Municipal Association of Victoria

Submission to Productivity Commission Inquiry: Waste Generation and Resource Efficiency in Australia

March 2006

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1 EXECUTIVE SUMMARY

Victorian local government is responsible for a range of domestic waste management services, including transfer stations and landfill, kerbside recycling, green and hard waste collection, waste education and litter abatement. Municipal solid waste is estimated to account for 37% of the total volume of waste disposed to landfill in Victoria. It is estimated that Victorian local government waste management service expenditure for the year 2003-2004, was in excess of $300 million[1] and capital expenditure an additional $17 million[2].

Local government has for a long time been charged with the responsibility for dealing with the wastes of society. Managing this growing waste burden has become increasingly expensive and complex as local government seeks the best environmental and social outcomes. Additionally, the sector is under financial and resource stress from the competing policy goals of governments and requirements of their communities.

More equitable cost-sharing across business, industry, governments and consumers is essential if the Australian community is to move towards greater environmental sustainability. The market has failed to deal with negative effects of its actions and it is now time for the Australian Government to step in to ensure all costs (environmental, social and economic) are fairly accounted.

1.1 Recommendations

- The Australian and State Governments to work cooperatively to develop consistent data collection, collating and sharing methodologies.
- The Australian Government to seek to develop requirements for resource and waste data to be collected at all points within the resource lifecycle. This responsibility must not fall to local government at the end of the chain.
- The Australian and State Governments to provide leadership in establishing a web-based physical waste resource exchange, with linked environmental cost-benefit tools.
- The Australian and State Governments to assist in providing resources for a information and case-study exchange in resource recovery and waste management. Investigate appropriateness and efficiency of single national exchange against state-based exchanges.
- Improved tools for life cycle analysis and triple bottom line assessment with up to date cost data allowing local government, in particular rural and regional municipalities, to assess their waste management options.
- The Australian and State Governments to investigate the need to provide incentives to prospective resource recovery and waste management contractors to compensate for lack of market power, particularly in rural and regional areas.

- Victorian Government to bring the statutory planning provisions in line with the state's resource recovery and waste management objectives.
- The Australian, State and local governments to explore further opportunities to recruit and retain skilled environmental and waste management professionals to regional areas, such as through greater incentives and assistance.
- Victorian Government to follow through on the intent of the Victorian Local Sustainability Accord.
- Targets for resource recovery be developed that consider the total environmental, social and economic costs and benefits.
- Australian Government to develop and deploy policy tools along the entire product and service life cycles. The reliance on local government to deal with the wastes of society must be shifted towards equitable cost sharing arrangements between industry, business, consumers and governments.
- Greater support must be given by Australian and State Governments to sustainability education and promotion.
- Policies must allow for regionally appropriate solutions. National policy coordination may be used where resources are moving between jurisdictions or where a national approach is required, such as extended producer responsibility.

2 INTRODUCTION

2.1 The Municipal Association of Victoria

The Municipal Association of Victoria (MAV) is the peak body for local government in Victoria. Under the *Municipal Association Act* 1907, the MAV is required to represent all 79 local governments in the state.

The MAV is a driving and influential force behind a strong and strategically positioned local government sector. The MAV's role, broadly speaking, is to represent and advocate the interests of local government, lobby for a 'fairer deal' for councils, raise the sector's profile, ensure its long-term security, and provide policy/strategic advice, capacity building programs and insurance services to Victorian local government.

This submission is made by the MAV as part of its ongoing commitment to supporting the role of local government in waste management and resource efficiency.

2.2 Waste management and local government

Victorian local government is responsible for a range of domestic waste management services, including transfer stations and landfill, kerbside recycling, green and hard waste collection, waste education and litter abatement. Regionally based, statewide coordination of waste management and education within local government is overseen by 16 Regional Waste Management Groups (RWMG). The MAV works closely with the RWMGs to help build effective waste management and resource recovery outcomes for the local government sector.

Municipal solid waste is estimated to account for 37% of the total volume of waste disposed to landfill in Victoria. It is estimated that Victorian local government waste management service expenditure for the year 2003-2004, was in excess of $300 million[3] and capital expenditure an additional $17 million[4].

2.3 The MAV's role in local government resource recovery and waste management

The MAV in supporting the role of Victorian local government in waste management and resource efficiency aims to serve the sector by:

- Advocating on behalf of local government to State and Federal Governments on issues canvassed from the sector;
- Providing review and analysis of waste management programs, policy, legislation and new initiatives relevant to Victorian local government; including identifying the implications for and actions required by the sector; and
- Representing the sector on a range of waste committees and working groups including – the Victorian Litter Action Alliance, the Victorian Jurisdictional Projects Group, and the Association of Victorian Regional Waste Management Groups; National

Packaging Covenant Council and the MAV/Sustainability Victoria Liaison Group.

3 OVERVIEW

3.1 The need for more data

In Victoria, data on waste disposal and resource recovery in local government is collected by EPA Victoria through its annual collection of *National Environmental Protection Measure - Used Packaging Materials* (NEPM) data and Sustainability Victoria in its supplementary survey. The collected data is generally of a high quality and annually achieves a 100% response rate. However, it must be noted that for some municipalities, particularly small rural shires, the requirement to respond to the survey can place quite a burden on staff. This burden stems from the nature of the record system within council, the availability of staff time to respond to the survey amongst the range of competing priorities, and the turnover of staff which gives rise to issues of familiarity with the requirements of the survey and consistency in data reported from year to year.

Whilst acknowledging the importance of quality data to monitor change over time in service delivery and effectiveness, any requirement for additional data collection must be considered in the context of local government's capacity to respond. There is a clear need for data consistency with other states to allow for greater comparison Australia wide.

The current Victorian surveys are nearing their maximum size for manageability. The burden of additional data collection on waste management services and resource recovery should not fall to local government. Industry must have a responsibility to provide data collected at the production, importation and consumption points of the resource lifecycle. Whilst acknowledging that State government agencies, such as Sustainability Victoria, periodically undertake waste audits of typical kerbside waste loads to provide an overview of the general breakdown of waste, data on 'special' wastes such as CDs/DVDs, small household appliances and household chemicals is largely unknown.

The National Projects Group, part of the National Packaging Covenant Council, has planned work towards national methodologies of data collection primarily around packaging waste. It is essential that such projects are supported and that a national approach is taken by the Environment Protection and Heritage Council (EPHC) to develop shared data collection definitions, methodologies and reporting. As well as providing improved systems for collating, analysing and sharing data.

3.2 Information Exchanges

3.2.1 Resource Exchange

Resource exchanges, where the wastes and by-products of one business are available as raw materials for another, have the potential to increase the efficiency of resource use. Direct exchange of wastes into existing processes can greatly reduce the need to extract and process raw materials. Energy is also saved in the reduction of materials needed to be reprocessed, when they can be used in their 'waste' state.

EPA Victoria, in association with the Waste Management Association of Australia (VIC), has developed a web-based waste database (see: http://tinyurl.com/a43z4) to facilitate the exchange of waste resources. The database is a searchable resource database with the ability to search for resources needed or resources available. It is unclear how widely this database is used, however only a limited number of material sources were listed at the time of writing.

There is a clear need for a national approach to resource exchange, which 'the market' has failed to establish. The Australian and State Governments need to provide leadership in this area to help facilitate, where feasible and practicable, the exchange of waste resources.

Further, it is important to consider the overall environmental impacts of resource recovery and transportation against the local treatment cost. Assessment tools, such as a real-time life cycle analysis calculator, linked with the database, would be very useful. For example, this would be used to assess environmental impact of transportation between source and destination, against the benefits of resource recovery and to allow the overall comparison of options.

3.2.2 Information Exchange

Information exchanges and databases on waste minimisation and resource recovery for consumers, industry, business and governments can be an effective means to share ideas and 'lessons learnt'. Local government has identified[5] a clear need for a web-based information exchange to share case studies, best-practice examples of new implementations of waste management systems and 'lessons learnt'. Sustainability Victoria and EPA Victoria both host some of this information. Local government has identified the need for a single web-based waste and resource efficiency information exchange.

Web-based information exchanges, such as Clearwater (see information box below), are a highly effective tool to enable local government to improve or establish resource recovery tools. However, exchanges require significant resources to establish and maintain, which requires assistance from the Australian and State Governments.

Clearwater – providing an information exchange for industry, local and State Government.

Clearwater, a joint initiative between the MAV and the Stormwater Industry Association of Victoria with funding from EPA Victoria, has developed a web-based information exchange. The exchange aims to bring together the many achievements, lessons learnt and experiences of local government, State Government and industry in stormwater, domestic wastewater and water conservation. More information: www.clearwater.asn.au

Consideration should be given to efficiency and appropriateness of national versus state based exchanges. A national approach would provide a means to share information and 'lessons learnt' between states. Some material would be suitable to certain jurisdictions, while much of the information would be transferable across jurisdictions.

4 GOVERNMENT INTERVENTION

4.1 Market failure arguments

The Issues Paper[6] says that a 'market failure' is the circumstance in which markets do not achieve the best returns for the community on their own. The MAV believes that the market is not adequately providing for the community in managing the negative 'spillovers' of products and services, such as greenhouse gas and toxic emissions, potential water quality issues, odour and amenity issues. The economic bottom line and continued growth are the chief markers and drivers for the market. There will only be slow change towards managing 'spillovers' within business and industry, unless the economic bottom line is likely to be affected or there is regulatory pressure applied. There is a clear case for government intervention to properly deal with the failure of the market.

Appropriate waste management technologies and services offering the best environmental, social and economic results will not eventuate solely through the market. An optimal setting for the development of the most effective waste management and resource recovery arrangements would be a market which takes account of the environmental and social costs. For example, in rural Victoria, where landfill sites are generally low-cost and readily available, there may be only a limited 'business case' for developing large scale composting facilities, even though this may be the best environmental choice. In transition to a more integrated market, governments may need to provide start-up subsidies to allow the development of appropriate technologies for the best environmental outcomes.

4.1.1 Illegal dumping

Illegal dumping is a highly visible and costly example of the market failing. The key items[7] illegally dumped are furniture and white goods, which have reached their end of life. Business and industry have not provided for these products to be recovered and their management falls to local government. In the year 2003-2004[8], 28 Victorian municipal councils determined the cost to their council for managing illegal

dumping and 19 of these also recorded the tonnages collected. The cost to the 28 reporting local governments was $1.82 million and the reported tonnage of illegally dumped material was almost 13,000 tonnes (for 19 councils). In the City of Melbourne alone, over 1,600 tonnes was collected[9]. From the sample of data reported, Sustainability Victoria extrapolated the cost to all of Victorian local government, for illegally dumped material and roadside litter, which is estimated to be in excess of $8 million annually, or around $22,000 a day.

Other costs that are much more difficult to quantify include amenity, public perceptions of safety and anti-social behaviour. Sustainability Victoria recently commissioned a cost-benefit study which is due to be completed shortly that aims to quantify some of these costs.

The City of Greater Dandenong – successful strategies for illegal dumping

The City of Greater Dandenong has developed and deployed a successful strategy for dealing with illegal dumping, in particular around multi-unit dwellings[1]. Greater Dandenong's approach involves regular litter patrols, high visibility black and yellow marking of illegal dumped materials, and strict enforcement. In 75% of cases where materials were visibly marked as "Illegally dumped material – under investigation", they were removed (presumably by the offender, and usually during the night) within 72 hours without further action. In the year 2004-2005, 238 fines worth around $31,000 were issued for illegal dumping. The City of Greater Dandenong estimates that their prevention program has saved council around $200,000 a year. More information: http://tinyurl.com/d5hfl

Four levels of action have been identified[10] to effectively tackle the issue of illegal dumping. These are:

- Increase awareness - provide targeted information on disposal options to those who want to do the right thing (eg. owners and long-term renters), but this alone is unlikely to change the behaviour of others;
- Make it easy to dispose of things - facilities and disposal options need to be readily available and convenient. The issue of service cost may have to be addressed for lower income groups. Again this is only likely to work for those with a propensity to do the right thing;
- Influence and change attitudes - this is a long-term goal to change perceptions that dumping is acceptable. Need to stress that dumping is not socially acceptable and build social/peer pressure to influence behaviour; and
- Enforce/reinforce community stance - highlight that dumping is illegal through a system of penalties and fines, which is well publicised.

The Victorian Litter Action Alliance (VLAA) Litter Champion and the EPA Litter Enforcement Program Officer (see section 5.7 – Litter, for further information) have recently begun work on a best-practice module for reducing and managing illegal dumping. The module will draw together local government case studies and tools from within Victoria, interstate and internationally.

4.1.2 Market power in local government waste management contracts

The resource recovery industry is generally dominated by a small number of very large players, whilst waste collection and disposal is open to a broader range of contractors. Metropolitan areas are generally able to attract sufficient tenders to contract, where there are more prospective service providers. The state of competition varies across the metropolitan area as resource prices fluctuate. The new Melbourne-wide waste management group, incorporating all 30 metropolitan local governments will mean increased market power and economies of scale. These economies of scale will significantly improve the opportunity of developing more efficient recovery options, including additional resource recovery from garbage.

Rural and regional areas are severely disadvantaged in negotiating waste management contracts. Due to the high cost and lower yields, tenders for recycling services may attract only a single contractor, with comparatively higher contract prices.

Negotiating contracts suitable for local government's needs and resources has been assisted somewhat through the development of Model Split Contracts. These model contracts have been developed by Sustainability Victoria in conjunction with local government. The contracts provide a strong basis from which to negotiate effective waste management and resource recovery outcomes. The model contract has proved a very effective tool for local governments to develop their own specific contracts, that otherwise would have been difficult without the in-house expertise or resources. It also provides consistency for local government and contractors across the state, at the same time allowing for regional requirements to be incorporated.

4.2 Institutional and regulatory barriers

4.2.1 Statutory and strategic planning

Local government has identified (through the *Towards Zero Waste Strategy* consultation and the MAV Waste Policy Forum[11]) a clear need for the integration of waste management strategic planning with statutory land use planning. Alignment of statutory land use planning provisions with strategic waste management plans will help to ensure appropriate siting of transfer, resource recovery, and residual waste facilities. Such statutory planning will assist in providing greater certainty to private sector investment, local communities and the planning of waste management and resource recovery services. This task will require amendment of planning provisions as defined by *Planning and Environment Act (VIC)* 1987. In metropolitan Melbourne this task will be greatly assisted by the formation of a single metropolitan wide waste management group. The group will be charged with the implementation of a Metropolitan Waste and Resource Recovery Strategic Plan. Integration of waste management strategic planning and land use planning will help facilitate the development of appropriate resource recovery.

Strategic planning and cooperation facilities between councils and state agencies at a regional scale are essential if Victoria and the nation are to achieve goals of resource efficiency, resource recovery and high-quality waste management services. This scale of planning is necessary to provide regionally appropriate and cost-effective resource recovery and waste treatment facilities.

4.2.2 Institutional barriers

There are a number of institutional barriers to local government, particularly rural and remote areas, implementing optimal resource recovery options. Local government has a series of seemingly ever-increasing and competing priorities. Rural councils are more acutely affected by competing context issues such as lack of professional staff, a low rate base, dispersed and aging populations and maintaining economic viability[12].

The difficulty in attracting and retaining professional staff increases with the greater distance from metropolitan areas. While traditional civil engineers have been equipped to deal with landfill disposal, many require professional development and training in newer resource recovery approaches and behaviour change tools. Local government, in many cases, does not have the capacity or resources to provide or source this training. The Victorian Government is acknowledged for its 'Moving Forward in Provincial Victoria' initiative, which is promoting the opportunities and lifestyles available in provincial Victoria. Part of this package includes a significant investment in services and programs in non-metropolitan Victoria.

The rate base directly affects the financial capabilities of local government to respond to the resource recovery challenge. For example, education is acknowledged as an essential component to implementing and improving resource recovery. However, few rural councils can afford to employ a designated waste or sustainability education officer.

Inter-organisational issues that affect local government include unclear roles and responsibilities of State and Australian government agencies, competing priorities between agencies, and a generally poor understanding of local government by State and Australian Government. It is intended that at a state level, the Victorian Local Sustainability Accord (see: http://tinyurl.com/8h4dl), an initiative between the State government and Victorian local governments, will improve cooperation, communication and partnerships for environmental sustainability. The formation of Sustainability Victoria, a merging of EcoRecycle and the Sustainable Energy Authority, is expected to provide a catalyst for the Victorian Government to clarify which state agencies are responsible for implementation, policy and regulation. This is expected to significantly improve the efficiency of how which local government and state government work together for improved resource use and recovery.

5 POLICY OPTIONS

5.1 Introduction

Governments have a clear role in developing greater resource efficiency and resource recovery. In the past a number of state and federal governments have produced waste policies with targets for waste reduction and recycling. These policies have largely failed due to the absence of fully integrated approaches for regulation, education and economic initiatives. To be successful in reaching the desired goal of better resource use, a combination of tools must be used. The range of policy tools must also be deployed with a clear acknowledgement and understanding of the capacities of different regions to respond.

Policy tools need to be applied along the entire resource life-cycle and must not rely on the end-of-pipe solutions, such as increasing the reach and effectiveness of local government kerbside recycling collections.

5.2 Key performance indicators and target setting

The Victorian Government recently released *Sustainability in Action: Towards Zero Waste Strategy (TZW)*, which sets a vision for Victorian resource recovery and waste management through to the year 2014. *TZW* sets non-binding targets and key performance indicators for the commercial, industrial and local government sectors. While these targets are non-binding and are somewhat ambitious, Sustainability Victoria has sought to find a balance between the achievable and the aspirational.

While targets and key-performance indicators are important for direction and goal-setting, it is important to recognise different regions have differing abilities to reach the overarching goals. For example, in *TZW* rural and regional local governments are allowed to develop their own targets contributing towards the goal of 'towards zero waste' based on their capabilities, rather than the same targets as metropolitan areas. Resource recovery and waste management targets must only be set after assessing the total environmental, social and economic costs of different options within the local context.

The idea of moving 'towards zero waste' is as much about the goals, as it is about beginning a shift in the perception held by the community of 'waste' towards 'resources'. Education is crucial to assist a shift in perception and attitudes towards seeing waste as lost resources, rather than an inevitable result of everyday life.

5.3 Whole of society approach to recycling

Victoria is one of Australia's leading recycling states. In 2003-2004, 53 per cent of Victoria's waste was recovered for recycling or reuse, however, this is countered by a 60 per cent rise in waste generation over the last decade[13]. Victorian local government has been highly successful in developing a comprehensive system of kerbside recycling. The benefits have flowed to the entire community through reduced raw resource use and reduced pollution, yet it is local government that has borne the financial burden of this service.

City of Greater Geelong – introduction of new three-bin kerbside system

In May 2003 the City of Greater Geelong completed the introduction of a new residential kerbside recycling (garden organics and commingled) and waste collection system. Using a strategic and consultative process, Geelong has achieved a state-leading 57.7% (by weight) recovery rate, some 24% more than the State average. There has also been a 55% reduction in street litter and an 11% increase in community satisfaction, despite a 50% increase in the cost to residents.

Sustainability Victoria as part of the development of *TZW* carried out a triple bottom line assessment[14] of 16 different scenarios of resource recovery and waste management. The assessment suggested a 'best' option, based on the triple-bottom-line analysis of each of the options, for managing solid waste in Victoria. The 'best' option involves building on the existing recyclables source separation with open composting and mechanical aerobic treatment of residual materials, along with assertive diversion of commercial, industrial and demolition streams. The preferred option is only able to fully function in a large metropolitan centre with its economies of scale and with government financial support. For example, new waste technology, such as the integrated UR-3R facility in Sydney, has been assessed by a third party[15] to provide a net triple-bottom-line (environment, social and economic) benefit over landfill in Victoria by around $90-$100 per household. Currently, on purely economic terms, this technology is dearer than landfill by approximately $20-$30 per household, making it uneconomical. The full cost of disposal options must be made clearer through internalised costs.

For rural and regional areas, improved life cycle analysis and triple-bottom-line tools providing region-specific information are essential to selecting the 'best' resource handling and treatment options. This information must be available for rural and regional communities to assess their waste management options, which may in some cases determine that disposal to landfill or conversion of plastics to fuels, are the environmentally and economically preferred options. Rural and regional local governments, where landfill space is readily available and can be satisfactorily managed, are unsure that the most cost-effective (social, environmental and economic) waste management policies are being made for their circumstances. The full environmental costs and benefits of recycling or otherwise must be demonstrated.

The cost of resource recovery must be more equitably shared between consumers, industry, business and governments. The waste hierarchy, enshrined in the Victorian *Environment Protection Act* 1970, puts avoidance at the top of the waste hierarchy. This has largely been ignored by business, industry and consumers. Products and services must be designed to limit the generation of waste and use resources in the most efficient manner, as well as allowing for easy disassembly for recycling.

5.4 Pricing measures

Local government is at the end of the product lifecycle and bears the majority of the cost for resource recovery and ultimate disposal. While residents of a local government area are also consumers, the two societal roles are not necessarily directly related in their needs and wants. Victorians are some of the best kerbside recyclers in the country, yet we are also generating increasing amounts of waste. The increased burden of waste and recyclables on the kerbside recovery and waste systems places increasing stress upon local government and flows through to higher rates and charges. Stronger pricing signals need to be provided to enable consumers to make the 'right' choices at the time of purchase. The 'right' choices are those that have the lowest overall environmental, social and economic cost. Presently imported products using virgin stock and transported thousands of kilometres are often less expensive, in dollar terms, than a locally produced 100 per cent recycled product. The locally produced product is likely to have a lower environmental cost and greater social benefit, yet to the consumer this is not apparent through ticket price and fair comparison cannot be made between products. As a local government resident, the consumer will contribute through their rates to the disposal of the product at the end of its life, but may not make the link between their consumption choices and their rates. The industries producing the products contribute little apart from taxes and general waste disposal charges.

Local government uses a number of tools to encourage residents to recycle where possible, including pricing measures. In many metropolitan local government areas residents are able to increase the size of their recycling bin at no additional charge. Yet to request a larger waste bin incurs an additional charge. For example, in the City of Port Phillip the standard waste management system consists of a 120 L recycling bin and a 120 L waste bin. Residents can get a larger (240 L) recycling bin at no extra cost. However, should they want a larger (240 L) waste bin there is $120 annual surcharge applied, a smaller (80 L) bin is available which attracts a $30 annual rate rebate. Provision is made for very large families or those with medical conditions, where a waste bin may be provided at no additional charge. These pricing measures signal to residents that recycling is desired and waste is undesirable.

In the United Kingdom a number of local governments have introduced pay-by-weight systems which allow direct charging to residents per kilogram of waste generated. This type of system directly rewards those recycling higher proportions of their household waste, and penalises the wasteful. Care must be taken to ensure socio-economic

allowances are made to prevent disadvantage. The City of Melbourne had a short-lived trial of a pay-by-weight system in the early 1990s. At the time the technology was expensive and required extensive modification to collection trucks, and little information could be used from the trial. New technology is more affordable and is able to be more easily retrofitted to existing equipment. The relative economic affordability of disposal of waste to landfill has meant that pay-by-weight systems were not sound investments, although with increasing landfill levies and costs over time this may change.

ECO-Buy – encouraging and supporting the 'green' and recycled product market.

The MAV hosts two joint green purchasing programs: ECO-Buy Local Government and ECO-Buy Business. The key objectives of ECO-Buy Local Government and ECO-Buy Business programs are to: motivate environmental purchasing and encourage the sustainable use of resources; increase awareness of range and quality of green products; support sustainable long-term markets; and create local government and business networks committed to green purchasing.

ECO-Buy Local Government is a joint initiative of Sustainability Victoria, the Victorian Greenhouse Strategy (Department of Sustainability and Environment), and the MAV. The ECO-Buy Business program was recently created as part of the State Government's Commonwealth Games Environment Program, with Toyota Australia a foundation member.

More information: www.mav.asn.au/ecobuy

The Victorian State Government places a levy on all waste going into landfill, which is passed on to parties disposing material to landfill, including local government. The landfill levy is charged at a differential rate for municipal waste, industrial waste and in urban and rural areas. The landfill levy is designed to provide a disincentive for disposing materials to landfill. The Victorian experience would suggest landfill levies are not a successful method of increasing resource recovery. Local government must manage the waste of inefficient and poorly designed products and pay the landfill levy, which is felt especially hard in rural areas where other resource management options are expensive. A more effective and equitable means would be to levy at the top of the production and supply chain, based on the costs of resource recovery or disposal. This would help to more equitably distribute costs of disposal between business, industry, consumers and governments.

5.5 Producer responsibility for waste

The MAV firmly suggests it is time for producers to contribute more equitably to the management of recovery and disposal of society's wastes. The pressure must be lifted from local government to recover the costs of dealing with waste as currently paid for by its rating system. As detailed above, it is clear the 'market' has failed in dealing with the effects of the negative environmental and social impacts of our economic system.

Since the introduction of the first national Packaging Covenant (NPC) in 1995 the Australian Government has been attempting to assist targeted, priority industries to pursue their own voluntary product stewardship arrangements. Industry has generally been very slow to develop workable schemes, with the notable exceptions of the television and tyre industries. Unfortunately progress on developing voluntary and co-regulatory schemes has slowed with these industries, in particular with the tyre industry which has had a voluntary stewardship framework on the table since 2002, yet little has been done to implement it.

The cohesiveness of an industry has a direct effect on its ability to develop voluntary stewardship schemes. For instance the computer industry has some excellent recovery trials, such as the Byteback program (see information box below), yet these are fragmented and not universally accessible. A national approach needs to be implemented to recover priority wastes, such as computers.

As demonstrated through the *Independent Local Government Evaluation of The National Packaging Covenant* (Meinhardt Infrastructure and Environment) and National Packaging Covenant Council - Evaluation of the Covenant (Nolan ITU), the first NPC was largely ineffective in reducing the environmental impacts of packaging. Some gains were made in industry resource efficiency and in developing a kerbside recycling system. Two of the main failings of the first Covenant were the lack of clear targets and the failure for any enforcement of the regulatory component. The renewed Covenant has clear targets, and therefore greater support, however the real test is for enforcement of those in the packaging industry not meeting the covenant's goals.

Byteback – Victorian local government working with industry to recover obsolete computers

- The Byteback program is a joint program between the City of Boroondara, Sustainability Victoria, Hewlett-Packard, Sims E Recycling and KS Environmental to recovery resources from computers and peripherals. In the first four months of the program (from June 2005) 78 tonnes of equipment was received, with 97% of materials able to be recovered. The trial has shown that the estimates of volumes, ages and orphan products made by the computer industry are overestimated by 50-300%. More information: http://tinyurl.com/8wx7o

The Australian Government must set hard deadlines for those industries currently developing voluntary schemes. It must also produce and implement full-regulatory frameworks for industries and sectors that have not made significant headway, as well as those that do not meet deadlines. Multiple, complementary policy and regulatory tools must be used to obtain the most effective resource recovery outcomes, while equitably sharing the cost across governments, industry, business and consumers.

Regardless of the types of producer responsibility schemes used, it is crucial that education and behaviour tools are also deployed

simultaneously. For example, the Mobile Phone Industry Recycling Program has been running since 1999 and has collected around 500,000 handsets, a small percentage of the estimated 12 million handsets that remain in cupboards and drawers around the country[16]. Recognising that the first program essentially failed, the scheme has recently been relaunched as MobileMuster with improved education materials, branding and promotion, although with a very conservative target of 12% recovery.

5.6 Regulation of landfill and other waste management facilities

The standard of landfill siting, design and management has increased dramatically over the last ten years. This has been helped through the development of EPA Victoria's *Best Practice Environmental Management: Siting, Design, Operation and Rehabilitation of Landfills*, which is linked to the Victorian landfill policy framework. Assistance has been given to local government to progressively close those landfills that do not meet today's environmental standards. A recent requirement was introduced for all landfill operators to provide financial assurance to cover potential liabilities associated with remedial actions, post-closure remediation and ongoing monitoring. It has been acknowledged by EPA Victoria that while local government exists in perpetuity and cannot abandon a landfill, they must still provide a financial assurance. For rural councils this is a significant financial burden and is seen be some to by unnecessary diversion of funds away from important, current projects.

The requirement to provide this financial assurance demonstrates a further example of local government bearing the present and future costs of waste disposal. To address this producers of non-recyclable products must contribute to the cost of landfill management.

Consideration should be given to simultaneously providing for the recovery and recycling of household level hazardous material and banning these from landfill. Household-level hazardous materials such as fluorescent lighting tubes, televisions, computers and batteries, contain toxic materials like mercury, lead and cadmium. It is imperative for business and industry to contribute to the recovery of these items. Tools such as advanced recovery fees where the cost of recovery is embedded in the price of the products may prove effective in facilitating this process.

5.7 Litter

Sustainability Victoria has commissioned a study to look at the cost-benefit of litter and management strategies. The preliminary report estimates the cost of litter to Victorian local government is approximately $96 million. The producers of materials that become litter, because they have no apparent value, contribute some funds to manage the problem. The Beverage Industry Environment Council (BIEC) is acknowledged for its contribution to litter education campaigns and litter research. The packaging industry, whose products

make up the largest percentage (by volume) of litter, will contribute $3 million per annum over the next five years through the National Packaging Covenant, part of which will go to projects related to litter. However, this contribution is very small compared to the annual cost to Victorian local government.

The MAV is working collaboratively with the Victorian Litter Action Alliance (VLAA) for better litter outcomes in Victoria. VLAA is the peak body for litter management and prevention in Victoria and aims to provide a coordinated approach to preventing litter in Victoria across state and local government, industry and community sectors. There are thirteen members of the Alliance including Sustainability Victoria, EPA Victoria, Melbourne Water, Parks Victoria, VicRoads, a number of industry bodies, and the MAV. VLAA is highly-valued as an enabling agent for the management and reduction of litter across multiple state agencies, local government and non-government agencies.

VLAA Litter Champion – building the litter reduction and management capacity of the local government sector

The three objectives of the Litter Champion project, initiated in 2002, are to:

- Develop a best practice litter prevention kit (modules developed include building sites, cigarette butts, dog poo, with a module currently being developed on illegal dumping);
- Marketing of the kit to ensure widespread uptake of best practice programs;
- Raise the profile of the litter issue across the state

More information – www.litter.vic.gov.au

Container deposit systems and legislation (CDL) are often suggested as an effective tool for reducing litter, in particular highly visible beverage packaging. CDL is said to reduce litter by attaching a value to the packaging, where people are less likely to throw away the item if it has value. CDL systems around the world have raised funds for recycling collection and infrastructure, changed people's packaging disposal behaviour, and increased recovery rates[17].

The Californian deposit system uses stand-alone reverse vending machines at activity centres, which people visit as part of other activities, which is a very cost-effective model. There have been a number of studies on CDL in Australia, but have generally been flawed by their assumptions, such as how they model cost distributions, trips to return containers and using a single, outdated model of CDL. The model that has been used is very similar to the South Australian system which requires retail space with associated loss of trading space and a manual system. Whereas a Californian-style, automated, stand-alone system is likely to produce very different outcomes. Further work needs to be done on how different models of CDL would interact with existing kerbside systems and the potential benefits for packaging consumed away from home.

5.8 Education programs

Education is an essential component of an overall approach to improved resource efficiency, resource recovery and waste management. Education needs to be provided to all spheres of our society – business, industry, governments, schools and communities. Effective waste education must provide for different learning styles and cultural understandings. For example, Environment Victoria (non-government organisation), runs a program called 'Nha Dep' or 'Beautiful Home' in the western suburbs of Melbourne specifically targeting the Vietnamese community. The sustainability program is designed around the cultural understandings of that community and provided in Vietnamese and English languages.

The Australian Government's National Action Plan for a Sustainable Future is recognised as providing a step in the right direction in effective, Australia-wide sustainability education. The national review[18] of the plan in 2004 found that sustainability education requires a greater financial contribution from governments and a whole-of-government approach if it is to be successful.

City of Darebin – Sustainable Homes Program

The City of Darebin, in association with the Western Region Waste Management Group, is providing free workshops and home tours to help the community to become more sustainable. The workshops cover areas such as water, energy, waste reduction and composting, organic gardening and sustainable transport. The program is a great example of local government working within their communities to actively work towards greater environmental sustainability. More information - http://tinyurl.com/b2a35

In Victorian local government waste education is undertaken in a collaborative way between Regional Waste Management Groups' Regional Education Officers (REOs) and, where available, council education officers. The REOs provide crucial support and a resource to local government in their waste education efforts. Waste education is limited by available resources, with many councils unable to fund their own education officers. Greater assistance must be provided for these important positions.

5.9 National coordination of policies

In principle Victorian local government supports the national coordination of policies. However, policies must allow some flexibility for the most appropriate solutions to be developed in regions based on different economic, social and environmental capabilities and resources.

The national coordination of policies is important to allow business to operate effectively between states and to prevent dumping of wastes or products across state borders. This has been a particular issue with disposal of wastes to landfill. Local government is aware of instances where contractors have disposed wastes across a nearby state border

where there were lower charges for landfill disposal. This situation may be prevented by regionally based landfill fees.

Federally coordination of policies is crucial where the products and services cross state borders and a consistent approach is required, such as extended producer responsibility and advanced recovery fees. For example, the Australian Government's DrumMuster program and the National Packaging Covenant. Frameworks such as the National Packaging Covenant require consistency between states to allow for effective enforcement where necessary.

6 CONCLUSION

Victorian local government has been bearing the costs of managing the community's wastes of consumption for a long time. It is now critical that a resource recovery and efficiency approach is taken that encompasses all aspects of the product and services lifecycle. The cost of resource recovery and waste management must be equitably shared between consumers, business, industry, federal, state and local governments.

Resource recovery and waste management options must be considered and chosen based on their social, environmental and economic costs and be regionally sensitive.

The MAV looks forward to working with the Australian Government to improve resource recovery and waste management outcomes.

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