SSROC submission on the Issues Paper

Cleaning Up Our Act –

The Future for Waste and Recycling in NSW

For the attention of:

NSW Department of Planning, Industry and Environment (DPIE)
Sent via email to: 20YWS@dpie.nsw.gov.au.

Contents

Introduction

The Southern Sydney Regional Organisation of Councils (SSROC) is an association of eleven councils. SSROC provides a forum for the exchange of ideas between our member councils, and an interface between governments, other councils and key bodies on issues of common interest. Together, our member councils cover a population of over 1.7 million, or one third of the population of Sydney. Our residents produce around 20% of all NSW household waste, which means that we are key players in the management of waste and recycling and the reduction of landfill.

Our Submission

Our submission on the Issues Paper for the development of the 20-year Waste Strategy (20YWS) includes responses to the most relevant questions for our councils taken from DPIE's online survey: https://yoursay.dpie.nsw.gov.au/20-year-waste-strategy/make-submission

Key Recommendations:

The key recommendations presented in this submission are summarised below:

Targets:

- The 20YWS should include targets for materials by type and by stream (including MSW, C&I, C&D, and CDS) to enable solutions and monitoring of progress on a more granular level. To enable this a robust waste data framework and management plan is urgently needed; and all state-wide targets need to be supported by dedicated funding and clear action plans.

Designing out Waste:

The 20YWS should include:

- Binding targets for recyclability and recycled content, phasing out difficult-to-recover packaging, tougher standards and import restrictions on products made from non-recyclable waste and difficult to recover packaging.
- A requirement to make the use of online Packaging Recycling Evaluation Tool (PREP) and the Australasian Recycling Label (ARL) mandatory for packaging companies operating in Australia.
- Preferencing for recycled materials in procurements by all government agencies; with funding and support to progress Australian Standards and specifications for products made from recycled materials.
- A commitment to expanding existing product stewardship (PS) schemes such as the National Television and Computer Recycling Scheme to include all e-waste and fast tracking the implementation of new product stewardship schemes for other priority products listed on the *2018 - 2019 Product Impact Management (PIM) Work-plan.*
- Measures to support consumers 'right to repair' and to increase the capacity for community-based reuse and repair centres with funding linked to recovery rates and data capture to monitor success.

Awareness and Behaviour change:

- The 20YWS should include commitments for ongoing funding for state-wide and regional behaviour change programs on waste avoidance, reuse and recycling.
- Funding is also needed for convenient infrastructure to enable people to reuse, repair and recycle goods.
- Continued funding for Regional Illegal Dumping (RID) Squads, and the Sydney RID Squad in particular is critical to enable councils to collaborate on both community education about, and penalties for persistent or serious, illegal dumping.

Regulatory safeguards

- SSROC's recommendations on changes to waste legislation and regulations are documented in the attached report - *Legislative and Regulatory Review of Council-Managed Waste Streams* commissioned by SSROC. This identifies significant legislative and regulatory opportunities to reform the waste legal framework.

Recovering food and garden organics

- SSROC recommends that the NSW Government assesses the advantages and disadvantages of food only (FO) and food and garden organics (FOGO) systems that includes consideration of the cost of collection, space for additional bins and contamination rates in high density areas and the quality of the recycled product. The 20YWS should detail how it will fund infrastructure for the collection and recovery of organics and how it will support end uses for the product.
- The 20YWS needs to include more targets and strategies on how to recover food waste in food production, manufacture and retail (as 75% of food waste occurs before food is sold or served) and from municipal solid waste (MSW). This should be prioritised first to help drive investment and capacity for processing organics where economies of scale for processing food waste would be easier to achieve in production and retail sectors. Once infrastructure and collection systems are set up for processing the 75% of food waste, household food waste collections (the remaining 25%) would be more viable.

Standardise collection systems for households and businesses

- Changing bin and truck infrastructure and sorting systems for kerbside streams is an enormous cost and requires long term planning for infrastructure that takes into consideration recent changes like the introduction of CDS, future changes to packaging and changing consumption habits. The 20YWS could include a five-year target of funding a number of trials of different adaptations to the current collections systems in both metropolitan and regional areas.
- There is a need for tailored models for the growing number of mixed commercial and residential developments. The 20YWS should consider strategies to ensure that bin rooms in new high density residential flat buildings include at the design stage source separation of food waste and bulky wastes (cardboard, polystyrene, e-waste, textiles etc). Section 496 of NSW Local Government Act 1993 and regulatory framework related to commercial waste collection need to be reviewed for C&I and MSW to be collected together.
- To assist future collection and processing infrastructure planning, the 20YWS should also include clear standards on the types of packaging that need to be sorted and processed and have targets about what types of packaging need to be phased out in the future as this impacts the design of collection systems.

Network-based waste drop-off centres

The 20YWS should outline support and dedicated funding for:

- Councils to undertake mobile collection of problem wastes.
- The expansion of the collection network for smaller waste items in supermarkets, hardware stores, libraries and community facilities. Supermarkets need to have a bigger role in the collecting and recovery of food and beverage packaging.

Innovation and Waste Technology

- The 20YWS should outline how the NSW waste levy revenue will be reinvested back into the waste industry to fund a transition to a circular economy. This is required to help fund desperately needed infrastructure and the innovation of waste technologies and trials needed to transition to a circular economy.
- Greater hypothecation of levy payments back to local government would assist in offsetting the costs of waste management and resource recovery and could lead to long term reduction in council Domestic Waste Charges and therefore achieve the NSW Government objective of an affordable resource recovery and waste system in NSW.

Planning for future infrastructure

- One of the highest priorities for SSROC councils is that the 20YWS will outline waste and resource recovery infrastructure needs, identify suitable sites in NSW and plan for how to protect, acquire or attract the infrastructure urgently needed to manage all waste streams in NSW; now and for the next 20 years. SSROC will provide recommendations on future infrastructure needs following the completion of a joint project on material flows and infrastructure needs analysis with DPIE in early July.

Continuation of Waste Less Recycle More funding beyond June 2021

- SSROC recommends a continuation of Waste Less Recycle More funding, including an immediate transition package (from current regional funding ending in June 2021 to any new regional funding programs), to enable the continuation of highly successful regional coordination activities and initiatives.

1. ***Do you have other evidence (such as data, reports or specific examples) that can inform the 20-Year Waste Strategy for New South Wales?***

Yes, including:

- SSROC initiated and is collaborating closely with DPIE and the EPA on the NSW Waste Flows and Infrastructure Needs project, which aims to quantify current municipal and commercial and industrial material flows, projected material flows for the next 20 years, current infrastructure capacity, and a future infrastructure needs analysis from generation to end markets, with an emphasis on materials types and end markets across NSW. SSROC and all other state ROCs and JOs will be represented on the steering committee. SSROC has commissioned a parallel project to develop recommendations for a standardised data protocol at the local, state and federal levels, a centrally coordinated waste data management system, and an GIS-mapped options assessment for necessary resource recovery infrastructure within the SSROC region. Both projects are due to be delivered by the end of August 2020.

- SSROC's *Legislative and Regulatory Review of Council-Managed Waste Streams* report by Clayton Utz identifies barriers and opportunities in the current legislative framework for waste and resource recovery (due to be delivered in June 2020), including:

    1. The definition of 'waste';
    2. Legal avenues for reinvesting the waste levy into resource recovery;
    3. The resource recovery orders/exemptions process;
    4. End market development to support COAG export bans;
    5. Expansion of source separation schemes, including the NSW container deposit scheme (CDS);
    6. WARR facility recovery targets;
    7. Streamlining planning approvals;
    8. Waste as essential infrastructure;
    9. Waste data transparency mechanisms;
    10. Financial incentives/disincentives for circular economy;
    11. Dedicated resource recycling and recovery authority;
    12. Regulation to address waste duopoly;
    13. Interstate arbitrage avoidance mechanisms;
    14. EfW policy;
    15. Illegal dumping enforcement; and
    16. Asbestos in construction & demolition
    17. Transparency and clarity in regulatory decisions (including resource recovery orders and exemptions amongst others).

- Findings from a stakeholder consultation conducted by Elton to inform the above *Legislative and Regulatory Review*.

- "*Attitudes towards unwanted household items and problem wastes*" (2015) Taverner for SSROC (for Q1.3)

- "*The marketplace for reusable furniture in Greater Sydney*" (2019) Institute Sustainable Futures for SSROC (for Q1.3)

- SSROC commissioned Eltons consulting in 2017 to undertake a *Social Research Study – Reuse Economy and social behaviour*.

- *SSROC 2019 Waste Audit* is the seventh regional audit undertaken over a time span of 20 years, providing one of the most comprehensive longitudinal data sets in Australia; available at: https://ssroc.nsw.gov.au/ssroc-2019-waste-audit/

- SSROC *Case studies: Solutions for Bulky Household and Problem Waste in Residential Flat Buildings*.

- SSROC commissioned Morrison Low to produce a report on the recycled crushed glass supply chain called *Procured Recycled: Paving the Way Project*; this will be shared with DPIE when available.

- City of Canada Bay commissioned SLR Consulting to review public place bin sensor technologies documented in *The Value of Bin Sensors for the Efficiency and Effectiveness of Public Place Waste Management* (April 2020); funded through the NSW EPA Waste Less Recycle More initiative funded from the Waste Levy.

SSROC's *Legislative and Regulatory Review of Council-Managed Waste Streams* will be emailed to DPIE as soon as it is finalised; any other documents can be emailed upon request.

Direction 1: Generate Less Waste

Question 1.1: State-wide targets

What targets and metrics would be most effective in driving waste avoidance, reuse and the circular economy?

This issues paper should have targets for every material type (like the targets for plastics proposed in the NSW Plastic Plan) for stakeholders to comment on to answer this question effectively.

As outlined in SSROC's submission on the NSW Plastic Plan, SSROC supports the targets proposed in the NSW Plastic Plan if they are adequately funded and resourced with the necessary infrastructure, the targets include:

- Triple the proportion of plastic recycled in NSW across all sectors and streams;
- Mandate 30% minimum recycled content in plastic packaging by 2025 (this should stimulate demand for recycled plastics); and
- Reduce plastic litter items by 25% by 2025.

Targets to phase out difficult to recycle plastic packaging such as PVC, some coloured plastics and composite products used in food and takeaway packaging; these targets should be set in consultation with material recovery facilities (MRFs), plastic processors, recyclers and manufacturers to better understand what particular products are the most difficult to recycle.

The draft Strategy should include targets for materials by type and by stream (including MSW, C&I, C&D, and CDS) to enable solutions and monitoring of progress on a more granular level; targets need to be based on the latest available data and take into account the capacity of NSW recovery facilities and end markets. Targets are needed for glass, paper, organics, metals, textiles, e-waste and hazardous waste; as well as for recycling materials through product stewardship schemes.

Materials recovered from each stream are also of varying quality and thus appropriate for varying applications. For example, data from APCO's *Australian Packaging Consumption & Resource Recovery Data* (December 2019) suggests that approximately 22% of glass from municipal recycling collections is recycled back into bottles and similar, the current total recovery rate of glass packaging is 46%, and 100% of recovered glass has good recyclability. The NSW CDS has a nearly 100% glass recycling rate; whilst SSROC estimates that an additional 33-40% of glass from its domestic collections (mixed to poor quality) can be incorporated into civil works as a replacement for natural sand[1] which can be duplicated by other Australian councils. There is extremely limited data on glass from C&I collections, which obfuscates any clear recovery rates of this glass. Based on the available data, we suggest setting an aggregated glass recovery rate of at least 60-70% by 2025, disaggregated by stream.

[1] SSROC has commissioned an independent consultant to analyse the recycled crushed glass supply chain and current infrastructure capacity to inform its *Procure Recycled: Paving the Way* project, which included interviews with industry and government stakeholders involved in the glass supply chain.

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The Issues Paper outlines in Figure 6 on page 9 that the C&D waste stream is achieving high levels of recycling close to its 80% recovery target by 2021-2022 however; as Figure 5 shows it generates 12.8Mt of waste and even with 80% recovery there is still a substantial 2.8Mt not recovered (equating to more than half of what is generated by MSW or C&I). There needs to be more targets and actions for the recovery of C&D waste than what is currently reflected in the Issues Paper.

NSW's targets should also align with the National Waste Policy Action Plan 2019 to achieve an 80% resource recovery rate from all waste streams by 2030, and the National Food Waste Policy to halve food waste by 2030. Targets are also needed for broader circular economy targets for growing the reuse sector and expanding innovation in the waste and remanufacturing sectors. The actions and funding needed to reach state targets should be outlined in the NSW 20YWS.

How can targets be implemented so they are most effective?

Setting targets for each waste stream requires consistent data collection, monitoring and reporting, a coordinated national waste data capture and management system is urgently needed to enable targets to be set and measured against. SSROC has commissioned Arcadis to undertake a Waste Data Gap Analysis and Management Plan project to identify waste data gaps and mechanisms to enable monitoring of materials flows. The findings and recommendations from this project will be shared with DPIE when available.

SSROC suggests contacting NACRO and the Australian Circular Textiles Association to discuss establishing a data framework for textiles and to identify a textiles recovery target for inclusion in the draft strategy.

Any new targets and metrics for waste minimisation should consider the 'whole life cycle' impacts rather than purely weight-based targets. Weight-based targets may not be the most appropriate for all streams such as plastics because they are (and are increasingly) so light, or for bulky items such as mattresses. The NSW Government needs to outline in the 20YWS how different approaches will be done for specific material targets as it is an important consideration in reaching the NSW emission reduction targets.

State-wide targets should become mandatory across all relevant government agencies and supported by action plans and funding.

Question 1.2 Designing out waste

What actions by government, industry and the community should be prioritised to avoid and 'design out' waste to keep materials circulating in the economy?

Government:

- Tougher standards and restrictions on imported products made from non-recyclable materials (potentially including bans) are needed to reduce waste before it even comes into Australia.
- Update relevant Australian Standards and specifications (e.g. continuing the work of NATSPEC) for products that Government agencies purchase in the highest quantities/frequencies to preference recycled materials (over virgin materials) and that can be reused or recycled at end of life. Examples include, preferencing (in the procurement and early design stages of infrastructure projects) recycled plastic in

products traditionally made from virgin imported plastic or wood where applicable; and preferencing the use of recycled crushed glass in civil works.

- Implement and expand sustainable procurement policies to preference and, where appropriate, mandate targets for recycled content.
- Challenge industry to innovate solutions through joint government procurements that describe the problem to be solved, specify for recycled materials and invite solutions from industry.
- The Government should support, through tax deductions or other financial incentives, those manufacturers that do produce repairable and durable products that meet a specified minimum standard.
- Introduce regulatory measures to achieve targets.

Industry and government:

- Fund the infrastructure and resources needed to meet the 2025 National Packaging Targets.
- Mandate binding targets for recyclability and recycled content, banning difficult-to-recover packaging, limiting the materials used for soft and hard plastics to the most commonly recoverable types, investing in research and development to innovate in materials harmonisation, and mandating the PREP and ARL for packaging.
- Consider import levies/requirements for imported goods to ensure they meet circular economy requirements and have repair/recycling schemes in place.
- Specify minimum warranty periods for products and legislation supporting consumers' rights to repair.
- Mandate take-back schemes for packaging waste and products; there are international examples such as the German Packaging Act and The European Union's End of Life regulation for car manufacturers to take back their cars and meet recycling standards at no cost to the consumer. In NSW, IKEA's buyback scheme for furniture products, initially trialed in Tempe, was so successful that it has been expanded nationally.
- Advocate to expanding existing product stewardship schemes such as the National Television and Computer Recycling Scheme to include any electrical item with a plug as well as smaller battery-operated items.
- Implement new product stewardship schemes for other priority products including batteries, solar panels, expanded polystyrene, refrigerators, freezers, air conditioners, medical sharps, textiles such as clothing and carpet, milk and bread crates (containing recyclable polypropylene), cigarette butts, takeaway coffee cups and disposable nappies.

Community and government:

- Considerable NSW Government investment is needed to grow the reuse and repair sector to drive circular economy outcomes. For example, the UK has a national reuse network and the UK Government recently invested $7.2 million (AUD) to assist local government and reuse operators with the reuse and recycling of electrical waste.
- Fund community-based reuse and repair centres, with funding linked to recovery rates and data capture for monitoring and evaluation. Identify facility and opportunity gaps in NSW that would benefit from reuse or repair centres or online marketplaces and provide funding opportunities and allocate land (e.g. crown land, land made available post WestConnex etc.) for reuse hubs and sharing libraries as these are often operated by not for profit organisations.

- Consumers need easy access to affordable repair centres, and attractive places to donate and purchase used goods. Social research by SSROC into attitudes towards unwanted items showed that more than half of residents surveyed were unwilling to travel more than 5km from their home or office to drop off unwanted goods.

What priorities should inform product stewardship (PS) schemes and extended producer responsibility (EPR)?

- PS and EPR schemes need to priortise avoiding and reducing the generation of waste from products in the design and manufacturing stages. Economic incentives are needed to ensure that product designers and manufacturers reduce the use of materials that are difficult to recover.
- Mandatory schemes for manufacturers of new products to provide spare parts and repair manuals for a mandated period of time, as legislated in France and currently being introduced across Europe and other jurisdictions
- Tax breaks for repairs of personal and household items, such as has been legislated in Sweden and other jurisdictions, as a financial incentive to repair and reuse, rather than throwing away and replacing with new items.
- Consider reusability and repairability standards in the Product Stewardship Act, as well as adding a 'right to repair' to the Productivity Commission's agenda for further action.
- Effective PS and EPR schemes should ensure that there is a shared responsibility between producers, retailers and consumers. Councils are often put in a position to collect and organise processing for products at the end of their life, as well as educating the public on the correct recycling and disposal of these products. Councils, and therefore ratepayers and communities, currently carry most of the financial burden of dealing with the waste from products rather than the producers and manufacturers. There should be more effective actions and regulations to ensure that the burden of recycling and disposing of these products is shared equitably.
- The process involved in the design to the implementation of a new product stewardship scheme can take many years, there is a role for NSW government in providing dedicated funding and staff to help implement new national schemes in each state and to ensure a coordinated national approach to the many existing individual product schemes.
- There are many individual product stewardship schemes operating in isolation of one another with different branding and without proper consideration of the disposal and recycling behaviours of consumers. When residents move house, purchase new items or organise clean up collections they try and dispose of multiple items at once. A common strategy and branding, as well as efficiencies in collection processes is needed to improve consumer uptake and the overall success of individual PS and EPR schemes.
- The CDS could be expanded to include clean food packaging, wine bottles, beverage containers of more than 1 litre, and aseptic containers. However, before it is expanded further, consultation is needed with councils, MRFs and plastic manufacturers about some of the dichotomies and lost opportunities they see in the packaging products currently in or out of scope for CDS. Careful consideration is needed before increasing materials accepted under the CDS scheme as it effects the value of products collected in kerbside recycling and consequently council waste contracts and refund sharing agreements; it will also be necessary to review the capacity of existing reverse vending machines (RVM) and the localised impacts

where the RVM are located (e.g. noise, parking, traffic and increased truck movements).

How do we drive uptake of materials and products with lower life-cycle emissions?

- Mandate life-cycle emissions product labelling to enable consumers to select products on this basis. This needs to be prioritised so that individual consumers and companies can compare the GHG emissions between products to make informed choices; particularly for products that contain recycled content.
- Funding and support to progress Australian Standards and specifications for products made from recycled materials for engineered plastic products. Consider gradually shifting the requirements of Australian standards over a 5 -10-year period and /or import requirements as has been done with vehicles.
- Include the proximity principle in government procurement guidelines and set recycled content targets for using domestic waste materials. SSROC councils have signed an agreement to preference products made with recycled content.
- Fund professional development and targeted education on circular procurement for government agencies to address the knowledge gap in buying recycled materials and to shift business as usual approaches to procurement. Pilot, evaluate and then roll out to other sectors.
- Incentivise manufacturers and remanufacturers to utilise domestically recovered materials to reduce transport distance and emissions.
- Economic incentives and/or subsides should be considered in the 20YWS to make recycled products more price competitive with virgin materials, to drive a significant shift in consumer purchasing behaviour and establish end markets. The cost of recycled plastic products compared to virgin materials (such imported virgin plastic or timber) was identified as one of the top barriers to recovering plastic products collected in the kerbside recycling stream by MRFs, plastic processors and manufacturers interviewed as part of a Circular Economy Think Tank Series run by SSROC, UNSW SMaRT Centre and NSW Circular[2].

Question 1.3 Awareness and behavioural change

What are new and innovative ways to engage consumers to reduce waste generation and increase recycling? How can these be implemented so they are most effective?

Shifting social attitudes and behaviours in NSW requires ongoing funding for state-wide and regional behaviour change programs on waste avoidance, reuse and recycling; and a commitment to funding and implementing this should be reflected in the 20YWS. Funding is needed for both innovative online and face to face education programs and for convenient infrastructure to enable people to take from as well as contribute to the reuse sector.

[2] SSROC, NSW Circular and UNSW SMaRT Circular Economy Think Tank Series. Final report will be shared with DPIE when available, expect July 2020.

SSROC-commissioned research[3] shows that convenience is critical to enable people to buy, sell and donate second-hand goods and to repairing items. The NSW Government should collaborate with NACRO (incorporating Zero Waste Sydney), charities, innovators and social enterprises working in the recovery space to build the capacity of the reuse sector and review the European Union strategies to reduce taxation to support re-use and repair and create jobs.

There are also successful trials of innovative infrastructure and programs to support waste avoidance and reuse including:

- ReTuna Recycling Mall in Sweden - to inspire or accommodate more 'takers, buyers' of second-hand goods.
- Auckland Zero Waste model where unwanted household goods are efficiently collected and prepared for redistribution through a partnership model.
- The Bower Reuse and Repair Centre and the Tinkerage in Shellharbour are local examples of successful repair and reuse centres; yet there are many other locations in NSW where communities do not have affordable access to repair centres.

SSROC also suggests further investment to develop the Impact Measurement Tool, originated by the Zero Waste Network, Sydney (using SSROC and City of Sydney BWRF) and being progressed through NACRO in response to the NSW Government call for metrics to measure waste avoidance. This tool would enable the reuse sector to effectively measure the environmental, social and economic benefits of their services and provide valuable data on the amount and scale of second-hand goods in NSW. See Zero Waste Network's Impact Measurement Tool Pilot Project Report for more information.

There is an opportunity for state-wide coordination of waste education for NSW public schools on priority waste avoidance, reuse and recycling topics. For example, one SSROC member council paid $24,000 for Keep Australia Beautiful's Environmentors primary program to offer education sessions on Keeping Waterways Clean, Lunches Unwrapped, Compost, Recycling, Worm Farming and Litter. Increased costs of waste collection, recycling and disposal will mean they are unlikely to be able to continue to fund this or expand the delivery to high schools. It would be more resource-efficient to provide dedicated funding for school education programs or to organise a state-wide procurement of primary and high school waste education programs that could be rolled out in partnership with the NSW Department of Education.

Sydney Regional Illegal Dumping (RID) Squad, which is co-funded by councils and the EPA, has a strong emphasis on education for behaviour change combined with its campaigns to identify and penalise serious or persistent dumping. The squad operates very effectively in the area, where typical dumping is different from that experienced in regional areas. In the area covered by Sydney RID Squad, there are more incidents involving local residents who do not understand how to correctly dispose of waste, particularly bulky hard waste. As bulky hard waste can legitimately be left at the kerbside for a scheduled or booked collection, some residents take its presence as an indication that leaving the material at the kerbside is an acceptable way to dispose of it. Others believe that they are providing an opportunity for passers-by to make use of it. This situation needs to be addressed through widespread and targeted education campaigns, and the RID Squad has a key role to play in this.

[3] "*Attitudes towards unwanted household items and problem wastes*"(2015) Taverner; and "*The marketplace for reusable furniture in Greater Sydney*" (2019) Institute Sustainable Futures; both commissioned by SSROC using the NSW EPA Better Waste and Recycling Funds..

The RID Squad is also critical to allowing councils to track dumping across jurisdictions, and to pursue more serious dumpers from one LGA who dump in another LGA. Sydney RID Squad as had some great success in this area, as the EPA representatives on the management committee would be aware.

SSROC therefore strongly recommends continued funding for RID Squads and for the Sydney RID Squad in particular.

Question 1.4 Targets for government agencies

Would mandating waste reduction targets and data reporting requirements be effective?

Yes, SSROC member councils already have waste targets in line with the previous NSW waste strategy and data reporting requirements. However, these could be extended to include a target for procuring materials with recycled content: this would help all the different teams within a council to work towards a shared target. All NSW government agencies should be working towards the same circular procurement targets to ensure we create the change needed.

What issues or limitations should be considered?

The types of waste dealt with by the health sector (e.g. non-hazardous and hazardous) and certain manufacturing, chemical and mining sectors. Mandating targets could for example provide the trigger for industries to progress with circular economy and their greenhouse emissions reduction requirements.

Question 1.5 Regulatory safeguards

What are the key opportunities for improving current waste regulations and regulatory processes in NSW?

Recommendations on improving waste legislation and regulations will be provided in *SSROC Legislative and Regulatory Review* report.

Direction 2: Improve collection and sorting

Question 2.1 Recovering food and garden organics

What are the key opportunities and challenges associated with mandating food and garden organics (FOGO) source separation?

Challenges:

- Revocation of the Mixed Waste Organics Outputs (MWOO) exemption has decreased recovery of organic materials from municipal solid waste; stymied investment and innovation in new technology and infrastructure to recover organics, particularly with respect to Advanced Waste Treatment (AWT) facilities.
- Garden organics has very low contamination rates, the 2019 SSROC Waste Kerbside Audit found the average contamination rate to be low at 2.8%. Adding food waste to this stream could increase the contamination levels. Trials conducted by Councils in metropolitan Sydney have highlighted this issue, which represents a cost to councils.
- There are different views on the success of FO and FOGO amongst our councils as not all trials have yielded a strong case for FO or FOGO in some densely populated areas e.g. Canterbury Bankstown where contamination was extremely high; whereas other councils like Randwick have a clear policy to roll out FOGO across their entire LGA.
- To roll out FO or FOGO, considerable investment is needed for: contamination management plans; ongoing extensive additional education and staffing resources; infrastructure (caddy's, bin liners etc); an increase in collections; revision of collection schedules (staff and trucks). These costs are not reflected in the Issues Paper. In particular, on page 28 there is a suggestion that "the average council in Sydney could save $2 million per year by removing 50% of food organics from mixed waste collections": This could be misleading; any potential savings need to consider all the costs involved in rolling out this service.
- Lack of available infrastructure for Sydney metropolitan councils to transfer and process increased volumes of food and garden organics. Sydney metropolitan councils need more organics transfer stations to bulk up volumes before transporting to processing facilities. These could service multiple councils through joint initiatives.
- For some stakeholders there may not be sufficient evidence on successes at metropolitan LGA scale in NSW or comparable urban settings – taking on board all community characteristics and behavioural barriers.

Opportunities:

- Page 28 of the Issues Paper discusses mandatory source separation for major generators of food waste in food production, manufacture and retail. This should be prioritised first as it is an opportunity to drive investment and capacity for processing organics (as 75% of food waste occurs before food is sold or served). Economies of scale for processing food waste would be easier to achieve in production and retail sectors. Once infrastructure and collection systems are set up for processing the 75% of food waste, household food waste collections (the remaining 25%) would be more viable.
- The potential to reduce greenhouse gases (GHG), recover valuable resources from food waste and close the loop on this material: provided the barriers can be addressed and funding made available before introducing any mandatory targets for

FO or FOGO source separation for municipal waste. Similar to comingled recycling, the value of the end product is contingent on contamination levels. More trials in high density metro areas will be needed to understand this problem and assess the potential value and use of highly contaminated FOGO, based on trial results and analysis of the contaminated composts.

- Opportunity to reduce food waste in the red lidded bin particularly in households less likely or unable to utilise home composting or worm farming systems.
- New residential flat buildings that include commercial food outlets could be designed at the planning stage to have mandatory food waste separation using systems appropriate to the dwelling types e.g. large worm farms or food dehydrators. This infrastructure can be costly to install and set up and is likely to need to be supported by grants for the infrastructure and ongoing maintenance (or economic incentives) provided by NSW Government.
- Opportunity to engage strata in large residential flat buildings whose buildings have the capacity for additional bin systems to source separate and potentially process food waste onsite.

What other options could be considered for recovery of food and garden waste?

- Funding and implementation of FO systems at significant infrastructure such as sports stadiums, showgrounds, art galleries, museums, events and festivals.
- NSW Government should commission research to assess the advantages and disadvantages of the mixed FOGO and separate FO and GO systems that includes consideration of the cost of collection, space for additional bins and contamination rates in high density areas with different demographics and quality of the recycled product. The 20YWS should detail how it will fund infrastructure for the collection and recovery of organics and how it will support end uses for the product particularly if the product is highly contaminated.
- A mixture of small-scale systems (such as Inner West Council's Compost Hut trial), suburb or precinct level anaerobic digesters and cogeneration plants and large-scale collection of FO or FOGO systems may be needed.

Option 2.2 Standardise collection systems for households and businesses

How could collection systems (including bins and drop off facilities) be designed to improve the separation of materials for recycling in your area and/or business?

Collection Systems:

Changing bin and truck infrastructure and sorting systems for kerbside streams is an enormous cost and requires long term planning. Trials of different collection and sorting systems in both metropolitan and regional councils would need to be undertaken for a range of options (dedicated bag for soft plastics or textiles; source separated food organics collection, moving to a four bin system to get a cleaner stream of glass as proposed in Victoria etc.) before any changes could be proposed.

Creating end markets is key to shaping the design of and processes around collection and sorting of materials. In particular, no additional source separation should be implemented until end markets for these source separated materials are logistically and economically

viable with sufficient capacity. Further to this, clarity is required around specifications and materials standards and testing to provide confidence in the market.

Adding additional bins into apartment bin rooms is not feasible in many urban areas especially if additional trucks are required. Some of our councils (Waverley and former Leichhardt Council) still collect paper in a separate bin; whether this is a better option or not requires further investigation that takes into consideration recent changes such as the introduction of the CDS scheme and the decline in print newspaper (as consumption of online digital news increases). SSROC 2019 Waste Audit showed that as the amount of CDS eligible containers and newspapers has decreased in the yellow bin, the proportion of contamination in the comingled bin has increased most likely because the amount of higher quality recyclable items has decreased.

The CDS scheme in NSW could be expanded to include wine bottles, beverage containers above 1L, and aseptic containers. This would need to follow extensive NSW Government consultation with councils, MRFs and plastic manufacturers to ensure that the most appropriate packaging products were included; and provided funding for contract negotiations and enough time to address the logistical challenges of expanding the scheme.

Further analysis needs to be undertaken before expanding the scheme as some beverage containers over 1L such as milk bottles may not be suitable for the CDS because of concerns about adding 10c to an essential item for low income households however, from a recovery perspective collecting HDPE clear milk and juice bottles through CDS could increase recovery of a high value plastic product used by some manufacturers to make recycled plastic products such as the Green Pipe (a pipe suitable for civil, forestry and agricultural use, made from HDPE clear milk and juice cartons). These issues need further exploration and analysis before expanding the scheme.

The introduction and expansion of schemes like CDS, individual product stewardship schemes and drop off facilities, changing consumption habits and future changes to packaging all need to be considered when planning for future changes to collection systems; as well as when planning for essential waste facilities in NSW. Long term, a trend towards expanding CDS and other drop off schemes may undermine the recovery rates for the yellow recycling stream to the point where its value is diminished. It could also increase gate fees by reducing the proportion of recoverable resources and increasing the remaining proportion of contaminants, putting a further strain in ratepayers.This highlights the need to prioritise funding for further analysis of collection systems (and how changes to one will flow on and impact other collection systems) and the urgency of trialling any changes to kerbside collection systems over the next five years.

Standardising Packaging:
To assist future collection and processing infrastructure planning, the 20YWS should also include clear standards on the types of packaging that need to be sorted and processed and have targets about what types of packaging need to be phased out in the future. MRFs and processing facilities would have valuable insights into what types of packing are difficult to find end markets for and recover. For example, a phase out of PVC food packaging and PVC labels is needed to improve recovery rates. These standards can then be utilised by councils in waste contracts.

Clear standards for packaging are particularly urgent with the recent packaging targets creating an increase in the volume of biodegradable and compostable packaging which is considered a contaminant in existing kerbside recycling systems with only a limited number of organics recycling facilities accepting compostable packaging. Consumer education and

clearer labelling may be needed to help individuals understand the difference between 'biodegradable', 'degradable' and 'compostable'; as it is unclear if the Australasian Recycling Label will include this.

Pay as you Throw schemes:

The Issues Paper briefly explores Pay as you Throw (PAYT) schemes. PAYT generally requires collection trucks with weighing mechanisms. Randwick Council has had weighing mechanisms in their trucks since 2008 but has not attempted PAYT because that could create numerous problems relating to the accuracy of weights, residents putting waste in other people's bins or in their recycling bin (increasing contamination) and an increase in illegal dumping to avoid costs. Some further research to address these barriers is needed before rolling out this system to ensure the necessary regulatory framework and education support systems are in place.

If PAYT systems are a feature of the 20YWS, we suggest that funding support is provided to facilitate new pricing mechanisms and equipment changes, to enable options such as:

a) Councils to reduce fees for recyclable streams when compared with residual waste on a bin size, volume or frequency basis.

b) Councils charge a mandatory fee component for its collection services and then differentiate fees for residual waste on a bin size, volume or frequency basis.

c) Further research into innovation in kerbside systems using smart and sensor bin technologies is undertaken for PAYT waste and the ability to compact a variety of waste streams for easier storage and collection. The most recent research into sensor bin technologies was focused on public place bins not household bins. Sensors and monitoring equipment are also expensive and would require funding out of the Waste Levy.

Should some sources of waste, e.g. multi-unit dwellings and small business, be considered separately? What would work best for multi-unit dwellings and small business and why?

Bin source separation systems for single unit dwellings (SUDs) need to be considered separately to multi-unit dwellings (MUDs) especially in urban areas due to different space requirements, education needs and expected contamination levels.

There is a need for tailored models for the growing number of mixed commercial and residential developments. Critical in the early development application stage, is to ensure that bin rooms in mixed developments are better designed to accommodate both commercial and residential waste streams. For example, dedicated infrastructure for food waste collection and processing should be required in mixed residential/commercial dwellings that have food outlets or supermarkets in a building such as food dehydrator; organic collection pump out tanks, incinerators/macerators; larger worm farms etc; and dedicated funding to support the set up costs of installing and maintaining this infrastructure.

Source separation of bulky wastes should also be encouraged in new developments for high density residential flat buildings and mixed residential and commercial dwellings. Some councils, such as the City of Canterbury Bankstown are already collecting source separated bulky waste (including polystyrene, cardboard, soft plastics, e-waste and textiles) in high density residential flat buildings (usually with more than 75 units where the economies of

scale make it viable). Additional funding may be needed for councils to service source separation of bulky waste in buildings and to trial ways to overcome space limitations in older buildings (e.g. the owner's corporation of an apartment in Pyrmont purchased a car space to provide room for additional bins to separate textiles, e-waste and lightbulbs because no other space was available)[4].

Some of our councils are investigating combining MSW and C&I collections to increase collection efficiency, bulk up volumes, and reduce traffic. Standardising MSW and C&I collection, to be collected by council or private contractors is a very complicated matter due to section 496 of the Local Government Act 1993 and competition requirements; regulatory reform may be needed to support this. This is also discussed more in Q2.7.

Question 2.3 Network-based waste drop-off centres

How do we further optimise NSW's network of waste drop-off centres and collection points?

Mobile collection for problem wastes:

Councils should be supported to research and fund mobile waste collection and community recycling centres (CRC's) to expand NSW's network of collection options for problem wastes. Previous applications for mobile CRC's from SSROC councils that were not able to set up a physical CRC due to the lack of available sites were not supported through the NSW EPA's Better Waste and Recycling Funds (BWRF). This should be reconsidered especially following successful trials in Randwick and Sutherland Council for mobile collection of soft plastics, textiles and e-waste where residents book online for a door to door service through companies like RecycleSmart.

SSROC supports the two of the options discussed on page 29 of the Issues Paper including:

- Providing government subsidies for free collection of items typically dropped to CRC's for less mobile residents.
- Expanding the network of collection points for small waste items such as light globes, batteries, phones, soft plastics, small e-waste items and potentially clothing; in supermarkets, hardware stores, libraries and community facilities. The City of Sydney collects lightbulbs, phones and batteries at their libraries for example.

However, ongoing funding would be needed from state government to cover the cost of these two options including operational costs, disposal costs and costs to manage the process. The 20YWS should go further in getting supermarkets to take a bigger role in collecting the vast amount of food and beverage packaging they sell at their stores beyond just collecting soft plastics (Coles and Woolworths) and batteries (ALDI). The 20YWS should look at international models and economic incentives used to support large supermarkets to collect recycling that could be adapted in Australia.

The Issues Paper also discusses on page 20, expanding the materials collected at CRCs. This will require liaison with councils first to ensure that local government, and hence their communities, is not left to cover the costs of processing the additional materials and the costs of running a larger event. The CRCs established under *Waste Less Recycle More*

[4] See SSROC *Case studies: Solutions for Bulky Household and Problem Waste in Residential Flat Buildings*.

funds were only guaranteed state government funding to cover the transport and processing of materials for a fixed term which means councils are later carrying the full costs of transporting and processing these materials. Previously, the NSW Government covered the cost of collecting some of the materials through Chemical Clean Out collections.

Question 2.4 Waste benchmarks for the commercial sector

How can National Australian Built Environment Rating System (NABERS) Waste ratings be used as an effective tool to drive better waste management practices in the commercial sector?

As part of stakeholder consultation for SSROC's, UNSW SMaRT Centre and NSW Circular's Think Tank of Plastic Remanufacturing, some manufacturers of recycled plastic products suggested that NABERs or a similar scheme should include waste ratings and support the use of recycled materials particularly recycled plastic and glass in construction. They cited that clients want to compare the GHG emissions with using a recycled plastic product compared to concrete, virgin timber or steel.

What opportunities and challenges do you anticipate if the NSW Government were to introduce minimum NABERS Waste requirements for the buildings it leases and owns?

This would be an opportunity for the NSW Government to lead by example and trial minimum NABERS waste requirements and make any needed adjustments before rolling it out to other sectors. There is also an opportunity to include this data in a national waste data framework.

Question 2.5 Innovation and 'waste-tech'

What are the key barriers to innovation in the waste and resource recovery sector?

- Lack of funding, including long term funding (more than 4 years) required for comprehensive projects, including innovative resource recovery facilities. As an example, the procurement of the SSROC Veolia MBT contract took 10 years from initial industry consultation until commencement date of processing. The BWRF funding operates on a 4-year cycle and therefore is not suitable for funding projects that require a 10 or more-year timeframe, such as the investigation, procurement and construction of large and significant waste infrastructure. This limits the ability of this money to affect significant change within the waste industry and to make new technologies and processes more affordable.
- Lack of infrastructure capacity particularly in reprocessing and remanufacturing and end markets for recycled products.
- Waste and resource recovery infrastructure and services continues to be given a lower priority than other essential services in the NSW planning system. Lengthy planning approval processes (on average 25 months[5]) stymy investment. The

[5] Arcadis Australia cited in https://www.smh.com.au/national/nsw/no-wonder-we-are-losing-the-war-on-waste-20181002-p507be.html

outcome has been inadequate planning and innovation in infrastructure for this essential service.

- Poor demand and lack of binding targets for recycled content (including recycled content generated in NSW) which then undermines the business case for investment in the necessary product and infrastructure development.
- Definition of waste and when waste ceases to be 'waste' creates regulatory uncertainty for producers and consumers (see SSROC's *Legislative and Regulatory Review of Council-Managed Waste Streams* when available).

How can the NSW Government help to foster innovation and partnerships in waste management?

- Prioritise investing in and developing the waste infrastructure needed to meet the needs of NSW waste and resource recovery targets. Identify potential sites that could be allocated for waste infrastructure or appropriate zoning so that much needed infrastructure can be progressed. Prioritise the development of waste precincts and special activation precincts located near railways that group complementary facilities together to minimise transport.
- Urgently invest in onshore reprocessing and recovery of materials collected in the yellow-lidded bin recycling stream.
- Re-invest NSW waste levy revenue into the waste industry to fund a transition to a circular economy.
- Set targets for the minimum number of tech-related trials each year addressing priority areas such as MRF optical sorting, etc.
- Have a funding stream that allows medium-higher risk start-up ventures to be tested prior to scaling up and that funds small trials. The need for such investment was apparent at the EPA-funded Organix 19 session which showcased a number of innovations that were unable to move up from 'a good idea' to piloting as there no government or bank funding schemes are appropriate.
- Make NSW a leader in waste and resource recovery and share these skills with other countries, provide funding for professional development of the sector.
- Facilitate and fund collaborative networks to drive innovation for different waste streams. For example, our recent Circular Economy Think Tank on Textiles identified the need for a national network to coordinate the recovery of textiles and implement data and monitoring frameworks. International examples include the Scottish Institute for Remanufacture.
- Facilitate public private partnerships e.g. State of Green in Denmark and the New Plastics Economy Action Plan sponsored by the Ellen MacArthur Foundation.
- Support commercialisation through processing and resource recovery specific funding streams and programs that draw co-investment and outline incentives for researchers to collaborate with business.
- Invest in the expansion of the reuse and repair sector as discussed in Q1.2 (Designing out Waste).

Question 2.6 Joint local council procurement

How can local councils best be encouraged or supported to collectively procure waste services?

SSROC and other ROCs and voluntary waste groups already successfully do this. However, facilitating collaboration can be very resource intensive. Continuing to fund Regional Strategic Coordinators and regional waste projects beyond 2021 would enable ROCs to do so much more than was possible without that funding before the Waste Less Recycle More funding began.

Establish a central government procurement portal increasing coordination of procurement and contracts between state and local governments.

Revise the Local Government Act procurement guidelines to encourage and enable joint procurement. For example, SSROC is subject to a rigorous approval process from council General Managers or duly delegated council officers to conduct contracts on their behalf. However, even with that authority, under the Local Government Act 1993 and its General (2005) Regulation, our options to achieve the best outcomes are extremely restricted. SSROC cannot act on behalf of the councils without a Council resolution to:

- Decline tenders with a view to negotiate.
- Decline tenders with a view to call fresh tenders.
- Enter into contracts on behalf of councils following the approval of the recommendations presented.

These limitations can create unnecessary delays, reporting and approval processes that can cause councils to miss opportunities for good commercial arrangements and pricing. A council resolution can take a month or more to obtain and is frustrating for council staff. In some instances, such as the procurement of electricity, retailers will typically hold their prices for 24 to 48 hours, nowhere near the timeframe required for a council resolution.

The processes can be equally frustrating for suppliers, to the extent that they may choose not to engage with the local government sector. They perceive a lack of flexibility, inability to negotiate, and are perplexed at councils' inability to enter into what they consider to be common commercial arrangements. A tender will be rejected for that reason alone, no matter what positive value it might have represented for councils. These frustrations for councils and suppliers translate into lost productivity for both.

What are the key issues that should be considered?

- While there can be many benefits from regional procurements, there is also the risk that larger scale procurements are not as well suited to small or medium sized enterprises which can led to a concentration of larger companies controlling the market unless procurements are designed specifically to address this risk.
- It can take a long time for contract alignment and negotiation of different council needs; regional procurements of waste services need to be planned well in advance. Dedicated staff are needed at ROCs to enable regional procurements, so councils without access to well-resourced ROCs can miss out on opportunities for regional procurement.
- Some organisations already doing this derive a portion of their revenue from coordinating procurements, so there is risk that a third party would take this income source away.
- The council officers involved in a waste-related procurement are often from a waste/sustainability background, they are not typically trained in commercial

business operations or negotiations. Professional development training to build the capacity of staff involved in waste related procurements is needed to develop procurement skills. A recent pilot project conducted by NSW Treasury and EPA with Inner West Council highlighted this issue and was very productive in this aspect, but the project was limited to Inner West. Whilst SSROC will share the learnings as best we can, it will be more effective to use the learnings from the pilot project to train other council staff through BWRF.

Question 2.7 Combining commercial and industrial waste collection services

What are your views on the potential solutions of creating commercial waste zones, or combining municipal solid waste and commercial and industrial waste collections?

Combining MSW and C&I is restricted by Section of 496 of NSW Local Government Act 1993; and this requires further consideration before including it in the 20YWS. There are a number of challenges and opportunities to combining MSW and C&I waste collection for existing developments that are listed below.

Opportunities:

- Can mandate the provision of recycling bins with general waste bins.
- Increases education outreach and encourages source separation.
- Suits small businesses.
- Reduces carbon footprint of trucks collection especially with growing emergence of mixed residential/commercial.
- Potential to collect organics (council pick up schedules may not be regular enough for all food businesses though).
- Allows an organics truck that has picked up from a domestic run to collect from some small businesses /shops that otherwise would be price prohibitive (i.e. for a random one-off collection).
- There was a draft proposal for a co-generation facility at the Bays /Fish markets area (at Glebe side as Sydney Water have an infrastructure land holding there); then council trucks could “power up” after they dropped off organics; we are not aware if this proposal is still being pursued. See: https://thebayssydney.nsw.gov.au/surveys/masterplanning-the-bays-market-district/

Challenges:

- Data collection and reporting can be more difficult when collecting two different streams; requiring a change in data recording (or some onboard weighing that weighs per lift) so that the driver can allocate to MSW or commercial and the accuracy of WARR data can be maintained.
- Section 496 of the NSW Local Government Act 1993 and Australian Competition and Consumer Commission concerns if you are offering a service that undercuts competitors.
- Does not work as well for large commercial businesses that may need more frequent collections.
- Some councils that offer bespoke services to suit businesses discussed challenges of making it cost effective and the potential WHS issues for larger bins e.g. 1100litre bins.

- There are diverse views on combining MSW and C&I amongst our councils. One of our councils suggested that there was no need to combine these services; as there are sufficient waste collection providers to service the commercial and industrial sectors who have been proactive in resource recovery and materials recycling of commercial and industrial waste.

Question 2.8: Economic incentives and the waste levy

The NSW Government should remove the waste levy on litter collected by councils, either collected by litter picks (employees or external parties) or deposited in council provided litter bins. There is currently no viable resource recovery option for this material although Newtecpoly have trialled processing beach litter with recycled plastic with their Polywaste technology (currently under development). The CDS provides an incentive to recover some litter but the remaining litter, which is either left in the environment or placed in council provided litter bins is too contaminated to have a recovery option under current NSW government policy or currently available infrastructure. Ratepayers already pay the cost of landfilling litter, some of which is brought in by non-residents. This is currently about $100 per tonne. Adding the Waste Levy to this amount unreasonably increases the cost of litter disposal and takes money away from the community which could be spent on resource recovery initiatives. The NSW Government has historically offered a levy exemption for litter collected as part of the yearly Clean Up Australia Day events and this exemption should equally apply to all council collected litter. This would help to make waste management more affordable to NSW residents, without impacting on resource recovery.

The NSW Government should continue to allow exemptions for the waste levy for other non-recoverable materials such as asbestos. The NSW Government should provide funding for all (not just large) illegally dumped asbestos collected by council, including material that is found not to be asbestos on testing but had to be removed of and disposed of as such in order to protect the community. The cost of transport to a suspected asbestos site is so high, that it is more cost effective to collect all small suspected asbestos dumps during one trip than to test first and potentially have to go back a second time.

Recommendations on waste levy parameters will be provided in *SSROC Legislative and Regulatory Review* report.

Direction 3: Plan for future infrastructure

Questions 3.1 and 3.2:

One of the highest priorities for SSROC councils is that the 20YWS will outline waste and resource recovery infrastructure needs, identify suitable sites in NSW and plan for how to protect, acquire or attract the infrastructure urgently needed to manage all waste streams in NSW.

SSROC will provide recommendations on future infrastructure needs following the completion of a joint project on material flows and infrastructure needs analysis with DPIE in early July. This study will provide detailed responses to the questions listed above.

Question 3.2: Place-based developments

What are the key opportunities and barriers to developing place-based waste infrastructure?

Opportunities

- Integration of waste recovery with anaerobic digesters and cogeneration. On site power and processing.
- Potential to co-locate sorting, processing and re-manufacturing technologies for different waste streams. As well as repair and reuse centres.
- Potential reduction of traffic congestions.

Barriers

- Available land near transport to metropolitan areas.
- Planning approvals, zonings, etc.
- Some such infrastructure does exist, but information about them needs to be captured and shared, then used to guide future developments and retrofits. In particular, SSROC suggests that DPIE capture learnings from existing precinct developments such as Barangaroo.
- Energy losses if energy from waste infrastructure is not sited close to energy needs.

Question 3.3 Making it easier to do business

What mechanisms could be used to improve regulatory and financial certainty for investors and how could these be implemented?

- All levels of government preferencing recycled materials where this does compromise quality or become cost prohibitive to help create a more favourable market and less risk for product development and infrastructure investment. SSROC member councils have recently signed an MOU agreeing to preference recycled content in their procurements. We have shared this with other councils.
- Transparency and clarity re exemptions/orders. Without this transparency and stakeholder engagement, the risk to implement projects increases. This risk increases the cost of resource recovery solutions, making them less affordable. It also increases the risk of project failure, making these projects less reliable.
- Appropriate and transparent timelines for approvals processes and timelines for developing new or specific exemptions/orders.

- More recommendations will be provided in *SSROC Legislative and Regulatory Review* report.

What are the priority measures that could be introduced to make it easier to do business?

- Simplified infrastructure planning procedures for essential waste infrastructure.
- Set time limits for DA decisions and appeals so industry can forward plan.
- Fast-track DA approvals and loans with favourable conditions for essential waste infrastructure and initiatives that drive a circular economy.
- Facilitate development by securing sites and zoning appropriately.

Direction 4: Create end markets

Question 4.1 Recycled content in government procurement

What are the main challenges and opportunities for using recycled content in state and local infrastructure projects and major development areas?

- Addressing the safety concerns, Australian Standards and specification requirements and building on the work by Natspec and various industry committees. NSW Government will need to review orders and exemptions for recyclate.
- Manufacturers not using recycling content (from domestic sources) because it can be more expensive than virgin materials.
- Preferencing for recycled contents in infrastructure developments including using recycled materials for piping, building materials, paving and furniture needs to occur at project inception and be included in drawings and the procurement of services at the design stage.
- The 20YWS could include a similar policy to Victoria's *Recycled First* that brings a uniform approach to the existing 'ad hoc' use of recycled products on major transport infrastructure projects. The NSW policy should not be limited to transport infrastructure but also extended to other types of infrastructure and products frequently purchased by NSW Government agencies.

Question 4.2 Standards for recycled content and materials

What are the priority areas that standards and certifications should focus on?

- This depends on the material and application. For civil works, in collaboration with TfNSW as part of our Procured Recycled project we have identified a preferred range of recycled crushed glass in each type of road-making material that meets specifications but requires a minimum percentage content.
- For recycled plastic, there is enormous range in the amount of recycled plastic used in products and where it is sourced from. Specifications for procuring recycled plastic material should require suppliers to use recycled plastic sourced within Australia and to provide clear information on the type and volume of recycled plastic used in each product.
- The second phase of SSROC's Procured Recycled Project is likely to use the findings from the Circular Economy Think Tanks Series, as well as upcoming procurements, to identify the highest-impact options with recycled plastic to target for regional procurement (e.g. bins, outdoor seating, infrastructure materials, traffic control equipment and office supplies) to stimulate end markets for kerbside plastics. This project will aim to work with key stakeholders in the value chain to work through issues with specifications, quality, costs and applications so that any learnings can be applied to other procurements of products made from recycled materials.

Question 4.3 Match suppliers with markets

How can industry and government best work together to foster partnerships and address information barriers to the uptake of recycled materials?

- Set up a centralised registry of government procurements and contracts for governments to collaborate on procurement, including facilitating pre-procurement

industry consultation to inform councils of new products and services that might be available or emerging, of which they may not be aware.

- Set up a centralised circular economy network listing all available suppliers, recycled materials, and products with recycled content available for purchase.
- Roll out learnings from the recent Inner West Council pilot project with NSW Treasury and EPA to build council's capacity to engage with industry through more effective procurement.
- Lead collaboration between key stakeholders in each material supply chain to address barriers and progress opportunities for the uptake of recycled materials.

Question 4.4 Best-practice regulatory environment for energy from waste projects

Are there policy and regulatory improvements that can be made to facilitate innovation and market development in the energy from waste sector, that do not compromise best practice environmental standards?

- The NSW Government needs to conduct a review of the current NSW Energy from Waste Policy (EfW) Statement in partnership with industry organisations such as the Waste Management and Resource Recovery Association of Australia (WMRR) to identify barriers and produce workable solutions.
- Thermal energy recovery is an important part of the infrastructure mix required for materials that have no higher order processing or recovery option; as it's still a better option than landfill. Co-location with power (and heat/cooling) offtake arrangements is an optimum solution or within a waste precinct or as part of a resource recovery park.
- The 20YWS should provide guidance on the types of EfW infrastructure the govt would like to see in NSW to ensure that the policy objectives of the govt are met, whilst still providing certainty to the private sector.
- The benchmark threshold for an energy from waste facility is stated as 400,000 tonnes on page 24; this could be misleading, when, depending on the technology smaller facilities such as 250,000 tonnes may be viable and in Japan (100,000 t facilities are operating). Please revise this wording in the development of the Strategy.
- Additionally, significant amounts of bottom ash (up to 30% of the input to an Energy from Waste facility by weight) can be produced during the Energy from Waste recovery process. Overseas, this ash product has been used to add value to civil works projects (recycled content). No legislation or guidelines currently exist for use of this ash in Australia. Providing a regulatory framework where this ash can be used as a recycled product and is not landfilled, will decrease the price of energy from waste projects, making these projects more affordable for the community.
- Simplified planning regulation for EfW facilities like in WA and SA.
- The NSW Government should look to other states where Energy from Waste has more community acceptance, such as Western Australia, as well as international examples, to determine what role the state government or comparable government organisation played in facilitating this acceptance.

General comments:

Regional Funding:

We strongly encourage the continuation of Waste Less Recycle More funding, including an immediate transition package, to enable the continuation of highly successful regional coordination activities and initiatives. This funds majority of SSROC's resource recovery and waste initiatives, 2 regional strategic coordinators, a part-time waste projects officer, and a regional education program including two full-time educators. Uncertainty of funding beyond June 2021 will suspend strategic planning, lead to attrition of skilled human resources to other jobs with financial certainty, and severely curtail the ability of ROCs and JOs to support member councils in achieving regional outcomes. This mechanism has achieved significant results for council that otherwise would not have been possible without funding support.

Funding of the 20YRWS:

As part of the 20 Year Waste Strategy development, SSROC strongly recommends that the NSW Government develop detailed budgets and resources within the NSW Government to fund. Local government is extremely wary of any strategy which involves projects that are not correctly resourced and will fall on local government to implement. Without such a funding commitment, implementation of the strategy is likely to make waste management less affordable through costs that local government are forced to pass onto ratepayers.

Redefining 'Waste' as 'Resources':

A 20-year strategy provides a unique opportunity to redefine 'waste' as 'resources'; products that we need to design and use efficiently throughout their lifecycle so that their embodied energy and materials can be reused as sustainably as possible. This could extend to revising in the 20YWS the traditional waste hierarchy concept to a "Resource Stewardship Hierarchy" or similar. A Resource Stewardship Hierarchy could have designing resources to avoid waste as the top level; followed by reducing unnecessary consumption; reusing resources, remanufacturing resources, recycling resources, recovering resources, and lastly treating and disposing of any waste that cannot be recovered. The terminology may need to be discussed with the waste industry associations and relevant government agencies to increase engagement in this concept.

Thank you for the opportunity to provide feedback on the Issues Paper and we hope through further engagement with key stakeholders that the draft 20YWS will help enable NSW's transition to a circular economy. For any enquiries, please contact me on 02 8396 3800 or via email at: helen.sloan@ssroc.nsw.gov.au

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