

## **ASBG's Submission on NSW's 20 year Waste Strategy**

Below is a copy of the on-line submission ASBG made for NSW's 20 year Waste Strategy.

ASBG answered the questions relevant to its representative members where appropriate. ASBG answers appear in black and the questions are in gray.

This submission is one of a number relating to the 20 year strategy and waste management in NSW which ASBG has made over the last two years. Other submissions include:

- [ASBG's Submission on NSW's 20 Year Waste Strategy 2019](#)
- [ASBG's Submission on Fire Safety in Waste Facilities 2019](#)
- [ASBG's Submission on the Circular Economy - 2018](#)
- [ASBG's Submission on the EPA's Asbestos Strategy - 2018](#)
- [ASBG's Framework Approach to a Revamped/Reengineered Recycling System](#)

ASBG has also provided submissions on waste at the National level including:

- [ASBG's Submission on the Waste Export Ban RIS 2020](#)
- [ASBG's Submission on COAG's Waste Export Ban 2019](#)

All ASBG submissions are prepared with the input from members of our Policy Reference Group.

**Yours Sincerely**

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## **Cleaning Up Our Act**

### **The Future for Waste and Recycling in NSW**

We are seeking your feedback on the Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW issues paper.

The issues paper sets out the case for action and outlines a range of options that could support the shift towards a circular economy.

Your views on the options that could support the shift towards a circular economy are highly valued and will inform the development of the 20-Year Waste Strategy.

If you would like to provide feedback by email, send your submission to [20YWS@dpie.nsw.gov.au](mailto:20YWS@dpie.nsw.gov.au).

1. Do you agree that it is important to transition New South Wales into a circular economy, supported by waste and resource recovery services that are sustainable, reliable and affordable?

- Yes
- No
- Unsure

If 'No' please tell us why

2. Where do you think the New South Wales government should prioritise efforts in improving recycling and resource recovery?

Choose all that apply

- Generating less waste and 'designing out' waste
- Improving collection and sorting of waste
- Planning for waste and resource recovery infrastructure
- Creating sustainable end markets for recovered materials
- Other (please specify)

Other Value

Improved, fast tracked approval process for recycling and reuse of specific wastes

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

#### **Direction 1: Generate less waste**

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

Minimisation of waste in new products will be in part possible, but limited as many products are not made in Australia, but imported. Changing the minimisation of waste to suit Australian recycling infrastructure will be difficult in the short term as this infrastructure has not been fully developed. Designing out waste in products requires the end uses of that waste for recycling and reuse to be first identified, then made cost effective.

It also must be recognised that some wastes are better off being disposed of than recycled. A waste that uses more natural materials (e.g. water, energy etc) than it replaces when it is recycled will do more environmental harm than if it is disposed of. Here Energy from Waste plays a key role as the last step for some wastes prior to the disposal option.

#### **Option 1.1 State-wide targets**

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

There are many complex and difficult mechanisms to get right in achieving a better rate of waste recycling and reuse. Collapse of international recycling markets has broken the international model for the circular economy. Here waste streams from Australia's imported product mix was sent back to those manufacturing economies to recycle these streams. Trying to recycle and reuse such wastes within Australia will be far more expensive due to higher costs, smaller economies of scale, international competition to export cleaner recyclates and a lack of new infrastructure currently to achieve the newer export market standards.

While recycling targets to avoid landfill provide a goal, they should be considered aspirational and not hard targets.

*6. How can these be implemented so they are most effective?*

ASBG has prepared its Framework Approach to a Revamped/Reengineered Recycling System see:

<http://www.asbg.net.au/attachments/article/448/ASBG's%20Revamped%20Recycling%20System.pdf>

As such ASBG considered that broad aspirational targets should be used first. Only when appropriate infrastructure, with reasonable end markets available should specific material type targets be set.

*7. What limitations should be considered?*

Mandated percentage recycled content has proven difficult overseas. For example, in the USA for newsprint it was more cost effective to pay fines than meet such targets. Consequently, the NSW Government must not set mandatory targets until clear recycling and circular pathways, which are cost effective are available.

*8. What additional targets and metrics could be used to drive emissions reductions from the waste system?*

This must be carefully done, with consultation with the industry, importers and the recycling chain to provide realistic approaches to setting any targets.

*9. What are other opportunities to reduce greenhouse gas emissions from waste, while supporting the economy?*

Many recycled products have much lower energy requirements than virgin materials such as metals, paper and cardboard, probably plastics. Energy costs are a major issue for recycling as it is essential for separation and sorting processes at the recycling plant. Lower cost energy directly supports recycling. Recent increases in energy costs have been the main reasons for recycling plant closures especially for fibre.

Transport distances is another issue, as some recycled materials may be too far from a recycling plant to result in a positive benefit for the environment.

**Option 1.2 Designing out waste**

*10. How do we better design out waste?*

This is a very complex and technical issue.

It will be specific not only to material type, product, market and downstream management, it will also require considerable input from the consumer and all in the circular chain. Everyone in the circular chain must take a level of responsibility in their part. Product design must be recognised as the first step in the process of waste minimisation. Recycling of the materials from products is dependent on the design of the product in materials selection, ease of disassembly/separation and the type and processes for each material to be recycled and what its end product will be. Reuse is related to repair or use as parts for many products. Reuse tends to be different for liquid and certain raw materials used in production processes. The first can be applied universally, but the second is limited to the processes available in Australia.

Noting that manufacturing in Australia has shrunk from around 35% in the late 1960s to around 6% of the economy today. As a consequence, Australia must produce recyclates which are acceptable in international markets. The alternative is to down cycle the materials for simpler uses which are more tolerant to higher contamination levels. For example using crushed glass as engineered fill, or Energy from Waste.

The Australian Packaging Covenant Organisation has been leading the way in reducing packaging waste. ASBG supports their approach to consider all wastes generated not just what happens to post consumer packaging. This encourages cleaner production and other waste minimisation approaches.

*11. What priorities should inform product stewardship schemes and extended producer responsibility?*

Product stewardship schemes must be applied at the National level. To do otherwise would be inefficient driving up costs due to differences between jurisdictions.

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

Again a very complex issue.

It can be tackled from the macro level, perhaps by material type. Given the vast variety of products available each will have its own unique approach.

Education is a key action focusing on preferably Nationally standardised approaches. The current approach of highly different recycling bins and separation requirements across just the Sydney area alone makes broad education difficult. Standardising the infrastructure and where certain materials go will make it far easier to provide clear messages to users of products.

Again having solutions for the suite of wastes types for recycling should be in place first before such drives can deliver appropriated outcomes. While some waste types have this, some are standard, such as C&D, other such as plastic and glass are up in the air.

### **Option 1.3 Awareness and behavioural change**

*13. What are new and innovative ways to engage consumers to reduce waste generation and increase recycling?*

This is answered in Question 12.

Responsibility also must be taken by the consumer, not the product supplier alone.

Kerb-side recycling has poor contamination levels often > 15%. In addition one small piece of asbestos can condemn the truck or even the stockpile it has deposited the recycate into to disposal.

Councils need to consider actions to encourage methods to avoid use of recycling bins as waste bins. For example, Hunter Resource Recovery will refuse to pick up recycle bins from a resident if repeated contamination occurs. Perhaps the bin may be picked up later as red bin waste and a charge could be added.

*14. How can these be implemented so they are most effective?*

You cannot education until the recycling system is in place and operating.

To do otherwise is like selling a product before it has been developed.

Implementing systems which also discourage residents from contaminating kerbside bins needs to be expanded.

### **Option 1.4 Targets for government agencies**

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

Yes, there are many waste minimisation and cleaner production methods that can be implemented by Government agencies. However, this should vary according to the activities of the agency in question.

To ensure the targets are taken seriously, they should be subject to similar obligations of producers under product stewardship schemes or the waste sector are including:

- \* Procurement procedures to buy lower waste products or % recycled content
- \* Data collection, frequency dependent on scale of waste generated
- \* Audits where necessary on larger sites (e.g. > 6,000 tpa waste generated)
- \* Results published in Parliament on an annual basis

*16. What issues or limitations should be considered?*

This should vary according to the activities of the agency in question. Perhaps three levels are appropriate:

Low level waste generation - office type activity

Medium level waste generation - some operational activities

High level waste generation - larger or utility type operations

### **Option 1.5 Regulatory safeguards**

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

Currently, the regulatory approach is fully focused on environmental protection, with recycling and reuse being given lip service.

Many ASBG members report experiencing difficulties in obtaining approvals for recycling and reuse for a variety of wastes. Applications are subject to very tight regulatory scrutiny. Often where education of the EPA officers is required by the applicant so they understand the science. In some cases the approach is bordering on obstruction. Assistance and help to progress such application is very thin compared to other environmental regulators in other states.

There is a regulatory void on how to use a waste to replace a raw material in another process. The Resource Recovery Order and Exemption process is only designed for land application and fuel use (thermal processes) not other raw material replacement options. What is required is a clear guideline on the reuse of certain wastes as raw material replacement similar to that used in Victoria for beneficial and secondary beneficial reuse of wastes.

## ***Direction 2: Improve collection and sorting***

18. What actions by government, industry and the community should be prioritised to improve the way waste is collected and sorted to maximise circular economy outcomes and lower costs?

ASBG's Framework Approach to a Revamped/Reengineered Recycling System see:

<http://www.asbg.net.au/attachments/article/448/ASBG's%20Revamped%20Recycling%20System.pdf>

sets out our position on what is required.

### ***Option 2.1 Recovering food and garden organics***

19. What are the key opportunities and challenges associated with mandating food and garden organics source separation?

FOGO has some considerable advantages in reducing waste to landfill. However, it will create considerable odour complaints and vector issues.

Roll out should be on a trial basis in urban and rural areas first.

High density areas may not be suited to FOGO

Bio degradable bags could be supplied to residents, but they must use them. Also tears and holes will render bags useless for odour control

Bins could be redesigned to minimise odour as well, but this will be costly.

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

House hold composting.

21. What are the key opportunities and challenges with reducing emissions from food and garden waste to achieve net zero emissions from organics by 2030?

This depends on what is meant by emissions.

FOGO will increase odour emissions.

Compositing may increase greenhouse emissions compared to a well engineered landfill with landfill gas capture.

The latter is a highly technical question one which can be calculated.

### ***Option 2.2 Standardise collection systems for households and businesses***

22. 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?

Refer to ASBG's Framework Approach to a Revamped/Reengineered Recycling System.

Victoria has already rolled out a standardised four bin system across Victoria.

23. Should some sources of waste, e.g. multi-unit dwellings and small business, be considered separately? If so, why?

24. What would work best for multi-unit dwellings and small business and why?

### ***Option 2.3 Network-based waste drop-off centres***

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

### ***Option 2.4 Waste benchmarks for the commercial sector***

26. 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?

Its a measurement tool, which is linked to the recycling services available.

For example, if a recycling plant goes into liquidation, there will be no means for that site to meet its NABERS criteria through no fault of its own.

Consequently, it should be a metric but not linked to a hard target. If a commercial site cannot recycle its waste due to downstream failures why should it suffer? This brings in the responsibility of Government to ensure recycling infrastructure remains viable and continues to provide services.

27. *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?*

Similar to commercial sites. See Q26.

28. *Are there opportunities to roll out similar requirements to other sectors?*

**Option 2.5 Innovation and 'waste-tech'**

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

In NSW the planning and environmental approval system directly works against innovative solutions in the waste area. To obtain approval the innovation will generally need to have been proven first outside of NSW. This means only older proven technology is able to gain approval in NSW

As a consequence of this risk adverse approach little innovation in waste processing can occur in NSW.

This must be fixed.

The NSW Government must take on a bit of risk that a pilot or commissioning of a new plant may have teething issues and may not be environmentally perfect.

The Victorian approach is far more flexible in obtaining planning and environmental approvals for new innovative projects. NSW need to implement a similar approach.

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

Develop a one-stop-shop for innovative waste processing systems. Learn from the Victorian approach. Introduce special planning and environmental legislation to permit trials, testing, experimenting, up scaling and commissioning of new first developed processed in NSW.

**Option 2.6 Joint local council procurement**

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

32. *What are the key issues that should be considered?*

**Option 2.7 Combining commercial and industrial waste collection services**

33. *What are your views on the opportunities and challenges of combining commercial and industrial waste streams?*

It sounds more efficient, but depends on the type of waste being picked up and avoidance of mixing waste and recycling types.

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

This appears to suggest the NY model. While moving away from the current generally competitive model to one of less collectors appears less competitive.

35. *What are your views on the right settings for these waste levy parameters?*

As very little of the waste levy is recycled back to waste management, especially businesses and the waste sector it is a heavily and over tax materiel. Approximately 65% of the waste levy is from the non-household sector, yet it receives the smallest fraction of the waste less reuse more money available.

36. *What other price-based incentives should be considered?*

37. *Which would work best in practice?*

**Direction 3: Plan for future infrastructure**

38. *What actions by government, industry and the community should be prioritised to ensure that infrastructure for managing waste is effectively planned, retained and managed?*

Again this is covered in ASBG's Framework Approach to a Revamped/Reengineered Recycling System.

**Option 3.1 Long-term waste and resource recovery infrastructure needs**

39. *What data and information needs to be included in a waste infrastructure needs assessment to ensure it will effectively support planning and investment?*

40. *What role should the NSW government, local councils and industry play in meeting landfill and recycling capacity needs?*

ASBG has called for a review of landfill capacity as there are many drivers sending increasing volumes of waste to disposal. Countering the requirement for new landfills, which is a necessary backstop, and other waste infrastructure development is the considerable difficulty in winning over communities to accept such facilities. The NIMBY syndrome has if anything gained strength which prevents needed well sited, cost effective waste infrastructure from being developed.

Communities must be encouraged to accept waste infrastructure in their area to deal with their wastes.

41. *How can government and industry better encourage innovation in waste infrastructure, to ensure it is sustainable, adaptive and responsive over time?*

As discussed in innovation of waste processes, there are many blocks and hurdles in this area. NSW must redesign the planning and environmental approvals process to permit new and innovative waste infrastructure. Currently NSW is a taker of older ideas and is not a place which encourages waste infrastructure innovation.

42. *What are the barriers and opportunities to reducing greenhouse gas emissions from waste collection, processing, recovery and disposal?*

43. *What are the barriers and opportunities to improve waste transportation and logistics issues?*

### **Option 3.2 Place-based developments**

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

45. *What would a modern waste precinct look like and where in NSW could this work?*

46. *What is the role for government in achieving the desired outcomes and what are the most effective levers it can apply?*

### **Option 3.3 Making it easier to do business**

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

The current planning system makes investment in waste infrastructure particularly difficult. Added to this are very conservative environmental protection criteria and approvals processes by the EPA. Together they are currently too tight and work against investment in NSW. What is required is a more cooperative approach between the bona fide waste sector and NSW Government to improve certainly in planning outcomes and environmental operability.

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

### **Option 3.4 Innovative financing models**

49. *What are your views on the opportunities for innovative financing models in the waste and resource recovery sector?*

50. *How can government best facilitate investment in infrastructure and services that contribute to circular economy objectives?*

### **Direction 4: Create markets**

51. *What actions by government, industry and the community should be prioritised to grow sustainable markets for recycled materials?*

With a small manufacturing sector the markets for purified recyclate is limited within Australia. Consequently, much of the market must be overseas.

Otherwise the other options for internal markets is in down cycling (e.g. engineered fill, blending with concretes etc) or energy from waste.

The current Energy from Waste policy has been discussed in prior ASBG submissions, but in short it is too restrictive and costly. It is also made for one type of EfW type, ignoring other EfW innovative approaches which have merit and are uneconomic under this current policy.

### **Option 4.1 Recycled content in government procurement**

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

53. *Should procurement targets be established and what is the best way to develop and implement them?*

#### **Option 4.2 Standards for recycled content and materials**

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

This is very dependent on the type of material and product.  
It can work well for some products, but poorly for others.

55. How critical do you think standards and certification are to developing markets for recycled content?

Standards for engineered fill or other engineering materials it can and has worked well in other states.  
However, the zero threshold for asbestos fibers in such fill renders the risk too high for many in Government to accept.  
A realistic threshold is required as a zero or undetected is a very high bar where few will wish to place their reputation.

#### **Option 4.3 Match suppliers with markets**

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

This is a complex area. Only ongoing communications with a level of cooperation and trust is required so the complex issues can be considered and addressed.

#### **Option 4.4 Best-practice regulatory environment for energy from waste projects**

57. 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 EfW Policy requires to be re-written in a more flexible manner.  
It also should be split into the various sections dealing with different EfW processes and innovative approaches.

58. Are there any other views, ideas or feedback you would like to provide?

#### **About you**

Email Required

Are you making this submission as an individual or an organisation?

- Individual
- Organisation

#### **For individuals**

Do you live in NSW?

Answer this question if you are making this submission as an individual only

- Yes
- No

Postcode

Answer this question if you are making this submission as an individual only

#### **For organisations**

Organisation name

Answer this question if you are making this submission as an organisation only

#### **Australian Sustainable Business Group**

You have **255** characters left.

Organisation type

Answer this question if you are making this submission as an organisation only

- Charity or community organisation
- Local government
- Plastic industry or manufacturer
- Small business
- State government



Waste or recycling industry

Other (please specify)

**Our commitment to privacy**

Tick the box if you would you like your feedback to be withheld from publication