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Review of the NSW Waste and Environment Levy

Final Report

This report has been prepared for the NSW Environment Protection Authority (formerly part of the Office of Environment and Heritage).

June 2012

Disclaimers

Inherent Limitations

This report has been prepared as outlined in the Introduction Section. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

References to 'review' throughout this report have not been used in the context of a review in accordance with assurance and other standards issued by the Australian Auditing and Assurance Standards Board.

*The findings in this report are based on a qualitative study and the report reflects a perception of the NSW waste levy, but only to the extent of the sample surveyed being the Environment Protection Authority (**EPA,** formerly the NSW Office of Environment and Heritage) approved representative sample of stakeholders. Any projection to the wider stakeholder is not possible based on the sample consulted.*

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, EPA consulted as part of the process.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

The findings in this report have been formed on the above basis.

Third Party Reliance

This report is solely for the purpose set out in the Introduction Section and for EPA's information, and is not to be used for any other purpose.

This report has been prepared at the request of EPA in accordance with the terms of the engagement contract between KPMG and EPA dated 7 February 2012. Other than our responsibility to EPA, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

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Executive Summary

Waste management policy is fraught with complexity. Stakeholders have competing interests across a wide range of issues which policy makers must attempt to balance. Policy objectives are further complicated by a lack of uniformity in approach between national, state and local government area (LGA) jurisdictions as well as difficulties in policy enforcement in many instances.

The New South Wales (NSW) Waste and Environment Levy (the levy), which is legislated under the *Protection of the Environment Operations Act 1997*, is the key policy used in NSW to

> *...drive waste avoidance and resource recovery by providing an economic incentive to reduce waste disposal and stimulate investment and innovation in resource recovery technologies.*

The levy and its application evoke strong and diverse views amongst waste industry stakeholders including processors, recyclers and local councils, who have raised a number of key concerns since the levy's inception.

In response to these concerns, on 17 January 2012 the Minister for the Environment the Hon. Robyn Parker announced that KPMG had been engaged to undertake an independent review of the operation of the levy and to provide recommendations to the NSW Government in response to issues raised in stakeholder consultations consistent with the levy's objectives to reduce waste generation and increase resource recovery.

In accordance with the terms of reference of this review, KPMG has considered the current barriers and opportunities to achieving waste policy objectives arising from the levy in relation to four key areas:

- households;
- the recycling industry;
- illegal dumping; and
- the use of levy funds to assist in achieving policy objectives in particular through investment in waste infrastructure.

Noting that there has been extensive research work conducted across numerous issues pertaining to waste in recent years, a literature review was used to identify recent trends, target policy areas and key challenges. An appropriate framework was then developed to guide the extensive consultations held across NSW.

In addition to 12 stakeholder forums, 23 targeted consultations and three industry presentations, 104 written submissions were received and reviewed.

Key issues and recommendations

KPMG notes that stakeholder views may at times be conflicting. For example, some regional councils argued that constituents could not afford the levy and that the levy contributed to illegal dumping, while many recyclers argued for a higher levy to

increase diversion rates and to assist in investment in new technologies and infrastructure.

In response to the core issues raised during the course of the review, and having regard to previous research and most recent data, KPMG has developed a number of recommendations in relation to the operation of the levy for consideration by the NSW Government. In developing these recommendations, KPMG recognises that the Government faces a number of difficult choices and competing objectives.

Core issues and recommended actions are summarised here. A full discussion of the issues raised through this review is contained within the main body of this report.

Issue: Household organic waste

There is a need to significantly increase diversion rates for food and organic waste from household residual bins.

Recommendations

The NSW Government should consider supporting an increase in the recovery of organic waste and dry recyclables from households using a three-pronged approach.

1. The NSW Government, together with industry and councils, should develop best practice approaches for household collections to improve source separation at the household level. For example, some councils offer a lower fee for households opting for a smaller residual waste bin.
2. The NSW Government, together with industry and councils, should develop education and community engagement programs to support household participation in adopting best practice management systems. For example, materials/media advising what waste goes in which bin.

   A portion of the waste levy revenue should be used to establish a funding pool for *Local Government Programs*. The funding pool should be non-contestable and fund the delivery of education and community engagement programs that are individually tailored by local councils for their local communities.
3. Support investment in resource recovery facilities to improve the removal of organic waste and dry recyclables from household bins.

   A portion of the waste levy revenue should be used for establishing an *Infrastructure Fund*. The pool would provide funding via a competitive grant process for infrastructure for metropolitan and regional councils and industry.

Issue: Recycling

Metal and paper recyclers argue that residual waste from the recycling process should be exempt from the levy, as this is waste that cannot be recycled further. The counterargument posits the levy provides greater incentive to find new ways of recycling residual waste and that exemptions may be exploited.

Recommendations

4. Support initiatives and programs to improve the recovery of waste from the commercial and industrial sector.

   A portion of the waste levy revenue should be used to establish a Recycling Innovation Fund.

5. Investigate the use of the Recycling Innovation Fund to support a reduction in metal and paper recyclers' residual wastes.

Issue: Use of levy funds

The levy is currently used to fund both general purpose programs as well as a range of waste and environmental programs. At the LGA level, the Waste and Sustainability Implementation Program (WaSIP) is the most visible form of hypothecated funding, attracting around 15% of levy revenues. WaSIP funding entails significant compliance obligations and is largely short-term focussed. Given current NSW budget constraints, KPMG notes that significant changes in the use of levy funds are unlikely to occur within the current forward estimate period.

Recommendations

6. Up to 2015-16, any levy revenue received by the NSW Government that exceeds the current forward estimates should be directed towards additional waste programs. After 2015-16, the NSW Government should look at directing a greater percentage of levy revenue to improve waste management and increase recycling.

7. The WaSIP program should be replaced and at least the equivalent funding be made available to local government through funding from the waste levy revenue for waste infrastructure, education and program support.

   Local Government should have access to both a non-contestable *Local Government Programs Fund* and a contestable *Infrastructure Fund.*

Issue: Waste infrastructure

Additional waste infrastructure is needed in NSW. The Richmond review identified that NSW needs approximately 16 new organics processing facilities, 13 upgraded organics processing facilities and two new mixed waste processing facilities for domestic waste at current levels. Additionally, by 2036, NSW will require 79 new waste processing facilities for C&I waste.

Recommendations

8. The NSW Government, together with industry and councils, should finalise regional waste and resource recovery infrastructure strategies that outline the investment required to meet the State Recycling Targets.

   A portion of the waste levy revenue should be used for establishing an Infrastructure Fund. The pool would provide funding via a competitive grant process for infrastructure for metropolitan and regional councils and industry.

9. Establish an independent expert panel to facilitate infrastructure investment in relation to planning, procurement and delivery of infrastructure.

Issue: Illegal dumping

There is no conclusive evidence that links the levy to illegal dumping, nevertheless illegal dumping is a problem for many NSW LGAs. Initiatives to date have had very limited success while prosecution costs are often prohibitively high. Councils strongly support the use of Regional Illegal Dumping (RID) Squads.

Evidence collected by OEH indicates that illegal dumping of asbestos occurs predominantly by households renovating on a small scale. Rebates for households appropriately disposing of asbestos may assist in reducing this incidence of dumping.

Recommendations

10. Implement a State-wide Illegal Dumping Strategy in consultation with industry and local government.

    A portion of the waste levy revenue should be used to establish a pool of funding for *Illegal Dumping* to fund the development of illegal dumping guidance, prevention infrastructure, and education and enforcement programs in accordance with the State-wide Illegal Dumping Strategy

11. Increase local government, public land managers and the community's participation in Regional Illegal Dumping programs from the *Illegal Dumping* fund.

12. Introduce a pilot program of accessible drop off facilities for problem waste and develop a statewide education program in conjunction with industry and local councils to improve awareness and disposal of problem waste.

    This should be reviewed after two years and if successful, then further drop off centres should be rolled out across all of NSW.

13. Introduce a pilot program providing a levy rebate to home renovators disposing of small, non-commercial quantities of asbestos, provided they have attended a council education session and dispose of the product in the required way. This should be funded from the Illegal Dumping fund.

Issue: Energy from waste policy

Australia is one of only a few developed nations that does not have a well established energy from waste industry. This is mainly due to historic environmental issues associated with energy from waste facilities together with the cost of new technologies that meet required standards.

Recommendation

14. Develop a new energy from waste policy and continue to investigate and provide guidance to industry on new technology available to increase waste diversion.

Issue: A price on carbon will increase the cost of landfill waste over and above the levy

Landfill operators with emissions exceeding 25,000 tonnes CO_2-e per annum will be liable to offset emissions resulting from new waste deposits after 1 July 2012, and for a period of up to 30 years. This liability will add to the cost of waste sent to landfill however given the complexity of emissions from differing waste streams and uncertainty around the carbon price after 2015, this cost has yet to be accurately estimated. Further, landfill operators will be able to mitigate emissions through:

- capturing and destroying methane;
- creation of carbon offset credits under the Carbon Farming Initiative by capturing/destroying emissions from legacy waste; and
- using methane to generate electricity and earn renewable energy certificates (RECs)

Additional research by KPMG[1] around price elasticities of waste charges suggests that, should the above strategies not be adopted, a carbon price is likely to provide further incentive to increase diversion rates.

The complexity and uncertainty inherent in the carbon price as it pertains to landfill operators, however, makes an appropriate policy response by the NSW Government extremely difficult.

Recommendation

15. The NSW Government should not adjust the scheduled waste levy rates in relation to the Federal carbon price.

Issue: The application of the levy across NSW is inconsistent

Historically the levy has been applied to areas that are highly populated and therefore produce a high proportion of waste. However there are still many areas of NSW that are generating or receiving large volumes of waste and yet are not attracting the levy.

In a small number of low population regions, economies of scale required at landfill facilities mean that the levy has a disproportionately large impact.

Recommendation

16. The levy should be applied across the whole of NSW, with small regional landfills receiving <5,000 tonnes of waste per annum remaining exempt from the levy.

Issue: Landfill operator operational requirements

It is acknowledged that landfill operators may use clean fill for legitimate operational purposes, but that compliance costs associated with monitoring and reviewing such operations on a site by site basis would be prohibitive.

[1] OECD 2006 The Political Economy of Environmentally Related Taxes

Recommendation

17. The 10% deduction on clean soil be reintroduced for all landfills.

Implementation of the above recommendations is likely to assist the NSW Government to improve waste diversion targets.

1 Introduction

On 17 January 2012, the Minister for the Environment, the Hon. Robyn Parker MP announced an independent review of the New South Wales (NSW) Waste and Environment Levy (the levy). The levy evokes strong and diverse views amongst the waste industry and local councils, and a number of key concerns have been raised regarding the manner in which the levy is applied and some of its unintended consequences. This review was identified as a priority action under Goal 23 in the report *NSW 2021: A plan to make NSW number one*, and presents an opportunity for the views and concerns of stakeholders to be addressed.

The levy is a market-based instrument legislated under the *Protection of the Environment Operations Act 1997* (the Act), initially introduced for the Sydney Metropolitan area (SMA), but subsequently extended to certain regional areas. According to the Act, the key objective of the levy is to:

> *...drive waste avoidance and resource recovery by providing an economic incentive to reduce waste disposal and stimulate investment and innovation in resource recovery technologies.*

Funds raised by the levy are used for a variety of purposes, including supporting targeted waste reduction and recycling programs. Progress reports[2] on the Waste Avoidance and Resource Recovery Strategy show that recycling in NSW has increased significantly since the introduction of the levy[3] in 1971, but that the municipal and commercial and industrial waste stream diversion rates are still significantly below target levels (see Section 2 for more detailed discussion).

The NSW Government is now conducting a full review of the levy to consider its effectiveness in achieving the above objectives.

KPMG has been engaged by the Office of Environment and Heritage (OEH) to consider the operation of the levy and provide recommendations to Government, with reference to its objectives for reducing waste generation, increasing resource recovery from waste and providing revenues to support delivery of priority Government services.

In particular, KPMG assessed the current barriers and opportunities arising from the levy in relation to four key areas:

- households;
- the recycling industry;
- illegal dumping; and
- the use of levy funds to assist these aims, especially through investment in waste infrastructure and education programs.

To complete the review, KPMG has:

- reviewed independent reports and data provided by OEH;

[2] NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy progress report: 2010, February 2011
[3] NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy progress report volume 1, February 2011

- chaired consultations sessions with a variety of local councils, and key industry and community stakeholders;
- analysed data and findings from the consultations; and
- developed this report outlining key policy recommendations related to the terms of reference of the review.

1.1 Structure of the report

The structure of this report is as follows:

- Section 2 provides a background and an overview of the NSW waste levy;
- Section 3 presents a summary of the process undertaken by KPMG to conduct the review;
- Section 4 provides a summary of the key issues identified; and
- Section 5 provides a list of recommendations.

2 Policy overview

2.1 Background

NSW faces a significant challenge in managing the waste produced by households, business and industry. The volume of waste produced is increasing as a result of population and economic growth, where economic growth is translating to higher consumption. There are several implications associated with waste disposal, including:

- the impact that waste can have on the environment, including an increasing need for land for landfill, increased Greenhouse Gas (GHG) emissions, increased use of water, and toxic waste not disposed of correctly;
- the loss of useful resources that may still be embodied in waste; and
- the impact that waste can have on the amenity values of surrounding areas.

For these reasons, the NSW Government has long had a strategy of trying to reduce waste sent to landfill, most recently captured in the *NSW Waste Avoidance and Resource Recovery Strategy* (the WARR strategy). The WARR strategy provides a framework for reducing waste and better managing resources. The priorities outlined as part of this strategy are:

- increasing recycling and use of secondary resources;
- preventing and avoiding waste;
- reducing toxicity in products and materials; and
- reducing litter and illegal dumping.

The levy is a key tool for driving reduction in waste sent to landfill. It is therefore important for the delivery of the WARR strategy that the levy be an effective tool.

As part of the WARR strategy, the OEH is required to report progress on the implementation of the strategy every two years, with the most recent report published in February 2011. This facilitates the continual reflection of the effectiveness of the strategy, including the waste levy.

This continual reporting process has highlighted key issues that need to be reviewed again, with the aim of providing recommendations in order to address these issues and improve the effectiveness of the waste levy.

2.2 The economics of waste

Waste is a significant policy issue in developed countries. The amount of waste produced is increasing as population growth increases along with the rising wealth and consumption of individuals. The majority of waste is disposed of in landfills which, apart from the space required, can cause undesirable environmental and social outcomes.

Waste disposed at landfills results in a number of externalities including:[4]

- the breakdown of organic material emitting gas which contributes to global warming;
- emitting small amounts of other air pollutants;
- leaching of waste leading to contamination of soil, groundwater and/or surface water; and
- impact of noise and odours on local amenity (also known as 'disamenity' impacts).

The cost associated with these externalities varies across landfills, with the exact nature and severity of externalities difficult to measure. It follows then that the cost of sending waste to landfill does not fully reflect the environmental and social consequences of doing so. Both producers and consumers often lack sufficient incentives to reduce the amount of waste being generated, and to ensure that what waste is generated has limited environmental impact.

Market failure[5] provides justification for Government intervention in the market, so as to bring consumption in line with marginal social cost, and deliver economic efficiency. In the case of waste, market failure arises from failing to price in the environmental externalities of generating waste. This leads to economically inefficient production and consumption patterns, and excess waste being produced and disposed of.

Governments usually have a number of policy instruments that can be used to address externalities and in the case of NSW, the levy is a key tool for driving the reduction in waste sent to landfill.

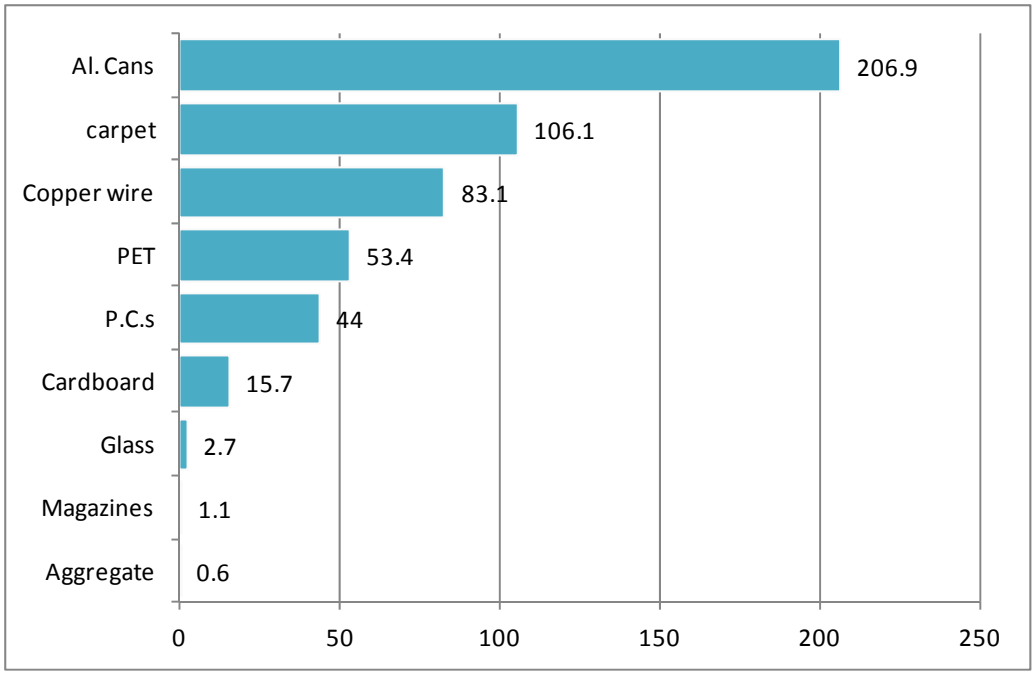
Waste sent to landfill represents the potential loss of useful resources. Further, using secondary recycled materials in manufacturing may save energy, water and greenhouse gas emissions. For example, a joint study[6] by ICF Consulting and the U.S. Environmental Protection Agency reports:

> *Products that enter the waste stream have energy impacts (and associated GHG emissions) at each stage of their life cycle. These stages include: the acquisition of raw materials, the manufacture of raw materials into products, product use by consumers, and product disposal. Waste reduction practices, such as recycling and reuse, reduce the demand for raw material and energy inputs to the manufacturing stage of the life cycle, thereby conserving energy and reducing GHG emissions.*

The report estimated energy savings resulting for a range of waste products diverted from landfill to recycling, as illustrated in Chart 2-1.

[4] Schollum, P., 2010, *Evaluation of the social optimum for the Landfill Levy in WA*, CEED Project number 09/002, University of WA
[5] Market failure refers to the inability to capture the cost of the externalities in the price of landfill.
[6] Choate, A et al, 2005, *Waste management and energy savings: benefits by the numbers,* Washington

Chart 2-1: Energy Savings (Million Btu per Ton Recycled)



Source: Choate et al (BTU = British Thermal Units)

2.3 Waste disposal and recycling in NSW

NSW residents and industry recycled approximately 60 per cent of waste generated, or about 9.5 million tonnes, in 2008–09. This is an increase of 15 percentage points from 2002–03 when the WARR strategy was established.[7] Over the same six-year period, waste disposal increased by a modest 3.5 per cent or 0.2 million tonnes. This means that since 2002–03, recycling has absorbed almost all of the 38 per cent increase in materials entering the waste management system in NSW.[8]

Waste is made up of three distinct streams:

- Municipal Solid Waste (MSW) – waste collected by, or for, local councils including solid waste from households including recycling, organics and waste, and solid waste from municipal parks and gardens and other public places;
- Commercial and Industrial (C&I) waste – waste arising from a wide range of commercial and industrial sectors and from both small and large businesses; and
- Construction and Demolition (C&D) waste – waste that arises from construction, refurbishment or demolition activities.

[7] NSW Office of Environment and Heritage, Reducing waste: Implementation strategy 2011-2015, February 2011
[8] Ibid.

NSW 2021 adopts the WARR strategy waste diversion[9] targets for each waste stream to be achieved by 2014. The progress towards waste diversion rates varies between the different waste streams, as shown in Table 2-1 and Figure 1.

MSW disposed to landfill has decreased by over 10 per cent[10] despite population growth of 9 per cent in NSW and a 30 per cent increase in household final consumption expenditure (between 2000 and 2009).

C&I waste sent to landfill has declined by almost 20 per cent despite an increase in State Final Demand of over 30 per cent.[11]

Conversely, C&D waste disposed to landfill has increased by nearly 50 per cent since 2000. However, the C&D waste is still on track to reach its 2014 target of 76 per cent,[12] as shown in Table 2-1. This contrasts to MSW and C&I streams that still have significant progress to make to achieve their targets.

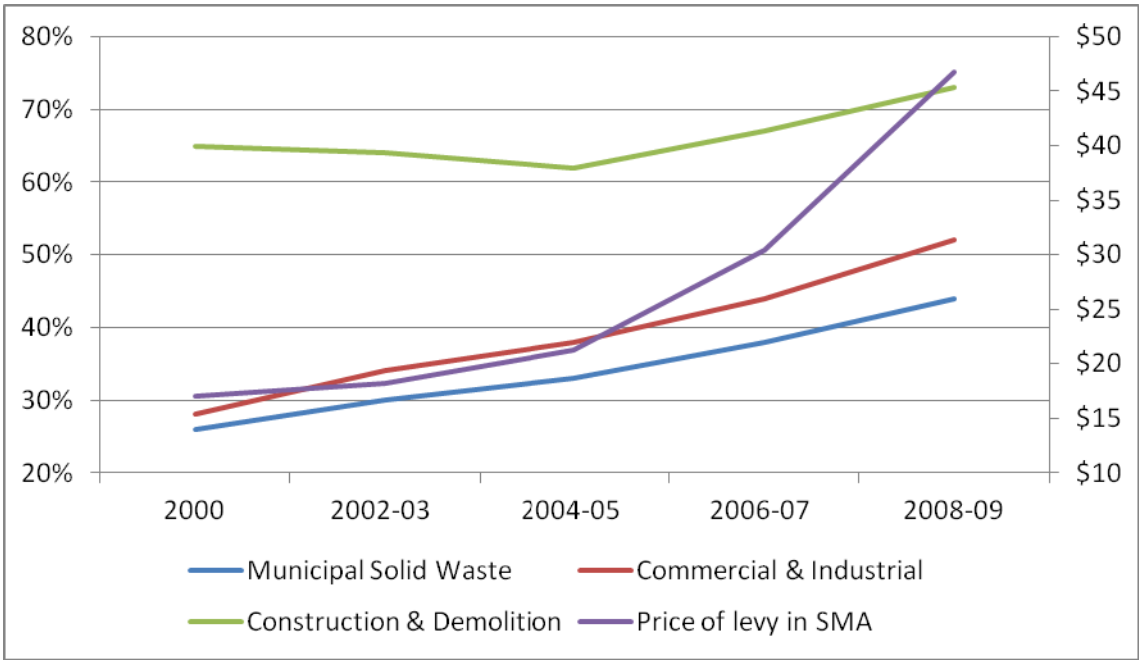
Table 2-1 – Progress towards waste diversion rates

Stream	2000 baseline	2002-03	2004-05	2006-07	2008-09	2014 Target
Municipal Solid Waste	26%	30%	33%	38%	44%	66%
Commercial & Industrial	28%	34%	38%	44%	52%	63%
Construction & Demolition	65%	64%	62%	67%	73%	76%
Overall	n/a	45%	46%	52%	59%	n/a
Tonnes recycles (m)	n/a	5.3	6.0	8.0	9.5	n/a

Source: NSW Office of Environment and Heritage, Reducing waste: Implementation strategy 2011-2015, February 2011

[9] Waste diversion is the percentage of waste generated that does not go to landfill.
[10] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.
[11] Ibid.
[12] Ibid.

Figure 1–Waste levy against waste diversion rates



Source: NSW Office of Environment and Heritage and KPMG analysis

Whilst there are specific issues related to each waste stream that are impeding progress towards the 2014 targets, the 2010 Richmond Review[13] explained the need for a unified approach to tackle the fundamental issues in the waste sector. These include enhancing and consolidating the WARR strategy, developing a whole of Government waste infrastructure strategy, and developing well targeted and funded education campaigns.

2.4 NSW waste levy

The Waste and Environment levy is a market-based instrument established under the *Protection of the Environment Operations Act 1997* to drive waste avoidance and to assist resource recovery to compete against traditional landfill disposal.[14]

The levy provides businesses, councils and individuals with an incentive to reduce the amount of waste generated and encourages them to seek legitimate alternatives to landfill disposal.[15]

[13] Ibid.
[14] NSW Government (Environment and Heritage) 2012, *Terms of reference: Review of the Waste and Environment Levy*, http://www.environment.nsw.gov.au/waste/levyreviewTOR.htm
[15] NSW Government (Environment, Climate Change & Water) 2009, *Waste and Environment Levy Operational Guidance Notes*, http://www.environment.nsw.gov.au/resources/waste/09813wastelevyguide.pdf

The clear objective of the levy is to reduce dependency on landfill through waste avoidance, resource recovery and recycling, and there are two mechanisms by which the levy facilitates this objective:

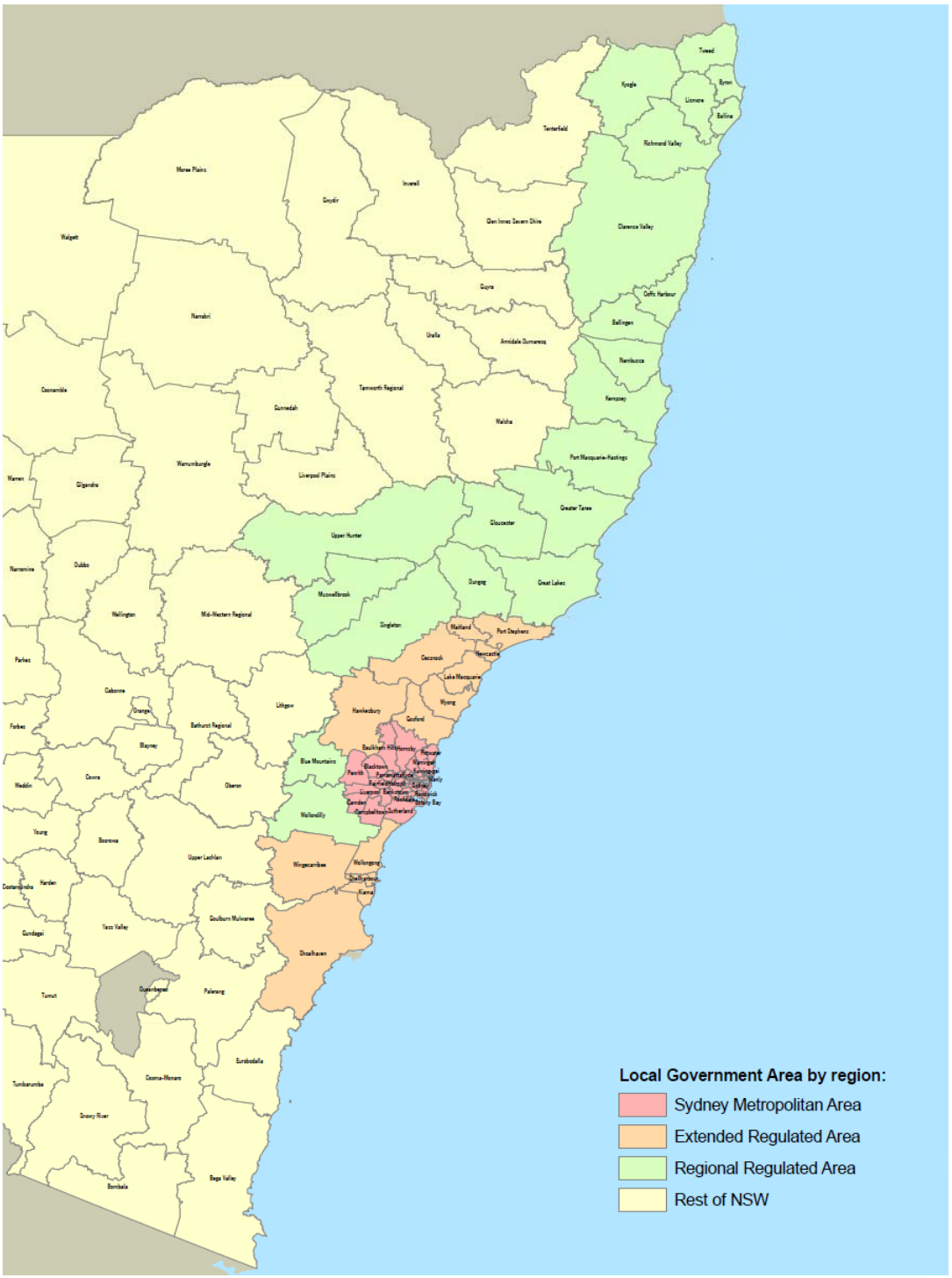
- creating a financial disincentive, to send waste to landfill; and
- hypothecating revenue to industry and local councils to assist in education, infrastructure and planning projects to aid the resource recovery industry.

The NSW Government introduced the levy in the Sydney metropolitan area in 1971.

Since its introduction, both the size of the levy and its geographical coverage has increased. The levy is applicable to all waste that originates from the regulated area of NSW, or that goes to a scheduled waste facility within the regulated area. The regulated area is comprised of three regions:

- Sydney metropolitan area (SMA);
- Extended regulated area (ERA), encompassing the Hunter and Illawarra regions; and
- Regional regulated area (RRA), extending to local Government areas (LGAs) along the coast north of Port Stephens to the Queensland border and the Blue Mountains and Wollondilly LGAs.

Figure 2: Levy paying regions



Source: NSW Office of Environment and Heritage

While a flat rate is charged for all solid waste, regardless of the type of waste, differential rates apply across the regions.

Table 2-2: Levy by region ($ per tonne, 2011-12 dollars)

Region	2011-12	2012-13
Sydney Metropolitan Area	82.20	95.20
Extended Regulated Area	78.60	93.00
Regional Regulated Area	31.10	42.40

Source: NSW Office of Environment and Heritage

The levy will continue to increase at $10 per tonne per year over the next three years (plus annual CPI adjustments) and is projected to be around $120 (in current dollars) per tonne in 2015-16 for the SMA and ERA and $71 per tonne for the RRA. The key question is: at what price should the levy be set? From a purely economic perspective, the levy should be set at a level that reflects the true cost of externalities associated with disposing of waste at landfills, however calculating that cost is difficult and, at any rate, will vary widely between individual landfill sites. The levy price has therefore been set to achieve the objective of making the alternatives to disposal of waste at landfill more economically attractive on average. The OEH reports that economic modelling indicates that the levy will achieve this objective at a price of around $120 per tonne in the SMA and ERA, and $71 per tonne in the RRA.

In 2010-11, the levy raised approximately $353.2 million. Over the next four financial years, the waste levy is expected to generate $1.84 billion. Two-thirds of the revenue generated by the levy is used by the NSW Government for general service delivery, with the residual third used to fund some core environmental programs, waste and recycling programs and environmental election commitments. Each waste stream roughly contributes one-third of waste disposed that attracts the levy as highlighted in Table 2-3 below.

Table 2-3: Proportion of waste that attracts the levy by waste stream (2010-11)

Waste Type	Proportion of waste disposed (%)
Municipal Waste	32.0
Commercial and Industrial	36.3
Construction and Demolition	31.7

Source: NSW Office of Environment and Heritage

Waste disposal in the Sydney region contributed 74 per cent of the total levy revenue, with the ERA accounting for 23 per cent and the RRA contributing the remaining 3 per cent. The contribution by waste stream varies across the regions; C&I and C&D generate more revenue in the SMA than does MSW, reflecting the higher proportion of industry in the region. Conversely, in regions outside of the SMA, the MSW stream generates most of the revenue.

Table 2-4: Levy revenue breakdown by region and waste stream (2010-11)

Waste Type	Paid by SMA (%)	Paid by ERA (%)	Paid by RRA (%)	Total (%)
Municipal Solid Waste	20.0	9.2	1.5	**30.7**
Commercial & Industrial	31.9	5.1	0.7	**37.7**
Construction & Demolition	22.0	8.7	0.9	**31.6**
Total	**73.9**	**23.0**	**3.1**	**100**

Source: NSW Office of Environment and Heritage

The levy generated $110.9 million from the MSW stream,[16] of which households contributed $89.3 million, or approximately 26 per cent of the total levy paid in 2010-11, as shown in Table 2-5.

Table 2-5: Household levy revenue breakdown by region (2010-11)

Region	Levy paid by households ($million)	Proportion of levy paid by households (%)
Sydney Metropolitan Area	62.4	18.1
Extended Regulated Area	24.1	7.0
Regional Regulated Area	2.8	0.8
Total	**89.3**	**25.9**

Source: NSW Office of Environment and Heritage

It should be noted that the levy makes up only a proportion of total landfill disposal costs. As shown in Table 2-6, the proportion varies across the levy regions but is likely to increase as the levy continues to rise in the coming years.

Table 2-6: Levy as a proportion of total average landfill cost per tonne (2011-12)*

Region	Levy proportion
Sydney Metropolitan Area[1]	38%
Extended Regulated Area[2]	40%
Regional Regulated Area[3]	22%

**Excludes collection and transport*
[1] Based on 11 out of 21 SMA landfills for 2011-12. Average cost of receiving mixed waste = $216, range $170-$270/t
[2] Based on all ERA councils with public information (excluding Kiama, Port Stephens, Cessnock, and Wingecarribee). Average cost of receiving mixed waste = $198, range $178-$218/t
[3] Based on all RRA councils North of Greater Taree Feb 2012. Average cost of receiving mixed waste = $143/t, range $104-$189/t.
Source: NSW Office of Environment and Heritage

[16] NSW Office of Environment and Heritage

2.5 Effectiveness of the levy

The effectiveness of the levy depends on the price elasticity of demand for landfill. Price elasticity refers to the sensitivity of demand in relation to the price of landfill (i.e. the levy); the higher the price elasticity, the more sensitive demand is to a change in price. One of the key determinants of price elasticity is the availability and price of substitutes. In the context of demand for landfill, a substitute for this is waste avoidance and resource recovery. It follows then that, where possible, waste generators will switch to cheaper waste avoidance and resource recovery to avoid sending waste to landfill and paying the levy.

The ability to switch to waste avoidance and resource recovery differs across the waste stream, meaning that the levy affects waste disposal in each waste stream differently.

Although households pay for the waste levy in full via a general collection by councils, there is no transparent and direct financial incentive for households to reduce their waste. Local councils are responsible for paying the levy on behalf of ratepayers, and this is then recovered from households through rate notices. Because home owners are charged a flat fee for their waste, they do not receive any financial benefit from reducing the amount of waste they produce at the individual household level, even though all households would benefit if they collectively reduced waste. Similarly, while landlords may incorporate the cost of the levy in rental charges, this is not seen by tenants.

In the C&I waste stream, the levy performance is more variable, with some commercial operators being less concerned about their waste because it forms a relatively small component of their total cost structure. Industrial sectors however have a strong incentive to reduce waste sent to landfill and, due to the size of the C&I sector and the quantity of waste it produces, as the levy continues to increase it is expected to make more of a difference.[17]

The impact in the C&D stream is reflective of the relatively high total cost of waste for the sector, which is mainly due to the high bulk density of the waste produced and therefore higher waste volumes sent to landfill. Consequently, there is a large incentive for the C&D sector to reduce waste through resource recovery and use as much material as possible on site before generating waste.[18]

[17] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.
[18] Ibid.

2.6 Waste levies in other jurisdictions

Every State and Territory in Australia has implemented a waste levy of some sort. The mechanisms vary greatly between States and Territories, however all jurisdictions use a waste levy as a key economic instrument to drive waste avoidance and encourage resource recovery. Table 2-7 below outlines details of waste levies across Australia.

Table 2-7 – Waste levies across Australia

State	Year introduced	Types of waste the levy applies to	Price of levy
NSW	1971	• Municipal Solid Waste; • Commercial and industrial waste; and • Construction and demolition waste.	In 2011-12, the levy is: • $82.20 in the SMA; • $78.60 in the ERA; and • $31.10 in the RRA.
QLD[19]	2011	• Commercial and industrial waste; • Construction and demolition waste; • Acid sulphate soil or contaminated soil; • Regulated waste; and • Green waste.	• Commercial and industrial waste - $35 per tonne; • Construction and demolition waste - $35 per tonne; • Acid sulphate soil or contaminated soil - $35 per tonne; • Regulated waste—other - $35 per tonne; • Regulated waste—low hazard - $50 per tonne; • Regulated waste—high hazard - $150 per tonne; and • Green waste directly disposed of as landfill or mixed with other types of stockpiled waste - $35 per tonne.
VIC	1992	• Municipal Solid Waste; • Industrial; and • Prescribed.	In 2011-12, the levy was: • Metro and provincial: - Municipal – $44 per tonne - Industrial - $44 per tonne - Asbestos - $30 per tonne - Prescribed industrial waste category C - $70 per tonne - Prescribed industrial waste category B - $250 per tonne

[19] On 10 April 2012, the new Queensland Government formally resolved to repeal the levy, taking effect from 1 July 2012.

State	Year introduced	Types of waste the levy applies to	Price of levy
			• Rural: - Municipal – $22 per tonne - Industrial - $38.50 per tonne - Prescribed industrial waste category C - $70 per tonne - Prescribed industrial waste category B - $250 per tonne
SA	2003	All waste.	In 2011-12, the levy was: • Metro Adelaide - $35 a tonne; • Non-metropolitan Adelaide - $17.50 a tonne
WA	1998	Putrescible waste and inert waste sent to landfill in metropolitan Perth.	From January 2010 the landfill levy increased to $28 per tonne and $12 per cubic metre for putrescible and inert waste respectively.
ACT	1995	Non-commercial waste and some problem waste (although administered through the landfill operator and not through its environmental agency).	• Domestic/self haul: $68.67 per tonne; and • Problem waste (TVs, mattresses etc.): varies per tonne.
NT	N/A	Only applies to waste tyres in certain local Government areas.	N/A
TAS	Varies across regions	All waste (although administered through the three regional waste groups and not through its environmental agency).	The three regional waste groups all charge a waste levy of approximately $2 per tonne for disposal of waste to landfill.

Source: NSW Office of Environment and Heritage, Queensland Department of Environment and Resource Management, Zero Waste SA, Environmental Protection Agency Victoria, Taswaste, ACT Government Territory and Municipal Services, Schollum, P. 2010 Evaluation of the social optimum for the Landfill Levy in WA, CEED Project number 09/002, University of WA.

As can be seen in Table 2-7, the levy ranges from $2 per tonne in Tasmania compared to $82.20 in NSW. The types of waste levied also vary between jurisdictions; MSW is exempt in Queensland and asbestos waste is levied in all jurisdictions except Tasmania, the Northern Territory and Queensland. Furthermore, NSW and South Australia have a flat rate for all waste types, but the levy varies by locality, whereas Victoria has a landfill levy which varies by both waste type and locality.

The use of revenue collected from the levy is another example of differences in waste policy across jurisdictions. In Queensland, the levy revenue is used to provide funding for programs that help establish better waste avoidance, resource recovery practices and overall waste management initiatives, including:[20]

- Around 42 per cent of the levy revenue will be used to create a dedicated Waste Avoidance and Resource Efficiency Fund for waste-related programs and projects;
- Approximately 32 per cent will be provided to a new Sustainable Future Fund where it will be used to assist in the delivery of local Government waste and environmental programs; and
- Residual funds will be provided to help support Queensland Government sustainability objectives outlined in 'Toward Q2: Tomorrow's Queensland'.

Victoria, on the other hand, uses the levy revenue solely for programs directed towards environmental protection, environmentally sustainable resource use and best practice in waste management. The levy is also used to fund the activities of Regional Waste Management Groups (RWMGs), Sustainability Victoria and the Environmental Protection Agency (EPA), to help establish waste management infrastructure, industry waste reduction programs, education programs, regulatory controls and enforcement regimes. Levy funds are also allocated by the Treasurer and the Minister for Environment through the Sustainability Fund.[21]

In Western Australia, prior to 2010, 100 per cent of the levy revenue was hypothecated for spending on strategic waste management activities. Now only 25 per cent of the levy revenue is hypothecated.[22] In South Australia, 50 per cent of the levy revenue is hypothecated for the 'Waste to Resources Fund' which is administered by Zero Waste SA.[23] Levy revenue in the Australia Capital Territory is directed to waste reduction initiatives, while Tasmania uses the funds raised from the waste levy for regional waste programs.

[20] http://www.derm.qld.gov.au/environmental_management/waste/levy_overview.html
[21] http://www.epa.vic.gov.au/waste/landfill_levies.asp
[22] Schollum, P. 2010 Evaluation of the social optimum for the Landfill Levy in WA, CEED Project number 09/002, University of WA
[23] http://www.zerowaste.sa.gov.au/About-Us/waste-levy

3 Waste review process

To review the levy, KPMG has conducted two main tasks:

- Reviewed a wide range of independent reports and data relevant to the waste levy; and
- Chaired a range of consultations with local councils, and industry and community stakeholders.

The tasks are outlined in further detail below.

3.1 Literature review

As part of the levy review process, KPMG conducted an extensive literature review into the major components, key issues and common themes of the levy that are impacting on stakeholders. The literature review was used to inform and develop the framework for the stakeholder forums and targeted consultations, including the initial identification of key issues. The literature review identified a wide range of issues. Some of these include:

- How the levy revenue is used;
- The lack of waste infrastructure;
- The impact of the levy on recyclers; and
- Utilising energy from waste.

It is clear from the literature review that the levy has wide ranging impacts throughout the waste industry, and finding the right balance between competing interests has proved difficult in the past.

The list below provides a snapshot of the key documents that were analysed, with a full list of documents reviewed located in Appendix A.

Review of the waste strategy and policy in NSW, NSW DECCW (Richmond Review)

One of the most comprehensive reports evaluated was the 2010 review of the waste strategy and policy in NSW, chaired by David Richmond AO, and commissioned by the then NSW Minister for Climate Change and the Environment, the Hon. Frank Sartor MP (Richmond Review). The document examined the implementation of the Waste Avoidance and Recovery Strategy, focusing on progress in meeting the strategy's recycling targets for 2014 and, to provide drivers to achieve these targets, proposed 23 enhancements to waste policies and strategies.[24] The findings of the Richmond Review provided an important framework for KPMG's analysis.

[24] http://www.environment.nsw.gov.au/warr/index.htm

The 23 enhancements were centred on key themes, including:

- Overall adequacy of the WARR strategy and targets;
- Waste management sector performance;
- Resource allocations and pricing signals; and
- Government performance.

Only a few of the 23 enhancements relate to the levy. These include:

- **Enhancement 12 – Funding better waste outcomes** – recommended to link an appropriate amount of the levy revenue to improved waste reductions and management outcomes.
- **Enhancement 14 – Exemption expert panel or peer review** – suggested establishing a panel of experts or a peer review process to advise and assist the Government on material suitable for exemptions.
- **Enhancement 15 – Energy from waste** – advised Government to support energy from waste applications and to develop an energy from waste policy.
- **Enhancement 16 – Waste infrastructure and sustainability fund** – suggested a proportion of the levy revenue be dedicated to a waste infrastructure and sustainability fund for council and industry.

A number of the enhancements recommended in the Richmond Review have yet to be addressed. The review did however lead to the development of a new implementation strategy document in February 2011: 'Reducing waste: implementation strategy 2011-2015'.

This document featured revised strategies in five new focus areas for the four year period to 2015:

- **Make it easier for households and businesses to recycle:**
  - Encourage best practice household collection;
  - Expand local waste collection centres;
  - Make bags compostable and deal with nappies; and
  - Refocus waste funding.
- **Make it easier for businesses to separate and recover their waste:**
  - Encourage best practice business waste collection; and
  - Refocus waste funding.
- **Reduce and remove problem waste:**
  - Accelerate product stewardship schemes; and
  - Reduce problem wastes.
- **Increase investment in waste infrastructure:**
  - Facilitate new waste infrastructure;

- Improve the regulatory framework; and
- Engage with stakeholders.

- **Reduce litter and combat illegal dumping:**
  - Increase education;
  - Align funding; and
  - Enhance enforcement campaigns.[25]

This review provided an opportunity to assess the degree to which these aims have been progressed.

The Centre for International Economics Reports

The Centre for International Economics (CIE) produced three reports between August and October 2011 related to waste. These were:

- Impacts of the waste levy on recyclers, CIE, August 2011, prepared for OEH;
- Impact of the waste levy on commercial and industrial recyclers, CIE, October 2011, prepared for OEH; and
- Waste to Energy: Potential impacts on waste management in NSW, CIE, October 2011, prepared for OEH.

The report on recyclers assessed the impacts that the levy and changes to the levy have had on metal recyclers, paper recyclers and alternative waste treatment facilities that operate in NSW.

The findings of the report suggest that, while the levy is unlikely to have negative effects on recycling in NSW, it may have negative impacts on NSW recyclers' overall profitability. To the extent that metal recyclers compete against other metal recyclers, including those located interstate and overseas that may pay either a lower or no levy, they will be competitively disadvantaged as a result of levy differentials. Recyclers indicated to KPMG that they were unable to pass on the higher cost of disposing of residual waste in the form of lower purchase prices for scrap metal.

Alternative waste treatment facilities (AWTs) on the other hand are likely to benefit from increases to the levy as landfill is the main alternative to AWTs. Therefore, an increase to the cost of landfill makes AWTs more price competitive.[26]

The report finds that at $120 a tonne, the levy would:[27]

- Reduce profit margins of metal recyclers by 3 per cent relative to no levy;
- Have negligible effects on paper recyclers; and
- Increase profit margins for AWTs by 30 per cent.

[25] http://www.environment.nsw.gov.au/warr/index.htm
[26] CIE, Impacts of the waste levy on recyclers, August 2011
[27] CIE, Impacts of the waste levy on recyclers, August 2011

The report examining the impact of the waste levy on commercial and industrial recyclers addresses the financial impact of the waste levy on the C&I waste collection industry and particularly the incentive the levy creates for separated collection services for business. This reflects concerns about achieving targets for recovery of C&I materials.

The report outlines the barriers for C&I waste collection which primarily include that the sectors waste needs are diverse and that waste costs are generally a small part of businesses' overall costs. The report concludes that a higher levy will increase the financial incentives for businesses to separate waste at the source or for waste collectors to undertake the separation of mixed waste.[28]

The waste to energy report investigates waste to energy facilities and how these would fit in with existing waste management options and interact with future waste management options, were the current regulations to be modified.

CIE concluded that energy from waste can either be a substitute for recycling, if it uses the same material streams and offers a lower cost, or a complement to recycling if waste is required to be processed prior to receipt at energy from waste facilities.

The impact of landfill diversion depends on the financial viability of waste to energy facilities. CIE finds that waste to energy facilities would become financially viable at a gate fee of $200 per tonne and larger facilities would be viable at a lower gate fee. Depending on the technology, a large facility might reduce unit costs anywhere from 10 per cent to 35 per cent.[29] With future levy increases and the introduction of the carbon price, landfill prices are headed towards a level over $200 a tonne and therefore waste to energy facilities will become more financially viable in the coming years.

Resource Recovery Infrastructure needs analysis: Summary report, GHD, November 2011

This report looked at requirements to increase resource recovery above current rates, with a particular focus on infrastructure. It was written to further develop the work done for the NSW Waste Systems Study, which concluded that there would be insufficient operational capacity, as well as constructed or planned capacity, to meet targets for the MSW, C&I and C&D waste streams.

The report concluded that, based on 2010-11 data, NSW requires approximately 16 new organics processing facilities, 13 upgraded organics processing facilities and two new mixed waste processing facilities for domestic waste.[30] It also concluded that for C&I waste, NSW requires the establishment of 46 waste processing facilities in the SMA and 33 waste processing facilities in the ERA and RRA by 2036.[31]

[28] CIE, Impact of the waste levy on commercial and industrial recyclers, October 2011
[29] CIE, Waste to Energy: Potential impacts on waste management in NSW, October 2011, page 22.
[30] GHD, Resource Recovery Infrastructure needs analysis summary report, November 2011
[31] Ibid.

Waste Avoidance and Resource Recovery Strategy progress report volume 1: 2010, NSW DECCW, Feb 2011

The *Waste Avoidance and Resource Recovery Act 2001* requires a report every two years on progress towards the objectives and targets established in the *NSW Waste Avoidance and Resource Recovery (WARR) Strate*gy. This report is a half way progress report based on 2008–09 data.

The findings of the 2010 WARR progress report included:[32]

- Progress towards the 2014 recycling targets is continuing, with recycling up 7 per cent in the two years from 2006-07.
- All regions in NSW have had an increase in recycling.
- Waste disposal has fallen in both absolute terms and as a proportion of total material flows. Overall waste to landfill has decreased by 0.7 million tonnes in the two years from 2006-07.
- NSW continues to be at the forefront of product stewardship issues, and is working within the national waste policy process to legislate change.
- Litter item numbers and volume has increased, and the NSW Government is implementing strategies to reduce the impacts of packaging on litter.
- According to the National Litter Index[33], illegal dumping has reduced in areas where Regional Illegal Dumping (RID) squads are present as the number of investigations and penalty infringement notices issued by squads have increased.

Independent review of the inclusion of Upper Hunter Shire Council in the Regional Regulated Area, Mike Ritchie and Associates Consulting

The report investigated whether the Upper Hunter Shire Council (UHSC) should be part of the RRA and be subject to the waste levy. The report concluded that there was insufficient evidence for the UHSC to be excluded from the RRA. The evidence for the circumstances which UHSC claimed distinguished it from other councils in the RRA was limited and the report suggested that the region still has a way to go to achieve best practice in recycling and landfill management. [34]

3.2 Stakeholder submissions and consultations

In addition to desktop research, KPMG's review of the levy involved an extensive stakeholder consultation process. The consultation process comprised several consultation formats including written consultations, online forums, stakeholder forums and targeted stakeholder meetings. The process and findings from each format are discussed in further detail below.

[32] NSW DECCW, Waste Avoidance and Resource Recovery Strategy progress report volume 1: 2010, February 2011
[33] NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy progress report: 2010, February 2011, page 5.
[34] Mike Ritchie and Associates Consulting, Independent review of the inclusion of Upper Hunter Shire Council in the Regional Regulated Area, March 2011.

3.2.1 Stakeholder forums

The stakeholder forums were conducted in six different locations within regions covered by the levy: Ballina, Port Macquarie, Maitland, Sydney Central, Western Sydney and Kiama. Each location hosted two separate sessions, one for councils and another for industry and community, with close to 300 people in total attending the forums.

The views expressed at the forums ranged from those who supported the levy to those who thought it should be abolished. Discussion also greatly varied across the three regulated areas, mainly reflecting the length of time the levy has been applied, and the differing price of the levy across regulated areas.

To allow stakeholders to be completely honest in their assessment of the levy, the views and information expressed to KPMG have not been attributed, but rather a summary of the key comments has been documented, organised by the issues raised.

A complete summary of the forum notes can be found in Appendix C.

Households

"The levy is not a sufficient driver to change household behaviour, there needs to be another support mechanism."

"It is difficult for councils to achieve high resource recovery if they have a high proportion of multi unit dwellings and no garden organics collection."

"There is still a problem about the public knowing what goes into households' red residual waste bin. The Government needs specific education programs."

"Councils are collecting problem waste but it is expensive and therefore the service is questionable."

Recycling

"Residual waste from recyclers should be levied at lower rate."

"Recycling should get a differential levy as the majority of waste cannot be recycled 100 per cent and residual waste attracts the levy."

"Recycling is being sent interstate and overseas because of the levy being applied to residual waste."

"The levy and future increases to the levy should be supported because it makes composting a financially suitable alternative."

Funding

"Residents and councils are fed up. More dollars need to go back to council."

"There needs to be another funding source for major infrastructure projects, separate to WaSIP. The levy should be invested in infrastructure."

"The Government is not using the money for what was intended."

"Councils spend months every year doing WaSIP reports and resources are diverted from strategic tasks."

"WaSIP money is spent on small projects rather than long term strategic projects."

"WaSIP has allowed councils to invest in broader environment projects. WaSIP benefits the community."

"People have a problem with money going to consolidated revenue. It should be hypothecated back to industry."

Illegal dumping

"The levy should be taken off contaminated waste such as asbestos. Asbestos disposal should be made as cheap as possible."

"If there is no market and recycling is not an option, such as in the case of asbestos, then it should be excluded from the levy."

"Illegal dumping increases as the levy increases and this puts pressure on councils."

"Illegal dumping is not due to pricing signals, but rather a convenience factor."

"Illegal dumping has always been a problem and there is no evidence to show that as the levy increases, illegal dumping gets worse. The more you look the more you find."

Other issues

"It is ridiculous that levy is paid on cover material." [35]

"The carbon tax is a big issue for councils. The uncertainties are very difficult for councils to budget for."

"Policies need to be developed earlier. For example, energy from waste is only now being developed in NSW."

3.2.2 Targeted stakeholder meetings

KPMG held targeted consultations with the following stakeholders:

- AMCOR;
- Australian Sustainable Business Group (ASBG);
- Australian council of Recycling (ACOR);
- Benedict Recycling;
- Brandown;
- Enirgi Group;

[35] Cover material refers to the layer of protection, usually compressed soil or earth, which is laid on top of waste on an operational landfill site.

- Global Renewables;
- KPMG;
- Local Government and Shires Associations (LGSA);
- One Steel;
- RENEW;
- Sell & Parker;
- Sims Metal;
- SITA Australia;
- Total Environment Centre (TEC);
- Upper Hunter Shire council;
- Veolia;
- Visy;
- Waste Contractors and Recyclers Association (WCRA); and
- Waste Management Association of Australia (WMAA);

In addition to the targeted consultations, KPMG presented at industry conferences including:

- Australian Environment Business Network (AEBN) seminar;
- WCRA breakfast briefing; and
- ASBG conference.

The key issues arising from the targeted consultation process were similar to those discussed at the stakeholder forums.

> *"It does not make sense to charge a levy on items sent to landfill that are unable to be recycled. Additionally items that are recycled to their maximum should not attract a levy on the residual waste they leave."*
>
> *"Millions of dollars in new technology would be needed to try and reduce the residuals from the recycling process."*
>
> *"The waste levy can be at around 25 to 40% of the total cost of recycling. The levy has already reached the point where it is an incentive to recycle and further increases are now making recycling a disadvantage."*
>
> *"If help in the form of a rebate or exemption is not given to metal recyclers, then companies will send waste offshore and the Australian steel industry would suffer."*
>
> *"The carbon tax is a big issue at the moment and there is a lot of uncertainty surrounding it."*
>
> *"Waste to energy is not a solution in NSW in the next 5 years."*

"The Government needs to be more transparent in what it spends the levy revenue on. The Government should look at hypothecating 100% of the additional revenue from levy increases back to councils and industry. Therefore the two-thirds the Government received would be capped."

"Education is a huge gap in the waste sector."

"The levy has no effect on households as the levy is only a part of a households waste cost, and waste is a minute part of overall household expenditure."

"The cost of the levy is small relative to the total budget for some companies."

"The household waste stream is an issue, rather than C&I and C&D waste streams. Hypothecation of the funds is a major issue."

"Local councils struggle to see the point and effectiveness of the levy and do not fully understand their role."

"Illegal dumping will always be done and is not a result of the levy."

A complete summary of the targeted consultation findings can be found in Appendix D. To allow stakeholders to be completely honest in their assessment of the levy, and to get the greatest outcome for the review, the views and information expressed to KPMG in the targeted consultations have not been attributed to any particular stakeholder, but rather a summary of the discussion has been documented.

3.2.3 Written submissions and online forums

The written consultation and online forum period ran for a period of 13 weeks from 17 January 2012 to 13 April 2012 and generated comments from 104 stakeholders with feedback submitted to the OEH website, unless marked confidential. The majority of submissions were made by local government and industry stakeholders (

Table 3-1). A complete list of the written submissions received can be found in Appendix B .

Table 3-1 – Summary of submissions

Submission	Number
Local Government & Regional Organisations of councils	51
Local Government (Voluntary Waste Group)	8
Local Government (Infrastructure Group)	2
State Government	2
Industry	20
Industry Associations	8
Environmental Groups	3
Individuals	7
Consultants	3
Total	**104**

Source: KPMG Analysis

The issues arising from the written submissions are summarised below.

Households

There were 43 written submissions that addressed the impact of the levy on households, with the majority believing that it is not an effective tool for increasing recycling and resource recovery amongst households.

Table 3-2 – Views on households

Issue	Yes	No	n/a
Does the levy have a negative impact on households?	30%	23%	47%
Is the levy effective for households?	7%	70%	23%

Source: KPMG Analysis

Submissions argued that the levy is not effective for households, as waste charges are paid through council rates and not directly by individual households. Some stated that most households are probably unaware that the levy even exists and are more concerned about their service provision rather than their waste charge.

Many council submissions stated that they offer households a multiple bin system and a collection or pick up service for large or problem waste and other recycling services, yet diversion rates remain the same. Additionally, increases in the levy have not transpired into increased recycling from households.

Respondents stated that the levy has a negative impact on households, pointing to the already high landfill costs, in some areas as high as $240 per tonne, which impact

heavily in areas that had a large proportion of residents on fixed incomes.[36] Some councils already experience high diversion rates and additional increases in the levy do not increase these diversion rates, they add to the financial burden of ratepayers.[37]

Recommendations centred on making the levy amount more transparent to householders and also applying a cap to the levy at current prices. Additionally, submissions pointed to the need for education programs to change household behaviour, believing this should be done at a state wide level.

Recycling

There were 35 submissions that mentioned the impact of the levy on recycling. The views of respondents are summarised in Table 3-3. It is clear that this sector is impacted by, and therefore views, the levy in a number of very different ways.

Table 3-3 – Views on recycling

Issue	Positive	Mixed	Negative	n/a
What is the impact of the levy on recycling?	22%	25%	39%	14%

Source: KPMG Analysis

Some respondents detailed that the levy has sent a strong signal to divert waste from landfill and has provided an incentive for development of recycling facilities. Without the levy, the cost of disposing of waste at landfills would be far below than that of recycling facilities. The levy has driven some councils to implement new recycling services and facilities, including Singleton council.[38] SITA Australia states that the levy has directly resulted in it investing approximately $200 million in Advanced Resource Recovery Technologies (ARRT), Material Resource Facilities (MRF) and resource recovery facilities.[39]

Other submissions however argued that the levy provides a disincentive for businesses to utilise recycling or waste processing facilities, especially for council owned facilities because the end result is that councils pay for the cost of processing the waste as well as disposing of the residual waste. The levy can increase the cost of operating resource recovery facilities to the point where they are no longer financially viable, as has been the case in Port Macquarie AWT.[40] Additionally, some submissions highlighted the additional collection costs associated with recycling and resource recovery. For example, composting for councils is approximately 10 per cent cheaper than the landfill price, however the extra collection service means that the total price of composting is considerably more than disposing of waste at landfills.[41] Respondents argued that the levy may be diverting waste from landfill, not to recycling, but rather to illegal dumping or to interstate and overseas. The cost of recycling is resulting in

[36] Kiama Municipal Council submission
[37] Midwaste Regional Waste Forum submission
[38] Singleton Council submission
[39] SITA submission
[40] Port Macquarie Hasting Council submission
[41] City of Sydney submission

recovered material that cannot be sold at a competitive price with imported or original products.

The wide range of views in submissions resulted in recommendations ranging from increasing the levy to ensure that there is a better price signal to encourage recycling over landfill, to providing exemptions or a lower levy for the recycling industry so that processing costs are not prohibitive.

Funding

Funding was a key issue with 75 submissions commenting on the existing funding arrangements. Most expressed concern at the hypothecation rate and believed that a higher amount needs to be hypothecated back to industry and local councils.

Many submissions also mentioned that funding should be linked back to the original objectives of the levy, and used to achieve these objectives. Numerous council submissions detailed that the funding hypothecated back is inadequate for them to build infrastructure or implement initiatives to drive recycling and resource recovery.

The majority of respondents recommended the full amount be hypothecated back and used for waste programs, making the levy more effective. Additionally, several recommended that levy revenue be used to increase awareness and fund education programs, as well as facilitating infrastructure development in the sector.

Submissions also commented on the way the funds are hypothecated. In particular, 45 respondents mentioned the Waste and Sustainability Improvement Payment (WaSIP) program in their submissions, with the views on the effectiveness varying as shown in Table 3-4.

Table 3-4 – Views on WaSIP

Issue	Yes	Mixed	No	n/a
Is WaSIP effective?	27%	29%	38%	7%

Source: KPMG Analysis

WaSIP was seen as complex and confusing for some councils, with a high administrative burden required to meet the WaSIP standards. On the other hand, WaSIP was considered effective in its ability to fund projects that would otherwise not have occurred.

Some submissions stated that the WaSIP needs to be reformed to further increase its effectiveness. Comments included that WaSIP funding needs to be long term, rather than only short term projects which are not strategic, and that WaSIP payments need to better align with council budget timeframes.

Illegal dumping

There were 50 submissions that addressed the issue of illegal dumping. The majority of submissions believed that the levy is linked to illegal dumping. The views of the submissions are summarised in Table 3-5.

Table 3-5 – Views on illegal dumping

Issue	Yes	Possibly	No	n/a
Is the levy linked to illegal dumping?	62%	10%	8%	20%

Source: KPMG Analysis

Evidence provided in submissions of the levy contributing to illegal dumping included:

- Between 2007-08 and 2010-11 there was almost a 21 per cent increase in tonnages of illegally dumped waste, mainly commercial quantities of demolition waste, excavated material and lopped trees.[42]
- Up to 2009, there was on average 12 instances of illegal dumping recorded. From July 2011 to December 2011, there were a total of 42 recorded instances.[43]
- In 2010, there was 1.4 tonnes of illegally dumped waste, this increased to 3.54 tonnes in 2011 and 7.94 tonnes in 2012.[44]
- Illegally dumped waste has doubled between 2003-04 and 2010-11 and there has been similar increases in council costs to clean up illegal dumping.[45]
- There were 81 incidents of illegal dumping on council land in last 12 months, which is double the amount prior to the introduction of the levy.[46]
- Illegally dumped waste has increased from approximately 170 tonnes in 2009 to 400 tonnes in 2011.[47]
- The rate of illegal dumping has increased by 20 per cent since 2005-06. There has been a 33 per cent reduction in trailer drop-offs at the Lucas Heights landfill facility, and the reported number of illegal dumping incidences has increased from 1,278 in 2005-06 to 1,603 in 2010-11.[48]

Submissions included various recommendations to combat illegal dumping. State wide education programs were discussed by a few respondents as well as investing in infrastructure such as drop off centres. Additionally, numerous respondents believed that greater deterrent measures needed to be implemented such as more resources for enforcement, higher fines and easier prosecution.

[42] Campbelltown City Council submission
[43] Great Lakes Council submission
[44] Greater Taree City Council submission
[45] Lake Macquarie City Council submission
[46] Port Macquarie Hasting Council submission
[47] Southern Council Group submission
[48] Sutherland Shire Council submission

Other issues

Numerous other issues were raised in the written submissions. There were 27 respondents that mentioned the levy and its effectiveness on different waste streams. As shown in Table 3-6, most respondents believed the levy was most effective on the C&D waste stream. The effectiveness of the levy on the MSW stream has been discussed previously, however in the C&I waste stream, lack of infrastructure as well as complexities in C&I processing were mentioned as reasons why the levy is not effective in this waste stream.

Table 3-6 – Views on waste streams

Issue	Yes	No	n/a
Is the levy effective for MSW	10%	45%	45%
Is the levy effective for C&I	6%	29%	65%
Is the levy effective for C&D	23%	6%	71%

Source: KPMG Analysis

The issues of hazardous waste and asbestos were also raised by a number of respondents. Almost all submissions recommended that asbestos be exempt from the levy as asbestos is a hazardous waste and is unable to be reused or recycled. Respondents believe that providing an exemption will decrease the rate of illegal dumping of asbestos.

Infrastructure was another key issue raised, with 86 submissions commenting on the effectiveness of the levy in supporting resource recovery infrastructure. Many respondents believed that infrastructure was the most critical issue that needs addressing if the waste diversion targets are to be met. Most agreed that future infrastructure investment needed to be a joint effort between State Government, local councils and industry.

Planning constraints were seen as an impediment to recycling infrastructure as well as disapproval from local communities. Suggestions to overcome these impediments included a whole of Government approach to infrastructure planning, procurement and operation as well as assistance to councils and communities that build facilities in their areas.

Council submissions highlighted the high cost of infrastructure as a major issue. For example, one council was looking at an AWT facility that would potentially reduce household waste by 60 per cent, however the AWT had significant capital cost which negated the decision.[49] SITA estimates that a new composting ARRT facility would cost in the range of $50 to $80 million meaning that individual councils cannot afford to invest in these facilities by themselves.[50] Recommendations to overcome the cost

[49] Gosford City Council submission
[50] SITA submission

barriers included using the levy revenue to fund long-term infrastructure, establishing an infrastructure fund and providing assistance for recycling infrastructure in regional areas.

Thirty-one respondents raised operational issues as a concern in their submissions. This mainly related to daily cover and construction materials, which most believed should be exempt from the levy. Arguments were that daily cover and construction materials are essential operating requirements for facilities and that facility operators should not be penalised for complying with Government requirements.

4 Summary of the key issues

The table below provides a summary of the key issues that have been identified throughout the literature review and stakeholder consultation process. These are discussed in more detail below.

Table 4-1 – Summary of the key issues

Issue	Main stakeholder issues/arguments
Households	
Household behaviour	• The levy does not provide an incentive for households to recycle • It is difficult to change the behaviour of waste disposal in individual households • Provision of drop off centres for problem wastes could assist
Education	• Education is a key to change behaviour • Education is also needed to combat illegal dumping • The NSW Government needs a state education strategy
Problem waste	• Problem waste can contaminate household waste • Households are unsure of what to do with problem waste (e.g. car batteries, e-waste), or ignore guidelines
Recycling	
Residual waste	• Residual waste from recycling operations that cannot be recycled should be exempt or rebated • A differential levy should be applied to residual from recycling operations
Recyclers, particularly metal recyclers	• Some recyclers are finding cheaper alternatives to paying the levy by sending residual waste interstate and offshore
Avoidance and upstream programs	• A greater emphasis is needed at the production end of the spectrum
Funding	
Hypothecation	• 100% of the levy should be hypothecated in environmental/waste programs • The levy is in fact a tax • Levy revenue should only be used for waste programs as this is the source where it is collected
WaSIP	• WaSIP payments need more flexibility and to allow for longer term programs (e.g. infrastructure) • Compliance with WaSIP standards create an administrative burden and can financially outweigh the benefits of qualifying for the funding • WaSIP funding needs to be better aligned with council budget processes
Infrastructure	• Funding needs to be directed at infrastructure

Issue	Main stakeholder issues/arguments
	• The NSW Government needs a state waste infrastructure plan
Illegal dumping	
Illegal dumping	• Regional Illegal Dumping officers to combat illegal dumping seen as a success, but not affordable for many councils • Provision of drop off centres for problem waste could assist • Majority feel that the levy contributed to illegal dumping (although there is limited evidence to support this view.)
Education	• Education may assist to combat illegal dumping • The NSW Government needs a state education strategy
Asbestos	• Asbestos should be exempt from the levy as it is unable to be recycled and the levy is causing an increase in illegal dumping of asbestos
Other issues	
Operational purposes	• Cover material should be exempt from the levy as it is an essential regulatory requirement for landfills • Waste for road making on a landfill site should be exempt from the levy
Waste to Energy/new technology	• The NSW Government needs to provide policies and guidance around new technologies to encourage investment
Differences in SMA, ERA and RRA	• All regions are different and the levy should be applied to suit each region
Differences in MSW, C&I and C&D	• All waste streams are different and the levy should be applied to suit each waste stream
Carbon price	• The carbon tax will essentially be doing the same job as the levy and therefore the levy could be reduced
Levy applicable regions	• The levy should apply to the whole of NSW • Some areas that currently attract the levy should be exempt

Source: KPMG Analysis

These issues are discussed in more detail below. It should be noted that these issues represent the views expressed throughout the consultation process, and are not the opinions of KPMG.

4.1 Households

Household behaviour

As mentioned in section 2.4, there is often a lack of direct and transparent incentive for households to reduce their waste, as the levy is typically collected as a flat rate charge to ratepayers. Measures to address this issue, such as bar-coded bins, are not without difficulties and as yet no practical solution has been implemented, although some councils do allow a lower fee for households opting to use smaller bins.

However, households present a perfect opportunity to reduce the amount of waste sent to landfill, with recent NSW waste audits highlighting that more than 74 per cent of the average household waste bin could potentially be recycled. This would divert another 0.46 tonnes of waste from landfill, per household per year.[51]

Most stakeholders agreed that the levy struggles to change household behaviour, and that other mechanisms should be implemented to assist the levy in driving waste avoidance and resource recovery. These other mechanisms include well targeted promotion and education campaigns and best practice models of bin configurations and volumes.

Removal of food and organic waste from household residual bins has been identified as key to achieving the 2014 waste diversion targets for the MSW stream. Each year, every NSW household throws away more than $1,000 worth of food, which totals approximately 800,000 tonnes of food waste across NSW per year.[52] To improve the removal of recyclables and organic waste from household residual bins, the short-term emphasis needs to be on improving source separation at the household level, with the longer-term solution of central sorting of residual waste via alternative waste treatment (AWT) facilities.[53]

Education

Recent NSW waste audits highlight that more than 74 per cent of the average household residual waste bin has the potential to be recycled. It is hard to pinpoint the exact reason as to why there is such a large percentage of household waste that is not being diverted from landfill, but lack of education and effective community engagement is a contributing factor.

In 2009, a review of local councils identified 55 different types of local council kerbside collections in NSW.[54] The differences included bin configurations and volumes as well as collection frequencies. Additionally, the type of waste allowed to be disposed of regularly differs between council areas. For example, some councils provide two bins for recycling, one for paper/cardboard and one for containers, whilst others provide a

[51] NSW Office of Environment and Heritage
[52] http://www.lovefoodhatewaste.nsw.gov.au/
[53] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.
[54] *Ibid.*

fully co-mingled bin for all recycling collection. This makes it difficult for people to understand what can and cannot be recycled, and what bin they should use.

Education campaigns, in consultation with councils and industry, are needed to address the current confusion or laziness of households regarding recycling, and to better inform households about avoidance and waste separation at source.

Problem waste

Problem or hazardous waste, such as gas bottles, lead acid batteries and plastic bags, provide management and disposal issues from an environmental, resource or human health perspective.

The National Waste Policy, agreed by all Australian environment ministers in November 2009, and endorsed by the Council of Australian Governments (COAG), lists hazardous waste as one of six key priority areas. The policy outlines objectives and strategies to deal with problem waste, including:

- Australia's responsibility to meet international obligations;
- To reduce hazardous materials entering the waste stream;
- To dispose of and move transboundary waste in an environmentally sound manner in appropriate facilities; and
- The adoption of a system that aligns with international approaches to reduce hazardous substances in products and articles sold in Australia.

The NSW Government is involved in working groups aimed at achieving the strategies outlined in the National Waste Policy. To enhance the management of problem waste at the State level, suggestions around collection or drop-off infrastructure, and targeted education programs were discussed by stakeholders. Bans at landfills, drop off facilities or kerbside waste collections are another regulatory option available, however, this could only be imposed if alternative disposal solutions are offered. [55]

4.2 Recycling

Residual waste

The majority of waste material cannot be 100 per cent recycled, at least at the present time using current technologies. During the resource recovery process, residual waste is created. This residual waste can only be disposed of at landfills and therefore attracts the levy. The aim therefore is for recyclers to improve their resource recovery and reduce their amount of residual waste sent to landfill.

Recyclers argue that residual waste from the recycling process should be exempt from the levy, or receive a rebate as this is waste that cannot be recycled further. Others in the waste industry argue that residual waste from recycling should attract the levy as

[55] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.

this will provide greater incentive for recyclers to find ways of recycling their residual waste.

It is clear from the discussion with recyclers that options for reducing residual waste are limited. Significant investment has already been made to improve the resource recovery process and therefore limit the residual waste produced. Further improvement in this area is not seen as commercially viable; any further reduction in residual waste is expected to cost more than it saves in payment of the levy.

Recyclers, especially metal recyclers

The levy is designed to provide an incentive to recycle, however due to the levy on residual waste from recycling, recyclers in NSW are being perversely impacted.

The CIE report into the impacts of the waste levy on recyclers[56] concluded on the following impacts for recyclers:

> *"The waste levy is having negative impacts on metal recyclers, with the waste levy for 2010-11 plausibly reducing margins by up to 1.8 percentage points relative to what would have otherwise been the case. Additional increases in the levy to 2015-16 could reduce margins by an additional 1.3 percentage points."*
>
> *"The waste levy has had and will continue to have mixed impacts on paper recyclers. On balance it is likely that the impacts from additional increases in the levy will be a very small positive as the higher levy increases the amount of scrap paper moving out of landfills but also increases the competitiveness of the option to export this scrap."*
>
> *"The waste levy is having positive impacts on AWTs, subject to these facilities having specified contractual obligations that they are able to meet. Additional increases in the levy will drive higher profitability and higher volumes of material into AWTs."*

The levy increases the cost to recyclers by the value of the levy multiplied by the weight of waste that cannot be recycled. In turn, recyclers pass these costs back to sellers of the recyclable material. If the only option was to recycle the material in NSW, then recyclers would be no worse off. This is because demand for recycling services would be inelastic to the price of recycling, as recycling a proportion of waste is still cheaper than the alternative (sending it to landfill). However, if waste can be sent to recyclers outside of NSW or Australia, then there may be a cheaper alternative to recycling in NSW. This is because recyclers outside of NSW do not pay the levy.

Avoidance and upstream programs

Waste avoidance or waste reduction by households and industry should be the top priority of any waste strategy, with disposal the last resort. Waste generation has been, and is likely to continue, increasing through population growth and economic activity. From 2002 to 2008, waste generation increased by 38 per cent. Whilst increases in

[56] CIE, Impacts of the waste levy on recyclers, August 2011

resource recovery absorbed some of the increases in waste generation, the amount of waste going to landfill still increased by 3 per cent.[57]

Waste avoidance is complex, and Government needs to understand what is driving waste generation. Issues such as increased population growth and economic activity, as well as increased consumerism and product packaging, are all contributing to the growth in waste generation. Avoidance needs to be addressed at all levels of the product lifecycle and not just at the consumption and disposal levels.

The National Waste Policy is taking action to address this by developing product stewardship schemes. Product stewardship refers to managing the impact of different products and materials and that those involved in producing, selling, using and disposing of products all have a shared responsibility to reduce their environmental, health and safety impacts throughout their lifecycle.[58] While predominantly a national issue, NSW can continue to work on avoidance through reducing unnecessary food waste, continuing education programs and assisting the Federal Government to develop product stewardship schemes.

4.3 Funding

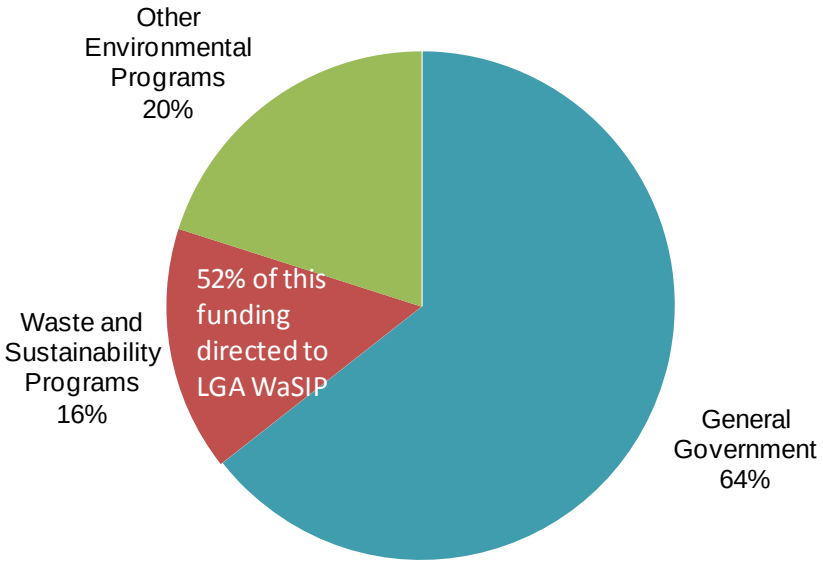
Hypothecation

Approximately 67 per cent of the revenue generated by the levy is used by the Government for general service delivery, with the additional 33 per cent used to fund core environmental programs, waste and recycling programs and environmental election commitments.

In 2010-11, just over $353 million was collected through the levy. $235.5 million or 64 per cent was used by the NSW Government for general service delivery, with $73.4 million (20 per cent) used to fund other environmental programs, and the remaining $56.7 million (16 per cent) used for Waste and Sustainability programs, of which[59] just over half ($29.4 million) went to local government WaSIP.

[57] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.
[58] http://www.environment.gov.au/settlements/waste/product-stewardship/index.html
[59] Amount is higher than the $353 million collected in 2010-11 due to money being brought forward from future years to fund the River Red Gum program.

Figure 3 – 2010-11 revenue split



Source: NSW Office of Environment and Heritage and KPMG analysis

OEH report that, of the $29.4 million funding allocated to WaSIP, there was a $13 million underspend in 2009-10.

One of the biggest issues reiterated throughout the stakeholder consultation process was that of the rate of hypothecation to local councils and the waste industry. Council stakeholders in particular argued that using a pure definition of “levy" meant that 100 per cent of revenue should be hypothecated back to council and industry. Additionally, they argued that one of the main objectives of the levy is to encourage resource recovery and recycling, and this should be done by funding programs and services aimed at improving recycling, rather than returning levy payments to the State’s general revenue funds.

The NSW Government is faced with a dilemma: on one hand, they wish to retain the income the levy contributes to general revenue but, on the other, they want to see the levy supporting a reduction of waste sent to landfill and therefore also the income that the levy generates. The NSW Government’s forward estimates, set out in Table 4-2 below, shows the income expected from the levy, which will be generated from increasing the levy, despite the expected reduction in tonnages sent to landfill.

Table 4-2 – NSW Government income from the Waste and Environment levy

Revenue	2009-10 Actual	2010-11 Actual	2011-12 Budget	2012-13 Forward estimate	2013-14 Forward estimate	2014-15 Forward estimate	2015-16 Forward estimate
Waste and Environment levy	$295m	$353m	$417m	$447m	$465m	$490m	$509m

Source: NSW Budget Paper 2011-12, Budget Paper No.2 and NSW Office of Environment and Heritage

WaSIP

The WaSIP program, which began in 2009-10, is a seven year program that provides grants to local governments in levy-regulated regions for a wide range of waste and sustainability-related initiatives. Payments are made to eligible councils in October each year with payments calculated in proportion to councils' population. As noted above, $29.4 million (8.3 per cent) of total levy revenue in 2010-11 was directed to WaSIP initiatives. In 2010-11, 51 per cent of the cumulative WaSIP funding was underspent and rolled over into 2011-12. In 2009-10 the underspend was 66 per cent.

To be eligible to receive WaSIP funding, councils in regulated areas are required to commit to meeting both the ongoing and current year's WaSIP Standards. The WaSIP Standards are progressively updated in consultation with an Advisory Group and the LGSA.[60] Standards for the SMA and ERA for 2011-12 include:[61]

- Commence reporting on environmental sustainability performance/KPIs from council's Sustainability Action Plan in council's Annual Report;
- Implement council's adopted Sustainable Events Management Policy;
- Undertake a climate change risk assessment for council operations and submit the assessment report to OEH by 31 May 2012;
- Implement council's Strategic Waste Action Plan that contains performance milestones that will contribute to council reaching the 2014 municipal waste target;
- Analyse the amount of dry recyclables being disposed in householders' residual waste bins and put in place measures to increase recycling of these materials; and
- Analyse the amount of food organics being disposed in householders' residual waste bins and put in place measures to decrease the amount of food organics going to landfill.

Standards for the RRA for 2011-12 include:[62]

- Council to have in place a 'Waste Not' Development Control Plan (DCP) or a policy of similar nature by 31 May 2012;
- Council to develop and adopt a Strategic Waste Action Plan that contains performance milestones that will contribute to council reaching the 2014 municipal waste target; and
- Submit the audit report and raw data sheets from the household residual waste composition audit completed between November 2010 and November 2011.

Ongoing standards for the RRA include: [63]

- All residential dwellings (other than multi-unit buildings) within the LGA to have access to a dry recycling collection service. At a minimum, this would involve kerbside collection in towns and population centres, and drop off facilities for non urban areas;

[60] http://www.environment.nsw.gov.au/waste/lcwpip.htm
[61] http://www.environment.nsw.gov.au/resources/warr/110309WaSIPgde.pdf
[62] Ibid.
[63] Ibid.

- Provide OEH with the information required under the National Environment Protection (Used Packaging Materials) Measure by 31 August each year;
- Collect and provide OEH with baseline data on tonnages of dry recyclables and garden organics collected for recycling and residual domestic waste by 31 August each year;
- Any new collection and/or mobile garbage bin replacement contracts are to require bin bodies and bin lids that conform to the Australian Standard; and
- The replacement of damaged or lost non-conforming MGBs and/or lids with MGBs and/or lids that conform to the Australian Standard.

Views on WaSIP from stakeholders varied. Whilst most agreed that WaSIP was beneficial to some degree, most felt that it could be more effective. Compliance with WaSIP standards was said to be burdensome - even to the point where it financially outweighs the benefits of qualifying for the funding. The flexibility of payments to allow for longer-term programs, possibly infrastructure, would be of benefit to councils. Additionally, it was stated that WaSIP funding needs to be better aligned with the timing of councils' budget processes.

Infrastructure

As noted in the Richmond Review (2010), and confirmed through KPMG's review process, the lack of waste infrastructure is considered by many a significant issue in NSW.

A recent report by GHD into resource recovery infrastructure in NSW[64] identified the need for approximately 16 new organics processing facilities, 13 upgraded organics processing facilities and two new mixed waste processing facilities for domestic waste, based on 2010-11 data. Additionally, the report recommended the establishment of waste processing facilities for C&I waste, stating that 46 facilities would be needed in the SMA and 33 facilities in the ERA and RRA by 2036.

It has been suggested throughout the consultation process that revenue generated from the levy should be directed towards infrastructure. The Richmond Review recommended that a Waste Infrastructure and Sustainability Fund (WISF) be developed to assist councils and industry to develop best practice infrastructure. Additionally, the review recommended that a whole of Government Waste Infrastructure Strategy be developed, and for waste infrastructure and services procurement guidance and support to councils. [65]

Whilst funding for infrastructure might assist in advancing delivery, there are additional issues that need to be addressed to solve the lack of waste infrastructure in NSW. These include: cost and availability of sites, planning restrictions, and the need for closer cooperation from smaller councils to achieve economies of scale.

There is also concern that some markets are not mature, or that there is not sufficient demand in Australia for some services and that, by providing infrastructure funding, the

[64] GHD, Resource Recovery Infrastructure needs analysis summary report, November 2011
[65] NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010.

Government will be setting companies up for failure. Furthermore, infrastructure assistance may lead to the premature entry into the market of technology that is yet to be proven, which may lead to flow on impacts throughout the waste industry.

4.4 Illegal dumping

Illegal dumping

In 1971 when the levy was first introduced, the levy was set at $0.51 per tonne of waste. This is expected to increase to around $120 (plus CPI) per tonne of waste in the SMA by 2015. It is generally accepted that the higher the levy the greater the incentive to circumvent paying it, which implies illegal dumping of waste. While this is economically intuitive, it is important to try to understand what impact a marginal increase in the levy will have on the propensity to recycle or to illegally dump waste.

There was a differing view from stakeholders as to whether the levy, and increases in the levy, causes an increase in illegal dumping activity. In the C&I and C&D sectors, avoiding the cost of legitimate waste disposal facilities would be a stronger motive for large scale illegal dumping than in the MSW stream. Whilst there is no conclusive evidence to suggest that the levy has led to an increase in illegal dumping, many local councils reported an increase in dumping over time. This however may be due to other factors such as convenience or naivety, or simply that local councils have invested more time and resources into looking for waste that has been illegally dumped and therefore have noticed higher rates.

Regardless of whether the levy plays a part, illegal dumping is an issue, and there was consensus among stakeholders that providing solutions to the illegal dumping problem should be a priority. The NSW Government is already involved in tackling the issue and has developed a resource kit to assist NSW local councils prevent and reduce the incidence of illegal dumping. A cost benefit assessment of the 2007 South Australian waste strategy found that 80 per cent of illegal dumping relates to municipal waste.[66] Reflecting this, local councils play a crucial role in addressing illegal dumping in 'hot spot' areas around the fringe of cities, and multi-unit dwellings (MUDs) in highly urbanised councils. Additionally, the NSW Government is working with local councils to establish Regional Illegal Dumping (RID) programs. The RID programs investigate and enforce breaches of NSW regulation in relation to illegal dumping.

Education

The lack of education was seen as a key driver of illegal dumping. Many councils stated they offered quarterly or biannual cleanup collection services for residents to dispose of waste that is unable to be disposed of in the kerbside red residual bins. However, many residents were unaware of these services. In a survey of MUD

[66] QLD Department of Environment and Resource Management, Regulatory assessment statement and cost benefit analysis for a waste disposal levy proposal, December 2010

residents, 89 per cent of respondents stated there was a need to educate people about what they can do with used household items.[67]

If household and industry are required to indentify and find proper disposal options themselves, they are more likely to illegally dump. Effective education and communication about waste collection and disposal services will make households and industry aware of the services that are available, and therefore remove this excuse.

Illegal dumping is sometimes considered by residents as socially acceptable when it is widespread, with the fines and penalties associated with illegal dumping unknown. To address illegal dumping, education campaigns are needed - not just on waste collection and disposal services but also on the environmental and community impacts, as well as the fines and penalties that can be imposed.

Asbestos

Illegal dumping of asbestos is a challenging issue in some regions of NSW. The evidence suggests that the majority of illegal dumping is by household renovators.

There are health risks associated with asbestos, as asbestos fibres are hazardous when inhaled. If they are incorrectly handled, stored or transported, the fibres can be released into the air.

Special legislative requirements apply to the handling, storage and transportation of asbestos. Disposal of asbestos attracts the levy as well as higher landfill fees. The unwillingness to pay or to save time may lead to the illegal dumping of asbestos. Furthermore, people may not be aware of the health risk associated with asbestos.

Many stakeholders argued that asbestos should be exempt from the levy as it is unable to be recycled and the correct disposal should be encouraged rather than making it more expensive. The issue with making asbestos exempt from the levy is that it allows people to try and exploit the exemption by contaminating waste with a small amount of asbestos and therefore claiming an exemption on the whole load.

[67] NSW Department of Environment Climate Change & Water, Crackdown on Illegal Dumping: Handbook for Local Government, April 2007

4.5 Other issues

Operational purposes

Under the Waste and Environment levy Operation Guidance notes,[68] the occupier of a waste facility that is required to pay the levy may claim a deduction for any waste received at the facility that will be used on-site for an approved operational purpose (AOP) and may claim a deduction for any waste received at the facility that will be used on-site for a land application purpose.

The following operational purposes will be considered for approval: [69]

- Final capping works; and
- Disposal of virgin excavated natural material below the water table.

Additionally, the following land application purposes will be considered for approval: [70]

- New asphalt or concrete used for roads or other construction works at the facility;
- Substances used at the facility for leachate collection systems;
- Substances used at the facility for landfill lining systems or associated stormwater management systems;
- Substances used at the facility for landfill gas collection systems; and
- Plastic sheeting used at the facility as a daily cover for waste.

Stakeholders agreed that waste and other materials used for an operational purpose should be exempt from the levy, however, they believed this should include all operational purposes such as the requirement for cover materials. Cover is the name given to the layer of protection, usually compressed soil or earth, which is laid on top of waste on an operational landfill site. Cover material is classified as daily, intermediate or final, depending on operation phase and function. Intermediate cover is used to close off an area that will not receive additional waste or final cover for some time. Final cover forms a low permeability barrier to control water entering the site and gas emissions, and promotes revegetation.

Use of cover material helps to protect the full range of environmental management objectives by limiting run-on and infiltration of water, controlling and minimising risk of fire, minimising emission of landfill gas, suppressing site odour, reducing fly propagation and rodent attraction, and decreasing litter generation. While soils are the traditional materials employed in cover materials, landfill operators are free to specify any alternative cover material (foams, plastic sheets, etc.) provided they can demonstrate compliance with Government regulations.

The counter argument to allowing exemptions or deductions for all operational purposes is that these may lead to landfill operators exploiting the exemption, and that

[68] http://www.environment.nsw.gov.au/resources/waste/09813wastelevyguide.pdf
[69] Ibid.
[70] http://www.environment.nsw.gov.au/resources/waste/09813wastelevyguide.pdf

there are already suitable alternatives for daily cover available to landfill operators, such as foam or plastic sheets.

Waste to energy/new technology

Waste to energy recovery involves converting waste material into energy that can be used for electricity generation. Currently, there are three main categories of waste to energy technologies that are used to divert waste from landfills:[71]

- Combustion/incineration — combustion of organic inputs;
- Pyrolysis — burning in the absence of oxygen which produces gas, liquid and a solid carbon rich component called char; and
- Gasification — reacts to organic input materials with a small amount of oxygen at high temperatures to produce synthetic gas.

Australia is one of the few developed nations that does not have a well-established waste to energy industry.[72] Many stakeholders (councils and landfill operators in particular) were interested in the potential for a waste to energy industry in NSW. Currently, the NSW Government does not have a flexible waste to energy policy.

According to the Australian Institute of Energy, Australia does not have a sophisticated waste to energy industry for the following reasons:[73]

- Combustion of waste for power is perceived as environmentally unsound; especially the management of ash, emissions and smoke;
- Existing incinerators are inefficient and do not use state of the art technology. These incinerators perpetuate public concerns; and
- Expenses involved in converting existing boilers/furnaces or constructing new boilers/furnaces, other capital expenses and ongoing expenses are perceived as high.

Potential waste to energy schemes can be applied to various waste types including MSW, liquid and gaseous waste and green waste.[74]

[71] Centre for International Economics, Waste to energy: potential impacts on waste management in NSW, October 2011
[72] Australian Institute of Energy, Energy from waste
[73] Ibid.
[74] Australian Institute of Energy, Energy from waste

Using international estimates, 80 per cent of municipal waste in Australia could be available for energy production.[75] This represents 50 gigajoules of energy produced annually, a small fraction of Australia's total annual energy usage of 3223 million gigajoules. Even so, converting waste to energy will reduce emissions from the burning of fossil fuels, and reduce methane emissions produced by the decomposition of waste.

The economic viability of waste to energy facilities depends on whether existing facilities could be retrofitted cheaply, on the costs of planning and constructing new facilities, on the scale and capacity of facilities, and on the location of facilities.

- Currently, there are over 50 existing boilers/furnaces (including power stations) which could be retrofitted for the purpose of receiving diverted waste from landfills.[76] Retrofitting existing boilers/furnaces may be more cost-effective than planning and constructing new facilities, depending on the emissions targets imposed.
- The scale of waste to energy facilities ranges from the conversion of 40,000 tonnes of waste annually to 300,000 tonnes annually.[77] For incineration, economies of scale exist but for other technologies, capacity could be modularised for smaller facilities. Scale is a clear driver of cost, especially for new facilities.
- Electricity transmission and distribution costs could be minimised if waste to energy facilities were located near end users. Alternatively, a facility could be located near landfill sites to reduce transportation costs. A large facility might reduce unit costs anywhere from 10 per cent to 35 per cent depending on the technology, but these reductions may be offset by higher planning and approval costs.
- Capacity is not a concern since waste to energy facilities will likely be set up with long-term contracts. Waste to energy will act as a complement to recycling, rather than a substitute.

According to CIE, a new, stand alone waste to energy recovery facility (with capacity of 100,000 tonnes per year) would become viable in NSW once gate fees reach $200/tonne.[78] Various technologies would be viable in this scenario. Larger facilities would be cost effective at lower gate fees, but there is little community support for a large scale facility.

[75] Ibid.
[76] Centre for International Economics, Waste to energy: potential impacts on waste management in NSW, October 2011
[77] Ibid.
[78] Ibid.

Differences in SMA, ERA and RRA

Inherent demographic and structural differences between metropolitan and regional areas have implications for waste and the operation of the levy. These include:

- Demographic trends, such as the migration of younger people from regional to metropolitan areas, increase pressures to attract and retain landfill personnel,[79] which in turn leads to increases in the operational costs of regional landfills. The majority of regional areas tend to have a larger proportion of retirees and pensioners than metropolitan areas, and given the fact that the levy is directly passed on by councils to households, the economic burden of a levy is magnified for regional populations.
- Personal and corporate incomes are positively correlated with the size of waste generated.[80] Relatively low economic activity in regional areas with smaller and older populations is associated with lower average and total incomes relative to metropolitan areas.[81] This results in regional areas generating less waste than metropolitan areas.[82]
- Regional areas have lower population densities than metropolitan regions.[83] Servicing low density populations increases the costs of waste transportation. The imposition of a waste levy compounds these higher transport costs, thereby increasing the relative costs of regional landfills.
- Metropolitan households have a greater propensity to recycle compared to regional households. This may be due to the limited implementation of kerbside recycling in regional areas due to higher costs associated with population spread.
- Landfill design differs by location. Metropolitan landfills are more likely to be lined than regional landfills given the cost effectiveness of construction and the regulatory requirements.[84] Lined landfills are better able to contain leachate and have lower adverse environmental impacts. For example, illegal disposal of pesticide containers to unlined landfill is a concern for regional landfill operators.[85]
- Compared to regional areas, metropolitan areas are in a better position to reduce waste disposal given that it is cheaper to consolidate green waste and recycling operations with existing metropolitan landfills. Metropolitan areas have access to larger markets for the re-use of goods than regional areas. This makes recycling

[79] South East Regional Organisations of Councils, Towards developing a regional waste management strategy for NSW South East Region, 2012
[80] Peter Harper, Australia's environment: issues and trends, Australian Bureau of Statistics, 2006
[81] Australian Bureau of Statistics, Regional wage and salary earner statistics, Australia, 2003-04, issued 2007
[82] NSW Department of Environment, Climate Change and Water, Waste avoidance and resource recovery strategy progress report, 2010
[83] Peter Harper, Australia's environment: issues and trends, Australian Bureau of Statistics, 2006
[84] Many rural landfills are unlicensed because of the small size of the population serviced
[85] Peter Harper, Australia's environment: issues and trends, Australian Bureau of Statistics, 2006

more economically attractive in metropolitan areas.86 Differences in MSW, C&I and C&D

The existing levy is applied uniformly to different waste types. This is inefficient given that the size of externalities varies depending on waste type.[87] Uniform application of the waste levy is less effective at changing waste disposal behaviour and reducing externalities. The propensity to change the disposal behaviour of C&I and C&D wastes is higher than the potential to change household disposal of MSW because C&I and C&D waste generators pay the levy directly at the point of waste disposal, while the levy on MSW is passed on to households indirectly via local Government rates.[88]

Each type of waste generates externalities of different magnitudes. For example, for every tonne of waste, the amount of CO_2-e generated by each waste type differs:[89] [90]

National Greenhouse-gas and Energy Reporting Scheme (NGERS) default factors:

- MSW 1.19t CO2-e/tonne of waste
- Wet C&I Waste 1.08t CO2-e/tonne of waste
- Dry C&I Waste 0.95t CO2-e/tonne of waste
- C&D Waste 0.17t CO2-e/tonne of waste

Carbon price

The carbon price will be applied to landfill sites with annual emissions greater than 25,000 tonnes CO_2-e. [91]. Waste sent to landfill prior to 1 July 2012 will be exempt because landfill operators cannot recover the costs of emissions from waste deposited in the past.[92] The issue of the impact of a carbon price, although not directly related to the levy, was raised on numerous occasions as the carbon price will add an additional impost on waste sent to landfill unless mitigating strategies are adopted.

Landfill operators expressed the view that the costs associated with a carbon price, while difficult to determine at present, would compound the impact of the levy leading to unwanted effects such as an increase in illegal dumping. Many stakeholders therefore wanted the Government to give consideration to reducing the levy, or at least delaying planned increases, to offset the impact of the carbon price.

Landfill creates emissions over a period of many decades, the intensity and duration of these emissions varying according to the type of waste. As a general principle, the higher the organic content, the greater the emissions profile. This means different landfill sites will face widely varying carbon price liabilities once a price is implemented.

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[86] Tracey Bauer, Regional waste minimization and Local Government, New South Wales, Australia, Earth and Environmental Sciences, 1995
[87] Productivity Commission, Waste management, 2006
[88] Ibid
[89] Ibid
[90] For landfills with gas capture and electricity generation capabilities, these externalities are effectively zero
[91] The Government will review the potential to group sites with emissions of 10,000 to 25,000 tonnes CO_2-e that are in close proximity, no later than 2015-16.
[92] Australian Government, Emissions from landfill facilities – fact sheet, 2011

It is currently not possible to determine the lifetime cost of landfill waste deposited on 1 July 2012, because once the three-year fixed-price period is complete, there are no accurate forecasts for what a carbon price might look like given the interplay of international markets for permits. Indeed, there is no guarantee that a scheme will continue to exist over the lifetime of landfill emissions. However, KPMG understands that preliminary modelling by OEH indicates that the average impact on operators may be between $4 and $26 per tonne for mixed waste (wet C&I or MSW) in the first year (July 2012 to 30 June 2013) at a carbon price of $23 per tonne CO_2-e. Estimates of operator liability beyond the fixed price period cannot be made due to uncertainty around the likely cost of carbon permits.

Additional carbon price affects on landfill operators will include:[93]

- road transport fuel will be (temporarily) exempt, but on-site fuel usage (e.g. loaders and landfill compactors) will be liable; and
- electricity and compliance costs initially estimated at $2/tonne of CO_2-e.[94]

All approved landfills within the SMA will be subject to the carbon price.

Emissions differ for each waste type:[95]

- MSW: 1.19 tonnes of CO2-e/tonne of waste;
- Wet C&I Waste: 1.08 tonnes of CO_2-e/tonne of waste;
- Dry C&I Waste: 0.95 tonnes of CO_2-e/tonne of waste; and
- C&D Waste: 0.17 tonnes of CO_2-e/tonne of waste.

There are approximately 59 landfills in NSW that are expected to produce greater than 25,000 tonnes of CO_2-e annually and that will therefore be liable for the carbon price.

[93] Waste Contractors and Recyclers Association of NSW, The carbon price in NSW – just the facts, 2012
[94] Waste Contractors and Recyclers Association of NSW, The carbon price in NSW – just the facts, 2012
[95] Waste Contractors and Recyclers Association of NSW, The carbon price in NSW – just the facts, 2012

Table 4-3 – NSW Government income from the Waste and Environment levy

Upper Limit received Tonnes	Levy paying facilities SMA Private (a) (b)	Levy paying facilities ERA Public	Levy paying facilities ERA Private (c)	Levy paying facilities RRA Public (d)	NON levy paying facilities Public	NON levy paying facilities Private
10	-	-	-	-	19	1
50	-	-	-	-	53	0
100	-	-	-	-	33	0
200	-	-	-	-	33	0
500	2	0	0	0	25	0
1,000	0	0	0	3	27	1
5,000	1	1	0	6	50	0
10,000	1	2	0	4	13	1
20,000	2	1	1	2	11	0
50,000	2	1	0	9	7	1
100,000	4	2	1	4	7	0
200,000	1	6	3	0	1	0
400,000	4	1	0	0	0	0
500,000	4	0	0	0	0	0
600,000	1	0	0	0	0	0

Source: NSW Office of Environment and Heritage

a) There is one public facility included in the levy Paying SMA Private column
b) One private facility is physically located outside the regulated area however receives only SMA waste
c) A significant proportion of the material received at privately operated ERA facilities is sourced from the SMA
d) There are no privately operated facilities in the RRA
e) Levy paying facilities that report zero waste received have been excluded as they are likely waiting to have their licence surrendered or they are not yet receiving waste.

The recycling industry is also expected to be face increased processing costs as a result of the carbon price including paper, glass, metals, plastics, tyres, motor vehicles and electronic waste reprocessing.[96]

The Australian Council for Recyclers (ACOR) believes that the potential for carbon abatement could be jeopardised by the current policy. Recyclers are disproportionally impacted by the carbon price as they do not receive free emissions permits. Large producers of virgin materials will receive free emissions permits which cover between 60 to 90 per cent of their carbon emissions[97]. In addition, recyclers face increasing

[96] Australian Council of Recyclers, RE: Carbon Pollution Reduction Scheme (CPRS) Green Paper, 2008
[97] Australian Council of Recyclers, Carbon price must incentivise recyclers, 2011

power and fuel costs which reduce their margins and may lead to the exportation of recycling.

However, there are initiatives that will allow landfill operators to mitigate their liabilities, notably through the installation of gas infrastructure that will potentially derive the following benefits:

1. Limiting liability by decreasing the amount of gas emitted;
2. Creating Australian Carbon Credit Units (ACCUs) from legacy waste; and
3. Using methane to generate electricity and earn renewable energy certificates (RECs).

The complexity and uncertainty inherent in the carbon price as it pertains to landfill operators therefore makes an appropriate policy response by the NSW Government extremely difficult.

Levy applicable regions

As discussed in Section 2.4, differential levies apply to the three waste zones (SMA, ERA and RRA) while the remainder of NSW is exempt. The levy rate applied depends on the source of the waste, not where landfill is sited;[98] to remove the incentive to transport waste between regions, although KPMG notes that it can be difficult to determine the origin of waste and the costs of enforcing such a policy are high.

The differential levy across NSW is difficult to justify. Currently, regional centres with large populations are excluded, while smaller regions in the RRA with low population densities face high per capita charges to comply with the levy. For example, Albury in the NSW south has a population of just fewer than 88,500[99] and Albury landfill receives around 200,000 tonnes of waste per year,[100] ranking it amongst the top 20 landfills in NSW for tonnes of waste received. If the objective of the levy is to drive waste avoidance and encourage resource recovery in NSW, then it makes sense that it should be applied across the whole State.

Differential levies can lead to increased air pollution, carbon emissions and traffic congestion due to increased truck movements. Additionally, as Victoria imposes a waste levy, Victorian waste is transported to border areas such as Albury. Extending the waste levy across the entire State would minimise the transfer of waste from Victoria to New South Wales.

Another key issue in regional areas is the lack of economies of scale required to provide infrastructure such as weighbridges and recycling facilities. It would therefore appear more logical to apply the levy on LGAs based on waste volumes produced, so that regions with low population density are not discriminated against.

[98] NSW Office of Environment and Heritage
[99] http://profile.id.com.au/Default.aspx?id=264&pg=210
[100] http://www.alburycity.nsw.gov.au/www/html/17-news.asp?n=1240

5 Recommendations

KPMG has been engaged by OEH to consider the operation of the waste levy and provide recommendations to the NSW Government, with reference to its objectives for reducing waste generation, increasing resource recovery from waste and providing revenues to support delivery of priority Government services, with particular reference to:

- households;
- the recycling industry;
- illegal dumping; and
- the use of levy funds to assist in addressing objectives, especially through investment in waste infrastructure.

In response to the views expressed by stakeholders, together with the review of relevant literature and supporting data, KPMG has made a number of recommendations in each of these key focus areas as well as on additional issues that arose throughout the consultation process, including the impact of a price on carbon.

In a number of instances, issues raised during the review process were considered to be either unsubstantiated by available evidence or were being dealt with in the most effective manner available.

5.1 Households

Issue

The removal of food and garden organics and dry recyclables from household residual bins has been identified as a key element in achieving the waste diversion target. However, imposition of a flat rate levy by councils results in a muted price signal to households to change their waste disposal behaviour.

Recommendations

The NSW Government should support an increase in the recovery of organic waste and dry recyclables from households using a three-pronged approach.

1. The NSW Government, together with industry and councils, should develop best practice approaches for household collections to improve source separation at the household level. For example, some councils offer a lower fee for households opting for a smaller residual waste bin.
2. The NSW Government, together with industry and councils, should develop education and community engagement programs to support household participation in adopting best practice management systems. For example, materials/media advising what waste goes in which bin.

   A portion of the waste levy revenue should be used to establish a funding pool for *Local Government Programs*. The funding pool should be non-contestable and fund

the delivery of education and community engagement programs that are individually tailored by local councils for their local communities.

3. Support investment in resource recovery facilities to improve the removal of organic waste and dry recyclables from household bins.

   A portion of the waste levy revenue should be used for establishing an *Infrastructure Fund*. The pool would provide funding via a competitive grant process for infrastructure for metropolitan and regional councils and industry.

5.2 Recycling

Issue

The levy increases the cost for recyclers by the value of the levy multiplied by the weight of waste that cannot be recycled. Recyclers argue that residual waste from the recycling process should be exempt from the levy, as this is waste that cannot be recycled further. Others in the waste industry argue that residual waste from recycling should attract the levy as this will provide greater incentive for recyclers to find ways of recycling their residual waste.

The issue with providing exemptions from the levy is that it allows people to try to exploit the exemption. Previous experience suggests that this occurs and is very hard to police. Additionally, there is a need for a pricing signal to stimulate the continued innovation to recover more materials. The higher the levy, the more impetus there is for industry to continue to improve resource recovery outcomes. KPMG has not seen sufficient evidence to support removal of the waste levy from recyclers' residual waste streams.

Recommendations

4. Support initiatives and programs to improve the recovery of waste from the commercial and industrial sector.

   A portion of the waste levy revenue should be used for establishing a Recycling Innovation Fund.

5. Investigate the use of the Recycling Innovation Fund to support a reduction in metal and paper recyclers' residual wastes.

5.3 Use of levy funds

5.3.1 Hypothecation

Issue

The NSW Government has a role in balancing the provision of essential services such as public transport, hospitals and schools, as well as providing funding for waste and recycling infrastructure and programs. The NSW Government has factored in the expected levy revenue to its forward estimates budget over the next three years, and

the rate of hypothecation is unlikely to change before 2015-16. The NSW budget estimates the levy will result in an increase of total waste diversion from landfill in the order of 7 per cent to 10 per cent per year, meaning a reduction in revenue generated by the levy.

Table 5-1 –Waste and environment levy projections

Tonnes contributing to projection					
	2011-12 Budget	**2012-13 Forward estimate**	**2013-14 Forward estimate**	**2014-15 Forward estimate**	**2015-16 Forward estimate**
SMA	3,722,295	3,386,000	3,099,000	2,894,000	2,705,000
ERA	1,250,715	1,196,000	1,095,000	1,022,000	955,000
RRA	577,100	546,000	434,100	404,000	365,500
% change					
	2011-12 Budget	**2012-13 Forward estimate**	**2013-14 Forward estimate**	**2014-15 Forward estimate**	**2015-16 Forward estimate**
SMA	0%	-9%	-8%	-7%	-7%
ERA	-1%	-4%	-8%	-7%	-7%
RRA	-2%	-5%	-20%	-7%	-10%
Levy Revenue Projections					
	2011-12 Budget	**2012-13 Forward estimate**	**2013-14 Forward estimate**	**2014-15 Forward estimate**	**2015-16 Forward estimate**
Projected revenue	$417m	$447m	$465m	$490m	$509m

Source: NSW Office of Environment and Heritage and KPMG analysis

The levy aims to increase waste diversion from landfill, and intuitively speaking, as the levy increases so too should the waste diverted from landfill. However, this is not always the case, and the Government may have overestimated the impact that the levy will have on waste diversion in future years. A lower than expected increase in waste diversion will lead to greater revenue than what the Government has projected in its forward estimates.

Table 5-2 shows the additional revenue that would be generated if disposal rates to landfill stayed constant, as well as if there was on average a 5 per cent reduction in waste disposed of at landfills each year.

Table 5-2 –Additional levy revenue

Levy Revenue Projections					
Additional revenue	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
	Budget	**Forward estimate**			
at 0% change in waste disposal	N/A	$49m	$102m	$149m	$202m
at 5% reduction in waste disposal	N/A	$24m	$47m	$58m	$70m

Source: NSW Office of Environment and Heritage and KPMG analysis

Recommendations

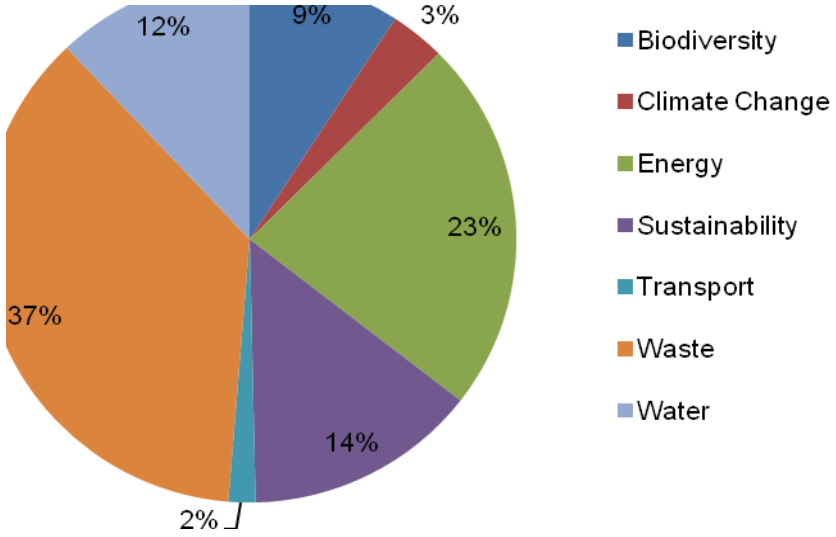
6. Up to 2015-16, any levy revenue received by the NSW Government that exceeds the current forward estimates should be directed towards additional waste programs. After 2015-16, the NSW Government should look at directing a greater percentage of the levy revenue back to improve waste management and increase recycling

5.3.2 WaSIP

Issue

As shown in Figure 4 below, waste programs only accounted for just over one-third of all WaSIP programs in 2010-11. As the levy is collected on waste disposed of at landfills, the revenue should be hypothecated back to councils to be used to achieve the objectives of the levy; that is, to drive waste avoidance and encourage resource recovery.

Figure 4 – 2010-11 WaSIP split by area



Source: NSW Office of Environment and Heritage and KPMG analysis

The funding allocated through WaSIP tends to be used for small and short term programs. A longer-term approach is needed to ensure that strategic projects are undertaken. Councils find WaSIP confusing and complex and often devote large amounts of time and resources to ensure that they meet the required WaSIP standards. The program should be changed from performance standards based to a grants program whereby councils can apply for grants to assist with waste projects they are undertaking. KPMG also notes that there is a history of underspending which may reflect the difficulties associated with accessing and acquitting against the fund.

Recommendation

7. The WaSIP program should be replaced and at least the equivalent funding be made available to local government through funding from the waste levy revenue for waste infrastructure, education and program support.

   Local Government should have access to both a non-contestable *Local Government Programs Fund* and a contestable *Infrastructure Fund.*

5.4 Infrastructure

Issue

The Richmond Review identified a shortage of waste infrastructure in NSW and that NSW needs approximately 16 new organics processing facilities, 13 upgraded organics processing facilities and two new mixed waste processing facilities for domestic waste at current levels. Additionally, by 2036, NSW will require 79 new waste processing facilities for C&I waste.

Development of a statewide waste infrastructure strategy to ensure these facilities are built would be a positive step, and would assist the waste industry to build sufficient resources available to continue to drive waste diversion into the future. A statewide plan would also allow for a whole of Government approach and allow for all Government departments (OEH, Planning etc) to work together to ensure waste infrastructure can be built in places of need and without restrictions.

Historically, funding for waste infrastructure has been the biggest impediment to investment. To solve this issue, after 2015 a waste infrastructure fund should be developed using a portion of the levy revenue. This infrastructure fund would not be used to provide grants, unless supported by a rigorous business case that assessed both construction and operational viability, as without this assessment grants may lead to a process where facilities are built that are not commercially viable. The infrastructure fund would be used to assist local council and industry to invest in viable waste and recycling infrastructure.

Recommendation

8. The NSW Government, together with industry and councils, should finalise regional waste and resource recovery infrastructure strategies that outline the investment required to meet the State Recycling Targets.

   A portion of the waste levy revenue should be used for establishing an Infrastructure Fund. The pool would provide funding via a competitive grant process for infrastructure for metropolitan and regional councils and industry.

9. Establish an independent expert panel to facilitate infrastructure investment in relation to planning, procurement and delivery of infrastructure.

5.5 Illegal dumping

Issue

There is no conclusive evidence that links the levy to illegal dumping. However, there is no disputing that illegal dumping is an issue across NSW and continued support is needed to tackle this problem. Consultations suggested that numerous approaches, such as security cameras, had failed and that even when perpetrators were caught, prosecution costs are often prohibitively high.

Regional Illegal Dumping squads are seen as highly positive by councils that employ them, however, the cost of this program appears high in relation to outcomes and is not accessible to all councils.

Illegal dumping of asbestos is a particular problem and is dealt with separately in this section of the report.

Recommendations

10. Implement a State-wide Illegal Dumping Strategy in consultation with industry and local government.

A portion of the waste levy revenue should be used to establish a pool of funding for *Illegal Dumping* to fund the development of illegal dumping guidance, prevention infrastructure, and education and enforcement programs in accordance with the State-wide Illegal Dumping Strategy

11. Increase local government, public land managers and the community's participation in Regional Illegal Dumping programs from the *Illegal Dumping* fund.
12. Introduce a pilot program of accessible drop off facilities for problem waste (levy free) and develop a statewide education program in conjunction with industry and local councils to improve awareness and disposal of problem waste.

    This should be reviewed after two years and if successful, then further drop off centres should be rolled out across all of NSW.

    KPMG notes that previous research suggests that, to be effective, one drop off centre for every 50,000 residents would be required[101], equating to more than 140 drop off centres across NSW. In the SMA and ERA, it would prove both expensive and challenging to find suitable locations for this number of facilities.

5.6 Asbestos

Issue

Illegal dumping of asbestos occurs predominantly by households renovating on a small scale. Rebates for households appropriately disposing of asbestos may assist in reducing the incidence of dumping.

Recommendation

13. Introduce a pilot program providing a levy rebate to home renovators disposing of small, non-commercial quantities of asbestos, provided they have attended a council education session and dispose of the product in the required way. This should be funded from the Illegal Dumping fund.

5.7 Energy from waste

Issue

Australia is one of the few developed nations that does not have a well established waste to energy industry. This is mainly due to historic environmental issues associated with waste to energy facilities.

Recommendation

14. Develop and implement a new energy from waste policy and continue to investigate and provide guidance to industry on new technology available to increase waste diversion.

[101] NSW Office of Environment and Heritage

5.8 Carbon pricing

Issue

Landfill operators with emissions exceeding 25,000 tonnes CO_2-e per annum will be liable to offset emissions resulting from new waste deposits after 1 July 2012, and for a period of up to 30 years. This liability will add to the cost of waste sent to landfill however given the complexity of emissions from differing waste streams and uncertainty around the carbon price after 2015, this cost has yet to be accurately estimated. Further, landfill operators will be able to mitigate emissions through:

- capturing and destroying methane;
- creation of carbon offset credits under the Carbon Farming Initiative by capturing/destroying emissions from legacy waste; and
- using methane to generate electricity and earn renewable energy certificates (RECs).

Additional research by KPMG[102] around price elasticities of waste charges suggests that, should the above strategies not be adopted, a carbon price may provide further incentive to increase diversion rates.

The complexity and uncertainty inherent in the carbon price as it pertains to landfill operators, however, makes an appropriate policy response by the NSW Government extremely difficult.

15. The NSW Government should not adjust the scheduled waste levy rates in relation to the Federal carbon price.

5.9 Regional application of the levy

Issue

Historically, the levy has been applied to areas that are highly populated and therefore produce a high proportion of waste. However, there are still many areas of NSW that are generating or receiving large volumes of waste and yet are not attracting the levy.

Recommendation

16. The levy should be applied across the whole of NSW, with small regional landfills receiving <5,000 tonnes of waste per annum remaining exempt from the levy, given the lack of economies of scale required to support necessary supporting infrastructure .

[102] OECD 2006 The Political Economy of Environmentally Related Taxes

5.10 Operational purposes

Issue

It is acknowledged that landfill operators may use “clean fill” – more appropriately Virgin Excavated Natural Material (VENM) – for legitimate operational purposes, but that compliance costs associated with monitoring and reviewing such operations on a site by site basis would be prohibitive. The previous 100% deduction was subject to some gaming; however it is recognised that completely removing the allowance may place a significant cost on some operators.

Recommendation

17. The 10% deduction on Virgin Excavated Natural Material (VENM) be introduced for all landfills.

The above recommendations, in combination, should assist the NSW Government to improve diversion rates towards target rates.

A Literature review list

- CIE, Waste to Energy: Potential impacts on waste management in NSW, October 2011;
- CIE, Impacts of the waste levy on recyclers, August 2011;
- CIE, Impacts of the waste levy on commercial and industrial recyclers; October 2011;
- GHD, Resource Recovery Infrastructure needs analysis background report; November 2011;
- GHD, Resource Recovery Infrastructure needs analysis summary report, November 2011;
- Mike Ritchie and Associates Consulting, Independent review of the inclusion of Upper Hunter Shire council in the Regional Regulated Area, March 2011;
- Minister for the Environment and Minister for Heritage, Levy review letter; October 2011;
- NSW Department of Environment Climate Change & Water, Crackdown on Illegal Dumping: Handbook for local Government, April 2007;
- NSW Department of Environment and Conservation, An assessment of attitudes and behaviour amongst multi unit dwelling residents in relation to illegal dumping: Research report, May 2004;
- NSW Department of Environment and Conservation, Regulatory Impact Statement: Protection of the Environment Operations (Waste) Regulation, 2005;
- NSW Department of Environment Climate Change & Water, City and Country Environment Restoration Program; December 2005;
- NSW Department of Environment Climate Change & Water, Disposal based survey of the commercial and industrial waste stream in Sydney, May 2010;
- NSW Department of Environment Climate Change & Water, Illegal dumping prevention and clean up: handbook for Aboriginal communities, December 2008;
- NSW Department of Environment Climate Change & Water, Memorandum of Understanding between LGSA and DECC, December 2008;
- NSW Department of Environment Climate Change & Water, Review of the waste strategy and policy in NSW, December 2010;
- NSW Department of Environment Climate Change & Water, Waste and Environment levy: Operational Guidance Notes, December 2009;
- NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy progress report volume 1, February 2011;
- NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy progress report volume 2, February 2011;

- NSW Department of Environment Climate Change & Water, Waste Avoidance and Resource Recovery Strategy (WARR) 2003, 2003;
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- NSW Office of Environment and Heritage, NSW local Government waste and resource recovery data report, June 2011;
- NSW Office of Environment and Heritage, Reducing waste: Implementation strategy 2011-2015, February 2011;
- NSW Office of Environment and Heritage, Report to the NSW Environment Trust Waste and Sustainability Sub-Committee on waste and sustainability programs 2010-2011, October 2011;
- NSW Office of Environment and Heritage, Revenue Source Analysis – Waste and Environment levy – 2010/11, 2011;
- NSW Office of Environment and Heritage, Schedule 1 Analysis: POEO (Waste) Amendment (Land Waste) Regulation; December 2005;
- NSW Office of Environment and Heritage, Waste and environment levy envelope funded programs, 2011;
- NSW Office of Environment and Heritage, Waste and Sustainability Improvement Payment Program: Guidelines for councils 2011-2012; July 2011;
- NSW Office of Environment and Heritage, Waste and Sustainability Improvement Payment Program 2010-2011, November 2011;
- NSW Office of Environment and Heritage, Waste and Sustainability Improvement Payment Program 2009-2010, December 2010;
- Premier of NSW, Levy review commencement letter, December 2011;
- Taverner Research, Waste Management and the Construction Industry Social Research, May 2008; and
- Waste Management Association of Australia, Inside Waste Industry Report 2011-2012, June 2011.

B Written submissions

Table A1: Written submissions received

Respondent	Respondent Sector
AAC Products	Industry
All Areas Demolition Excavation	Industry
Australian Council of Recycling	Industry Association
Australian Industrial Ecology Network (WMMA Group)	Industry Association
Australian Industry Group	Industry Association
Australian Landfill Owners Association	Industry Association
Australian Sustainable Business Group (ASBG)	Industry Association
Auckett, Geoff	Individual
Armstrong, Kevin	Individual
Barker, Colin	Consultant
Bankstown City council	Local Government
Blue Mountains City council	Local Government
BP Australia	Industry
Branson, Robin	Consultant
Camden Council	Local Government
Campbelltown City council	Local Government
City of Canada Bay	Local Government
Clarence Valley council	Local Government
Climate Change Australia (Clarence Branch)	Environment Group
Coffs Coast Waste Services	Local Government (Infrastructure Group)
Coffs Harbour City council	Local Government
Compost NSW	Industry Association
Dimeo, Robert	Industry
Enirgi Group (Confidential)	Industry
Fahey, Darren	Individual
Falanga, Mark	Industry
Global Renewables	Industry
Gloucester Shire council	Local Government
Gosford City council	Local Government
Great Lakes council	Local Government
Greater Taree City council	Local Government

Respondent	Respondent Sector
Hawkesbury City council	Local Government
Holroyd City council	Local Government
Hornsby Shire council	Local Government
Hunters Hill council	Local Government
Ipsum (Paul Oakes)	Consultant
JJ Richards and Sons Pty Ltd	Industry
Kempsey Shire council	Local Government
Kiama Municipal council	Local Government
Kimbiki Environmental Enterprises Pty Ltd	Local Government (Infrastructure Group) / Industry
Kogarah City council	Local Government
Ku-ring-gai council	Local Government
Kyogle council	Local Government
Lake Macquarie City council	Local Government
Lane Cove council	Local Government
Local Government and Shires Associations of NSW	Local Government (Association)
Latham, Wayne	Individual
Midwaste Regional Waste Forum	Local Government (Voluntary Waste Group)
Marinic, Mitchell	Individual
Mobius Environmental on behalf of Benedict Sand and Gravel, Brandowne Quarrying and Recycling Services and Hi Quality Quarrying Group - CONFIDENTIAL	Industry
Mosman council	Local Government
Murray Waste Management Group	Local Government (Voluntary Waste Group)
Muswellbrook Shire council	Local Government
NetWaste	Local Government (Voluntary Waste Group)
North East Waste Forum	Local Government (Voluntary Waste Group)

Respondent	Respondent Sector
Northern Inland Regional Waste (NIRW)	Local Government (Voluntary Waste Group)
Northern Sydney Regional Organisation of councils	Local Government (ROC)
Parramatta City council	Local Government
Peabody Energy Australia	Industry (Energy)
Pittwater council	Local Government
Port Macquarie Hasting council	Local Government
Port Stephens council	Local Government
RAMROC Riverina Waste Group	Local Government (ROC)
Remondis (Written and Uengage)	Industry
Resource Recovery Management Limited	Industry
RENEW NSW	Local Government (All NSW Voluntary Waste Groups)
REROC	Local Government (ROC)
Ryde council (City of)	Local Government
Shellharbour City council	Local Government
Shoalhaven City council (1)	Local Government
Shoalhaven City council (2)	Local Government
SIMS Metal Management (Confidential)	Industry (Metal)
Singleton council	Local Government
SITA Australia	Industry
Soilco	Industry
South East Resource Recovery Group	Local Government (Voluntary Waste Group)
South West Regional Waste Management Group (Uengage submission)	Local Government (Voluntary Waste Group)
Southern Councils Group	Local Government (ROC)
Southern Sydney Regional Organisation of councils (SSROC)	Local Government (ROC)
SULO	Industry

Respondent	Respondent Sector
Sutherland Shire council	Local Government
Sydney Airport Corporation Limited	Industry (Generator) quarantine waste
Sydney (City of)	Local Government
Tamworth Regional council	Local Government
Total Environment Centre	Environment Group
Tweed Shire council	Local Government
Upper Hunter council	Local Government
Veolia	Industry
Visy Recycling	Industry
Wagga Wagga (City of)	Local Government
Warringah council	Local Government
Warrell, Lance	Individual from QLD
Waste Assets Management Corporation	NSW Government
Waste Contractors and Recyclers Association (WCRA)	Industry Association
Waste Management Association (NSW Branch)	Industry Association
Western Sydney Regional Organisation of councils Ltd (WSROC)	Local Government (ROC)
Weston Aluminium Pty Ltd	Industry
Willoughby council	Local Government
Wollondilly Shire council	Local Government
Wollongong City council	Local Government
WorkCover NSW	State Government
Wyong Shire council	Local Government
Confidential	Individual
Zero Waste Australia	Environment Group (Waste)

Table A2: Responses to recycling

Examine any evidence presented that the application of the levy to recycling sectors is impacting on competitiveness or the attainment of maximum economically efficient recycling		
Q: What is the impact of the levy on efficient recycling?	**Response**	**Number**
	Mixed	9
	Negative	14
	Positive	8
	N/A	4
Recommendation Topics	**Respondent**	**Number**
The levy should not apply on residual waste	local Gov	8
	Industry	2
Levy funds should be used to subsidise the high cost of transporting regional areas	local Gov	4
The levy should continue to increase	Industry	2
Should be 100% hypothecation	Industry	2
Differential levies should be considered on a case by case basis	Industry	1
Three-step levy discounting method for recyclers	Industry	1
Recycling industry should be exempt for the levy	Industry	1

Table A3: Responses to differential waste streams

Review the effectiveness of the levy on recycling across different streams (i.e. Municipal Solid Waste, Commercial and Industrial Waste, and Construction and Demolition Waste) and make recommendations for improvement, as necessary.		
Q: Is the levy effective on recycling for MSW?	**Response**	**Number**
	Yes	3
	No	14
	N/A	14
Q: Is the levy effective on recycling for C & I?	**Response**	**Number**
	Yes	2
	No	9
	N/A	20
Q: Is the levy effective on recycling for C & D?	**Response**	**Number**
	Yes	7
	No	2
	N/A	22

Review the effectiveness of the levy on recycling across different streams (i.e. Municipal Solid Waste, Commercial and Industrial Waste, and Construction and Demolition Waste) and make recommendations for improvement, as necessary.		
Recommendation Topics	**Respondent**	**Number**
Need to develop C&I infrastructure e.g. material recovery facilities.	Individual	1
Licensing of all waste and recycling facilities (not just over 30,000t threshold) and licensing/reporting of all waste transporters	Industry	1
Councils operating their own facilities should get a proportion of all of the levy collected from C&I and C&D, not just MSW	local Gov	1
Stabilised waste from mixed C&I processing that is being developed for fuel manufacturing be given an interim levy exemption to reduce investment risks	Industry	1
Application of AWT organic outputs for mine rehabilitation is supported but not a sustainable option	Industry	1
Banning of priority recyclables from residual waste stream. Providing a second MGB for recyclables and servicing it at the same time. Increasing the frequency of the MGB collection. Provide a bigger MGB for recyclables (e.g. 360L).\	Industry	1
Regulatory controls such as bans or maximum allowable organic content. Mandatory source separation of organic waste from high organics producing businesses. Regulatory controls on allowable wastes in landfills (e.g. stabilise organic waste prior to landfilling). Carbon credits for soil carbon from compost. Promotion of small bench-top bins and composting of food waste and garden organics. Extensive NSW wide education.	Industry	1
Banning certain minor waste streams from MSW, C&I and C&D. Provide funding to EPA for enforcement of waste and recyclables.	Industry	1
Establishing free drop off centres	Industry	1
State wide education campaign for minor waste streams.	Industry	1
Introduction of innovative and well designed recovery receptacles for minor waste streams.	Industry	1

Table A4: Responses to household waste

Analyse data and evidence presented and provide advice on the impact of the levy on households and the effectiveness of the levy in supporting greater resource recovery from household waste		
Q: Does the levy have a negative impact on households?	**Response**	**Number**
	Yes	13
	No	10
	Not stated	19
Q: Is the levy effective for households?	**Response**	**Number**
	Yes	3
	No	29
	Not stated	10
	Relatively limited	1
Recommendation Topics	**Respondent**	**Number**
Levy component should be shown on the local council Annual Rates & Charges Notice.	Industry	3
Cap levy at current rate	local Gov	4
Method of calculating the levy needs to be reassessed to ensure that the penalties and rewards are directed at the source of the waste generation	local Gov	1
Greater outcomes can be achieved through behavioural change through education, system upgrades and investing in infrastructure	local Gov	1
Levy should not apply to the residual waste from AWTs	local Gov	
NSW Government should fund a broad based marketing campaign, including social media, TV and radio	local Gov	1
	Individual	1
Measures must be introduced that reduce the impact of the initial capital cost of facilities that provide an alternative to landfill disposal	local Gov	1
A whole of Government approach must be taken in addressing waste infrastructure planning, procurement and operation	local Gov	1
That the historical impact of the waste levy on the household (domestic) waste stream be analysed with a view to projecting what the impact will be (if any) on further increases in the levy. Based on the findings the NSW Government, develop a program to address household waste tonnages	local Gov	1
Assistance to councils to investigate and develop more responsive domestic waste charging systems including “pay for lift” and “pay by weight” charging systems	local Gov	1

Analyse data and evidence presented and provide advice on the impact of the levy on households and the effectiveness of the levy in supporting greater resource recovery from household waste		
Introduce mandatory source separation and recycling of food waste and highly recyclable materials for households and businesses. Support for innovative collection systems (e.g. 360L bin), upgrade of collection vehicles and lifting mechanism.	local Gov	1
Method of calculating the levy needs to be reassessed to ensure that the penalties and rewards are directed at the source of the waste generation	local Gov	1

Table A5: Responses to funding

Review and report on the existing funding arrangements available to local councils and industry for waste and resource recovery initiatives, programs, infrastructure and combating illegal dumping.		
Recommendation Topics	**Respondent**	**Number**
Investment in infrastructure	local Gov	3
	Individual	1
100% hypothecation	local Gov	19
	Individual	1
Councils to retain a higher proportion of the levy	local Gov	5
Funds should be spent on initiatives in the area from where they are raised	Industry	2
Funding of initiatives to reduce and to dispose of hazardous and problem wastes	local Gov	2
Levy funds should be used to support compost industry. Funds to help subsidise costs for good quality compost	Individual	1
100% funds raised should be available for education and waste reduction projects by local Government, industry and NGOs.	Environment group	1
Increase funding for voluntary Regional Waste Groups to allow greater opportunities for investing in infrastructure, research and development and human resourcing	local Gov	4
Levy revenue to be directed toward the employment of five Market & Industry Development Officers for the NSW Compost Industry, over a sustained five year term. Cost $500,000 per annum x 5 years (Total 2.5M)	Individual	1

Review and report on the existing funding arrangements available to local councils and industry for waste and resource recovery initiatives, programs, infrastructure and combating illegal dumping.		
Levy revenue to fund a five year scale-in, scale out approach to increased compost use within extensive agriculture and intensive horticulture industries across NSW, distributed equitably across the 72 LGAs. The funding would effectively cover the supply and distribution of 125,000t at Year 1 at a cost of $40 p/t covering 12,500 hectares at an application rate of 10t/ha. Year 2 costs equate to $20/t for the same overall hectares coverage with year 3 costing $10/t. Cost $5M/yr 1, $2.5M/yr 2, $1.25M/yr 3 (Total $8M)	Individual	1
Should fund a SMA wide collection of mattresses, batteries and other difficult materials. Consolidate funding for regional education initiatives to be more effective	local Gov	1
Funding of a Regional Illegal Dumping (RID) Squad for regional communities	local Gov	2
More funding for rural and regional councils	local Gov	1
Levy funding be made available to councils outside of the levy area	local Gov	1
Levy should fund contamination enforcement/education officers in each council	Industry	1
Substantial funding be allocated to several key projects that are strategically aligned with NSW Reducing Waste: Implementation Strategy 2011-2015 and in particular focus area 4 - infrastructure	NSW Gov	1
Grants matching dollar for dollar industry funds	Industry	1
Investment in infrastructure should not be at the expense of the Environment Trust or WaSIP funds currently available to councils	local Gov	1
The review should consider the best mechanism to divert money generated from the levy back to avoidance, reduction and recycling improvements and target existing "bottlenecks". Where revenue is directed to improvements, the review should consider how the value this funding provides will be measured and linked to improvements in diversion to landfill over the longer term.	Industry	1
Revenue should be used to plan strategically the development of waste infrastructure and invest in new facilities	local Gov	3
Fees for education and environment programs for the State Government would be better funded from State Government resources	local Gov	1
Provide assistance to ensure best practice landfilling	local Gov	1

Review and report on the existing funding arrangements available to local councils and industry for waste and resource recovery initiatives, programs, infrastructure and combating illegal dumping.		
A major proportion to be allocated back to councils for use (individually and/or regionally) on waste and sustainability initiatives	local Gov	1
The distribution of the domestic waste levy funds should be hypothecated back to councils and be proportional on the basis of their contribution to the total domestic levy funding pool (e.g. council contributes 10% of total levy, gets 10% of the pool back)	local Gov	1
That councils/groups of councils have the autonomy to use returned levy funds for waste and sustainability programs and projects	local Gov	1
A substantial proportion to be used for the establishment and operation of appropriately scaled and located, proven alternative waste technologies and infrastructure (such as drop-off centres, composting facilities, energy from waste [subject to approval] etc), designed to address the specific needs of local and/or regional waste streams and communities.	local Gov	1
A proportion for a WASIP-style program which enables councils to individually or jointly develop strategies and programs to address broader sustainability issues such as water and energy conservation, waste reduction, sustainable procurement etc	local Gov	1
Support for RENEW funded by the levy to be 1% of levy revenue	local Gov	2
Less could be diverted to Treasury. Also support continued use for other environmental programs but not at the expense of uplifting resource recovery.	Environment group	1
Subsidising the provision of recycling opportunities in regional areas, e.g. for e-waste, mattresses, polystyrene, farm plastics	local Gov	2
Offsetting higher transport and service costs in regional areas	local Gov	1
Regional programs - to remove the unfair competitive advantage the larger metropolitan councils currently have in accessing some funds	local Gov	1
Encouraging investment in research and development for small scale infrastructure that is appropriate for regional areas	local Gov	1
That a waste management fund supporting the non-Government C&D and C&I sectors be established and its size proportional to the contribution these sectors make to levy revenue	Industry	1
Supports the current funding and program duration arrangements	local Gov	1

Review and report on the existing funding arrangements available to local councils and industry for waste and resource recovery initiatives, programs, infrastructure and combating illegal dumping.		
Acknowledgement of demonstrated interest of industry in industrial ecology.	Consultant	1
A statewide logistics and infrastructure study should be commissioned to inform decision making.	local Gov	1

Table A6: Responses to infrastructure

Review and make recommendations on ways to improve the effectiveness of the levy in supporting investment in and the financial viability of resource recovery infrastructure.		
Recommendation Topics		
Infrastructure	**Respondent**	**Number**
Levy funds should not be used to fund new landfill infrastructure	Industry	1
NSW Government plan for new MSW landfills for the Greater Sydney Region	Industry	1
Department of Planning and EPA establish a taskforce to deal with sites of future waste management infrastructure	Industry	1
Invest in the research/development of new infrastructure and facilities	Loc Gov	19
Invest in the research/development of new infrastructure and facilities	Industry	2
Whole of Government approach to addressing waste infrastructure	Loc Gov	1
Set up regional groups of councils to plan and construct waste processing and recycling infrastructure	Loc Gov	1
Financial incentives for groups of regional councils to collaborate for larger scale resource recovery facilities (including funding for tender processes, site approvals and offset the cost of tendering by proponents)	Industry	1
Funding to be provided on a 'reimbursement of costs' basis	Industry	1
The establishment of an advisory group to co-ordinate, promote and facilitate infrastructure development	Industry	1
Funding/grants	**Respondent**	**Number**
Funding for regional infrastructure	Loc Gov	16
Grants matching dollar for dollar industry funds	Industry	1
Low interest loans for projects	Industry	1
Loan guarantees	Industry	1
Research and Development Grants for resource recovery	Industry	1
Rent subsidies for start up periods such as DOCs	Industry	1

Review and make recommendations on ways to improve the effectiveness of the levy in supporting investment in and the financial viability of resource recovery infrastructure.		
Capital grants	Industry	1
Reduce the impact of the initial capital costs of facilities	Loc Gov	1
Loans/transitional loans to councils for capital works	Loc Gov	1
Interest free bank loans to councils or privates for infrastructure	Loc Gov	2
Assist with procurement	Industry	1
Provide funding to councils to purchase sites	Industry	1
Funding should be non-discriminatory between public and private sector providers	Industry	1
Provide capital funding for alternative organics residual waste treatment facilities for small and medium sized councils	Loc Gov	1
Want drop off centre	Loc Gov	1
Want local education centres	Loc Gov	1
Levy should provide seed funding for best practice recycling facilities	Environment group	1
Infrastructure funds	Industry	2
Others	**Respondent**	**Number**
Infrastructure should be provided to clusters of councils to enable commercial scale and viability of technologies (e.g. AWT)	Loc Gov	2
Wants NSW Government to put in place a statewide Infrastructure Plan	Industry	3
Wants NSW Government to put in place a statewide Infrastructure Plan	Loc Gov	3
Establish an infrastructure fund (with retrospective application) that supports the councils of the rural regulated and non-regulated areas	Loc Gov	2
Need to examine markets and alternative options, e.g. energy from waste or bioreactor landfills	Loc Gov	1
Regional programs	Loc Gov	2
Operators running problem waste recycling facilities should be given subsidies to reduce their processing costs	Loc Gov	1
Transport rebates/offsets for recovered materials	Loc Gov	3
Government provides targeted support for EfW Investments	Industry	1
Alignment of recycling policy and planning policy	Consultant	1
Use of levy funds in capital funding for organics recycling located out of the Sydney basin	Industry	1

Review and make recommendations on ways to improve the effectiveness of the levy in supporting investment in and the financial viability of resource recovery infrastructure.		
Rewards for achieving State Diversion Target	Industry	1
Fund regional programs	Loc Gov	1
Structured three way partnership arrangements for infrastructure to allow all parties to commit (reluctance of private sector to invest without commitment from local Government)	Loc Gov	2
100% hypothecation	Loc Gov	1
Strategic advice to local Government to support waste reform	Industry	1
Strongly support dedicating a proportion of levy revenue to a Waste Infrastructure and Sustainability Fund (WISF)	Loc Gov	1

Table A7: Responses to WaSIP

Review the effectiveness of the Waste and Sustainability Improvement Program (WaSIP) delivery and identify funding priorities for waste and resource recovery initiatives, programs and infrastructure		
Q. Is WaSIP effective?	**Response**	**Number**
	Supported	12
	Negative	17
	Mixed	13
	Not stated	3
Recommendation Topics		
WaSIP funds should be used for substantial infrastructure projects	Industry	1
Want no change to WaSIP funding and should continue beyond 2015	local Gov	3
The continuity of WaSIP should be guaranteed as long as the levy is in place	local Gov	5
The WaSIP Advisory Committee should be expanded to include a review of standards and approval of projects and delivering on the Waste Implementation Plan	local Gov	6
100% of levy funds should be used for research and development programs for new waste technologies	local Gov	1
Councils should be free to decide how they allocate WaSIP funds	local Gov	1
WaSIP funds should be provided at the beginning of the financial year	local Gov	5
Allow WaSIP funds to be "banked" (not needed to be spent in the same year) for infrastructure development	local Gov	2
Reporting should be consolidated and reduced	local Gov	1
Administrative costs from WaSIP should be funded via WaSIP or other State Government funding	local Gov	2

Review the effectiveness of the Waste and Sustainability Improvement Program (WaSIP) delivery and identify funding priorities for waste and resource recovery initiatives, programs and infrastructure		
Support programs on a broader scale, working in partnership with local Government and industry	Individual	1
The focus should be on waste related projects	local Gov	7
Increase percentage of waste levy to councils	local Gov	3
Needs to be a balance between sustainability programs and facility development	local Gov	1
WaSIP payments to councils need to be pooled on a regional basis and invested on cross-council projects	local Gov	2
Additional funding required to permit further education in the C&I and C&D sector	local Gov	1
Should be returned as a simple annual payment with the agreement to deliver on improvements	local Gov	1
The Government needs to fund TV advertising	local Gov	1

Table A8: Responses to illegal dumping

Assess any evidence that links the levy to an increase in illegal dumping in NSW		
Q. Is there a link between the levy and illegal dumping?	**Respondent**	**Number**
	Yes	31
	No	4
	Possibly	5
	N/A	10
Recommendation Topics		
Illegal dumping is a double cost to councils; clean up costs and disposal costs	local Gov	4
Have had to employ an additional illegal dumping officer	local Gov	2
Noticed an increase in illegally dumped mattresses, e-waste, TVs and bulky items	local Gov	15
	Individual	1
Noticed an increase of illegally dumped asbestos	local Gov	8
	State Gov	1
	Individual	1
Need to consider further increase of the levy with the introduction of carbon tax	Industry	2

Table A9: Responses to asbestos

Assess potential for helping combat illegal dumping, particularly asbestos waste

Assess potential for helping combat illegal dumping, particularly asbestos waste		
Recommendation Topics		
Education	**Respondent**	**Number**
Wants social research on why people illegally dump	local Gov	1
Want an illegal dumping toolkit	local Gov	2
	State Gov	1
Want a comprehensive education program	local Gov	2
	Industry	1
Provide $500k for prevention programs for Public Land Managers	State Gov	1
Enforcement	**Respondent**	**Number**
Want increased enforcement	Industry	3
	local Gov	1
	Enviro group	1
Trial illegal dumping tracing technology	State Gov	1
Exemptions		
Asbestos should be exempt	local Gov	23
	Industry	1
	Individual	1
	Enviro group	1
Reduce the levy of asbestos waste	local Gov	1
Exempt wastes that have no other disposal options than disposal at landfills	local Gov	7
	Industry	1
Exempt cleanfill	local Gov	1
Exempt illegally dumped waste	local Gov	11
	Individual	1
Exempt only source separated and audited asbestos	local Gov	3
	State Gov	1
	Industry	2
Exempt charity waste	Industry	1
Levy rates	**Respondent**	**Number**
Reduce the levy	local Gov	1
	Industry	1
Introduce a tiered levy	NSW Gov	1
Cap at current levy rate	local Gov	4

Assess potential for helping combat illegal dumping, particularly asbestos waste		
Others	**Respondent**	**Number**
Standardise gate fee for asbestos waste	local Gov	1
Review requirements for covering asbestos waste at landfills	State Gov	1
	Industry	2
Expand RID squads	local Gov	2
	State Gov	1
Wants illegal dumping grants	local Gov	5
The manufacturer of asbestos should bear the cost of removal/disposal	local Gov	1
Hypothecate the levy funds for asbestos disposal	Industry	1
Wants a grant/subsidy for the removal and disposal of legacy asbestos waste	local Gov	1

Table A10: Responses to other matters

Others matters		
Recommendation Topics		
Bad Debts	**Respondent**	**Number**
Levy exemptions/deferrals should be allowed for proven bad debts	Industry	3
	local Gov	1
	NSW Gov	1
Carbon tax	**Respondent**	**Number**
Waste levy should be deferred for next three years	Industry	2
Defer the waste levy increase on 1 July 2012	local Gov	1
Keep levy rate static for the 2012-13 year	Industry	1
No further increase to the levy in regional areas	local Gov	2
Reduce levy by the amount of carbon tax	local Gov	6
Freeze current levy rate until the full impact of carbon tax can be quantified	Industry	1
Carbon tax needs to be considered and adjusted accordingly	local Gov	4
Both the waste levy and carbon tax should not be applied to the same transaction/activity	local Gov	1
Levy should be returned to councils to offset additional costs in operating after the introduction of carbon tax	Industry	1
Container Deposit Legislation (CDL)	**Respondent**	**Number**
Want financial assistance for the promotion of CDL	local Gov	1
NSW Government should fund CDL from the waste levy	local Gov	1

Others matters		
Wants CDL	local Gov	1
Energy from Waste	**Respondent**	**Number**
Release draft Energy from Waste policy	Industry	1
Should be supported by State Government along with other technologies	local Gov	1
Industrial Ecology	**Respondent**	**Number**
Consider introduction of an industrial ecology scheme similar to the UK	Industry	1
Acknowledge benefits of industrial ecology	Consultant	1
Increase technical and human resources by increasing resources of Government departments to engage with the manufacturing sector	Consultant	1
Establish an organisation for industrial ecology	Consultant	1
Leviable Area	**Respondent**	**Number**
Objection to any expansion to the leviable area	local Gov	6
Levy has been inappropriately applied to the Upper Hunter	local Gov	1
Remove Muswellbrook from RRA	local Gov	1
Remove levy from Glouster	local Gov	1
Remove levy from regional areas or councils that achieve the recycling target	local Gov	1
Levy should be a fixed rate statewide	Industry	2
Levy should be extended throughout NSW and increased in net value terms, not just CPI	Industry	1
New penalties for customers deliberately deceiving a landfill operator	local Gov	1
Levy Administration	**Respondent**	**Number**
Timeframe for levy payments needs to be increased	Industry	2
	NSW Gov	1
	local Gov	1
Local Government should collect and manage the levy	local Gov	1
GST should not apply to the levy	Industry	2
Levy should not apply to energy from waste	Industry	1
Six monthly volumetric survey is a burden	local Gov	1
Notice for levy adjustments need to at least 6-9 months.	local Gov	1
	NSW Gov	1
Requirement that the Waste Levy is separately itemised on all disposal invoices	Industry	1

Others matters		
Waste is only weighed and recorded for material entering the site that will be landfilled	local Gov	1
Vehicle conversion factors are justified by EPA and provided to public	local Gov	1
One standardised set of requirement for data to be developed by OEH which allows council to more simply administer s88 reporting	local Gov	1
Levy exemptions	**Respondent**	**Number**
Levy should not apply for residual wastes from AWT or MRF	local Gov	2
Levy should not apply to recycling residues	Industry	1
Levy rate	**Respondent**	**Number**
Determination of a realistic and affordable levy rate	local Gov	1
Any variations should be communicated with at least six months' notice	Industry	1
Standardising levy rates across jurisdictions	Industry	1
Consistency across States	Industry	1
Levy increases from 2012-13 should be kept to CPI	Industry	1
Postpone increases till economy improves	Individual	1
If levy cannot be removed, it should be capped at current levels	local Gov	1
Levy is removed from regional areas or, if not removed, capped at current rates	local Gov	2
Freeze current levy rate	Industry	1
	local Gov	2
Cap levy at current rate for next two years and do social impact assessment of cost	local Gov	1
If levy cannot be removed, it should be capped with one incremental increase	local Gov	1
Future scheduled increases in the Waste Levy are subject to a Regulatory Impact Statement (RIS) that factors in the impact on low and fixed-income communities	local Gov	1
Projected levy increases to go ahead	Industry	1
Standardising levy rate across Eastern States	Industry	1
Increases need to be reviewed in light of Carbon Tax	local Gov	1
Current progressive increases for RRA be maintained or halted	local Gov	1
Increases limited to CPI only	local Gov	1
Levy funds redirected to Sydney Water for environmental initiatives	Industry	1
Operational Issues	**Respondent**	**Number**
Levy should not apply to daily cover	Industry	1

Others matters		
	local Gov	10
	NSW Gov	1
Levy should not apply to green waste	local Gov	1
All cover materials should be exempt	local Gov	3
Levy should not apply to materials for operating and landfill maintenance	Industry	2
	local Gov	5
Virgin Excavated Natural Material (VENM) should be exempt	local Gov	2
Scope of operational purpose deductions expanded to include daily cover, access road construction materials and materials used for the construction of essential facilities at the landfill	local Gov	1
The levy should not be applied to daily cover/clean fill where that cover material is sourced from a waste facility owned by the same council	local Gov	1
Levy should not apply to waste for which there is no viable alternative other than disposal	local Gov	1
That rational objective criteria be developed in consultation with landfill operators for determining levy application materials	local Gov	1
Rebate/exemption for recycled waste used on landfill site such as mulched timber	local Gov	1
Product stewardship	**Respondent**	**Number**
Extender Producer Responsibility should be mandatory	local Gov	3
Regulatory Framework	Respondent	Number
Lower licensing thresholds	Industry	2
Robust regime needed for reporting and inspection	Industry	1
By-products should not be classified as wastes	Consultant	1
Mandate timeframe for determining applications and right of appeal	Industry	1
Independent Review process be established ("independent umpire") for timely and fair assessments of claims from the EPAs decisions	NSW Gov	1
Greater resources for EPA to support the Resource Recovery Exemption mechanism	Consultant	1
Environmental controls are required but the current Resource Recovery Exemption regime is rooted in an attempt to control markets rather than a fit for intended purpose approach	Individual	1
Review mechanism for Resource Recovery Exemptions should be established	Industry	1
A tolerance factor should be introduced to allow organic fraction within the input material to a non-putrescibles Material Recovery Facility (MRF) to be received.	Industry	2

Others matters		
Waste Classification Guidelines should be reviewed	Industry	1
Require all waste transporters to be licensed	Industry	1
Waste Strategy	Industry	1
Need a comprehensive Infrastructure Needs Analysis	local Gov	1
The waste levy needs to be linked to the new NSW Government "Reducing Waste - Implementation Strategy" with better transparency and accountability as to the allocation of funds to meet the Strategy's stated targets and five focus areas.	local Gov	1
C&I and C&D need to be funded as well as MSW. Lack of long-term planning for continuing landfill capacity, absence of strategic investment in AWT infrastructure left to two service providers (minimal competition and high demand). Transport implications of increased resource recovery/source separation.	local Gov	2
Other	**Respondent**	**Number**
Coal waste levy should be dropped	Industry	1
Wants a State Government education campaign	local Gov	3
More transparency on the collection, distribution and use of the waste levy funds	local Gov	2
An oversupply of landfill space will reduce incentives for resource recovery infrastructure	Industry	1
Release levy review draft report to WCRA, WMAA, ACOR and local Government prior to finalising the report	Industry	1
Non-payment of levy by unlicensed landfills	Industry	1
Provide assistance to ensure compliance and best practise landfilling	local Gov	1
Application of AWT organic outputs for mine rehabilitation is supported but not a sustainable option	Industry	1
Government should use a landfill levy as a price signal to reduce waste	Industry	55
Government has role apart from just setting signal price, most think programs are currently not sufficient	Industry	50
Councils affected by mining operations need assistance from State Government through approval processes requiring mines to recycle	local Gov	1
If levy needs to be charged on quarantine waste, the funds collected should be used to investigate recovery options of treated quarantine waste	Industry	1

Others matters		
The NSW Government should put in place a regime of cost of disposal to landfill that allows landfill operators to charge fees reflective of the true environmental cost of waste disposal in any form. Such disposal fees should include the cost of insurance for any gaseous or liquid discharge to the external environment, both at the current time and into the foreseeable future.	Enviro group	1
The NSW Government should immediately cease using the term 'levy' as a part of any landfill cost structure and should pass legislation to enable a separate stream of funding through the NSW Treasury to go directly to separate body to fund positive and permanent resource recovery functions in all NSW communities.	Enviro group	1
Establish a Resource Recovery Authority (RRA) independent of the NSW Government bureaucracy and reporting directly to the Minister	Enviro group	1

C Stakeholder forums

Monday 20th February 2012
Ballina, Ballina RSL
240 River Street Ballina

KPMG:
Nicki Hutley, Director - Economics, Infrastructure and Policy
James Eastes Senior Advisor

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
    - history of the waste levy
    - waste levy rates
- Key waste statistics for NSW
- Regional waste and recycling statistics
- Key issues identified by stakeholders
- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:00 am Local Government Session

- Illegal dumping in a large problem in the region.
- Businesses, households and local councils are still adjusting to introduction of the waste levy in the region. More time is needed to adjust. The levy should be capped at $30/tonne for three years, followed by $40/tonne for three years. $50/tonne will be too costly.
- There is no point consulting if the review only considers 30% of the waste levy revenue.
- The Waste and Sustainability improvement payment (WaSIP) program needs more flexibility. Councils should be able to use the funding for waste and recycling infrastructure and upgrades.
- Councils need certainty about the waste levy after 2015.
- Waste levy is a tax on people trying to do the right thing.
- Consultation is pointless if there will be no change to the levy.
- Waste levy is a financial drain on local communities.
- If there is a new Government in Queensland, their levy will be abolished.
- The waste levy encourages people to do the wrong thing like illegal dumping rather than the right thing.

- The government should get rid of the tax. If the government keeps the tax then 100% should go back to local communities.
- The waste levy is counterproductive. It takes funding from regional areas for general revenue.
- The funding could be invested in regional projects rather than general revenue. It reduces capacity of local government to invest in regional projects.
- Paying the levy reduces the financial capacity of councils to deliver illegal dumping prevention plans.
- There are perverse effects from the tax. EPA requires daily cover be applied on landfills. Councils are taxed to comply with EPA requirements. In the Queensland model there is no tax on daily cover.
- It's not appropriate to pay tax on clean fill coming in as daily cover. The EPA makes a profit on complying with their own requirements.
- There should be a levy discount on residues from waste processing infrastructure. For example 50% discount like in the Queensland model.
- Alternate waste technologies have trouble attracting commercial waste due to the higher cost of the processing plus the levy paid on the non recyclable residues. Returning the levy could help attract commercial waste and increase commercial waste recovery.
- Regional facilities and councils working together for regional outcomes will attract the federal carbon tax.
- One third is coming back to local government under the WaSIP program for feel good fuzzy projects rather than building infrastructure and developing new industries for materials such as glass fines and plastics. 100% of the levy should be returned to infrastructure and creating markets.
- This review is only playing around the edges, rather than fixing what is broken.
- This is not a grass roots review. This review is just an example of another government positively washing something that is broken.
- This is not a genuine review. It is just government taking ideas back to make it feel good.
- What should the ceiling be on the tax and where does it stop. NSW is the highest tax in the country and it was bought in with no knowledge and consideration of the carbon tax. Now there is a double whammy and the cost will be too much. There should be a productivity enquiry of the levy on households and businesses.
- NSW is taking money out of the community and businesses. The levy should be reduced to take the carbon tax into account.
- Councils have additional costs like volumetric surveys and weighbridge upgrades. There should be flexibility in WaSIP. Council's don't have the resources to do all the requirements.

- The higher the levy goes, the more waste will be illegally dumped.
- Councils have administrative burdens to account for moisture loss of garden organics.
- Prior to 2009 when the levy came into the region, council was putting money aside in compliance with the Local Government Act requirements, for investments in technology, infrastructure and rehabilitation of existing sites. Since 2009 when the levy came in council is unable to put that money aside and is absorbing the waste levy because the council doesn't want to put the waste management charge up.
- WaSIP funds are only used for high profile campaigns like plastic bag free townships rather than investment in infrastructure.
- Householders wouldn't be happy to know that only one third of the levy goes back for waste and environmental; programs.
- The levy should be used to offset council costs like the large financial burden for land acquisition for waste infrastructure.
- Recycling rate for C&D waste is not attributable to the waste levy. It's because it's easy and there are markets.
- You've bought the bathtub up from Sydney. The waste levy model might work in Sydney but it's different in regional areas. Two reasons why the Sydney model doesn't work in regional area: a) C&D waste, C&I and municipal all goes to same tip face. Councils are expected to invest in infrastructure to recycle and sort C&D waste but it is too expensive; b) Illegal dumping is much easier in regional areas rather in Sydney. Regional areas have large tracts of land, forests where waste can be illegally dumped and not found for years.
- WaSIP has lots of requirements such as DCPs and audits. The WaSIP funds go back to things you have to do not discretionary spending on waste projects.
- Local government waste infrastructure projects are a large financial drain on councils, costing $10 - $20 million and long term contracts. Frustration that large amounts of money are being collected and not coming back to support local government do what the government wants local government to do.
- WaSIP should be tied to infrastructure. Hope that the State government has the appetite to do it.
- There is a lack of transparency about how the one third is spent.
- Councils collect illegal dumping and then take it to landfill and then pay the waste levy.
- Councils should not be a tax collector on behalf of State government.
- The waste levy should not be charged on materials that have to go to landfill like asbestos. There is nothing that can be done with asbestos except landfill so the levy cannot encourage recycling. The levy is driving asbestos out of landfill. Managing asbestos is costly – the handling process and wrapping. The levy adds cost to an already expensive process as is the case with residues from AWTs and recycling facilities.

- Socioeconomics in regional areas give more incentive to dump waste because people don't want to pay.
- There has been a threefold increase in illegal dumping events since the levy started in 2008. From an event every 10-12 days to every 3-4 days.
- RID squad model is not doable in rural/regional areas because councils don't have the resources like enforcement officers
- Sydney also has a problem with illegal dumping, especially with the council clean-up services. Residents in other areas dump waste with the clean-up materials.
- Illegal dumping at charities in a big issue in the region. Some councils are faced with providing free tipping to charities.
- It is costly to comply with WaSIP requirements, for example the council spent $350,000 in the first year to get $30,000 back in WaSIP payments.
- WaSIP timing should be in line with Councils statutory requirements and budget planning. It needs to be realigned. The funds are provided to councils near the end of the calendar year to be spent by 30 June.
- Asbestos should not be pushed away from landfill. In addition to not paying the levy on asbestos, councils should receive rebates to help pay for the expensive handling and disposal costs.
- Asbestos disposal should be made easier for customers, disposal costs and handling regulations make illegal dumping a more viable option.
- There should be a pot of money for infrastructure development. A start-up fund to help make projects more financially viable.
- The waste levy is an unjust tax on communities.
- The current government didn't introduce the tax and they now have ability to do the right thing and abolish the tax.

Session 2: 1.30 pm – Industry and Community

- Councils need more access to the levy funds
- If the levy continues councils want more back for example at least 50% of levy paid.
- Illegal dumping has always existed in the region, before the levy came in. Mostly large bulky items like the old washing machine.
- Communities have a low level of understanding about asbestos. There needs to be more community education. Asbestos will become a bigger problem in the future.
- Infrastructure development should be driven at a local level and supported by return of levy funds.
- Community needs the message that there is a higher cost for everything that goes in the red lid bin.

- There are increased costs to council for educating communities about changes to waste handling.
- Councils have uncertainty about the carbon tax liability and impact.

Wednesday 22nd February 2012
Port Macquarie
Panthers, 1 Bay St Port Macquarie

KPMG:
Steven Casey Senior Manager – Economics, Infrastructure and Policy
James Eastes Senior Advisor – Economics, Infrastructure and Policy

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
    - history of the waste levy
    - waste levy rates
- Key waste statistics for NSW
- Regional waste and recycling statistics
- Key issues identified by stakeholders
- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:00 am Local Government Session

- The Government has repeatedly failed to provide the details on the funding arrangements from the levy revenue available for education and waste initiatives
- The waste levy has caused confusion for rate payers who blame councils for the annual increases to the council waste management rates
- There has been an increase in illegal dumping in the Midwaste region with ratepayers paying a double whammy for disposing of illegally dumped waste through their rates
- Collectively, the Midwaste councils have contributed to the State Government $5million in waste levy
- The waste levy should be described as a tax, not a levy, as most of the funding goes to hospitals and schools and not waste initiatives
- The waste levy should be removed
- When the levy was extended to the Regional Regulated Are (RRA), no social impact statement was prepared. The Midwaste area is a different community to that of Sydney with a lot of people on fixed incomes

- The impact of the carbon tax will be close to $35/tonne which will increase waste disposal rates, so there is a strong argument for the levy to be reduced by a commensurate amount
- The waste levy is ineffective with regard to MSW and the C&I waste streams, too far removed from householders to have an impact
- There has been increased illegal dumping activity in the area since the introduction of the levy
- The Waste and Sustainability Improvement Payment (WaSIP) Scheme is a key program for local councils. Linking the *Implementation Strategy: Reducing Waste 2011-2015* with WaSIP would deliver better outcomes
- Disposing of waste in properly designed and engineered landfills is not a bad outcome. If appropriately sited and operated, communities should not be penalised for choosing landfill as their preferred waste management option
- The RRA should not be treated the same as the Sydney Metropolitan (SMA) and Extended Regulated Area (ERA)
- Every council in the Midwaste region owns and operates a landfill. Unlike Sydney where the councils sold their landfills years ago. The levy is therefore an imposition on areas which have a high percentage of fixed income residents and poor cash strapped councils
- Council waste charges are escalating, with a doubling of waste charges projected from 2009 to 2015/16. Councils in the Midwaste region have a high percentage of residents on fixed incomes. The Councils therefore have a limited capacity to increase charges. An increase in the waste charge impacts on other rates and reduces the ability of Councils to raise funds for infrastructure projects or other programs
- Midwaste Councils had implemented AWTs before the levy. Now they feel penalised
- The levy needs to be better targeted to encourage the diversion of waste. The Queensland model allows for a reduction on the levy for the disposal of residuals from a Material Recovery Facility (MRF). Residuals from MRFs and Alternative Waste Treatment (AWT) facilities should not be subject to the levy
- Daily cover incurs the levy. The theory of applying the levy to anything that enters a landfill is perverse. Daily cover should be exempt
- Commercial & Industrial waste operators are taking their waste to Grafton instead of the AWT at Coffs Harbour as it is cheaper to dispose of it there which diminishes the amount of recovery
- The levy funds should subsidise capital and running costs of AWTs
- In the Midwaste area, the economies of scale are small when compared to Sydney such that regional areas pay more for the same service
- Transport distances make regional operations/facilities/coordination difficult

- Sydney has dedicated inert landfills for C&D waste whereas regional councils just have one landfill for all wastes
- The State Government should impose the waste levy, but the councils should collect and keep it. State Government could set KPIs/benchmarks/targets, but allow Councils to keep the funds and determine how best to achieve the outcomes (e.g. subsidies, infrastructure) relevant for their area
- The requirements to be eligible for Waste and Sustainability Improvement payments (WaSIP) are getting more onerous and expensive. The costs for undertaking waste audits are increasing almost to a point beyond what is worthwhile to get the WaSIP money back from the Government
- The scope of WaSIP needs to be broadened to: include capital equipment, enable councils to accumulate WaSIP and not be constrained to spending in a financial year
- Without the option to spend WaSIP on capital equipment, councils are struggling to spend the money appropriately without frittering it away on small projects
- WaSIP needs to be modified to account for regional issues
- Each council must use a SWAP tool to be eligible to receive the WaSIP payment. This is an example where councils are just using SWAP in order to be eligible for the WaSIP payment but the tool achieves nothing
- Consolidation of reporting requirements needs to be undertaken. Time spent to undertake WaSIP requirements is considerable
- In addition to WaSIP reporting requirements there is monthly levy reporting, volumetric surveys, stockpile reports, annual surveys and reports
- There are also different reporting systems
- In the water industry, Government has been very active in streamlining reporting and it is audited every 3 years
- Local Government can't and shouldn't have to tackle the issue of waste generation
- Illegal dumping is a big issue which is difficult to compare to Sydney councils
- The Environment Trust and Urban Sustainability Grants need a 1:1 funding match from councils. To raise the other 50% of the funding, Councils either need to go through the rigorous IPART process for raising rates or streamline other areas of the budget
- The Grant processes are very competitive which take time and resources to apply for which means smaller councils don't bother applying
- There is only a small proportion of grants available that councils can apply for
- In the Midwaste area there are greater opportunities for illegal dumping due to the geography of the area

- While greater flexibility is required in the WaSIP scheme, the funding should be constrained for councils to spend only on waste activities/infrastructure not sustainability initiatives which are just feel good
- There have recently been some good changes made to the WaSIP scheme such as the consolidation of two pools into one pool of funding to try and help the RRA
- At least 50% of levy funding should be heading back to council through a WaSIP style program
- Need to explore synergistic relationships with schools, rotary etc to further reach the community through education
- Education is a priority due to ever changing recycling process/contractors processes and machinery. Also important due to seachangers coming to the region thinking they can recycle the same things as in Sydney, leading to contamination issues
- Midwaste was already performing well with limited funding and without the levy. The cost to now move to even higher recovery rates is more than the amount of the levy returned to the region. The levy is killing “poor cash-strapped regional councils”
- There is not a linear relationship between increased tip fees and illegal dumping but rather a ‘tipping point’ which has been reached
- In Bellingen, prior to 2009 a trailer of waste cost $13 to dispose of, now it costs $30
- In Port Macquarie at the transfer station, a trailer of waste cost $6, now it costs $18/trailer with the council subsidising the transport costs to keep the costs low
- The communities of Midwaste are sensitive to price changes
- Perception that dumping waste is an option because if it is found, council will pick it up and dispose of it for free
- There are lots of areas that council aren’t even aware of where illegal dumping must be occurring such as State Forests and National Parks
- The enforcement legislation makes it difficult to prove illegal dumpers guilty
- Small amount of monitoring and surveillance is undertaken by councils for illegal dumping
- No point funding illegal dumping programs from the levy, just need to stop charging the levy and it won’t be a problem
- Government assistance should be provided to improve landfill design and engineering
- Port Macquarie has closed down its AWT due to the waste levy applying to the residuals sent to landfill. Now unprocessed and un-shredded waste is going to landfill and using up a larger amount of landfill space, all of which is a poorer environmental outcome
- Midwaste has achieved the a good waste diversion outcome (60% diversion rate of MSW waste) therefore the levy should be suspended at the current rate

- Drop off centres for problematic wastes such as televisions, e-waste need to be provided in populated areas as the community won't travel out to isolated waste facilities
- The cost/penalty for the waste generated needs to be moved from the community to industry so they have responsibility for the consumable waste and packaging they produce, i.e. there is a need for EPR
- There are mixed messages from recycling operators such as Visy to waste contractors as to what materials are able to be recycled. This is in part due to the volatility of the market for some plastics
- The Packaging Industry Council is ineffective
- Waste avoidance is a key issue
- Effective solutions should include:
    - Subsidise collection centres
    - Set up milk run contracts for the whole east coast
    - Allow funds to be used to hire temporary staff (lack of capacity is a big issue)
- For community recycling programs (such as the recycling of mattresses) the biggest cost is the transportation cost to centres which have these recycling facilities. Potentially these costs could be offset or subsidised by WaSIP
- In the RRA, industry is smaller with a lot of owner operators directly driving their waste to the landfill, seeing the increasing costs and responding
- Rate notices in some councils in Midwaste will now explicitly outline the proportion of waste management rates that are attributable to the levy
- Some regional specific grants could be established which would encourage regional councils to apply
- Grant money should be available to contract staff from other areas (e.g. university students) which would free up resources for on the ground work
- Increases in State Government reporting requirements leads to less staff available to undertake on the ground work
- Asbestos waste has a high disposal cost. The levy should not apply to asbestos waste
- Costs should be reduced or a rebate system introduced to offset the disposal costs of asbestos waste
- Could provide a refund directly to the contractor that disposed of the asbestos waste to encourage the appropriate management and disposal of asbestos
- There is no other use for asbestos waste so it should not incur the levy
- The disposal of hazardous chemicals and soils should also not incur the levy

Session 2: 1.30 pm – Industry and Community

- The WaSIP scheme is not getting good value out of the levy. There are only small fractions to be gained under the current WaSIP scheme. Funding should be directed instead towards infrastructure programs
- Financially recycling is progressing will in the Midwaste area
- Organics recycling and mixed waste infrastructure is needed. Councils should be able to apply to the Government for levy funding to underpin Energy from Waste and Food and Garden infrastructure
- Councils in the Midwaste area own and operate their own landfills which is an opportunity to lead the way in investing in infrastructure
- The funding from the levy should be evenly distributed across the State to achieve good outcomes
- The outputs from the processing of residual waste should not have to pay the levy as they don't have the same environmental impact as mixed waste
- The levy provides no incentive for commercial businesses. There is no benefit for those C&I customers that separate their waste, same as C&D businesses
- There is no support from the levy back to industry
- There should be price discrimination between sorted and unsorted waste going to landfill (e.g. Armidale). But there can be leakage from this approach, therefore needs to be regional
- The current council approach is to give householders the tools through squeezing them with smaller bin sizes and then hit them with education. Councils however only deal with residents, not the occupiers which is problematic with high proportions of renters
- There should be a subsidy for contractors disposing of waste from customers who source separate on-site. The contractors could then pass back this subsidy to the customers to reward them
- The Queensland Government are providing $400 cash to businesses who undertake a waste audit and waste plan
- Small business reacts better to a cash/reward approach rather than the softer education approach
- The GHD Infrastructure Needs Analysis recognises the need for infrastructure. There should be a simple diversion of funding from the levy for those facilities
- Waste to Energy may be more viable with infrastructure funding
- Asbestos waste should be cheaper to dispose of. Legitimate operators who dispose of their asbestos waste legally are being undercut by unscrupulous operators
- Asbestos only poses a risk when it's airborne. Once managed appropriately there is no reason why there is a huge price on its disposal. It is more an OH&S issue on the site of generation

- Infrastructure has a cost per tonnage which means it is often not viable for small communities. Support could be given to drive infrastructure by providing recurrent funding for transportation for regional infrastructure
- It is not just about building infrastructure, there is a need to recognise that transportation is part of the whole process
- There is a need as part of this review into the impact of the levy on illegal dumping to conduct social research because it is a furphy that the levy has caused illegal dumping. It is a political issue
- Remoteness is a strong factor for illegal dumping
- Policies at the waste disposal facilities are the biggest driver for illegal dumping. E.g. Coffs Harbour facility won't accept bulk asbestos waste which means transporting it up to Grafton
- Council is neglecting its responsibility by not accepting waste such as bulk asbestos waste as it leaves operators with little option but to dump the waste if they hadn't planned in transportation costs/time
- Some councils won't accept waste at their landfill if the business isn't local to their area. Makes it difficult for waste/business contractors who then need to be aware of all councils landfill policies
- There needs to be a standardisation of policies across council landfills in regards to what they accept. This would significantly reduce illegal dumping
- Illegal dumping is often blamed on increasing tip fees but it is mostly due to poor planning by councils
- The Regional Waste Groups need to be empowered to collectively standardise their infrastructure
- There is no incentive to separate waste streams and take it to a facility which charges the same amount for all waste
- There are inconsistencies of policies and procedures across Regional Areas (e.g. Grafton charges less for separated green waste whereas Coffs Harbour charges a very high rate)
- CDL may be effective
- WaSIP has created a bureaucracy which must be a waste of resources and money for the State Government to administer and Local Government to comply with
- It would be more efficient if the WaSIP money went straight into projects which would lead to better waste diversion
- Undertaking the bin audits is not worth undertaking in order to get the WaSIP money
- Education is a major concern for the management of asbestos waste
- Some people illegally dump asbestos waste cause they are afraid to handle it and afraid to admit they ever had it

- Councils could do a lot more to help householders deal with asbestos waste
- Clear indication from Government is needed whether they intend on increasing or extending the levy
- The Government through the Regional Waste Groups has an opportunity to provide economic advice to councils and a framework to operate within
- Councils need guidance on economic management skills. It is a significant financial risk for councils to run landfill facilities

Friday 24th February 2012
Maitland
Maitland Town Hall, High Street Maitland

KPMG:
Nicki Hutley, Director - Economics, Infrastructure and Policy
James Eastes Senior Advisor

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
    - history of the waste levy
    - waste levy rates
- Key waste statistics for NSW
- Regional waste and recycling statistics
- Key issues identified by stakeholders
- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:30 am Local Government Session

- Industry should do more to communicate the message
- Mining companies in the region are the biggest contributors to landfill in huge volumes that would always make it hard for us to improve recovery rates. There's no incentive for them to stop sending that to landfill as it isn't a high proportion of their costs. Need to work with them to reduce their waste to landfill if we're going to get 66% here
- Need more regional based end-of-life opportunities for reuse i.e. using glass in road base
- Better communication is needed
- Need for better infrastructure and reuse investment – i.e. all very well collecting it, what can we do with it afterwards. That needs to be regionally focussed for best environmental outcomes

Overview of discussion points at 1:30pm Industry and community session

- The cost of disposing of industry off-cuts e.g. MDF etc from custom-made kitchens, has reducing competitiveness of the local industry compared to ready-made imports from China.
- There should be a tax on all packaging, including imported goods, which would add to the cost of those Chinese imports. Make producers pay
- Avoidance is crucial. They're working on biodegradable packaging foam stuff that was made from fungus. Encourage more avoidance in manufacturing
- Problem waste should be called 'harder' wastes. We need to make it easier for people to drop those off and for collectors to correctly dispose of them.
- We want "Do the Right Thing campaign". Definitely need better communication/education for households and everyone to do the right thing etc. There hasn't been one in years and it's missed.
- People have to pay a tip fee to dispose of fridges. That's wrong. Things like that should be free
- Illegal dumping – two issues here, one is criminal activity, an industry, in itself where people are doing the wrong thing. The other is the social place where people are at. That's the household dumping that people just don't think about because they don't know – or think – how wrong it is. This needs to be tackled

Monday 27th February 2012
Sydney
Vibe Hotel, 11 Goulburn Street Sydney

KPMG:
Nicki Hutley, Director - Economics, Infrastructure and Policy
James Eastes Senior Advisor

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
    - history of the waste levy
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- Regional waste and recycling statistics
- Key issues identified by stakeholders
- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:00 am Local Government Session

- WaSIP's improved sustainability outcomes should be better documented.
- Illegal dumping is a challenge – especially in high density areas and asbestos is a problem
- There is uncertainty about carbon tax and how it will impact on Domestic Waste Charge
- It is important that small companies get waste levy money back. More money is needed to focus on infrastructure.
- Infrastructure is needed. Need across government support and planning involved.
- Funds are needed for infrastructure especially in small councils.
- Carbon tax changes the dynamics.
- Recent sale of WSN – makes it more difficult to do collective activity. Levy should be use to ensure councils have the resources to make well informed decisions re: Infrastructure/AWT.
- Critical issue – all facing lack of infrastructure. $89 million revenue. Councils struggle for finance. No interest loans may be an answer.
- Government should be investing revenue in infrastructure in the Sydney metropolitan area.
- WaSIP – difficult and confusing e.g. reporting. Not clear guidelines – "think it up & put it up". It's not linked to other grants which are well managed. All should be

dedicated to reducing waste. $89 million is substantial and could be used for infrastructure.

- WaSIP is arbitrary and confusing. Little information and guidance. Better targeted programs needed. Waste to energy is also a priority.
- Be very careful with organic outputs from AWT, not for metropolitan market
- WaSIP standards are good to bring councils up to a level playing field. It is difficult with deadlines. It doesn't fit in with local government finances and planning timeframes.
- Infrastructure – AWT, Food and garden. Difference with both technologies. We need a state wide approach including planning rather than markets dictating
- Education is very important. Education is resource intensive in some areas of Sydney e.g. face to face works well though it is costly and resource intensive.
- Design systems. It is important to get the systems for multi unit dwellings right e.g. spacing for bins when systems change.
- Illegal dumping is a big issue, asbestos, mattresses (100-150/week). Infrastructure is the most important and needs to be driven by state government.
- Illegal dumping problem is severe. There is only so much that education can do. Dumping squads can be effective. For multi unit dwellings make strata managers responsible for education and notify people when they move out.
- Clean ups don't accept e-waste. Councils still waiting on e-waste schemes. E-waste is a big challenge for councils and householders.
- Need overall state government support but need local systems that meet needs of the community.
- E-waste is a national scheme and won't help councils.
- Need to provide incentives to councils that want to make changes and incentives when they achieve outcomes.
- WaSIP has been very good. Local government needs to drive change, not central government.
- Asbestos problem when uncovering landfills.
- Remove levy off asbestos but there may be perverse outcomes as people may contaminate waste with asbestos to avoid paying.
- Need to make it easier for households to dispose of asbestos.
- Asbestos – costly process already, but when you add the levy as well it makes it too expensive.
- Asbestos – remove levy and apply rebate to offset other costs as well.
- Very difficult to apply funds for illegal dumping.
- Illegal dumping officer can be effective to investigate illegal dumping.

- Integrated programs needed – planning services and enforcement.
- Commercial and Industrial waste is going to the same landfills as municipal waste. WaSIP is based on municipal waste.
- The levy in NSW is the highest in the country.
- Strategic state infrastructure approach is needed.
- The levy is not a sufficient driver, need another support mechanism.
- Waste should be seen as an essential service.
- UK – illegal dumping- waste transporters need to be licensed to help manage illegal dumping.
- Very diverse, transient demographic – Illegal dumping is a significant problem even though cleanup is provided, as well as e-waste and white good collection services. Council boundaries are a challenge. It is costly gathering evidence, often cost prohibitive. Need regional RID squads over metropolitan areas.
- WaSIP funding is not ongoing.
- Councils don't want to raise costs.
- OEH approach – standards systems – standard bin and colour system but state government has not undertaken TV advertising. State government should reconsider if they want a standard system implemented and being effective.
- Councils provide all services e.g street bins, TVs, clean-up, and clean-out. Community expects more. Should community be more responsible for waste? E.g. Residents think it's councils responsibility for e-waste.
- Drop off centres – have a time and a place. Many people don't have access to transport.
- Services needed to support elderly, infirmed residents.
- Council rates are the best place to charge for services.
- Councils have financial incentives to provide recycling services rather than big bin going to landfill.
- Levy doesn't discriminate. If councils try their best to process waste they still have to pay the levy on residuals.
- Discriminating levy – for residuals from process centres, especially during commission phase of infrastructure. It is very costly initially and councils are paying out 2 ways.
- Need central, facilitated approach to help councils meet recycling targets.
- Food and garden organics contract – 7 councils were in (2007), now only 3. Results in additional collection and transport costs.
- Councils provide services but it costs money.

- Extended Producer Responsibility (EPR) schemes have been talked about for 15 years, and need to be enacted. Either enact EPR or get rid of it so councils know where they stand.
- Councils are collecting e-waste and bearing the costs but it is expensive.
- EPR scope is too narrow – not all e-waste will be collected.
- Need point of sale – exchange, display option.
- Need standard services. Residents want services e.g. e-waste. Want state government support to provide services.
- WaSIP fosters ad hoc, short term projects.
- No funds reserved for incentivising better outcomes.
- $89 million and 2/3 goes back to state coffers
- Need to know what happens post 2015
- Private sector stopped building infrastructure due to regulatory uncertainty in the past e.g. AWTs, now another 3 year hiatus, uncertainty past 2015.
- Carbon tax – many uncertainties and very difficult for councils to budget.

Overview of discussion points at 1:30 am Industry/ Community Session

- Levy going to increase in July to about $95 per tonne but also have the introduction of a carbon price – in effect a substantial increase in the cost of taxation at landfill gates. Will recyclers be taken into account with an increase of the levy and carbon tax and an increase of gate fees?
- Challenge that funds are used for environmental programs. Because so much goes back to consolidated revenue the government has a conflict of interest with respect to resource recovery versus disposal and levy revenue. This needs to be separated. There is a strong argument to decouple and call it a tax.
- Have a problem with money going to consolidated revenue. It should be hypothecated back to industry
- There is concern as to how the CIE report fits into the KPMG waste levy review. The CIE report has drawn conclusions and there is concern KPMG will accept the conclusions. How does the finding that it doesn't matter where it is recycled fit in, doesn't matter whether or not recycling occurs in NSW?
- The government needs to encourage avoidance – top of the waste hierarchy as the key goal.
- National Parks have substantial bills for asbestos and other illegally dumped waste in national parks. This is driven by levy and regulatory difficulties in appropriately disposing of asbestos.
- See the asbestos issue from the recycler's perspective. It is worth the risk to illegally dump waste with the levy increasing. The government needs to trust that

industry realises the depth of the asbestos issue. Asbestos needs better management.

- One of the hurdles is that multi unit dwelling living space is becoming smaller and therefore difficult to allocate waste systems for 3 different streams. A 3 bin system is not going to work in multi unit dwellings. No one will carry down three different loads. The government needs a good education program.
- Waste leakage also works in reverse. Victoria's waste is coming into Albury to avoid a $22/t levy fee, therefore why would it be exempt from the levy? The government needs to consider the rate of hypothecation and is a key issue for industry. Victoria quotes the same recycling rate and has been reinvesting in infrastructure for years but NSW has never had any seed funding and there needs to be a reallocation.
- There is still a problem about the public knowing what goes into the Red Bin. The majority of people regard it as everything else. Glass in the red bin is a big problem for AWTs. The government needs specific education to get household chemicals and things like dirty spaghetti sauce jars out of the red bin.
- Allocation of funds 60 – 40% is immovable. After 15 years we need to do something proper with education. Historically education has been very poor. We need education by NSW state government – not councils. No one really knows what they should be doing.
- There is a good argument for hypothecation. Forward budget estimates expect 25% drop in waste going to landfill. Double the levy will only get an additional 10% diversion. Calculations suggest that there would still be an extra $100 million in price of landfill. There is some extra money to do something with. An awful lot that we can do that other governments have been doing for years but additional issue with trying to site new facilities. New initiatives, especially waste to energy, need to involve the planning system – industrial areas to locate these facilities.
- Inclusion of carbon price and what modelling have you done to account for this. How will KPMG calculate carbon price?
- One of the most useful things done by NSW is the forward projections of levy costs – this is very useful for commercial planning. Many have been arguing for future projection of the levy and 100% hypothecation to infrastructure of all future increases without affecting treasury revenue. Further future projections give a clear signal to infrastructure market and are worth doing.
- Need to get some more system thinking rather than looking at end of pipe. Touched on education earlier – only useful if you teach people how to use the systems. Huge lack of beneficiation infrastructure in the industry. Look at the system to see where infrastructure is missing. Fundamentally manufacturers need to be focussed on systems to drive packaging etc so that end use is considered. About 1/3 of material in residual waste is packaging. Needs to be addressed with some serious systems thinking.
- We need money put into drop off centres.
- Should be trying to input in to review to ensure outcomes are put forward in a planned and considered way. Things need to be systematic and well planned so

that they can be implemented effectively. Looking back on my last 3 years experience, outcomes are best where authorities have strong strategies and plans in place. Don't think we're going to see centralised waste policy under current government – councils need to be better supported and ensure that current efforts are supported and funded. Strategic waste planning across the state is critical. We need local messages for local people. People won't listen to Robyn Parker about washing out pasta jars.

- There is a lack of beneficiation at the end of the chain as they don't have equipment - it is the missing infrastructure link.
- The current Minister has not engaged with industry.
- In UK used levy funds to give credits to groups of councils that came together to implement infrastructure. Quite innovative. Councils then have to bid to get credits. Other value is that those councils also had to have sites with development consent in order to apply – this addresses the siting issue.
- Levy funds should be used for infrastructure. Councils had to bid for those type of projects and have sites with planning approvals.
- Primary drivers in Commercial & Industrial – the price. If there is not a price signal at that level then businesses won't do it. Other alternative is to put in dirty C&I sorting infrastructure. In Europe they are doing dirty C&I MRFing. For large scale gains we need to invest in some big C&I sorting boxes to get the increase in diversion. Industry needs the right price signal and the right planning conditions. Remond is looking at a plant at Parramatta but there is not enough return. There is a strong argument for a differential levy at the back end or a grant at the front end
- Need to be careful of where waste will go e.g. in Germany they just ban stuff from landfill. You can't duplicate this system in NSW because the European plants that process these materials process them in to fuel fractions and a small amount of residual for landfill and we've been told that the EfW policy will not do fuel specs. They have energy from waste plants that take about four different waste streams.
- Relying on levy in C&I sector is not going to go anywhere as it's such a small fraction of manufacturing costs. Needs to be applied to processors.
- Illegal dumping:
  - No-one likes it
  - Undermines legitimate industry players
  - pushes prices down
  - seems like it will be more of a problem with a higher price
  - look to the private sector for policing
  - are RID squads working?
  - 10 – 15% goes out of the waste stream

- Disagrees it is between 10 -15%. Illegal dumping has always been a problem. There is no evidence to show as the levy goes up illegal dumping gets worse. The more you look the more you find. There is currently no representative data.
- Asbestos puts all recycling facilities into default as we can't treat asbestos. Guys getting red bins with asbestos – are you segregating that material.
- Want to talk about innovation – good innovation in universities which will change some of the words which will change because of energy from waste.
- Comment: Wants the review to look at the impact of recycling sent overseas. The CIE report makes comments on impact of increasing levies on export of recycled material to other states or overseas. Report says that's OK. But it has economic cost/job impacts and affects a company's tilt point. Look at different business models – direct shipping and loss of value adding.
- Recycling should get a differential levy and wants this considered in the review. It is a simple fix.
- Simple fix for infrastructure development to cut cost out of back end of plant – industry will adjust to direct export. Loss of value-adding.
- Issue of levy on landfill cover – landfill provides a lot of cover from onsite. Proposed AWT outputs for the site could be good as alternate cover materials at landfill. Is cover material being considered as part of review?
- AWT processing residuals – want to use residuals for daily cover but it will cost and extra $126.
- Are you looking at environmental implications of exporting waste with recyclable material to other countries?
- Local government performance payments are to fund lots of small projects but are not significant to big targets. They should be aggregated into big programs. Target waste diversions minimising waste as an absolute not as a percentage.
- Projection of $1.2 billion in levy – there is technology in Europe that would really cut the legs off this.
- WaSIP is being used to fund little strange projects that do not deliver against bigger outcomes. Better to be aggregated to address key problems. Council diversion targets are still set on a waste diversion % basis – why go about it like this?
- If we invest in a particular technology how would that effect recycling overall?
- How would recycling infrastructure investment affect broader recycling targets – how would this be quantified?
- Would KPMG explore a differential levy? There will be difficultly with regulation and enforcement and differentiating legit operators from shonks. The EPA doesn't have an officer at every landfill. It would benefit from better thinking.

Tuesday 22th February 2012
Parramatta
Northcott centre, 2 Fennell Street North Parramatta

KPMG:
Steven Casey Senior Manager – Economics, Infrastructure and Policy
James Eastes Senior Advisor

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
    - history of the waste levy
    - waste levy rates
- Key waste statistics for NSW
- Regional waste and recycling statistics
- Key issues identified by stakeholders
- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:00 am Local Government Session

- Agreed with issues identified by KPMG
- Limited technology/infrastructure currently
- Levy funds should be directed at partnerships with industry for infrastructure
- There is uncertainty about the best option for organics
- Woodlawn and energy production may be better than composting
- Councils that run their own facilities have additional operational costs plus have to pay levy. No money back to councils from C & I and C & D waste through council's landfills need to manage those streams. Councils can't invest in technologies to increase recovery of C & I, C & D because it is too costly. Levy Funds need to be reinvested in regional infrastructure
- Levy should be spent to assist regional market development e.g. green waste mulch/compost. Need support to move on green waste at present as we can hardly give it away
- Levy should be used for infrastructure that a group of councils could run e.g. AWTs
- WaSIP standards not driving councils to meet 66% target.
- Targets are confusing. Green waste collection inflates figures
- No one can achieve 60% unless we have AWT and transport – should be a partnership with state government for a specific technology
- The signal does not go back to rate payers

- Difficult for councils to achieve high resource recovery if have high proportion of multi unit dwelling (and no garden organics)
- OEH is insisting that councils investigate food waste organics but the compost market is saturated
- The levy should be invested in infrastructure
- OEH needs to guide councils on technology selection
- Spent 50% of money to comply with requirements of WaSIP and this doesn't leave much funds for other incentives
- Don't have staff for WaSIP and need to get consultants in
- Spend two months every year doing WaSIP reports and being diverted from strategic tasks
- Problem finding new and enhanced projects constantly for WaSIP and is not sustainable
- Should be able to use WaSIP funds over a couple of years for capital investments
- WaSIP spent on small bits and pieces rather than long term strategic projects
- WaSIP requirements are resource intensive for councils, high compliance costs
- For households we need to provide easy systems e.g. system change from recycling to bins led to higher recovery. Next step is organics or AWT. WaSIP doesn't support large system, change infrastructure
- Yellow bin was a huge impact to reduce waste so would need something else big to change again
- Householders don't go to the tip so big impact on councils
- Higher disposal costs at tips ($250 +) is too expensive and people just dump
- Like benefits WaSIP brings, though has hairs on it
- Concerns that WaSIP is being reviewed when is only a small component of levy revenue
- Grief with illegal dumping whilst 2/3 is lining treasury's pockets
- Local government contribute ~ 100 million per year 24.5% is WaSIP
- Concerned that entire levy revenue is not available for the review
- Industries such as mattress recycling are going out of business. Levy funds should be used to support recycling industry and infrastructure
- WaSIP has allowed councils to invest in broader environment projects – ones they wouldn't; do anyway. It does benefit the community. Sometimes councils are struggling to find new projects though

- Not enough infrastructure. Start things like mattress recycling, residents are keen but the industry falls away as they are not financially supported. Wants some funding for this, otherwise how can we do this long term
- Its infrastructure, infrastructure, infrastructure
- There is a lot of levy revenue, should be used to incentivise industry infrastructure
- Councils don't want to lose the dollar coming back to them e.g. WaSIP. Won't look good for community if all the levy collected goes to fund industry infrastructure
- Once all WaSIP standards are ticked off there isn't much money left to individualise projects
- Likes WaSIP. Made it flexible to pay environmental initiatives which we would otherwise not fund. Need long term education
- Penrith has an organic plant. They have an organic collection and ratepayers have a choice of different bin sizes. If council doesn't reach 66% householders will have to pay more. They can offer this incentive because they have the infrastructure
- Best value for money should be different for every council
- State government partnerships with regional GPS of Councils could generate income
- Need for a regional strategy - Plan for regional infrastructure especially where councils do not have land available for recycling facilities. Without access to AWT these councils will never reach 66% target.
- Approval for infrastructure is very hard. Need State Government to work together, environment department and planning. Plus involve Federal Government to bring Australians up to standard of other countries
- No competition in market. Although council has contracts in place for AWT and meets 66% target, the future is uncertain. In 8 years there may be no competition and prices may be too high
- Regional planning for waste infrastructure is needed
- Not in my backyard' is also a big problem for infrastructure. Transport is an issue. Paris and Japan have small viable facilities. If one or two small councils came together rather than 20 as its too big and centralisation does not work. State government should work on smaller technologies. Approach should be your waste your problem. Energy from waste works and ideas need to be addressed and needs to come from State government
- Infrastructure barriers land ownership/rights, State government 3 Fs regulation and carbon tax uncertainty. The next thing is food, but no infrastructure
- We need infrastructure to achieve the high diversion rates
- OEH encouraging councils to recycle a lot and then invest in AWT. This is very costly. AWT can develop a whole region of councils

- Asbestos price signal sends wrong message. It shouldn't attract the levy, it is very costly anyway. Wants it reviewed. As the levy increases the fines stay the same, wants more balance. No surveillance in rural areas
- Seemingly authentic asbestos contractors are dumping it. But at least its wrapped so makes it easier for councils to collect and dispose of it
- Domestic waste dumping probably not due to levy. But it is for C & D and C & I
- Council areas on outside skirts of Sydney have issues with illegal dumping. Very difficult to catch them. Very resource intensive for council
- High growth areas, like in SW, have big issues with illegal dumping
- Ignorance and transient populations lead to dumping
- Illegal dumping not due to pricing signals, but convenience factor e.g. Some council accept free white goods at their landfills, still people still dump in the bush.
- Councils across state all have individual campaigns. Since "do the right thing" there hasn't been a consistent state-wide campaign. It needs to be ongoing not just for a year. People are still not aware and won't read a small add in a local paper
- Lease arrangements should be put in place ensuring tenants don't dump, like a bond
- Illegal dumping includes 2 big issues – ignorance for household goods and secondly organized criminal element
- EPA waste regulatory area is not adequately resourced, probably not as adequate even as Western Sydney RID. Levy funds should be used to build up a strong EPA illegal dumping team. The levy review should consider this
- EPA requirement for daily cover. Buying clean fill and transporting it in is a very significant cost for Councils
- Process for orphan waste is time consuming and should be looked at in conjunction with levy, illegal dumping and asbestos
- Carbon tax is big issue for Councils

Overview of discussion points at 1:30 am Industry and community Session

- Levy has perverse impact on C + I process. No one is going to invest
- Policies only being developed e.g. Energy from waste now being developed and the 3Fs
- There is a residue from processing waste that needs to be land filled but it's too expensive with the levy. Regulatory uncertainty for residue waste and what can be done with it
- Litter should be part of the review
- The government wouldn't be wasting money on review if it wasn't sure of outcomes

- Carbon tax came in after levy increases. This negates the need to increase the levy for 2 years. Carbon tax with result in $20 – 30/tonne increase in cost
- Cost modelling for small business show 30% increase in cost from 1 July 2012 – levy increases and carbon tax. Levy increases should be withheld. Some small businesses with go out of business - we need to preserve jobs
- WaSIP funding should be made available to industry
- Most money going to treasury
- Lots of levy money not going to waste
- QLD model is targeting actions to increase resource recovery, unlike in NSW
- WaSIP can't be used for the tendering process, procurement of infrastructure. Even though the infrastructure will give the best gains
- Hazardous waste should be taken into account
- The levy is high enough. Impediments to recycling are resource recovery exceptions, high facility thresholds and lack of licensing for transporters
- Asbestos should not be subject to the levy. Asbestos waste should be made as cheap as possible
- If there is no market and recycling is not an option (such as asbestos), should be excluded from the levy
- Levy to general revenue should be reduced, no reduction to levy for waste programs
- Making levy rates variable for certain materials may just result in more money for EPA compliance
- Levy rate should be reduced for dry waste
- Carbon tax on transporters will have a big impact
- Cannot look at levy in isolated of the carbon tax
- Issues with waste levy paid and transporters and/or business that go out of business (bad debts). Landfill operator has obligation to pay levy
- Councils clean up collections are compacted and cannot be reused/reprocessed. Levy could be used to fund collections and reprocessing of bulky wastes
- OEH should be mandating what councils do
- Industry spend lots of time assisting OEH but then councils do their own thing
- Strip councils of their powers
- What happens if councils done meet target? There is no strategy overall
- NSW Government tender – required a transporter to absorb the levy and put in a non-conforming tender

- Can't have it both ways – Recyclers are giving money to councils and at the same time are complaining about levy on residuals
- In QLD, levy money returned is very targeted, not broad environmental funding
- Residues from recyclers should be disposed of at lower cost. But appreciate it will be difficult to enforce and support may be abused by unscrupulous operator
- Need licensing scheme for recyclers, not a lot of control now
- Some exemptions for recycling residues but need licensing scheme. Long hanging fruit already recycled, more recycling would be contaminated and will be residues
- Manufacturing on-shore is important. Levy exemption should apply when reprocessed
- Recyclers need to pay more for recycling from councils to protect their investment
- Should have landfill bans in place for materials we don't want in landfill
- Green waste (raw material) is generated in Sydney but needed over the 'big hill' in western NSW. Levy should be used to compensate for transport costs.
- Levy rebate on methane at landfills turned into Electricity.
- Need NSW waste advertising campaign across the state rather than all councils doing their own thing.
- To increase recovery now, we need a step to change. Municipal waste – needs $100 million infrastructure C + D is done → playing win in varying success
- Need a step to change for C + I. C + I is most difficult – need sorting/processing facilities and injection in funds to support C+I e.g. $5 million kick in
- Large companies leaving C+D recycling space because of problems with resource recovery exemptions and risk being too great
- Some efficient C+D recycling facilities are shut down for couple of chips of asbestos
- Regulations are too difficult. Relief is needed for testing asbestos
- Removing levy on asbestos will reduce illegal dumping
- But conversely results in loads being contaminated
- Should be looking forward – asbestos of the future
- Waffle base slabs will be difficult in the future and new house timbers have all sorts of treatments and won't be recycled in future
- Asbestos – should be removed if pure wrapped asbestos. Not mixed loads. That could works and minimise abuse of system
- Will levy be charged on energy from waste facilities?
- Lots of small companies just shopping around for cheapest landfills and no recycling. Not desired outcomes

- Illegal dumping increases as levy increases and puts pressure on councils
- All yards should record materials coming and going out
- Small skip bin operators (7 truck) carry revenue of $500,000/year. No licensing of small operators. No education. Regulator expects them to look at website.
- Levy should fund drop off centres

Thursday 1 March 2012

Kiama
The Pavillion, Bong Bong Street, Kiama

KPMG:
Steven Casey Senior Manager – Economics, Infrastructure and Policy
James Eastes Senior Advisor

- Brief overview of the independent waste levy review:
    - terms of reference and focus areas
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- Key waste statistics for NSW
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- Critical dates: Submissions close 13 April 2012
- Facilitated discussion

Overview of discussion points at 10:00 am Local Government Session

- Promotes and markets illegal dumping. Low socio-economic background. Lack of transport. Cost of using tips.
- Time poor residents and pre-packaged food which leads to more waste and less recycling.
- When yellow bins are full recycling goes in the red bins
- Paid over 20 million dollars in levies since 1996 but only got back six million dollars.
- WaSIP payments are a small percentage of payments back to council.
- Direct reduction of levy for landfills that extract methane needed.
- Residents and councils are fed up. More dollars need to go back to councils.
- Councils have to pay the levy on materials used to construct landfill cells.

- State Plan has target for tackling illegal dumping over 200 tonnes. Is this looking at small scale as well? Does the State Plan also intend to look at less than 200 tonnes.
- Drop off centres – doesn't cover all demographics. Transport options are limited for many households.
- Illegal dumping strategy – Kiama council. RID squad being worked on and progressing.
- TV's are a big current waste issue. Digital changeover 5 June 2012.
- Approval in principal for RID squad.
- 5 year program – 2 billion to government. Only 25% came back to councils. $350,000 out of $20,000,000 returned.
- Question about whether the levy is at the point it is driving dumping.
- Increased opportunity for seniors to participate in community life. Impacts on pensioners and finances
- Charitable organisations impacts and having to pay the levy
- Shoalhaven wants its fair share back, asbestos and noxious weeds levy free, more on the ground initiatives
- Each council does its own projects. How can we better consider councils to work together to get bigger infrastructure and bigger picture
- Reference to the R**egional Resource Recovery Strategy/Options** that was developed by the ROC.
    - It was a huge and draining effort for the region's Councils to assess all the options, technologies, transport issues, business cases etc
    - 3 things stopped the implementation is; global financial crisis, councils risk averse, technologies failed or didn't deliver.
    - Councils will need to invest money to look at alternatives and time. No good case studies of success in Australia. Need low key technologies that work and funding. The Department should do more to advise Councils on what solutions suit which situations (rather than Councils all trying to do this research themselves).
- Sydney councils are only interested in domestic collection. Regional landfills (owned and/or operated by Councils) deal with C&D and C&I. They are also the constructors and investors in landfills and waste infrastructure.
- Costs of levy on environmental controls
- Ridiculous that levy is paid on cover material
- High cost of home construction – a lot of costs are going to the disposal of VENM going to landfill
- We don't think it is appropriate that we pay the levy on road material within landfill

- Remove levy on asbestos and noxious weeds
- Councils see that drop off centres will be another cost when the residuals go to landfill
- Charitable organisations should be able to be levy exempt
- Levy is only one part of tip fee and there's carbon tax as well
- Dumping of TV's, lounges, large goods; Increases needed to resources for picking up. OH&S risks; 20 tonnes to 100 tonnes collected increase in collection service
- Mattress collection has significant transport costs on top of levy, carbon tax, GST
- Wollongong Council – 3% of levy paid is for illegally dumped material; Charities do get levy exemption, but still pays tipping fee
- Would like levy to be taken off domestic contaminated waste such as asbestos
- Council has achieved a good diversion rate, and freed up space in the red lid bin. However, recent bin audits have shown that asbestos is turning up in the red lid bin. Residents are using red lid bins and illegally disposing asbestos, disassembled e-waste, and timber etc
- Is there a possibility of a hazardous drop off point for (similar to "Chem collect" for asbestos
- Removing levy on asbestos may help to reduce incidence of dumping but won't solve all asbestos issues
- Illegal dumping shows that the levy does not work.
- Kiama gets about $ 100K. Auditing (top 10 sites energy & water), illegal dumping strategy, auditing garbage bins ($30K) every 3 years; Workload regardless of Council size are the same.
- 3 coloured bins are an advantage, all speaking the same language
- Wollongong Council – grant with a rubber band. No long term planning because no funding security. Administratively burdens
- WaSIP Criteria is bigger and bigger which needs to be addressed each year
- Needs to be another funding source for major infrastructure projects, separate to WaSIP.
- Infrastructure renewal scheme for local government, but not another set of criteria/ hoops to jump through.
- More advanced warning on what funding is becoming available so it can be built into budgets
- Sometimes Council doesn't include the WaSIP payments in the budget and then if it comes through it's a bonus
- More flexibility for councils to come up with own initiatives

- Sydney offices can't service regional areas. Needs to be more flexibility for councils.
- Council runs a skip bin company and competes with business who may do the wrong thing; suggest audit process for all construction and demolition sites; additional resource for council to have staff to do pre-works inspections and admin being considered
- Households and businesses. If the community doesn't know that the levy exists, how can it work as a stick? Needs better communication to drive people away from landfill and towards recycling. Comes across as tip fee increases. Needs better education campaign.
- Would be great to have generic information provided for use by councils in delivering communications message, consistent for all areas.
- All material coming in needs to be accounted for and then claim on material going out.
- Conversion factors need to be reviewed.
- Early advice on levy increases so it can be built into council budget papers. February is cut-off.
- Increasing dumping fines. Amount charged by SRDO
- Pensioner rebates, on rates. Get less than that under Federal Government system. Maybe get that money, back on domestic waste rebates.
- What s the tipping point for the levy to make alternatives cheaper? Shellharbour at $ 218/tonne will go to about $ 240/tonne. Differential levy depending on type of processing needed, i.e. concrete waste versus other wastes.

Overview of discussion points at 1:30 pm Industry and community session

- C & D waste – doesn't go to council landfill so must be sent to Huntly and Cleary Bros. Both plan to close within 12 months. Where will C & D go?
- Building industry around Wollongong is not high so C & D is coming out of Sydney.
- Levy implications for landfills using daily cover.
- Allow councils to be exempt from levy on daily cover. Councils have been slugged through changes lased on private operator behaviour.
- Significant proportion of local government waste budget is spent on making levy contribution.
- Need to look at whether the levy is actually being treated as a tax and whether it can be charged through the rating system.
- Queensland system where dollars collected are quarantined for environmental programs.
- Constitutional issue about levy versus tax.

- Old agreement that 55% of levy was returned to waste programs. Now looking at 30%.
- The government is not using the money for what was intended.
- Of the money returned about ½ to council waste programs and ½ to other environmental programs.
- Commencing food waste composting. Without levy, could not do that viably. Loss making enterprise in other states.
- Comment from composting operator - Supports levy and increases because it makes composting a financially suitable alternative
- Funding of infrastructure is critical. Grants or low-interest loans wood be good.
- AWT derivatives for daily cover.
- Illegal dumping issue on land with 2 to 3 dumpings per month.
- Internal recycling initiatives driven by cost advantages outweigh environmental advantages.
- Sampling costs limit recycling opportunities
- Need for more infrastructure to be in place to support businesses to take the next steps.
- Gaps in recycling services.
- Needs to be more pressure on councils to perform to best industry practise to get levy returns.
- Too hard to find all the different recycling companies to deal with all the various waste streams that business have. Would be good to have something more combined.
- The 3 F legislation was initially difficult and hard to get through. Getting easier. Not a very realistic approach, especially for sampling regimes.

D Targeted consultations

Below is a complete summary of the discussions undertaken in the targeted consultation process.

- Supports in principle a disincentive for landfill in some form and believe that any levy revenue should be hypothecated back to assist in resource recover.
- The overall policy aim should support a sustainable economy.
- It does not make sense to charge a levy on items sent to landfill that are unable to be recycled such as asbestos. Additionally items that are recycled to their maximum should not attract a levy on the residual waste they leave.
- At present the levy is increasing at a higher rate than the increase in the level of resource recovery rates. This is in part due to the decreasing levels of recyclables in some products (e.g. metals in cars and fridges).
- In the last 12 to 18 months there have been five new bale operations open in NSW which is undermining the Australian recycling industry.
- The waste levy can be at around 25 to 40 per cent of the total cost of recycling. The levy has reached the point where it is an incentive to recycle and now the levy is making recycling a disadvantage.
- Believes there is a practical case for full exemptions, as recyclers have to take items that are made up of recyclable and unrecyclable items, and the recycling component is maximised.
- The argument that an exemption on the residual waste would lead to a decrease in recoverable items is weak as this is the core business of recycling and if there is metal then they will recycle it. The profit to be made is incentive enough to maximise resource recovery.
- Another argument is that if there is an exemption of the levy on residual waste then people will try to rort the system and pass a mixed load off as residual waste. A way to overcome this is by creating a national accreditation scheme where the exemption is limited to those who are licensed. The licensed recyclers would need to meet targets defined by industry standards or meet thresholds before the rebate or exemption is given.
- The Government might not want to introduce an exemption on residuals as it will impact the amount of the levy that they collect. But if this is not changed then recycling activity will go offshore and the Australian recycling industry will be impacted.
- The use of the revenue collected by the levy needs to be looked at. In QLD the money goes into a fund in which Government and industry can use to assist infrastructure and technology investments. One-third of the revenue that is hypothecated back to Government is spent on councils and other programs not associated with resource recovery, which is the main objective of the levy.
- Company pays an extra ($15/week) for this bin to be collected separately. This will reduces the organic waste that goes to landfill.

- The cost of standard waste collection is capped (on a dollar basis). The levy is built into the lease of the property.
- Waste collection is part of the cleaning contract. People collecting the bins are required to do a visual check of the bins. If, from a visual inspection, there is more than five per cent contamination, the whole bin goes to general waste.
- The cost of the levy is small relative to the total budget for the area. In Sydney, the cost of waste removal is only $36,000 per year.
- Incentives to recycle include to stay within their waste collection cap and corporate social responsibility
- Standard of waste collection services seems to be quite variable.
- The amount of auditing is weak, and there is a lack of transparency in the waste collection data.
- Would like to have access to trend data on the streams of waste collected.
- The structure of the waste service and collection contract can be structured very differently for each site and organisation.
- The structure of the contract has a strong impact upon the incentives of an organisation to separate waste at the source.
- Would like to see standards around waste collection services to improve the quality and transparency in the services provided.
- The household waste stream is an issue, rather than C&I and C&D waste streams. Hypothecation of the funds is a major issue
- WaSIP has changed to a single pool of money which will please the RRAs. WaSIP has so far only provided money for small projects but councils, especially in the RRA, would prefer WaSIP was used to provide infrastructure.
- Landfill gate prices have not risen substantially where the waste levy has. Local Councils struggle to see the point and effectiveness of the levy and do not fully understand their role.
- Illegal dumping is an issue on the fringes of Sydney, especially with small businesses and people dumping asbestos. Asbestos has no standards and asbestos should be exempt from the levy as you cannot reuse or recycle it.
- There are currently Regional Illegal Dumping (RID) Squads funded by OEH that works to tackle the illegal dumping issue.
- Has a best practice for local council bin types and councils should take note of this as it is beneficial however there needs to be flexibility in the options. There is also not enough flexibility in how councils charge households for waste.
- Millions of dollars in new technology would be needed to try and reduce the residuals from the recycling process.

- In 2006, scrap metal was being sent overseas as there was an excess. Now this is changing to unprocessed scrap metals. Small companies are a big threat to the big operators.
- A solution would be to have an industry level of resource recovery and then have rebates or exemptions on the residual waste for companies that meet the industry level.
- If help is not given then companies will send waste offshore and the Australian steel industry would suffer.
- A rebate or exemption would decrease Government revenue but if there is not any help then companies will leave NSW and there will be a bigger impact.
- The carbon tax is a big issue at the moment and there is a lot of uncertainty surrounding it.
- Companies will look at different business models if the levy continues.
- State Government needs to give guidance on technology and if there was beneficial technology available then companies would invest.
- Levy revenue going back to industry for recycling initiatives would be beneficial.
- The critical issue is whether companies process the waste and sell in NSW or do they ship to Asia unprocessed. Some believe it is now cheaper to export their own processed scrap metal than to process it in NSW.
- If waste is exported then NSW Government does not collect the revenue from the levy, however the total waste deposited also falls.
- If major metal recyclers exported all its material then the Australian scrap metal industry would close and companies would have to pay import prices for metal.
- When buying scrap metal they generally get 75 per cent of metal and 25 per cent is residual waste.
- The Queensland model is ideal as legitimate recyclers get a 50 per cent rebate provided they meet certain recovery rates of the residue sent to landfill.
- Occasionally truck waste to QLD where they pay $110 including transportation costs as opposed to $130 in NSW. They are now planning on building a facility in Queensland.
- Recovering scrap metal from the bush is becoming unfeasible. There used to be a rebate for regional scrap metal but this is not the case anymore.
- The levy is currently 30 per cent of the processing cost.
- Waste to energy and drying of waste is not feasible. The planned State Government waste to energy policy is very restrictive.
- Waste to energy is not a solution in NSW in the next five years.
- Do not ship their waste overseas as they believe it is illegal due to the BASIL convention. However they also note that this is not strictly enforced.

- Acknowledges that it is cheaper to invest in QLD or elsewhere rather than NSW due to the levy.
- Have invested millions into technology to try and gain higher recycling rates and minimise residual waste. They believe that a rebate or exemption should occur on the residue waste from recyclers that meet targets set by the NSW Government.
- Industry is trade exposed, and is affected by the export price therefore they should have rebates or exemptions from the levy to assist.
- Are in favour of the levy and always have been.
- Residual waste from recycling should not be given a rebate, as the levy drives resource recovery. A rebate would cause complications and rorting.
- The best facilities get about 50 per cent diversion rates. Without the levy then higher diversion rates would not be achieved. These higher rates are being seen in some waste streams.
- The Government needs to be more transparent in what it spends the levy revenue on. The Government should look at hypothecating 100 per cent of the additional revenue from levy increases back to councils and industry. Therefore the two-thirds the Government received would be capped.
- Infrastructure grants would bring inefficiencies into the market. New technologies could be brought in that the market has not driven. This has been seen with facilities that have gone into receivership (e.g. Rocky Point in QLD)
- Education is a huge gap in the sector. The lack of education causes contamination which is the biggest issue in the processing of waste.
- Public drop off systems for items like computers and batteries should be looked at as people do not know how to dispose of them. Additionally a council collection service of contaminated waste is an option.
- Container Deposit Schemes like in South Australia should be looked at.
- A standardised approach across Australia needs to be implemented and will only occur through COAG.
- Are in favour of the levy and want it implemented in other states.
- The levy has no effect on households as the levy is a only a part of a households waste cost, and waste is a minute part of overall household expenditure. However this is not the levy's purpose.
- Funding needs to be seed funding for better household collection and separation. This includes better infrastructure.
- The residue waste from metal recyclers is an issue. The closer you get to maximum recycling and reuse then you should get a discount.
- Illegal dumping will always be done and is not a result of the levy.
- In regards to asbestos, the revenue generated from the levy should be used for the quarantine and safe disposal of asbestos.

- In relation to the one third of funds hypothecated back to councils, some of this is goes to programs not related to waste and the environment and this should not be the case.
- The three bin household system is the best, and that two bin household system is not environmentally positive.
- Do not have an issue with the levy but rather the size of the levy.
- The objectives of the levy need to be further clarified.
- Rail links provide cheap transport and can carry high volumes of waste to landfills. Landfills also have the added benefit of mine rehabilitation in some instances.
- Landfill still has an important part to play, although the Governments rules and regulations sometimes make landfill seem illegal.
- A higher levy will make technology work better. Waste to energy is a good idea but the political issues are the biggest constraints.
- The uncertainty in the levy and what the price rises will be is a constraint to investment. The Carbon tax is also another issue as it brings further uncertainty.
- The Victoria model works well with good hypothecation of levy revenue. South Australia and Queensland are not great. The UK also has a good system.
- The Government has not had consultation with industry in the past about the levy.
- Illegal dumping and rebirthing is an issue.
- Small C&D operators and also landfill operators are sometimes non-complying which undermines the levy.
- A constraint on recycling is the planning approval process.
- Hypothecating money back to industry is very important.
- The risk and benefit in the waste industry needs to be shared by Government and the private sector.
- Shown a strong interest in researching and developing ‘energy from waste’ technology.
- Pays approximately $7m (plus gate fees) on the Waste levy in NSW per year, or approximately 60 per cent of waste management costs per year;
- The $7m could be better put to use as capital expenditure in resource recovery technology;
- A significant issue is that recyclers are burdened with paying the waste levy on recycling residue which should have been borne by other parties.
- A rebate should be applied to bona fide recyclers based on facilities standards and adherence to resource recovery targets.

- Australia is lacking in resource recovery infrastructure capabilities due to market and regulatory constraints and a backwards attitude in Government towards investment and technology.
- Constantly reviewing the potential for, and viability of, existing infrastructure to be upgraded or added to so as to increase recovery off inputs.
- An increase in the levy may not necessarily result in an increase in recycling – other options might be considered as part of the industry's response.
- There is merit in the hypothecation arrangement of the Queensland Waste levy.