

1. *Are there opportunities to further coordinate, harmonise or streamline approaches to waste management across jurisdictions?*

Comment: National approaches to Extended Producer Responsibility or Product Stewardship will help give certainty to business and consistency to suppliers operating in several jurisdictions.

2. *Are the categorisations, definitions and standards used to manage waste between and within the different levels of government effective and appropriate?*
3. *Do the current waste management frameworks across jurisdictions:*
 - *deliver an effective regulatory framework?*
 - *provide an appropriate suite of approaches to address waste and resource recovery issues?*
 - *work effectively in conjunction with planning and other environmental legislation?*
 - *provide the right incentives to manage materials, products and waste sustainably and holistically?*
 - *need improving, and if so, how could this be done?*

Comment: There is a discrepancy between the goals of the waste management frameworks, the proposed National Waste Policy and licence conditions specified in individual site licences issued under Part V of the Western Australian Environmental Protection Act 1986. Some individual site licence conditions prohibit waste synergies between companies as the site licence prohibits the receipt or processing of wastes from other locations. Often this can prevent diversion of wastes from landfill that are of beneficial use to other companies. Synergistic use of wastes should be encouraged amongst neighbouring industries where this leads to beneficial environmental outcomes (e.g. less waste to landfill, reduction in the need to consume a 'new' material).

4. *In the 1992 National Strategy for Ecologically Sustainable Development, COAG endorsed the strategies and objectives for a national approach to waste management (Appendix A). Looking ahead to the next decade, how could these strategies and objectives be updated to provide the basis for a national waste policy that responds to current and future challenges and opportunities?*

Comment: The focus of these strategies needs to remain on waste minimisation, but with a maximised focus on product stewardship. The onus of waste management for the future needs to be put back on producers in order to effect realistic change in the amount of waste that is generated. Continued focus on waste reuse and recycling fails to deal with the issue at the point source. Product stewardship and Extended Producer Responsibility can establish market based mechanisms to promote decreased resource usage in products supplied to Australia. This reduces the need for expansion of waste

management and provides associated environmental benefits from decreased resource usage in production of products.

5. *What waste issues would most benefit from a national approach? What strategies could be considered and how could the need for local solutions be integrated with a national approach?*

As above

6. *Are there waste management initiatives in operation overseas that could apply in the Australian context? If so, which ones and why?*

Comment: There are numerous schemes around the world that Australia should benchmark in its establishment of a national waste management policy. Again, careful review of other countries product stewardship schemes should be carried out to determine success and failures, and base any Australian scheme on the key elements of successful schemes overseas.

7. *Australia needs to safely manage hazardous waste and waste containing hazardous materials over the long term.*
- *Are there any changes to current arrangements that would improve Australia's capability to safely manage hazardous waste, for example in regard to adequate infrastructure or disclosing the contents of goods and substances?*
8. *There are a number of approaches to product stewardship operating in Australia.*
- *What, if any, role is there for a national approach and what would be the costs, benefits, opportunities and focus of such an approach?*
 - *What models might work in Australia?*
9. *Are there any aspects of waste management that could be improved or streamlined through adopting national standards?*
10. *What fundamental data sets does Australia need to collect to better inform waste management policies, practices, investment, business operations and to assess and manage risk?*
11. *What, if any, place should there be for approaches that seek to avoid waste through changes in design, production processes and transport?*
12. *What changes could be made to improve management of the municipal waste stream and those of the commercial and industrial sector and the construction and demolition sector?*

Comment: There may be the potential for waste synergies between industries, particularly for commercial and industrial waste. There is no mechanism for developing synergies such as a database or centralised notification system

(akin to an electronic Reader's Mart or Trading Post) to identify waste synergies at a local, state or national level.

13. Landfill is currently the primary means of waste disposal. What, if any, changes need to be made to manage Australia's waste stream in the long term given current trends in the volume and nature of the waste?

Comment: Landfill is often a cheap and easy alternative for waste disposal. The recycling of waste, particularly specialist streams, e.g. mercury, e-waste, where there is a limited amount of recyclers in the state needs to be subsidised to make it more cost effective for waste generators to recycle the waste, especially where transports costs are significant.

14. Reducing the amount of organic waste sent to landfill has the potential to contribute to reducing greenhouse gas emissions as well as other potential environmental and economic benefits. What are the benefits and opportunities, costs and disadvantage of increased diversion and/or recycling of organic wastes?

Comment: Alcoa has been diverting putrescible food and other organic waste from landfill at all of our Western Australian operations for nearly 10 years. This waste is diverted at the source by all personnel and visitors through our "3 Bin System", and is sent to our worm farm facility at the Pinjarra refinery for processing. Worm castings produced from this facility are used in Alcoa's gardens at Pinjarra refinery. Alcoa has diverted over 1,000 tonnes of putrescible wastes through our worm farm since 1995.

Other industries may require support or incentives to implement similar systems either individually or communally to reduce overheads.

15. What, if any, changes are needed to the way e-waste is managed?

Comment: E-waste is a newly emerging waste stream and industries and households are often unaware that there are alternatives for landfill for certain e-waste streams. Education in this area needs to be improved to both the public and industry.

16. The Carbon Pollution Reduction Scheme will apply to emissions from landfill. Are there related approaches that would complement the scheme and thus contribute to meeting the emissions targets and the timeframes set in the Australian Government's climate change policy?

17. What are the opportunities to reduce water and energy use through the way waste is managed?

18. In what ways can waste management and resource recovery (including recycling, re-processing, re-manufacturing) industries add further value to the economy and create employment?

Comment: There are many recycling technologies and techniques that for various reasons are currently not accessible for the treatment of waste stream

generated in Australia. As these new recycling processes become available in Australia and particularly Western Australia, Alcoa is interested in exploring the feasibility of alternate options as they become available.