

Submission on Redirecting the future of plastic in NSW

June 2020

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Opening

Thank you for the opportunity to make a submission on the discussion paper *Cleaning Up Our Act: Redirecting the Future of Plastic in NSW*.

Local Government NSW (LGNSW) is the peak body for local government in NSW, representing NSW general purpose councils and related entities. LGNSW facilitates the development of an effective community-based system of local government in the State.

Background

On 8 March 2020 the NSW Government released the discussion paper, *Cleaning Up Our Act: Redirecting the Future of Plastic in NSW*, for comment. The paper is the first step in developing a new, comprehensive approach to managing plastic waste and pollution in NSW and will inform the development of the NSW Plastics Plan that will be an important part of the NSW 20-Year Waste Strategy.

LGNSW has consulted with councils and local government organisations in preparing this submission and our corresponding submission on the *Future of Waste and Resource Recovery*.

Summary of Recommendations

To make it easier to use less plastic LGNSW recommends the NSW Government:

- Work with manufacturers and retailers to simplify and reduce plastics used in products and reduce plastic packaging.
- Where single use items are deemed essential, such as in medical and health applications, work to find more sustainable options.
- Work to resolve confusion around compostable plastics, including standards, certification and labelling.

For design standards for plastics LGNSW recommends the NSW Government:

- Develop regulation and design schemes that promote the use of plastics that can be readily reprocessed in Australia.
- Ensure targets for plastic packaging producers regulated by the NSW EPA are the same as the APCO targets.

LGNSW recommendations for phasing out key single-use plastic items:

- Phasing out single-use plastics where they are not required for medical reasons or complying with environmental health regulations, with exemptions for critical uses.
- Phase outs must include community education campaigns to promote waste avoidance and sustainable alternatives.

LGNSW recommendations for increasing plastics recycling:

- Further research to determine the most appropriate collection methods for the available processing techniques, so as to enable a higher proportion of plastics to be recycled.
- Development of an implementation plan to achieve the plastics target.
- Reinvestment of the waste levy into infrastructure and programs to manage, reprocess and remanufacture plastics.

LGNSW recommends that the NSW Government work with COAG to mandate producer responsibility schemes for plastic products, particularly for commonly littered plastic items (that are not being phased out).

LGNSW recommends that any recycled content requirements be applied to domestic and imported plastic and plastic products alike.

LGNSW recommends the NSW Government support demand and industry capability by:

- Phasing in NSW Government domestic plastic recycled content procurement targets and associated baselines, monitoring and reporting systems
- Funding the development and implementation of overarching procurement guidelines tailored to local government, for example through Local Government Procurement.
- Facilitating the commercialisation of new compostable plastics that can be processed in all current home and commercial organics processing operations and are safe for the environment.

LGNSW recommendations to the NSW Government for infrastructure to prevent plastic leakage:

- Work with asset managers and developers to harmonise stormwater and litter infrastructure and maintenance, and
- Investment in public infrastructure to prevent plastic leaking into the environment must also provide for its ongoing operation and maintenance.
- Further research around whether using recycled plastic products, such as recycled plastic outdoor furniture or plastic content in roads, is not contributing further to pollution.

LGNSW recommends that a dedicated plastics research network in NSW includes local government representatives, product designers and the manufacturing industry to ensure the research is applied and able to be upscaled.

Response

LGNSW welcomes the release of the discussion paper and the Government's intention to address the management of plastics as a priority, to protect human health and our environment.

The NSW Government has shown leadership in committing to develop a Plastics Plan; however there needs to be an implementation plan and monitoring and reporting framework to underpin this strategy. The paper proposes four outcome areas built around a framework of shared responsibility, but councils, industry and the community require continued leadership and support to implement the statements in this strategy. We look forward to consultation on an achievable implementation plan that includes resourcing, roles and responsibilities.

The four outcomes proposed in the discussion paper are supported, however we recommend the final plan include greater focus on the designing out of unnecessary and hard to recycle plastics, and even rationalising the types of plastics used.

An implementation plan for the strategy that identifies what needs to be done, who will do it and how the actions will be funded is essential. In particular there is a dire need for investment in infrastructure to manage, process and manufacture recycled plastics, although this needs careful consideration to avoid obsolescence in light of other initiatives in the Plastics Plan (eg phase outs, changes to packaging).

NSW has a golden opportunity to create a progressive and pragmatic plan that stimulates solutions that NSW can be proud of and that delivers new jobs of the future.

Outcome 1: Reduce plastic waste generation

Proposed target: Phase out key single-use plastics in NSW

The NSW Government's circular economy approach needs to start at the design of the product stage and determine whether the material used – or plastic type in this case - is fit for purpose, and also consider the lifecycle implications of that material. Product design should ensure the design, the use of the product and recovery of the product at end of life contributes to the circular economy.

As per the waste hierarchy, the avoidance of waste should be the top priority. This includes reducing excessive plastic packaging and limiting single-use items. Unlike other materials such as glass, plastics are only able to be recycled limited times before they are disposed so we need to look at where and how plastics are being used, and ensure they are fit for purpose.

As well as a focus on reducing plastic waste, consideration could also be given to phasing out the use of hazardous chemicals in plastic manufacture. This will improve the health and safety of people in the supply chain/plastics system as well as achieve environmental outcomes.

Do you support the proposed target to phase out key single-use plastics in NSW?

LGNSW supports the phase out of single use plastic bags, and logically this extends to other single-use plastics where they not required for medical or food safety reasons. However, there needs to be consideration of what we are replacing single-use plastic items with. So far supermarkets have replaced bags with heavier plastic bags at cost to the customer. Some customers are still considering them as a single use bag. While these bags may be used more than once, the bags still have an environmental impact.

We also need to consider what single-use plastic items are being imported into Australia. Imported items must also be required to comply with a phase out to ensure a level playing field.

Phasing out key single use plastics is likely to increase the use of alternatives to plastics for niche applications such as home compostable bioplastics or other compostable packaging. Is this material accepted by organics processors and hence accepted in FOGO bins? Is there adequate labelling and certification? These questions must be resolved immediately.

As well as phasing out single use plastics, phasing out hazardous chemicals used in plastic manufacture should also be considered to reduce environmental and human health impacts.

Priority direction 1: Harness people power to create a fundamental shift in the way we use plastic

Do you support using less plastic? Is it hard to use less plastic?

Yes, however the biggest shift in the way we use plastic would come by placing responsibility on the producer rather than the consumer. Then there would be less reliance on individual behaviour.

It can be difficult to use less plastic, particularly in some applications where alternatives are fewer or less convenient. However using less plastic is achievable and greater awareness within the community can drive demand for alternatives, making them more readily available and part of everyday use.

A first step is to review what we are replacing plastic with to ensure no worse environmental outcomes. Using 100% recycled plastic content products could help maintain a market for the recovered plastics from other products. However, the chemical composition of plastics means that plastics are not endlessly recyclable unlike glass. Understanding the expected performance and life cycle of these plastics and other materials is vital.

How can government make it easier to use less plastic?

The NSW and Australian Governments can support reusable packaging initiatives and encourage new delivery models to eliminate unnecessary plastic packaging eg, RETUB, keep cups / reusable bowls.

Encouraging or mandating producer responsibility schemes for plastic products (particularly those made from plastic types 3-7) would also help to either reduce the array of plastics down to those that can be feasibly recovered and recycled through existing kerbside and other return points, or at a minimum ensure manufacturers provide for their materials to be managed at end of life.

The NSW Government through COAG could mandate/complement the Australian Packaging Covenant Organisation's (APCO) target. There is currently a mismatch between what is technically possible to recycle and the recycling industry's ability to accept and manage materials, e.g. aseptic packaging (such as long life cartons) is widely used in Australia and despite the recycling technology existing on almost every continent¹ to recycle this type of packaging there is no such facility in Australia. According to APCO research plastic packaging makes up 19.6% of the packaging placed on the market in Australia, of which only 54% is classified as having good recyclability by APCO. However the post-consumer packaging recovery rate in 2017–18 for plastic packaging was only 16%.

Reducing product packaging, both business to business and business to consumer, is another way to cut down on the plastic in circulation. Many products come wrapped in 2-3 layers of packaging and the products are often bulked up for retailers in even more layers and packaging components.

A suggestion in the discussion paper is to set up plastic-free precincts. These may be workable in the metropolitan area, however in regional areas they can present some issues in terms of transport, processing capacity and volumes collected that may make plastic free precincts unviable. It would be far more equitable to minimise the plastics used in products and packaging across the board.

Australian standards do exist for composting – *AS 4736: 2006 Biodegradable plastics suitable for composting and other microbial treatment* (Australian Industrial Compost Standard) relevant to industrial and commercial scale composting facilities; and *AS 5810: 2010 Biodegradable plastics suitable for home composting*. However confusion surrounds how these apply. For example according to the newly released APCO Compostable Plastic Packaging Guidelines, compostable packaging that meets AS 4736 does not compost in home composting; and packaging that meets AS 5810 may not break down in all home composts, depending on how they are run.

It is recommended that organic processors seek certification against a verification scheme that their processors do process certified AS 4736 compostable packaging as organics recyclers in Australia have differing capabilities based on individual operating processes. Assurance is needed that these materials will break down without interfering with normal operating

¹ <https://www.tetrapak.com/au/sustainability/recycling>

processes and will not leave any physical or chemical residues in the finished organic product after processing.

For the consumer it is challenging to distinguish between compostable plastics and conventional plastics. This has been demonstrated in the mid north coast of NSW where compostable containers are contaminating both organic and recycling streams. Plastic containers end up in the green bin because people think they are compostable. Conversely, people are putting compostable plastic in the yellow bin. Given the 20 year waste strategy is proposing a widespread transition to FOGO, it will be even more important that labelling standards are improved so that it is clear whether the compostable plastic is compostable in real conditions and won't create further issues by generating micro-plastics.

Councils recognise that compostable plastics result in contamination in the recycling system but compostable plastics derived from renewable materials may be preferable to petrochemical plastics if the 'plastic' is going to make its way into the environment. The NSW Government needs to provide guidance on which is the more important driver – reducing contamination in the recycling stream or reducing litter/environmental pollution.

Where single use items are necessary in medical and health applications, as has been seen during COVID19, the feasibility of replacing these with safe reusable more robust items should be explored. Where single use items are necessary, there should be accessible, affordable collection and recycling systems and use of recycled content in their manufacture.

To make it easier to use less plastic LGNSW recommends the NSW Government:

- Work with manufacturers and retailers to simplify and reduce plastics used in products and reduce plastic packaging.
- Where single use items are deemed essential, such as in medical and health applications, work to find more sustainable options
- Work to resolve confusion around compostable plastics, including standards, certification and labelling

How can businesses make it easier to use less plastic?

There is little in the plastics plan to reduce the generation of plastic packaging by producers, which accounts for 40% of the global plastic use. In many instances plastic packaging can be avoided altogether while maintaining utility. Reuse business models should be encouraged as a preferred 'inner loop' decreasing need for single use plastic packaging. Most European and some North American jurisdictions have reuse schemes for bottles. This could work in high density areas.

Some waste types will stop being recycled under the waste export ban, such as polycarbonate polymers, as there are insufficient tonnages to support a processing facility solely for domestic use. If materials cannot be realistically and feasibly recycled then their use should be questioned / phased out, or investment made into small scale local processing technology. Getting a clear understanding of upcoming plastic packaging/product designs and current material flows can inform what is needed.

Another option is for businesses to charge increasingly more for any avoidable plastic items where they provide alternatives or people can bring their own (eg. sauce, take away containers/bags, cutlery, straws).

Priority direction 2: Set design standards for plastic consumer items

Do you support government introducing mandatory design standards for certain plastic products? What products or materials should have mandatory design standards or what mandatory design standards would significantly reduce plastic waste generation?

Mandatory design standards for products are supported in principle, but this is difficult to answer without knowing what plastic products it will apply to.

Australian Packaging Covenant Organisation (APCO) research indicates:

- Only 54% of plastic packaging placed on the Australian market has good recyclability (ie technically recyclable, collection and recycling services widely available and viable end markets), with recovery rate in 2017-18 only 15%
- Average recycled content in plastic packaging is 2% (compared to average of 35% in 2017-18 across all packaging).

This indicates a priority need for regulation and design standards to make producers of plastic packaging more responsible for reducing its use or considering the combination of materials they use. Mandatory design standards that take into account what is feasible to recycle in Australia and push for more sustainable alternatives are needed.

It is unreasonable to expect that councils will continue to collect packaging that is 'technically' recyclable but is not being recycled within the current MRF and processing technologies. This increases costs of council waste contracts due to the increasing amount of recycling that goes to landfill as contamination. The mismatch between designing theoretically recyclable packaging and what actually can be recycled in Australia needs to be addressed. Better collaboration is urgently needed between packaging designers and the waste industry given the Waste Export Ban implementation. Either plastic packaging does not enter the Australian market unless it is domestically recyclable, or producers pay upfront for upgraded technology at processors to enable their choice of packaging to be recycled in Australia.

Standards that design-out hard to recycle plastics such as composites, PVC, liquid paper board and polystyrene on both imported and domestic products is needed. Producers and consumers/users should bear the cost, rather than all residents through the domestic waste charge at the end of the pipeline. In this way consumers can be incentivised, through their purchasing decisions, to avoid hard to recycle packaging.

The APCO targets, while a step forward, need to be more strongly enforced and amended to include that products should be recyclable, reusable and compostable but also that they are actually recycled, reused and composted. The NSW Government should take action now to ensure that the APCO target is achieved and also work with the packaging companies that are not APCO members to make sure there are comprehensive actions on plastic packaging in NSW so there is a level playing field. Currently packaging companies that choose to be regulated by the NSW EPA have lower and less targets than the APCO targets.

Waste generators through product stewardship, rather than communities through kerbside recycling, should fund the increasing cost of plastic recycling or landfilling poorly designed plastic packaging and products unsuited to the domestic or global circular economy.

For design standards for plastics LGNSW recommends the NSW Government:

- Develop regulation and design schemes that promote the use of plastics that can be readily reprocessed in Australia.
- Ensure targets for plastic packaging producers regulated by the NSW EPA are the same as the APCO targets.

Priority direction 3: Phase out key single-use plastic items

We note that there is no specific timeframe given to phasing out single use plastic bags, the plan states it will be 6 months from passing of legislation, which is 2021 at the earliest.

Do you support the phase out of lightweight plastic bags (less than 35 microns and including 'degradable' and 'compostable' plastics)

Yes, local government supports a ban on single-use plastic bags.

Do you support the phase out of other single-use plastic items such as:

- *heavier/boutique plastic bags*
- *Plastic straws*
- *Disposable plastic plates and bowls*
- *Disposable Plastic cutlery*
- *Disposable Plastic stirrers*
- *Disposable plastic cups*
- *Expanded polystyrene food and beverage containers*
- *All oxo-degradable plastics*

We support the phase out of all single-use plastics, where there are alternatives and where they are not required for medical reasons or to comply with environmental health regulations. There will need to be exemptions for critical uses.

Phasing out the single-use plastics listed will help drive innovation. NSW is not the first jurisdiction to introduce these kinds of restrictions on plastics. Other jurisdictions have already done so, therefore NSW should be able to follow quickly.

Are there other plastics that should be phased out?

Plastic lids on beverage cups, balloons, cotton buds, sticky labels on fruit, plastic labels, membership and gift cards, silage and livestock wrap, pens, plastic lined tins, plastic fishing tackle, supermarket promotions such as plastic cards and ooshies/stickies; plastic wine kegs (20 kg).

There are also plastics that are a problem in kerbside systems, such as polystyrene and meat trays (black ones in particular as these are not readily sorted at MRFs). Polystyrene is bulky and takes up room in waste bins or is presented in hard waste clean up where it can break apart and small pieces are left in the verge or are blown away. It also takes up valuable space in landfill.

And then there is unnecessary plastic packaging such as prepacked fruit and vegetable items, over packaged non perishable/non breakable products, and single use logistics packaging.

Before phasing out the above items, there needs to be consideration as to whether appropriate sustainable alternatives are available, especially in relation to food packaging as it needs to comply with food regulations. The NSW Government also needs to look at single use plastics that are imported and how their use and processing are controlled.

What should the NSW Government consider when implementing these phase outs?

The first consideration is educating the community to avoid the use of these items, changing consumers purchasing behaviour to avoid and reduce the amount of single use plastic waste

generated. The second consideration is educating the community on sustainable consumption (where avoidance is not currently a viable option), encouraging “replace with sustainable alternatives” rather than “phase out”. This will assist with public take up as we are replacing day to day items rather than be seen as taking them away. This is hard under the current COVID-19 restrictions e.g. alternatives to disposable coffee cups. However it’s essential that any sustainable alternatives have viable closed loop resource recovery systems in place.

As with any regulatory change, early and clear communication is key and will help affected industries and consumers to plan ahead and identify alternatives. It will also be important to explain how the phase outs will be monitored and enforced, for both domestic and imported products.

LGNSW recommendations for phasing out key single-use plastic items:

- Phasing out single-use plastics where they are not required for medical reasons or complying with environmental health regulations, with exemptions for critical uses.
- Phase outs must include community education campaigns to promote waste avoidance and sustainable alternatives.

Outcome 2: Make the most of our plastic resources

Proposed target: Triple the proportion of plastic recycled in NSW across all sectors and streams by 2030

Do you support the target to triple the proportion of plastic we recycle in NSW across all sectors and streams by 2030?

LGNSW supports the proposed target in principle and would like to see the detail of how this can be achieved in an implementation plan. Further detail is needed on the definition of ‘recycle’; the baseline against which the target will be measured; the processing capacity increases required against current and planned processing capacities; how markets will be found for this increase and how the target will be measured.

Imports, transport and technical requirements will need to be addressed. Around 66% of plastics consumed in Australia are imported and 34% manufactured domestically, so as a net importer of plastics, supply of recycled plastic is likely to outstrip domestic demand.

There is limited infrastructure for recycling plastics and a small domestic plastic recycling market, with new plastic cheaper to produce than recycling existing plastic. A Credit Suisse Investment Strategy Research report for plastic (albeit 2018) found that a cost premium of about \$100 per tonne differential to virgin resins will remain and forecast increases by 2022. There is also a lack of high-tech facilities to sort different plastic types.

Any cost increase to local government caused as a result of such a target should be offset through reinvestment of the waste levy or introduction of producer responsibility/take back schemes.

There is little domestic manufacture of PVC, PP, PS and EPS resins, which will make increasing the recycled proportion of these plastics difficult. See previous comments on the need to review the types of plastics used in products and whether they are fit for purpose and/or plastic types can be rationalised. There is no point in building processing infrastructure for plastics that in the medium term become redundant due to phase out of problematic plastic types.

There are challenges with designing container lids so that the safety seal remains with the lid (rather than on the container neck), which would make items more recyclable and reduce contamination in recycling bins. There is also a tension between what the CDS and MRFs require in terms of preference for lids on or off.

Improvements in collection and processing systems will assist in meeting the target. The NSW Government could assist in the following ways:

- Undertake detailed analysis and innovative trials to determine how and where best to separate each plastic waste material type - at household, precinct, takeback or MRF level, or a combination, dependent on recycling processing environments eg high tech MRFs, social enterprise MRFs, energy from waste plants and chemical processing.
- Support high-tech facilities to sort different grades of low-quality kerbside plastic (3-7) for reprocessing into higher value recycled plastic. This mixed plastic material will be viewed as contamination under the Waste Export Ban (not financially viable to recycle) and landfilled unless infrastructure is improved. Investment in sorting & reprocessing infrastructure is needed to reform and reshape kerbside recycling to recoup lost value. Alternatively phase out these low grade plastics.
- Facilitate collection points for soft plastics (the dominant form of plastic packaging) including innovative collection infrastructure.

Tripling the proportion of plastic we recycle requires the development of end markets for the plastic recyclate produced to ensure no plastic recycling ends up in landfill or is stockpiled. Government procurement of products with a percentage of domestic plastic recycled content will assist drive the plastic recycling rate and build resilience to overseas market shocks for exported plastic recyclate.

LGNSW recommendations for increasing plastics recycling:

- Further research to determine the most appropriate collection methods for the available processing techniques, so as to enable a higher proportion of plastics to be recycled.
- Development of an implementation plan to achieve the plastics target.
- Reinvestment of the waste levy into infrastructure and programs to manage, reprocess and remanufacture plastics.

Priority direction 4: Make producers of plastic items more responsible for collecting and recycling in NSW

Do you support schemes where producers take greater responsibility for the plastics they generate?

Yes. It would be faster and more efficient for producers to take responsibility than re-designing systems to process a mixed product stream. Producer responsibility schemes need to be required through regulation as the current voluntary schemes have limited effectiveness, which is further exacerbated by free-rider issues.

Manufacturers should be given targets to use recycled plastics in their products, and their manufacturing capacity approval should be based on their commitment to use recycled plastic. Another option is to adopt the European Packaging Recovery Note (PRN) system which requires plastics producers to prove that waste packaging material has been recycled into a new product.

What plastic items or materials could be considered for such schemes?

Plastic items made from readily recycled plastic types (PET, HDPE) should be considered for producer responsibility schemes. Hard-to-recycle plastics should be phased out.

Are there challenges with such schemes?

Challenges with producer responsibility schemes include:

- High transport costs from regional areas to processing locations (unless processing is localised e.g. microfactories)
- Making sure the scheme's material recovery targets are met from across all of NSW not just where densities allow for easier collection.
- Having appropriate facilities for collection with the challenges of storage space (metro areas), the tyranny of distance (regional areas) and NIMBYism. Any takeback schemes that use local government facilities and services should at a minimum cover the cost of providing the collection point and servicing that point. Producers should not be free riding off ratepayers.
- The current lack of processing infrastructure in Australia may slow down the commencement of these schemes.

What are the other ways the NSW Government could support producers to be more responsible for the plastic they generate?

NSW and Australian Governments could work together to provide economic or regulatory incentives for take back systems. Further collaboration is needed between producers and businesses that can reuse or reprocess the plastics in their products. This could lead to design changes that will ensure less waste is produced and more plastic is recovered.

LGNSW recommends that the NSW Government work with COAG to mandate producer responsibility schemes for plastic products.

Priority direction 5: Mandate 30% minimum recycled content in plastic packaging in NSW by 2025

Do you support a requirement for all new plastic packaging to contain at least 30% recycled plastic content by 2025?

LGNSW supports a minimum of 30% recycled plastic content by 2025, as this should help the plastic subject to the waste export ban to be used. However there are several things to consider in setting a target:

- Primarily plastic should be avoided, and priority should be given to looking for sustainable alternatives. Phase out the harder to recycle plastics including PVC (for packaging), PP, PS and EPS resins, mainly HDPE and LDPE. This could be done through bans or a levy/tax so appropriate substitutes can be found.
- There are risks in terms of mandating recycled content as it may lock us into the continued use of plastics. We need to set the recycled content targets at a level that relates to the volume of plastic that we genuinely need to use for health and safety reasons, and provide for reviews of the targets over time as product (and plastic) mixes change.
- Modelling of material streams is important to determine what the most appropriate percentage of recycled content that allows for continued recycling and not create perverse outcomes.
- Regulation may need to require products be made from a single material rather than a composite.

- How will this target be monitored? Who will undertake compliance checks?
- How do we enforce compliance in NSW particularly on imported packaging?

Do you support all new plastic items to be made with recycled plastic?

Yes, assuming there are not any issues with the previous use of the plastic contaminating the next product (eg, hazardous chemical tainting the plastic) and health and food regulations can be met.

Would a requirement to use recycled plastic drive demand for recycled content?

To an extent, yes, but if Australia is a net importer of plastics (60% of our plastics) this will only work if the imports also have to meet the requirements.

LGNSW recommends that any recycled content requirements be applied to domestic and imported plastic and plastic products alike.

Are there barriers to creating a reliable supply of locally recycled materials for reprocessing?

Introducing a requirement for packaging to contain recycled content needs to be viable for MRFs. Recently MRFs have not been investing in processing equipment as the markets for materials are so poor. A mandate to use recycled plastic content domestically may have limited effectiveness in increasing market demand due to the large volume of imports.

Local government wants to avoid the ongoing situation where councils and MRFs invest in collecting and sorting materials that are difficult to sort and recycle when they could be avoided in the first place. Considering the lifecycle of plastic in the design phase is critical to ensure the products are practically recyclable.

Priority direction 6: Support demand and industry capacity

How can NSW Government procurement best encourage increased use of recycled plastic?

We need to increase local and state government procurement of recycled plastic made with domestic content, for example by:

- adopting recycled content targets to help drive demand and provide incentives to deliver on these targets.
- funding further research, development and delivery of recycling technologies and plastics generated from recyclables, particularly by local or regional councils.
- Incentivising the investment in new product development.

The NSW Government can show leadership by phasing in recycled plastic procurement targets, starting by preferencing Australian-made plastic products in procurement, and prioritising companies that use recycled content through, for example, weighting / preferencing in contracts. Some councils find it difficult to buy recycled content products when they are more expensive than conventional products. One solution is to make recycled content products price comparable (eg through subsidies, or by taxing products made without recycled content) and thereby create a level playing field with products/producers using virgin plastics.

Alternatively, if the NSW and Australian governments are procuring recycled plastics, it is easier for councils to justify the additional costs. Procurement guidelines would also be appreciated.

Several councils and groups of councils in NSW are already developing regional and region-specific solutions for the plastic 'circular economy'. For example, SSROC councils have signed an agreement to preference products made with recycled content. This was adopted from a model provided by a group of Adelaide councils. Councils would also see benefit in developing/expanding on a database that highlights preferred suppliers of sustainable alternatives or recycled content products and materials, for example Sustainable Choice or Ecospecifier.

Other countries such as UK, France and the Netherlands have developed "Plastics Pacts" under the umbrella of the Ellen Macarthur Foundation Plastics Economy Global Commitment to transition to a plastics circular economy.

Uptake of recycled plastics needs incentivising otherwise the plastic waste export ban will result in illegally stockpiled, dumped or landfilled plastic waste. There are some innovative solutions for plastics such as:

- REDcycle program diverting soft plastics from landfill through takeback to supermarkets, however this does not have widespread adoption.
- NSW councils using soft and hard plastics, including toner cartridges, in civil construction.
- North western NSW councils kerbside plastics being made into star pickets locally.

LGNSW recommends the NSW Government support demand and industry capability by:

- Phasing in NSW Government domestic plastic recycled content procurement targets and associated baselines, monitoring and reporting systems.
- Funding the development and implementation of overarching procurement guidelines tailored to local government, for example through Local Government Procurement.
- Facilitate the commercialisation of new compostable plastics that can be processed in all current home and commercial organics processing operations and are safe for the environment

What type of funding would encourage investment in the plastics recycling sector?

Incentives are not limited to funding but may also include tax/fee concessions and reducing industry risks through the fast tracking of the approval process and EPA licencing and assist in developing social license to operate.

Another option is for an environmental tax/levy on non-recycled content products that goes into funding the creation of those that are made from recycled content, or that funds the research and development for alternatives.

Local government would be an ideal leader for projects to recycle plastics (and other materials), particularly in regional areas. Reinvestment of the waste levy could help kick start small scale, locally-based plants that deal with local/regional waste, thereby reducing transport costs and environmental impacts, and boosting local economies.

What type of projects could be funded to increase plastic recycling?

Ideally plastics would be recycled back into the product it came from or as high order use as possible. However this is not always technologically or logistically feasible. Alternatives include:

- Plastic lids could be used in 3D printing filament micro factories that are co-funded and located in all existing MRFs or state prisons or disability worker enterprises/charities.
- Kerbside plastics could be recycled locally into high volume products such as star pickets in rural areas, and road barriers, bollards and matting in urban areas.

Outcome 3: Reduce plastic waste leakage

Proposed target: Reduce plastic litter by 25% by item by 2025

Do you support the target to reduce plastic litter by 25% by 2025?

Yes, plastic is very problematic as it does not biodegrade (like paper) but can persist for decades as larger items or as microplastics.

Councils expend considerable resources cleaning up litter, including plastic litter, and installing and maintaining a range of litter control measures (note these do not capture microplastics) in stormwater drainage systems and waterways. Clean Up Australia's 2019 Rubbish Report for NSW found plastic was the most littered material at 37%. Around 80% of marine plastic waste comes from land sources.

Some plastic products can result in direct pollution such as microfibres in textiles and artificial turf. There is a need to find alternatives for these products as it is not feasible to implement filtration measures at large scale. There is also a research gap around whether using recycled plastic products, such as recycled plastic outdoor furniture or plastic content in roads, is not contributing further to pollution.

Priority direction 7: Use extended producer responsibility schemes to fund litter collection and end-of-life plastic management

Do you support schemes that enable producers to be more responsible for the collection and management of plastic items like cigarette butts and fishing gear?

LGNSW supports extended producer responsibility schemes through which producers are more responsible for the management of end of life items. Councils currently bear a significant burden in the costs of managing litter items such as cigarette butts.

The discussion paper implies fishing gear is a significant litter item, however the merits of whether a producer responsibility scheme will work for fishing gear depends on whether it is being wilfully left along shorelines or unintentionally lost (snags, snapped line). Is there any data on this? Producer responsibility schemes alone will not work if the majority of this material is being lost.

Ultimately plastics have found their way into many uses because they are durable and cheap to produce. If the environmental costs of the plastic in its life cycle were to be included in the cost of the plastic product, we would likely see its cost move much closer to other materials such as metals.

LGNSW recommends development of extended producer responsibility schemes for commonly littered plastic items (that are not being phased out).

Priority direction 8: Invest in infrastructure that can better manage plastic before it causes harm

Do you support the NSW Government investing in infrastructure to prevent plastic leaking into the environment?

Yes, however as outlined below care is needed to select the most appropriate interventions, by understanding and tackling the reasons for the plastic leakage. In some cases education and awareness raising may be what is needed, or we need to eliminate the products or processes

that cause or allow plastics to leak into our environment. For items that are prone to littering, one option is to introduce a levy on those items, which can be used to resource further education, clean ups or other measures to prevent plastics reaching the environment.

Investment in infrastructure needs careful consideration to avoid obsolescence in light of other initiatives in the Plastics Plan (eg phase outs, changes to packaging).

What infrastructure or processes would most effectively prevent plastic leakage?

Microfibres which come off our synthetic clothes each time we do a load of washing go down the drain and into rivers and oceans and are consumed by marine life. Education and requirements on householders and manufacturers to fit machine microfibre filters should be included in any plan as has been delivered in France.

In the short term, is it possible to make finer filters to capture microplastics without compromising the operation of the stormwater system? Councils are concerned that additional filters on stormwater systems risk the system overflowing and make the infrastructure unfit for the purpose it was created.

The NSW Government should work with asset managers (such as councils) and developers to harmonise infrastructure and maintenance. Developers often hand over stormwater and litter assets to local government without specifying what and where they are. Therefore, they could never get emptied or perform as designed. Any investment in infrastructure (eg for trapping plastics) must also provide for the ongoing maintenance of that infrastructure to ensure continued performance.

LGNSW recommendations to the NSW Government for infrastructure to prevent plastic leakage:

- Work with asset managers and developers to harmonise stormwater and litter infrastructure and maintenance, and
- Investment in public infrastructure to prevent plastic leaking into the environment must also provide for its ongoing operation and maintenance.
- Further research around whether using recycled plastic products, such as recycled plastic outdoor furniture or plastic content in roads, is not contributing further to pollution.

Outcome 4: Improve our understanding of the future of plastics

Proposed target: Make NSW a leader in national and international research on plastics

Do you support the proposed target to make NSW a leader in national and international research on plastics?

LGNSW supports the intention of making NSW a research leader, which is a worthy initiative and should help to drive innovation and investment in NSW.

Priority direction 9: Set up a NSW plastics research network by 2021

Do you support the establishment of a NSW Plastic Research Network?

This needs to be the first outcome which will inform the other outcomes and targets. There is already work occurring in this space in universities and industry networks, but the timing of new research, and analysis of existing research, needs to be brought forward to enable informed decisions on investment.

We also need to research and develop renewable plastics and new sustainable plastics that are safer alternatives to petrochemical plastics.

LGNSW recommends that a dedicated plastics research network include local government representatives, product designers and the manufacturing industry to ensure the research is applied and able to be upscaled.

Priority direction 10: Support commercialisation of research-driven plastics solutions

Do you support the NSW Government funding the commercialisation of research-driven plastics solutions?

Yes. As outlined above, it will be important that this work is informed by other parts of the circular economy to ensure the solutions are workable with existing collection systems, retailers, product designers.

Do you need support from government to commercialise a viable plastics management solution and bring it to market?

LGNSW itself does not require support but is aware of solutions in the market that have faced regulatory hurdles to commercialise in NSW. For example, we are aware of a proponent that has looked interstate rather than set up in NSW to commercialise a chemical recycling process. One of the hurdles of establishing in NSW was the definition of waste limiting the storage of feedstock and product in commercial quantities (without long wait times for approvals).

What is the most important action the NSW Government can take to minimise the impact of plastics and why do you think this?

- Design out unnecessary plastics and banning single use items and hard to recycle plastics.
- Develop an implementation plan for the strategy, including a long term vision. We need to identify what needs to be done, who will do it and develop funding for these actions

Conclusion

LGNSW welcomes the release of the *Redirecting the Future of Plastic in NSW discussion paper* and the opportunity to input into the NSW Plastics Plan.

Overall the proposed outcomes and priority directions for the Plastics Plan are supported, however LGNSW recommends the final plan include greater focus on the designing out of unnecessary and hard to recycle plastics, and even rationalising the types of plastics used.

As outlined in the submission, an implementation plan and monitoring and reporting framework to underpin the Plan is needed, coupled with reinvestment of the waste levy in processes and infrastructure to manage, process and manufacture recycled plastics. We look forward to consultation on a final Plan and associated implementation plan that includes resourcing, roles and responsibilities.

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