



ACOR provides this initial submission following the Minister for Environment's request for comments for consideration as part of the NSW 20 Year Waste & Resource Recovery Strategy ("the Strategy"). This submission is crafted at a conceptual level and ACOR looks forward to substantive contributions as the NSW Government further outlines its own directions and aspirations as part of Strategy development.

ACOR also looks forward to direct engagement and discussion between its members, the Minister and agencies of the NSW Government in the further development of the Strategy. We note the Government's early promises of genuine co-design of and stakeholder involvement in the Strategy, and look forward to such a pro-active, positive and productive approach, as has recently been the case in Queensland.

Founded in 1983, ACOR is a national industry association for the resource recovery sector, representing some 50 companies. Its membership uniquely spans:

- Companies working across all waste streams and material types; and
- Companies working across all aspects of the recycling supply chain from collection to sorting to reprocessing to remanufacturing into recycled content products.

It is estimated that the resource recovery employs up to 20,000 people in NSW and generates up to \$10 billion in value to the NSW economy. Western Sydney is the region of Australia with the highest concentration of resource recovery facilities and employment. Simply put, **ACOR members make new products not push waste.**

On behalf of its members and industry, ACOR seeks to advance resource recovery in Australia for the environmental, social and economic benefits that it provides. It does so through positively contributions to public policy and through conducting beneficial projects, such as developing the new NSW-based Recycle Mate (anti-contamination) app with the strong support of the NSW EPA, and our new national voluntary industry accreditation initiative.

ACOR has a clear goal for Australia and our sector: **100% recovery of recyclable, compostable, reuseable or recoverable materials**, and the economic, environmental and social benefits that flow from that goal.

We recommend this goal for the Strategy as it optimises the opportunities of a circular economy. It is important to shift our joint efforts to positive productivity of our urban resources rather than the conventionally minimalist approach of

dealing with waste at the lowest possible cost, as the lowest possible cost outcome is actually illegal dumping.

In line with such a goal and ACOR's **10 Point Plan for Results-Based Recycling**, adopted in 2018, ACOR has considered the priorities that the Minister has identified for the Strategy, and structured its comments around them. ACOR briefly nominates a range of policy ideas which it is happy to expand on as the Strategy process continues.

**Sustainability** – the NSW waste industry is self-sustaining, delivers improved environmental outcomes and avoids the human health impacts associated with poorly managed waste

**Reliability** – the bins are always collected, and our waste is managed in accordance with community expectations where our recycling is recycled for example

**Affordability** – waste services are delivered at a reasonable cost and with the customer in mind

ACOR suggests that the NSW resource recovery sector – which is distinct from the waste disposal industry – is largely self-sustaining, delivering good environmental outcomes, and helping to avoid human health impacts from waste. This can be measured by progress toward the State's existing waste reduction targets, and the industry's concomitant growth over many decades, largely without any direct subsidisation from governments. It can also be measured by the overwhelming community support for recycling (near 90% in NSW according to rigorous survey work by the CT Group in 2018) and regular participation in recycling initiatives.

Indeed, from ACOR's perspective and given major recycling **infrastructure investments in the municipal, commercial and building spheres by the private sector in NSW in 2018 alone of more than \$100 million**, there isn't a substantial issue of the industry being fundamentally unsustainable. Rather, with policy reform and continued industry innovation, the Strategy is an opportunity for resource recovery to be part of transforming the productive landscape of NSW for economic, social and environmental good.

The industry's self-sustaining capacity is particularly strong in terms of the construction and demolition (C&D) and commercial and industrial (C&I) waste streams where resource recovery rates are comparatively high on a national basis, and commercial arrangements are stable and competitive. This is a result of the positive economic signal that the waste disposal levy creates for waste generators, especially those generating heavier and more homogenous materials, to divert material to resource recovery rather than landfill.

(By way of reverse corollary, it should very strongly be noted that a **downward trajectory of the waste disposal levy will have an extremely deleterious effect** on resource recovery rates and the industry's capability to operate in NSW. Virtually every business plan in the resource recovery sector in NSW – in the areas where the levy applies – has factored for the levy in determining viability and investment. Nor would a downward trajectory significantly make waste disposal more affordable in NSW, as most costings are relatively inelastic due to fixed costs. Uncertainty about

the waste disposal levy will also impact on investor confidence be it within the direct sector or debt/equity providers both here and overseas-based.)

**Where conditions are weaker is the Municipal Solid Waste (MSW) sector** where the total supply chain and process known as kerbside recycling is less sustainable and the opportunity to divert organic material from landfill is underdeveloped. A lower resource recovery rate applies as a result.

In significant measure, this is again a reflection of the waste disposal levy which in the case of MSW does not provide a sufficient direct incentive for lighter and more heterogeneous materials normally associated with MSW, such as packaging, mixed paper, e-waste, and batteries. Effectively, the systemic cost of collecting, sorting and reprocessing recyclable material in NSW is lower than the commodity or market value of the collected material.

This has been further exacerbated by commodity price and market availability aspects emerging from changes in Asia, and put pressure on the NSW Government, Councils and their contractors, as the “funding gap” for kerbside recycling has grown / changed. Arguably, depending on the size and trajectory of the “funding gap”, this means that kerbside recycling cannot successfully operate on a purely “free market” footing in NSW.

This is particularly so when landfill disposal of waste continues not to reflect the true environmental costs of waste, nor when kerbside recycling’s broader environmental benefits – such as greenhouse gas emission reduction and resource conservation – are not taken up in costings.

NSW like all other Australian constituencies, but unlike many overseas jurisdictions, also does not require that brand owners in the packaging supply chain (whose products are the vast majority of a basket of kerbside recycling materials) substantively contribute to the costs or operation of the system, e.g., various forms of extended producer responsibility. Our kerbside recycling system is a de facto voluntary “system”, or more accurately described as non-binding in its targets and a loose confederation of a variety of locally-determined approaches.

While ACOR is actively supporting APCO’s projects in good faith, including representation on its Board and Collective Action Group, it has previously point out that **a purely voluntary approach has nowhere in the world yielded achievement of similar targets**. As one example, Malta and Bulgaria, the lowest performing European countries, have plastics recycling rates higher than Australia’s (at 12% total and some 30% for plastic packaging.)

This market-based / voluntary approach has extended to the siting and development of resource recovery facilities, including those needed for kerbside and organic recycling of MSW. As our population grows, our metropolitan areas spread, and our housing density increases and encroaches on previous land uses, **it is extraordinary how little thought and consideration has been given to where we will site and develop the necessary facilities to manage our growing waste stream** (or to harness the nascent opportunity of resource recovery). For example, the Greater Sydney Commission has confirmed to ACOR that while water and energy supply has been factored for in their future scenarios, waste and urban resource have generally not.

At the same time, while the introduction of the container deposit/refund scheme in NSW has increased the collection percentage of containers and reduced litter from affected materials, it has also caused some disruption in the kerbside recycling system. For all the system's pluses, and they are many, there is also an unresolved structural issue and a lack of a systemic approach with regard to the distribution of the costs and benefits of CDS vis-à-vis kerbside. It appears that - in the case of at least some Materials Recovery Facility (MRF) operators - the volume of valuable materials in kerbside recycling has gone down while its unit value has gone up. However there remains a lack of clarity about how to manage these changes and the inter-relationship of the dual systems for packaging recovery.

Equally, a key feature of both demographic and housing growth in metropolitan Sydney and other areas of NSW has been the strong uptake of Multiple Unit Dwellings (MUDs). This has often occurred without sufficient pre-planning in terms of the logistics of resource recovery or ample considerations of unique socio-cultural factors (in a city where nearly 50% of residents are born overseas and often migrated from societies without comparable collection types). This has generally led to extremely poor quality in collected material from high-rises largely regardless of the quantity or quality of education provided – and, as a result, higher loss rates in many MRFs especially due to cross-contamination of paper, glass and plastics.

Furthermore, while participation rates in recycling are remarkably high and laudable, contamination at the household level remains a problem across the general kerbside recycling system for a variety of reasons, including: disparate collection approaches from LGA to LGA, including bin types, signage, education, frequency and array of materials collected; the accelerating introduction of packaging that can have limited design consideration for recyclability, and; limitations on waste bin volumes / collection frequencies.

Contamination is also becoming more problematic with fast-moving changes in consumption patterns (coupled with minimum requirements for product stewardship for many economic sectors). The recycling sector – at the collection, sorting, reprocessing and remanufacturing levels – is increasingly bearing the operational, occupational health and safety risk, and costs of e-waste (the fastest growing waste stream) and batteries. ACOR is very concerned and disappointed about the slow progress in developing coherent and consistent a product stewardship scheme for batteries, for example, while at the same time adjusting for the increased NSW fire safety requirements for facilities (that have no control of fire risks from batteries).

As a result of the above factors, **we have market failure in kerbside recycling which requires further policy action** given that kerbside recycling has been de facto deemed a worthwhile “public good” over the historical course of public policy. That is reflected by: NSW's waste diversion targets; the instrument that is the waste disposal levy, which specifically exists to support resource recovery (and no other stated purpose), and; gate fees charged and paid for via contracts with Councils and their ratepayers.

(It is also notable in this respect that the average per household cost of recycling services – even considering a systemically unfunded component – is well below that of waste disposal services and unlikely to exceed \$75 per household per year anywhere in NSW. This is important to establish in clear fact during the Strategy process in order that the Minister's emphasis on affordability be satisfied.)

Many of the above issues were recognised in the work of various groups and taskforces convened by the NSW EPA – both internal and external to Government – during the so-called China crisis. However, it is difficult to suggest that there has been comprehensive policy or program action take-up or reform subsequently. In simple terms, to redress the market failure in kerbside recycling and to make it self-sustaining for the broader sector (including not only industry, but Councils, brand owners and the NSW Government), it is necessary to minimise the costs of kerbside recycling while expanding its revenue streams.

**The imperative for change is now even greater and genuinely urgent as: a) more Asian nations put in place restrictive conditions on the export of potential recyclate from NSW and other Australian jurisdictions; b) Australia and NSW themselves – through COAG – have decided to ban waste exports while developing domestic recycling capacity, and; c) voluntary APCO targets which require, for example, a five-fold increase from some 200,000 tonnes to 1 million tonnes in domestic demand for plastic recyclate.**

The Minister’s stated desire for reliability (e.g., that collected material is recycled) will be hugely challenged if there isn’t swift and substantive action at the national and NSW levels to build further domestic recycling capacity. The risk of in NSW of implementing the ban prematurely – and leading to more landfilling and potentially illegal stockpiling of formerly exported materials – is tangible.

With regard to building greater domestic sustainability and reliability, in April 2018, ACOR commissioned independent consultancy MRA Consulting Group to evaluate what steps (and their cost) were needed would it to “keep” some 50% of current exports on-shore. That study recommended one-off, matching dollar investments of \$90 million on a national basis in MRF improvements, fibre secondary processing, plastics secondary processing and glass reprocessing, as well as greater harmonisation in contractual models, community education, collection systems, and material ranges. **This would suggest that a proportionate investment of at least \$60 million – on a matching dollar basis - is necessary in new kerbside-related infrastructure in NSW to give full effect to the new COAG ban.**

The following table illustrates the possible mechanisms that ACOR suggests for further consideration in terms of efficiency and revenue, and the sustainability, reliability and affordability that the Minister seeks. They speak primarily to kerbside recycling, but some also have strong application in terms of optimising resource recovery from C&D (orange \*) and C&I (purple \*) as indicated. (Some of the below concepts will also apply to the Minister’s themes of affordability and reliability as well.)

Efficiency Measures/Options	Revenue Measures/Options
1. Establish <b>performance standards</b> based on material quality for operational collection approach, including bins, signage, colour schemes, optimal segregation / commingling mix, and collection frequency – to cover both inorganic and organic recyclable streams	1. To meet diversion targets and COAG ban, reorient and reinvest <b>greater funding from the waste disposal levy</b> via the Waste Less Recycle More initiative into resource recovery infrastructure and recycled content product development on a targeted basis across MSW (with an emphasis

	<p>on MRF improvements and paper, plastic and glass reprocessing technology), C&amp;I (with an emphasis on C&amp;I MRFs), C&amp;D (with an emphasis on off-take) and e-waste / batteries (with an emphasis on “bring” centres and reprocessing capacity)**</p>
<p>2. Establish a <b>standardised set of collected materials</b> (and, by corollary, a set of materials which should <u>not</u> be collected such as soft plastics and multi-material, complex packaging)</p>	<p>2. As has been in part done in Queensland, <b>exempt residual waste</b> from recycling and remanufacturing process from the waste disposal level, as this is a perverse penalty on recyclers**</p>
<p>3. Establish a “<b>model contract</b>” for Councils based on unit costs and commodity price ranges plus profit margins for both inorganic and organic streams, and factoring for CDS revenues</p>	<p>3. Maintain the <b>forward trajectory of the waste disposal levy</b> to reflect the true environmental and social costs of waste management**</p>
<p>4. Improve <b>strategic planning and land planning</b> for the siting and development of resource recovery facilities, including placement of all resource recovery facility processes in the domain of the State Government**</p>	<p>4. Establish a <b>pro-active recycled content procurement</b> approach across State and local governments, especially a focus on major infrastructure projects**</p>
<p>5. Consider the <b>removal of conventional “kerbside recycling” type services from Multiple Unit Dwellings</b> (MUDs) and its replacement with container deposit/refund-oriented collections that are subject to market contestability.</p>	<p>5. If there is limited progress against national packaging resource recovery targets in the next two years, <b>consider the full funding of the unmet costs of kerbside recycling</b> on a 50/50 basis via the waste disposal levy and the packaging supply via an improved NEPM or other most efficient and effective means</p>
<p>6. Support ACOR’s efforts to establish a national <b>voluntary industry accreditation scheme</b> to ensure highest standards in resource recovery activity**</p>	<p>6. Allow for <b>market contestability of individual MUDs</b> for resource recovery services, including CDS-material oriented services</p>
<p>7. Introduce a comprehensive and consistent approach to <b>waste minimisation education</b> in NSW**</p>	<p>7. Trial models of <b>market contestability for individual</b></p>

	<b>ratepayer</b> waste management, including “pay as you throw”
8. Require <b>transparency on Council rates notices</b> about the comparative costs of waste disposal and recycling activity	8. Improved development of <b>energy-from-waste</b> opportunities for residual waste including micro-generation, co-generation, and fuel replacement**
9. Grant Council rangers the ability to <b>fine households and businesses for contamination</b> of recycling streams – as they can for littering and illegal dumping*	

Several other aspects need to be considered in terms of fulfilling the Minister’s criteria as well as taking a pro-active approach to the realisation of the full potential of resource recovery across MSW, C&I, and C&D in NSW. There are also lessons to be learned from other Australian jurisdictions in crafting the Strategy. These aspects and learnings are discussed in the following section.

We need to consider NSW’s current resource recovery targets and progress toward them: 70% for MSW, 70% for C&I and 80% for C&D. In this regard, ACOR commissioned MRA in late 2018 to examine the infrastructure requirements for meeting these targets while also considering demographic growth rates and major public works projects occurring in NSW. MRA was also asked to examine the job-related aspects of resource recovery infrastructure.

That analysis, prepared for a workshop with the Minister for Western Sydney, found that:

- some 35 additional facilities are needed to meet 2021 targets and recycle an additional 5.18 million tonnes, including two additional MSW AWT facilities, three additional MRFs, two MSW organics processing facilities, and, very critically, fifteen C&I MRFs and thirteen C&D processing plants.
- **an investment around \$994 million is needed;**
- economic value returned would be over \$1 billion and **nearly 4,800 jobs** (or some 50% growth in the industry’s size).

(The above estimations are separate from modelling specific to implementing the COAG ban for packaging materials in NSW.)

To meet both this challenge and claim this opportunity, a variety of reforms, further to those that are pertinent in the table above such as planning changes, are needed.

In this respect, it is regretful but fair to describe the regulatory relationship between the NSW Government, local Councils, and the resource recovery sector as at times **frustrating, needlessly adversarial and unproductive, and certainly lacking in consistency and certainty**. This is at both site-specific and systemic levels, and this can be at least partially attributed to **all** participating actors. NSW compares unfavourably to other constituencies in this regard where collaboration, communication, policy co-design and partnership where appropriate are much more

prevalent. Some of these aspects were referred to in the recent Legislative Council inquiry.

ACOR suggests the following steps to effect regulatory and policy renewal, reduce regulation-related costs, provide greater certainty and investor confidence, and contribute to sustainability, reliability and affordability:

- a) Building on the recent restructure of the NSW EPA and DPIE, further delineation in the waste-related regulatory and program functions of the NSW Government, including the creation of a **stand-alone stewardship institution** along the lines of Green Industries SA and Sustainability Victoria to feature an independent Board of expert stakeholders and to provide a strong central platform for progress and partnership;
- b) Conclusion of a **proper resource recovery infrastructure audit** and gap analysis as per Victoria, South Australia and Queensland and identification of a necessary projects pipeline as is done in the transport and other spheres of urban activity;
- c) Identification of **industrial ecology parks** and zones for the future development of resource recovery and circular economy infrastructure, and their facilitation by agencies of the NSW Government;
- d) End the fragmented and unproductive approach to product stewardship delivery by fostering accessible, consistent and integrated **resource recovery “bring” centres** for the return by ratepayers of a variety of non-kerb products and materials, such as e-waste, car batteries, household batteries, soft plastics, paint, mattresses, household chemicals, containers subject to deposits/refunds etc;
- e) Introduce **landfill bans** on materials in a manner which is harmonised with other States, including Victoria’s e-waste ban;
- f) Development of a **Resource Recovery Industry Growth Action Plan for NSW** which identifies specific measures that are necessary – between both the sector and Government to build greater capability and more jobs, including via the education and training system, as per the Queensland precedent;
- g) **Positively resolve the AWT Mixed Waste Organic Outputs (MWOO) regulatory process** and the collaborative development of new pathways for this important recycling activity which is currently very significantly contributing to progress against MSW diversion targets and some 200 jobs across NSW;
- h) Careful consider MSW and C&I FOGO options weighing up both potential environmental benefits and issues to be managed such as product quality, consumer amenity, logistical complexity, and ratepayer cost;
- i) **Greater collaboration between the NSW EPA’s regulatory wing and the resource recovery industry** in the form of partnering in the induction training of EPA staff, regular informational visits to resource recovery operations, mutual staff secondments, and cooperation in the development of ACOR’s voluntary industry accreditation scheme;

- j) Application of a **cumulative impacts / benefits approach** to the planning evaluation and site-specific regulation of resource recovery facilities where their broader environmental contribution (such as greenhouse gas emission reduction) is balanced with any single-point pollution issues, and the greater identification of collaborative improvement actions and schedules;
- k) Specific reform of the **Resource Recovery Exemption / Order process**, which is unique to NSW and which on current design actually hinders rather than fosters the development of recycled content products, via a collaborative “gateway-style” approach, clearer guidelines and expectations, specific performance / evaluation criteria, and set timetables, as well as use of Waste Less Recycle More grants to fund scientific research as required, and;
- l) Greater leadership by NSW as the most populous State in: **National Waste Policy** process, which needs real funding and real targets beyond those for packaging; the implementation of the **COAG ban** on waste exports, including an immediate **ban on the export of bales of unprocessed waste tyres**, and; the development of national product stewardship schemes especially where there is a demonstrable lack of progress such as batteries and potentially packaging and plastics.

Finally, ACOR congratulates the Minister and his agencies on embarking on the development of the Strategy as it has the potential to unlock vast productive potential via resource recovery in NSW. That is a positive and bright future of environmental, social and economic capital that we all aspire to. Therefore, look forward to further engaging with the Minister and the Strategy’s content developers in the spirit of genuine co-design especially as more substance is offered by the Government on its objectives, aspirations and potential directions.

The contact person to discuss the contents of this initial submission is ACOR’s CEO, Pete Shmigel, on 0419 541 531.