labelling instructions on heavy weight plastic bags highlighting the REDcycle program via use of the Australian Recycling Logo (ARL).
Health related sterile items (e.g. Syringes)	No fit for purpose substitutes are presently available providing the necessary sterility or hygiene barrier.
Sanitary items	
Nappies and incontinence products	

To assess that substitute products are fit for purpose, will increase recycling, reduce litter and are environmentally beneficial, the AFGC recommends a decision process similar to the table below be considered. The following example has been completed using takeaway coffee cups as an example.

Step		Option 1 Keep Cup Exchange	Option 2 Recycle Me	Option 3 Simply Cups
1	Action to reduce	Not applicable	Not applicable	Not applicable
2	Action to reuse	Introduce keep cup exchange program	Not applicable	Not applicable
3	Identify contamination issues	Low risk	Low risk	Low risk
4	Identify sustainable substitutes	Keep Cup Exchange	Recycle me	Simply Cups
5	Identify health and safety or other community risks	No risk	No risk	No risk
6	Lifecycle assessment of substitutes. Whole of life vs end of life	Lower environmental impact	Lower environmental impact	Lower environmental impact
7	Confirm collection system	Not required	Standard recycling bin or separate collection	Separate collection
8	Confirm sorting via PREP	Not required	Confirmed due to separate collection	Confirmed due to separate collection
9	Confirm secondary processing	Not required	Can be pulped or processed separately	Confirmed due to separate collection
10	Economic impact on community	Positive	No change if collected in standard recycling bin or potential increased collection costs if collected separately	Potential increased collection costs
11	Community acceptance and uptake	High intent but potential low adoption	High	High

## 7. WHAT MEMBERS OF OUR COMMUNITY MAY BE IMPACTED BY PHASING OUT SINGLE-USE PLASTICS AND HOW? WHAT ARE THE SOLUTIONS?

Of the seven items identified above that have readily available substitutes, we believe only straws may prove problematic with sections of the community. As the aged care, health care and disability sectors of the community are reliant to plastic flexible neck straws their removal may be interpreted as discriminatory. To overcome this some quick service restaurants chains have replaced plastic straws with paper straws on the counter, and made plastic flexible neck straws available upon request only.

## 8. WHAT ELSE DO YOU THINK NEEDS TO BE CONSIDERED AS PART OF THIS DISCUSSION?

When reviewing each single use plastic item, the AFGC recommends TCCS take into account the following considerations to guard against unintended consequences that have the potential to result in negative environmental and community outcomes:

1. Clarity of policy aims: Reduce litter or increase recycling, as the actions for each can differ greatly,
2. Ensure environmentally superior substitutes are available,
3. Do not jeopardise food safety or product hygiene, and
4. Do not increase food waste

### CONSIDERATION 1: CLARITY OF POLICY AIMS

To achieve optimal environmental outcomes, the AFGC believes it is critical to first establish clear policy aims. In relation to single-use plastics, policy aims could be to, 1). reduce litter, and/or 2). increase recycling rates. It is critical that the policy aims are clearly defined and confirmed prior to developing policies as the actions to address litter and recycling rates vary dramatically.

#### Reduce Terrestrial and Marine Litter

If the aim is to reduce litter, the following initiatives would prove effective:

1. Container Deposit Scheme (CDS): As evidenced in the ACT, SA, NSW and Qld the introduction of a CDS has a dramatic impact on reducing the volume of beverage containers littered and therefore entering marine environments.
2. Public place bins: Increased public place bins, strategically located in high litter areas will assist in preventing litter entering the environment and should be considered as a first line of defence, especially in highly used public areas adjacent to waterways.
3. Education: The AFGC believes it is necessary to move from binary messaging (good and bad actions) to aspirational messaging to drive community behaviour change. As understanding consumer behaviour is a core skillset of brand marketing, the food and grocery sector understands that to change consumer or community behaviour, you must first create perceived value of an item. Simply informing householders of 'correct' and 'incorrect' actions does not build the perceived value required to drive behaviour change to reduce littering and increase recycling. The AFGC is keen to collaborate with local governments, TCCS and the waste sector and share industry marketing expertise.

Increase Recycling

If the aim is to increase recycling rates, then policy should focus on materials with low recycling rates. As detailed below in diagram 8.1, the low Australian recycling rates of plastics and glass at 12.3% and 52.6% respectively highlight the need for local infrastructure development and market stimulation.

Diagram 8.1: Australian Recycling and Local Utilisation Rates

Material	Recycling Rate		
	MSW	Packaging	National Packaging Target
Plastic	12.3%	32.0%	70.0%
Glass	52.6%	50.0%	Not Specified

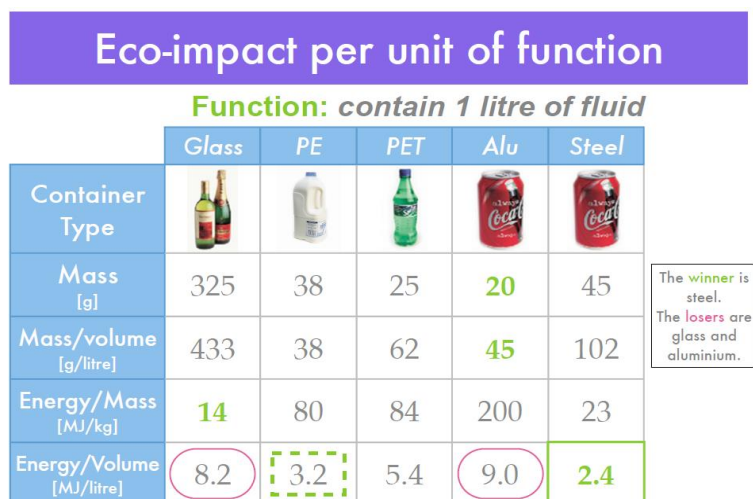
Source: National Waste Report 2017/18 & APCO Material Flow Analysis February 2019

1. Plastic: Due to the recent closure of Asian plastics processing markets, local infrastructure is required to process and manufacture rPET and rHDPE and hence increase the plastic recycling rate. Additionally, to increase the recycling rate of plastics #3-7, emerging technologies such as chemical processing and/or the usage of plastics in roads could be considered, both requiring further research and development from industry and government. See Appendix 1 for further details.
2. Glass: To increase the recycling rate of glass, several options need consideration. Firstly, increased use of post-consumer glass in civil construction and roads would reduce current glass stockpiling. Secondly, source separation of glass in kerbside collections would increase the quality of post-consumer glass allowing greater percentages of recycled content in local glass bottle production. See Appendix 1 for further details.

**CONSIDERATION 2: AVAILABILITY OF ENVIRONMENTALLY SUPERIOR SUBSTITUTES**

It is imperative that substitutes for unnecessary and problematic single-use plastic items provide an overall environmental benefit. Therefore, the AFGC recommends that a lifecycle assessment is undertaken on product substitutes to ensure they are actually environmentally beneficial. For example, as evidenced by diagram 1.2 below, the energy used to source and manufacture packaging materials varies widely and should be taken into account to mitigate against unintended negative environmental outcome.

Diagram 8.2: University of Cambridge - Manufacturing Energy Efficiency by Material Type



Recycling changes the picture a little – but not simple

Diagram 8.2 highlights that replacing PET with glass may in fact increase energy consumption from 5.4 to 8.2 MJ/Litre during product manufacture. Additionally, due to the additional weight of glass, further energy would be consumed during transportation. Therefore, in the case of soft drink bottles, it is environmentally beneficial for them to remain in PET, be collected in the container deposit scheme and recycled into rPET to stimulate a circular economy as in the example of Coca Cola's recent announcement to utilise 100% rPET in all bottles less than 601ml by the end of 2019.

### **CONSIDERATION 3: PROTECTING FOOD SAFETY AND PRODUCT HYGIENE**

The food and grocery industry is presented with a balancing act to ensure that the primary benefits of packaging; to ensure product stability, provide food safety and reduce food waste, are not outweighed by the effects of irresponsible disposal and littering. As stated on page 14 of the recent South Australian discussion paper, "Plastics play an important role in our economy and daily lives. Light and innovative materials in cars or planes save fuel and cut CO2 emissions and when used in packaging, plastics help ensure food safety and reduce food waste."

The superior air and moisture barrier properties provided by plastic packaging increase food quality and safety and provide effective hygiene barriers for medical and therapeutic products used at home or in the medical sector. Overall, this has led to improved community health outcomes that need to be considered when selecting product/packaging substitutes to reduce the impact of irresponsible disposal. The AFGC recommends these community health benefits be taken into account when drafting definitions of problematic and unnecessary single-use plastics.

### **CONSIDERATION 4: REDUCING FOOD WASTE**

The AFGC is a supportive member of the Commonwealth Department of Environment and Energy's Food Waste Steering Committee and the Fight Food Waste CRC. Similarly, brand owners continue to support the reduction of food waste through donations to food charity, such as Foodbank, and through reducing waste during the manufacturing process.

Packaging also plays a vital role in reducing food waste through providing:

- ✓ an air and moisture barrier to extend shelf life and reduce spoilage,
- ✓ resealable packaging to extend shelf life and reduce spoilage,
- ✓ portion control so that packaging sizes align with average usage/serving sizes,
- ✓ packaging that easily dispenses all food product to avoid wastage (eg: squeezable pouches), and
- ✓ reducing damage and waste in transport along the total supply chain from paddock to plate.

Diagrams 8.3 and 8.4 below, highlight that food waste does not only include the loss of the food itself, but the water and energy consumed to grow the food, transport the food, process the food, create the packaging, package the food and store and/or refrigerate the food from the farm to the fork.

Diagram 8.3 – Food Chain Energy Use

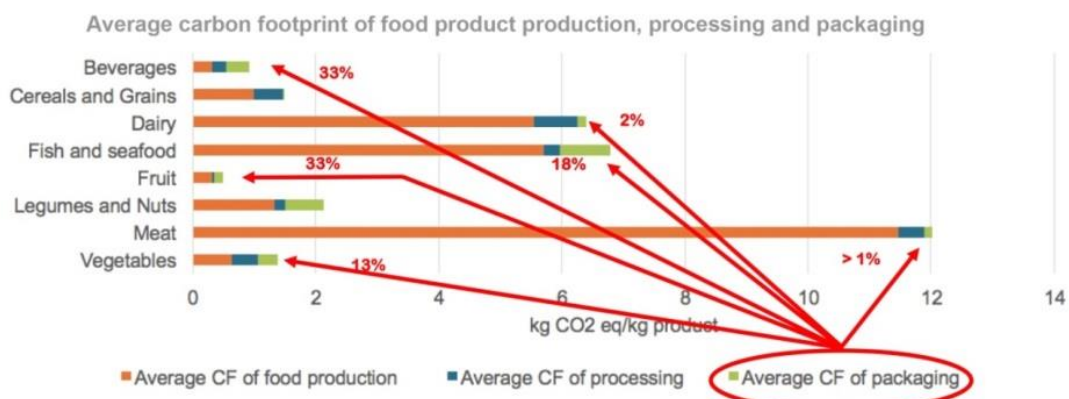


Diagrams 8.3 highlights that on average, packaging only accounts for 10% of the energy consumed in the total food supply chain. Simply put, if inferior packaging is used that increases food waste, the energy cost could be 9 times greater than the energy used to create the packaging.

Diagram 8.4 below highlights that the carbon footprint of products varies considerably by item, with meat, seafood and dairy products recording the highest energy consumption during production. Hence changing to inferior packaging that increased food waste on these items would result in considerable detrimental environmental outcomes.

Diagram 8.4 – Carbon Footprint by Product Type

### Life Cycle Assessment (LCA) - Carbon Footprint Packaging’s impact Kg CO<sub>2</sub> eq/Kg product



“The whole value chain has a responsibility to explain that sustainability is not synonymous with recycling, recyclability, recycled content, biodegradability and other popular buzz words, but that it is the overall resource efficiency of the supply chain that should be the main priority.” (Russell, 2014)

<https://www.oregon.gov/deq/FilterDocs/PEF-Packaging-ExecutiveSummary.pdf>

Due to the above considerations, the AFGC believes it is critical to incorporate them into the definitions of unnecessary and problematic single-use plastics to avoid unintended negative environmental and community outcomes. We believe consideration of the draft definitions below would reduce the risk of unintended consequences and negative environmental and community outcomes.



Diagram 8.5 – Draft definitions

<p><b>“Single use”</b></p> <p>To remove any ambiguity defining ‘single use’, the AFGC recommends the following criteria be considered:</p> <ul style="list-style-type: none"> <li>• The item or items contained in the packaging is only used, or sized to be consumed, in one occasion, or</li> <li>• Only a single item is contained in the packaging, or</li> <li>• The item is not resealable to allow usage or consumption on multiple occasions, or</li> <li>• Plastic items with greater 30% recycled content (in line with the national packaging target) are excluded as they contribute to the creation of a circular economy and their continued use is required to stimulate demand.</li> </ul>
<p><b>“Problematic”</b></p> <p>Includes products and items that:</p> <ul style="list-style-type: none"> <li>• are currently difficult to recycle with no emerging processing innovation to enable increased recycling in the near future, and</li> <li>• are ranked high in litter surveys.</li> </ul> <p>For example, plastic film should be excluded until emerging chemical processing technology has been assessed, as failure to do so may stifle innovation and therefore lower recycling rates in the long-term (ie: the criteria needs to be future looking, not tied to the past China based recycling system and promote innovation to develop a circular economy)</p>
<p><b>“Unnecessary”</b></p> <p>Product packaging that fails to meet the community benefits test; where, on balance, the benefits provided by the packaging do not exceed the issues caused by the packaging, or</p> <ul style="list-style-type: none"> <li>• Exempt plastic packaging where environmentally superior substitutes do not exist or the environmental cost from food waste or the risk to health exceeds the environmental cost of litter</li> <li>• Consider excluding hazardous goods and therapeutic and medicinal products (those managed by the TGA) due to mitigate against increasing health and safety risks.</li> </ul> <p>For example, products would not be defined as unnecessary where the benefits provided to the community by the packaging (reducing food waste and providing food safety for consumers) exceed the impact of recycling or litter issues.</p>

Alternatively, rather than establishing broad legal definitions of unnecessary and problematic single-use plastics, which may prove ambiguous in the long-term, a simple list of nationally consistent items could be drafted and agreed by all jurisdictions which would provide industry with certainty, clarity and confidence to invest. As our members operate within national and often global supply chains, alignment across the jurisdictions will provide brand owners with the scale necessary to drive optimal environmental outcomes.

The AFGC recommends establishing a defined national list of problematic and unnecessary single-use plastics in consultation with APCO, the Therapeutic Goods Administration (TGA), Food Standards Australia New Zealand (FSANZ) and the Fight Food Waste Co-operative Research Centre (FFWCRC) to ensure detrimental unintended health or food waste consequences do not occur.

The AFGC and brand owners are actively engaged in APCO Project 3. White Paper on Problematic and Unnecessary Packaging, Project 6. Food Service Packaging Guidelines, and Project 14. Models for Phase Out of Single Use Plastics and urge TCCS to consider the recommendations of these projects as part of the consultation process.

## SUMMARY OF RECOMMENDATIONS

The AFGC appreciates the opportunity to provide input to the ACT Government Phasing out single-use plastics discussion paper and supports the aims of reducing terrestrial and marine litter and increasing the recycling rate of plastic. We believe these are distinct issues and need to be assessed and addressed independently to obtain the best outcome for the community and the environment.

The food and grocery industry believes any proposed action to reduce the impacts of unnecessary and problematic single-use plastics requires an evidence based assessment process to deliver overall environmental and community benefits and ensure perverse outcomes are avoided. Considerations to include are:

- Ensuring clarity of policy aims,
- Ensuring environmentally superior substitutes are available,
- Ensuring food safety, consumer safety or product hygiene are not compromised, and
- Ensuring food waste does not increase

The AFGC also recommends that a nationally consistent list of unnecessary and problematic single-use plastic items is developed to provide industry with certainty, clarity and confidence to invest in selecting environmentally superior substitutes.

The AFGC recommends TCCS continues to collaborate with APCO as they lead the whole-of-supply-chain project to develop the National Waste Policy Implementation Action Plans that include plans to phase out problematic and unnecessary single use plastics by 2025.

The AFGC thanks TCCS for the opportunity to contribute to the consultation process and is keen to collaborate with all industry and government stakeholders to reduce the impacts of litter, increase recycling rates and develop a circular economy.

Should you require any additional information, please do not hesitate to contact me on 0413 263 249 or [barry.cosier@afgc.org.au](mailto:barry.cosier@afgc.org.au).

Regards



**Barry Cosier**  
**Director Sustainability**



## APPENDIX 1

The following appendices detail actions the AFGC understand would be beneficial to increase recycling rates and recycled content rates.

### INCREASING RECYCLING RATES AND RECYCLED CONTENT TO STIMULATE A CIRCULAR ECONOMY

The AFGC and its member companies support the National Packaging Targets that have been jointly agreed by APCO and industry. As Diagram A1.1 below highlights, both plastic and glass have recycling and local utilisation rates below the agreed targets.

Diagram A1.1: Australian Recycling and Local Utilisation Rates

Material	Recycling Rate			Packaging Local Utilisation Rate
	MSW	Packaging	Nat Packaging Target	
Plastic	12.3%	32.0%	70.0%	14.0%
Glass	52.6%	50.0%	Not Specified	36.0%

Source: National Waste Report 2017/18 & APCO Material Flow Analysis February 2019

#### 1. GLASS – SOURCE SEPARATED COLLECTIONS

As detailed above in diagram A1.1, there is opportunity to increase both the recycling rate and the local utilisation rate of glass within Australia.

##### Glass crushing for civil construction

The AFGC supports recent initiatives in Victoria and New South Wales where glass crushing plants have been established to produce glass sand for use in civil construction and road projects and in turn increase the recycling rate of glass. Additionally, the AFGC understands that greater recycling and recycled content rates could be achieved through reducing contamination found in commingled recycling collections.

##### Source separation of glass or paper

The AFGC has recently been in discussions with secondary glass processors who have indicated that the recycled content of glass used in Australian furnaces is approximately half of that used in New Zealand furnaces due to the high levels of contamination found in Australian MRF cullet. It was stated that **New Zealand furnaces contain approximately 60-75% recycled glass, versus Australian furnaces accepting approximately 20-30% recycled glass.**

Further environmental benefits were also mentioned, firstly, as recycled glass melts at a lower temperature energy use is reduced, and secondly, recycled glass produces lower carbon emissions during processing than virgin materials as carbon is only released when virgin materials are processed.

The reason New Zealand furnaces can process double the recycled content / tonne of Australia is due to the New Zealand source separating kerbside glass, and in doing so dramatically reducing the contamination. The AFGC therefore, supports trials such as Yarra City Council where glass is being collected separately, and the APCO [Project 1.3: Economic analysis of alternative collection systems and end markets](#), assessing the economic sustainability of alternate collection systems.

The New Zealand experience not only reduces the contamination of glass but also eliminates glass fragments being embedded in paper and cardboard. The flow on impact is that the value of both glass and paper is increased exponentially. As glass and paper represent approximately 70-75% of MRF feedstock, the resultant increased income for MRF operators could be used to offset processing costs and ultimately reduce the cost burden on Councils and the ratepayer. Opinions from MRF operators and collectors have varied relating to whether it is preferable/optimal to collect glass separately or paper separately (as in Northern Beaches Councils in NSW). Views expressed inferred that it would be preferable to collect paper separately due to the expected increased value of paper exceeding the expected increased value of glass.

The AFGC also recommends consideration of the following kerbside collection frequencies to minimise the impact on collection costs. As source separation will not impact the generation rate of household materials, an additional paper or glass bin could be provided to households with it being collected on alternate monthly cycles to the commingled recycling bin as summarised in diagram 4 below:

Diagram A1.2: Recommended recycling bins collection schedule

<i>Stream</i>	<i>Current</i>	<i>Proposed short to medium term</i>	<i>Proposed long term</i>
Garbage	Weekly	Weekly	Fortnightly
Recycling – commingled	Fortnightly		
Recycling – paper or glass		Monthly	Monthly
Recycling – remaining materials		Monthly	Monthly
Organics	Fortnightly		
Food Organics		Fortnightly	Weekly
<b>Total Collections / Week</b>	<b>2 Bins</b>	<b>2 Bins</b>	<b>2 Bins</b>

From prior experience in the waste industry and discussions with Councils that have implemented weekly food organics collection services, the AFGC recommends food organics collections be implemented in a staged approach. The experience of many Councils implementing weekly food organics collections was a substantial rise in contamination of the food organics bin and/or the recycling bin in the week the general waste bin was not collected. Anecdotal evidence and bin audits suggest that food organics bins and recycling bins have been used for putrescible waste, such as nappies, on the week the general waste bin was not collected. This has the impact of further devaluing the materials contained in the food organics and recycling bins and ultimately increases costs to Councils and ratepayers. It is therefore recommended that food organics collections are implemented on a fortnightly basis (as offered in South Australia with resultant leading diversion rates) and transitioned to weekly collections over time once community has engaged with, and understands the benefits of food organics collections.

If the above collection frequency proved successful, the additional cost to Councils and ratepayers would be limited to the cost of a bin. At approximately \$45.00 / bin over a 20 year period, this equates to \$2.25 per property per annum, a cost surely to be offset by the increase in glass and paper values.

Should the New Zealand system of source separating glass be replicated in Australia, **not only would the recycling rate of glass packaging double, the recycled content rate of packaging would also double over night stimulating a circular economy.**

## 2. PLASTICS - INCREASE AUSTRALIAN SECONDARY PROCESSING

As detailed in diagram A1.1, the current recycling rate of plastic packaging of 32.0% is approximately 3 times the national MSW average of 12.3%; however this is still well short of the 70% target contained in the National Packaging Targets.

Furthermore, the current local material utilisation rate of 14.0% is well short of the 30.0% recycled content target contained in the National Packaging Targets. Therefore, considerable effort and infrastructure is required to increase both the plastic recycling rate and recycled content rate to achieve the National Packaging Targets by 2025.

As the majority of plastic has been exported to Asia for almost 20 years, brand owners have little option but to buy imported plastic packaging. It is impossible to buy local packaging if it isn't available locally.

Additionally, the impact of the 2018 China Sword policy, the recent closure of other Asian markets and the pending export restrictions of the Basel Convention on mixed plastics highlights the urgent need to develop local plastic processing infrastructure. The AFGC believes the following action is required:

- Phase 1: Implement national MRF specifications, and
- Phase 2: Increase MRF sorting capability, and
- Phase 3: Increase local secondary plastic processing capacity

### PHASE 1: IMPLEMENT NATIONAL MRF SPECIFICATIONS

The National Packaging Target of designing all packaging to be 100% reusable, recyclable or compostable by 2025, is only achievable if a nationally consistent product acceptance criteria is established for all MRF's. It is currently impossible for brand owners to design packaging to be recyclable in approximately 140 MRF's if they all have different acceptance criteria.

In the absence of such national standards, the AFGC supports the use of the Australian Recycling Label ([ARL](#)) as it provides a national recycling benchmark for brand owners to use when designing packaging for recycling.

To aid the development of recyclable packaging, reduce community confusion, reduce contamination & ultimately increase the value of sorted materials we urge TCCS to collaborate with APCO (Project 4), MRF operators, local councils and policy makers to implement state/nation-wide product acceptance criteria for all MRFs (ie: Accepted product list).

### PHASE 2: INCREASE MRF SORTING CAPABILITY

As the China Sword policy and the recent tightening of Malaysian import regulations have been implemented largely due to contamination concerns, and considering the amendment to the Basel Convention that will prohibit the exportation of mixed plastics from 2021, the AFGC believes there is a need to set specifications for MRF sorting capability.

There is an apparent need for MRF's to install optical sorters to sort PET and HDPE from mixed plastics, or alternatively, there is a need for secondary facilities to be established that provide this sortation service for smaller MRF's where this may not be economically viable.

These separated materials could then be sent secondary processing facilities that recycle PET, HDPE and mixed plastics to maximise their value and recycling rates.

**PHASE 3: INCREASE LOCAL SECONDARY PLASTIC PROCESSING CAPACITY**

As stated above, brand owners are unable to buy local recycled content if it is not available locally. Therefore, the AFGC believes the following secondary recycling infrastructure is required to firstly, increase recycling rates, and secondly, to increase recycled content in packaging:

1. Food grade rPET recycling infrastructure
2. Food grade rHDPE recycling infrastructure
3. Alternate waste technology for processing plastics #3-7

According to the APCO [Material Flow Analysis](#) published in February 2019, the plastic packaging recycling rate is 32% with the plastics #3-7 representing the greatest opportunity for recycling at 48.5% of plastic packaging as summarised below in diagram A1.3.

Diagram A1.3: Plastic packaging recycling rates

Material	Tonnes generated		Tonnes recovered		Recovery Rate
<b>Total Plastic</b>	<b>907,401</b>	<b>100.0%</b>	<b>287,502</b>	<b>100.0%</b>	<b>32% ±4%</b>
<b>1 PET</b>	<b>138,585</b>	<b>15.3%</b>	<b>40,764</b>	<b>14.2%</b>	<b>29% ±5%</b>
<b>2 HDPE</b>	<b>328,727</b>	<b>36.2%</b>	<b>96,883</b>	<b>33.7%</b>	<b>29% ±4%</b>
3 PVC	17,014	1.9%	4,794	1.7%	28% ±3%
4 LDPE	220,148	24.3%	61,518	21.4%	28% ±4%
5 PP	101,464	11.2%	27,156	9.4%	27% ±4%
6 PS	26,913	3.0%	8,022	2.8%	30% ±4%
7 Other	74,551	8.2%	48,365	16.8%	65% ±7%
<b>Total 3-7</b>	<b>440,090</b>	<b>48.5%</b>	<b>149,855</b>	<b>52.1%</b>	<b>34% ±4%</b>

**1. Food Grade rPET**

The recent [announcement](#) by Coca Cola that it will introduce 100% recycled content on all products <600ml in their Coca Cola, Sprite, Fanta, Mount Franklin and Pump 750ml brands by the end of 2019 has signalled the opportunity for Australian processing. It must however be stressed that the recycled material must food grade and fit for purpose to avoid any food safety, quality or food waste issues. This must be assessed on a case by case basis as chemical migration from packaging varies by food type.

**2. rHDPE**

There is also a growing need for recycled HPDE. As recently [announced](#), Unilever Australia will move to introduce Australian sourced post-consumer recycled plastic for bottles of locally made and well-known Home and Personal Care brands such as OMO, Dove, Surf, Sunsilk and TRESemmé.

Again, caution must be exercised due to concerns of taint from recycled HDPE contaminating food or grocery items causing food and product safety, quality or waste issues. Some brand owners are currently pursuing food safety testing or investigating the installation of multi-layered HPDE packaging where virgin material is used internally for product/food contact and recycled content is used on the outer layer. Due to the high cost of upgrading manufacturing production lines, government support in the form of grants would be required as provided by the [NSW EPA](#) Product Improvement Program.

### 3. Alternate waste technology for processing plastics #3-7

Alternate waste technology for plastics #3-7 could include expanding the use of plastic in road making such as [Downers](#) recent trials in partnership with Close the Loop and REDcycle. Alternatively, consideration should be given to emerging chemical processing technologies that aim to convert end of life plastics to oil or oil based products such as diesel, petrol, kerosene, LPG or wax.

Several technologies exist, including gasification, pyrolysis or the Australian hydrothermal upgrading platform, the [Cat-HTR](#)™ innovation developed by Licella.

The benefit of chemical processing is that end of life plastics are returned to oil and can therefore be reprocessed into new virgin packaging without the concerns of chemical migration or taint that may cause health and safety issues for the community, creating a true plastics circular economy.