Waste landfilled in Scotland - 2016

This release provides a summary of all waste landfilled in Scotland in calendar year 2016. It excludes Scottish waste landfilled elsewhere. Further information including definition of terms is included in the methodology and glossary.

Key points

Waste landfilled in Scotland– 2016 calendar year

- The total quantity of waste landfilled in Scotland in 2016 was 3.72 million tonnes, a decrease of 464,904 tonnes (11.1%) from 2015. The decrease is consistent with a decreasing trend of waste disposed to landfill over the past decade.
- The quantity of biodegradable municipal waste (BMW) disposed to landfill was 1.08 million tonnes, a decrease of 2,597 tonnes (0.2%) from 2015.

Summary data tables are also available to download in Excel format on SEPA's web site.

Enquiries on this publication to: Contact SEPA Communications Department: 01786 452546.

An Official Statistics publication. These statistics have been produced to the high professional standards set out in the Code of Practice for Official Statistics, which sets out eight principles including meeting user needs, impartiality and objectivity, integrity, sound methods and assured quality, frankness and accessibility. More information on the Official Statistics Code of Practice can be found here at http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html.

Table 1. Hazardous and non-hazardous waste landfilled in Scotland in 2016 by waste category

Waste Category	Non hazardous waste landfilled (tonnes)	Hazardous waste landfilled (tonnes)	Total Landfilled (tonnes)
Acid, alkaline or saline wastes	0	0	0
Animal and mixed food waste	8,121	0	8,121
Animal faeces, urine and manure	135	0	135
Batteries and accumulators wastes	0	0	0
Chemical wastes	1,163	7	1,170
Combustion wastes	81,186	2,579	83,765
Common sludges	6,746	0	6,746
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	1,400	0	1,400
Discarded vehicles	0	0	0
Dredging spoils	0	0	0
Glass wastes	16,820	0	16,820
Health care and biological wastes	5,042	0	5,042
Household and similar wastes	1,245,187	0	1,245,187
Industrial effluent sludges	14,942	0	14,942
Metallic wastes, ferrous	26	0	26
Metallic wastes, mixed ferrous and non-ferrous	5	0	5
Metallic wastes, non-ferrous	0	0	0
Mineral waste from construction and demolition	81,965	890	82,855
Mineral wastes from waste treatment and stabilised wastes	250,215	178	250,393
Mixed and undifferentiated materials	54,306	0	54,306
Other mineral wastes	23,179	23,065	46,244
Paper and cardboard wastes	17	0	17
Plastic wastes	1,367	0	1,367
Rubber wastes	43	0	43
Sludges and liquid wastes from waste treatment	6,338	128	6,467
Soils	1,007,287	15,859	1,023,146
Sorting residues	853,706	0	853,706
Spent solvents	0	0	0
Textile wastes	6,581	0	6,581
Used oils	0	0	0
Vegetal wastes	7,078	0	7,078
Waste containing PCB	0	0	0
Wood wastes	437	0	437
Total	**3,673,292**	**42,705**	**3,715,997**

Data and Trends

Waste Landfilled in Scotland

- In 2016, 3.72 million tonnes of waste was disposed of to landfill in Scotland. This is a decrease of 464,904 tonnes (11.1%) from 2015. The decrease is consistent with the longer term landfill trend in Scotland, with a total decrease of 3.34 million tonnes (47.3%) of waste disposed in this way since 2005.
- Most of the waste disposed of to landfill in Scotland in 2016 was Household and similar wastes (1.25 million tonnes), Soils (1.02 million tonnes) and Sorting residues (853,706 tonnes) as depicted in Figure 1 below.
- The waste category with the largest decrease was Combustion wastes, with 333,996 tonnes landfilled in 2015 and 83,765 tonnes landfilled in 2016, a decrease of 250,231 tonnes (74.9%). This change was primarily due to Combustion wastes no longer being landfilled to ash lagoons following the closure of the site that produced these wastes, the Longannet coal power station, in the second calendar year quarter of 2016.
- The amount of Soils landfilled in Scotland also contributed to the decrease, with 1.24 million tonnes landfilled in 2015 and 1.02 million tonnes landfilled in 2016, a decrease of 218,013 tonnes (17.6%).
- Household and similar wastes disposed to landfill decreased steadily between 2005 and 2013. However, this decrease appears to have levelled out since 2013 (see Figure 1 below). There was an increase of 72,812 tonnes (6.2%) of these wastes landfilled from 2015. It should be noted that the category Household and similar wastes includes waste generated by businesses as well as households. This category includes the refuse from regular waste collections provided by local authorities and other contractors. As Household and similar wastes from household sources decreased during the same period (see household statistics on Scotland's Environment website), this suggests the change is primarily due to an increase of landfilling of wastes from commercial sources.
- The landfilling of Sorting residues has increased by 445,896 tonnes (109.3%) since 2005. An increase in Sorting residues is consistent with the increased infrastructure of waste sorting facilities in Scotland such as Material Recovery Facilities. This increasing trend in landfilling of sorting residues stabilised from about 2012, with a 90,707 tonne (9.6%) decrease in the landfilling of these wastes from 2015 and 12,333 tonnes (1.4%) decrease from 2012.
- As depicted in Figure 2 below, there was 42,705 tonnes of Hazardous waste disposed to Landfill in Scotland in 2016, which amounts to 1.1% of all waste landfilled. The bulk of Hazardous waste landfilled was Other mineral wastes (23,065 tonnes, 54% of all Hazardous waste landfilled), which primarily comprise insulating materials such as asbestos, followed by Soils (15,859 tonnes, 37% of total). From 2005 to 2012 the amount of hazardous Soils landfilled ranged between 47,722 and tonnes 105,317 tonnes. From 2013 – 2016 the amount of hazardous Soils landfilled ranged from 4,788 to 27,209 tonnes. This change corresponds to a removal of landfill tax exemption for landfilling of waste from contaminated land in 2012.

Figure 1. Waste disposed to landfill in Scotland by waste category 2005 - 2016

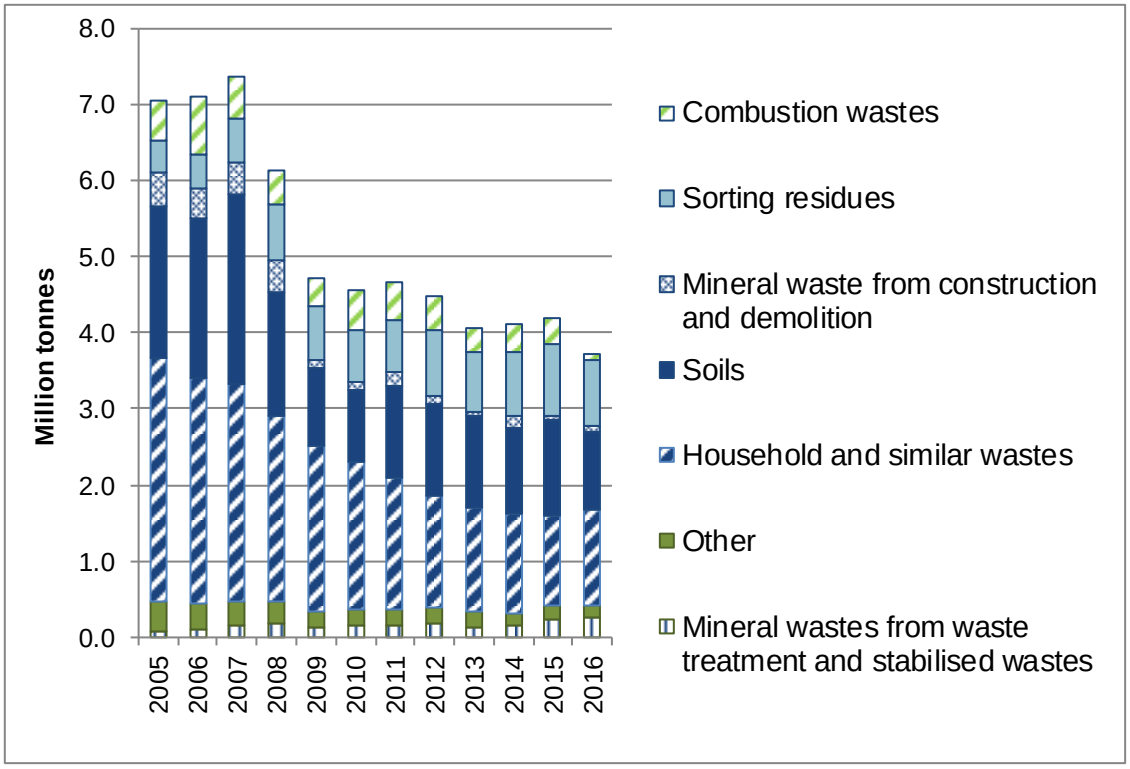


Figure 2. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2016

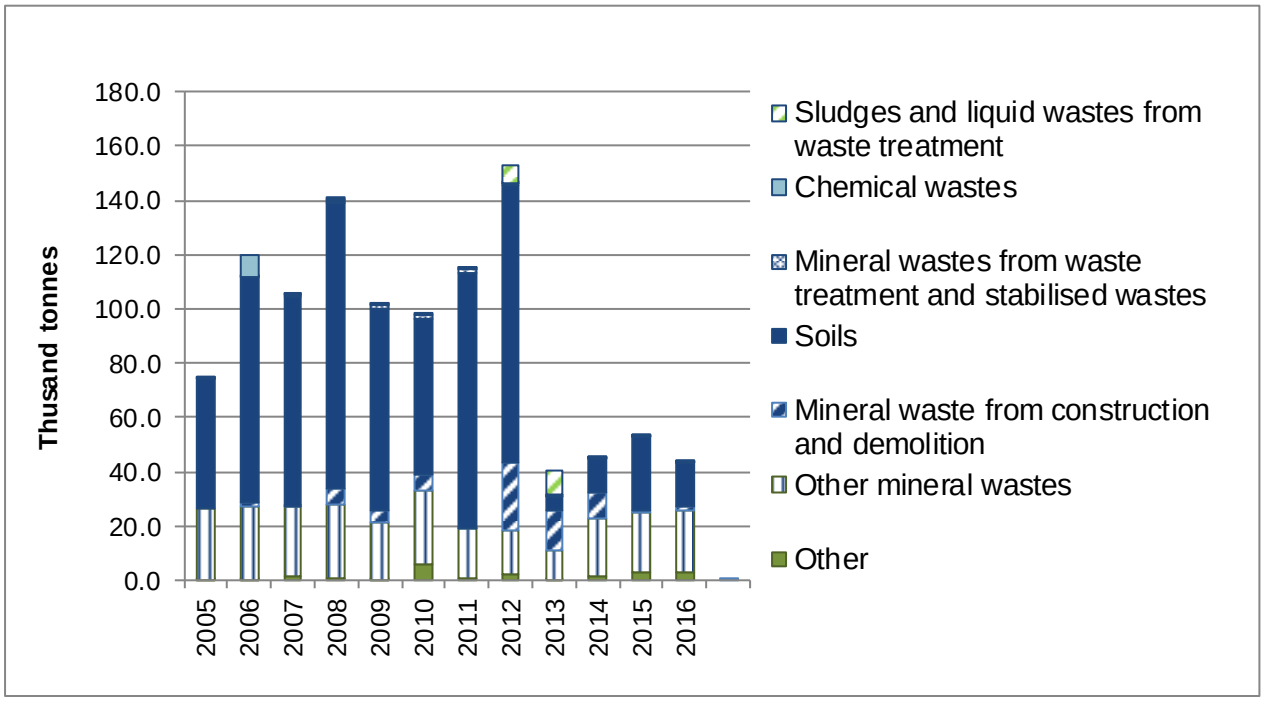


Table 2. Waste disposed to landfill in Scotland by waste category 2005 - 2016

Waste Category	Year											
	2005 (tonnes)	2006 (tonnes)	2007 (tonnes)	2008 (tonnes)	2009 (tonnes)	2010 (tonnes)	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)
Household and similar wastes	3,212,099	2,972,577	2,848,253	2,434,477	2,184,192	1,929,466	1,726,995	1,466,298	1,350,335	1,307,174	1,172,375	1,245,187
Soils	1,981,068	2,074,445	2,494,877	1,629,731	1,007,472	950,445	1,210,975	1,220,689	1,207,077	1,135,698	1,241,159	1,023,146
Sorting residues	407,809	445,095	570,575	738,220	723,364	683,935	668,476	866,039	796,418	833,129	944,413	853,706
Combustion wastes	532,420	758,621	555,924	436,725	353,903	521,327	511,179	453,593	318,714	364,589	333,996	83,765
Mineral waste from construction and demolition	456,289	411,666	426,597	413,527	100,690	97,703	178,670	95,702	60,193	150,913	60,961	82,855
Mineral wastes from waste treatment and stabilised wastes	79,464	88,267	164,900	176,634	124,431	142,952	157,486	189,298	132,802	145,233	233,680	250,393
Other	385,589	357,141	302,943	300,529	212,649	227,141	217,009	189,462	204,820	173,735	194,318	176,946
Total	**7,054,739**	**7,107,813**	**7,364,069**	**6,129,843**	**4,706,701**	**4,552,968**	**4,670,789**	**4,481,080**	**4,070,360**	**4,110,470**	**4,180,901**	**3,715,997**

Table 3. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2016

Waste Category	Year											
	2005 (tonnes)	2006 (tonnes)	2007 (tonnes)	2008 (tonnes)	2009 (tonnes)	2010 (tonnes)	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)
Soils	47,722	82,918	76,984	105,317	73,958	57,571	94,663	102,497	4,788	11,978	27,209	15,859
Other mineral wastes	26,337	27,047	25,693	26,797	21,113	27,075	17,990	16,223	10,557	20,745	22,493	23,065
Mineral waste from construction and demolition	1,585	626	6,321	4,769	6,175	139	24,587	15,265	10,189	192	1,637	890
Mineral wastes from waste treatment and stabilised wastes	191	15	472	661	1,535	1,491	1,033	615	482	189	402	178
Chemical wastes	3	7,842	135	253	112	362	126	36	32	19	17	7
Sludges and liquid wastes from waste treatment	0	0	205	428	137	0	357	6,596	9,440	3	120	128
Other	245	85	1,138	746	11	5,706	777	2,165	55	1,678	2,647	2,579
Total	**76,084**	**118,534**	**110,947**	**138,970**	**103,042**	**92,344**	**139,534**	**143,395**	**35,543**	**34,805**	**54,525**	**42,705**

Biodegradable Municipal Waste (BMW) Landfilled in Scotland

- BMW is the fraction of municipal waste which will degrade within a landfill, giving rise to methane emissions.
- In 2016, there was1.08 million tonnes of BMW disposed to landfill in Scotland (see Figure 3 below). This is a decrease of 2,597 tonnes (0.2%) from 2015. This is the sixth consecutive decrease in BMW landfilled since 2010.
- Scotland has an EU based target to reduce BMW landfilled in Scotland to less than 1.26 million tonnes by 2020. The BMW landfilled from 2013 onwards have been within this target.
- The percentage decrease in BMW landfilled (0.2%) is less than the percentage decrease of total waste landfilled (11.1%, refer to Waste Landfilled on page 3). The change in total waste landfilled is largely due to a 250,231 tonne (74.9%) decrease in combustion wastes landfilled from 2015 to 2016. The relatively small decrease in BMW landfilled is because Combustion wastes are not considered municipal waste and have zero biodegradable content, so do not contribute to the BMW landfilled data.
- In 2016, most of the BMW landfilled waste comprised two EWC codes: 20 03 01 coded waste (mixed municipal waste) comprised 71.3% and 19 12 12 coded waste (Other non-hazardous wastes from mechanical treatment of waste) comprised 24.3%.

Figure 3. BMW landfilled in Scotland 2015 – 2016

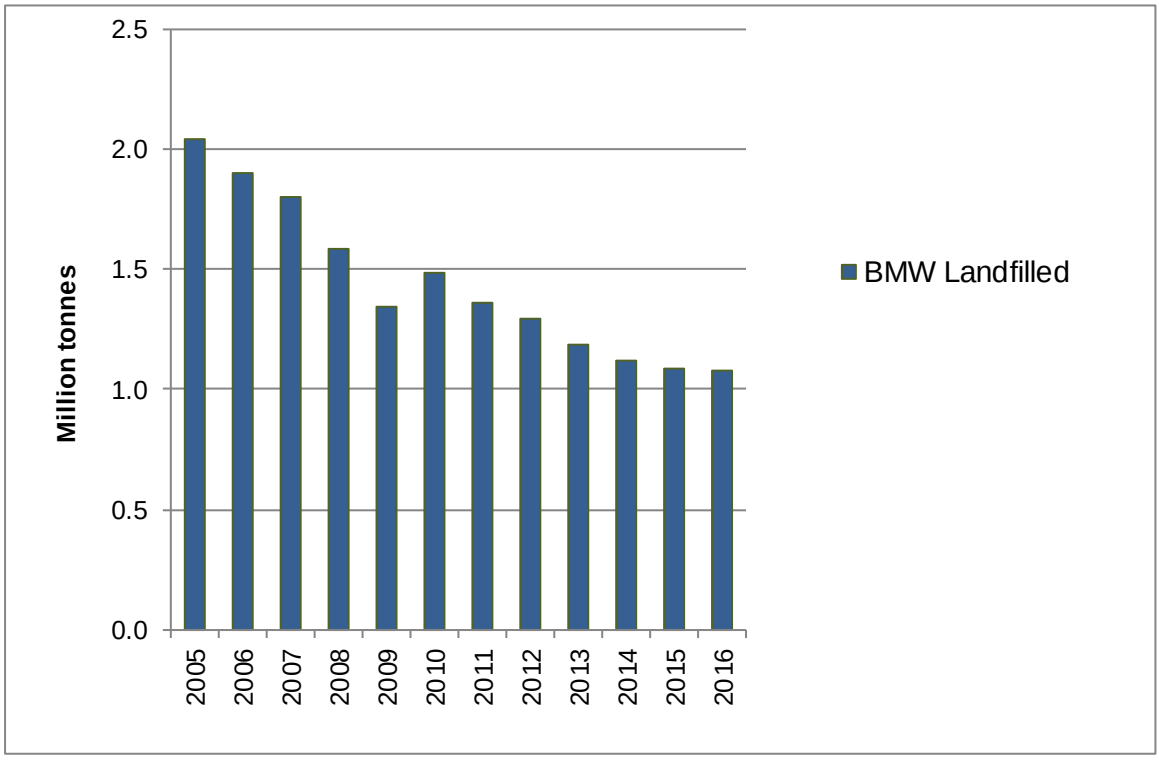


Table 4. BMW landfilled in Scotland 2015 – 2016

Year	BMW Landfilled
2005	2,039,328
2006	1,899,423
2007	1,803,518
2008	1,582,285
2009	1,344,562
2010	1,484,357
2011	1,357,528
2012	1,292,112
2013	1,182,922
2014	1,122,013
2015	1,083,963
2016	1,081,366

DATA USES, FEEDBACK, REVISIONS POLICY, METHODOLOGY, GLOSSARY OF TERMS AND MEASURES, AND REFERENCES

User Statement

Data on waste generation and management is collected to monitor policy effectiveness, particularly the commitments in the Scottish Government's Making Things Last – A Circular Economy Strategy for Scotland and to support policy development. The data is also used to supply data for the Waste Statistics Regulation (2002/2150/EC). The data is used extensively by local and central government, the waste industry, researchers and the public.

Feedback

We welcome feedback on the data from all users including how and why the data is used. This helps us to understand the value of the statistics to external users. Please see our contact details at the bottom of the first page of this notice or e-mail: waste.data@sepa.org.uk.

Revisions Policy

SEPA will provide information about any revisions made to this release and any associated datasets. Revisions could occur for various reasons, including when data from third parties is unavailable or provisional at the time of publishing or if there are subsequent methodological improvements or refinements.

The figures are accurate at the time of publication. However the data may be updated if further revisions are necessary. Normally these revisions will be published concurrent with the next release.

Methodology

Data is taken from permitted waste site returns submitted to SEPA. . Further details on the methodology used to produce the figures are provided in the annual Waste Data Quality Reports on SEPA's web site.

Glossary of terms

EWC Code – European Waste Catalogue waste code

BMW – Biodegradable Municipal Waste - waste that is capable of undergoing anaerobic or aerobic decomposition, such as; food and garden waste; and paper and cardboard.

Hazardous Waste – waste with hazardous properties which may render it harmful to human health or the environment. Hazardous waste is also called Special Waste in Scotland as defined in the Special Waste Regulation 1996 (and amendments)

Municipal BMW – BMW that originates from municipal sources. All wastes of EWC chapter 20 and selected wastes of EWC chapter 19 and chapter 15 are considered municipal sources.

WFAS – waste from all sources. This includes waste from commercial and industrial sources, construction and demolitions sources as well as from household sources.

Waste landfilled –WFAS that is disposed of to landfill.