Waste incinerated in Scotland - 2018

This release provides a summary of all waste incinerated in Scotland for calendar year 2018. It excludes Scottish waste incinerated 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 incinerated in Scotland – 2018 calendar year

- The total quantity of waste incinerated in Scotland across 21 permitted incineration facilities in 2018 was 711,504 tonnes. This was an increase of 3,340 tonnes (0.5%) from 2017, and an increase of 301,445 tonnes (74%) from 2011.
- While the tonnage of Wood waste incinerated in Scotland fell by 16% (76,809 tonnes), there were significant percentage increases for the incineration of Sorting residues (+165% 19,815 tonnes), Rubber (+118%, 472 tonnes),household and similar waste (+51% 48,310 tonnes) and Industrial effluent sludges (+45%, 4,164 tonnes). For all four of these waste categories, the tonnage of waste incinerated in Scotland was higher in 2018 than previous years.
- The majority (>99%) of waste incinerated is non-hazardous waste.

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 incinerated in Scotland – Summary data 2018

Waste Category	Total incinerated (tonnes)
Acid, alkaline or saline wastes	0
Animal and mixed food waste	398
Animal faeces, urine and manure	85,320
Batteries and accumulators wastes	0
Chemical wastes	145
Combustion wastes	0
Common sludges	0
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	0
Discarded vehicles	0
Dredging spoils	0
Glass wastes	0
Health care and biological wastes	1,314
Household and similar wastes	142,946
Industrial effluent sludges	13,430
Metallic wastes, ferrous	0
Metallic wastes, mixed ferrous and non-ferrous	0
Metallic wastes, non-ferrous	0
Mineral waste from construction and demolition	0
Mineral wastes from waste treatment and stabilised wastes	0
Mixed and undifferentiated materials	1
Other mineral wastes	0
Paper and cardboard wastes	2
Plastic wastes	0
Rubber wastes	17,511
Sludges and liquid wastes from waste treatment	2,307
Soils	0
Sorting residues	31,858
Spent solvents	0
Textile wastes	0
Used oils	0
Vegetal wastes	0
Waste containing PCB	0
Wood wastes	416,272
Total	**711,504**

Data and Trends

Waste Incinerated

- In 2018, 711,504 tonnes of waste were incinerated in Scotland. This was an increase of 3,340 tonnes (0.5%) from 2017. This increase is consistent with the longer term incineration trend, with 301,445 tonnes (74%) more waste incinerated in Scotland than in 2011 (see Figure 1 below).
- Wood wastes was the largest category of waste incinerated in Scotland in 2018 (416,272 tonnes), comprising over half (59%) of all waste incinerated. Of the Wood wastes incinerated, 42% originated in the UK outwith Scotland (data not shown). This compares with 46.7% that originated outwith Scotland in 2011. The vast majority of the 301,445 tonnes increase in waste incinerated between 2011 and 2018 is mainly due to Wood wastes, which increased by 321,795 tonnes during the same period. A significant proportion (42%) of the Wood wastes incinerated are imported from other UK countries.
- There was 142,946 tonnes of Household and similar wastes incinerated in Scotland in 2018 (see Figure 3 below), which was 20% of all waste incinerated and an increase of 51% (48,310 tonnes) from 2017. All Household and similar wastes were incinerated in four Scottish municipal waste incinerators, and three quarters of the increase since 2017 was recorded from two municipal waste incinerators that first operated in 2018. The increase in incineration of Municipal wastes such as Household and similar wastes is the beginning of an increasing trend as Scottish local authorities and waste management companies divert waste from landfill ahead of the ban of biodegradable municipal waste to Scottish landfills in 2021.
- In 2018, the majority of the waste incinerated in Scotland was recovered by co-incineration (75%), with the remaining 25% incinerated by disposal. There was no incineration by recovery in 2018 as there are currently no municipal waste incinerators in Scotland that are accredited to the R1 energy efficiency standard.
- There were 2,572 tonnes of hazardous waste incinerated in Scotland in 2018 (see Figure 3 below), which amounted to 0.4% of all waste incinerated in Scotland and an increase of 383% (2,040 tonnes) from 2017. The majority of this increase was for one site which incinerated 2,307 tonnes of liquid combustible wastes containing dangerous substances (EWC 19 02 08*) in 2018, but only 112 tonnes in 2017.

Figure 1. Waste incinerated in Scotland by waste category 2011 - 2018

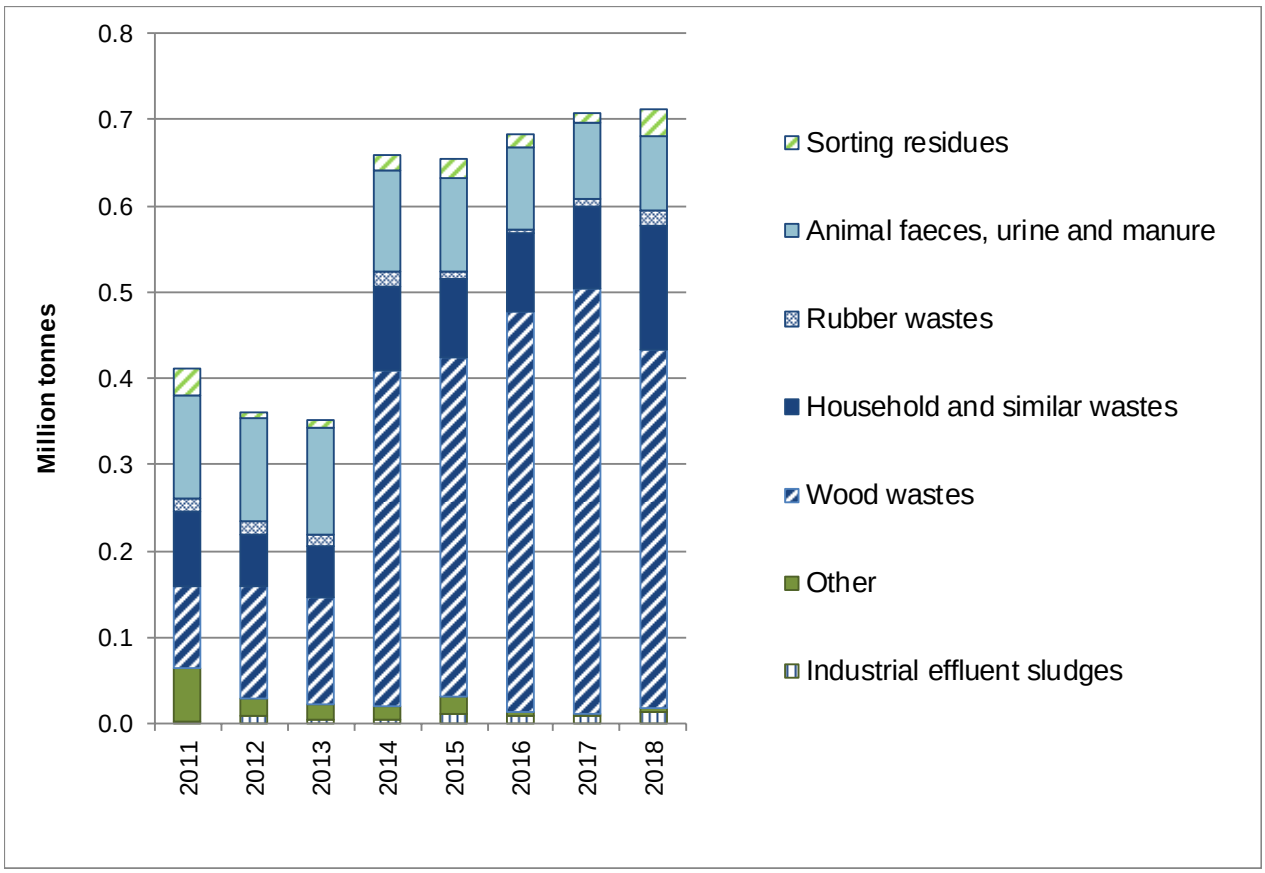


Table 2. Waste incinerated in Scotland by waste category 2011 – 2018

Waste Category	Year							
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)	2017 (tonnes)	2018 (tonnes)
Wood wastes	94,477	130,449	123,121	388,394	394,199	464,310	493,081	416,272
Household and similar wastes	87,693	58,759	59,034	98,041	90,837	90,646	94,636	142,946
Animal faeces, urine and manure	119,309	120,509	123,748	117,431	108,194	94,685	89,009	85,320
Sorting residues	29,648	6,270	7,578	17,836	22,912	16,582	12,043	31,858
Rubber wastes	15,235	14,539	15,025	16,183	8,594	2,940	8,039	17,511
Industrial effluent sludges	2,404	8,243	5,191	5,295	11,542	9,991	9,266	13,430
Other	61,293	21,364	17,448	15,326	18,518	4,071	2,090	4,167
Total	**410,059**	**360,132**	**351,145**	**658,506**	**654,797**	**683,225**	**708,164**	**711,504**

Figure 2. Waste incinerated in Scotland by incineration method 2011 - 2018

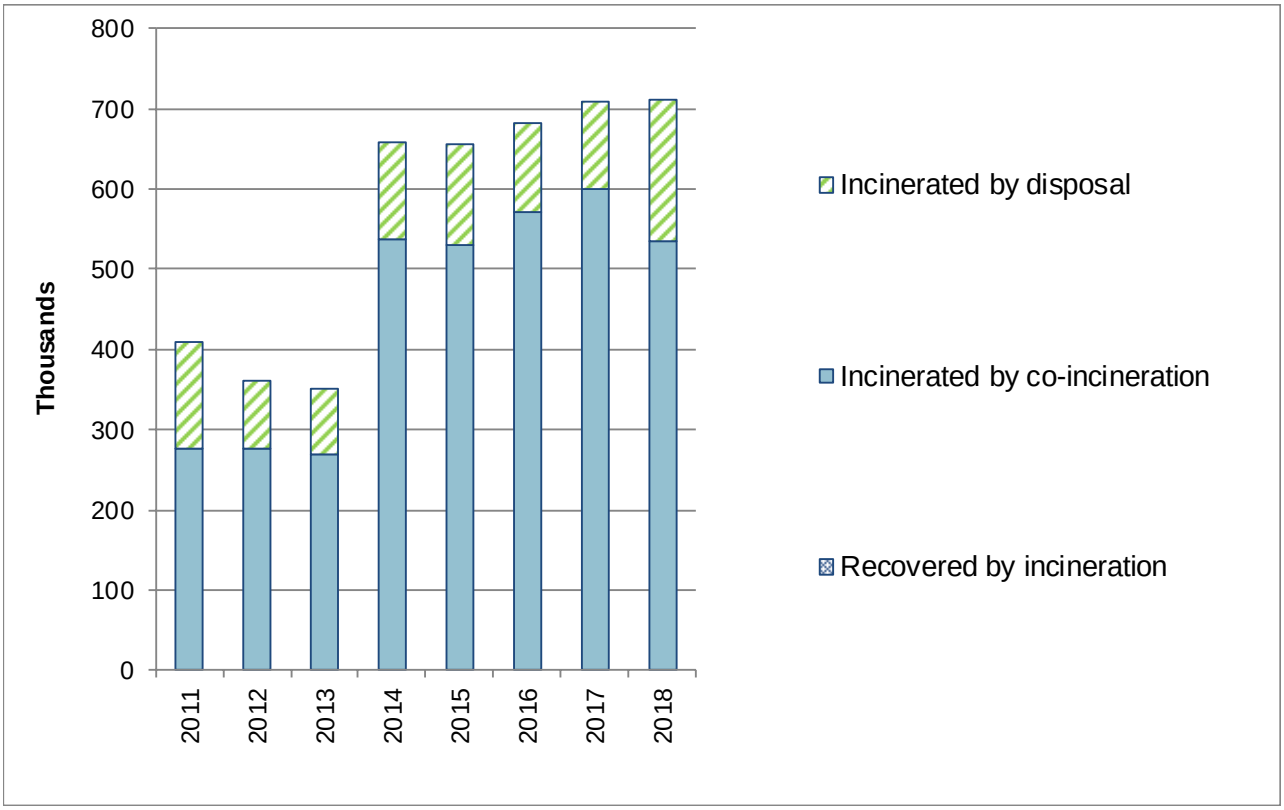


Table 3. Waste incinerated in Scotland by incineration method 2011 - 2018

Year	Recovered by incineration	Incinerated by co-incineration	Incinerated by disposal	Total
2011	0	276,869	133,190	410,059
2012	0	276,899	83,234	360,132
2013	0	268,295	82,850	351,145
2014	0	537,817	120,689	658,506
2015	0	529,303	125,494	654,797
2016	0	572,008	111,217	683,225
2017	0	598,944	109,220	708,164
2018	0	534,357	177,147	711,504

Figure 3. Hazardous waste incinerated in Scotland 2011 – 2018

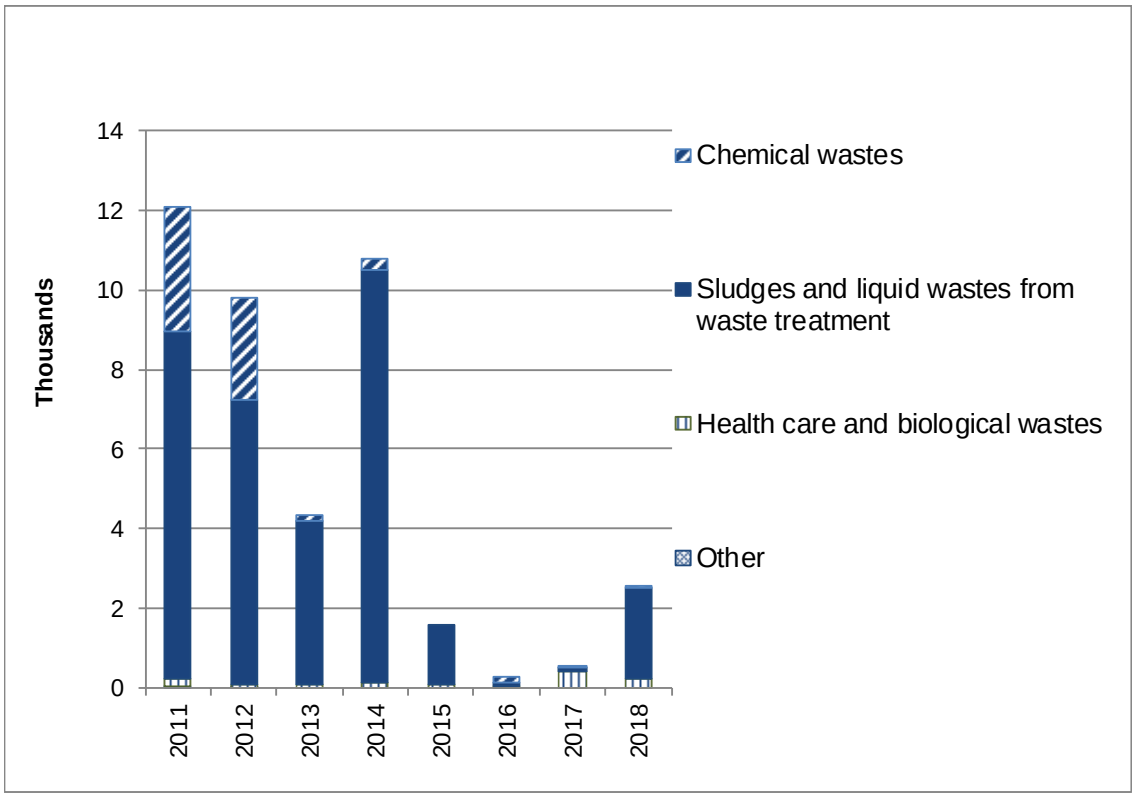


Table 4. Hazardous waste incinerated in Scotland 2011 – 2018

Waste Category	Year							
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)	2017 (tonnes)	2018 (tonnes)
Sludges and liquid wastes from waste treatment	8,745	7,150	4,082	10,410	1,476	82	112	2,307
Health care and biological wastes	172	90	94	107	82	49	387	207
Chemical wastes	3,134	2,567	172	244	0	114	33	58
Other	52	3	0	0	0	0	0	0
Total	**12,103**	**9,811**	**4,348**	**10,761**	**1,558**	**245**	**532**	**2,572**

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.

The 2017 incineration dataset has been revised downwards from 766,574 tonnes to 708,164 tonnes of waste incinerated. The majority of this is due to one site which mistaken recorded incorrect units in the data return. The revised 2017 dataset by waste category is depicted in Table 5 below on page 9.

Methodology

Data is taken from licensed/permitted site returns or reports 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

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)

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

Waste incinerated by co-incineration –wastes used principally as a fuel and incinerated at an incineration facility in which the main purpose is the generation of energy or production or material products (e.g. cement) and which uses waste as an additional fuel.

Waste incinerated by disposal - wastes incinerated at an incineration facility where the energy efficiency has not been demonstrated to meet the R1 criteria specified in the EU Waste Framework Directive (Directive 2008/98/EC).

Waste incinerated by recovery - wastes used principally as a fuel to generate energy and incinerated at an incineration facility where the energy efficiency has been demonstrated to meet the R1 energy efficiency criteria specified in the EU Waste Framework Directive (Directive 2008/98/EC).

Waste recovered by incineration - wastes incinerated by co-incineration and waste incinerated by recovery.

Waste incinerated –WFAS that is incinerated in Scotland including waste incineration by disposal and waste incineration by recovery.

Table 5. Revisions to 2017 waste incinerated in Scotland by waste category

Waste Category	Waste Incinerated in 2017 (tonnes)	
	Original	Revised
Acid, alkaline or saline wastes	0	0
Animal and mixed food waste	259	259
Animal faeces, urine and manure	89,009	89,009
Batteries and accumulators wastes	0	0
Chemical wastes	73	73
Combustion wastes	0	0
Common sludges	0	0
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	0	0
Discarded vehicles	0	0
Dredging spoils	0	0
Glass wastes	0	0
Health care and biological wastes	1,360	1,360
Household and similar wastes	94,636	94,636
Industrial effluent sludges	9,266	9,266
Metallic wastes, ferrous	0	0
Metallic wastes, mixed ferrous and non-ferrous	0	0
Metallic wastes, non-ferrous	0	0
Mineral waste from construction and demolition	0	0
Mineral wastes from waste treatment and stabilised wastes	0	0
Mixed and undifferentiated materials	1	1
Other mineral wastes	0	0
Paper and cardboard wastes	2	2
Plastic wastes	25	25
Rubber wastes	65,855	8,039
Sludges and liquid wastes from waste treatment	705	112
Soils	0	0
Sorting residues	12,043	12,043
Spent solvents	0	0
Textile wastes	0	0
Used oils	0	0
Vegetal wastes	258	258
Waste containing PCB	0	0
Wood wastes	493,081	493,081
Total	**766,574**	**708,164**

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