

# Bulletin 4: Compost and Anaerobic Digestion Statistics for 2013

## Introduction

The EPA produces national statistics on waste generation and management to meet legislative reporting obligations and inform national policy development.

This bulletin reports information on composting and anaerobic digestion at merchant facilities that accept waste for treatment. This is a recovery activity. These figures do not include home composting estimates or facilities where only waste generated on-site is treated on-site.

Composting is the breakdown of the organic fraction of waste material by micro-organisms in controlled, aerobic conditions. The end product is compost; a dark, nutrient-rich soil conditioner. The process of anaerobic digestion (AD) involves the breakdown of organic matter by bacteria and enzymes in an oxygen-free environment. The end product is biogas and digestate.

Thirty-two composting and four AD facilities were surveyed for 2013. The sources of waste accepted for treatment at these facilities were mainly municipal (e.g. kitchen and canteen; garden and park), waste water treatment plants and industrial facilities (see Table 1). Compost was mainly used in horticulture and landscaping, agriculture and as a soil improver in the restoration of landfill sites.

## Key Trends

- The quantity of waste accepted for treatment at composting and AD plants decreased from 276 ktonnes in 2012 to 271 ktonnes in 2013 (2%

reduction). The main cause for the decrease was a reduction in some of the agricultural process waste previously sent to composting and AD facilities.

- The quantity of municipal organic waste accepted for treatment at composting facilities was 158 ktonnes in 2013, a 3% increase from 154 ktonnes in 2012. The amount of municipal waste accepted for composting rose significantly from 48 ktonnes in 2005 to 158 ktonnes in 2013 (see Figure 1).
- The quantity of food waste accepted at composting and AD facilities in 2013 was up 8% (from 105 ktonnes in 2012 to 114 ktonnes in 2013).
- The quantity of brown bin organic waste (food and garden waste) accepted at anaerobic digestion facilities increased from 0.7 ktonnes in 2010 to 7.7 ktonnes in 2013.

**Table 1. Sources of waste accepted at compost and AD plants in 2013**

	<i>ktonnes</i>	<i>% share</i>
Municipal Organic Waste	158	59%
Waste water treatment plants	55	20%
Industrial facilities involved in the production of beverages	26	10%
Other	31	11%



**Figure 1. Municipal waste accepted for composting/anaerobic digestion, 2005 to 2013**

## Bio-stabilised residual waste

In 2013, there were four compost facilities producing bio-stabilised<sup>1</sup> residual waste from organic fines arising from the mechanical treatment of residual waste. The quantity of organic fines accepted at these facilities was 50 ktonnes, which produced 24 ktonnes of bio-stabilised residual waste. Bio-stabilised residual waste is waste that meets the required EPA standard and is used as landfill cover.



<sup>1</sup> Biostabilised residual waste means residual biodegradable municipal waste that has been treated to achieve an EPA approved biodegradability stability standard prior to landfilling or alternative agreed use.