

Industrial and commercial waste production in Northern Ireland 2002

Executive Summary

In March 2002, M·E·L Research in association with EnviroCentre Belfast were commissioned by the Environment and Heritage Service to carry out a survey of industrial and commercial waste producers. The survey was the second full survey to be carried out, the previous one being completed in 2000. This second survey used identical methods to the previous year but with a larger sample size.

Sampling

It had already been decided that the survey should be designed to elicit responses from 2,500 companies and that therefore 12,000 companies should be contacted. Firstly it was decided that all companies employing more than 25 staff should be surveyed and that all industrial companies should be surveyed. This amounted to 9,074 companies and a sample was taken of the remainder. Half of these were allocated based on quantities of waste and half on variability of waste per employee factors. The samples were allocated to size bands based on the fact that companies with more employees tend to produce more waste.

Method

A postal survey approach was used to obtain the required information. The same questionnaire as had been used in the previous year was used again.

The data were entered into the EHS's Microsoft Access database then exported into SPSS for analysis.

Data were grossed up with employment data using the average quantity of waste produced per employee within each industry sector as the basis. A special measure of the average was used to account for the skewed distribution of the waste per employee figures.

Response

A response rate of 16.7% was achieved, a small improvement over the previous year's survey.

Quantities of waste produced

In 2002 industry and commerce in Northern Ireland produced around 635,000 tonnes of waste. No significant increase over the amount produced in 2000 could be detected.

By economic sector

Commerce is responsible for most of the waste produced in Northern Ireland at 82% of the total amount with industry producing 17% and the utilities generating 1%.

Four sectors are responsible for nearly one half of the waste produced in Northern Ireland – health and social work (15%), retail (13%), education (10%) and public administration (9%). This means that more than one third of waste produced comes from the public sector in some form or another.

By district

Belfast produces the most industrial and commercial waste at 29% while Moyle produces the least at less than 1%.

By waste material

The most commonly produced waste material is 'mixed waste', that is waste that consists of two or more materials mixed at point of collection. This type of waste is rarely hazardous but does contain significant quantities of recyclable materials. Mixed waste accounted for 257,000 tonnes in 2002 and 41% of all waste produced.

Other waste materials produced in significant amounts included paper and cardboard (15%), waste from health care (11%) and edible oil and fat (8%).

By management method

The most common waste management method for waste produced by industry and commerce in 2002 was landfill at 252,000 tonnes (40%). One third of all waste is recycled, a performance more or less on par with England and Wales where 35% of industrial and commercial waste is estimated to be recycled. Around 19% of industrial and commercial waste in Northern Ireland is incinerated or burned.

Recycling

Four sectors are particularly effective recyclers – 1) real estate, renting and computer-related activities (74% of waste recycled), 2) the wholesale trade (73%), 3) hotels and restaurants (72%), and 4) post and telecommunications (69%).

Three sectors are particularly poor recyclers – land transport (1% of waste recycled), research and development (2%), and manufacture of other non-metallic mineral products (5%).

Packaging waste

Overall, at least 196,000 tonnes of packaging waste was produced in Northern Ireland in 2002. This is likely to be an underestimate since whether or not waste was packaging was determined from the respondent's relatively brief description of the waste.

The largest quantities of packaging are produced by the health and social work sector (mainly metallic packaging). Other large generators include public administration and the retail sector.