

# DISPOSAL LEVIES

## ReThink Policy Paper Series

### OWMA's Policy Position

The OWMA supports the use of disposal levies if properly designed and implemented, as a means of changing behavior; reducing waste generation; promoting reuse; and increasing waste diversion in Ontario.

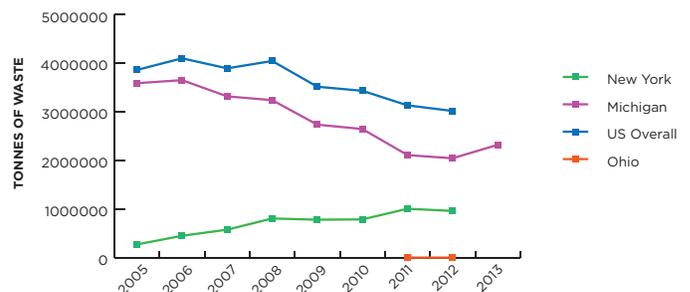
However, the policy will only work if levies are set at an appropriate level to encourage diversion; if enforcement is diligent; and if haulers or generators are not simply allowed to export waste to disposal facilities outside of Ontario. It is also important that funds raised by this levy are not injected back into the waste sector to unbalance or distort the marketplace. Disposal levies are intended to provide an adjustment to the differential gap between disposal and diversion, not a source of funding.

The economic realities and regulatory framework of waste disposal in Ontario necessitate creative and informed thinking on the subject of disposal levies. A disposal levy must be applied in such a manner that it captures waste destined for export and prevents any possibility to redirect waste from Ontario landfills to other jurisdictions. If properly designed, phased and implemented, disposal levies could be an effective instrument to support Ontario-based recycling capacity and economic activity.

### Background

Disposal levies are an economic tool used to shift waste management decisions towards diversion and away from disposal. Typically, disposal levies are applied to each tonne of waste disposed of or collected. The objective of introducing a levy is to reduce the existing cost differential between diversion and disposal by effectively creating a disincentive to disposal. As long as it is cheaper to dispose of waste in Ontario landfills or in nearby US jurisdictions (such as Michigan and New York State) than it is to recycle, businesses and individuals will be more likely to dispose of the wastes they generate.

ONTARIO / US WASTE EXPORT DATA



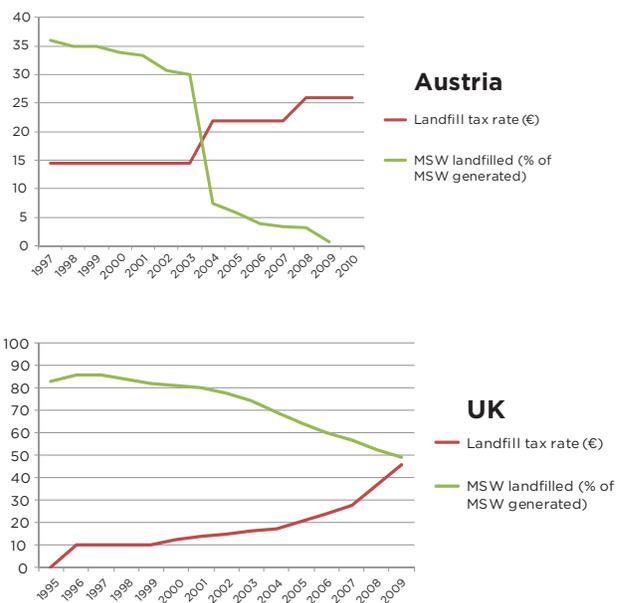
There are several examples of jurisdictions that have used disposal levies to support their diversion efforts, including Manitoba, Quebec, California, Ohio, Pennsylvania, Wisconsin and several other U.S. States and European jurisdictions. The amount of these levies vary widely from as low as \$1.76 per tonne to over \$140 per tonne.<sup>1,2</sup> The revenues generated are usually collected and allocated into special purpose or dedicated funds, which can be used to finance designated initiatives such as waste diversion programs, contaminated site remediation, or waste minimization projects.

A recent EU study<sup>3</sup> by BIO Intelligence Service analyzed the relationship between the performance of the waste management strategies of EU Member States and their use of economic instruments. The study revealed that EU States have increasingly been implementing disposal levies for non-hazardous municipal solid waste (MSW) - 19 EU states had a levy by the end of 2012. The levy rates, list of exempted materials, and the way in which the revenues are used differ across the nations. In Austria for example, the levy revenues serve to finance the remediation of contaminated sites, and to provide an incentive for improved waste management.

The rate of a disposal levy depends on the environmental impact associated with the waste treatment option and waste type, resulting in a lower levy for construction and demolition (C&D) waste or for energy from waste facilities. In the UK, the revenues generated from the levy are directed

to the Landfill Communities Fund, Waste and Resources Action Programme, and other activities implemented by the Department for Environment, Food and Rural Affairs. Figure 2 compares levy rates with the percentage of municipal solid waste sent to landfill in Austria and the UK.

**Figure 2.** Landfill Levy Rates Compared with Percentage of Municipal Solid Waste Sent to Landfill<sup>4</sup>



Bio Intelligence Service suggested that there is a direct relationship between higher disposal charges and lower percentages of municipal solid waste sent to landfill. The authors defined “landfill charges” as the sum of the levy and the gate fee for the disposal of waste in a landfill.

Although higher disposal levies were linked to lower percentages of waste being landfilled, the authors claim that other policies such as disposal restrictions (material bans) likely also influenced the volume of waste going to landfills.

Many US states<sup>5</sup> have implemented disposal levies. In most cases, the revenues from these levies are utilized to finance designated initiatives such as waste diversion programs or contaminated site remediation projects. For instance, in California, the fee for solid waste disposal is \$1.76 per tonne. The revenue generated from the Integrated Waste Management fee is placed into the Integrated Waste Management Account (IWMA). The majority of the funds in the IWMA are used to support the activities of the Department of Resources Recycling and Recovery, which is responsible for several programs, including regulating solid waste facilities; meeting the state’s waste diversion goals; and managing abandoned solid waste facilities.

It is important to note that the IWMA has operated with a structural deficit (with expenditures exceeding revenues) from 2006-2010 as revenues going into the fund have been declining. According to the Legislative Analyst’s Office,<sup>6</sup> there are two primary causes of this: a decline in the amount of

waste generated by the construction industry due to the economic downturn, and an overall decline in the amount of solid waste disposed of as more waste is diverted.

Within the Canadian context, Manitoba and Quebec are the only provinces that have introduced disposal levies. All solid waste disposed in Manitoba landfills is subject to a \$10 per tonne Waste Reduction and Recycling Support (WRARS) Levy<sup>7</sup>. The Levy applies to all residential, C&D, IC&I and other solid waste streams – 80% of the revenue generated is remitted to eligible municipalities to promote recycling<sup>8</sup> and the remaining 20% supports other provincial waste diversion priorities<sup>9</sup>.

Quebec’s Regulation Respecting the Charges Payable for the Disposal of Residual Materials requires landfill site operators to pay levies of \$20.69 per tonne of residual materials received for disposal. The Quebec levy has two components: a permanent fee of \$11.41 per tonne and a temporary fee (October 2010 to December 2023) of \$9.69 per tonne.<sup>10</sup> With regards to funds allocation, 85% of the basic levy portion is allocated to municipalities in the form of grants for developing and implementing regional waste management plans which are submitted to Recyc-Quebec for review and approval. The remaining 15% of the funds from the basic levy are used to finance waste management activities at the ministry level.

As for the supplementary levy, 33% of all revenue generated goes to municipalities for waste

management plans, while 67% goes towards funding composting / biomethanization (anaerobic digestion) programs and other initiatives that support implementation of the Quebec waste management policy (2011-2015).

In 2009, in their From Waste to Worth white paper, the Ontario Ministry of the Environment (MOE)

proposed to apply a levy to all waste discarded in the Industrial, Commercial and Institutional (IC&I) and residential sectors. The Ministry proposed that the revenues from this disposal levy could be used to support the waste diversion efforts of businesses, consumers, and municipalities.

#### **Disposal Levy Positions from Various Organizations:**

| Stakeholder             | General Position in WDA Consultation  |
|-------------------------|---|
| Waste Management Sector | Support a disposal levy. Dedicate revenue to waste diversion, enforcement and financial assurance (not general revenue). Revenue from the levy should not affect the marketplace. |
| Municipalities          | Support a disposal levy. Municipalities should be fully reimbursed and dedicate funds to waste diversion (not general revenue).   |
| Stewards                | Support a disposal levy but will be viewed as a tax. Dedicate revenue to waste diversion (not general revenue).   |
| ENGOS                   | Support disposal levy as a means to drive diversion.  |

- OWMA position can be found here.
- Association of Municipalities of Ontario (AMO), Regional Public Works Commissioners of Ontario (RPWCO), and Municipal Waste Association (MWA) positions can be found here.
- Recycling Council of Ontario (RCO) position can be found here.
- Canadian Energy-From-Waste Coalition position can be found here.
- ENGOs (including Canadian Environmental Law Association, Canadian Institute for Environmental Law and Policy, and Toronto Environmental Alliance) position can be found here.
- Stewardship Ontario position can be found here.

For every \$1 per tonne<sup>11</sup> associated with a disposal levy in Ontario would generate roughly over \$9M in annual revenue (65% from the IC&I sector and 35% from the residential sector). This is expected to decrease over time as more waste is diverted from landfill. In any case, this levy revenue could be used to fund: regulatory oversight of the waste sector; pooled financial assurance frameworks; diversion programs for materials not suitable for extended producer responsibility (EPR), such as organics; promotion; education; and outreach programs to reduce waste.

## Implications

The majority of stakeholders involved in the Waste Diversion Act Review generally support the implementation of a disposal levy. However, there are potential implications to all of the stakeholders that require careful consideration:

- *Waste Management Industry* – There is the potential that more waste will be exported to other jurisdictions (in order to avoid being subject to the levy), which would severely impact existing domestic infrastructure and investments. This could be avoided by ensuring that the levy is applied at waste consolidation points (transfer stations or to direct shipments by generators to disposal sites).

Additional investment may be needed to secure the necessary tracking, sorting, and reporting technology and public communications materials required for the implementation of a levy. The revenue generated through the levy may be used to offset some of these costs.

There are also concerns that funds from the levy could be used in a manner that would unbalance the market by selectively funding technologies and/or projects. For example, certain municipalities could be provided an unfair advantage if these funds were allocated to fund public waste management infrastructure to the detriment of private sector facilities.

- *Municipalities* – A disposal levy may increase disposal costs for some municipalities. However, a portion of the levy revenue could be used to offset increased costs. Municipalities want their funding for waste diversion to be proportional to their payment of the levy, i.e. cost-neutral.
- *Consumers* – Municipalities with pay-as-you-throw waste management programs, such as Toronto, would be able to easily recoup these costs from individual residents, ensuring those who dispose more pay more. Other municipalities that fund their waste management programs from property tax revenues may elect to raise the extra revenue through increased property taxes.
- *Businesses* – A disposal levy may increase disposal costs for some businesses; however, the increase is likely to be minimal, especially when considered on a per-business basis. Based on a 2008 study<sup>12</sup> that used Owen Sound IC&I waste audit data, a company with 5 employees could see an increase in disposal costs of under \$15 per year if a \$1 per tonne levy is imposed. For a company with 100 employees, they could see an increase in disposal costs of under \$100 per year if a \$1 per tonne levy is introduced.<sup>13</sup> As diversion increases, these costs to businesses would go down. Moreover, the benefits to businesses resulting from programs designed to increase diversion would outweigh the costs of the levy.
- *Ministry of the Environment* – Some administrative and enforcement costs would be incurred; however, the disposal levy revenue could be used to offset these costs.

## Implementation Considerations

Disposal levies must be tailored to a jurisdiction's complex situation. Every jurisdiction's situation is unique from the waste management policies that it has in place, to geographic and population density considerations, to its processing capacities, access to markets, and its material specific diversion rates. Every jurisdiction is somewhat different and should be evaluated accordingly. The following elements are necessary for proper implementation of a disposal levy:

### *Analyze marketplace and identify objectives*

The government needs to establish clear objectives as to what they seek to gain from the disposal levy. As well, the government must decide how data will be tracked and monitored to ensure the levy is being applied in a uniform manner. This necessitates a better understanding of how waste and material is currently being moved across the province and how various levy rates might affect this movement.

### *Stakeholder Consultation*

Stakeholders, which include various levels of government, regulatory agencies, distributors, producers, generators and representatives of the waste management sector, must be consulted

about the potential impacts of the levy and how to most effectively implement it. The discussion must cover the following key areas:

1. Who collects the disposal levy?
2. How is the disposal levy collected?
3. How do you prevent leakage (materials simply being exported to other jurisdictions for disposal)?
4. Where do the funds from the levy go and how are they allocated?
5. How is the disposal levy enforced?
6. How is data tracked?
7. Does the disposal levy apply to energy from waste facilities?
8. How do you set the disposal levy rate to meet policy objectives?
9. Is residential waste treated differently than IC&I waste?
10. What is the impact of the disposal levy on generators?

#### *Regulation*

There appears to be regulatory authority for the Province to move forward and implement a disposal levy under clause 175.1 (b) of the Environmental Protection Act (EPA), which

authorizes the Lieutenant Governor in Council to make regulations prohibiting, regulating or controlling the making, use, sale, display, advertising, transfer, transportation, operation, maintenance, storage, recycling, disposal, or discharge or any manner thereof of any product. The government would likely need to establish a Special Purpose Account for the funds raised.

#### *Transition Period*

It is important to allow for ample lead time to ensure adequate alternative recycling options are available; to allow for proper communication, education and training; and to establish enforcement, tracking and other compliance elements.

#### *Enforcement*

A disposal levy must be combined with an enforcement strategy to ensure that all material is captured and that all levies are collected.

#### *Review*

Periodic reviews should be conducted to assess the efficiency and effectiveness of a disposal levy and to determine whether the rate needs to be adjusted.

# ADDITIONAL RESOURCES



Ontario Ministry of the Environment. *From Waste to Worth*, October 2009. Available at [http://www.dsa.ca/fileBin/mediaLibrary/WDA\\_Report.pdf](http://www.dsa.ca/fileBin/mediaLibrary/WDA_Report.pdf)

Bio Intelligence Service. *Use of Economic Instruments and Waste Management Performances*, 2012. Available at [http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)

European Commission. *The Story Behind the Strategy: EU Waste Policy*, 2005. Available at [http://ec.europa.eu/environment/waste/pdf/story\\_book.pdf](http://ec.europa.eu/environment/waste/pdf/story_book.pdf).

European Topic Centre on Sustainable Consumption and Production. *Overview of the use of landfill taxes in Europe*, April 2012. Available at [http://scp.eionet.europa.eu/publications/WP2012\\_1/wp/WP2012\\_1](http://scp.eionet.europa.eu/publications/WP2012_1/wp/WP2012_1).

Institute for Environmental Studies. *Effectiveness of Landfill Taxation*, November 24 2005. Available at [http://www.ivm.vu.nl/en/Images/Effective%20landfill%20R05-05\\_tcm53-102678\\_tcm53-103947.pdf](http://www.ivm.vu.nl/en/Images/Effective%20landfill%20R05-05_tcm53-102678_tcm53-103947.pdf).

International Solid Waste Association (ISWA). *Guidelines: How to Design an Appropriate Waste Fee - Principles, Practices and Applications of Waste Management Fees*, November 2011. Available at [http://www.iswa.org/index.php?eID=tx\\_iswaknowledgebase\\_download&documentUid=2360](http://www.iswa.org/index.php?eID=tx_iswaknowledgebase_download&documentUid=2360).

Kelleher Environmental. *Analysis of City of Owen Sound Waste Audit/Recycling Plan Data for IC&I Premise*, November 24 2008.

Western Australian Local Government Association (WALGA). (2012, February) *Background Paper: Landfill Levy*, February 2012. Available at [http://www.wastenet.net.au/Assets/Documents/Content/Information/Background\\_Paper\\_Levy\\_Final\\_ amended\\_March\\_2012.pdf](http://www.wastenet.net.au/Assets/Documents/Content/Information/Background_Paper_Levy_Final_ amended_March_2012.pdf)

# APPENDIX



- 1 Ontario Ministry of the Environment. From Waste to Worth, October 2009. Available at [http://www.dsa.ca/fileBin/mediaLibrary/WDA\\_Report.pdf](http://www.dsa.ca/fileBin/mediaLibrary/WDA_Report.pdf)
- 2 European Topic Centre on Sustainable Consumption and Production. Overview of the use of landfill taxes in Europe, April 2012. Available at [http://scp.eionet.europa.eu/publications/WP2012\\_1/wp/WP2012\\_1](http://scp.eionet.europa.eu/publications/WP2012_1/wp/WP2012_1)
- 3 Bio Intelligence Service. Use of Economic Instruments and Waste Management Performances, 2012. Available at [http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)
- 4 Bio Intelligence Service. Use of Economic Instruments and Waste Management Performances, 2012. Available at [http://ec.europa.eu/environment/waste/pdf/final\\_report\\_10042012.pdf](http://ec.europa.eu/environment/waste/pdf/final_report_10042012.pdf)
- 5 Including California, Oklahoma, Ohio, Pennsylvania, Wisconsin
- 6 Legislative Analyst's Office. Overview of the Integrated Waste Management Account, March 18 2010. Available at [http://www.lao.ca.gov/handouts/resources/2010/Overview\\_of\\_the\\_Integrated\\_Waste\\_Management\\_Account\\_31810.pdf](http://www.lao.ca.gov/handouts/resources/2010/Overview_of_the_Integrated_Waste_Management_Account_31810.pdf)
- 7 Green Manitoba website. Available at <http://greenmanitoba.ca/wrars/>
- 8 Funds are allocated to municipalities based on the amount of material they divert.
- 9 Currently, these funds support e-waste and household hazardous waste diversion programs.
- 10 Both levies are indexed on January 1st of each year on the basis of the percentage change in the Consumer Prices Index of Canada.
- 11 Dollar figure simply used for illustrative purposes.
- 12 Kelleher Environmental. Analysis of City of Owen Sound Waste Audit/Recycling Plan Data for IC&I Premise, November 24, 2008.
- 13 Dollar figure used for illustrative purposes.