

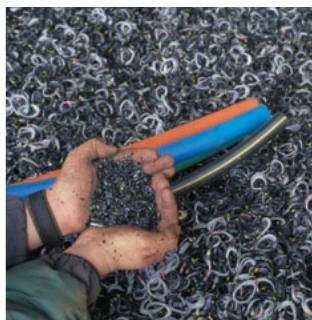
Waste Data Digest 12: Key facts and trends

Published 2012





Contents



Introduction

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

This document is the first part of the digest and presents key facts and trends on waste data over a five year period from 2006 to 2010 (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 local authority collected waste and commercial and industrial wastes.

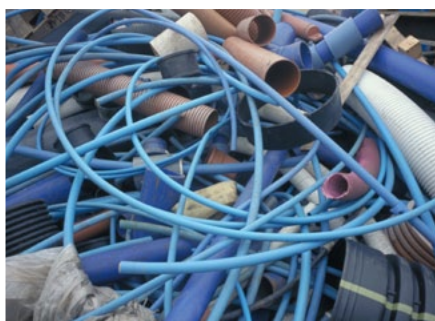
Both parts of the digest are available to download from the our website¹.

Key findings

Some of the key findings are:

- The quantity of controlled waste generated in Scotland in 2010 was 16.86 million tonnes, of which the largest proportion was construction and demolition waste (44%). The total amount of waste generated fell 10% between 2006 and 2010, largely due to reductions in industrial waste.
- A total of 3.14 million tonnes of municipal waste arisings were collected and managed by, or on behalf of, Scottish local authorities in 2010–2011. This was the lowest amount in the five year period.
- Scottish local authorities recycled and composted 38.2% of the municipal waste they managed in 2010–2011. Although the recycling rate continued to grow over the five year period, the speed of the increase slowed.
- The amount of controlled waste landfilled in Scotland in 2010 (4.56 million tonnes) was 37% less than that in 2006. Much of the reduction in tonnage over the five year period was due to a drop in the amount of mineral waste and mixed waste landfilled.

¹ 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 as amended.

List of waste management sites

Lists and maps of waste management sites in Scotland are available on our website².

Municipal waste

The definition of municipal waste changed in April 2006. 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' on page 32). 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) 2010–2011.

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. Any changes are marked in the tables.

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.

² www.sepa.org.uk/waste/waste_infrastructure_maps.aspx

Total controlled waste arisings in Scotland 2006 to 2010



Million tonnes

Waste source	2006	2007	2008	2009	2010
Household*	2.97	3.00	2.94	2.82	2.77
Commercial	5.07	5.48	5.62	4.89	4.70
Industrial - other	2.71	2.75	2.33	1.80	1.92
Industrial - C&D	8.03	9.44	8.63	7.60	7.47
Total	18.78	20.67	19.52	17.11	16.86

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

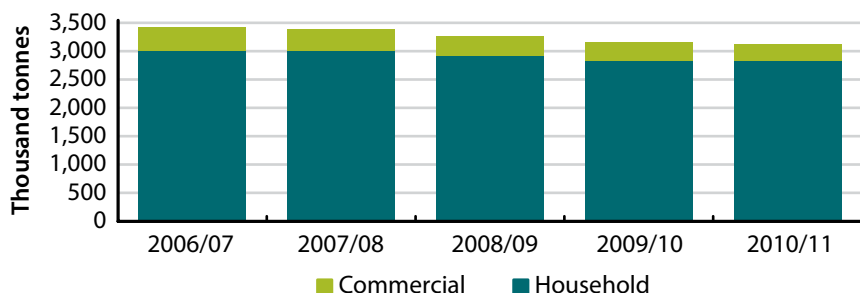
In 2010, the total amount of controlled waste generated in Scotland was 16.86 million tonnes - the lowest amount during the period 2006 and 2010. This was composed of approximately 44% construction and demolition waste, 28% commercial waste, 16% household waste and 11% other industrial waste.

The latest data indicates that the total amount of waste generated fell by 1.92 million tonnes (10%) between 2006 and 2010. The majority of this reduction was due to other industrial waste which decreased by 0.79 million tonnes (29%) and construction and demolition waste which decreased by 0.56 million tonnes (7%).

We collect data on controlled waste by a variety of means:

- Data on the quantity of household waste generated was obtained from the national online local authority reporting database, WasteDataFlow.
- Data on the amount of commercial and industrial waste generated for 2006 (excluding construction and demolition waste) was obtained from a voluntary national business waste survey carried out by us. Waste arisings for 2007-2010 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 exempt activities registered under Paragraphs 9 or 19 (2006-2010) and Paragraphs 7, 9 or 19 (2010). Allowances were made for possible double-counting.

Scottish local authority collected municipal waste arisings 2006-2007 to 2010-2011



Tonnes

Waste source	2006/07	2007/08	2008/09	2009/10	2010/11
Household	3,005,866	3,001,154	2,905,584	2,819,247	2,824,639
Commercial	409,989	388,273	363,021	347,651	300,369
Other non household*	21,192	24,275	19,464	30,378	16,194
Total	3,437,046	3,413,702	3,288,069	3,197,276	3,141,202

*Includes mixed industrial.

The amount of local authority collected municipal waste (LACMW) managed by, or on behalf of, Scottish local authorities in 2010–2011 was 3.14 million tonnes. This was the lowest amount managed in the five year period, and was a further decrease.

From a starting point of 3.43 million tonnes in 2006–2007, the total has fallen by 296,000 tonnes (9%).

The majority of the reduction was due to household waste which decreased by 181,000 tonnes and commercial waste which decreased by 110,000 tonnes. However, household waste decreased at a slower rate (6%) than commercial waste (27%) and other non-household waste (24%).

There are two possible reasons for the greater rate of decrease in commercial waste:

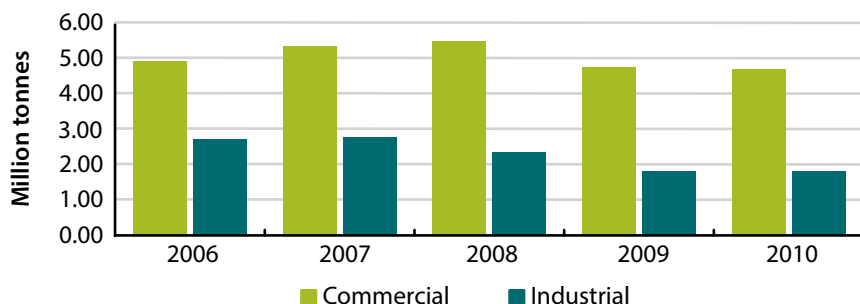
1. either a reduction in the number of businesses or the amount of waste produced by businesses;
2. local authorities collecting or reporting waste from fewer businesses.

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 split between commercial and household could not be established all waste was reported as household. We are working with local authorities on a best practice methodology to help them 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. The definition of household waste changed on 1 April 2011 and the differences will be reported in the reporting financial year 2011–2012. Further information about the new definition of household waste can be found on our website³.

³ www.sepa.org.uk/waste/waste_data/lacw.aspx

Business waste arisings in Scotland 2006 to 2010



Million tonnes					
Waste source	2006	2007	2008	2009	2010
Commercial	4.92	5.33	5.47	4.75	4.70
Industrial*	2.72	2.76	2.34	1.82	1.80
Total	7.64	8.09	7.81	6.57	6.50

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

The amount of business waste generated in Scotland in 2010 was 6.50 million tonnes. This was composed of 72% commercial and 28% industrial waste.

The latest data indicates that the amount of business waste generated fell by 1.14 million tonnes (15%) between 2006 and 2010. The majority of this reduction was due to industrial waste which fell by 0.92 million tonnes (34%) over the period. Commercial waste fell by 0.22 million tonnes (4%) over the same period.

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 a national business waste survey carried out by us for 2006 data. The returns were statistically analysed and grossed up to produce overall totals for Scotland. Figures for 2007-2010 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.

Construction and demolition waste arisings in Scotland 2006 to 2010



Million tonnes

	2006	2007	2008	2009	2010
Total	8.03	9.44	8.63	7.60	7.47

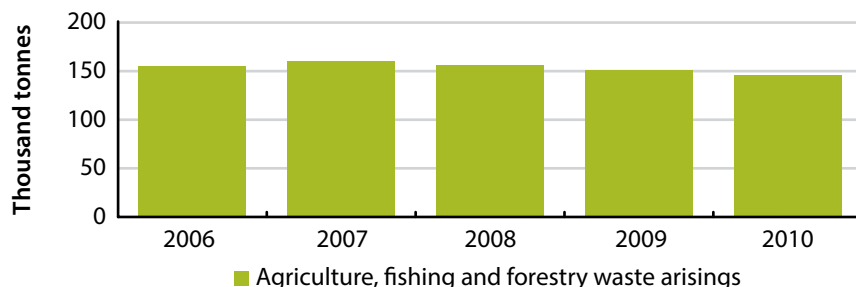
In 2010, the amount of construction and demolition waste generated in Scotland was 7.47 million tonnes. This represented about 44% of all controlled waste generated in Scotland in this year. The predominant waste types were mineral wastes, including soils and stones (5.99 million tonnes; 80%) and mixed construction and demolition wastes (0.93 million tonnes; 12%). Approximately 34,000 tonnes of asbestos-containing waste were also produced.

The quantity of construction and demolition waste generated fell by 0.56 million tonnes (7%) between 2006 and 2010, although there was a rise of approximately 1.4 million tonnes between 2006 and 2007.

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).

The data in this table was generated by analysing statutory returns from licensed and permitted waste management sites and from activities holding an exemption registered under Paragraph 7, 9 or 19 of the Waste Management Licensing Regulations. Allowances were made for possible double-counting.

Agriculture, fishing and forestry waste arisings in Scotland 2006 to 2010



	Tonnes				
Waste type	2006	2007	2008	2009	2010
Agriculture*	147,919	152,919	149,514	145,678	140,058
Fishing†	3,770	4,118	3,115	2,247	2,130
Forestry‡	3,274	3,284	3,286	3,284	3,393
Total	154,963	160,321	155,915	151,208	145,582

*Includes aquaculture.

†Sea fishing. Excludes fish waste disposed of at sea.

‡Excludes plant material left *in situ*.

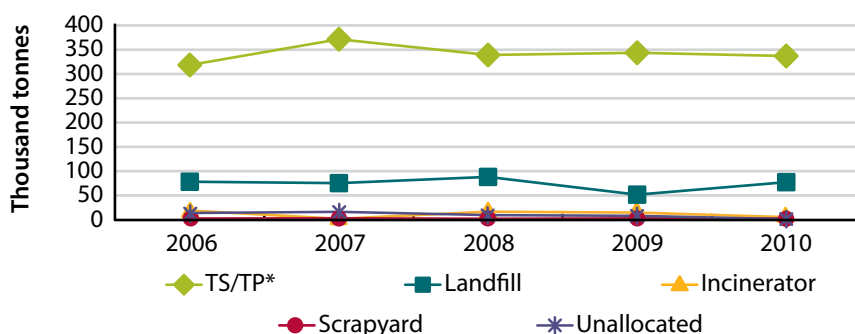
Approximately 146,000 tonnes of waste were produced by the agriculture, fishing and forestry sectors in Scotland in 2010.

Agricultural wastes fell by around 7,900 tonnes (5%) between 2006 and 2010. This change was mainly due to changes in the overall area of agricultural land and in crop and livestock production. Fishing waste declined by 1,600 tonnes (34%) 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, 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 2006 to 2010



Tonnes

Destination type	2006	2007	2008	2009	2010
TS/TP*	318,528	371,535	339,178	343,701	337,084
Landfill	78,185	75,320	88,144	51,584	77,282
Incinerator	13,810	16,237	9,466	7,953	1,230
Scrapyard	2,501	2,945	1,938	2,794	2,052
Unallocated [†]	18,871	1,901	16,481	14,656	5,335
Total	431,895	467,938	455,206	420,688	422,983

*Transfer station/treatment plant.

[†]Unable to identify destination type.

In 2010, approximately 423,000 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.

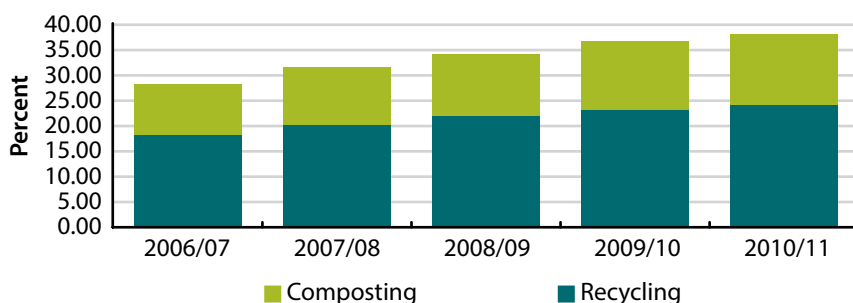
The majority of the special waste managed in Scotland was produced in Scotland (363,000 tonnes; 86%). An additional 117,000 tonnes of waste were produced in Scotland, but managed in England and Wales.

The latest data indicates that the total amount of special waste sent to waste management facilities decreased by about 9,000 tonnes (2%) between 2006 and 2010, with an average drop of 0.5% year on year.

In 2010, there were about 215 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 (80%) 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 2006-2007 to 2010-2011



	Percent				
Activity	2006/07	2007/08	2008/09	2009/10	2010/11
Recycling	18.19	20.16	21.87	23.16	24.09
Composting	10.14	11.47	12.36	13.58	14.12
Total	28.33	31.64	34.25	36.74	38.21

Scotland recycled and composted 38.2% of its LACMW in 2010–2011. Of the local authorities in Scotland:

- 17 recycled or composted more than 40% of their waste;
- 11 recycled or composted more than 30%;
- two recycled or composted more than 20%;
- two recycled or composted less than 20%.

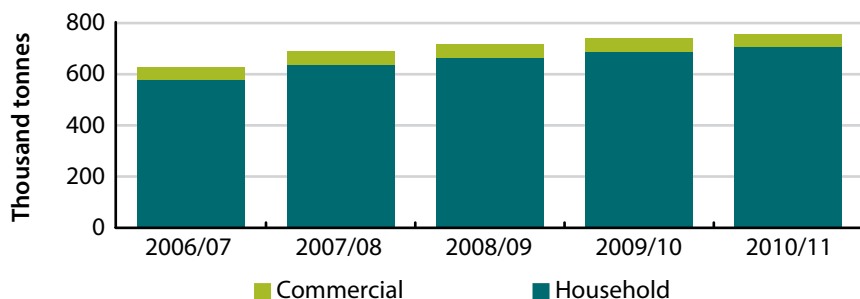
Rates achieved by individual local authorities ranged from about 20% to 50%.

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 2010–2011 were 38.3% for rural authorities, 39.2% for mixed authorities and 38.6% for urban authorities.

Although the recycling and composting rate continued to grow over the five year period, the speed of the increase slowed.

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

Scottish local authority collected municipal waste recycled – breakdown by source 2006-2007 to 2010-2011



Tonnes

Waste source	2006/07	2007/08	2008/09	2009/10	2010/11
Household	576,855	636,559	661,576	685,728	706,433
Commercial	48,434	51,463	56,971	54,137	50,163
Total	625,289	688,023	718,547	739,864	756,596

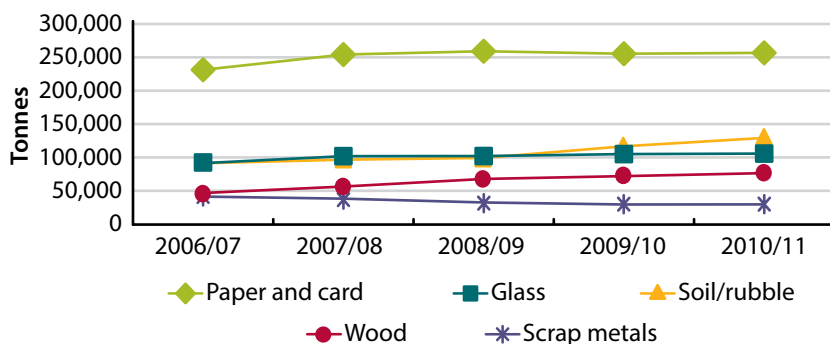
The amount of LACMW recycled by Scottish local authorities in 2010–2011 was approximately 757,000 tonnes. This was composed of waste from households (93%) and from commercial premises (7%).

The total amount of LACMW recycled in 2010–2011 increased by 131,000 tonnes (21%) over the five year period. This rise was almost exclusively due to household waste recycling, which grew by just under 130,000 tonnes. Commercial waste recycling grew by almost 2,000 tonnes but dropped about 4,000 tonnes in the last year.

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 rate out any materials suitable for recycling and therefore maximise the quantity of waste recycled.

Details about the Zero Waste Plan targets, including recycling targets up to 2025, are available on page 33.

Scottish local authority collected municipal waste recycled – breakdown by material 2006-2007 to 2010-2011



The amount of materials recycled by local authorities over the five year period 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.

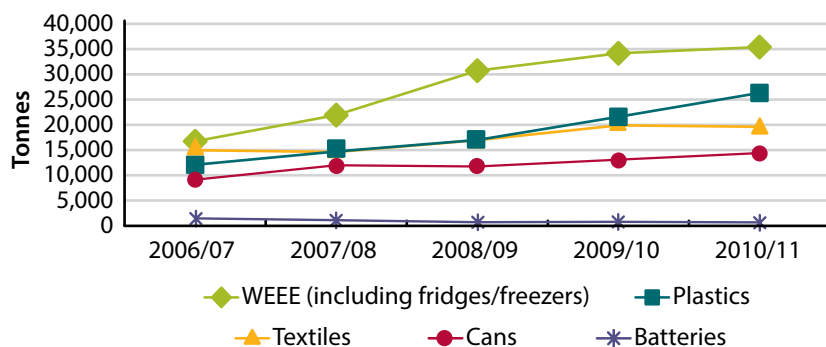
The total quantity of materials recycled by Scottish local authorities in 2010–2011 was about 756,000 tonnes, which is an increase of about 133,000 (21%) from 2006–2007. The five most frequently recycled materials in this year made up about 79% of the overall total recycled, with paper and card accounting for 34% 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 four and two times, respectively.

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 2010–2011, Scottish local authorities operated 176 recycling centres and 4,263 recycling points.

Details about the Zero Waste Plan targets, including recycling targets up to 2025, are available on page 33.

Scottish local authority collected municipal waste recycled – breakdown by material 2006-2007 to 2010-2011



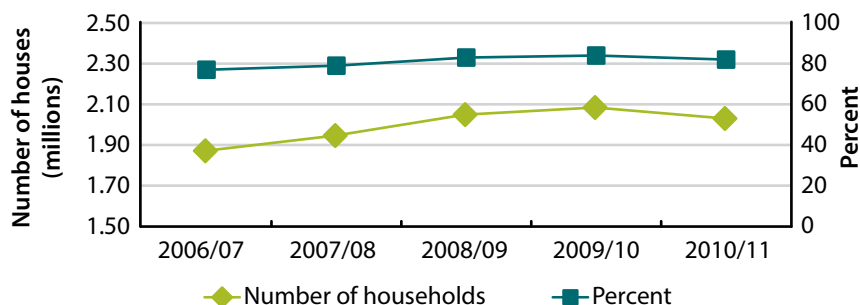
Tonnes

Material	2006/07	2007/08	2008/09	2009/10	2010/11
Paper and card	231,354	254,206	259,157	255,416	256,732
Glass	91,441	101,930	102,101	105,023	105,779
Soil/rubble	91,365	96,631	99,269	116,717	129,262
Wood	46,693	56,387	67,773	71,995	76,477
Scrap metals	41,334	38,208	32,512	29,489	29,631
White goods/ WEEE*	6,724	12,500	22,161	26,256	28,979
Plastics	12,083	14,715	16,996	21,588	26,316
Textiles	14,971	14,618	16,957	19,894	19,617
Residue from incineration	12,913	14,990	13,952	15,188	5,778
Cans	9,129	11,987	11,745	13,095	14,403
Fridges/freezers	10,017	9,422	8,568	7,913	6,420
Batteries	1,465	1,108	706	783	672
Other [†]	53,475	57,779	62,462	55,381	55,833
Total	622,966	684,481	714,359	738,737	755,898

*Waste Electrical and Electronic Equipment.

[†]'Other' includes books, yellow pages, tetrapack cartons, Chipboard and MDF, composite wood, furniture, plasterboard, aluminium foil, tyres, vegetable oil, mineral oil, paint, mattresses, aerosols, bric-a-brac, fire extinguishers, gas bottles, ink and tonner cartridges, video tapes DVD's and CD's, bicycles, other treatment residue recycled, recycling from MBT, other materials.

Number of households receiving a kerbside recycling and composting collection in Scotland 2006-2007 to 2010-2011



Households

	2006/07	2007/08	2008/09	2009/10	2010/11
Total number of households in Scotland	2,425,252	2,458,966	2,464,992	2,471,808	2,492,397
Households offered a kerbside recycling or composting collection	1,873,974	1,948,945	2,051,771	2,086,221	2,032,017
% of households	77	79	83	84	82

In 2010-2011, 82% of Scottish households were offered a kerbside collection of one or more materials for recycling or composting by their local authority. This compared with 77% in 2006-2007. All Scottish local authorities, apart from Dumfries and Galloway, were offered a separate kerbside collection for dry recyclables. Thirty local authorities collected green waste for composting and six 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 158,000 (8%) over the five year period. The total number of households in Scotland increased by 67,000 (3%) over the same time.

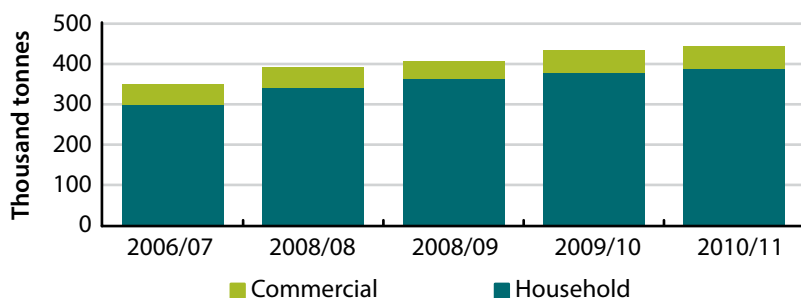
Using the Audit Scotland classification of local authorities as rural, mixed or urban (see page 30 for more information), we noted the following differences in the household kerbside collection rates in 2010-2011:

- rural authorities offered a service to 74% compared with 90% in 2009-2010;
- mixed authorities offered a service to 92% which is the same as in 2009-2010;
- urban authorities offered a service to 77% compared with 76% in 2009-2010.

The decrease in the service offered to rural authorities is due to Dumfries and Galloway changing the way they collect recyclables, from kerbside collection to extraction of recyclables from mixed waste at the Eco Deco treatment plant.

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 2006-2007 to 2010-2011



Tonnes

Waste source	2006/07	2007/08	2008/09	2009/10	2010/11
Household	297,843	340,158	363,384	376,937	388,149
Commercial	50,589	51,508	43,015	56,784	55,486
Total	348,432	391,666	406,399	433,720	443,634

In 2010-2011, about 444,000 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 95,000 tonnes (27%) over the five year period. This rise was mainly due to the household waste composting which grew by 90,000 tonnes. Commercial waste composting grew by 5,000 tonnes, although there was a drop of 1,000 tonnes in 2010.

Although the amount of waste composted increased every year, the rate of the increase generally slowed.

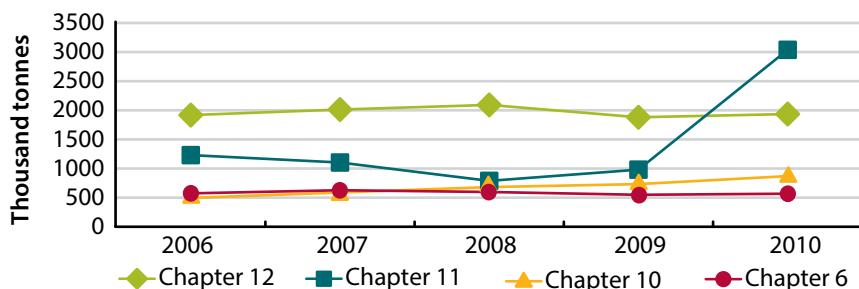
Approximately 64% of Scottish households were offered a kerbside collection of green waste by their local authority in 2010-2011. Of the 32 Scottish local authorities:

- 17 offered a kerbside collection of green waste to more than 75% of households;
- nine 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 and permitted waste management sites in Scotland 2006 to 2010



Just under 8.00 million tonnes of controlled waste were treated at waste management facilities in Scotland in 2010. This is an increase of 2.65 million tonnes (50%) from 2006. Much of this increase was accounted for by the treatment of over two million tonnes of sewage sludge by a fuel plant in Glasgow. This was new data reported to us for the first time.

The graph on this page shows the four largest waste types treated by tonnage and the graph on the following page shows the remaining waste types, both for the five year period.

In 2010, the four main waste types treated at Scottish waste management facilities were:

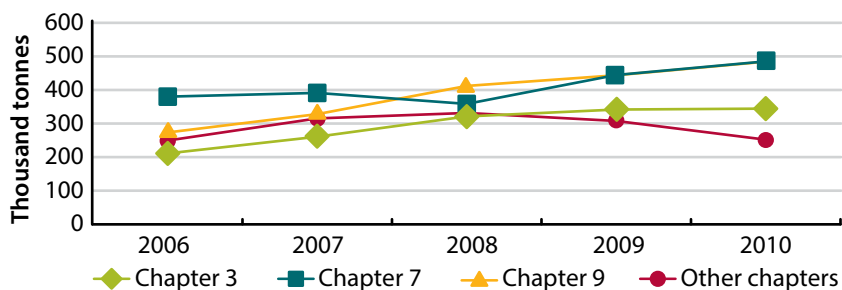
- common sludges, including sludges from sewage treatment and from the purification of drinking water (3.04 million tonnes);
- mineral wastes, including construction and demolition waste (1.94 million tonnes);
- mixed wastes (0.87 million tonnes);
- metallic wastes, including ferrous and non-ferrous scrap (0.57 million tonnes).

The general 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 and permitted waste management sites in Scotland 2006 to 2010



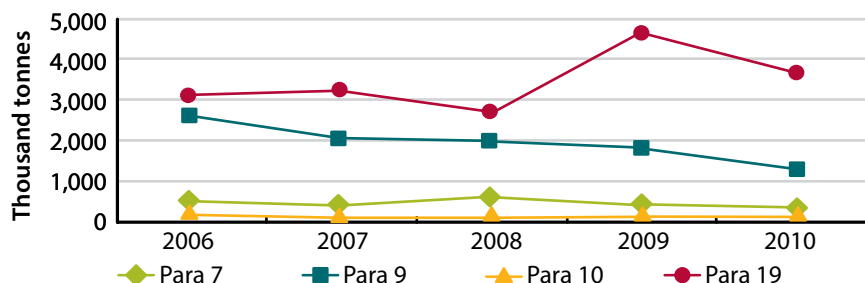
Tonnes

Waste type by EWC-STAT* code	2006	2007	2008	2009	2010
03 Other chemical wastes	211,018	260,698	321,184	341,719	344,414
06 Metallic wastes	573,490	627,460	597,131	548,915	567,437
07 Non-metallic wastes	380,126	391,231	358,481	444,605	485,179
09 Animal and vegetal wastes	273,442	328,027	412,024	443,806	484,353
10 Mixed wastes	495,551	588,069	681,257	732,345	869,480
11 Common sludges	1,230,384	1,103,213	788,145	980,651	3,038,800 [†]
12 Mineral wastes	1,917,771	2,012,917	2,092,610	1,880,397	1,935,668
Other Chapter codes	249,388	315,284	331,521	307,681	251,971
Total	5,331,170	5,626,899	5,582,353	5,680,119	7,977,302

*European Waste Catalogue for Statistics – see page 31 for further information.

[†]Common sludges include 2,081,568 tonnes of sewage sludge treated at fuel plant in Glasgow.

Waste managed by complex exempt activities in Scotland 2006 to 2010



Tonnes

Exemption paragraph	2006	2007	2008	2009	2010
Paragraph 7	508,436	410,823	626,168	411,344	351,325
Paragraph 8(2)	26,194	34,943	71,170	103,896	46,922
Paragraph 9	2,625,603	2,063,001	1,995,697	1,828,092	1,322,330
Paragraph 10	181,414	93,010	97,148	146,914	215,679
Paragraph 12	27,291	11,412	51,058	61,909	23,017
Paragraph 19	3,099,909	3,208,507	2,680,363	4,665,460	3,515,225
Total	6,468,848	5,821,696	5,521,605	7,217,614	5,474,498

The amount of waste managed by complex exempt activities in Scotland in 2010 was 5.47 million tonnes. This represented about 32% of all controlled waste generated in Scotland in this year.

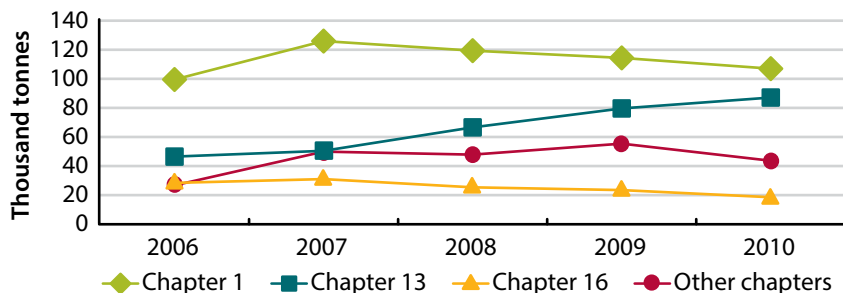
Over the five year period, the total amount of complex exempt waste managed fell by just under one million tonnes (15%), although there was a large increase in 2009 mainly due to the management of mineral wastes.

The greatest fluctuation over the period was seen in Paragraph 19 which is generally for construction and demolition wastes.

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 us. 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 us 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 2006 to 2010



Tonnes

Waste type by EWC* 2002 chapter code	2006	2007	2008	2009	2010
Chapter 01	99,522	125,974	119,378	114,396	106,992
Chapter 07	8,676	9,067	15,205	11,617	12,184
Chapter 13	46,495	50,471	66,601	79,633	87,123
Chapter 16	28,416	31,025	25,359	23,460	18,545
Chapter 19	6,941	5,230	4,536	4,845	14,448
Other chapter codes	26,723	49,919	47,856	55,410	43,649
Total	216,772	271,686	278,935	289,361	282,941

*European Waste Catalogue.

The amount of special waste consigned (sent) to treatment plants in Scotland in 2010 was about 283,000 tonnes. The majority of this (69%) were exploration wastes such as drilling muds (EWC Chapter 1) and oil wastes (EWC Chapter 13).

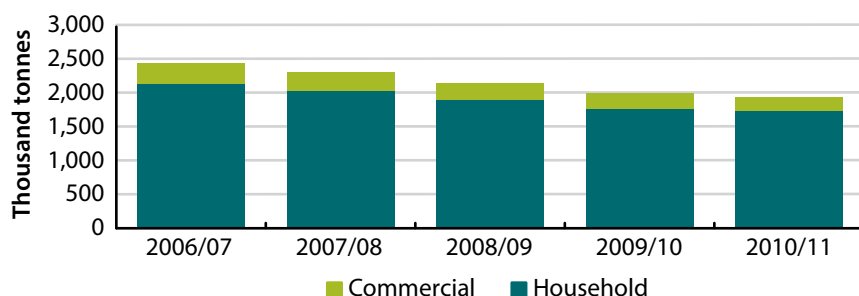
The total quantity of special waste treated increased by around 66,000 tonnes (31%) between 2006 and 2010.

The majority of the special waste treated in Scotland was produced in Scotland (246,000 tonnes; 87%). An additional 81,000 tonnes of special waste were produced in Scotland and sent to treatment or recovery 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 source 2006-2007 to 2010-2011



	Tonnes				
Waste source	2006/07	2007/08	2008/09	2009/10	2010/11
Household	2,127,233	2,021,881	1,878,156	1,753,608	1,729,159
Commercial	310,966	285,107	263,054	236,730	194,721
Other non household*	21,192	24,275	19,464	30,378	16,194
Total	2,459,391	2,331,264	2,160,674	2,020,717	1,940,073

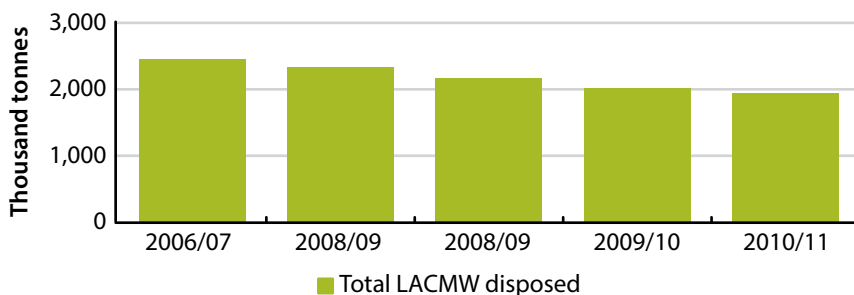
*Includes mixed industrial.

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.

In 2010-2011, approximately 1.94 million tonnes of Scottish LACMW were disposed of. This represented about 62% of the total LACMW managed by Scottish local authorities in this year. Of the total, 89% came from households and 11% came from commercial premises and other non-household sources.

Over the five year period, the amount of household waste disposed of decreased by 398,000 tonnes (19%) and the amount of commercial and other non-household waste disposed of decreased by 121,000 tonnes (61%). This was because more LACMW waste was recycled and less LACMW was generated over this period.

Scottish local authority collected municipal waste disposed – breakdown by method 2006-2007 to 2010-2011



					Tonnes
Disposal method	2006/07	2007/08	2008/09	2009/10	2010/11
Landfill	2,398,433	2,256,661	2,076,388	1,935,126	1,844,333
Incineration	60,931	74,603	84,286	85,591	95,740
Other	27	0	0	0	0
Total	2,459,391	2,331,264	2,160,674	2,020,717	1,940,073

In 2010-2011, approximately 1.94 million tonnes of Scottish LACMW were disposed of. Most of this waste was landfilled (95%) and the remainder was incinerated with energy recovery.

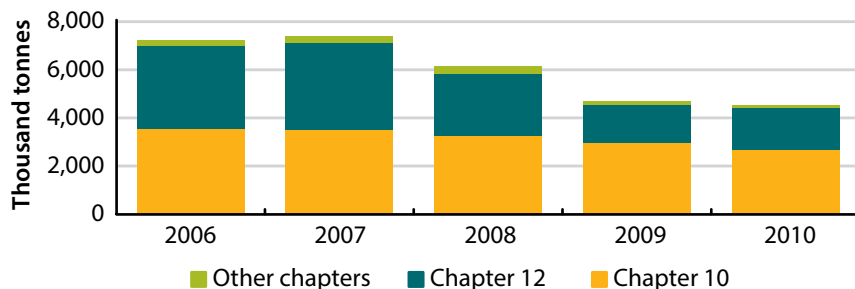
The amount of LACMW landfilled fell by 554,000 tonnes (23%) over the five year period, and there was a steady downward trend over this period. This reduction was complemented by a general increase in the amount of LACMW recycled and composted, as driven by targets set by the (then) Scottish Executive to reduce the amount of biodegradable LACMW landfilled.

The amount of LACMW incinerated increased by 35,000 tonnes (57%) over the five year period. There were three incinerators with energy recovery in Scotland authorised to manage LACMW in this period: one in Dundee, one in the Shetland Islands and one in Dumfries.

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 2006 to 2010



Thousand tonnes

Waste type by EWC-STAT* code	2006	2007	2008	2009	2010
03 Other chemical wastes	24.13	24.31	27.77	17.34	15.85
07 Non-metallic wastes	34.64	21.03	30.64	20.09	15.08
09 Animal and vegetal wastes	31.46	27.62	62.35	20.51	8.54
10 Mixed wastes	3,523.33	3,491.95	3,220.30	2,948.20	2,634.25
11 Common sludges	59.26	41.76	42.91	33.81	39.15
12 Mineral wastes	3,448.18	3,621.61	2,613.46	1,562.08	1,758.70
Other EWC-STAT codes	108.05	143.56	138.43	107.93	85.44
Total	7,229.05	7,371.83	6,135.85	4,709.96	4,556.99

*European Waste Catalogue for Statistics.

The amount of controlled waste landfilled in Scotland in 2010 was 4.56 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.

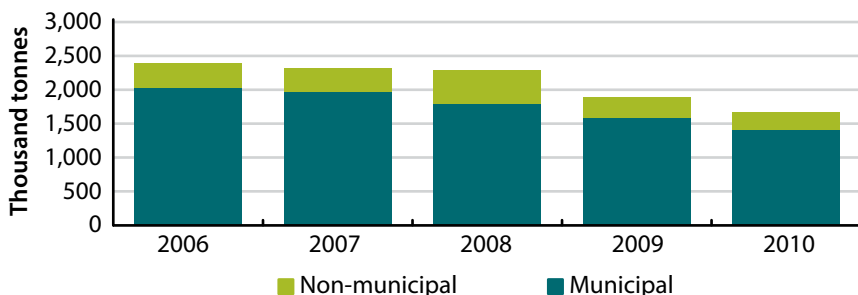
The total amount of waste landfilled in 2010 was about 2.67 million tonnes (37%) lower than in 2006. Much of the reduction was due to fewer mineral wastes and mixed wastes being landfilled.

The lower amount of mixed wastes landfilled may reflect an increase in the amount of recycling, particularly of local authority collected wastes. Also interesting is a 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 2006-2010



Tonnes

Waste type	2006	2007	2008	2009	2010
Municipal	2,027,731	1,969,041	1,784,949	1,573,755	1,405,889
Non-municipal	358,199	347,327	501,864	317,367	258,668
Total	2,385,930	2,316,368	2,286,813	1,891,122	1,664,558

In 2010, 1.66 million tonnes of biodegradable waste were landfilled in Scotland. The majority of this was municipal waste (84%), 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.

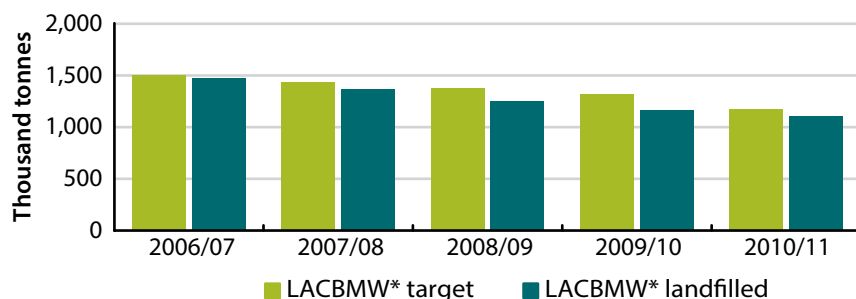
The overall quantity of biodegradable waste landfilled decreased by 721,000 tonnes (30%) between 2006 and 2010 and there was a steady decline over this period with the tonnage dropping by an average of 7.6% year on year. Most of this decline was due to a reduction in biodegradable municipal waste landfilled, which fell by 622,000 tonnes (31%) 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 us on a quarterly basis. We calculate the biodegradability content of the waste landfilled by applying conversion factors estimated for each waste type. We are 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.

Scottish local authority collected biodegradable municipal waste landfilled 2006-2007 to 2010-2011



	Tonnes				
	2006/07	2007/08	2008/09	2009/10	2010/11
LACBMW* target	1,500,000	1,440,000	1,380,000	1,320,000	1,173,333
LACBMW* landfilled	1,471,026	1,369,614	1,255,718	1,162,650	1,103,956

*Local authority collected biodegradable municipal waste.

In 2010-2011, 1.10 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 1.17 million tonnes of biodegradable LACMW to landfill in 2010-2011.

The quantity of biodegradable LACMW landfilled decreased by 367,000 tonnes (25%) over the five year period and there was a steady decline with the tonnage dropping by an average of 6% year on year.

To help reach the 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 we monitor Scotland's progress towards achieving overall Landfill Directive targets.

Special waste landfilled in Scotland 2006 to 2010



Tonnes

Waste type by EWC* 2002 chapter code	2006	2007	2008	2009	2010
Chapter 01	9	114	260	0	171
Chapter 13	140	138	674	281	265
Chapter 17	77,454	71,060	85,804	44,876	70,253
Chapter 19	417	3,655	208	4,357	4,607
Other EWC codes	165	352	1,198	2,069	1,986
Total	78,185	75,319	88,144	51,584	77,282

*European Waste Catalogue.

In 2010, approximately 77,000 tonnes of special waste were landfilled in Scotland. The majority of this (91%) was construction and demolition waste (EWC Chapter 17). Much of the variability in the quantities of special waste landfilled between 2006 and 2010 can be explained by the variations in the amount of contaminated soils arising from construction projects.

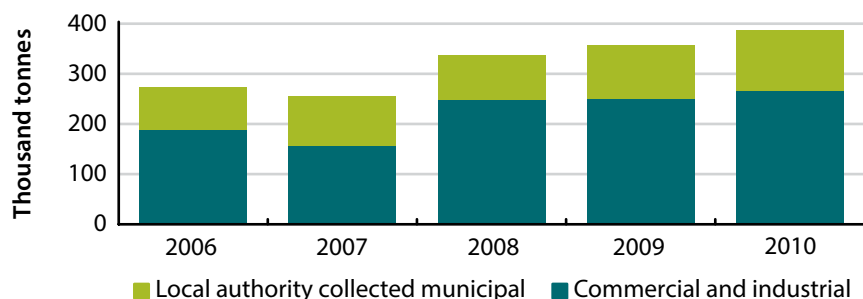
The majority of the special waste landfilled in Scotland was produced in Scotland (97%). An additional 3,000 tonnes of special waste were produced in Scotland and sent to landfill sites in England and Wales.

There was one landfill site in Scotland licensed to accept hazardous waste in 2010 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 2006 to 2010



	Tonnes				
Waste source	2006	2007	2008	2009	2010
Local authority collected municipal	85,279	97,928	88,145	106,770	122,119
Commercial and industrial*	188,314	156,225	247,968	249,528	264,429
Total	273,593	254,153	336,113	356,298	386,548

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

Approximately 387,000 tonnes of waste were inputted to incinerators and co-incineration plants in Scotland in 2010. Commercial and industrial wastes accounted for 68%, and LACMW accounted for the remainder.

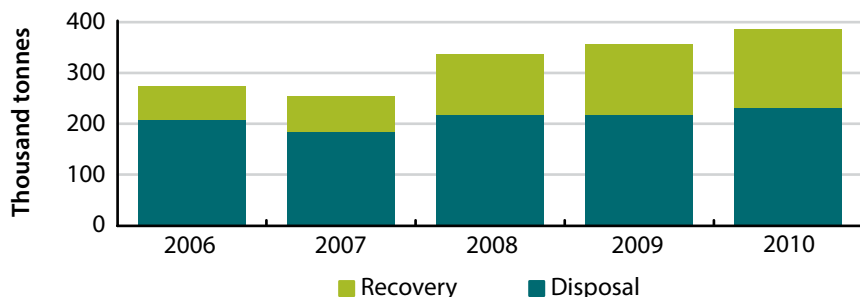
The total quantity of waste inputted to these plants increased by 113,000 tonnes (41%) between 2006 and 2010. There was considerable variability over this period with waste inputs falling initially and then rising thereafter.

Much of this variability was due to commercial and industrial waste inputs. The large increase between 2007 and 2008 (82,000 tonnes; 32%) can be explained by more animal litter/remains and wood waste being incinerated. There were 16 plants in Scotland actively handling commercial and industrial wastes in 2010: eleven incinerators and five co-incineration plants.

LACMW inputs increased by 37,000 tonnes (43%) over the five year period. There were three plants handling LACMW in Scotland in 2010 and all 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 waste as a regular or additional fuel, or it thermally treats waste for the purposes of disposal.

Waste incinerated in Scotland – breakdown by method 2006 to 2010



Tonnes

Method	2006	2007	2008	2009	2010
Recovery	66,903	71,297	119,274	139,080	156,581
Disposal	206,690	182,856	216,839	217,218	229,967
Total	273,593	254,153	336,113	356,298	386,548

In 2010, almost 387,000 tonnes of waste was managed by incinerators and co-incineration plants in Scotland. Of this, 59% was disposed of and 41% was recovered.

Between 2006 and 2010, the amount of waste managed by these plants increased by 113,000 tonnes (41%). The majority of this rise was due to waste recovery which more than doubled in this period, from approximately 67,000 tonnes to 157,000 tonnes. The increase in waste recovered was mainly due to reporting the co-incineration of sewage sludge and to the opening of a new plant in 2008 that handled wood waste.

The sharp 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 and 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 us, including licensed and 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.

EWG 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	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 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 us 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
Paragraph 47 - Repair and/or refurbishment of WEEE

No data were received for Paragraph 46 in 2010. Reliable data for Paragraphs 45 and 47 were not available until 2009 and 2010, respectively. These data are not included in this publication as there are no trends as yet, but data for these paragraphs are available in online data tables.

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 our website⁴.

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	Driver
40% recycling/composting and preparing for re-use of waste from households	2010	Scottish Government
<2.7 million tonnes of biodegradable municipal waste to be sent to landfill	2010	Article 5(2) of EU Landfill Directive
50% recycling/composting and preparing for re-use of waste from households	2013	Scottish Government
<1.8 million tonnes of biodegradable municipal waste to be sent to landfill	2013	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	Article 11(2)a of EU Waste Framework Directive
60% recycling/composting and preparing for re-use of waste from households	2020	Scottish Government
<1.26 million tonnes of biodegradable municipal waste to be sent to landfill	2020	Article 5(2) of EU Landfill Directive
70% recycling and preparing for re-use of construction and demolition waste	2020	Article 11(2)b of revised EU Waste Framework Directive
<5% of all waste to be sent to landfill	2025	Scottish Government
70% recycling/composting and preparing for re-use of all waste	2025	Scottish Government

⁴ 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

Lists and maps of waste management sites in Scotland:

www.sepa.org.uk/waste/waste_data/waste_site_information.aspx

Commercial and industrial waste information:

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

Exempt activity information:

www.sepa.org.uk/waste/waste_regulation/application_forms/exempt_activities.aspx

Municipal waste information:

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

Zero Waste Plan:

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 requires 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]]. This definition is valid for the 2010-2011 data reported in this publication; however it changed from 1 April 2011. See page 7 for further details.
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	<p>Waste from a factory (within the meaning of the Factories Act 1961) or from any premises used for, or in connection with:</p> <ul style="list-style-type: none"> • provision of public transport; • public supply of gas, water, electricity or sewerage services; • provision of postal or communication services to the public. <p>[As defined in Environmental Protection Act 1990, section 75 and schedule 3 of the Controlled Waste Regulations 1992 (as amended)].</p>
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.
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.
Local authority collected municipal waste	Further details available in the 'Supporting information' section.

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 to, 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).