13 May 2009

51 Walker Street
North Sydney NSW 2060
PO Box 289
North Sydney NSW 2059
Australia
ABN 76 369 958 788
Tel: +612 9466 5566
Fax: +612 9466 5599
www.aigroup.asn.au

Waste Policy Taskforce
Department of the Environment, Water, Heritage and the Arts
GPO Box 787
Canberra ACT 2601
wastepolicy@environment.gov.au

A National Waste Policy: Managing Waste to 2020
Submission by the Australian Industry Group

The Australian Industry Group (Ai Group) welcomes the opportunity to respond to the National Waste Policy Consultation Paper.

The Australian Industry Group
Ai Group is a leading industry association in Australia and is committed to helping Australian industry meet the challenge of change. Our focus is on building competitive industries through global integration, human capital development, productive workplace relations practices, infrastructure development and innovation. The recently announced merger of the Engineering Employers Association South Australia with Ai Group further builds our strong national representation.

Ai Group members operate small, medium and large businesses, and employ around 750,000 staff in a number of industry sectors. Many members are in resource-intensive industries, and the generation of waste and residues as a by-product of industrial processes remains a major issue for management of compliance and costs. We have significant membership in the electrical and electronic manufacturing and ICT sectors, where product stewardship, e-waste and eco-design are key issues. Other members are directly involved in waste management and disposal, resource recovery or recycling.

Ai Group is closely affiliated with more than 50 other employer groups in Australia alone and directly manages a number of those organisations, including the Australian Constructors Association. Together, Ai Group and its affiliates represent the interests of approximately 60,000 businesses which employ in excess of 1.2 million staff across Australia and the world.

Waste policy in Australia

In developing this submission, Ai Group has consulted widely with member companies in a range of key sectors across government jurisdictions. Industry in Australia incurs significant administrative and compliance costs as a result of inconsistent waste management policies and regulations. These include:

- Fundamentally different approaches and divergent policy settings, such as waste diversion targets, which create significantly different cost and compliance regimes, adding to costs and administrative complexity for businesses operating across state boundaries;
- Differing categories, definitions, rules and practices inhibit the generation of accurate and consistent data on waste across (and even within) jurisdictions, impeding the ability of businesses to take up opportunities to more efficiently manage their waste;

There are clearly opportunities to better harmonise practice at every level – from policy objectives such as waste targets, through to important technical details such as the conversion factors applied in calculating waste data. An effective national waste policy could potentially unlock important economic and environmental gains for Australia, and contribute to a seamless national economy. This raises two questions: what should such a policy look like, and how can it be achieved?

Principles for reform

Development of a National Waste Policy must address the need for both consistency and appropriateness in waste policy settings across jurisdictions. What standards should we harmonise to, and what should be the underlying principles? Ai Group considers that in development of a national waste policy consideration should be given to a number of the issues raised in the Productivity Commission's 2006 Report on Waste Management (the PC Report). The PC Report advocated an approach to waste management that incorporates:

- a focus on reducing risks to human health, the environment and social amenity;
- rigorous cost benefit analysis of the range of options for addressing genuine risks, including both upstream regulation and the option of doing nothing; and
- pursuit of only those options with the highest net community benefits.

Australian governments face a range of options, including:

- Reform waste policy to be more flexible, tailored and community-benefit based, with policy settings underpinned by clear cost benefit analysis;
- Retain existing goals and principles but put in place the policies, information and assistance necessary to achieve them, with costs to be shared across government, business and the community; or
- Do nothing, and allow existing targets to be missed while unnecessary costs continue to be imposed on the community.

Ai Group supports a move towards a net community benefits approach which is responsive to the real – and changing – costs and benefits of waste and which enables responsibility for dealing with waste to be placed where it can most efficiently be discharged – a calculation that would differ substantially between different sectors and product categories. Such an approach should include recognition of the strategic role of modern landfills and advanced energy recovery facilities in the waste infrastructure.

Process for achieving a national policy

Given the present inconsistency of approaches across Australia, implementation of an effective national policy will likely involve significant changes in the regulatory and commercial environment in which business operates. It is critical that development of a national waste policy does not impose a further level of compliance and confusion.

Development of a national waste policy should involve close consultation with all stakeholders. The consultation paper to which this submission responds is a start, but continuing and substantive consultation with business and other groups is vital to ensure that policy development is relevant, responsive and well-informed. This will be particularly so when governments begin to arrive at indicative positions on the many issues raised in the consultation paper.

The need for consultation applies within government as much as outside it. Waste policy has significant impacts both on government finances and on the broader economy. Treasuries and Departments of Finance should therefore be closely involved at all stages, both federally and in each State.

Responses to questions contained in the Consultation Paper

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

Ai Group's member companies consistently report that existing waste policy arrangements are fragmented and contradictory. The survey of existing policies at Appendix B of the Consultation Paper clearly highlights that policy settings vary between and within the States and Territories in nearly every respect: objectives, scope, exemptions, incentives, fees, penalties, definitions, legislation, future policy directions and more. This means higher costs for administration, licensing, compliance and enforcement, and not only for stakeholders who operate in several jurisdictions. Single-jurisdiction business is also impacted through lack of access to the more efficient advisory and waste management services that would result from a more consistent national system. .

Specific anomalies raised by Ai Group members include:

- *Conversion factors*. The factors used to convert between volume and weight for waste are not only fairly arbitrary, but also differ completely from state to state. As a result, businesses that operate in more than one state, or who are owned by national companies, are less able to keep track of their waste, negotiate effectively with waste managers or produce reliable and comparable data.

- *Battery recycling*. Licensing requirements differ between States, with varying thresholds for the absolute or annual mass of batteries that a business can store or receive before a license is required. Confusing and restrictive, these arrangements deter effective collection and recycling.

- *Fluorescent lights*. Regulation of products with mercury content varies not just between States, but between different contexts within States. In some instances, transporting fluorescents for recycling is subject to strict requirements that do not apply when transporting new lights for sale or old ones to landfill.

2. ***Are the categorisations, definitions and standards used to manage waste between and within the different levels of government effective and appropriate?***

Management and regulation of waste in Australia is characterised by a complex maze of regulations, guidelines, policies and standards across jurisdictions. What is "prescribed" waste in one location is defined as "hazardous industrial" waste in another and there is also variation in thresholds for waste categories. Differences in terminology also apply to the businesses handling waste (a regulated waste handler? A container reconditioner?) and to the permits/licenses/approvals required from governments to carry out their business.

Ai Group supports harmonisation of terminology between jurisdictions in close consultation with industry.

3. ***Do the current waste management frameworks across jurisdictions:***
   - ***deliver an effective regulatory framework?***

Ai Group is concerned that the current waste management frameworks across jurisdictions place insufficient emphasis on balancing social, environmental and economic outcomes. Ai Group supports development of a waste policy framework which facilitates development of flexible, tailored policy settings underpinned by a clear cost benefit approach and informed by the waste hierarchy. Such an approach would allow modern landfills and advanced energy recovery facilities to play a strategic role in the waste infrastructure.

   - ***provide an appropriate suite of approaches to address waste and resource recovery issues?***

Businesses require technical advice and support in reducing their waste, from product design, through to identification of recycling and reuse opportunities.
Ai Group is working in close cooperation with EPA Victoria in the delivery of practical advice and assistance to industry to reduce industrial waste to landfill via our Sustainability Covenant. Many of the industry projects undertaken with Covenant funding have explored cost-effective and resource-efficient options for industrial waste, to reduce quantities of material going to landfill disposal. The success of these resource recovery projects has been recognised by the recent extension of the Covenant for a further 3 years.

This is an example of a successful collaborative approach to waste management that could be replicated.

Increased emphasis also needs to be placed on approaches to supporting infrastructure and markets for diverted material. The global recession has seen prices for recycled materials drop significantly, making some forms of recycling commercially marginal or unviable, and diminishing the achievability of waste diversion targets under current policy settings. Recycling can be enhanced through provision of better information about what can and can not be recycled, and the high quality and performance of recycled materials, and through reform of remaining regulations and product specifications that require use of virgin materials. For more marginal products, recycling may never be viable on purely commercial terms. It is critical that any policy initiatives to address these instances are based on a cost benefit analysis and allocate cost burdens fairly and transparently.

   - ***work effectively in conjunction with planning and other environmental legislation?***

There are several respects in which waste policies and other policies work at cross purposes or are poorly coordinated. For example, in the appliance sector, mandatory

energy efficiency and consumer safety requirements encourage the use of materials and designs that reduce the value of the product at end of life or complicate processing. In another example, mandatory measures to reduce wastewater can increase the concentration of hazardous substances in discharges and present challenges for local treatment facilities. Scope exists for better coordination of standards with waste policy.

Planning laws frequently make it difficult or impossible to establish modern landfills or energy recovery facilities. Initiatives to promote improved community understanding of the issues and confidence in the regulatory framework may be of assistance in addressing local concerns and balancing economic and environmental factors.

- ***provide the right incentives to manage materials, products and waste sustainably and holistically?***

As outlined above, increased emphasis also needs to be placed on approaches to supporting infrastructure and markets for diverted material. Banning disposal of materials to landfill will not in itself generate investment in collection and processing facilities in the absence of alternative uses and viable markets for the diverted material.

Furthermore, substantially differing landfill levies between jurisdictions, and between urban and regional areas within jurisdictions, may create perverse incentives to transport waste further than is efficient. Combined with landfill bans, there is a heightened danger of illegal dumping.

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?***

The 1992 principles include many positive elements, including the endorsement of pricing structures that fully reflect costs. A successor to the National Strategy should:

- reaffirm the goal of minimising the social, environmental and economic impacts of waste;
- reaffirm the goal of ensuring the costs associated with changing waste management practices does not fall disproportionately on industry;
- explicitly adopt a requirement that waste policy achieve net community benefits; and
- recognise the responsibility of government to help industry reduce its waste, through provision of technical advice and support over the full product cycle from design to identification of recycling opportunities.

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?***

This submission has highlighted in the preceding sections many waste issues that would benefit from implementation of a national approach.

A key priority is focussing waste policy on reducing risks to human health, the environment and social amenity with policy initiatives based on rigorous cost benefit analysis.

Development by the Commonwealth of a model set of principles and methods for waste policy would be a useful starting point for no-doubt protracted discussions with the State, Territory and Local Governments. These principles should have the flexibility to tailor policy responses to specific wastes in specific contexts, rather than one-size-fits-all solutions.

A further key priority is to reduce regulatory and compliance burdens on business by moving to harmonise standards, regulations and terminology. Harmonisation would be best advanced initially by a stocktake of operational differences between jurisdictions. Collaborative dialogue could well establish that there are similarities in underlying principles, and a considerable degree of harmonisation should be possible with relative ease. Discussion of harder questions, such as variations in landfill levies, should await resolution of easier issues.

More broadly, in developing a national waste policy and considering delivery options, it is important that the parties who are best placed to act are identified and play an appropriate role in implementation. This is likely to involve action on the part of the Australian Government, state and territory governments, local governments, business and the community – with the various parties potentially taking sole responsibility for some measures and working collaboratively with others to achieve other outcomes.

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

Australian conditions, particularly our combination of sprawling major cities and vast, thinly populated regions, mean that overseas solutions will not necessarily be efficient here and should be treated with caution. Notwithstanding this, international practice can be a valuable example. For example, energy recovery facilities are widely used and accepted in Europe, where they are an essential, well-regulated and cost-effective part of waste management. Modern energy recovery plants should be facilitated in Australia where economically justifiable, well-designed and subject to appropriate emissions controls. Once the Carbon Pollution Reduction Scheme (CPRS) is operational, the carbon externality will be fully reflected in purely commercial decisions about the viability of these facilities in particular locations.

Standards for reducing waste through better product design are another aspect of international practice that might be adopted after careful consideration and in close consultation with industry. In the absence of clear policies and requirements in Australia, and with a range of different schemes operating overseas, it is difficult for Australian suppliers and manufacturers to commit to any single approach to improved design. Exporters and international companies already make some products to comply with one or more international standards, such as the EU Directives on Restriction on Hazardous Substances (RoHS), Waste Electrical and Electronic Equipment (WEEE), and Energy-using Products (EuP). Uncertainty could potentially be reduced if one or more of these frameworks were adopted. However, this should only be done if thorough analysis and regulatory impact assessment showed that net benefits to the community would result.

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?***

Ai Group member companies highlighted inconsistencies between jurisdictions and anomalies within them. As noted above, products with mercury content can attract very different regulatory treatment depending on whether they are offered for sale, disposed or recycled. Water efficiency measures may concentrate waste discharges to the point where they become hazardous, with implications both for the regulatory status of waste generators and the demands placed on local treatment facilities.

Ai Group is currently participating in consultations on EPA Victoria's Exposure Draft of Environment Protection (Industrial Waste Resource) Regulations 2009. Ai Group supports the intended replacement of the default listing of prescribed industrial wastes with an approach to waste classification that is based on the hazards that are present in the waste and the risks that are posed by them. This will provide greater flexibility for industry in addressing hazardous waste issues.

Ai Group further supports Victorian proposals to remove requirements for transport certificates for materials being reused as a feedstock in another process including at another site provided it doesn't need any "treatment or reprocessing".

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?***

Product stewardship and Extended Producer Responsibility schemes must not be considered the default solution to waste issues. Such schemes can introduce significant costs and administrative complexity, and may limit innovation and raise barriers to market entry. Problems associated with orphan products and free riders are inherently difficult issues to address through such schemes.

Ai Group member companies reported that several current schemes are functioning well, including the National Packaging Covenant, but were concerned that further schemes only be introduced where necessary and well-adapted to the particular characteristics of the product and market. Introduction of multiple incompatible state-based schemes must be avoided.

There is a clear role for a national approach to product stewardship, so long as it establishes a framework flexible enough to address varying circumstances. Consideration of Product Stewardship and Extended Producer Responsibility schemes should be based on a rigorous assessment of the environmental issue, the causal factors and assessment of the most appropriate policy responses. The March 2009 *Draft Report on A Draft Framework for Product Stewardship in Australia*, prepared by PricewaterhouseCoopers for EPA Victoria, provides a valuable model for consideration of whether a product stewardship scheme is appropriate and how it should be structured. There are three broad questions:

- Necessity: is there a genuine market failure causing significant harm that cannot be efficiently addressed by other means? Products with a high risk

and cost of illegal disposal may qualify, while inert materials like glass bottles may not.
- Efficacy: are the necessary conditions in place for a product stewardship scheme to be effective? Supply side concentration and a product that is relatively undifferentiated in its waste-disposal characteristics are examples.
- Structure: how should such a scheme be structured to maximise efficiency? Anything from a purely voluntary system through to mandatory regulation may be appropriate, depending on the context.

Any decision to establish a scheme should be based on careful cost benefit analysis and be informed by a framework along these lines. The PC Report and other research indicate that some polices, such as container deposit schemes, are unlikely ever to provide net community benefits. Schemes that place responsibility purely on producers will rarely be successful; government and suppliers usually have important expertise and vital roles to play. Any measures, whether voluntary or regulatory, must balance social, environmental and economic outcomes, and be implemented by the appropriate level of government, industry or the community.

9. Are there any aspects of waste management that could be improved or streamlined through adopting national standards?

Ai Group member companies reported insufficient consistency and compatibility within the waste-handling industry. Collection bins differ widely in their measurements and capabilities between companies and regions. Crucially, many cannot be weighed, allowing only volumetric waste measurement. As a result, companies can find it difficult to evaluate different waste service providers, or to obtain valuable information about their own waste stream. There may be considerable value in work on one or more benchmark standards for waste bins that would be more interoperable and provide comparable accurate data.

Household waste and recycling bins could also benefit from standardisation. The bins provided by various local authorities differ in size and colour, causing confusion and reducing proper recycling and disposal.

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?

Ai Group supports the PC Report's call for a nationally consistent data set for waste management, involving the collection of data only where there is a clear policy need.

In order to make accurate assessments of net community benefit from waste policy, it is vital that there be sufficient information available about the amount and composition of Australia's waste streams; the social, environmental and economic costs and benefits of particular waste streams and policy responses; and the economic value of recoverable materials. It is also important that the costs and administrative burden on industry and the community of collection and dissemination of this information are minimised.

As noted, Ai Group members have raised the concern that basic data on their own solid waste production is both inaccurate and not readily available. Incompatibilities between different types of bin and the inability to weigh most of them lead to a reliance on waste volume information. However; in many instances bins may be removed in accordance with a set schedule, rather than when they are full, potentially leading to overestimation of waste production. Combined with the varying factors used by different jurisdictions to convert waste volume to weight, there is significant room to improve both the accuracy of solid waste data and its availability to business.

This could be achieved at minimal cost, since waste generators and handlers already produce and provide the data, albeit in a less useful form.

Sound waste policy must be based on a detailed and specific cost benefit analysis, and such an analysis can only be as good as the data it is based on. Data is needed on the characteristics of different forms of waste in different contexts to determine whether they impose unaddressed externalities – the threshold question for any policy response. Information is also required on the cost and impact of waste policy instruments: how much land is usefully available for landfill and land-intensive recycling facilities, and what is the actual economic value of that land? What externalities do different forms of disposal – or even individual facilities – impose? Considerable work is already underway to refine the measurement of greenhouse gas emissions, a particularly important issue for the waste sector. Similar rigor is required with respect to the other impacts of waste – including any economic costs imposed on business and the broader community by policy.

Policy that mandates particular levels of waste diversion or excludes particular products from landfill should be based on accurate information about past performance, current conditions and likely trends in materials prices.

Various state and federal policies already require the provision of considerable information, often overlapping but in different formats. Ideally a national waste policy would not simply add a further layer of data demands from an additional body. One way to avoid this would be to rest responsibility for all waste data collection with a single agency in each State. They would collect data on their own and the Commonwealth's behalf according to nationally agreed standards and terminology, and share it nationally. This would give businesses the benefits of contact with a local regulator with local knowledge, while ensuring nationally consistent and available data.

11. What, if any, place should there be for approaches that seek to avoid waste through changes in design, production processes and transport?

As stated above, waste policy must focus on reducing risks to human health, the environment and social amenity with policy initiatives based on rigorous cost benefit analysis. In practice, product design, production and transport must be responsive to many variables beyond waste, and businesses are better placed to make these judgments than governments. The primary role for government is ensuring that specific externalities are addressed through well-tailored regulation or appropriate price signals.

There may nonetheless be a place for schemes and design standards that seek to improve current practice. However, there are several difficulties that must be addressed. The small size of the Australian market limits our ability to drive changes in product design for imported items. The administrative complexity of taking account of significantly differentiated products within a product stewardship framework makes it difficult for such schemes to drive improvements in the products themselves. And as noted above there can be conflicts between the objectives of mandatory product standards and environmental policies.

There is a need to reconcile the differing objectives of a range of programs, standards and regulations that conflict despite a common focus on improving outcomes for society and the environment. For example, energy efficient appliances can be optimized by the use of materials that are difficult to recycle and have low value once processed. The design of these products can complicate disassembly for

recycling, recovery. Similarly, health and safety requirements often limit the potential for product re-use.

There are many international initiatives and standards in the area of eco-design, such as the EuP Directive. However, these often differ between jurisdictions and are further complicated by interactions or contradictions with other applicable requirements, like the RoHS and WEEE Directives. Businesses are pursuing sustainable manufacturing, but as previously noted, with no dominant and coherent regime abroad to adopt, it is difficult for manufactures to commit to any one form of eco-design without the potential for serious impacts on their business.

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?

Education about waste practices and recycling options has improved significantly over the past two decades, but Ai Group member companies report that business and households need more and better information. Consistent, accurate and up-to-date information on what can and cannot be recycled will help manage all waste streams better. Governments, industry associations and waste services companies can all help provide this information.

Commercial and industrial waste could be better managed if the difficulties highlighted above with bin design and data collection were addressed. Businesses would have a better understanding of their waste streams and be in a better position to assess and optimise the waste services they purchase. There is also great promise in government-assisted self regulation schemes, particularly where the compliance costs of mandatory regulation would lead to negative net community benefit. For instance, dentists in Victoria are sharply cutting their discharge of mercury with new equipment, facilitated by information and part-funding from the Ai Group and EPA Victoria Sustainability Covenant.

Some Ai Group members have noted the scope for greater commercially viable recovery of demolition materials, particularly concrete. The principal barriers identified were poor understanding by potential customers of the value and performance of recycled construction materials, and a widespread failure to segregate materials during demolition. Without segregation, recycling is not viable and construction firms must pay to landfill their waste, rather than inexpensively recycling it. However, segregation takes time and demolition is often expedited in order to meet project schedules. Time concerns are real, but there is a need for constructors and clients to be more aware of the potential economic and environmental returns from recycling when planning projects. Ai Group would note that many major project contractors have already adopted these strategies.

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?

Ai Group considers that landfill must continue as an essential element of an efficient waste management system. Diversion of waste to reuse, recycling or energy recovery should be encouraged and supported wherever it offers greater net community benefits – but this is a question that depends very much on the particular waste product and the particular context of disposal. In many instances it will be landfill that offers the best outcome, minimising social, environmental and economic costs.

Recognising the value of landfill implies several changes to current practice. New landfill sites will continue to be needed to manage a waste stream that will inevitably expand as Australia's population grows. However, new sites are increasingly difficult to establish, not because of any shortage of suitable locations but because of policy choices and political sensitivities. Modern landfills with effective lining, methane capture and leachate treatment should be facilitated by government, with careful performance-based regulation tailored to local conditions to ensure minimal social and environmental impact.

The consultation paper raises the specific issue of the increased greenhouse gas emissions that may result from transport of waste to more distant landfill sites. However, the carbon externalities of waste transport are best addressed not through waste-specific measures but through broader climate change policy. Once the CPRS is in place, Australia's greenhouse gas emissions will be capped. And once the transitional policy of offsetting the CPRS impact on fuel prices lapses, the carbon price will be directly incorporated into waste transport costs and decisions on waste management. It will therefore be unnecessary to give separate consideration to this issue. Additional measures, such as a surcharge to landfill levies, are unlikely to be complementary to the CPRS and would not promote least-cost abatement.

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?

Organic waste is a vast proportion of the waste stream, with many potential uses. However, technical feasibility does not guarantee commercial sustainability. Ai Group member companies involved in composting noted that current and emerging technologies are highly effective in deriving a safe and useful product from waste, but that these can be very land-intensive and are commercially marginal at the moment. Transporting the end product to customers can be very expensive. The CPRS will provide a growing incentive to divert organics, capture their methane or convert them to energy.

Diversion of organic waste is necessary to achieve the waste-reduction targets set by many jurisdictions, which may suggest further increases to landfill levies are necessary. However, such increases would not reflect the actual costs of organic waste; they would encourage illegal dumping and generate perverse incentives. While levies would incentivise producers to get rid of their organic waste, they do little to establish the infrastructure and markets needed to make diversion sustainable. Establishing these will require direct support which will come at a cost.

Two other policy options could improve the use of organic waste. Enhanced education for households and business should focus on the importance of avoiding contamination of organic waste; toxic substances can make organics much more expensive and unattractive to recycle. Secondly, policy settings should facilitate the construction of energy recovery plants. Regulation should tightly govern emissions and social impacts from such plants, but planning and other restrictions should not unnecessarily hamper their construction. As noted, the European example shows that energy recovery can have an important place in environmentally conscious societies.

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

Research cited by the PC Report indicates that the environmental impacts from many forms of e-waste, including CRT monitors and nickel-cadmium batteries, may not be

as great as some fear. Decisions to regulate should be based on careful analysis. Much e-waste may not require any special treatment. Nonetheless, where it can be shown that a particular stream of e-waste includes toxic substances in a form that may dangerously contaminate the broader waste stream, a policy response is needed.

Landfill bans and levies are an inefficient and ineffective response. Recycling is likely to remain commercially marginal or unviable for many forms of e-waste. While product stewardship approaches may be appropriate in some instances, the case for introducing a product stewardship scheme must first be demonstrated by undertaking: a rigorous assessment of the environmental issue and the causal factors; and consideration of whether it is the most cost effective policy response. Each product needs to be considered in view of its physical size, materials and componentry (in terms of type, toxicity and intrinsic value), supply chains, processing issues, and so on. Without supply-side concentration and a homogenous waste product, product stewardship may not be an appropriate response. Ai Group members involved in current product stewardship schemes are concerned about the continuing scope for free riders, conferring market advantage on players who do not cooperate, and the difficulty of orphan products from businesses that have ceased operating or left the market.

Responsibility for addressing environmental impacts needs to be applied to appropriate points across the supply chain. Application of responsibility to a single link in the supply chain will rarely be cost effective or appropriate. For example, the focus of extended producer responsibility is on the manufacturer, limiting the range of waste management options and increasing the likelihood of sub-optimal outcomes.

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?

Once the CPRS is operating, the carbon price will be embodied in the costs of waste disposal, product manufacture and eventually transportation. Where recycled materials achieve emissions savings over virgin materials, allowing for energy use in reprocessing them, this will be reflected in their relative prices. As the carbon price rises, efficiently recycled materials will grow more attractive.

A national waste policy's primary role in relation to carbon emissions is to ensure that the carbon price signal flows unimpeded through the waste management chain. Apart from any genuine market failures that may be identified, there is no need for separate consideration of emissions reductions in assessing the value of recycling.

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

Waste policy should not aim to reduce water and energy use per se, but to ensure the overall efficiency of waste management – taking account of the true costs of energy and water and the externalities imposed by their use. Where externalities are effectively regulated or included in a transparent and responsive price signal, use of water and energy may appropriately increase where it is worthwhile.

Once the CPRS is implemented, the price of electricity will include the carbon price. Ongoing direct reforms to water policy are a more efficient and appropriate means of addressing water use than attempting to do so through waste policy.

The collection, transport and processing of waste consumes significant levels of energy (and to a lesser degree, and depending on the waste type and processing methods, water). These can be most effectively reduced by finding the right balance for any given facility or region between two conflicting strategies:

- reducing the need for transport through the establishment of decentralized collection and collation facilities and
- improving the efficiency of processing through the economies of scale provided by bulk processing of waste in large, sustainable, continuously operating facilities.

Where input costs already reflect relevant externalities, purely commercial waste management decisions will find this balance and provide the greatest net community benefit. Separately valuing the reduction of energy or water use where pricing is already adequate is likely to encourage inefficient allocation of resources and unnecessarily raise costs for business and consumers.

Commercial decisions must be well-informed, however, and there is an important role for the targeted provision of information and education to business about the regulatory environment and opportunities to improve their efficiency. Governments, industry associations and environmental services businesses all have a role in delivering this information.

As previously noted, water efficiency measures can in some cases make waste streams more concentrated and hazardous. This reinforces the importance of making policy based on the broadest assessment of net benefit.

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?

Resource recovery will add genuine value to the economy where it offers net community benefits, taking into account the externalities imposed by other waste management methods and the market values of recovered and virgin materials. Policy cannot add value by mandating a level of resource recovery above that which is justified by these factors, since unnecessarily high costs will flow through to the wider economy and diminish overall welfare.

How much resource recovery is worthwhile will vary from product to product and will change constantly with technology, supply and demand. For example, during the recent commodities boom, demand for resources surged ahead of supply, driving increased recycling of a wider range of profitable materials. During the current global recession, prices have fallen sharply; many recyclates are not currently viable, and recycling rates can be expected to slow or fall.

Some Ai Group members attempting to meet waste targets have reported limited capacity in parts of the Australian recycling industry. Recyclers for particular products can be difficult to find; in some cases there is only one service provider in Australia, while some products can only be recycled by sending them overseas. Bulk polypropylene packing bags are one example. Several members expressed concern about the environmental and social impacts of China-based recycling operations.

Building capacity in the Australian industry beyond what market prices can support would require aggressive action by government. Member companies at various points in the waste management chain suggested provision of information, construction of necessary supporting infrastructure, market-making requirements that

government procurement specify minimum levels of recycled content, and direct subsidies for recycled materials. None of these would be cheap, and they may have unintended and undesirable consequences.

If you require further information, please contact me at tennant.reed@aigroup.asn.au or on 0400 406 144.

Yours sincerely,

Tennant Reed
Principal Adviser – Environment and Energy Policy