Waste landfilled in Scotland - 2018

This release provides a summary of all waste landfilled in Scotland in calendar year 2018. It excludes Scottish waste landfilled elsewhere. Information on the methodology used to prepare this release and a definition of terms is in the methodology and glossary at the end of this document.

Key points

Waste landfilled in Scotland– 2018 calendar year

- The total amount of waste landfilled in Scotland in 2018 was 3.74 million tonnes, which was a reduction of 84,876 tonnes (2.2%) from 2017.
- The top three categories of waste landfilled were Soils (1.42 million tonnes, 38% of total), Household and similar wastes (1.19 million tonnes, 32% of total) and Sorting residues (745,403.34 tonnes, 20% of total
- The amount of biodegradable municipal waste (BMW – the biodegradable component of Municipal Waste) disposed to landfill was 1.02 million tonnes, a decrease of 67,040 tonnes (6.1%) from 2017.

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

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

This is an Official Statistics publication. These statistics have been produced to the high professional standards defined in the Code of Practice for Official Statistics, which sets out fourteen principles under the pillars of Trustworthiness, Quality and Value. More information on the Official Statistics Code of Practice can be found here: http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html.

Table 1. Waste landfilled in Scotland – Summary data 2018

Waste Category	Total waste landfilled (tonnes)
Acid, alkaline or saline wastes	0
Animal and mixed food waste	4,352
Animal faeces, urine and manure	27
Batteries and accumulators wastes	0
Chemical wastes	1,942
Combustion wastes	723
Common sludges	3,192
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	75
Discarded vehicles	0
Dredging spoils	2,334
Glass wastes	2,490
Health care and biological wastes	8,549
Household and similar wastes	1,187,185
Industrial effluent sludges	18,717
Metallic wastes, ferrous	37
Metallic wastes, mixed ferrous and non-ferrous	18
Metallic wastes, non-ferrous	0
Mineral waste from construction and demolition	36,891
Mineral wastes from waste treatment and stabilised wastes	214,430
Mixed and undifferentiated materials	46,497
Other mineral wastes	39,504
Paper and cardboard wastes	36
Plastic wastes	859
Rubber wastes	1,309
Sludges and liquid wastes from waste treatment	3,739
Soils	1,415,748
Sorting residues	745,403
Spent solvents	0
Textile wastes	996
Used oils	0
Vegetal wastes	5,095
Waste containing PCB	0
Wood wastes	332
Total	**3,740,480**

Data and Trends

Waste Landfilled in Scotland

- In 2018, 3.74 million tonnes of waste was disposed of to landfill in Scotland across 56 waste sites. This was a reduction of 84,876 tonnes (2.2%) from 2017.
- The top three categories of waste landfilled in Scotland in 2018 were Soils (1.42 million tonnes, 38% of total), Household and similar wastes (1.19 million tonnes, 32% of total) and Sorting residues (745,403.34 tonnes, 20% of total) as depicted in Figure 1 below.
- The waste category with the largest change in the last year was Soils, increasing by 159,023 tonnes (13%) to 1.42 million tonnes in 2018. This follows an increase the previous year (2016 to 2017) of 230,038 tonnes.
- The total amount of waste disposed of to landfill has generally decreased steadily since 2009, following large reductions between 2007 and 2009 (see Figure 1 below)
- The disposal of 'Household and similar wastes' to landfill fell by 35,772 tonnes (3%) in 2018, and has fallen a total of 63.0% (3.21 million tonnes) since 2005. This waste category includes waste generated by businesses as well as households. It also includes such refuse from regular waste collections provided by both local authorities and other contractors.
- The disposal of Sorting residues to landfill fell by 68,166 (8%) from 2017. This is against the longer term trend, with an increase of these wastes to landfill from 2005 to 2018 of 337,594 tonnes (see Figure 3 and Table 2 below). Part of the year-on-year reduction is due to more of these wastes being diverted from landfill to incineration (refer to Waste incinerated in Scotland statistics on SEPA's web site). The longer term increase is consistent with the increased infrastructure of waste sorting facilities in Scotland such as Material Recovery Facilities.
- As shown in Figure 2 and Table 3 below, there was 45,913 tonnes of hazardous waste disposed of to landfill in Scotland in 2018, which amounts to 1.2% of all waste landfilled. Just over half of the hazardous waste landfilled was Other mineral wastes (23,521 tonnes, 51% of total), which primarily comprise insulating materials such as asbestos.
- Between 2005 and 2012, soils comprised between 62% and 76% of the total hazardous waste disposed of to landfill. From 2013 onwards, that percentage has dropped, and in 2018 comprised 21% (9,642 tonnes, see Figure 4 and Table 3 below). This change corresponds to a change in 2012 when a landfill tax exemption for disposing of waste from contaminated land was removed.

Figure 1. Waste disposed to landfill in Scotland by waste category 2005 - 2018

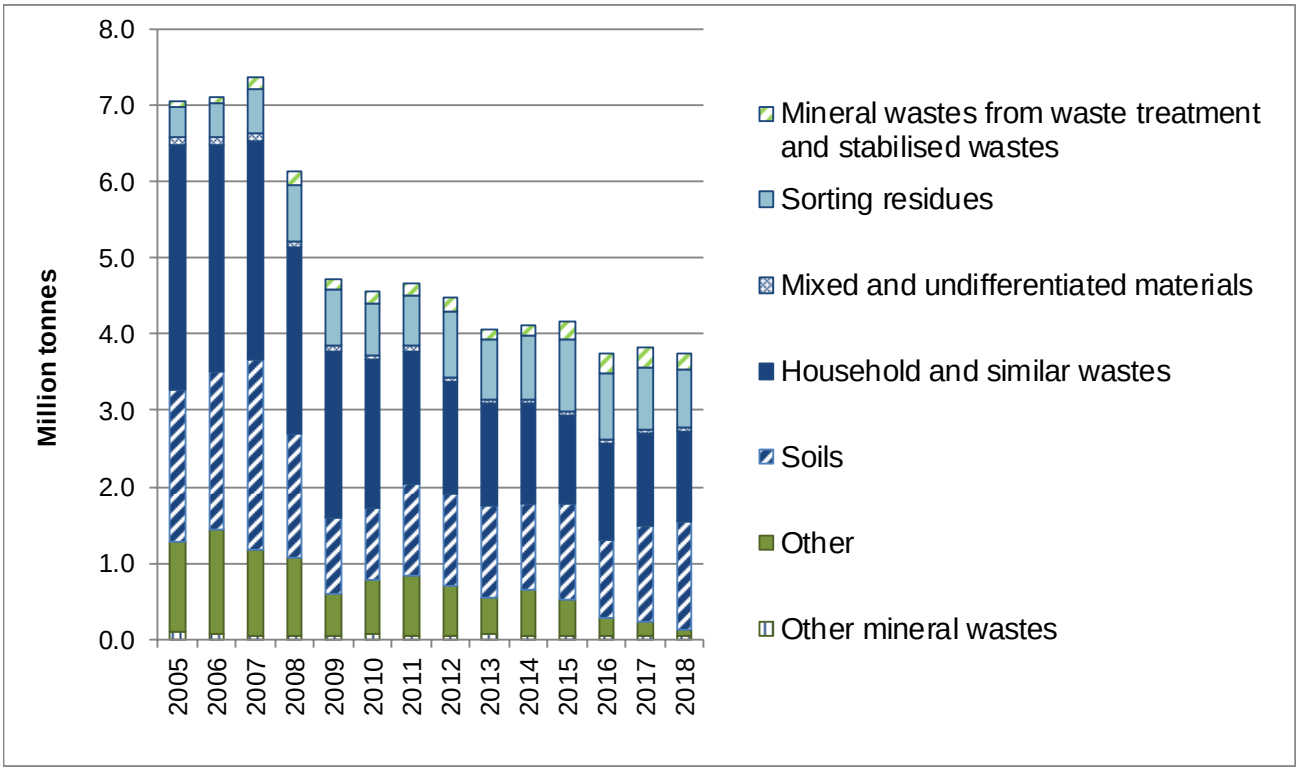


Figure 2. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2018

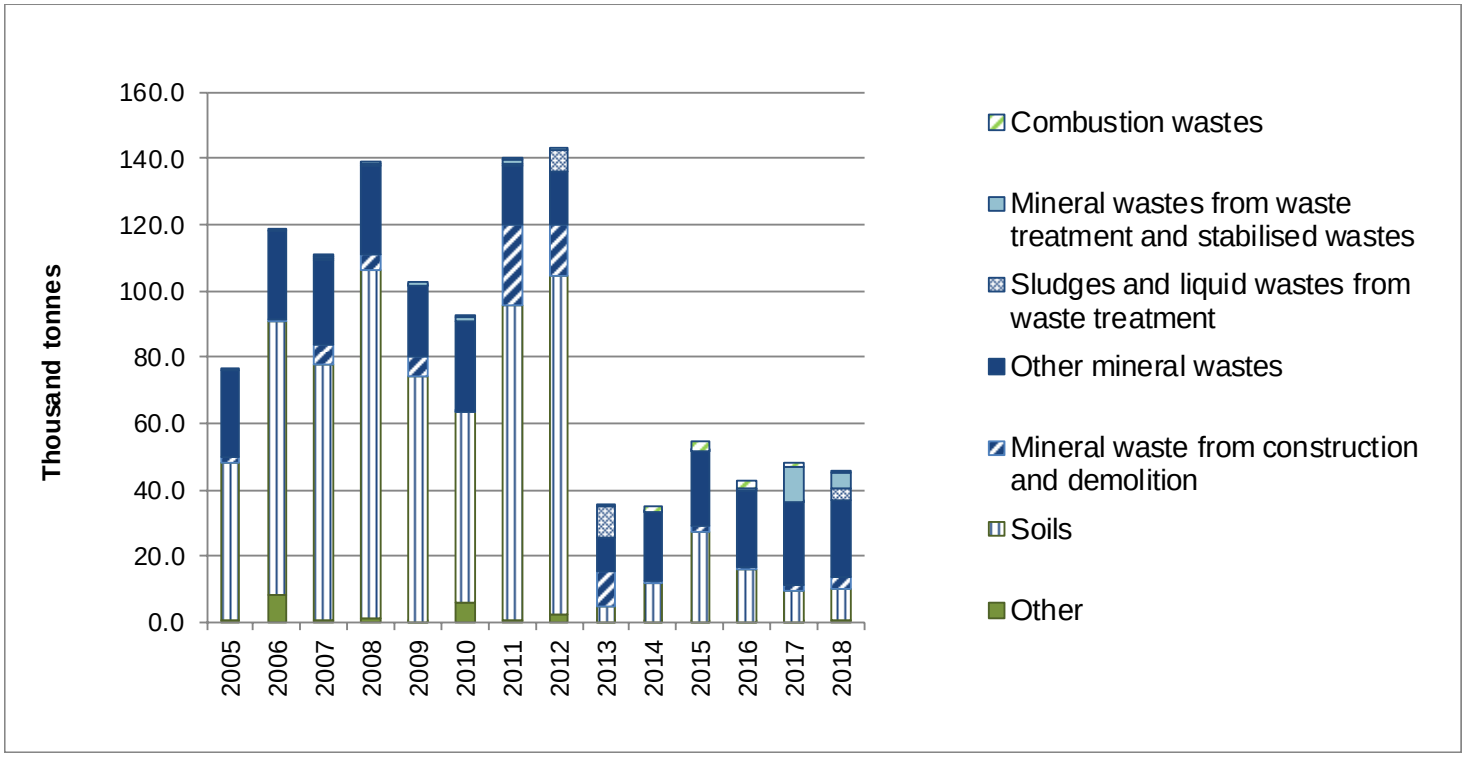


Table 2. Waste disposed to landfill in Scotland by waste category 2005 - 2018

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)	2017 (tonnes)	2018 (tonnes)
Soils	1,981,068	2,074,445	2,494,877	1,629,731	1,007,472	950,445	1,210,975	1,220,689	1,207,592	1,137,523	1,243,087	1,026,687	1,256,725	1,415,748
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	1,466,308	1,351,373	1,313,490	1,166,258	1,245,786	1,222,957	1,187,185
Sorting residues	407,809	445,095	570,575	738,220	723,364	683,935	668,476	866,219	796,418	833,129	945,509	867,345	813,569	745,403
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	275,364	214,430
Mixed and undifferentiated materials	93,097	95,909	107,268	83,171	75,702	62,347	75,231	47,623	43,203	42,554	62,139	54,306	34,671	46,497
Other mineral wastes	90,782	82,091	48,801	42,670	38,160	69,134	51,090	56,410	78,922	54,991	50,135	48,447	55,828	39,504
Other	1,190,418	1,349,429	1,129,395	1,024,940	553,381	714,690	780,538	634,999	462,811	591,702	473,441	243,016	166,242	91,713
Total	**7,054,739**	**7,107,813**	**7,364,069**	**6,129,843**	**4,706,701**	**4,552,968**	**4,670,791**	**4,481,545**	**4,073,122**	**4,118,622**	**4,174,250**	**3,735,979**	**3,825,356**	**3,740,480**

Table 3. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2018

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)	2017 (tonnes)	2018 (tonnes)
Other mineral wastes	26,337	27,047	25,693	26,797	21,113	27,075	17,990	16,223	10,586	20,748	22,493	23,120	24,671	23,521
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	9,424	9,642
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	1,790	3,473
Sludges and liquid wastes from waste treatment	0	0	205	428	137	0	357	6,596	9,440	3	120	128	45	3,094
Mineral wastes from waste treatment and stabilised wastes	191	15	472	661	1,535	1,491	1,033	615	482	189	402	178	10,709	5,299
Combustion wastes	0	0	702	0	0	248	159	0	0	1,644	2,647	2,579	1,165	557
Other	248	7,927	570	999	123	5,821	744	2,201	87	53	17	7	14	327
Total	**76,084**	**118,534**	**110,947**	**138,970**	**103,042**	**92,344**	**139,534**	**143,395**	**35,572**	**34,807**	**54,525**	**42,759**	**47,817**	**45,913**

Figure 3. Disposal of selected wastes to landfill in Scotland 2005 - 2018

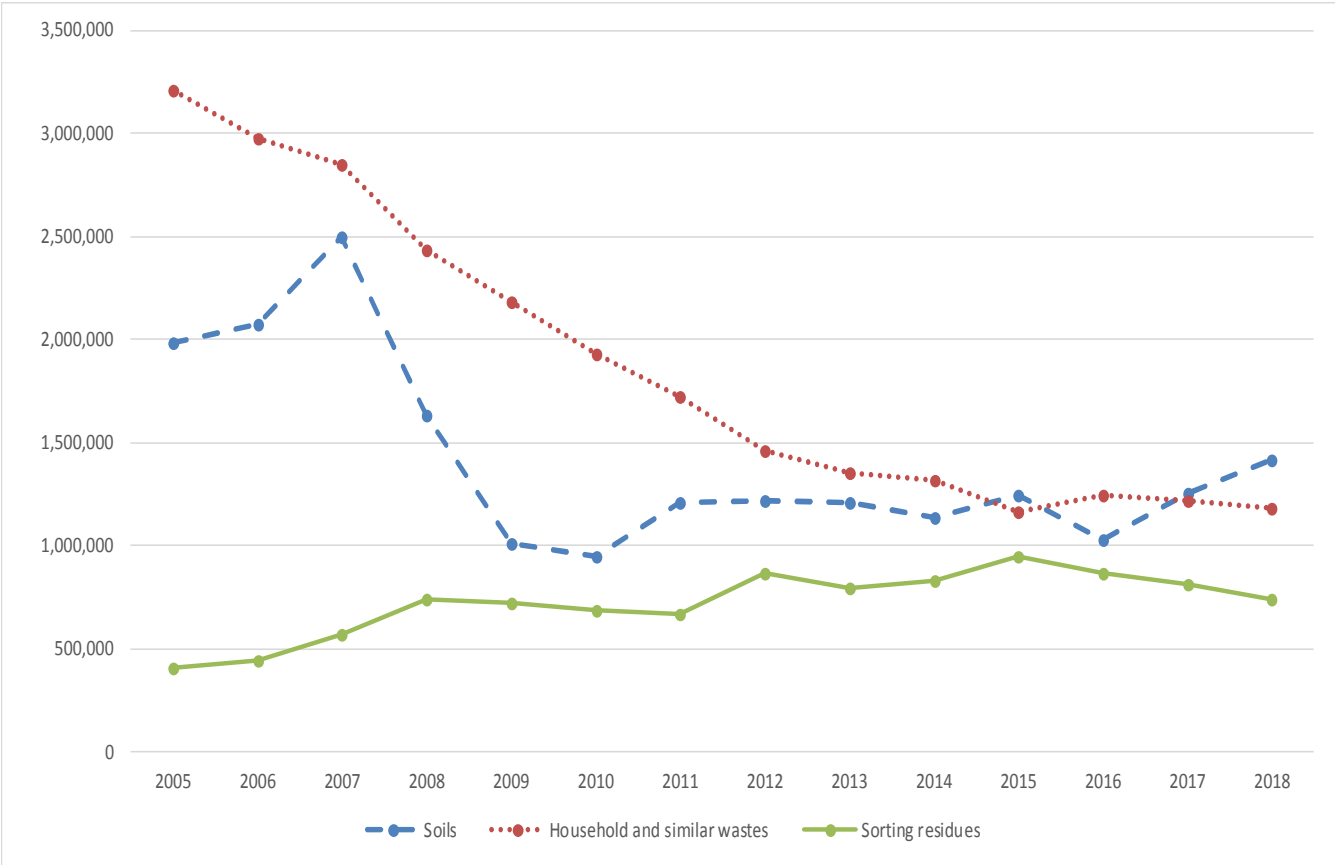
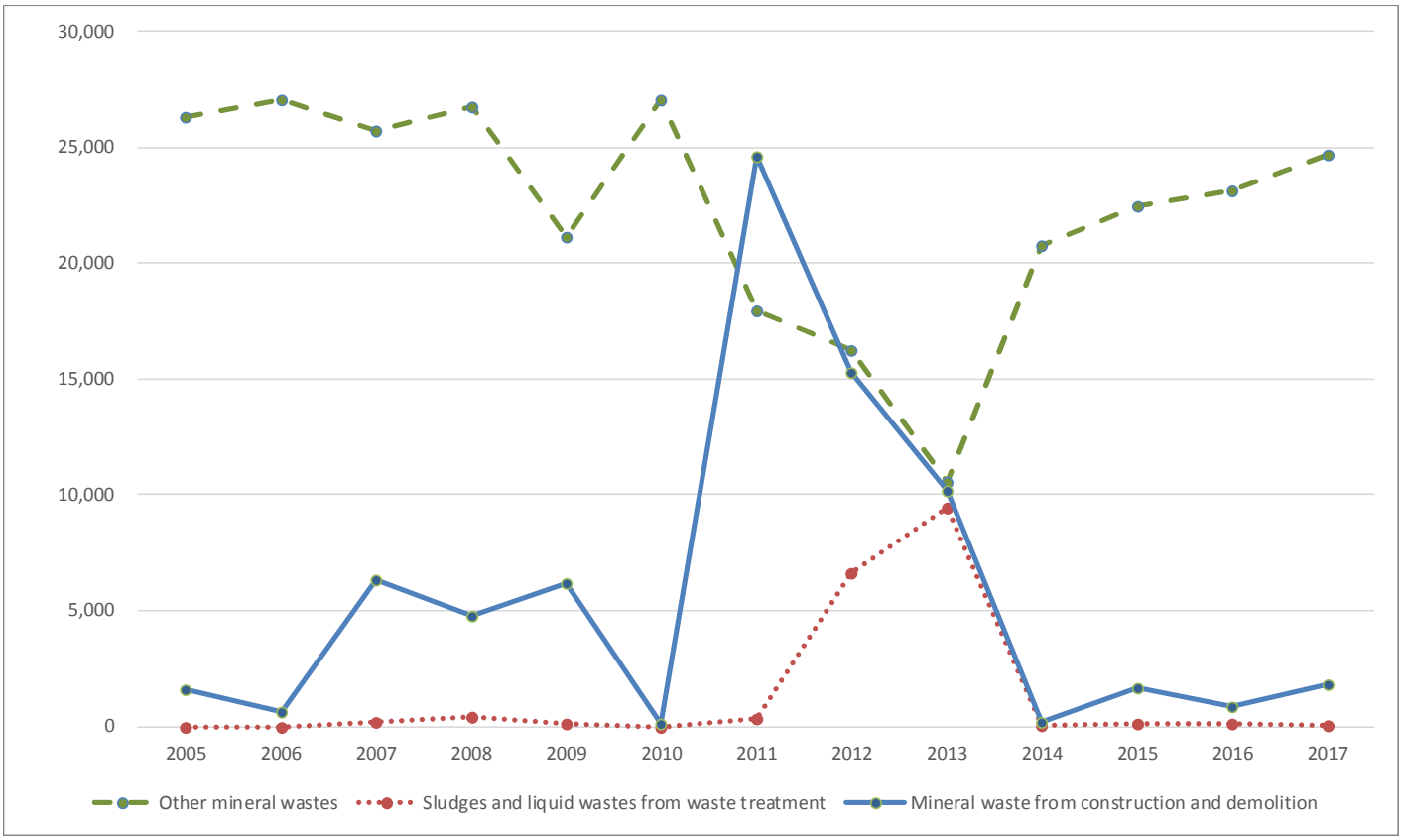


Figure 4. Disposal of selected hazardous wastes to landfill in Scotland 2005 - 2018



Biodegradable Municipal Waste (BMW) Landfilled in Scotland

- Municipal waste is defined as waste with certain EWC codes, primarily Chapter 20 codes and certain Chapter 15 and 19 codes. The full list of relevant EWC codes may be found in Table 6 on Page 12.
- BMW is the fraction of municipal waste which will degrade, giving rise to methane emissions over time when landfilled.
- In 2018, 1.02 million tonnes of BMW were disposed of to landfill in Scotland (see Figure 5 below). This was a decrease of 67,040 tonnes (6.1%) from 2017.
- Scotland has an EU based target to reduce the quantity of BMW disposed of to landfill in Scotland to less than 1.26 million tonnes by 2020. Since 2013 Scotland has met this target.
- In 2018, the top two categories of BMW disposed of to landfill were EWC 20 03 01 (mixed municipal waste) which comprised 71.6% of the total and EWC 19 12 12 (Other non-hazardous wastes from mechanical treatment of waste) which comprised 25.3% of the total (data not shown).

Figure 5. BMW landfilled in Scotland 2005 – 2018

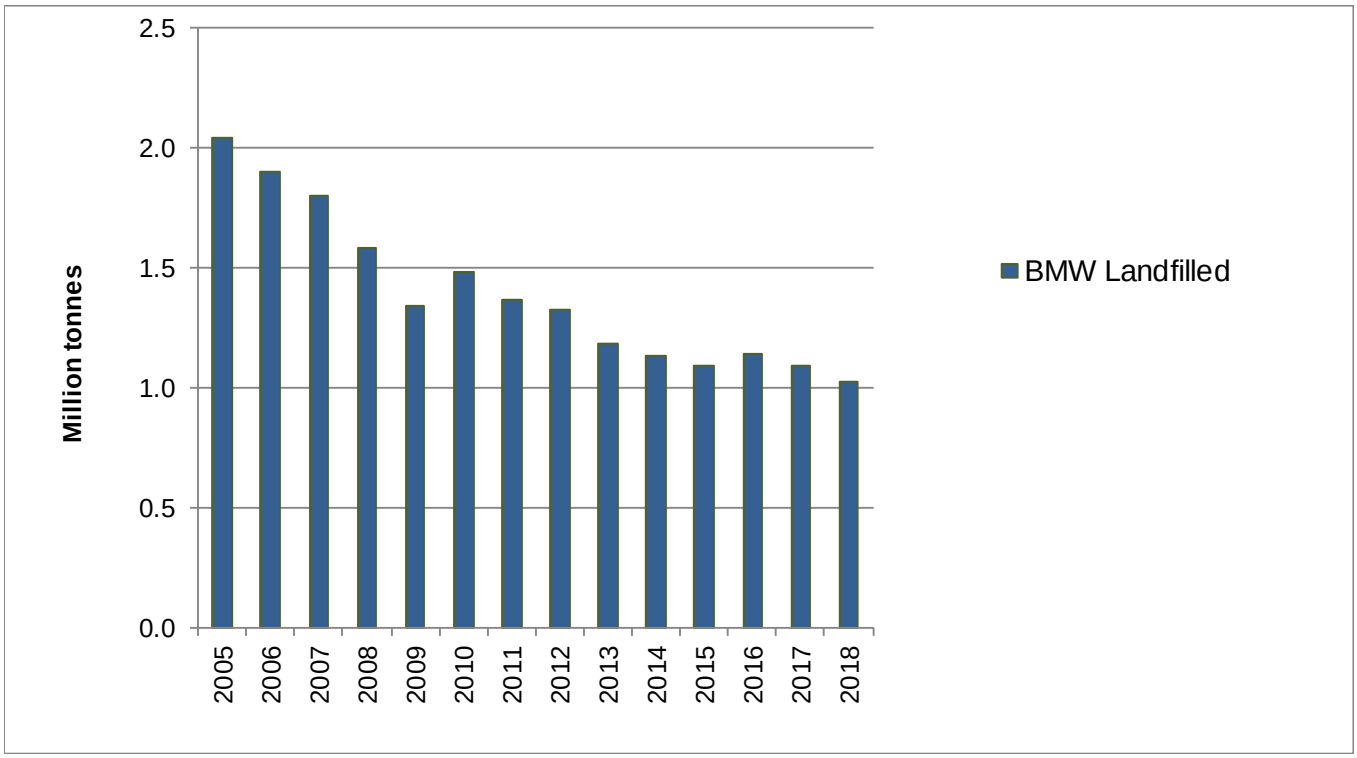


Table 4. BMW landfilled in Scotland 2005 – 2018

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	1,363,516
2012	1,327,242
2013	1,182,064
2014	1,136,865
2015	1,095,158
2016	1,140,387
2017	1,090,404
2018	1,023,364

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.

Revision to 2017 waste landfilled in Scotland data since the last statistical publication in September 2018 are shown in Table 5 below. All revised data in this publication is due to waste operators submitting revised permitted waste site returns.

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 – the biodegradable fraction of Municipal Waste - waste that is capable of undergoing anaerobic or aerobic decomposition, such as; food and garden waste; and paper and cardboard. It is calculated by multiplying the Municipal waste tonnes by the biodegradability factor listed in Table 6 below.

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 Waste – all wastes with EWC codes listed in Table 6 below.

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.

Table 5. Revisions to 2017 waste landfilled in Scotland by waste category[1]

Waste Category	Total Landfilled (tonnes)	
	Original	Revised
Acid, alkaline or saline wastes	0	0
Animal and mixed food waste	5,667	5,667
Animal faeces, urine and manure	61	61
Batteries and accumulators wastes	0	0
Chemical wastes	2,597	2,597
Combustion wastes	1,386	1,386
Common sludges	2,756	2,756
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	214	214
Discarded vehicles	0	0
Dredging spoils	63	63
Glass wastes	19,429	19,429
Health care and biological wastes	6,523	8,024
Household and similar wastes	1,225,186	1,222,957
Industrial effluent sludges	17,201	17,201
Metallic wastes, ferrous	0	0
Metallic wastes, mixed ferrous and non-ferrous	15	15
Metallic wastes, non-ferrous	0	0
Mineral waste from construction and demolition	97,834	97,834
Mineral wastes from waste treatment and stabilised wastes	275,364	275,364
Mixed and undifferentiated materials	33,920	34,671
Other mineral wastes	55,828	55,828
Paper and cardboard wastes	25	25
Plastic wastes	2,450	2,450
Rubber wastes	382	382
Sludges and liquid wastes from waste treatment	673	673
Soils	1,258,705	1,256,725
Sorting residues	814,321	813,569
Spent solvents	0	0
Textile wastes	2,864	2,864
Used oils	0	0
Vegetal wastes	4,304	4,304
Waste containing PCB	0	0
Wood wastes	297	297
Total	**3,828,065**	**3,825,356**

1. Cells shaded in grey represent revisions amounting to greater than 50 tonnes

Table 6. European Waste Catalogue (EWC) codes that comprise Municipal Waste[1]

EWC code	Percent biodegradability	EWC code	Percent biodegradability
20 01 01	1	20 03 99	0.63
20 01 02	0	19 01 02	0
20 01 08	1	19 01 11*	0
20 01 10	0.5	19 01 12	0
20 01 11	0.5	19 01 13*	0
20 01 13*	0	19 01 14	0
20 01 14*	0	19 01 15*	0
20 01 15*	0	19 01 16	0
20 01 17*	0	19 01 17*	0
20 01 19*	0	19 01 18	0
20 01 21*	0	19 01 99	0
20 01 23*	0	19 04 01	0
20 01 25	1	19 04 02*	0
20 01 26*	1	19 04 03*	0
20 01 27*	0	19 04 04	0
20 01 28	0	19 05 01	0.63
20 01 29*	0	19 05 03	0.63
20 01 30	0	19 06 03	0
20 01 31*	0	19 06 04	0.2
20 01 32	0	19 06 05	0
20 01 33*	0	19 06 06	0.2
20 01 34	0	19 12 01	1
20 01 35*	0	19 12 02	0
20 01 36	0	19 12 03	0
20 01 37*	1	19 12 04	0
20 01 38	1	19 12 05	0
20 01 39	0	19 12 06*	1
20 01 40	0	19 12 07	1
20 01 41	0	19 12 08	0.5
20 01 99	0.63	19 12 09	0
20 02 01	1	19 12 10	0.5
20 02 02	0	19 12 11*	0.5
20 02 03	0	19 12 12	0.63
20 03 01	0.63	15 01 01	1
20 03 02	0.63	15 01 02	0
20 03 03	0.51	15 01 05	0.74
20 03 04	0.2	15 01 06	0.63
20 03 06	0.1	15 01 07	0
20 03 07	0.5	15 01 09	0.5

[1] The fraction of 19 12 12 coded waste considered municipal is calculated on a site by site basis, accounting for municipal waste inputs that contribute to the formation of the 19 12 12 waste.