



# WALGA

## Submission on the Landfill Levy Review

### Status of this submission

This submission has been prepared through the Municipal Waste Advisory Council (MWAC) for the Western Australian Local Government Association (the Association). The Municipal Waste Advisory Council is a standing committee of the WA Local Government Association with delegated authority to represent the Association in all matters relating to solid waste management. It has been formed through collaboration with Regional Councils who are not ordinary members of the WA Local Government Association. The resulting body represents the views of all Local Government bodies responsible for waste management in Western Australia.

### Summary

This Submission is in response to the *Landfill Levy Review 2007*, prepared for the Waste Management Board by Four Scenes. The Review aimed to

- a) Review the current and future effectiveness of the landfill levy as an economic instrument for influencing waste management practices, including reducing waste to landfill.
- b) Review the landfill levy to investigate a sound methodology for medium to long term increases - for the purpose of (a) an effective economic instrument for reducing waste to landfill; and (b) ensuring the levy is able to raise sufficient funds for waste related programs.

The Submission provides recommendations regarding the report itself and pathways forward for a model to determine a model for determining the Levy.

## **WALGA Recommendations**

### **Report Recommendations**

***Recommendation 1: Add an analysis of the future effectiveness of the Landfill Levy based on a range of assumptions regarding the size of the levy and other relevant factors.***

***Recommendation 3: Clarify the intended scope of the report and communicate with the consultant.***

***Recommendation 5: Assess trends in Commercial / Industrial and Building / Demolition waste to landfill adjusted for changes in the level of activity in these sectors.***

***Recommendation 6: Complete an analysis on per capita or per unit of activity adjusted waste to landfill over a 20 year period and project the possible range of outcomes had the levy not been applied***

***Recommendation 7: Provide an analysis of the Landfill Levy as a proportion of total disposal cost and compare the responsiveness of the WA market with other jurisdictions.***

### **Determination of Levy Recommendations**

***Recommendation 2: Detail a proposed methodology by which the qualitative feedback from a range of stakeholders could be drawn together to establish the future structure and level of the Landfill Levy.***

***Recommendation 4: Assess the services developed with resources from the Landfill Levy and analyse the degree to which they offer a (cost) effective substitute for waste to landfill.***

***Recommendation 8: Either provide a sound basis for assessing the external costs of sending waste to landfill, or use an alternative basis for establishing the level of the Landfill Levy.***

## **Objectives**

The Objectives of the Landfill Levy Review (November 2007) are stated as:

- a) Review current and future effectiveness of the Landfill Levy; and
- b) Determine a sound methodology for establishing the Landfill Levy.

The report provides some analysis of the current effectiveness of the levy (see comments below) but provides little analysis or comment on the future effectiveness of the Levy applied at any level.

The report provides considerations, and comments on a number of options in establishing the Landfill Levy and suggests a framework. However, it does not draw this together to provide a methodology for establishing the Landfill Levy.

Recommendation 1: Add an analysis of the future effectiveness of the Landfill Levy based on a range of assumptions regarding the size of the levy and other relevant factors.

Recommendation 2: Detail a proposed methodology by which the qualitative feedback from a range of stakeholders could be drawn together to establish the future structure and level of the Landfill Levy.

## **Scope**

The scope of the Review is ambiguous in some respects. The report indicates that its objectives include:

*Review the Landfill Levy to determine a sound methodology for medium to long term increases – for the purpose of:*

- (a) an effective economic instrument for reducing waste to landfill; and*
- (b) ensuring the levy is able to raise sufficient funds for waste related programs.*

The Report provides no detailed discussion concerning:

- the targeted reduction in waste to landfill. The aspirational goal of the Waste Management Board is *toward zero waste*. However, zero waste to landfill is not contemplated within the forecast period and would be in obvious conflict with raising funds on the basis of waste delivered to landfill;
- the quantum of funds required for waste related programs; and
- whether the Landfill Levy is the only instrument considered for reducing waste to landfill.

Recommendation 3: Clarify the intended scope of the report and communicate with the consultant.

## **Effectiveness of the Landfill Levy as an Economic Instrument**

In parts of this report the term “economic instrument” is interpreted narrowly to mean the aggregate response of the market to an increase in the price of delivering waste to landfill.

The literature cited indicates that the demand for Landfill Services is price inelastic, that is, it changes little in response to an increase or decrease in price. So it should be no surprise that a marginal change in the cost of landfill has small impact on the quantity of material delivered to landfill.

In terms of achieving the objective of reducing the total quantity of material delivered to landfill, the cross-elasticity of demand is more important, that is the availability of (good) substitutes and their price. If it can be shown that the levy has facilitated (or at least encouraged alternative practices to landfill) then the economic instrument has been effective.

Recommendation 4: Assess the services developed with resources from the Landfill Levy and analyse the degree to which they offer a (cost) effective substitute for waste to landfill.

## **Statistical Evidence of Effectiveness**

The subdivision of total waste to landfill into types of waste-stream is informative. However, this approach should be extended to assess waste generation relative to the level of activity within each sector. The report details Municipal Waste per capita. The use of level of activity measures should also be extended to Building and Demolition Waste and Commercial and Industrial Waste.

Building and demolition waste should be indexed according to an appropriate measure of activity in this sector. The number of Building Approvals (No of Dwelling Approvals + No of Non-residential Building Approvals) in Western Australia increased by over 60% between 2000/01 and 2006/07. It would be appropriate to source the data for demolition licences issued.

Likewise Commercial and Industrial waste could be indexed by a measure of activity in the economy (perhaps Gross State Product or State Final Demand). Peaks and troughs in the variable trend of Commercial and Industrial waste to landfill should be investigated and noted. For example, it is possible that the spike in waste to landfill during 2006 and 2007 is the result of particular projects such as CSBP Bayswater site remediation and the MetroRail project, or more broadly the introduction of Contaminated Sites legislation. A similar spike occurred in 2003 and a trough in 2001. Understanding and potentially adjusting for these spikes would provide a better understanding of the underlying trends in the data.

Recommendation 5: Assess trends in Commercial / Industrial and Building / Demolition waste to landfill adjusted for changes in the level of activity in these sectors.

A measure of effectiveness of the Landfill Levy is to compare the predicted quantity of waste to landfill had the Levy not been applied. It is acknowledged that there are a range of factors that determine the behaviour of the market with respect to landfill. The Levy is just one of these and it would be inappropriate to attribute any response entirely to one factor. However, it would be informative to extend the analysis to include a 5 – 10 year period prior to the introduction of the Levy and project, with confidence intervals, the likely situation had the trends from before the introduction of the levy continued. Ideally this should be completed for each of the waste streams separately.

Recommendation 6: Complete an analysis on per capita or per unit of activity adjusted waste to landfill over a 20 year period and project the possible range of outcomes had the levy not been applied

(Note the Scale or sub heading on Figure 3 is wrong).

Recommendation 7: Provide an analysis of the Landfill Levy as a proportion of total disposal cost and compare the responsiveness of the WA market with other jurisdictions.

## **Household Waste Management**

It is argued that the achievement of the Landfill Levy objectives is limited because households are generally not directly exposed to landfill charges. It is true that in most cases the marginal private cost of disposal is zero, while the social cost is positive.

However, the cost effective (including social and personal costs) options for individual households are quite limited. For example, it will not be cost effective for individual households to deliver their wastes to several locations, and even separate collection may not in aggregate be cost effective after considering the total (including external) costs of landfill. Households have an important role in waste avoidance through their buying preferences, but waste avoidance is not considered in detail in this report.

In reality it is Local Governments and business who are in the best position to make economically based decisions regarding waste management.

### **Focus on Non-Municipal Waste**

Waste other than Municipal waste contributes more than 70% of the total waste to landfill. This deserves particular attention both in this report and in the evaluation of where levy funds are most effectively applied.

### **Social Costs (Internalising Externalities)**

Several comments are made about the Landfill Levy objective being to reflect the externalities associated with sending waste to landfill, although no references are provided as to how this has been determined. In principle, social welfare will be decreased if the levy exceeds the external costs. Given the high level of regulation of landfills and potential benefits from land reclamation and provision of quarried materials the external costs may be quite small.

Recommendation 8: Either provide a sound basis for assessing the external costs of sending waste to landfill, or use an alternative basis for establishing the level of the Landfill Levy.

### **Bans**

From an economic perspective bans are a blunt instrument. While it can be readily argued that certain waste streams be banned from landfill for environmental reasons, it is difficult to do so for economic reasons. The economic costs of bans may not have been adequately considered. It is recognised that a critical mass of a certain waste stream may be required for economically viable recovery, but this necessitates some kind of interim measure (probably an incentive) rather than a ban.