



SOLID WASTE DISPOSAL, 2010

Environmental Snapshot
July 2011

Key points

- In 2010, 2.531 million tonnes of solid waste was disposed of to municipal landfills in New Zealand.¹
- National information on waste disposal to municipal landfills has improved significantly since the last estimate in 2006.
- The 2010 figure provides a robust indication of disposal of waste to municipal landfills in New Zealand and a good baseline for future comparisons.

Introduction

Waste comprises a mixture of many different materials, including organic, paper, plastic, metal, timber and potentially hazardous substances. Waste can be generated at different times during a product's life cycle:

- when raw natural resources are extracted or harvested to manufacture the product
- during manufacturing
- when goods are packaged, transported, consumed and eventually disposed of.²

Waste can represent an inefficient use of resources, or a loss of resources. Many potentially reusable and recyclable materials such as paper, plastic, organic waste, glass and metal, are disposed of to landfills.³ Some forms of waste produce greenhouse gases and others can have significant health impacts on humans and animals. Waste can also pollute our waterways, air and land if it is not adequately managed.

The amount of waste being disposed of can be an indication of how efficiently we are using some of our natural resources. When combined with waste composition and diversion information, it can help inform waste minimisation policies and initiatives.

This snapshot report

This snapshot report provides information on the amount of solid waste disposed of to municipal landfills in 2010. Waste in municipal landfills can come from construction and demolition, industrial, commercial and residential sources.

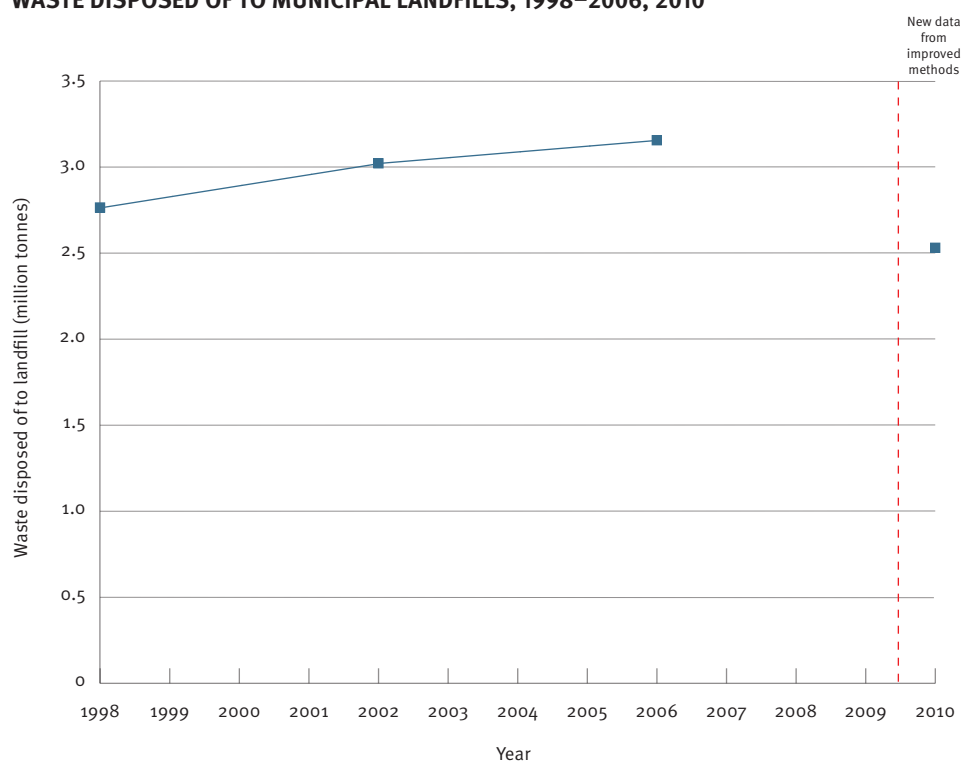
The Waste Minimisation Act 2008 (see text box) provides a robust framework for collecting data on waste disposed of to municipal landfills. As a result, we can now report solid waste disposal to municipal landfills annually, from 2010. The 2010 figure is considered more accurate than previous estimates of waste disposal to municipal landfills. The 2010 figure also provides a good baseline for future comparisons, which will be more frequent than in the past due to the regular collection of data.

Results

In 2010, 2.531 million tonnes of waste was disposed of to municipal landfills.¹ Figure 1 shows estimates of waste disposed of to municipal landfills in previous years. However, due to improved accuracy of waste disposal information for 2010 and high uncertainties for previous estimates, it is not advisable to compare these data and report trends over time.

+ FIGURE 1

WASTE DISPOSED OF TO MUNICIPAL LANDFILLS, 1998–2006, 2010



Reducing waste disposal to municipal landfills

Individual, community, and local and central government initiatives in recent years have successfully diverted large amounts of waste from landfills.² For example, since the implementation of the **Packaging Accord** in 2004, the recovery of packaging (which includes aluminium, glass, paper, plastics and steel) has increased by 26 per cent to approximately 430,000 tonnes.⁴

Participation in recycling by households has also increased in recent years – from 85 per cent in 2000 to 91 per cent in 2008.⁵ A 2008 survey indicated that 74 per cent of households recycled all or most of those items that they knew could be recycled.⁶

There remain a number of opportunities to further reduce the amount of waste disposed of to municipal landfills. A 2008 survey of waste composition in municipal landfills showed that approximately three-quarters of the waste disposed of to municipal landfills could have been potentially diverted by being recovered, reused or recycled.³ Other recent surveys showed that similar proportions of domestic waste being disposed of to municipal landfills could have also been potentially diverted.⁷

The amount of waste disposed of can also be reduced at other stages of a product's life cycle. This can include employing more efficient processes to extract raw materials, improving the efficiency of designs, and using materials more efficiently in the production process.²

Future watch

The amount of waste disposed of is generally expected to increase as population and/or economic activity increases.² As these factors increase, the total consumption of goods and services also generally increases due to:

- more people requiring goods and services in the case of population growth⁸
- higher consumption of goods and services as wealth, or economic activity, increases.⁹

New Zealand's economic growth in 2011 is predicted to be low¹⁰ and population is projected to increase.¹¹ As a result, the amount of waste disposed of to municipal landfills in 2011 may be similar to the waste disposed of in 2010. However, by increasing the amount of waste diverted from landfills and improving production efficiencies (as discussed above), the link between waste disposal and economic activity and population can be reduced.

Limitations of this snapshot report

The Waste Minimisation Act 2008 enables the collection of data on waste disposed of to disposal facilities, as defined by the Act. The data collected via the Act provides more accurate indications of waste disposal than previous disposal estimates.

Also some disposal facilities included in the earlier estimates have been excluded under the definition in the Waste Minimisation Act 2008. These factors make it difficult to compare new data with the older data, and accurately report trends over time. However, information obtained under the Act provides more accurate and regular figures on waste disposal to municipal landfills and the 2010 figure provides a good baseline for future comparisons.

It is unknown whether disposal to alternative disposal facilities such as cleanfills (which accept natural materials like clay, soil and rock, and inert materials like concrete and brick) and industrial landfills has increased over time, as there is very limited information available. Therefore, changes in waste disposal to municipal landfills could also represent changes in the type of facility that waste is disposed to, rather than changes in disposal quantities.

Waste Minimisation Act 2008

The Waste Minimisation Act 2008 encourages a reduction in the amount of waste we generate and dispose of in New Zealand and aims to lessen the environmental harm of waste. The Act also aims to benefit the economy by encouraging better use of materials throughout the product life cycle, promoting domestic reprocessing of recovered materials and providing more employment.

The Act introduced several new tools for managing and minimising waste. The Act provides:

- a levy on all waste disposed of at municipal landfills to generate funding to help reduce waste
- recognition of product stewardship schemes (through accreditation) and the ability to impose mandatory product stewardship schemes
- clearer responsibilities for territorial authorities in managing and minimising waste.

For further information on the Waste Minimisation Act 2008 and the Waste levy, go to www.mfe.govt.nz/issues/waste/waste-minimisation.html.

Endnotes

- 1 This is the quantity of waste that the waste disposal levy was collected on in 2010. The waste disposal levy is applied to waste received by disposal facilities, as defined by the Waste Minimisation Act 2008. It excludes diverted (recovered, reused or recycled) materials and materials used to cover waste at landfills.
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- 9 European Environment Agency. 2007. *Europe's Environment: The Fourth Assessment*. Copenhagen: European Environment Agency. Retrieved from www.eea.europa.eu/publications/state_of_environment_report_2007_1 (20 April 2011).
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FOR MORE INFORMATION:

- about the state of New Zealand's environment see: www.mfe.govt.nz/environmental-reporting
- about the Ministry for the Environment's reporting on New Zealand's solid waste disposal: josh.fyfe@mfe.govt.nz.



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