



## Submission Cover Sheet

### National Waste Policy – Consultation Paper

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# Submission on the National Waste Policy: Managing Waste to 2020 Consultation Paper

PREPARED BY THE



MUNICIPAL WASTE ADVISORY COUNCIL  
*"Getting the Environment Right"*

May 2009

### Status of this Submission

This Submission has been prepared through the Municipal Waste Advisory Council (MWAC) for the Western Australian Local Government Association (WALGA). The Municipal Waste Advisory Council is a standing committee of the WA Local Government Association, with delegated authority to represent the Association in all matters relating to solid waste management. MWAC's membership includes the major Regional Councils (waste management). The Regional Councils members of MWAC include the Eastern Metropolitan Regional Council, Mindarie Regional Council, Rivers Regional Council Southern Metropolitan Regional Council, Western Metropolitan Regional Council and the City of Geraldton-Greenough. This makes MWAC a unique forum through which all the major Local Government waste management organisations cooperate. This Submission therefore represents the consolidated view of Western Australia Local Government. However, individual Local Governments and Regional Councils may have views that differ from the positions taken here.

Due to meeting schedules and the short timeframe of the consultation, this Submission has not yet been endorsed by MWAC, however, it will be put before the Council at the earliest opportunity (Wednesday 17 June 2009) and The Waste Policy Taskforce will be informed of any changes to this Submission following consideration by the Municipal Waste Advisory Council.

The Municipal Waste Advisory Council's member organisations are:



## Executive Summary

In Western Australia, under the Waste Avoidance and Resource Recovery Act 2007, Local Government is responsible for Local Government waste - this is defined as material collected from households and generated by the Local Governments own activities. Local Government provides waste services to the majority of households in the state. In the metropolitan area, a collection service for waste and recycling is provided to the vast majority of households. In the non-metropolitan area, the majority of regional centres have both kerbside waste and recycling services; in the regional areas waste and recycling services vary dependent on population.

For Local Government, waste management is a core activity as well as an essential service it provides. Consequently, a proportion of this Submission is dedicated to providing some context for Local Government waste services in WA and considerations for this service.

There needs to be a fundamental shift in how responsibility for waste management is assigned. The current assumption of Local Government continuing to be able to provide services for all products is not sustainable. Waste is no longer simple, cheap or easy to deal with, as waste increases in volume and complexity so does our understanding of the impacts of waste on the environment, society and the economy. There is considerable need for national Extended Producer Responsibility Schemes to be determined and implemented.

Local Government priorities for a national waste policy:

**Waste management recognised as an essential service:** if discontinued there would be substantial environmental, social and economic impacts at a local, state and global level.

**Roles and responsibilities:** to date, there has been only limited definition of roles and responsibilities for waste management. Roles and responsibilities for waste management need to be clearly negotiated, assigned and implemented for the industry to move forward.

**Focus Upstream:** Local Government has only limited control on the inputs into the waste stream, the State Government is better placed to influence producers of material. A holistic approach is needed to clearly identify products that can be reused as a resource at the end of their life; the aim being to move to a 'cradle to cradle' consideration of products and activities.

**Leadership by Federal Government:** all spheres of government need to show leadership by their behaviour regarding purchasing, project planning and operations.

**Equal focus for all waste streams:** material from Local Government defined sources makes up approximately 20-25% of the waste stream, yet undue focus is placed on Local Government. Hazardous waste streams, Commercial & Industrial and Construction & Demolition waste are equally important waste streams.

**Equity of service provision:** the importance of ensuring that service provision is equitable, for the metropolitan and non-metropolitan areas.

## Recommendations

*Recommendation 1: The term Extended Producer Responsibility be used to ensure it is clear that what is being sought is a change to the status quo and increased responsibility from producers and manufacturers.*

*Recommendation 2: That a national website/portal be established to provide a central access point for sharing waste management related research and information.*

*Recommendation 3: Further research be undertaken by the Waste Policy Taskforce to ascertain if the initiatives outlined could be applied in the Australian context.*

*Recommendation 4: Each State/Territory and Commonwealth develop a glossary of terms and how they apply in their jurisdiction including variations used by various stakeholders.*

*Recommendation 5: That the Federal Government includes waste management considers in its decision making process.*

*Recommendation 6: Establish a Strategic Partnership Funding opportunity for the Australian Local Government Association (ALGA) and other key stakeholders.*

*Recommendation 7: That waste management be included as a consideration in the Federal Assistance Grants.*

*Recommendation 8: That waste management be considered and treated as an essential service by the Federal Government.*

*Recommendation 9: that roles and responsibilities be clearly negotiated, assigned and implemented for waste management.*

*Recommendation 10: That the implementation of National EPR Schemes for priority products be a central part of the National Waste Policy.*

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# 1 Introduction

This Submission provides an overview of waste management in Western Australia from a Local Government perspective, discusses definitions (Product Stewardship and Extended Producer Responsibility) provides comment on the questions identified in the Consultation Paper and identifies further issues and makes recommendations for consideration in the development of a National Waste Policy.

## 1.1 Local Government Waste Management in Western Australia

Local Government provides a range of services, including waste management. In Western Australia:

- Under the *Waste Avoidance and Resource Recovery (WARR) Act 2007* Local Government is responsible for waste from households and its own waste. This is defined as 'Local Government waste'.
- Local Government provides waste services to the majority of households in the state. In the metropolitan area, a collection service for waste and recycling is provided to the vast majority of households. In the non-metropolitan area, the majority of regional centres have both kerbside waste and recycling services; in the regional areas waste and recycling services vary dependent on population.
- Local Government runs landfills, provides waste and recycling kerbside collection and processing services (including Alternative Waste Treatment and Alternative Waste Treatment facilities), transfer stations, community education programmes and recycling drop off facilities.
- Local Government also provides some services to the commercial sector.
- In 2006/07 municipal waste services cost Local Government over \$130 million (WA Grants Commission, pers comm.).

Waste from households and Local Government sources is between 20-25% of the waste going to landfill. The other 75-80% of waste to landfill is material from commercial and industrial and construction and demolition activities in WA. Of the waste streams going to landfill, Local Government waste is the only waste stream to show a *decrease* in tonnages to landfill. Despite increasing population, Local Government waste to landfill has decreased by approximately 1% per

year since 1999/2000 (Cardno, 2008). *This decrease is the result of Local Government recycling and resource recovery operations.*

With population growth and consequent development, waste generation is increasing, however there are a variety of technologies available to assist waste managers. The waste stream is increasing in not only volume, but in complexity. Products put onto the market are consequently harder and more expensive to recycle or recover. New types of material in the waste stream, such as electronic waste, present a hazard when disposed of in landfill and a substantial financial cost to collect and recycle.

#### *Regional Councils in Western Australia*

Most of the Regional Councils (Regional Local Governments) in WA were formed around providing a regional waste management service. However, the benefits of regional service delivery mean that frequently Regional Councils have expanded their activities to other areas. In the metropolitan area there are 5 Regional Councils. There are at least 3 non-metropolitan Regional Councils whose activities involve waste management.

#### **Example: Metropolitan - Eastern Metropolitan Regional Council**

Member Councils: Town of Bassendean, Cities of Bayswater, Belmont, and Swan, Shires of Kalamunda and Mundaring

Regional Population: more than 300,000

Area (sq km): 2,100

When EMRC was constituted in November 1983, the original function was to provide waste management and disposal services.

Since then EMRC has grown significantly and now, in partnership with the member Councils, provides a varied yet interrelated range of services designed to enhance the region, maximise its numerous natural features, and provide the highest possible quality of life for the people who live in or visit it.

The Council works alongside a workforce of approximately 70 skilled and dedicated employees who work across three divisions, delivering a number of services:

- Waste Management;
- Environmental Services;
- Regional Development;
- Risk Management;
- Resource Recovery; and
- Corporate Services/Governance.

(EMRC, undated)

#### **Example: Non-Metropolitan – Pilbara Regional Council**

Member Councils: Shires of Ashburton, East Pilbara and Roebourne and Town of Port Hedland

Regional Population: more than 41,000

Area (sq km): 511,220

The Pilbara Regional Council (PRC) was formally established under the Western Australian Local Government Act 1995, in May 2000, to assist Councils in the coordination of resource sharing and common issues and to:

- assess the possibilities and methodology of facilitating, and to identify funding opportunities for, a range of services on a Pilbara regional basis;
- undertake, manage and facilitate services identified from above;
- influence and liaise with Local, State and Federal Governments in the development of policies and legislation which are of benefit to the Pilbara region; and
- provide administrative services to the Participant Councils in connection with their membership of the Western Australia Local Government Association (WALGA).

(Pilbara Regional Council, undated)

## 1.2 Key Terms

A number of key terms will be used throughout this Submission, for clarity see below definitions.

AWT – Alternative Waste Treatment, a suite of technologies which are an alternative to landfill as a means of waste treatment.

C&D – Construction and Demolition.

C&I – Commercial and Industrial.

CPRS – Carbon Pollution Reduction Scheme.

DEC – Department of Environment and Conservation

MGB – Mobile Garbage Bin

MSW – Municipal Solid Waste, waste from households or Local Government sources.

MWAC – Municipal Waste Advisory Council is a standing committee of the Western Australian Local Government Association with delegated authority on municipal waste issues. MWAC's membership includes the major Regional Councils.

NGERS – National Greenhouse and Energy Reporting Scheme.

WALGA – Western Australian Local Government Association is the peak organization of Local Government in Western Australia. WALGA provides an essential voice for almost 1,300 Elected members and over 11,000 employees and the 2 million constituents of the 141 Councils in WA.

WAPC – Western Australian Planning Commission

WARR Act – Waste Avoidance and Resource Recovery (WARR) Act 2007.

WARRL Act – Waste Avoidance and Resource Recovery Levy (WARRL) Act 2007.

## 1.3 Product Stewardship versus Extended Producer Responsibility

The terms Product Stewardship and Extended Producer Responsibility tend to be used interchangeably, however they can be seen to have different emphasis and consequently different outcomes. Also given the WA WARR Act context, legislatively these terms have different meanings, with Product Stewardship being voluntary and Extended Producer Responsibility regulatory.

To address specifically the definition of Product Stewardship given in the Consultation Paper (and currently used by the Commonwealth):

*Product stewardship – a policy approach recognising that manufacturers, importers, governments and consumers have a shared responsibility for the environmental impacts of a product throughout its full life cycle. Product stewardship schemes establish a means for relevant parties in the product chain to share responsibility for the products they produce, handle, purchase, use and discard.*

Local Government is concerned that the Product Stewardship philosophy of shared responsibility is used to justify Local Government responsibility for the disposal of products. For example the National Packaging Covenant – Australian packaging manufacturers and users have been prepared to undertake programs to reduce the weight of their packaging, but have refused to accept any substantive responsibility for the impacts of their packaging in a waste management context. This approach to sharing responsibility does not provide compelling drivers for significant change in producer or consumer behaviour. For example, if producers take some responsibility for their products at the end-of-life, they acquire a direct incentive to maximise the ease and affordability of discharging that responsibility.

***Key Point: In any future definition of Product Stewardship it should be clear that responsibility should be apportioned in order to compel behavioural change.***

With the use of the term Extended Producer Responsibility it is clear that the responsibility shifts to specifically prescribe where the responsibility lies. EPR posits a change to the status quo. The WA Local Government Association Policy Statement on EPR defines it as:

*The financial and/or physical co-responsibility of those involved in making, providing or selling a certain product for the management and disposal of that product at the waste phase. Extended Producer Responsibility schemes generally engage producers in financing or carrying out the collecting, processing, recycling or disposing of post-consumer waste. Extended Producer Responsibility schemes may also be directed at changing manufacturing practices.*

*Key Point: Extended Producer Responsibility is an appropriate market based instrument which assists in improving environmental outcomes through the development and implementation of appropriate policies.*

**Recommendation 1: The term Extended Producer Responsibility be used to ensure it is clear that what is being sought is a change to the status quo and increased responsibility from producers and manufacturers.**

#### 1.4 Corrections to Consultation Paper

The Consultation Paper is well researched and provides a good overview to the current situation regarding waste management in Australia, however there were some inaccuracies relating to the information on Western Australia presented.

Table 3 (page 14) indicates that Western Australia does not have any Legislative capacity for Product Stewardship/Extended Producer Responsibility. This is not the case, the *Waste Avoidance and Resource Recovery Act 2007* Part 5 clearly provides for encouraging Product Stewardship and if this is not achieving the desired outcomes then Extended Producer Responsibility is possible through regulation. Under Section 47 (1) of the Act the Waste Authority must include in its business plan each year a priority statement with respect to any Extended Producer Responsibility scheme the Waste Authority proposes to recommend for implementation and operation.

On page 50, the section outlining the legislative context for Western Australia, the inert landfill levy is quoted as being measured in tonnes. This is not the case, material to Category 63 (inert) landfills is measured and charged in m<sup>3</sup>, then converted to tonnes.

## 2 Questions

This section provides responses to the questions raised in the Consultation Paper. Some of the issues raised apply to numerous questions, there has been an effort to avoid repetition, therefore the questions are cross referenced where appropriate.

### 2.1 Question 1

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

Given current experience and the concerns of Local Government there are definitely opportunities to ensure more effective waste management. Suggestions and opportunities are identified under Question 5: Extended Producer Responsibility and Question 8: Product Stewardship

### 2.2 Question 2

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

There appears to be limited standardisation of terminology between States, Territories and the Commonwealth. Local Government similarly may use varying terminology and categorisation for material. These variations reflect local understanding of the terms and appropriate at this level. These varying definitions can cause confusion if the specifics are not understood.

#### **Example: Contamination rate for Kerbside Recycling**

This example of how terminology can vary relates to where contamination rates of kerbside recycling are measured. These rates can either be measured at Kerbside, which shows the extent to which households are putting the correct materials in the recycling service, or once the material has been processed through a MRF. This later measure will show how much material is sent to landfill (and potentially the effectiveness of the processing infrastructure). Being unclear about where contamination rate is measured can cause considerable confusion and misrepresent how good a recovery rate a system is achieving, as contamination rates at kerbside can be as low as 3 – 5% after processing can range from 10 – 30%.

Understanding the meta data for terminology used and being clear on its application is particularly important. Some national standards have great applicability than others. A standard can provide

market stability and quality assurance, however it is necessary to ensure that assistance is available if the standard is to be rigorously applied. One suggestion for a national standard is that of outputs from alternative waste treatment / resource recovery operations.

Two examples are outline below of a less and more useful national standard.

**Example: AS 4123.7 – 2006 Mobile waste containers – colours, markings & design requirements**

While it may be a long term goal to have consistent bin colours, for Local Government application it would be expensive, as may bins have up to a 20 year life and there would be a very limited return on that investment.

**Example: AS4454 – Compost, soil conditioners and mulches**

The Association identified in its WALGA Background Paper on Standards for Recycled Organics Applied (2007) to land the value of AS4454 as a minimum requirement for all organic products applied to land. The current situation is that untreated or poorly treated organic products, such as raw manures and un-pasteurised mulch, are available for application to land with minimal controls placed on their use. It is acknowledged that many Local Governments currently supply a range of partly-pasteurised to un-pasteurised mulch to residents (often for no cost) as a key part of their green-waste diversion. There is a fairly high level of uptake of this product and few complaints have arisen from residents regarding its use. However, this practice is not considered ideal as the use of partly or completely un-pasteurised mulch can have risks associated with it including the spread of weeds, pests and plant diseases.

In addition, these products have a low market entry and ongoing processing costs, and can therefore out-compete more carefully refined products. This inequitable competition acts as a disincentive for many operators to adopt any type of higher voluntary standard. Further, in addition to the direct risks presented by these products, the availability of low quality product on the market is highly likely to negatively affect public confidence in the use of recycled organic products across the board.

## 2.3 Question 3

Question 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?

*Do the current waste management frameworks across jurisdictions deliver an effective regulatory framework and provide an appropriate suite of approaches to address waste and resource recovery issues?*

Regulation varies between jurisdictions, as priorities for developing that legislation may vary. Western Australia, New South Wales and South Australia (through CDL) are the only states which appear to have provision for Extended Producer Responsibility through existing legislation. There is a strong national role to regulate for Extended Producer Responsibility as it has the potential to reduce duplication of effort in regulating and provide a consistent operating context for those industries affected by the particular EPR Scheme. The key areas for national action are further discussed under Question 5.

*Work effectively in conjunction with strategic land use planning and other environmental legislation?*

There has been limited strategic planning for and integration of waste management activities into other planning schemes or government activities. As waste management has largely been seen as the purview of Local Government (even though as already noted material from households constitutes less than a quarter of waste to landfill) there has been limited strategic land use planning at a state level. For example, waste management sites are not included in the Metropolitan Regional Scheme, therefore when residential development reaches the edge of the buffer zone problems arise. These issues may be outside the jurisdiction of the Local Government

and decision of Local Government overridden by the WA Planning Commission. Two examples are outlined below of less than ideal planning outcomes.

***Key Point: Need for statewide oversight of infrastructure to ensure adequate planning for waste management facilities.***

**Example: Buffer distances from Industrial Areas – Kemerton Industrial Park**

In the building of the Kemerton Industrial Park differences between the Planning Commission and Department of Environment and Conservation (DEC) recommendations for buffer distances. The Planning Commission indicated to State Development all that was required was a 1 km buffer, although the DEC recommended a 3 km buffer. State Development used the 1 km buffer because it would make the Industrial Park more viable. However, as predicted by the DEC as residential sub-division has come to the edge of the 1 km buffer, complaints and community concern has increased (D.Bills personal communication, May 4 2009).

**Example: Landfill Planning - City of Cockburn**

Number of households: 29,628

Area (sq km): 148

The City of Cockburn has a strategic plan to expand the operation at the Henderson Waste Recovery Park (HWRP) to accommodate and process commercial waste streams so as to divert waste away from landfill.

The project and vision is a holistic approach to waste management which seeks to address collection as well as disposal. Unfortunately the project has been stymied for almost 2 years due to a number of uncertainties surrounding the future planning of the area and an apparent lack of understanding across the various departments of Government on the waste management needs into the future. HWRP is located in the Hope Valley Wattleup Redevelopment Area (currently known as latitude 32) that is controlled by the WAPC and Landcorp. Of significance is the lack of clear land-use planning direction over the site and the contention that waste management cannot coexist in this landform. The City would contend that a properly managed and integrated waste management facility could be the benchmark development for this industrial precinct. A waste management facility that caters for all waste streams including C&I, C&D and which incorporates a

range of technologies to separate, process and minimise waste is consistent with the Government's current stated direction. Landcorp however have developed a Planning Strategy with zones that significantly restrict the expansion of the HWRP. Landcorp have also proposed to establish an intermodal facility in close proximity to HWRP. Some of the options that are currently open for public comment completely cover the HWRP, however the preferred model quarantines a significant portion of land on the east of the Site. Until this Intermodal Facility is finalised the City cannot proceed with any confidence to invest in technology.

The HWRP lined cells are ideally located in disused limestone quarries. The practical expansion of the facility is to the north toward another completed limestone quarry, however current zoning will not permit the Cockburn Cement land (General Industry) to be used as a Resource Recovery centre. It is the City's vision to develop RDF on the site that will comply with the DEC standards to power industry and wind/solar (thermal or PV) farms on the capped landfill cells to further enhance the renewable energy generated from the HWRP. Current and planned uses for this site blend well with the existing and future zoning of the area should our or additional adjacent land be rezoned to Resource Recovery.

***Need improving, and if so, how could this be done?***

The different jurisdictions will have determined their priorities and actions in a variety of ways. Key concerns emerge at a national level and are best tackled at this level. For example the number of Jurisdictions currently look for electronic waste recycling and a range of other Extended Producer Responsibility schemes. It should be noted that priorities may not be reflected by all jurisdictions. Issues of concern for non-metropolitan Western Australia, such as transport logistics and costs for recyclables, is less likely to be of concern to metropolitan New South Wales. The work which has been commissioned by EPA Victoria (2009) to develop a Framework for Product Stewardship in Australia may assist in determining appropriate priorities for EPR and when this form of intervention is appropriate.

***Key Point: Ensure a clear process for identifying and implementing waste management priorities for national action.***

## 2.4 Question 4

Question 4 In the 1992 National Strategy for Ecologically Sustainable Development, COAG endorsed the strategies and objectives for a national approach to waste management. 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?

A change in how we consider 'waste' needs to occur. The term 'resource efficiency' is often used and reflected in the current National Strategy for Ecologically Sustainable Development. Currently, there is greater focus on climate change considerations therefore it is important to ensure these are reflected in the National Waste Policy. Perhaps the greatest challenge however is to ensure that the activities in the National Strategy are implemented. Over 10 years after the Strategy was put in place, only limited action seems to have occurred on the majority of objectives.

***Key point: The challenge is to ensure the National Strategy is fully prioritised, funded and implemented.***

Local Governments providing a recycling service are faced with an increasing diversity of materials used, particularly in packaging, leading to the need for more complex recycling infrastructure and greater expense in order to separate the material. While there are policy responses in place to assist with this issue (for example the National Packaging Covenant) the problem still remains and Local Government may struggle to keep pace with the diversity of materials and cost of delivering the community expectation of a comprehensive and effective recycling service.

Other materials of concern are also entering the waste stream. With increasing consumption of electronic goods, cheaper prices coupled with short life of products, more are ending up in the waste stream. Depending on the collection system in place, there is the potential to recover the product, however, substantial cost is incurred by Local Governments wishing to recycle these products.

***Key point: Increasing complexity, diversity and quantity of some materials in the waste stream, consequent effects on technology and cost, lack of linkage between policy objectives.***

## 2.5 Question 5

Question 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?

There are a range of issues that would benefit from national approach or a coordinated at a national level. There need for national activity regarding Extended Producer Responsibility, this is a key area where a national approach could be greatly beneficial.

### *National Approach to EPR*

Extended Producer Responsibility and Product Stewardships Schemes require a re-examination of the current situation regarding the management of products/materials throughout their lifecycle. As such, the WALGA EPR Policy Statement indicates that EPR Schemes require policy makers and stakeholders to negotiate the assignment of responsibility; instead of defaulting to the status quo.

WALGA defines EPR as a process that “engages producers in financing or carrying out the collecting, processing, recycling or disposal of post-consumer waste, and may also be directed at changing manufacturing practices”.

EPR can provide effective tools to advance key outcomes required in achieving sustainable, economic, social and environmental principles. These key outcomes are:

1. *Clear, sensible and effective designations of responsibility for the management of lifecycle impacts of products* - Extended Producer Responsibility mechanisms have the potential to clarify the responsibilities of key stakeholders. In addition, where a rational assessment process precedes implementation, Extended Producer Responsibility mechanisms can be expected to assign specific responsibilities to those with the best capacity to discharge them;
2. *Improved valuation, pricing and incentives mechanisms* – Extended Producer Responsibility mechanisms can improve the attractiveness of using recycled material

and can generate incentives to design products in order to minimise waste and maximise potential for material or resource recovery;

3. *Greater investment in infrastructure and research and development* - Extended Producer Responsibility mechanisms can encourage research and development in recycling and resource recovery technology and provide a logical link between expansions in production and expansions in recycling and resource recovery infrastructure; and
4. *Greater transparency and accountability* - Extended Producer Responsibility can include measures to make producers physically responsible for the products at the end of life and consequently problematic aspects of their products will become direct liabilities for the producers.

These benefits of EPR are likely to be achieved more effectively if the Schemes are implemented at a national level. National EPR offers the opportunity to reduce duplication of effort, provide consistent systems and ensure equal service delivery nation wide. Local issues and conditions can be incorporated into a national EPR approach. A comprehensive consultation and engagement process (with adequate time for comment) will ensure that local conditions and considerations are incorporated in the development and application of EPR Schemes. Regular consultation and review allows Schemes to be adjusted to ensure they are performing well and providing an equitable service. For example, for non-metropolitan areas distance considerations need to be incorporated.

The Association recently conducted a survey of its members to establish the key products for EPR Schemes (in the short term). E-waste was identified as first priority, followed by containers (through a Container Deposit Scheme), tyres and used motor oil.

### ***National Leadership on Alternative Waste Treatment***

Alternative Waste Treatment (AWT) technologies provide one method of addressing some of the waste management challenges currently faced (see Question 14 for more details on specific advantages). There is limited State or Federal leadership on emerging technologies such as AWT. The thermal suite of AWT technologies, usually termed waste to energy, are evolving rapidly but with very limited public and policy discussion. The likely result is the issue will only be considered

when a proposal is put forward for development. This limits the options for waste managers as many are reluctant to be the first movers in an untested regulatory and policy context.

WA is leading the country in AWT, there are 4 Alternative Waste Treatment facilities in Perth (City of Stirling, Mindarie Regional Council, Southern Metropolitan Regional Council and Western Metropolitan Regional Council). Another 2 facilities, for the metropolitan area, are being investigated. However, a greater understanding of the options and implications of all technologies is needed. Local Government is bearing most of that financial cost and responsibility, funding from Federal Government is needed to ensure this technology is utilised across the Country.

### ***National Industry Training***

Local Government has long supported training opportunities for its employees and at a State level is just starting to achieve some vocation training and skills recognition through the Industry Training Council. At a national level, such training needs to be recognised, accredited and financially supported.

At a tertiary level, further courses and study on waste management are necessary. One example of how such courses could be encouraged is found in how Local Government qualifications are encouraged, through a program which provides funding to Universities who offer Local Government related courses.

### ***National Approach Waste Management Information Exchange and Research***

In the various jurisdictions a huge variety of waste management related research has been undertaken, funded by a range of different organisations. There is no central repository for that information, so it is frequently difficult to find out what research has already been conducted in particular area and key contacts. The industry relies heavily on certain individual's corporate knowledge. In order to make the industry more accessible and ensure that research is shared, it is suggested that the national waste management research website/portal be established and be managed by the Department of Environment, Water, Heritage and the Arts. One example currently in operation is the GrantsLINK website which includes grants on a range of subject matters from across the Country.

**Recommendation 2: That a national website/portal be established to provide a central access point for sharing waste management related research and information.**

Research at a national level is also important. While waste management is often a localised activity, frequently the issues faced are similar in different places. One example is the Australian Landfill Gas Project, which will look at Greenhouse reduction strategies for landfills across Australia. In this case while the particular mitigation measures may change depending on location, the methodology to establish appropriate mitigation is standardised.

### *Local Solutions*

Many Non-Metropolitan Local Governments have recycling services or facilities and there is strong community support for the recycling. Some non-metropolitan Local Governments are in a difficult position however, with decreasing sale prices for material and a limited rate base to fund these activities.

### **Example: Glass Recycling**

Currently the majority of glass collected for recycling in WA is transported to Adelaide for reprocessing. This can mean glass from the Shire of Broome, being transported 2,200km to Perth, then a further 2,700km to Adelaide. This has been the case since ACI closed their glass recycling plant in WA in 2004. Various options have been investigated to find alternative markets and end uses. The Waste Authority commissioned a report on the economic feasibility of a Boutique Bottling Plant – the Report found that the cost would be prohibitive (\$20 million) and the plant would only be able to recycle a small proportion of the State's total collected glass (DEC, 2008). Another solution which has gained traction is the use of recycled glass in roads. The Southern Metropolitan Regional Council received a Strategic Waste Initiative Scheme (SWIS) grant to work with Pioneer Road Services to put crushed glass into asphalt. The use of glass in asphalt adds value to the end product because:

- "Glass asphalt services are more reflective than conventional asphalt (improves night time road visibility);

- The surface dries faster than traditional paving after rain because the glass particles do not absorb water (increase road safety); and
- Due to the glass content the asphalt will hold heat longer than conventional asphalt (easier to work and compact)."

(Pioneer Road Services, 2008)

## 2.6 Question 6

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

In the Consultation Document British Columbia was identified as an example, the Association recommends further investigation of this jurisdictions approach to waste management.

A few areas for further investigation by the Waste Policy Taskforce have been identified, these include:

- WEEE Directive – the European Waste Electrical and Electronic Equipment (WEEE) Directive was implemented in February 2003 and a review undertaken in 2008 and changes proposed to tackle the issues which had arisen. The WEEE Directive provides for the creation of collection schemes which allow consumers to return their electronic waste for free (EUROPA, 2009). The WEEE Directive a method of regulating e-waste and as it has been in place for some time (and been reviewed) would provide a comprehensive look at potential challenges and solutions.
- Austria and Germany declared that no unprocessed organic material can go into a landfill, and less than 5 percent of material going into a landfill can be organic (US Department of Agriculture, 2009).
- Other sustainability measures, such as resource intensity of the economy have also been used to measure of consumption in society and overall effectiveness of waste minimisation and efficient resource use.

**Recommendation 3: Further research be undertaken by the Waste Policy Taskforce to ascertain if the initiatives outlined could be applied in the Australian context.**

## 2.7 Question 7

Question 7 Australia needs to safely manage hazardous waste and waste containing hazardous materials over a 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?

There are several elements to successful management of hazardous waste and waste containing hazardous material long term.

### *Long term commitment and monitoring*

Local Government has identified the need for long term commitment and monitoring from the Federal Government if there is intervention on a particular waste (the example of used oil is outlined below). Without long commitment, Local Government may be reticent to become involved in the management of certain materials. If Local Government provides a service, an expectation of service delivery is built in the local community making it very difficult to retract the service. Local Government is therefore committed to providing a service which may not be viable in the long term (without external funding or Extended Producer Responsibility schemes to ensure safe recycling/disposal). Regular monitoring any intervention is necessary to ensure the action has been effective and is providing equitable service delivery.

### *Flow of materials*

Understanding the material flow (supply and demand) for hazardous products at national level is necessary to determine the need for intervention and measure success. A small scale example of the benefits of understanding material flows, in an industry setting, is the work the Curtin Centre of Excellence in Cleaner Production undertakes. It provide an industrial synergies program, which encourages the use of waste material from one industrial process as an input into other process.

### *Extended Producer Responsibility & Alternative Product use*

The preferred approach long term would be comprehensive producer responsibility for hazardous products and a national education program to encourage the use of less hazardous materials.

#### **Example: Product Stewardship for Oil (PSO) – Some success but limited long term commitment**

Local government is concerned that the Product Stewardship philosophy does not adequately resolve the issue of shared responsibility for product disposal; it is assumed local government will be responsible for the disposal of products. This approach to sharing responsibility does not provide compelling drivers for significant change in producer or consumer behaviour. For example, if producers take some responsibility for their products at the end-of-life, they acquire a direct incentive to maximise the ease and affordability of discharging that responsibility.

The current PSO arrangements have led to a situation in Western Australia where market failure has occurred regarding used oil. Oil recovery has increased – but with no market development and industry responsibility accompanying it local government was left in the situation with increasing stockpiles of oil and no methods of disposal. Currently the situation is that local government is paying for the recycling of used motor oil. This uncertainty and the current disposal charge has substantially damaged confidence in the recycling industry, which has wider implications than for just this specific material type. A large amount of time, effort and money is expended at all levels of government to encourage recycling; such market failures undo much of this good work and damage confidence in Federal programmes.

## **2.8 Question 8**

Question 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?

As indicated in Question 5, there are benefits to undertaking a national approach to product stewardship and EPR.

The Association identifies in its Policy Statement on Container Deposit System the value of a national rather than state based approach, the observation is likely to apply to many of the product types considered for EPR Schemes:

*Given the national nature of product distribution, Local Government recognises that a national Container Deposit System is preferred over a state-based scheme as it enables greater financial efficiency through consistency in such areas as marketing, labelling and education campaigns and inherently incorporates the economy of scale.*

In considering what EPR schemes could work in Australia, it is important to consider the existing programs. The success of a scheme for Local Government can be measured by its uptake and ongoing use and viability. One successful industry driven scheme currently operating is DrumMuster. For Local Government the important consideration is that the collection and recycling of the products are assured. Industry has taken responsibility for this recycling (and through a levy on its products) subsidises the recycling.

***Key Point: Most of the current applications of Product Stewardship have lead to a very limited application of the principle of shared responsibility, with no incentive for producers to ensure their product is recyclable and recycled.***

**Example: PaintBack – Very Successful but not Sustained in WA**

In June 2005, Dulux in collaboration with Bunnings implemented a pilot recycling paint scheme, known as the Paintback Scheme. The program aimed to discover the most cost effective model for recycling unwanted paint and paint cans.

The Paintback Scheme ran for a period of two years. Unfortunately the Scheme was discontinued due to the inability of Dulux to process the materials. The Scheme is still operational in Victoria through the Sustainability Victoria “Detox your Home” Program. For WA a voluntary industry lead scheme did not work long term and has created an expectation on Local Government from the community to collect and recycle paint. Currently no options exist in WA for paint recycling, therefore material is disposed of.

### **Example: National Packaging Covenant (NPC)**

Under the NPC Australian packaging manufacturers and users have been prepared to undertake programs to reduce the weight of their packaging, but have refused to accept any substantive responsibility for the impacts of their packaging in a waste management context. The producer has no incentive to look at how their product can be recovered and funding for programmes is targeted at infrastructure provision, not ongoing running and/or replacement costs.

## **2.9 Question 9**

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

To some extent national standards have already been addressed under Question 2. In relation to a Carbon Trading Scheme, other policy areas, recycling incentives and economic activity metrics, there needs to be an administrative distinction (though ABS, ANZSIC or both) between waste and resource recovery. Currently under ANZSIC Division D 292 Waste treatment, disposal & remediation services, AWT Facilities are classified as 'waste sector'.

## **2.10 Question 10**

Question 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?

To understand and provide effective waste management, material flow (supply and demand) needs to be understood. Data on waste re-use has proven difficult to collect; data collection has been shown to drive recycling rather than driving reduction/re-use of materials. However collection of data on a National basis has proven problematic. The example below outlines the problems associated with the development of a National Waste Database

***Key Point: further research needed on national material flow.***

### **Example: National Waste Database**

The states and territories undertake their own independent data collection and reporting for their own purposes, just as Local Government does. As there is no specified coverage or level of detail of what needs to be reported in the Commonwealth State of the Environment report, there has been no reason to ensure that any of the State/Territory waste data categorisations match up. For example, what might be classified as a hazardous waste in one State, might not be considered as such in another.

In their recent consultation on a National Waste Database Mk 2, the Waste Management Association of Australia identified some reasons for the failure of the original Australian Waste Database (AWD). WMAA identified implementation was hindered by, among other things, the inadequacy of available technology and the lack of incentives to collect data and populate the database. In particular raw data is commercially sensitive and is therefore difficult to obtain and problematic to transfer between consultants, jurisdictions and private enterprise.

(WMAA, 2008)

The WA Local Government Association is currently developing a Data & Information Policy Statement. The aim of this Policy Statement is to identify why we collect data, what we use the data for and what forms of information management are required.

### **Data – Why and What?**

- Why collect data?
  - Reporting against targets
  - Inform policy
  - Inform business planning
- What are the inhibitors to data collection?
  - Non-uniform reporting systems between local government
  - Lack of capacity to report data
  - Lack of clarity regarding why reporting

## Data - How

- How can more reliable data be collected?
  - Identify what you need & why
  - Identify all sources of data
    - what other information is local government reporting
    - are there more direct methods of measurement
  - Payment for provision of data (at least for time recovery)
  - Identify margin or error and assumptions clearly (independent audit).
  - Be clear on the metadata (identify definitions used in each state)
  - Consistent reporting over time

Rather than seek national standardisation of terminology, unless absolutely imperative, a more effective solution may be to understand the terminology and how it is used in each state and territory. When terminology use has been negotiated between State and Local Government and consensus achieved, any national intervention is unlikely to be productive.

***Key Point: limited standardisation, need to understand meta data.***

**Recommendation 4: Each State/Territory and Commonwealth develop a glossary of terms and how they apply in their jurisdiction including variations used by various stakeholders.**

Some principles in data collection include:

- Long term planning for data collection, acknowledging that the data will be less accurate at the beginning of the process, but can be improved over time;
- Identify what data is already available and understand the meta data for that information (for example compare definitions, areas covered etc);
- Understand why data is collected;
- Involve stakeholders in discussions regarding data provision;
- Identify barriers to effective data collection;
- Clearly identify your motivation for collecting a particular data set; and
- Resource data collection, collation and analysis appropriately.

## 2.11 Question 11

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

In considering the waste hierarchy, waste avoidance is given greatest priority and consequently could provide the greatest benefit if applied. Currently, there is only limited focus on design, production process and transport of products. By focusing up stream at the design, production and transport there could be greater incentives for producers to reduce waste.

## 2.12 Question 12

Question 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?

### *Municipal Waste Stream*

The municipal waste stream is well regulated and Local Government has clearly identified the issues regarding the management of this particular waste stream. Local Government has identified a clear methodology and rationale for intervention regarding a particular product or material. The Association Policy Statement on EPR offers a methodology for this, through the use of a series of questions regarding a product.

### *Commercial & Industrial*

Local Government undertakes recycling in response to community needs. Recycling in the commercial sector is less affected by community concern and so convenience and cost may be more important considerations.

### *Construction & Demolition*

The C&D waste stream is relatively simple to recycle when compared to putrescibles materials as there are less health and environmental hazards associated. Local Government as innovators and market leaders, have been using inert material diverted from landfill in their activities (such as road construction) and are potentially a major market for this material.

WALGA has appointed ARRB Consultants to undertake research into Local Government usage of recycled materials into road construction and road maintenance, this report is currently in the development stage. Below are some of the inhibitors and drivers identified with the usage of C&D materials (E.Fuery personal communication, April 30 2009).

<b>Example: Barriers identified by WALGA with regard to C&amp;D material usage by Local Government</b>	
<b>Inhibitor</b>	<b>Driver</b>
It is easier to continue doing the same thing over and over again than to adapt to change and introduce new methods	Identify champions to undertake more demonstration projects in receptive local governments
A perception that by using a non-standard product, there is a higher level of risk in pavement performance	Disseminate result of reports by independent laboratories undertaken as part of a grant project
A lack of hard data and prior examples of local use of recycled products	Run workshops in regions to disseminate examples of successful use of recycled products
A lack of availability of recycled products	Increase landfill levy to encourage greater diversion of C&D recycled products
Rejection of mixed loads of C&D as material difficult to handle	Educate workforce to benefits of separation at source for C&D material

Unless there is clear identification of roles and responsibilities regarding federal, state and local government and private industry many of the issues for waste management will remain. Local government waste (residential and that generated from the local governments own activities) is well regulated. However, the commercial and industrial (C&I) and the construction and demolition (C&D) sector has only limited regulation and no responsibility authority assigned to it. These waste streams make up the majority of the waste stream, yet go virtually unregulated. Local government may not be positioned to take responsibility for these waste streams, nor should it be assumed that they will.

### 2.13 Question 13

Question 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?

Climate change considerations need to be considered along with Alternative Waste Treatment and the implementation of national Extended Producer Responsibility. These areas are explained in more detail in other Questions. There are a range of state based tools to assist in diversion of waste from landfill such as band and levies.

### 2.14 Question 14

Question 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, cost and disadvantages, of increased diversion and/or recycling of organic wastes?

#### *Alternative Waste Treatment*

As a technical strategy, Alternative Waste Treatment (AWT) has gained significant support in Western Australia; currently the City of Stirling, Southern Metropolitan Regional Council, Western Metropolitan Regional Council and Mindarie Regional Council operate AWT facilities.

The Association has a Policy Statement on Standards for Recycled Organics Applied to Land. The Policy Statement recognises that significant potential environmental benefits can be associated with the application of quality recycled organics to land. These have been identified in a range of local, national and international studies. Most notable, given their local application, are the results of the Southern Metropolitan Regional Council's Compost Market Development Project (September, 2006). The benefits identified include:

- A significant reduction in greenhouse gas emissions, in particular methane gas resulting from the breakdown of greenwaste and other organics in landfill;
- Improvements in soil quality, including improved pH, reduced soil temperature, improved soil microbial balance, and increased organic carbon content;
- Improved water holding capacity, leading to a decrease in additional water requirements;

- Reduction in nutrient run-off, leading to lower artificial fertilising requirements and improved water quality; and
- Improved plant growth

However, there are problems associated with this material such as:

- A lack of viable markets;
- High transportation costs;
- Lack of consistent regulation; and
- Quality standards for the materials produced.

This type of shift in treatment of MSW represents a significant investment by local government and the community in waste management. The technology also represents a substantial increase in the amount of MSW diverted from landfill and the consequent greenhouse gas emissions (GHG). The GHG reduction of the Southern Metropolitan Regional Council's AWT facility has been formally recognised through the Federal Greenhouse Friendly™ Programme. SMRC are the only local government in Australia with accredited carbon offsets for sale.

Development of strategies/legislation for the removal of household hazardous wastes from the domestic waste stream, also elimination of organics to landfill will contribute towards the reduction of greenhouse gas emissions.

Reducing the amount of organic waste sent to landfill has the potential to contribute to reducing greenhouse gas emissions and providing other potential environmental and economic benefits. The challenges if organic material is diverted from landfill are outlined in Table 2.1.

Advantages	Disadvantages	Opportunity	Risk
Longer landfill life	Economic loss to existing landfill operators	Development of Alternative Waste Treatment Facilities	Planning, location and licensing of AWT facilities
Lower environmental impacts from putrescible waste	Lower renewable energy potential	Carbon credits under CPRS if resource recovery separated from "waste"	Regulation limiting use of recycled organics recovered from the domestic waste stream
Lower methane emissions	Less gas available for capture	Increased soil carbon sequestration from applying recycled organics to land	Supply exceeding demand placing existing business at risk

**Table: 2.1:** Key advantages, disadvantages, opportunities and risk for diversion of organic waste from landfill.

## 2.15 Question 15

Question 15 What, if any, changes are needed to provide a national approach to the way e-waste is managed?

Local Government has identified e-waste as a priority product for EPR. A workshop was held in Perth in early March 2009 to discuss ways forward for a Product Stewardship Program for e-waste in Western Australia. A project to develop a program for WA has progressed following this workshop. To assist with the preparation of the Program, MWAC surveyed seven large (population range 10,000 – 41,000) non-metropolitan Local Governments to ascertain how and what e-waste is handled, collected, disposed and or recycled. Most Local Governments surveyed indicated they primarily dispose of e-waste to landfill. The Local Governments were unable to quantify the amount of e-waste collected or the associated financial costs. Three Local Governments use MobileMuster and Planet Ark Cartridge Recycling internally. Four Local Governments do not use any free take-back recycling programmes for e-waste.

The response from non-metropolitan regional centres highlight the potential issues for a Statewide Program, particularly distance from market. The key parameters for a successful e-waste Product Stewardship Program in WA are:

- Need for State wide coverage;
- Program to become self funding;
- Further consultation with the sector; and
- Local Government provides collection infrastructure where appropriate.

The importance of a national approach for e-waste relates to the large quantities of imported products and the need for consistent regulation to ensure that all products are taken care of at end of life. Effective changes to the way e-waste is managed could be undertaken by:

- Setting up a network of permanent drop-off locations at transfer stations and other well used areas;
- Focusing on the collection of items such as TV's, Computers, Stereos etc;
- Supporting the development of the Byteback program nation wide;
- Engaging the local community so that there is a good understanding of the benefits of an e-waste recycling (and re-use) system.

The Television Industry (through its Industry Association) has been trying for five years to establish a voluntary Product Stewardship Scheme for TV's and has asked the Federal Government to implement regulations to this effect (SBS Insight, 2009).

**Example: Apple e-waste collection day**

Apple Computers is paying for a number of Free Public e-waste collection days around the Country. These Collection days are being hosted by Local Governments and Regional Councils in the WA metropolitan area and will take place on Saturday 6 and Sunday 7 June 2009.

The events will be held at nine collection sites across the metropolitan area in:

- Town of Cottesloe
- City of Perth
- City of Rockingham

SMRC Regional Resource Recovery Centre (Canning Vale)

City of South Perth

City of Stirling

City of Swan

Sims E-waste Recycling (Spearwood)

Tamala Park (Mindarie)

Products that will be accepted on the days include computer equipment and accessories, printers, scanners, mobile phones, telephones, TV's, video and DVD players, stereo equipment, digital and video cameras. The Association strongly welcomes the initiative shown by Apple Computers in putting these collection days in place.

#### **Example: Cost of Recycling E-Waste – City of Bunbury**

Number of households: 16,564

Area (sq km): 61.2

The City of Bunbury has identified community concern and the need to provide a service for electronic waste recycling. The City is currently collecting approximately one sea container full of electronic waste every three weeks (85 tonnes per year); at a cost of \$52,000 per annum. Demand for the service is very high and persistent.

### **2.16 Question 16**

Question 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?

Waste will be a covered sector under the CPRS, the effect of this is currently uncertain. Inclusion of waste in the CPRS will be the major area of impact for Local Government. There are a number of reservations about the inclusion of waste (impact on recycling and ability of AWT's to sell offsets). Given the likely significant impact, waste should be considered a 'strongly affected industry'.

The WA Local Government Association made a substantial Submission on the Carbon Pollution Reduction Scheme Green Paper. The Submission highlighted Local Government commitment and support for climate change action, but also the potential costs to Local Government and limited capacity for Local Government to source revenue.

The Submission highlights that, while

*there is no doubt that Western Australian Local Governments have expressed concern about climate change impacts and have shown considerable leadership regarding mitigation and adaptation strategies, however it is also true that the imminent Carbon Pollution Reduction Scheme presents myriad difficulties, both in its direct and indirect effects on Local Government.*

*The Federal Government, through the Department of Climate Change has expressed the view that climate change management is going to present some costs to the Australian economy.*

*WALGA acknowledges this as a necessity of the Scheme, but asserts that the Federal Government must also realise that there will be some sectors of the business and government community that will struggle to meet obligations under the conditions outlined in the recently released Green Paper. Exposed low income households and some businesses have been addressed in the paper; however Local Governments, the most under-resourced sphere of Government, have not been specifically captured by the 'profit-share' mechanisms that the Federal Government has outlined in the Climate Change Action Fund (CCAF) to assist with implementation and cost implications of the forthcoming Carbon Pollution Reduction Scheme.*

*To put this need in comparative perspective, the Australian Bureau of Statistics 5506.0 identifies 2006/07 Federal Tax Revenue as \$261,988 million, States \$48,911 million and Local Government \$9,388 million out of \$319,776 million. Local Governments receive 2.94% of Australian Tax Revenue but only through their own taxing efforts (i.e. property*

rates). Through Financial Assistance Grants (FAGs), Local Governments receive from the Commonwealth funding that equates to only 0.67% of Federal Government Revenue. Adding funding for local roads, Local Governments receive from the Commonwealth funding equivalent to a total of 0.75% of Federal Government Revenue. While Local Government is not reticent in adopting strict climate change measures or making considerable changes to 'business as usual', many Western Australian Local Governments (over 50%) are not well enough resourced currently to meet their immediate responsibilities in relation to asset and infrastructure management, let alone to comply with the future costs and legislative requirements that a Carbon Pollution Reduction Scheme will present (*The Journey – Sustainability into the Future, 2008*). So whether or not they wish to commit to deep cuts and significant abatement and adaptation strategies, they may simply not have the resources to do so. The rising costs of energy and water, along with lesser acknowledged impacts such as rising infrastructure management and construction costs for Local Government will further exacerbate the issue of inadequate Local Government resourcing and may lead to a situation prohibitive of necessary climate change action.

**Key Point: Local Government has limited capacity to raise revenue to mitigate the impact of the CPRS.**

The Submission also notes that it is

*incumbent on the Federal Government to ensure that the sector is adequately resourced to undertake actions necessary to ensure compliance with the Scheme. Resourcing needs for the Local Government sector in relation to the Carbon Pollution Reduction Scheme are likely to include administrative and reporting expertise, assistance in developing and delivering emissions estimation methodologies for landfills and general training on the OSCAR system. The Inter-Governmental Agreement Establishing Principles Guiding Inter- Governmental Relations on Local Government Matters (April 2006) establishes that "any consequential financial impacts are to be considered within the context of the capacity of Local Government".*

The main impacts identified for Local Government are related to waste management. The Association has only given conditional support to the inclusion of waste as a covered sector. The issues raised in the Association Submission on the CPRS Green Paper included:

- *Support for a 25 kilo tonne CO2e reporting threshold for landfills, but not for a reduced threshold;*
- *Non-inclusion of legacy landfills;*
- *Operators of landfills exceeding the threshold size be required to acquire permits based on the quantity and type of waste received in the previous year;*
- *That landfill gas captured and burnt be eligible to generate offsets within the compliance market;*
- *That the Federal Government clarify the status of Renewable Energy Certificates into the future and in relation to the Carbon Pollution Reduction Scheme to assure REC generators that their investments are secure under this process;*
- *That offsets/permit (generation) should be allowed for industries investing in projects with significant 'additional' abatement outcomes and these offsets should be available for sale into the compliance market (for example AWT);*
- *That the Federal Government acknowledge that the current proposed estimation methodologies for landfill emissions are not stringent enough to ensure reporting accuracy;*
- *State provides adequate local resources (i.e. dedicated officers seated within each state Environment Department), to mentor those sectors or individual entities struggling with reporting requirements through the process; and*
- *That international consistency and equity be ensured and maintained in the development of the Scheme and that interaction with international trading schemes be assured and supported by the Federal Government.*

***Key Point: Conditional support for inclusion of waste in CPRS.***

The Association recommended that the Federal Government reconsider waste as a 'strongly affected' industry; due both to the significant investment in infrastructure and the lack of ability to pass on costs. The Submission recommended that as:

*many waste facilities (most larger sites) have invested significantly into gas capture and methane flaring infrastructure and pass through of costs is constrained to a degree by the capacity of the community to cover rate, levy and gate fee increases, that the significant costs inherent in the Carbon Pollution Reduction Scheme be equitably assessed and that all costs to ratepayers/community members be taken into account when allocating funds, both to 'strongly affected industries' (in which waste should be included by virtue of its inability to pass on costs) and to householders.*

***Key Point: Waste should be considered strongly affected industry under the CPRS***

While the CPRS will cover the waste sector, the benefits of recycling in terms of greenhouse gas reduction will not be picked up within the Scheme.

**Example: Recycling to reduce greenhouse gas emissions**

The University of Michigan (2007) estimates that, for the United States of America, "increasing the recycling rate to 35 percent would reduce greenhouse gas emissions by an additional 5.2 Million Metric Tons of Carbon Dioxide Equivalent".

While the above is a generic example, detailed life cycle assessment clearly shows the benefits of recycling (in most situations). The Department of Environment and Conservation has developed a simple life cycle analysis system (DEC, Benefits of Recycling Calculator Tool) which is an excel based tool to calculate and demonstrate the environmental benefits of recycling in WA. Within the CPRS, however, these benefits are not recognised. It is anticipated that recycled material will have a higher monetary value under the CPRS, because it requires less energy to process (compared to processing raw material). However, recycling will also cost more as the costs for collection and processing increase with fuel and electricity prices; whether the increased collection and processing costs are commensurate with the increase value of recycled products remains to be seen. This issue will be particularly significant for non-metropolitan Local Governments who recycle, as their material frequently has to travel further to market. As the recent price drop for recyclables has highlighted, transport distance is a key concern for Local Governments.

*Key Point: Uncertainty about the effects of CPRS on recycling, non-metropolitan Local Governments likely to be disproportionately affected.*

**Example: Carbon offsets**

The Southern Metropolitan Regional Council produce Greenhouse Friendly™ carbon offsets from their Alternative Waste Treatment process. The AWT facility that SMRC operates, composts the organic fraction of municipal solid waste (MSW) into a valuable product which is applied to agricultural land. The carbon offsets are generated from the avoidance of methane emissions caused by waste decomposing in landfill, which would otherwise occur in the absence of a program.

The tonnage of carbon offset that the SMRC is eligible for, under the Greenhouse Friendly™ Program, is calculated using the following general formula:

Total Greenhouse gas emissions avoided by project - Total Greenhouse gas emissions from the project (all operating emissions) = Carbon offset eligible

Currently these carbon offsets are sold into the market. Once the CPRS commences, with waste as a covered sector, these carbon offsets cannot be sold into the compliance market. There may be potential to sell the offsets into the voluntary market; although how this market will be structured and priced is still uncertain. There is also the issue of international equity, as waste is not a covered sector in other emission trading schemes their offsets could potentially be sold in the Australian compliance market – although Australian offsets generated in the same way would not be eligible.

The Commonwealth Government has proposed to expand the Renewable Energy Target (RET) Scheme to 20% Renewable energy by 2020 and will extend the operation of the Scheme until January 2030. Should this be implemented it will create a significant incentive for 'landfill gas to energy' projects to reduce significantly the permit liabilities for landfill operators, to produce energy for sale and to generate Renewable Energy Certificates for sale. However although this would be considered a positive outcome of the CPRS, it may disadvantage those early movers who have

invested significantly in alternative waste treatment technologies which are not offered dispensation within the scheme.

***Key Point: Alternative Waste Treatment will be affected by CPRS.***

The suggested amendment to NGERs recently release would see the threshold for reporting lowered to 10KT – any such move would prove very difficult for Local Government, as sites affected are likely to include smaller non-metropolitan sites with only a very limited reporting capacity.

***Key Point: Local Government does not support the lowering of the NGERs Reporting threshold to 10KT.***

#### *Waste to Energy*

The Carbon Pollution Reduction Scheme Bill 2009, had an implicit support of waste to energy facilities as any such facilities would gain advantages through the Scheme. This will affect existing Alternative Waste Treatment operations which are currently diverting waste from landfill through composting technology. As previously mentioned, there has been limited public debate on AWT and public feeling is likely to be strong on waste to energy solutions.

### **2.17 Question 17**

Question 17 What are the opportunities to reduce water and energy use through the way waste is managed?
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The market for materials to be reprocessed in Western Australia is limited, therefore most material collected for recycling in Western Australia are transported elsewhere to be reprocessed and recycled. The relatively low volume of material generated in Western Australia, and its geographical isolation, also affects the sustainability of these markets.

Local reuse and recycling provide opportunities to reduce transport use of energy. Providing the opportunity for reprocessing this material in WA would greatly reduce energy usage.

## 2.18 Question 18

Question 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?

Development of local reprocessing has the potential to add value to the economy and create employment. The example outlined below relates to one of the Regional Councils in the metropolitan area who, through recycling activities, have created jobs and added value to the local economy.

### **Example: EMRC - Resource Recovery Job Creation**

The Eastern Metropolitan Regional Council (EMRC) has several new recycling initiatives, some of which are a first for WA. The EMRC Timber Processing Plant employs three people and recycles all timber pallets in partnership with Laminex industries. The EMRC Mattress processing Plant, is a first for WA and employs four people to recycles old mattresses. Both of these plants add value through job creation and offer waste management solutions previously non-existent in the area. Consequently material is diverted from landfill and recovered as a resource.

## 3 Additional Comments

### 3.1 Consideration with new regulations of impact

Decision and regulations are implemented at a Federal level with little or no consider of the impacts at a local level. There is a need to consider the waste management implications of new products before they are introduced to the local market; an example of this is CFL's.

**Example: Increasing volumes – Compact Fluorescent (CFL's) bulbs**

When the previous Federal Government made the announcement regarding the ban on incandescent light bulbs, the Municipal Waste Advisory Council wrote to the Minister indicating that while we support the ban, there are substantial waste management implications regarding an increased volume of CFL's being disposed of in the municipal waste stream. MWAC indicated that it considers that best management of CFL's would be achieved through a product stewardship arrangement incorporating industry responsibility for establishing and maintaining adequate CFL bulb collection and reprocessing infrastructure. Further, that the stewardship should include an industry commitment for an ongoing national public education campaign to raise community understanding of why and how to dispose of CFL bulbs correctly.

**Recommendation 5: That the Federal Government includes waste management considers in its decision making process.**

### 3.2 Ongoing support and commitment

When a scheme or activity is initiated there is usually an expectation of ongoing support for that program (until such a point as the activity is no longer needed). If this ongoing support is not present this can be termed cost shifting. In 2002 the Standing Committee on Economics, Finance and Public Administration resolved to inquire into local government and cost shifting as referred by the Hon. Wilson Tuckey MP, Minister for Regional Services, Territories and Local Government.

Local and State Governments responded to this Inquiry and the *Inter-Governmental Agreement Establishing Principles Guiding Inter-Governmental Relations on Local Government Matters 2003* was developed, giving the three spheres of government an agreed framework within which services were to be funded and delivered to the community at the local level. With particular reference to Part I s3 and Part II s10

Part I – Fundamental Principles of this Agreement states:

- s3 The Parties agree in principle that where local government is asked or required by the Commonwealth Government or a State or Territory Government to provide a service or function to the people of Australia, any consequential financial impact is to be considered within the context of the capacity of local government.

Part II – Existing Arrangements states:

- s10. Where the Commonwealth or a State or Territory intends to impose a legislative or regulatory requirement specifically on local government for the provision of a service or function, subject to exceptional circumstances, it shall consult with the relevant peak local government representative body and ensure the financial implications and other impacts for local government are taken into account.

This agreement has not always been honoured and resulted in net increases to Local Government, as outlined in the below example.

**Example: Cost shifting identified in the Submissions to the Inquiry into Local Government and Cost Shifting 2002**

1. Services are formally referred to, and/or are assigned to local government through legislative and other State and/or Federal instruments without corresponding funding;
2. Local government is required to be the sole provider of essential/important local services that clearly contribute to local, regional, state and national public good;
3. Local government is required to be the sole provider of new and innovative services that have no historical funding precedent;
4. Local government is required to 'pick-up' services as a result of the direct transfer of 'ownership' of infrastructure from another sphere of government;
5. Government policies are imposed that require local government to undertake costly compliance activity [and increased regulations]; and
6. Fees and charges that local government is permitted to apply, for services prescribed under state legislation or regulation, are not indexed or related to increase in costs of provision

The Product Stewardship for Oil Program has been previously mentioned as an example where long term commitment has been limited from the Federal Government.

**Example: Used Motor Oil – Federal Scheme**

Through the Federal Program *Product Stewardship for Oil Program*, the WA Local Government Association (through the Municipal Waste Advisory Council) administered a Program to improve collection of used oil in WA. The result was 112 units of infrastructure were distributed to 62 Local Governments throughout Western Australia. In WA, the aim of the Program was to improve the distribution of, and access to, used oil collection infrastructure. Under the Program drum storage units and used oil collection tanks have been provided to Local Government, as well as funding for essential site works. Furthermore, the Program includes an education and promotion aspect aimed at maximising the use of the used oil infrastructure.

The two year Program commenced in 2003. The total value of infrastructure and site works for these Phases exceeds \$1 million. As the Federal Government initiated and promoted the Scheme – this implies some degree of responsibility for it. In Western Australia the State Government is now, in the interim, providing funding to ensure that collection of oil continues, as used oil recyclers have instituted a collection charge. If they had not done so, it is likely a large number of Local Governments would have ceased to collect used oil, as they are unable to take on this additional cost.



Picture: Used Oil Drum Storage Unit and 4,500L storage tank at the Shire of Williams.

### 3.3 Capacity to comment and provide input

The Waste Authority provides Strategic Partnership Funding to the Association and several other key stakeholders. This approach allows the Association to maintain sufficient capacity to respond and actively participate in state government waste management related activities. There would benefit, at a Federal level, of using a similar approach.

**Recommendation 6: Establish a Strategic Partnership Funding opportunity for the Australian Local Government Association (ALGA) and other key stakeholders.**

### 3.4 System Barriers

One system barrier to action on waste management which has been identified is the requirements for Regulatory Impact Statements (RIS) and the institution of the Office of Best Practice Regulation. While it is acknowledged that an assessment of any new regulation is necessary to

consider impacts, the view of Local Government is frequently the RIS process inhibits any environmental regulation (including waste management related regulation) due to the primacy cost/benefit analysis is given in these considerations and the emphasis on minimising financial burden to industry. Although there are methodologies which can take into account public opinion and willingness to pay, these are in their infancy in Australia. The focus on avoiding any additional costs to industry ignores that these costs are already being paid by society as a whole (frequently through Council rates) and that by regulating costs are likely to be directed specifically at those who produce and use the product rather than the whole community. The use of different tools, such as life cycle analysis, offer methods to effectively assess the impact of actions and would consider the whole of life costs of action.

## **4 Conclusions**

### **4.1 Waste Management is an essential service**

Over time considerable social capital and community expectation has been developed regarding service provision in the waste and recycling area. Recycling which has grown in scope, cost and participation rates over time. Support and ensuring appropriate designation of responsibility are needed to ensure this activity can continue. Local Government is seeking recognition and acknowledgement of waste management as an essential service.

An essential service can be defined as one where a “failure to adequately provide this service would have serious implications for the physical and economic well being of all residents with similar impact on the local environment” (Geelong, 2006). For waste management, given the climate change implications, this can be widened to include the global environment.

Internationally there is a greater recognition of waste as an essential service. For example at the World Cities Summit in 2008, former president of the International Solid Waste Association (ISWA) and Solid Waste Association of North America (SWANA), N.V. Vasuki identified that Solid Waste Management was an essential service as “water supply, sewerage, power supply and telephone”. Other sources, such as the National Solid Wastes Management Association (undated) identify

waste management as an essential service in their report *Residential Trash Collection: An Essential Service at a Bargain Price*.

At a national level, the inclusion of waste management in the CPRS is another signal of the significance of the industry. WALGA has been advocating that waste management should be included in the Federal Assistance Grants (FAG's) for Local Government – as there is a clear expectation of service provision and an imbalance in the financial ability to provide these services. In some non-metropolitan areas, to provide an equivalent service to the metropolitan areas, the charge would be too high on a per capita basis due to large distances, low population density and distance to market.

The provision of municipal waste services has the following outcomes:

- Protects community health by the prevention of disease through the collection, treatment and disposal of putrescible and hazardous waste;
- Protects the natural environment through the reduction of greenhouse gas emissions as a result of controlled disposal and treatment of waste and recycling;
- Provides landfill, Resource Recovery and alternative waste treatment capacity required for waste resulting from pandemics, natural or other disasters; and
- Supports sustainability principles through collecting materials for recycling.

Given the significance of waste management, the Association calls for the establishment of a Centre of Excellence for Waste Management in WA. Through the Federal Government, funding is available for establishment of Cooperative Research Centres (CRC) (providing funding is matched by cash and/or in kind contributions from CRC participants). This is an additional source of funds which could provide for a Centre of Excellence in Waste Management. Such a centre would provide a central academic database of waste management knowledge. Areas of research include the potential to move to a 'cradle to cradle' society and approach to waste management (including legal and engineering considerations). Such a centre would offer both policy and practical solutions for waste management and an avenue for cooperation between all stakeholders.

**Recommendation 7: That waste management be included as a consideration in the Federal Assistance Grants.**

**Recommendation 8: That waste management be considered and treated as an essential service by the Federal Government.**

#### **4.2 Understanding roles and responsibilities at a Local, State and Federal level.**

Much of the concern expressed by Local Government regarding waste management relates to the lack of clear roles and responsibilities for the sector. Under the WARR Act, Local Governments' role is specified. However the roles other stakeholders, state and federal government, waste generators, community and industry, are unclear. To move forward in a consolidated and constructive manner, all stakeholder responsibilities within the system must be established. Some suggested areas of responsibility are outlined below. This is a starting point for discussion only, as it should be noted that these roles and responsibilities should be negotiated and assigned according to capacity to influence. Clear assignment of roles and responsibilities is also necessary for the National Waste Policy to be effective. If it is not clear who is accountable, or a clear process in place for establishing accountability, much time and effort may be wasted in the implementation of projects and whenever a new issue arises. There are a variety of key stakeholders in the area, including Federal, State and Local Government, the waste industry, waste generators (such as manufacturing and producers), industry associations and special interest groups and the community.

##### **Federal Government**

- Strategic oversight of waste generation and material flow on a national level.
- Coordination of development of national priorities for EPR, education etc;
- Market development where priority identified;
- Targeted grants for key infrastructure development;
- Leadership (leading by example); and
- Funding opportunities to Local Government and Industry for infrastructure development.

## **State Government**

- Strategic oversight of waste generation as a whole (e.g. prediction increase in generation/ major projects etc), strategic planning, risk management, contingency planning).
- Education, on waste minimisation and key state level communications (for example why you should recycle);
- Market development where priority identified;
- National representation (for example on EPR);
- Prioritisation of materials for EPR at a State level;
- Coordination for Product Stewardship / Regulation for EPR;
- Communication/consultation with Stakeholders;
- Funding mechanisms;
- Funding opportunities to Local Government and Industry for infrastructure development;
- Programme delivery;
- Leadership (leading by example);
- Cooperation; and
- Responsibility for its own waste / State Supply Commission.

## **Local Government**

- Service delivery appropriate to its community;
- Responsive to community need;
- Education regarding the 'how' of recycling and waste management;
- Communication;
- Programme delivery;
- Leadership (leading by example);
- Innovation;
- Expertise; and
- Responsibility for its own waste / purchasing policy.

## **Waste generators – Households / Businesses**

- To be informed;

- Consume responsibly; and
- Consider disposal at point of purchase.

#### **Waste generators - Producers / Manufacturers**

- Responsibility to design products for minimum environmental impact/ease of recycling;
- Responsibility to communicate with State Government; and
- Planning for disposal / reuse of own waste.

#### **Waste industry**

- Innovation;
- Cooperation;
- Service provision; and
- Expertise.

#### **Industry associations and interest groups (e.g. WALGA, WMAA, Conservation Council)**

- Programme/Policy delivery for stakeholders;
- Representation/consolidation of views; and
- Coordination.

#### **Shared contributions across all categories**

- Research & Development – cooperative research centre / centre of excellence;
- Communication; and
- Partnerships.

**Recommendation 9: that roles and responsibilities be clearly negotiated, assigned and implemented for waste management.**

### **4.3 Focus upstream**

Extended Producer Responsibility (EPR) and Product Stewardship, at a State and Federal level, are policy tools to assist with waste management. Costs and responsibility for disposal of material

will always be borne, ultimately, by society and the environment, however through EPR schemes the responsibility and cost can be negotiated and directed toward the producer. For producers this means there is an imperative to think through the life cycle of their product, considering waste minimisation and intelligent product design and ensuring there are disposal or recycling options available. Product stewardship and voluntary approaches do have a place in waste management, as can be seen by the DrumMuster program. However there needs to be a recognition and willingness from government to regulate.

**Recommendation 10: That the implementation of National EPR Schemes for priority products be a central part of the National Waste Policy.**

#### 4.4 Leadership from Federal, State and Local Government

Government is a significant consumer of products and services and instigator of projects. All spheres of government need to show leadership by ensuring that waste management is considered in purchasing, project planning and operational decision making.

##### **Example: WALGA Purchasing & Tender Guidelines**

The Association is currently developing a set of guidelines to assist Local Government in creating and implementing appropriate sustainable procurement policies and processes. The guidelines will be embedded in the Local Government Purchasing and Tender Guide. The purpose of the guidelines is to assist Local Governments to implement sustainable procurement through all facets of Local Governments business and to encourage a consideration of the long term benefits of 'life cycle costing' for products and services. This supports the Towards Zero Waste Framework.

The adoption of sustainable procurement will result in significant benefits to Local Government, including:

- Saving money through improvements in resource efficiency (i.e. reduced energy, water and waste disposal costs);
- Helping meet Triple Bottom Line targets and objectives thus increasing community

confidence;

- Reducing environmental impacts generated by the public sector, including
  - Reducing consumption of scarce or valued resources (water, energy);
  - Reducing waste to landfill;
  - Reducing human and environmental pollution;
- Showing strong environmental leadership to industry and community;
- Encouraging industry adoption of cleaner technologies and improved corporate social responsibility through unified sustainability standards requirements;
- Enhancing market development for sustainable technologies through stimulated demand;
- Stimulating an environment of investment confidence in further research and development for sustainable technologies; and
- Stimulating local production.

#### 4.5 Equal focus for all waste streams

Frequently State Government efforts regarding waste management focus predominantly on Local Government. As noted, Local Government waste makes up around 20-25% of the waste disposed of to landfill; and in WA this is the only waste stream where waste to landfill has actually decreased. The Local Government structure may make it easier for State/Federal Government to engage and regulate this waste stream, however this should not mean that the other waste streams are ignored. Waste Streams such as hazardous, Commercial & Industrial and Construction & Demolition waste need equal focus.

#### 4.6 Ensure equal service provision

From the National Environment Protection Council Act 1994 *'people enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia'*.

In order to ensure this is the case it is important to ensure that the assumption is not made that a nationally consistent regulation will have nationally consistent outcomes. This is not the case, National schemes such as the Used Oil Stewardship Program and the National Packaging Covenant application have shown this in Western Australia. There needs to be a good knowledge of the issues for each state and territory and comprehensive consultation and involvement in any regulation.

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