

## Waste landfilled in Scotland - 2019

This release provides a summary of all waste landfilled in Scotland for calendar year 2019. 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– 2019 calendar year

- The total quantity of waste landfilled in Scotland in 2019 was 3.00 million tonnes, a reduction of 735,807 tonnes (20%) from 2018 and a reduction of 4.05 million tonnes (57%) from 2005.
- The reduction was largely due to the amount of Household and similar wastes landfilled, which fell by 36% from 1.19 million tonnes in 2018 to 0.76 million tonnes in 2019. This reduction is consistent with an increase in the management of these wastes by incineration, and corresponds to several new Scottish municipal waste incinerators becoming fully operational throughout this period.
- The top three categories of waste landfilled in 2019 were Soils (1.17 million tonnes, 39% of total), Household and similar wastes (0.76 million tonnes, 25% of total) and Sorting residues (0.67 million tonnes, 22% of total)
- The amount of biodegradable municipal waste (BMW – the biodegradable component of Municipal Waste) disposed to landfill was 0.70 million tonnes, a decrease of 324,486 tonnes (32%) from 2018. This is the first time that it has been under one million tonnes.

Summary data tables are also available to download in Excel format on [SEPA's web site](#).

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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>.

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**Table 1. Waste landfilled in Scotland – Summary data 2019**

<b>Waste Category</b>	<b>Total waste landfilled (tonnes)</b>
Acid, alkaline or saline wastes	0
Animal and mixed food waste	6,329
Animal faeces, urine and manure	72
Batteries and accumulators wastes	0
Chemical wastes	1,209
Combustion wastes	4
Common sludges	4,420
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	509
Discarded vehicles	0
Dredging spoils	73
Glass wastes	9,456
Health care and biological wastes	9,290
Household and similar wastes	756,722
Industrial effluent sludges	20,467
Metallic wastes, ferrous	39
Metallic wastes, mixed ferrous and non-ferrous	51
Metallic wastes, non-ferrous	0
Mineral waste from construction and demolition	25,905
Mineral wastes from waste treatment and stabilised wastes	234,959
Mixed and undifferentiated materials	45,082
Other mineral wastes	31,318
Paper and cardboard wastes	39
Plastic wastes	1,834
Rubber wastes	90
Sludges and liquid wastes from waste treatment	6,922
Soils	1,173,991
Sorting residues	670,443
Spent solvents	0
Textile wastes	844
Used oils	0
Vegetal wastes	4,528
Waste containing PCB	0
Wood wastes	78
<b>Total</b>	<b>3,004,674</b>

## Data and trends

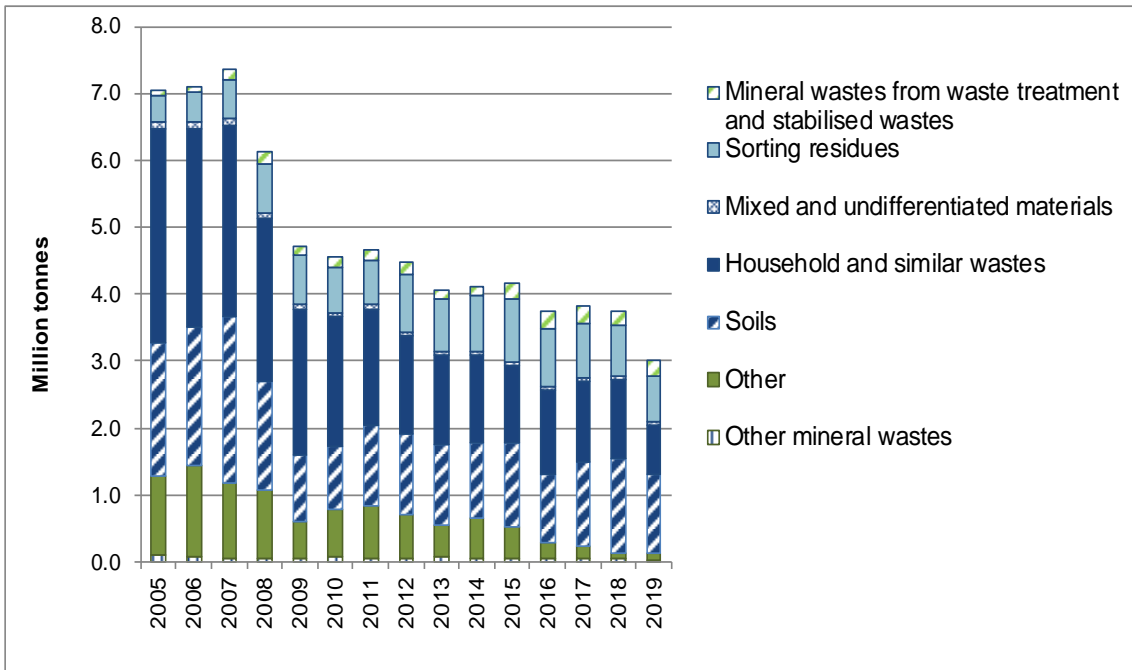
### Waste Landfilled in Scotland

- In 2019, 3.00 million tonnes of waste was disposed to landfill in Scotland across 46 permitted landfill sites. This was a reduction of 735,807 tonnes (20%) from 2018.
- The reduction was primarily due to the amount of Household and similar wastes landfilled, which fell by 36% from 1.19 million tonnes in 2018 to 0.76 million tonnes in 2019. This reduction is consistent with an increase Household and similar wastes incinerated<sup>1</sup>, and corresponds to several new Scottish municipal waste incinerators becoming fully operational throughout this period. This waste category includes waste generated by businesses as well as households. It includes refuse from regular waste collections provided by both local authorities and other contractors.
- The top three categories of waste landfilled in Scotland in 2019 were Soils (1.17 million tonnes, 39% of total), Household and similar wastes (0.76 million tonnes, 25% of total) and Sorting residues (0.67 million tonnes, 22% of total) as depicted in Figure 1 below.
- The amount of waste landfilled has generally in Scotland has decreased steadily since 2009 (see Figure 1 below)
- As shown in Figure 2 and Table 3 below, 40,999 tonnes of hazardous waste were disposed to landfill in Scotland in 2019, accounting for 1.4% of all waste landfilled. Just over half of the hazardous waste landfilled was Other mineral wastes (21,939 tonnes, 54% of total), which primarily comprised insulating materials such as asbestos.
- Between 2005 and 2012, soils comprised between 63% and 76% of the total hazardous waste disposed to landfill. From 2013 onwards, that percentage has dropped, and in 2019 comprised 15% (6,191 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.

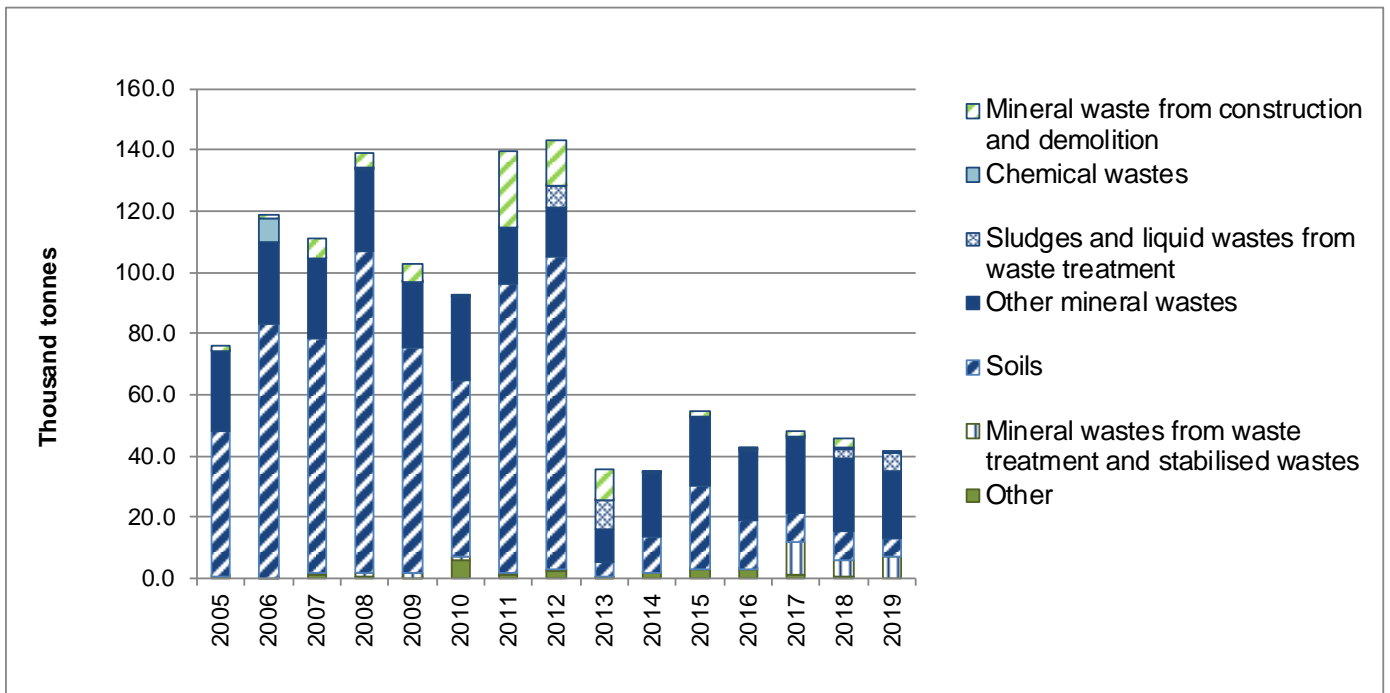
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<sup>1</sup> For statistical information about waste incinerated in Scotland, refer to the 2019 Waste incinerated in Scotland official statistics available at <https://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/waste-data-for-scotland/>

**Figure 1. Waste disposed to landfill in Scotland by waste category 2005 - 2019**



**Figure 2. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2019**



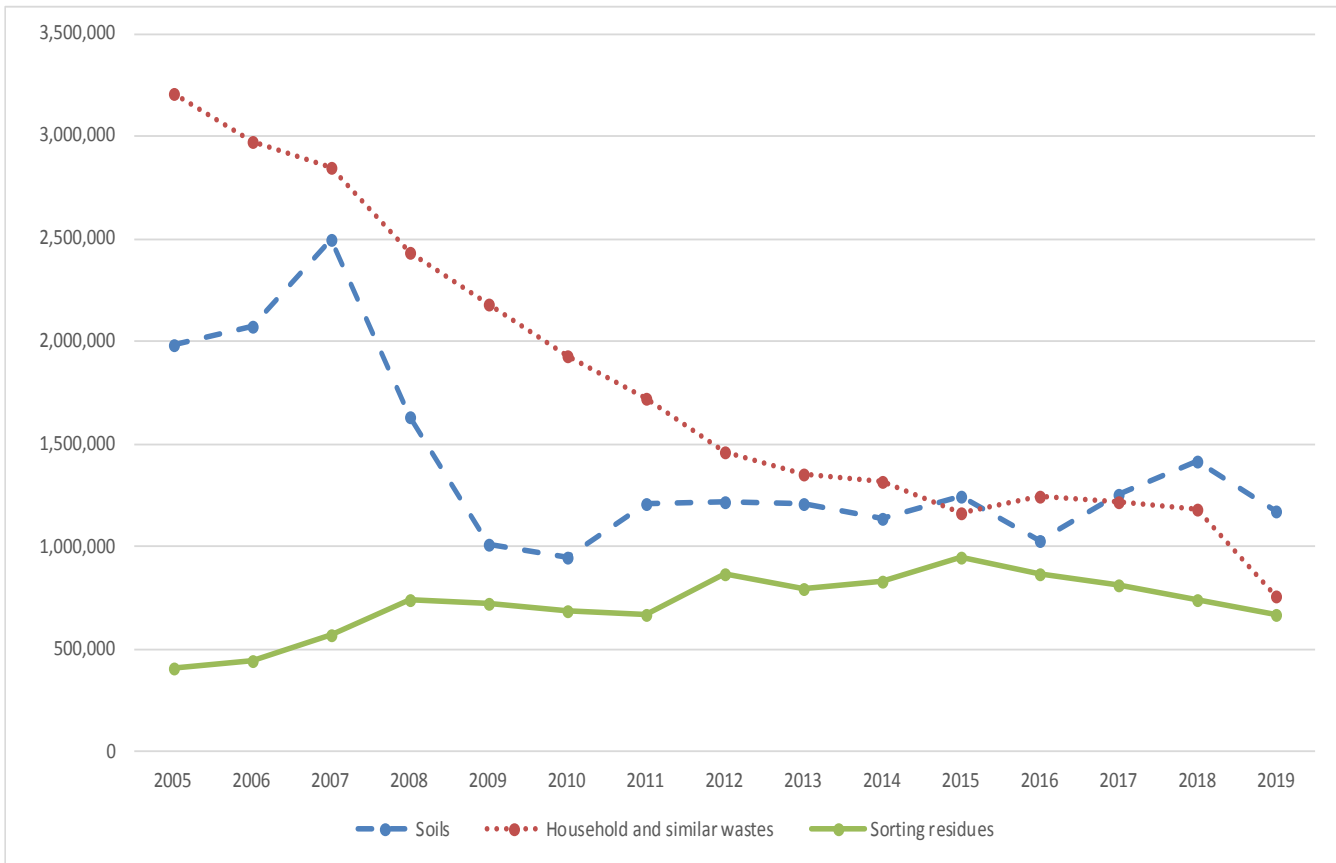
**Table 2. Waste disposed to landfill in Scotland by waste category 2005 - 2019**

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)	2019 (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	1,173,991
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	756,722
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	670,443
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	234,959
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	45,082
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	31,318
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	92,158
<b>Total</b>	<b>7,054,739</b>	<b>7,107,813</b>	<b>7,364,069</b>	<b>6,129,843</b>	<b>4,706,701</b>	<b>4,552,968</b>	<b>4,670,791</b>	<b>4,481,545</b>	<b>4,073,122</b>	<b>4,118,622</b>	<b>4,174,250</b>	<b>3,735,979</b>	<b>3,825,356</b>	<b>3,740,480</b>	<b>3,004,674</b>

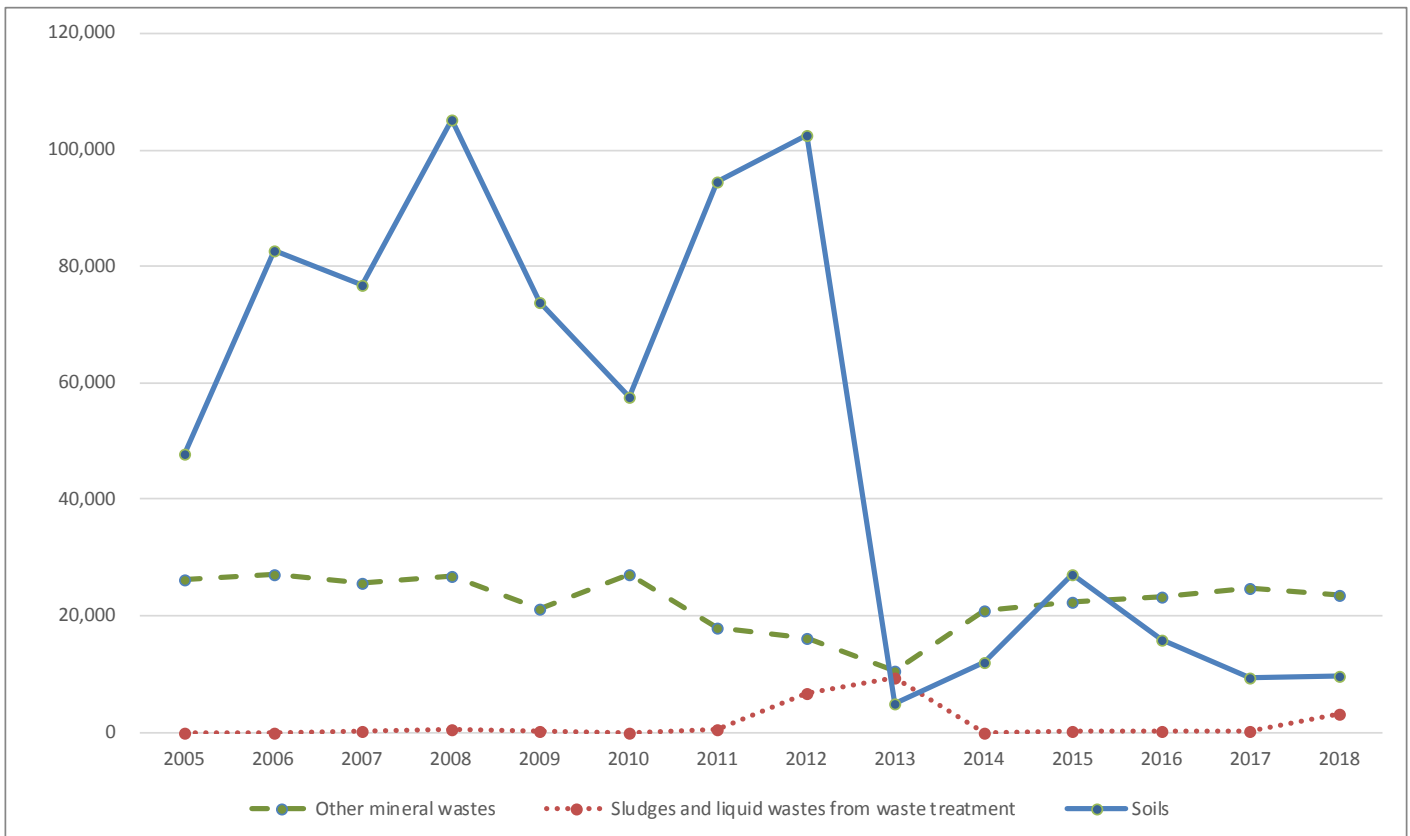
**Table 3. Hazardous waste disposed to landfill in Scotland by waste category 2005 – 2019**

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)	2019 (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	21,939
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	7,033
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	6,191
Sludges and liquid wastes from waste treatment	0	0	205	428	137	0	357	6,596	9,440	3	120	128	45	3,094	5,610
Chemical wastes	3	7,842	135	253	112	362	126	36	32	19	17	7	14	327	189
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	38
Other	245	85	1,138	746	11	5,706	777	2,165	55	1,678	2,647	2,579	1,165	557	0
<b>Total</b>	<b>76,084</b>	<b>118,534</b>	<b>110,947</b>	<b>138,970</b>	<b>103,042</b>	<b>92,344</b>	<b>139,534</b>	<b>143,395</b>	<b>35,572</b>	<b>34,807</b>	<b>54,525</b>	<b>42,759</b>	<b>47,817</b>	<b>45,913</b>	<b>40,999</b>

**Figure 3. Disposal of selected wastes to landfill in Scotland 2005 - 2019**



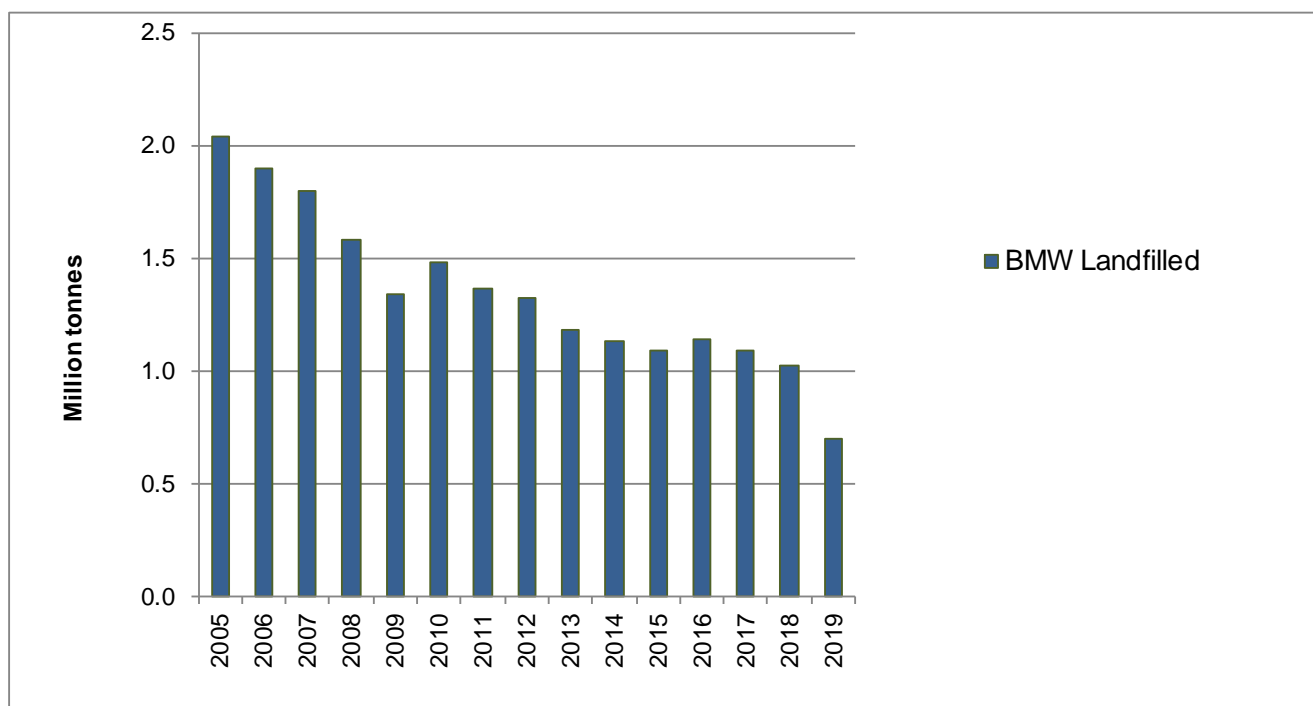
**Figure 4. Disposal of selected hazardous wastes to landfill in Scotland 2005 - 2019**



## 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 5 on Page 11.
- BMW is the fraction of municipal waste which will degrade, giving rise to methane emissions over time when landfilled. It should be noted that this measure differs from that for the 2025 BMW landfill ban. The 2025 landfill ban applies to the whole amount of waste containing BMW, not just the BMW fraction.
- In 2019, 0.70 million tonnes of BMW were disposed to landfill in Scotland (see Figure 5 below). This was a decrease of 324,486 tonnes (32%) from 2018. The large reduction is due to the decrease by 430,463 tonnes of Household and similar wastes landfilled (see Figure 1 on page 4 above). These wastes primarily comprise EWC code 20 03 01 which has a high biodegradability factor of 63% (see Table 5 on page 11).
- Scotland has an EU based target to reduce the quantity of BMW disposed to landfill in Scotland to less than 1.26 million tonnes by 2020. Since 2013 Scotland has met this target.
- In 2019, the top two categories of BMW disposed to landfill were EWC 20 03 01 (mixed municipal waste) which comprised 63% of the total and EWC 19 12 12 (Other non-hazardous wastes from mechanical treatment of waste) which comprised 30% of the total (data not shown).

**Figure 5. BMW landfilled in Scotland 2005 – 2019**



**Table 4. BMW landfilled in Scotland 2005 – 2019**

<b>Year</b>	<b>BMW Landfilled</b>
<b>2005</b>	2,039,328
<b>2006</b>	1,899,423
<b>2007</b>	1,803,518
<b>2008</b>	1,582,285
<b>2009</b>	1,344,562
<b>2010</b>	1,484,357
<b>2011</b>	1,363,516
<b>2012</b>	1,327,242
<b>2013</b>	1,182,064
<b>2014</b>	1,136,865
<b>2015</b>	1,095,158
<b>2016</b>	1,140,387
<b>2017</b>	1,090,404
<b>2018</b>	1,023,292
<b>2019</b>	698,805



# 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](mailto: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.

There were no revisions to 2018 waste landfilled in Scotland data since the last statistical publication.

## 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 5 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 5 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, industrial, and construction and demolition sources as well as from household sources.

**Waste landfilled** –WFAS that is disposed to landfill.

**Table 5. European Waste Catalogue (EWC) codes that comprise Municipal Waste<sup>2</sup>**

EWC code	Biodegradability factor	EWC code	Biodegradability factor
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

<sup>2</sup> The fraction of 19 12 12 coded waste considered municipal waste is calculated on a site by site basis, in order to account for municipal waste inputs that contribute to the formation of the 19 12 12 waste. An EWC code with an asterisk is a hazardous waste.