

Country report Ireland

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Introduction and organic waste situation

The National Strategy on Biodegradable Waste published in April 2006 by the Department of Environment, Heritage and local Government proposes to divert biodegradable waste from landfill. The strategy has targets for operational capacity to treat source separated food and garden waste by composting and anaerobic digestion.

Compost Facilities

There are about 30 composting facilities in Ireland which treat garden/park waste, food waste and sludges. There are also four on farm based anaerobic digestion plants. Details on compost and anaerobic digestion facilities can be found on www.cre.ie

Compost Standard

At the moment there is no compost standard in Ireland. In the absence of standards the Environmental Protection Agency (EPA) and local authorities are using the technical discussion document produced by the European Commission "Biological Treatment of Biowaste", when regulating composting facilities.

Cré conducted EPA funded research that analysed Irish compost quality databases and estimated appropriate limit values for certain parameters. Cré then developed an industry quality standard for source separated biodegradable waste derived compost, tailored to Irish conditions. This standard proposed limit values for parameters including heavy metals, pathogens, impurities, stability and organic matter. This report "Development of an Industry-Led Quality Standard for Source-Separated Biodegradable Material Derived Compost" was published in 2009.

In 2009, rx3 (www.rx3.ie) requested the National Standards Authority of Ireland (NSAI) to develop a CQS for source separated biodegradable derived compost. NSAI used published research that compared Irish compost quality databases with databases and standards from other European countries. Irish Standard 441:2011 was published June 2011. See www.rx3.ie/National-compost-quality-standard for further details.

Compost Quality Assurance Scheme

To complement the compost quality standard I.S. 441, rx3 developed a compost quality assurance scheme using I.S. 441 specifications. See www.cqas.ie. A quality mark (below) has been developed to assist in marketing and identifying high quality compost, increasing overall awareness and understanding of quality issues in compost.

Markets for Compost

Compost sites in the Republic of Ireland were surveyed to determine what markets they sold compost into during 2012. The results of this survey are based on the majority of Irish composting plants -23 plants. The 3 plants that did not respond to the survey produce about an estimated 3,000 tonnes of compost.

The main findings of the survey are:

- The total tonnes of compost produced from brown bin, garden material and sewage sludge was 111,165 tonnes.
- Tillage land is the main market for compost manufactured from brown bin material and sewage sludge.
- Horticulture is the main market for compost manufactured from garden material.
- Overall, the main market for compost is in the horticulture sector and tillage land is the second largest market for compost.

rx3 has generated a market report on organic waste management, compost production and compost use in Ireland. This report brings together comprehensive information about the sector for the first time. The report notes that there has been a generally upward trend since 2000 in numbers of composting facilities operational, capacity provided, materials treated and compost produced.

Cré – and WRAP (Waste & Resources Action Programme) co-sponsored preliminary trials to investigate the use of high quality composted materials in the maintenance of golf fairways. The trials were undertaken at the K Club Golf Course, County Kildare, Ireland. The report can be downloaded from here [Cré-WRAP Compost Trial at K Club](#)

Cré has also produced Factsheets on Compost Use:

- [Compost Use in Organic Growing](#)
- [Compost Use in Turf](#)
- [Compost FAQs by Landscapers](#)

Before 2011, barriers to market development for compost products in Ireland included a lack of education and poor awareness / public perception of waste derived composts and little knowledge of use / benefits associated with compost and digestate and how to apply to maximum advantage.

Crop demonstration trials have been a feature of compost marketing in countries that have successfully introduced widespread source segregation, separate collection and composting of organic wastes and this information is widely published. Similar projects are required in Ireland to demonstrate benefits of compost use to farmers. Therefore, rx3 is leading a project demonstrating market potential and to quantify technical, environmental, and financial aspects of the approach, to produce results to aid adoption of best practice on Irish working farms. The long term objective is to increase agricultural use of compost.

Five farms were selected, each growing either spring barley or winter wheat or grass silage, to trial and demonstrate use of high quality food waste derived compost and digestate against use of slurry and inorganic fertiliser in a commercial farming environment.

Second year preliminary results, now available (February 2012), indicate a range of beneficial effects and practical learning's. These include: digestate and inorganic fertilisers showed similar nitrogen release rates; soil organic matter increase with use of organic fertilisers, with increased soil activity; compost application

timing is important to ensure adequate incorporation; compost is well suited to grass/clover, with steady N-release; yields may increase.

A detailed chemical characterisation of the compost and digestate has been conducted. Incubation trials are studying nitrogen and phosphorus (N and P) availability of compost and digestate when mixed with soil. Pot-plant growth trials using grass are ongoing to determine relative availability of organic N and P relative to inorganic N and P. In all cases, a comparison of results will be made to another characterisation which is underway of 25 compost and digestate materials from another project and with results reported in international literature.

An extensive information dissemination exercise has been conducted throughout the project, and over 400 interested parties have attended open days. A financial evaluation of effects is being developed. Importantly, the farmers are also very satisfied with the results to date.

The open days provided farmers and other interested people the opportunity to see the trial plots, to learn about the crop trial and first year results, and to discuss with host farmers experiences of using compost and digestate.

The impacts of compost and digestate on several aspects of soil quality, crop development and yield are being assessed, along with environmental effects. For further information about the trials please click here; www.rx3.ie/rx3-Compost-Demonstration-Trials

National Legislation for Source Separation of Commercial Food Waste

In December 2009, Ireland's Minister for the Environment, published the Food Waste Regulations (SI 508 of 2009) heralding national legislation for the source separation of food waste from major commercial premises. These regulations are designed to promote the segregation and recovery of food waste in the commercial sector. They will facilitate achieving the targets set out in the European Commission's Landfill Directive 99/31/EC for the diversion of biodegradable municipal waste (BMW) from landfill sites to composting and anaerobic digestion plants, and to other forms of biological treatment. Disposal of source separated food waste into the residual collection service also is prohibited.

The regulations impose obligations on the major producers of food waste, such as state buildings where food is prepared, restaurants and cafés, hot food outlets, canteens, hotels and larger guest houses, supermarkets and other food retailers, to segregate these materials and make them available for separate collection service (commonly known as a brown bin service in Ireland). Alternatively, these materials can be biologically treated (e.g. composted) on the premises where they are generated under specified conditions. Small businesses that produce less than 50 kg of food waste per week are exempted from complying for one year.

National Legislation for Source Separation of Household Food Waste

The Minister for the Environment, Community and Local Government signed the European Union (Household Food Waste and Bio -Waste) Regulations 2013 (S.I. No. 71 of 2013).

The regulations are designed to promote the segregation and recovery of household food waste.

The Household Food Waste Regulations impose obligations on:

- Waste collectors – who must provide a separate collection service for household food waste,

- Households that produce food waste – who must segregate such waste and keep it separate from other non-biodegradable waste, and have it separately collected by an authorised waste collector.

Householders may alternatively:

- Compost the food waste at home, or
- Bring the food waste to authorised treatment centres, for recovery in an environmentally acceptable way, such as civic amenity sites, anaerobic digestion sites.

Households are not allowed to:

- dispose of food waste in the residual waste collection (the black bin)

The Regulations have differing phase in periods. Over a period to 1st July 2016 brown bins will be rolled out to most towns and cities with only very small population areas being exempt or small islands or areas where it is simply not practical to separately collect such waste.

In accordance with the regulatory impact assessment prepared for these regulations, the roll-out of the brown bin will be phased in over the following timetable:

- 1st July 2013 for agglomerations > 25,000 persons;
- 31st December 2013 for agglomerations > 20,000 persons;
- 1st July 2014 for agglomerations > 10,000 persons;
- 1st July 2015 for agglomerations > 1,500 persons, and
- 1st July 2016 for agglomerations > 500 persons.

The Regulatory Impact Assessment can be located at the Department's web site at the following link:

<http://www.housing.gov.ie/sites/default/files/migrated->

[files/en//Legislation/Environment/Waste/WasteManagement/FileDownload%2C31686%2Cen.pdf](http://www.housing.gov.ie/sites/default/files/migrated-files/en//Legislation/Environment/Waste/WasteManagement/FileDownload%2C31686%2Cen.pdf)

Draft Waste Management (Household Food Waste Collection) Regulations - Regulatory Impact Assessment (pdf, 1,838 kb).

Education Programme

A new education programme to educate people to use collection food waste was launched in 2014 – www.brownbin.ie

Contact and source of Information

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ECN accepts no responsibility for the correctness and the up-to-dateness of the country data. In case of more details please contact the ECN Country Representatives. Please mention the ECN Country Report, date of revision and the author in your quotations. Further country information in English is available at the ECN Office info@compostnetwork.info

About ECN

The European Compost Network is a membership organisation with 70 members from 28 European Countries. Members include all European bio-waste organisations and their operating plants, research, policy making, consultants and authorities. ECN represents 22 bio-waste organisations (compost and digestate quality assurance organisations) from 14 European Countries and two from abroad, 25 companies producing bio-based products (organic fertilisers, soil improvers, growing media and, biodegradable plastics), 9 non-governmental organisations of environmental protection organisations, 11 academic (research) institutes in environmental, agricultural and natural sciences and 3 environmental agencies. Via the member organisations, ECN represents more than 3000 experts and plant operators with more than 30 million tonnes of biological waste treatment capacity.