Composting and Anaerobic Digestion in Ireland

Introduction

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

This release reports information on Composting and Anaerobic Digestion (AD) in 2015 at commercial facilities that accept biodegradable waste generated in Ireland. The figures do not include (i) home composting estimates (ii) data for facilities where only waste generated on-site is treated on-site and (iii) waste imported for treatment.

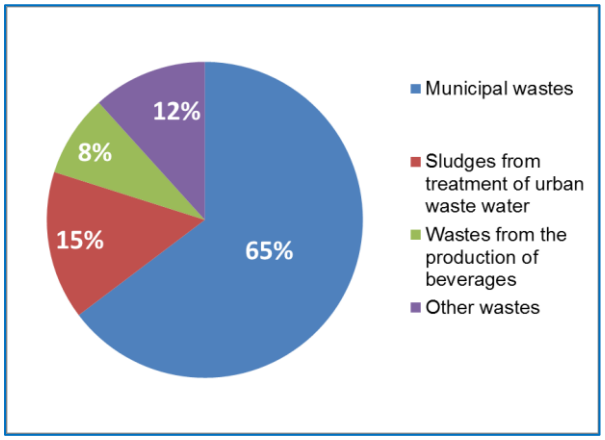
The EPA surveyed thirty-seven[1] facilities (31 composting, 5 AD and 1 facility that combines composting and AD).

Key Trends

- The quantity of waste accepted for treatment at composting and AD plants increased from 271 ktonnes in 2013 to 300 ktonnes in 2015 (11% increase).
- Composting was the dominant treatment activity (>80% of tonnage accepted).
- Municipal waste (kitchen and canteen food waste, garden and park green waste, edible oils & fats) was main source of waste accepted (65%). See Figure 1.
- Municipal waste mainly comprises the brown bin collections at households and commercial premises. Commercial brown bin waste is primarily food waste, while household brown bins also contain a small quantity of garden waste (approx. 10%). The quantity of brown bin waste accepted rose with 114 ktonnes in 2013 and 143 ktonnes in 2015 (25% increase) reflecting implementation of Food Waste Regulations. In 2015, 39% accepted was from commercial sources and 61% from household sources.
- The quantity of municipal waste accepted for treatment has risen from 158 ktonnes in 2013 to 194 ktonnes in 2015 (23% increase). See Figure 2.

[1] Includes 3 facilities in Northern Ireland. Estimates used for 5 composting facilities. 3 facilities submitted nil return (i.e. not operational in 2015).

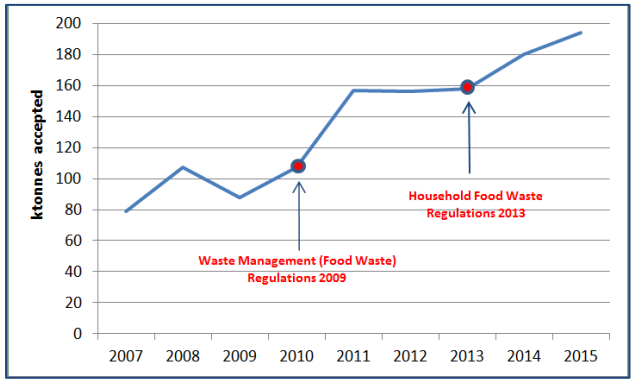
Figure 1. Sources of waste treated at Composting and Anaerobic Digestion plants in 2015



- There was a 34% increase in garden and park waste accepted for treatment between 2013 (35 ktonnes) and 2015 (47 ktonnes).
- After municipal waste, sludges from urban waste water treatment plants and wastes from the production of beverages are the other dominant sources of waste accepted. (Figure 1).
- While there was an increase in most waste streams accepted for treatment, there was a decrease in wastes from agriculture and food preparation and processing industries.
- There is an increasing trend of brown bin waste collected in Ireland being exported to Northern Ireland for recovery. Four ktonnes[2] was exported in 2013, 31 ktonnes in 2015 (eight-fold increase and 22% of the total quantity of brown bin waste accepted at composting and AD facilities in 2015).
- Products of composting and AD were used in horticulture, landscaping and agricultural land treatment.

[2] Source: National TransFrontier Shipment Office at Dublin City Council

Figure 2. Municipal waste accepted for composting and anaerobic digestion, 2007 to 2015



More information

See www.epa.ie/pubs/reports/waste/stats/ for the EPA's previous data release on Composting and AD in Ireland in 2013 as well as 2015 data tables and details of facilities surveyed.

Biostabilised residual waste

In 2015, five composting facilities produced biostabilised residual waste from organic fines arising from the mechanical treatment of residual waste. Biostabilised residual waste has been treated to achieve an EPA approved biodegradability stability standard prior to use as landfill cover or alternative agreed use. The amount of organic fines accepted at composting facilities has risen significantly from 50 ktonnes in 2013 to 100 ktonnes in 2014 and 119 ktonnes in 2015. This reflects the increase in mechanical treatment of residual waste at waste recovery facilities.

Environmental Protection Agency

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