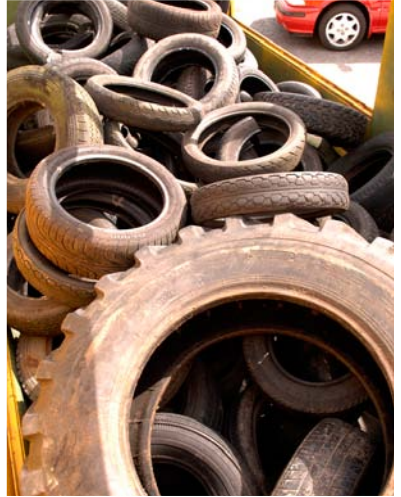


# Waste Data Digest 11: Key facts and trends

Published 2011





# Contents



# Introduction

Welcome to SEPA's Waste Data Digest, a two-part report based on data collected by, or on behalf of, SEPA on controlled waste in Scotland.

This document is the first part of the digest and presents key facts and trends on municipal, commercial and industrial waste data over a five-year period from 2005 to 2009 (calendar or financial years). There are four main sections: waste arisings (generated), recovery, disposal and incineration.

The key facts and trends are underpinned by the second part of the digest, the data tables, which contain detailed annual data on municipal, commercial and industrial wastes.

Both parts of the digest are available to download from the [SEPA website](#)<sup>1</sup>.

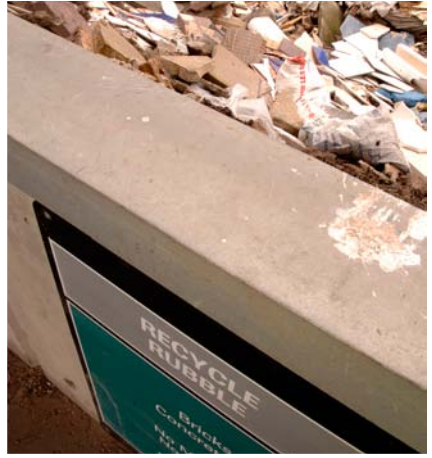
The next set of key facts and trends reporting on waste data between 2006 and 2010 (calendar or financial years) will be published in spring 2012.

## Key findings

Some of the key findings are:

- The quantity of controlled waste produced in Scotland in 2009 was 17.11 million tonnes. Overall, the total amount of waste generated fell between 2005 and 2009, largely due to reductions in commercial waste, and in construction and demolition waste.
- A total of 3.20 million tonnes of municipal waste were collected and managed by, or on behalf of, Scottish local authorities in 2009-2010. This was the lowest amount in the five-year period and suggested that the Scottish Government's target of achieving zero growth in this waste stream by the end of 2010 had been realised.
- Scottish local authorities recycled and composted 36.7% of the municipal waste they managed in 2009-2010. Although the rate continued to grow between 2005-2006 and 2009-2010, the speed of the increase slowed.
- The amount of controlled waste landfilled in Scotland in 2009 (4.71 million tonnes) was 23% less than that in 2008 and 36% less than in 2005. Much of the reduction was due to a drop in the amount of mineral waste and mixed waste landfilled.

<sup>1</sup> [www.sepa.org.uk/waste/waste\\_data/waste\\_data\\_digest.aspx](http://www.sepa.org.uk/waste/waste_data/waste_data_digest.aspx)



# Important information

These notes are provided to help you understand the text.

## Controlled waste

Controlled waste is all waste as defined in the Controlled Waste Regulations 1992.

## List of waste management sites

Lists and maps of waste management sites in Scotland are available on [SEPA's website](#)<sup>2</sup>.

## Municipal waste

The definition of municipal waste changed in April 2006 (see 'supporting information' section in previous key facts and trends for more details). To draw meaningful conclusions about the trends in this type of waste it has been necessary to rework data from previous years to match the new definition. As a result, tonnages for years prior to 2006–2007 may differ from those published in previous online digest tables. The tonnages in the online digest tables are correct according to the definition that existed at the time.

In addition, reporting definitions changed in 2010 and waste previously classified as municipal waste is now classified as Local Authority Collected Municipal Waste (LACMW) (see 'supporting information' section in this publication for more details). Therefore, what was known as municipal waste in previous digests is now known as LACMW. This change has not affected tonnages reported in previous years.

## Reporting years

Normally data is reported by calendar year, but in some instances only financial year data is available. The financial year runs from 1 April to the 31 March and is shown as (for example) 2009–2010.

## Rounding

Where the sum of the figures in a table does not equal the total, this is due to rounding.

## Scottish Executive

The Scottish Executive was established in 1999 and since August 2007 has been officially referred to as the Scottish Government. Therefore, where reference is made to the Scottish Executive, the term 'the (then) Scottish Executive' is used.

## Updates

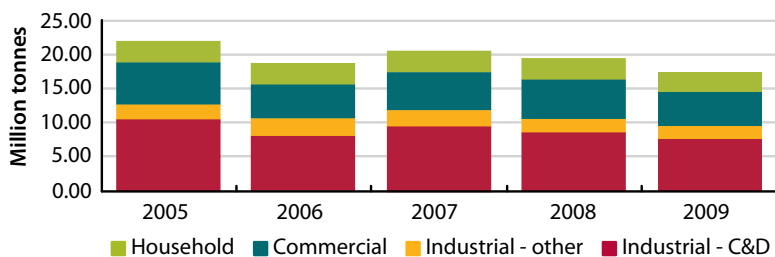
Some data tables have been updated since they were originally published in the waste data digest in order to provide more robust data.

## WasteDataFlow

The totals on pages 13 and 15 (Scottish local authority collected municipal waste recycled by type and material) do not match because of the way the underlying source data are reported in WasteDataFlow.

<sup>2</sup> [www.sepa.org.uk/waste/waste\\_data/site\\_capacity\\_\\_infrastructure.aspx](http://www.sepa.org.uk/waste/waste_data/site_capacity__infrastructure.aspx)

## Total controlled waste arisings in Scotland 2005 to 2009



Million tonnes

Waste type	2005	2006	2007	2008	2009
Household*	2.87	2.97	3.00	2.94	2.82
Commercial	6.21	5.07	5.48	5.62 <sup>†</sup>	4.89
Industrial - other	2.36	2.71	2.75	2.33 <sup>†</sup>	1.80
Industrial - C&D	10.61	8.03	9.44	8.63	7.60
<b>Total</b>	<b>22.05</b>	<b>18.78</b>	<b>20.67</b>	<b>19.52<sup>†</sup></b>	<b>17.11</b>

\*Household figures for 2005 and 2006 are calculated on a proportional basis (3/4 of 2005/06 + 1/4 of 2006/07).

<sup>†</sup>Updated data.

In 2009, the total amount of controlled waste generated in Scotland was 17.11 million tonnes – the lowest amount between 2005 and 2009. This was composed of approximately 44% construction and demolition waste, 29% commercial waste, 16% household waste and 11% other industrial waste.

The latest data indicates that the total amount of waste generated fell by 4.94 million tonnes (22%) between 2005 and 2009 and by an average of 6% per year over this period. This change was mainly due to reductions in commercial and industrial wastes, including construction and demolition waste. The quantity of household waste generated fell by an average of 0.4% over the period indicating that the quantity of household waste produced was stabilising.

SEPA collects data on controlled waste by a variety of means.

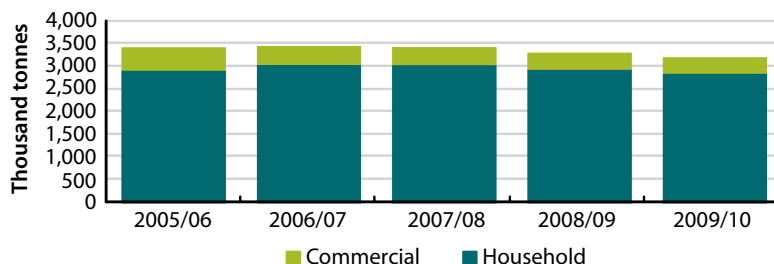
Data on the quantity of household waste generated was obtained from the national online reporting database, WasteDataFlow.

Data on the amount of commercial and industrial waste generated for 2004 and 2006 (excluding construction and demolition waste) was obtained from two voluntary national business waste surveys carried out in those years by SEPA. Figures for 2005 were estimated from the 2004 survey, and figures for 2007, 2008 and 2009 were all estimated from the 2006 survey.

Data on construction and demolition waste generated was estimated by analysing statutory returns from licensed and permitted waste management sites and from sites registered under Paragraph 9 or 19 exemptions to the Waste Management Licensing Regulations. Allowances were made for possible double-counting.



## Local authority collected municipal waste managed by, or on behalf of, Scottish local authorities 2005-2006 to 2009-2010



Tonnes

Waste type	2005/06	2006/07	2007/08	2008/09	2009/10
Household	2,885,695	3,005,866	3,001,154	2,905,584	2,819,247
Commercial	497,960	409,989	388,273	363,021	347,651
Other non household*	30,529	21,192	24,275	19,464	30,378
<b>Total</b>	<b>3,414,184</b>	<b>3,437,046</b>	<b>3,413,702</b>	<b>3,288,069</b>	<b>3,197,276</b>

\*Includes mixed industrial.

The amount of local authority collected municipal waste (LACMW) managed by, or on behalf of, Scottish local authorities in 2009–2010 was 3.20 million tonnes. This was the lowest amount managed between 2005–2006 and 2009–2010.

In 2003, the (then) Scottish Executive set a target that growth in municipal waste should cease by 2010. This was restated by the Scottish Government in 2008 as part of its plans for a zero waste Scotland and waste prevention is now a top priority across all waste streams.

The latest data indicates that growth may have stopped. The total amount of LACMW decreased by 217,000 tonnes (6%) between 2005–2006 and 2009–2010 and fell by an average of 2% per year over this period.

Although there was an overall reduction in total LACMW during this time, there was a considerable difference between the household and commercial components. On average, household waste decreased by an average of 0.6% per year and commercial waste decreased by an average of 8% per year. There are two possible reasons for the greater decrease in commercial waste: first, a reduction in the amount of waste produced by businesses and second, local authorities collecting or reporting waste from fewer businesses.

With regard to the second point, many local authorities have to estimate the split between household and commercial waste in mixed collections. In the cases where a commercial/household split could not be established all waste was reported as household. We are currently working on a methodology to help local authorities achieve more accurate estimates.

LACMW is household waste and similar business waste that is collected by or on behalf of Scottish local authorities. Further information on the definition of LACMW can be found on page 32.

## Business waste arisings in Scotland 2005 to 2009



Million tonnes

Waste type*	2005	2006	2007	2008	2009
Commercial	6.06	4.92	5.33	5.47 <sup>†</sup>	4.75
Industrial	2.35	2.72 <sup>†</sup>	2.76 <sup>†</sup>	2.34 <sup>†</sup>	1.82
<b>Total</b>	<b>8.41</b>	<b>7.64<sup>†</sup></b>	<b>8.09<sup>†</sup></b>	<b>7.81<sup>†</sup></b>	<b>6.57</b>

\*Does not include waste from agriculture, fishing, forestry or construction sectors.

<sup>†</sup>Updated data.

The amount of business waste generated in Scotland in 2009 was 6.57 million tonnes. This was approximately 70% commercial and 30% industrial waste.

The latest data indicates that the amount of business waste generated fell by 1.84 million tonnes (22%) between 2005 and 2009. There were fluctuations within this trend in the commercial and industrial waste streams, probably linked to the economy.

Business waste is waste produced by all businesses, including public sector organisations and commercial and industrial companies, such as factories, utility and transport companies, shops, offices, hotels, restaurants, schools and hospitals.

The data in this table was obtained from two national business waste surveys carried out by SEPA for 2004 and 2006 data. The returns were statistically analysed and grossed up to produce overall totals for Scotland. Figures for 2005 were estimated from the 2004 survey and figures for 2007, 2008 and 2009 were estimated from the 2006 data. As a result of the low response rate to the surveys, the figures are only indicative.

All commercial and industrial sectors were included in the surveys, with the exception of agriculture, forestry and construction in both 2004 and 2006. The fishing, mining and quarrying sectors were also excluded in 2004.

## Construction and demolition waste arisings in Scotland 2005 to 2009



Million tonnes

	2005	2006	2007	2008	2009
<b>Total</b>	<b>10.61</b>	<b>8.03</b>	<b>9.44</b>	<b>8.63</b>	<b>7.60</b>

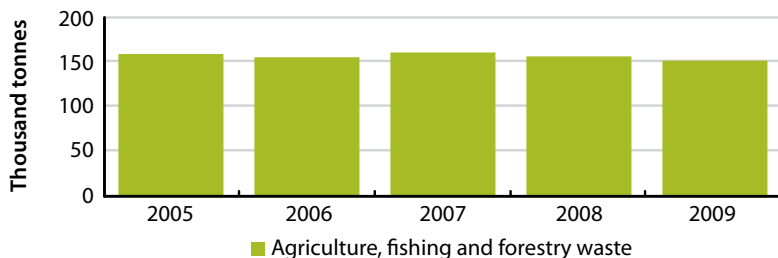
In 2009, the quantity of construction and demolition waste generated in Scotland was 7.60 million tonnes. This represented about 44% of all controlled waste generated in Scotland in this year. The predominant waste types were mineral wastes, including soils and stones (6.27 million tonnes; 82%) and mixed construction and demolition wastes (1.05 million tonnes; 14%). Approximately 23,000 tonnes of asbestos-containing waste were also produced.

The quantity of construction and demolition waste generated fell by 3.01 million tonnes (28%) between 2005 and 2009, although there was a rise of just over a million tonnes between 2006 and 2007. The overall downward trend was probably due to a reduction in the number and scale of construction and demolition projects.

The data in this table was generated by analysing statutory returns from waste management sites and exempt activities that managed these wastes. Allowances were made for possible double-counting.

Construction and demolition wastes typically include soils, concrete, bricks, glass, wood, plasterboard, asbestos, metals and plastics and are classified under Chapter 17 of the European Waste Catalogue List of Wastes (EWC 2002). Depending on their nature, these wastes are managed either at licensed/permitted waste management sites or at sites holding an exemption registered under Paragraph 9 or 19 of the Waste Management Licensing Regulations.

## Agriculture, fishing and forestry waste arisings in Scotland 2005 to 2009



Waste type	Tonnes				
	2005	2006	2007	2008	2009
Agriculture*	150,600	147,919	152,919	149,514	145,678
Fishing <sup>†</sup>	4,786	3,770	4,118	3,115	2,247
Forestry <sup>‡</sup>	3,267	3,274	3,284	3,286	3,284
<b>Total</b>	<b>158,653</b>	<b>154,963</b>	<b>160,321</b>	<b>155,915</b>	<b>151,208</b>

\*Includes aquaculture.

<sup>†</sup>Sea fishing. Excludes fish waste disposed of at sea.

<sup>‡</sup>Excludes plant material left *in situ*.

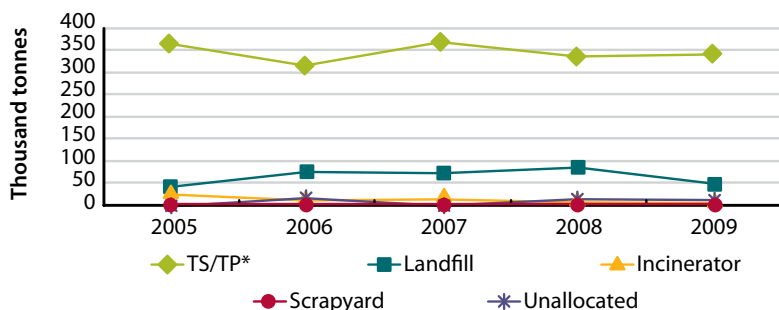
A total of 151,000 tonnes of waste were produced by the agriculture, fishing and forestry sectors in Scotland in 2009.

Agricultural wastes fell by 4,900 tonnes (3%) between 2005 and 2009. This change was mainly due to changes in the overall area of agricultural land and in crop and livestock production. Fishing waste declined by 2,500 tonnes (53%) over the period and this was linked to a reduction in the number of fish landed at Scottish ports over these years. Forestry waste remained fairly constant over the five-year period at an average of 3,300 tonnes.

Data from the annual Scottish Agricultural Census was used to produce estimates of waste generated from farms, based on parameters such as crop and livestock production. Agricultural waste also included wastes from the aquaculture sector as determined from fish mortality data. Models were used to estimate waste arising from fishing and forestry.

Agricultural wastes include packaging, plastics, redundant machinery, tyres, oils, batteries, fencing, building materials, scrap metal, unused pesticides and veterinary medicines, and spent sheep dip. Fishing wastes that arise at ports usually consist of broken nets, packaging waste and waste oils. Typical wastes produced by the forestry sector are oil, batteries, chemicals, metal, packaging and general mixed wastes.

## Special waste consigned to waste management facilities in Scotland 2005 to 2009



Tonnes

Destination type	2005	2006	2007	2008	2009
TS/TP*	368,157	318,528	371,535	339,178	343,701
Landfill	44,425	78,185	75,320	88,144	51,584
Incinerator	27,403	13,810	16,237	9,466	7,953
Scrapyard	2,377	2,501	2,945	1,938	2,794
Unallocated <sup>†</sup>	99	18,871	1,901	16,481	14,656
<b>Total</b>	<b>442,460</b>	<b>431,895</b>	<b>467,938</b>	<b>455,206</b>	<b>420,688</b>

\*Transfer station/treatment plant.

<sup>†</sup>Unable to identify destination type.

In 2009, 421,000 tonnes of special waste were consigned (sent) to waste management facilities in Scotland. This was about 2.5% of the total controlled waste generated in Scotland in this year.

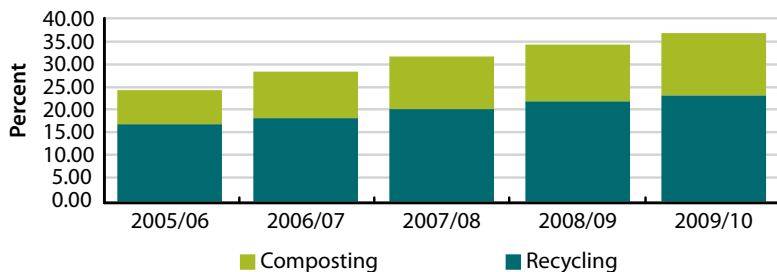
The majority of the special waste managed in Scotland was produced in Scotland (339,000 tonnes; 81%). An additional 104,000 tonnes of waste were produced in Scotland, but managed in England and Wales.

The latest data indicates that the total amount of special waste sent to waste management facilities decreased by 22,000 tonnes (5%) between 2005 and 2009, with an average drop of 1% year-on-year.

In 2009, there were about 230 sites in Scotland that accepted special waste for management. These included incinerators, landfills, scrapyards (metal recyclers), transfer stations and treatment plants, or some combination of these. The majority of the waste (82%) was managed by transfer stations/treatment plants.

Special wastes are wastes that pose particular risks to human health and the environment. They are classed as such because they have one or more hazardous characteristics or properties, such as being explosive, highly flammable, toxic or carcinogenic. In the rest of the UK they are referred to as hazardous waste.

## Local authority collected municipal waste recycling and composting rates for Scotland 2005-2006 to 2009-2010



	Percent				
Activity	2005/06	2006/07	2007/08	2008/09	2009/10
Recycling	16.87*	18.19*	20.16*	21.87*	23.16
Composting	7.42*	10.14*	11.47*	12.36*	13.58
<b>Total</b>	<b>24.30</b>	<b>28.33</b>	<b>31.64</b>	<b>34.25</b>	<b>36.74</b>

\*Updated data.

Scotland recycled and composted 36.7% of its LACMW in 2009–2010. Of the local authorities in Scotland:

- 16 recycled or composted more than 40% of their waste;
- 11 recycled or composted more than 30%;
- four recycled or composted more than 20%;
- one recycled or composted less than 20%.

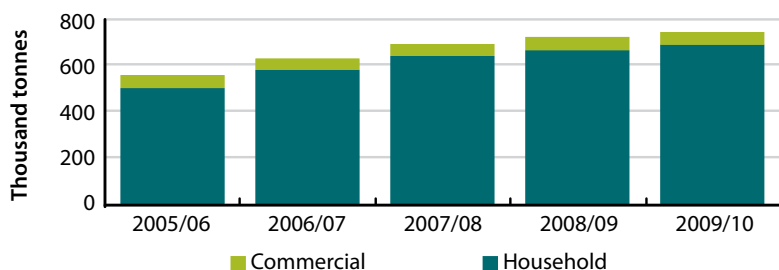
Rates achieved by individual local authorities ranged from about 19% to 47%.

Using Audit Scotland's classification of local authorities as rural, mixed or urban (see page 30 for more information), the average recycling and composting rates of these three classes in 2009–2010 were 35.7% for rural authorities, 41.7% for mixed authorities and 32.5% for urban authorities.

Although the recycling and composting rate continued to grow over the five-year period, the speed of the increase slowed. Between 2005–2006 and 2006–2007, the recycling rate increased by 17%; that increase had slowed to 7% between 2008–2009 and 2009–2010.

The Scottish Government has now set tonnage and carbon-based recycling and composting targets up to 2025 as part of its plans for a zero waste Scotland. There are also European Union tonnage-based targets up to 2020. Further information on these targets is given on page 33.

## Scottish local authority collected municipal waste recycled – breakdown by type 2005-2006 to 2009-2010



Tonnes

Waste type	2005/06	2006/07	2007/08	2008/09	2009/10
Household	498,478	576,855	636,559	661,576	685,728
Commercial	55,942	48,434	51,463	56,971	54,137
<b>Total</b>	<b>554,419</b>	<b>625,289</b>	<b>688,023</b>	<b>718,547</b>	<b>739,864</b>

The quantity of LACMW recycled by Scottish local authorities in 2009–2010 was 740,000 tonnes. This was composed of waste from households (93%) and from commercial premises (7%).

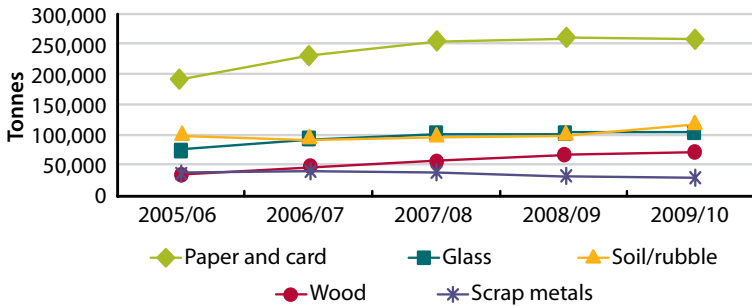
The total amount of LACMW recycled increased by 185,000 tonnes (33%) between 2005–2006 and 2009–2010. This rise was due to household waste recycling which grew by an average of 9% each year over the period. The total amount of local authority collected commercial waste recycled fell by 2,000 tonnes (3%) over the same period.

Although the amount of waste recycled increased every year, the rate of the increase declined. Between 2005–2006 and 2006–2007 there was an increase of 13%. That had dropped to an increase of 4% between 2007–2008 and 2008–2009 and 3% between 2008–2009 and 2009–2010.

In recent years, local authorities have introduced many schemes to encourage recycling, including improved kerbside collections, increased numbers of recycling centres and points, and collecting a wider range of materials. Additionally, a number now send residual waste collected for disposal to material reclamation facilities to separate out any materials suitable for recycling and therefore maximise the quantity of waste recycled.

So far, the overall improvement in recycling by local authorities has mainly been driven by recycling and composting targets set by the Scottish Government and the (then) Scottish Executive. Zero Waste Plan targets up to 2025 should provide a new impetus for recycling and carbon-based measures should help improve the quality of the recycle. Details of the targets are given on page 33.

## Scottish local authority collected municipal waste recycled – breakdown by material 2005-2006 to 2009-2010



The quantity of materials recycled by local authorities between 2005–2006 and 2009–2010 varied considerably. The graph on this page shows the five most frequently recycled materials and the one on the following page shows five other commonly recycled materials.

The total quantity of materials recycled by Scottish local authorities in 2009–2010 was about 740,000 tonnes. The five most frequently recycled materials in this year made up about 78% of the overall total recycled, with paper and card accounting for 35% of the total and glass for 14% of the total.

The most noticeable increases in the recycling of individual materials over the five-year period have been for white (electrical) goods and plastics, which had growth rates of six and three times, respectively.

Using current data on the composition of LACMW, about 44% of the available glass and 38% of the available paper and cardboard were recycled by Scottish local authorities in 2009–2010. For individual local authorities, the recycling rate for glass ranged from 22% to 67%, and for paper and cardboard from 5% to 55%. There are opportunities for some local authorities to increase their recycling of certain waste types.

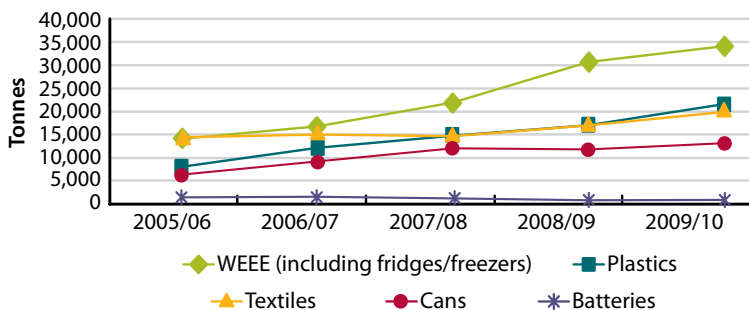
The main collection methods for recyclable materials are household and commercial kerbside collections, recycling centres, recycling points (such as sites at supermarkets), and materials recovered at sorting facilities. In 2009–2010, Scottish local authorities operated 180 recycling centres and 4,003 recycling points.

The increase in recycling has mainly been driven by the need to meet the (then) Scottish Executive's targets for recycling and composting. Further targets up to 2025 have now been set by the Scottish Government as part of the Zero Waste Plan.

Details on the targets are given on page 33.



## Scottish local authority collected municipal waste recycled – breakdown by material 2005-2006 to 2009-2010



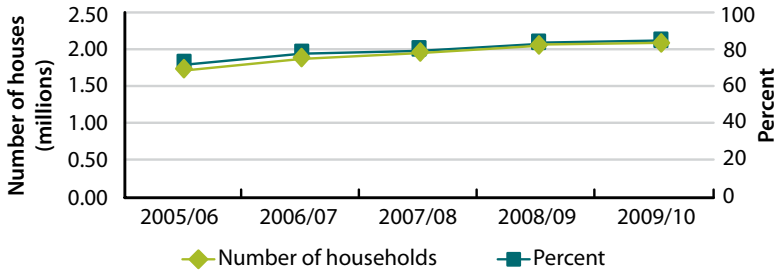
Tonnes

Material	2005/06	2006/07	2007/08	2008/09	2009/10
Paper and card	191,816	231,354	254,206	259,157	255,416
Glass	74,563	91,441	101,930	102,101	105,023
Soil/rubble	98,773	91,365	96,631	99,269	116,717
Wood	35,138	46,693	56,387	67,773	71,995
Scrap metals	38,408	41,334	38,208	32,512	29,489
White goods/ WEEE*	4,343	6,724	12,500	22,161	26,256
Plastics	7,963	12,083	14,715	16,996	21,588
Textiles	14,377	14,971	14,618	16,957	19,894
Residue from incineration	15,975	12,913	14,990	13,952	15,188
Cans	6,263	9,129	11,987	11,745	13,095
Fridges/freezers	9,716	10,017	9,422	8,568	7,913
Batteries	1,339	1,465	1,108	706	783
Other†	55,346	53,475	57,779	62,462	55,381
<b>Total</b>	<b>554,020</b>	<b>622,966</b>	<b>684,481</b>	<b>714,359</b>	<b>738,737</b>

\*Waste Electrical and Electronic Equipment.

†'Other' includes books, furniture, mineral oils, vegetable oil, paint, fluorescent tubes and aluminium foil.

## Number of households receiving a kerbside recycling and composting collection in Scotland 2005-2006 to 2009-2010



### Households

	2005/06	2006/07	2007/08	2008/09	2009/10
Total number of households in Scotland	2,412,472	2,425,252	2,458,966	2,464,992	2,471,808
Households offered a kerbside recycling or composting collection	1,719,226	1,873,974	1,948,945	2,051,771	2,086,221
% of households	71	77	79	83	84

In 2009-2010, 84% of Scottish households were offered a kerbside collection of one or more materials for recycling or composting by their local authority. This compared with 71% in 2005-2006. All 32 Scottish local authorities collected dry recyclables, 30 of them collected green waste for composting and 9 of them provided the service to more than 90% of their households.

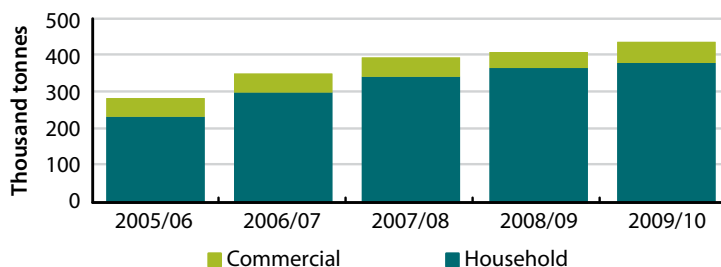
The number of households provided with a recycling and composting collection service rose by 367,000 (21%) between 2005-2006 and 2009-2010. The total number of households in Scotland increased by 59,000 (3%) over the same period.

Using the Audit Scotland classification of local authorities as rural, mixed or urban (see page 30 for more information), we noted the following differences in the household kerbside collection rates in 2009-2010:

- rural authorities offered a service to 90% compared with 89% in 2008-2009;
- mixed authorities offered a service to 92% compared with 91% in 2008-2009;
- urban authorities offered a service to 76% compared with 74% in 2008-2009.

Kerbside collection is just one way of collecting materials for recycling or composting. Others include recycling centres and points.

## Scottish local authority collected municipal waste composted 2005-2006 to 2009-2010



Tonnes

Waste type	2005/06	2006/07	2007/08	2008/09	2009/10
Household	232,778*	297,843*	340,158*	363,384*	376,937
Commercial	49,764*	50,589*	51,508*	43,015*	56,784
<b>Total</b>	<b>282,542</b>	<b>348,432</b>	<b>391,666</b>	<b>406,399</b>	<b>433,720</b>

\*Updated data.

In 2009-2010, about 434,000 tonnes of waste were composted by Scottish local authorities. This was composed of 87% household waste and 13% commercial waste.

The total amount of LACMW composted increased by 151,000 tonnes (54%) between 2005-2006 and 2009-2010. This rise was mainly due to household waste composting which grew by an average of 15% each year over the five-year period. Local authority collected commercial waste composting had an average annual growth rate of 4% in the same period.

The overall rate of increase dropped year on year, except for the last year when there was a slight recovery. Between 2005-2006 and 2006-2007 there was an overall increase of 23%, but between 2007-2008 and 2008-2009 that had dropped to 4%. Between 2008-2009 and 2009-2010, the increase had climbed slightly to 7%, largely due to commercial waste collections.

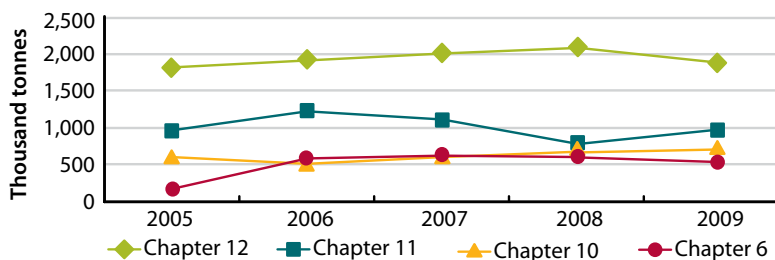
Approximately 65% of Scottish households were offered a kerbside collection of green waste by their local authority in 2009-2010. Of the 32 Scottish local authorities:

- 18 offered a kerbside collection of green waste to more than 75% of households;
- eight offered a kerbside collection of green waste to between 50% and 75% of households;
- six offered a kerbside collection of green waste to less than 50% of households.

The main methods of composting used are windrow and in-vessel composting, and anaerobic digestion. Generally, the types of materials composted are garden waste, waste food, small amounts of wood, paper and card waste, and other compostable material such as street sweepings.

Composting can involve a weight loss. The quantities in this section refer to the weight of the waste sent for composting rather than the weight of material resulting from the composting process. Local authorities use composting to reduce the amount of biodegradable waste going to landfill. The main collection methods in this year were from kerbsides and recycling centres.

## Controlled waste treated at licensed/permitted waste management sites in Scotland 2005 to 2009



Over 5.68 million tonnes of controlled waste were treated at waste management facilities in Scotland in 2009. The graph on this page shows the four most commonly treated waste streams between 2005 and 2009 and the graph on the following page shows the remaining waste streams.

In 2009, the main waste streams treated at Scottish waste management facilities were:

- mineral wastes, including construction and demolition waste (1.88 million tonnes);
- common sludges, including sludges from sewage treatment and from the purification of drinking water (0.98 million tonnes);
- mixed wastes (0.73 million tonnes);
- metallic wastes, including ferrous and non-ferrous scrap (0.55 million tonnes).

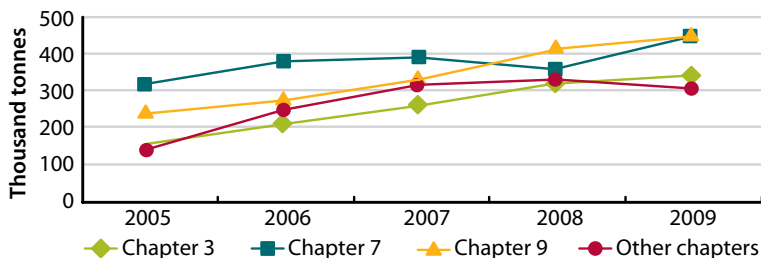
The total quantity of waste treated increased by 1.30 million tonnes (30%) between 2005 and 2009. However, the overall rate of increase dropped year on year and in 2007 it began to level out. Between 2005 and 2006 there was an increase of 22% and that increase had dropped to 2% between 2008 and 2009.

The increase in waste treated over the five-year period can be partly explained by the requirements of the Landfill (Scotland) Regulations 2003 which enacted the EU Landfill Directive (1999/31/EC) into Scottish law. Among its requirements is that landfills can only take wastes that have been pre-treated. Treatment can reduce the volume and biodegradability of waste sent to landfill, helping to meet Landfill Directive targets for biodegradable municipal waste and reduce disposal costs for industry.

Waste can be treated by physical, chemical or biological processes in order to produce a material that is suitable for reuse, recycling, further processing or safe disposal.

Supporting information on EWC-STAT codes can be found on page 31.

## Controlled waste treated at licensed/permited waste management sites in Scotland 2005 to 2009

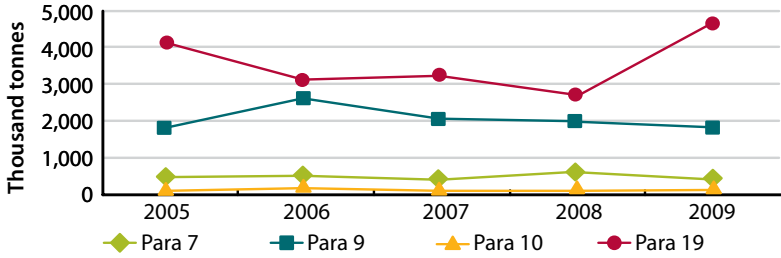


Tonnes

Waste type by EWC-STAT* code	2005	2006	2007	2008	2009
03 Other chemical wastes	155,634	211,018	260,698	321,184	341,719
06 Metallic wastes	175,393	573,490	627,460	597,131	548,915
07 Non-metallic wastes	318,297	380,126	391,231	358,481	444,605
09 Animal and vegetal wastes	235,187	273,442	328,027	412,024	443,806
10 Mixed wastes	586,789	495,551	588,069	681,257	732,345
11 Common sludges	949,865	1,230,384	1,103,213	788,145	980,651
12 Mineral wastes	1,814,447	1,917,771	2,012,917	2,092,610	1,880,397
Other Chapter codes	140,806	249,388	315,284	331,521	307,681
<b>Total</b>	<b>4,376,418</b>	<b>5,331,170</b>	<b>5,626,899</b>	<b>5,582,353</b>	<b>5,680,119</b>

\*European Waste Catalogue for Statistics - see page 32 for further information.

Waste managed by complex exempt activities in Scotland 2005 to 2009



Tonnes

Exemption paragraph	2005	2006	2007	2008	2009
Paragraph 7	467,602	508,436	410,823	626,168	411,344
Paragraph 8	104,380	26,194	34,943	71,170	103,896
Paragraph 9	1,793,710	2,625,603	2,063,001	1,995,697	1,828,092
Paragraph 10	93,609	181,414	93,010	97,148	146,914
Paragraph 12	80,557	27,291	11,412	51,058	61,909
Paragraph 19	4,134,478	3,099,909	3,208,507	2,680,363	4,665,460
<b>Total</b>	<b>6,674,337</b>	<b>6,468,848</b>	<b>5,821,696</b>	<b>5,521,605</b>	<b>7,217,614</b>

The amount of waste managed by complex exempt activities in Scotland in 2009 was 7.22 million tonnes. This represented about 42% of all controlled waste generated in Scotland in this year.

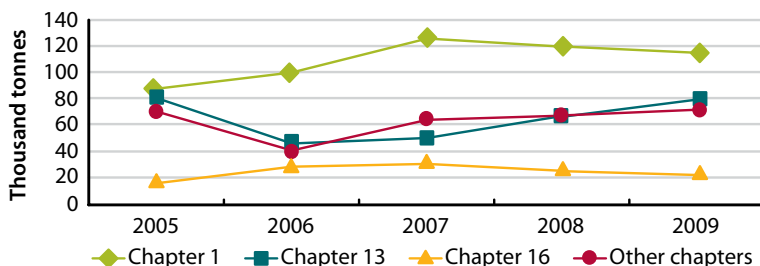
Overall, the amount of exempt waste managed fell by 1.15 million tonnes (17%) between 2005 and 2008 and then rose by 1.70 million tonnes (31%) between 2008 and 2009. This last increase was largely due to the management of mineral wastes.

The greatest fluctuation over the period was seen in Paragraphs 9 and 19 which are generally for construction and demolition wastes. This may reflect the variability of this economic sector.

Exempt activities are lower risk waste management activities, such as certain reclamation and recycling activities, which are not regarded as a threat to the environment or human health. They are exempt from the need to obtain a full waste management licence or pollution prevention and control permit, but they are required to register with SEPA. There are two types of exempt activity: simple and complex. Complex exempt activities must register annually, pay a fee, keep records of the amount and type of waste handled and submit this data to SEPA on request. Data reported in this publication are for complex exemptions registered under Paragraphs 7, 8(2), 9, 10, 12, and 19.

Supporting information on exempt activities can be found on page 32.

## Special waste consigned to treatment plants in Scotland 2005 to 2009



Tonnes

Waste type by EWC* 2002 chapter code	2005	2006	2007	2008	2009
Chapter 01	87,122	99,522	125,974	119,378	114,396
Chapter 07	20,849	8,676	9,067	15,205	11,617
Chapter 13	80,971	46,495	50,471	66,601	79,633
Chapter 16	16,374	28,416	31,025	25,359	23,460
Chapter 19	22,382	6,941	5,230	4,536	4,845
Other chapter codes	27,516	26,723	49,919	47,856	55,410
<b>Total</b>	<b>255,214</b>	<b>216,772</b>	<b>271,686</b>	<b>278,935</b>	<b>289,361</b>

\*European Waste Catalogue.

The total quantity of special waste consigned (sent) to treatment plants in Scotland in 2009 was about 290,000 tonnes. The majority of this (67%) were drilling muds and oil wastes.

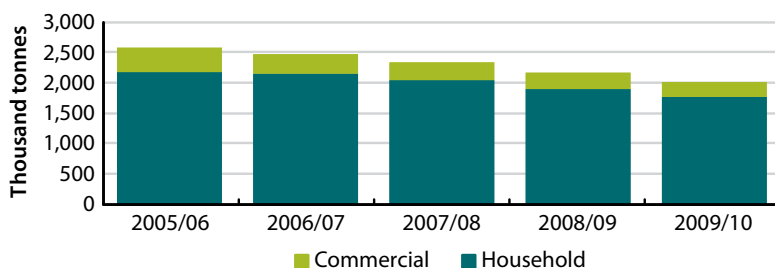
The total quantity of special waste treated increased by 34,000 tonnes (13%) between 2005 and 2009, and followed an upward trend throughout this period apart from a dip in 2006.

The majority of the special waste treated in Scotland was produced in Scotland (250,000 tonnes; 86%). An additional 64,000 tonnes of special waste were produced in Scotland and sent to treatment plants in England and Wales.

Special wastes are those which pose particular risks to human health and the environment. In the rest of the UK they are referred to as hazardous waste. Special waste can be treated by physical, chemical or biological processes in order to produce a material that is suitable for reuse, recycling, further processing or safe disposal.

Supporting information on the European Waste Catalogue 2002 chapter codes can be found on pages 30 and 31.

## Scottish local authority collected municipal waste disposed – breakdown by type 2005-2006 to 2009-2010



	Tonnes				
Waste type	2005/06	2006/07	2007/08	2008/09	2009/10
Household	2,151,025	2,127,233	2,021,881	1,878,156	1,753,608
Commercial	391,994	310,966	285,107	263,054	236,730
Other non household*	30,529	21,192	24,275	19,464	30,378
<b>Total</b>	<b>2,573,548</b>	<b>2,459,391</b>	<b>2,331,264</b>	<b>2,160,674</b>	<b>2,020,717</b>

\*Includes mixed industrial.

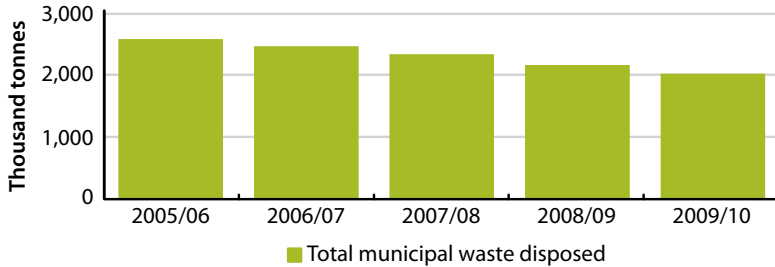
These pages present information on the LACMW disposed of by Scottish local authorities. This page shows the waste split by source and the next page shows the waste split by disposal method. The minor differences between the totals in the tables for 2005–2006 are due to the data being reworked to meet the revised definition of LACMW in 2006–2007.

In 2009–2010, approximately 2.02 million tonnes of Scottish LACMW were disposed of. This represented about 63% of the total LACMW managed by Scottish local authorities in this year. Of the total, 1.75 million tonnes originated from households and 0.27 million tonnes originated from commercial premises and other non-households.

Between 2005–2006 and 2009–2010 the quantity of household waste disposed of decreased by 397,000 tonnes (18%) and commercial and other non-household waste by 155,000 tonnes (40%). This was mainly because, over this period, more household waste was recycled and composted rather than disposed of and Scottish local authorities collected 30% less commercial waste.



## Scottish local authority collected municipal waste disposed – breakdown by method 2005-2006 to 2009-2010



Tonnes

Disposal method	2005/06	2006/07	2007/08	2008/09	2009/10
Landfill	2,493,538	2,398,433	2,256,661	2,076,388	1,935,126
Incineration	80,418	60,931	74,603	84,286	85,591
Other	492	27	0	0	0
<b>Total</b>	<b>2,574,448</b>	<b>2,459,391</b>	<b>2,331,264</b>	<b>2,160,674</b>	<b>2,020,717</b>

In 2009–2010, approximately 2.02 million tonnes of Scottish LACMW were disposed of. Most of this waste was landfilled (96%) and the remainder was incinerated with energy recovery.

The amount of LACMW landfilled fell by 558,000 tonnes (22%) between 2005–2006 and 2009–2010, and there was a steady downward trend over this period. This reduction was complemented by a general increase in the amount of LACMW recycled and composted, as driven by targets set by the (then) Scottish Executive to reduce the amount of biodegradable LACMW landfilled.

The amount of LACMW incinerated increased by 5,000 tonnes (6%) between 2005–2006 and 2009–2010. There were two incinerators with energy recovery in Scotland authorised to manage LACMW in this period: one in Dundee and the other in the Shetland Islands.

It should be noted that in this table the tonnage of waste incinerated refers to the materials lost during the incineration process and not to the waste entering the incinerator. Any materials landfilled or recycled after incineration are included as appropriate in the landfilled or recycled tables.

As part of its plans for a zero waste Scotland, the Scottish Government has set long-term maximum targets for the disposal of all wastes by landfill (5%) and energy from waste (25%). Further details of the targets are given on page 33.

## Controlled waste disposed of to landfill in Scotland 2005 to 2009



	Thousand tonnes				
Waste type by EWC-STAT* code	2005	2006	2007	2008	2009
03 Other chemical wastes	24.82	24.13	24.31	27.77	17.34
07 Non-metallic wastes	31.76	34.64	21.03	30.64	20.09
09 Animal and vegetal wastes	63.71	31.46	27.62	62.35	20.51
10 Mixed wastes	3,648.24	3,523.33	3,491.95	3,220.30	2,948.20
11 Common sludges	91.09	59.26	41.76	42.91	33.81
12 Mineral wastes	3,387.42	3,448.18	3,621.61	2,613.46	1,562.08
Other EWC-STAT codes	69.68	108.05	143.56	138.43	107.93
<b>Total</b>	<b>7,316.72</b>	<b>7,229.05</b>	<b>7,371.83</b>	<b>6,135.85</b>	<b>4,709.96</b>

\*European Waste Catalogue for Statistics.

The quantity of controlled waste landfilled in Scotland in 2009 was 4.71 million tonnes. The majority of this was mixed wastes and mineral wastes (including construction and demolition waste) which together made up 96% of the total. About 36% of the waste landfilled in Scotland originated from households and the remainder was produced by commerce and industry.

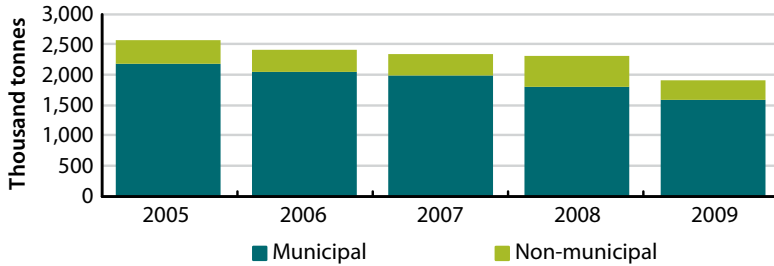
The total amount of waste landfilled in 2009 was 23% (1.43 million tonnes) lower than in 2008 and 36% (2.66 million tonnes) lower than in 2007. Much of the reduction was due to fewer mineral wastes and mixed wastes being landfilled. With mineral wastes, the reduction could be due to two factors: a continuing fall in the amount of construction and demolition waste generated (see page 9) and the completion of restoration work at closed landfill sites which typically uses mineral wastes, such as soils.

The lower amount of mixed wastes landfilled probably reflects an increase in the amount of recycling, particularly of local authority collected wastes. Also interesting is the fall in the amount of animal and vegetal wastes landfilled, which may reflect a diversion of these waste types into composting.

As part of its plans for a zero waste Scotland, the Scottish Government has set a long-term target of sending no more than 5% of all waste to landfill by 2025.

The latest European and Scottish landfill targets are given on page 33.

## Biodegradable waste landfilled in Scotland 2005 to 2009



Tonnes

Waste type	2005	2006	2007	2008	2009
Municipal	2,159,139	2,027,731	1,969,041	1,784,949	1,573,755
Non-municipal	383,328	358,199	347,327	501,864	317,367
<b>Total</b>	<b>2,542,467</b>	<b>2,385,930</b>	<b>2,316,368</b>	<b>2,286,813</b>	<b>1,891,122</b>

In 2009, 1.89 million tonnes of biodegradable waste were landfilled in Scotland. The majority of this was municipal waste (83%), with non-municipal sources accounting for the remainder. Municipal waste is household waste and waste from other sources, e.g. businesses, that is similar in nature and composition to household.

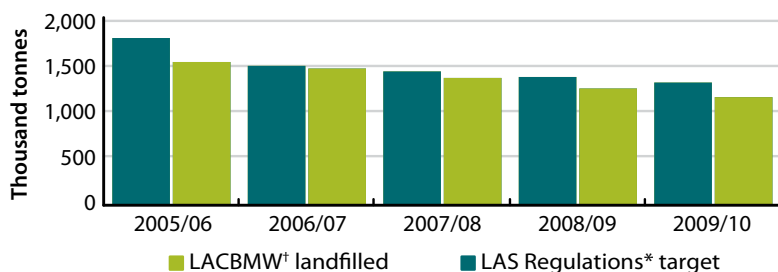
The overall quantity of biodegradable waste landfilled decreased by 651,000 tonnes (26%) between 2005 and 2009 and there was a steady decline over this period with the tonnage dropping by an average of 6% year on year. Most of this decline was due to a reduction in biodegradable municipal waste landfilled which fell by 27% over the period.

The data in this table is sourced from the operators of permitted landfill sites. It is part of their licence conditions to return data to SEPA on a quarterly basis. We calculate the biodegradability content of the waste landfilled by applying conversion factors estimated for each waste type. SEPA is continually working with industry and the Scottish Government to make these factors more robust and reliable.

Biodegradable waste is any waste that will rot and is typically food, garden refuse, paper and cardboard. The decomposition of these wastes within a landfill releases gas, primarily methane. Diverting these types of wastes from landfill will help protect the environment from greenhouse gas emissions.

Diversion is driven mainly by the EU Landfill Directive (1999/31/EC) which sets key targets for 2010, 2013 and 2020 to reduce the amount of biodegradable municipal waste sent to landfill. The data on this page show that Scotland has already met the 2010 and 2013 targets for landfilling no more than 2.70 million tonnes and 1.80 million tonnes of biodegradable municipal waste, respectively. We have not yet met the 2020 target for landfilling no more than 1.26 million tonnes of biodegradable municipal waste. Further information on the targets can be found on page 33.

## Local authority collected biodegradable municipal waste landfilled by Scottish local authorities 2005-2006 to 2009-2010



	Tonnes				
	2005/06	2006/07	2007/08	2008/09	2009/10
LAS Regulations* target	1,800,000	1,500,000	1,440,000	1,380,000	1,320,000
LACBMW† landfilled	1,541,555	1,471,026	1,369,614	1,255,718	1,162,650

LAS, Landfill Allowance Scheme.

\*Landfill Allowance Scheme (Scotland) Regulations 2005.

†Local authority collected biodegradable municipal waste.

In 2009-2010, 1.16 million tonnes of biodegradable LACMW were landfilled by Scottish local authorities. This more than achieved the Landfill Allowance Scheme (LAS) target of sending no more than 1.32 million tonnes of biodegradable LACMW to landfill in 2009-2010.

The quantity of biodegradable LACMW landfilled decreased by 379,000 tonnes (25%) between 2005-2006 and 2009-2010 and there was a steady decline over this period with the tonnage dropping by an average of 6% year on year.

Twenty-five local authorities met their annual permitted landfill allowances in 2009-2010, compared with 26 in 2008-2009. To help reach these targets, local authorities recycled more biodegradable waste (such as paper, textiles and cardboard) and introduced, or increased, green waste and kitchen waste collections for composting or treatment.

Biodegradable LACMW is any waste collected by local authorities that will degrade within a landfill giving rise to methane emissions.

The EU Landfill Directive sets targets to reduce the amount of biodegradable municipal waste landfilled. In Scotland, the LAS applies to municipal waste collected by, or on behalf of, local authorities and SEPA monitors Scotland's progress towards achieving overall Landfill Directive targets. The Scottish Government has assigned LAS allocations to each Scottish local authority from 2010-2011 until 2019-2020. These can be found on [SEPA's website](http://www.sepa.org.uk/waste/waste_data/zero_waste_plan_data.aspx)<sup>3</sup>.

<sup>3</sup> [www.sepa.org.uk/waste/waste\\_data/zero\\_waste\\_plan\\_data.aspx](http://www.sepa.org.uk/waste/waste_data/zero_waste_plan_data.aspx)

## Special waste landfilled in Scotland 2005 to 2009



Tonnes

Waste type by EWC* 2002 chapter code	2005	2006	2007	2008	2009
Chapter 01	28	9	114	260	0
Chapter 13	151	140	138	674	281
Chapter 17	43,724	77,454	71,060	85,804	44,876
Chapter 19	51	417	3,655	208	4,357
Other EWC codes	471	165	352	1,198	2,069
<b>Total</b>	<b>44,425</b>	<b>78,185</b>	<b>75,319</b>	<b>88,144</b>	<b>51,584</b>

\*European Waste Catalogue.

In 2009, 52,000 tonnes of special waste were landfilled in Scotland. The majority of this (87%) was construction and demolition waste (European Waste Catalogue 2002 Chapter 17). Much of the variability in the quantities of special waste landfilled between 2005 and 2009 can be explained by the variations in the amount of contaminated soils arising from large construction projects.

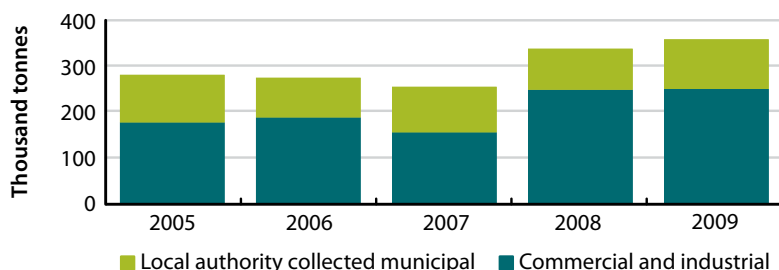
The majority of the special waste landfilled in Scotland was produced in Scotland (46,000 tonnes; 89%). An additional 2,000 tonnes of special waste were produced in Scotland and sent to landfill sites in England and Wales.

There was one landfill site in Scotland licensed to accept hazardous waste in 2009 and an additional 16 non-hazardous landfill sites were permitted to accept bonded asbestos waste, as stable non-reactive hazardous waste consigned in a separate cell.

The types and quantities of special wastes landfilled are controlled by the requirements of the Landfill (Scotland) Regulations 2003, which came into force in April 2003.

Supporting information on the European Waste Catalogue 2002 chapter codes can be found on pages 30 and 31.

## Waste inputs to incinerators and co-incineration plants in Scotland 2005 to 2009



	Tonnes				
Waste type	2005	2006	2007	2008	2009
Local authority collected municipal	102,333	85,279	97,928	88,145	106,770
Commercial and industrial*	177,598	188,314	156,225	247,968	249,528
<b>Total</b>	<b>279,931</b>	<b>273,593</b>	<b>254,153</b>	<b>336,113</b>	<b>356,298</b>

\*The commercial and industrial waste incinerated does not include any collected as part of local authority collected municipal waste.

A total of 356,000 tonnes of waste were inputted to incinerators and co-incineration plants in Scotland in 2009. Commercial and industrial wastes accounted for 70%, with LACMW making up the remainder.

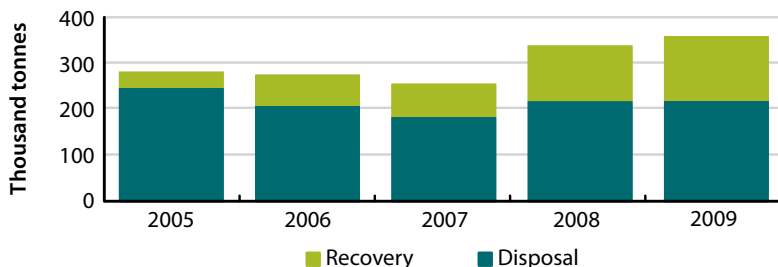
The quantity of waste inputted to these plants increased by 76,000 tonnes (27%) between 2005 and 2009. There was considerable variability over this period with waste inputs falling until 2007 and then rising thereafter.

Much of this variability was due to commercial and industrial waste inputs. The increase between 2007 and 2008 (82,000 tonnes; 32%) can be explained by more animal litter/ remains and wood waste being incinerated. There were 14 plants in Scotland handling commercial and industrial wastes in 2009. Of these, nine were incinerators and five were co-incineration plants.

LACMW inputs remained fairly constant over the five-year period at an average of 96,000 tonnes. There were two plants handling LACMW in Scotland in 2009 and both of these were incinerators with energy recovery.

Incineration is the thermal treatment of wastes with or without recovery of the combustion heat generated. This includes incineration by oxidation of waste, pyrolysis and gasification. The main purpose of a co-incineration plant is the generation of energy or the production of material products. It either uses wastes as a regular or additional fuel, or it thermally treats waste for the purposes of disposal.

## Waste incinerated in Scotland – breakdown by method 2005 to 2009



Tonnes

Method	2005	2006	2007	2008	2009
Recovery	35,000	66,903	71,297	119,274	139,080
Disposal	244,931	206,690	182,856	216,839	217,218
<b>Total</b>	<b>279,931</b>	<b>273,593</b>	<b>254,153</b>	<b>336,113</b>	<b>356,298</b>

In 2009, 356,000 tonnes of waste was managed by incinerators and co-incineration plants in Scotland. Of this, 61% was disposed of and 39% was recovered.

Overall, about 20,185 tonnes (6%) more waste was managed by these plants in 2009 compared with 2008. This was mainly due to an increase in the amount of waste sent for recovery rather than disposed.

This mirrors a general trend between 2005 and 2009 of a four-fold increase in the amount of waste recovered. This was mainly due to reporting the co-incineration of sewage sludge from 2006 onwards and to the opening of a new plant in 2008 that handled wood waste.

The increase in the amount of waste disposed of by incinerators and co-incineration plants between 2007 and 2008 was largely due to an additional 40,000 tonnes of animal litter/remains being incinerated.

Waste incineration for recovery covers the incineration and co-incineration of waste in power stations and industrial facilities in order that the energy produced can be used to generate heat or electricity.

Waste incineration for disposal covers the incineration of waste where the main purpose of the incineration is the thermal treatment of waste in order to reduce the volume and the hazardousness of the waste, and to obtain an inert product that can be disposed of.

## Supporting information

### Audit Scotland classification of local authorities

Audit Scotland classifies Scottish local authorities as rural, mixed or urban.

Rural	Mixed	Urban
Aberdeenshire	Angus	Aberdeen City
Argyll & Bute	Clackmannanshire	Dundee City
Dumfries & Galloway	East Ayrshire	East Dunbartonshire
Eilean Siar (Western Isles)	East Lothian	City of Edinburgh
Highland	East Renfrewshire	Falkirk
Orkney Islands	Fife	Glasgow City
Perth & Kinross	Inverclyde	North Lanarkshire
Scottish Borders	Midlothian	Renfrewshire
Shetland Islands	Moray	West Dunbartonshire
	North Ayrshire	
	South Ayrshire	
	South Lanarkshire	
	Stirling	
	West Lothian	

### European Waste Catalogue List of Waste (EWC 2002)

The European Waste Catalogue is a harmonised non-exhaustive list of waste types established by the European Commission. It categorises wastes based on a combination of what they are, and the process or activity that produces them.

The use of EWC 2002 codes to describe waste on waste transfer notes in Scotland has been statutory since April 2004. The majority of statutory waste data returns received by SEPA, including licensed/permitted site returns, exempt activity returns and special waste consignment notes require waste to be classified according to the EWC 2002.

The catalogue is divided into 20 chapters, most of which are industry-based, although some are based on materials and processes. Each chapter is represented by a two-digit code between 01 and 20 and comprises one or more subchapters; each subchapter is subdivided into individual waste types.



EWC 2002 chapter codes and abbreviated descriptions	
01 Mining and minerals	11 Metal treatment and coating processes
02 Agricultural and food production	12 Shaping/treatment of metals and plastics
03 Wood and paper production	13 Oil and oil/water mixtures industry
04 Leather and textile production	14 Solvents
05 Petrol, gas and coal refining/treatment	15 Waste packaging, wiping cloths
06 Inorganic chemical processes	16 Wastes not otherwise specified
07 Organic chemical processes	17 Construction and demolition waste
08 Paints, varnish, adhesive and inks	18 Human or animal health care
09 Photographic industry	19 Waste/water treatment and water
10 Thermal process waste (inorganic) and asbestos	20 Municipal and similar commercial

## European Waste Catalogue for Statistics (EWC-STAT)

The EWC-STAT is a (mainly) substance-oriented statistical classification of waste. There are 13 categories represented by a two-digit code between 01 and 13. These are subdivided into individual waste types.

A table of equivalence allows wastes coded in the EWC 2002 coding system to be converted into the EWC-STAT coding. However, because of the way the coding system operates, it is not possible to do the reverse conversion.

EWC-STAT category and waste type	
01 Chemical compound wastes	08 Discarded equipment
02 Chemical preparation wastes	09 Animal and vegetal wastes
03 Other chemical wastes	10 Mixed ordinary wastes
04 No longer used	11 Common sludges
05 Health care and biological wastes	12 Mineral wastes
06 Metallic wastes	13 Solidified, stabilised or vitrified waste
07 Non metallic wastes	

## Exempt activities

There are 48 activities that are exempt from full waste management licensing, although they are still subject to statutory controls to prevent environmental pollution and harm to human health. The following paragraphs are classified as complex exemptions and are required to provide information to SEPA on the types and quantities of waste handled.

Paragraph 7 - The treatment of land for agricultural benefit or ecological improvement

Paragraph 8(2) - The storage and spreading of sludge

Paragraph 9 - The reclamation or improvement of land

Paragraph 10 - Reception and treatment of specified waste at a water treatment works

Paragraph 12 - Composting

Paragraph 19 - Waste for construction and other "relevant work"

Paragraph 45 - The recovery of scrap metal or the dismantling of motor vehicles

Paragraph 46 - The burning of plant tissue or wood at a dock

The first year of reliable data for Paragraph 45 exemptions was 2009. These data are not included in this publication as there are no trends. One Paragraph 46 exemption was registered in 2009 but no data were reported.

## Definition of Local Authority Collected Municipal Waste (LACMW)

Local Authority Collected Municipal Waste (LACMW) is household waste and similar business waste that is collected by or on behalf of Scottish local authorities. It includes all wastes under Chapter code 20 and some waste under Chapter codes 15 and 19 of the EWC (2002) list of wastes. This is the definition used for the Landfill Allowance Scheme Biodegradable Municipal Waste (BMW) landfill allocations.

## Definition of municipal waste

Municipal waste is waste generated by household, plus commercial and industrial waste similar in nature and composition to that generated by households. It includes all wastes under Chapter codes 20 and some waste under Chapter codes 15 and 19 of the EWC (2002) list of wastes. This is the definition used by Scotland and the UK for reporting against EU landfill diversion targets.

## LACBMW targets

Local authority landfill allowances up to 2019–2020 can be found in the *Zero Waste Plan – Guidance for Local Authorities* on [SEPA's website](#)<sup>4</sup>.

## Zero waste

Zero waste is a concept which is increasingly being adopted internationally. It is about effectively managing resources through reducing the unnecessary use of raw materials, designing sustainable products, preventing waste, and recovering value from products and materials when they reach the end of their lives through recycling, composting or energy recovery.

## European and Scottish waste targets

EU Directives and Scottish Government targets for waste up to 2025 are shown below. These targets apply to Scotland as a whole.

Target/cap	Year	Measure	Driver
40% recycling/composting and preparing for re-use of waste from households	2010	Tonnage	Scottish Government
<2.7 million tonnes of biodegradable municipal waste to be sent to landfill	2010	Tonnage	Article 5(2) of EU Landfill Directive
50% recycling/composting and preparing for re-use of waste from households	2013	Carbon*	Scottish Government
<1.8 million tonnes of biodegradable municipal waste to be sent to landfill	2013	Tonnage	Article 5(2) of EU Landfill Directive
Preparing for re-use and recycling of 50% of waste materials such as paper, metal, plastic and glass from household waste and similar	2020	Tonnage	Article 11(2)a of EU Waste Framework Directive
60% recycling/composting and preparing for re-use of waste from households	2020	Carbon*	Scottish Government
<1.26 million tonnes of biodegradable municipal waste to be sent to landfill	2020	Tonnage	Article 5(2) of EU Landfill Directive
70% recycling and preparing for re-use of construction and demolition waste	2020	Tonnage	Article 11(2)b of revised EU Waste Framework Directive
<5% of all waste to be sent to landfill	2025	Tonnage	Scottish Government
70% recycling/composting and preparing for re-use of all waste	2025	Carbon*	Scottish Government

\*SEPA will also report tonnages

<sup>4</sup>[www.sepa.org.uk/waste/waste\\_data/zero\\_waste\\_plan\\_data.aspx](http://www.sepa.org.uk/waste/waste_data/zero_waste_plan_data.aspx)

## Weblinks

This booklet and previous waste data digests, including data tables:

[www.sepa.org.uk/waste/waste\\_data/waste\\_data\\_digest.aspx](http://www.sepa.org.uk/waste/waste_data/waste_data_digest.aspx)

Lists and maps of waste management sites in Scotland:

[www.sepa.org.uk/waste/waste\\_data/site\\_capacity\\_\\_infrastructure.aspx](http://www.sepa.org.uk/waste/waste_data/site_capacity__infrastructure.aspx)

Commercial and industrial waste information:

[www.sepa.org.uk/waste/waste\\_data/commercial\\_\\_industrial\\_waste.aspx](http://www.sepa.org.uk/waste/waste_data/commercial__industrial_waste.aspx)

European Waste Catalogue List of Waste (EWC 2002) and European Waste Catalogue for Statistics (EWC-STAT) information:

[www.sepa.org.uk/waste/waste\\_data/reporting\\_definitions\\_and\\_term/coding\\_systems.aspx](http://www.sepa.org.uk/waste/waste_data/reporting_definitions_and_term/coding_systems.aspx)

Exempt activity information:

[www.sepa.org.uk/waste/waste\\_regulation/application\\_forms/exempt\\_activities.aspx](http://www.sepa.org.uk/waste/waste_regulation/application_forms/exempt_activities.aspx)

Local authority collected municipal waste information:

[www.sepa.org.uk/waste/waste\\_data/municipal\\_waste.aspx](http://www.sepa.org.uk/waste/waste_data/municipal_waste.aspx)

Special waste:

[www.sepa.org.uk/waste/waste\\_data/statutory\\_data\\_returns/special-hazardous\\_waste\\_data.aspx](http://www.sepa.org.uk/waste/waste_data/statutory_data_returns/special-hazardous_waste_data.aspx)

Zero Waste Plan:

[www.scotland.gov.uk/Publications/2010/06/08092645/0](http://www.scotland.gov.uk/Publications/2010/06/08092645/0)

## Glossary

Biodegradable waste	Waste that is capable of undergoing anaerobic (oxygen poor) or aerobic (oxygen rich) decomposition, such as food or garden waste and paper and cardboard.
Co-incineration plant	A co-incineration plant is one whose main purpose is the generation of energy or production of material products, and which uses waste as a regular or additional fuel, or in which waste is thermally treated for the purpose of disposal.
Commercial waste	Waste arising from premises that are used wholly or mainly for trade, business, sport, recreation or entertainment, excluding household and industrial waste [as defined in Environmental Protection Act 1990, section 75 and schedule 4 of the Controlled Waste Regulations 1992 (as amended)].
Composting	The process of controlled biological decomposition of biodegradable materials under managed conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat.
Construction and demolition waste	Waste arising from the construction, repair, maintenance and demolition of buildings and structures.
Controlled waste	Household, industrial and commercial waste or any such wastes that require a waste management licence for treatment, transfer or disposal (as defined by Environmental Protection Act 1990, section 75).
Disposal	Any of the operations provided for in Annex II A of the Waste Framework Directive. This includes incineration and landfill.
Exempt activity	An activity involving waste materials that is exempt from licensing because it meets the requirements detailed in Regulation 17 of the Waste Management Licensing Regulations 1994, as amended by the Waste Management Licensing Amendment (Scotland) Regulations 2003.

Green waste	Includes vegetation and plant matter from household gardens and from local authority parks and gardens.
Household waste	Waste from domestic properties including waste from caravans, residential homes and premises forming part of an educational establishment or part of a hospital or nursing home [as defined in Environmental Protection Act 1990, section 75 and schedule 1 of the Controlled Waste Regulations 1992 (as amended)].
Incineration plant	Any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes, with or without recovery of the combustion heat generated.
Incineration with energy recovery	Incineration with the recovery of energy in the form of power and/or heat.
Industrial waste	Waste from a factory (within the meaning of the Factories Act 1961) or from any premises used for, or in connection with: <ul style="list-style-type: none"> <li>• provision of public transport;</li> <li>• public supply of gas, water, electricity or sewerage services;</li> <li>• provision of postal or communication services to the public.</li> </ul> [As defined in Environmental Protection Act 1990, section 75 and schedule 3 of the Controlled Waste Regulations 1992 (as amended)].
Kerbside collection	Any regular collection of recyclable or compostable materials from premises. This excludes collection services delivered on demand.
Landfill	Area of land in or on which waste is deposited.
Local authority collected municipal waste	Further details available in the 'Supporting information' section.
Materials reclamation facility	A facility to process wastes for the purpose of recovering useful materials using a variety of processes to separate out different materials.

Recovery	Any operation where the principal result is waste that serves a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.
Recycling	Any recovery operation by which waste materials are reprocessed into products, materials or substances, whether for the original or other purposes. This does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.
Recycling centre/ civic amenity site	A manned site for depositing recyclates. Recycling centres usually accept a wider range of waste materials than recycling points and can include other facilities, such as normal household waste disposal.
Recycling point/ bring sites	An unmanned site with a container, or a collection of containers, for depositing recyclates, eg at a supermarket.
Special waste	Any waste which is hazardous waste as defined by Article 1(4) of the Hazardous Waste Directive.
Thermal treatment	A broad term covering processes that involve the use of heat to treat waste.
Transfer station	A site to which waste is delivered for sorting and compacting, prior to transfer to another place for recycling, treatment or disposal.
Waste	Any substance or object in the categories set out in Annex I of the Waste Framework Directive (2006/12/EC) which the holder discards or intends or is required to discard.
Waste arisings	The amount of waste generated in a given locality over a given period of time.
Zero Waste Plan	The Zero Waste Plan was published by the Scottish Government in June 2010 and supersedes Scotland's first National Waste Plan (2003).