Waste incinerated in Scotland - 2017

This release provides a summary of all waste incinerated in Scotland for calendar year 2017. 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 – 2017 calendar year

- The total quantity of waste incinerated in Scotland across 19 permitted incineration facilities in 2017 was 766,574 tonnes. This was an increase of 83,347 tonnes (12.2%) from 2016, and an increase of 356,515 tonnes (86.9%) from 2011.

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 452565.

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 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: http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html.

Table 1. Hazardous and non-hazardous waste incinerated in Scotland in 2017

Waste Category	Non-hazardous waste incinerated (tonnes)	Hazardous waste incinerated (tonnes)	Total waste incinerated (tonnes)
Acid, alkaline or saline wastes	0	0	0
Animal and mixed food waste	259	0	259
Animal faeces, urine and manure	89,009	0	89,009
Batteries and accumulators wastes	0	0	0
Chemical wastes	40	33	73
Combustion wastes	0	0	0
Common sludges	0	0	0
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	0	0	0
Discarded vehicles	0	0	0
Dredging spoils	0	0	0
Glass wastes	0	0	0
Health care and biological wastes	973	387	1,360
Household and similar wastes	94,636	0	94,636
Industrial effluent sludges	9,266	0	9,266
Metallic wastes, ferrous	0	0	0
Metallic wastes, mixed ferrous and non-ferrous	0	0	0
Metallic wastes, non-ferrous	0	0	0
Mineral waste from construction and demolition	0	0	0
Mineral wastes from waste treatment and stabilised wastes	0	0	0
Mixed and undifferentiated materials	1	0	1
Other mineral wastes	0	0	0
Paper and cardboard wastes	2	0	2
Plastic wastes	25	0	25
Rubber wastes	65,855	0	65,855
Sludges and liquid wastes from waste treatment	0	705	705
Soils	0	0	0
Sorting residues	12,043	0	12,043
Spent solvents	0	0	0
Textile wastes	0	0	0
Used oils	0	0	0
Vegetal wastes	258	0	258
Waste containing PCB	0	0	0
Wood wastes	493,081	0	493,081
Total	**765,449**	**1,125**	**766,574**

Data and Trends

Waste Incinerated

- In 2017, 766,574 tonnes of waste were incinerated in Scotland. This was an increase of 83,347 tonnes (12.2%) from 2016. The increase was consistent with the longer term incineration trend, with 356,515 tonnes (86.9%) more waste incinerated in Scotland than in 2011 (see Figure 1 below).
- The waste category with the largest contribution to this change was Rubber wastes, with an increase of 62,915 tonnes (2139.9%) to a total of 65,855 tonnes incinerated in 2017. All of the Rubber wastes incinerated originated in Scotland, and this increase coincides with a change in waste legislation in Scotland in which exemptions from waste licencing for waste tyres were removed in 2017.
- Wood wastes was the largest category of waste incinerated in Scotland in 2017 (493,081 tonnes, comprising 64.3% of all waste incinerated) followed by Animal faeces, urine and manure (89,009 tonnes, 11.6%) and Household and similar wastes (94,636 tonnes, 12.3%).
- In 2017, 45.5% of Wood wastes incinerated in Scotland originated in the UK outwith Scotland (data not shown). This compares with 4.1% that originated outwith Scotland in 2011.
- The amount of Household and similar wastes incinerated has been generally steady from 2011 through 2017, although a dip in these wastes incinerated in 2012 and 2013 (see Figure 1 below) was due to the temporary closure of the Baldovie Waste to Energy Plant in Dundee during this period
- In 2017, the majority of the waste incinerated in Scotland was recovered by co-incineration (85.8%), with the remainder incinerated by disposal (14.2%, see Figure 2 below). The waste recovered by co-incineration was 2.0 percentage points higher than the 83.7% recovered by co-incineration in 2016, and 18.2 percentage points higher than the 67.5% of waste recovered by co-incineration in 2011. There was no incineration by recovery in 2017 as there are currently no municipal waste incinerators in Scotland that are accredited to the R1 energy efficiency standard.
- There was 1,125 tonnes of hazardous waste incinerated in Scotland in 2017 (see Figure 2 below), which amounts to 0.15% of all waste incinerated in Scotland. The majority of the hazardous waste incinerated was of Sludges and liquid wastes from waste treatment (705 tonnes) and Chemical wastes (33 tonnes) .
- The amount of hazardous waste incinerated in 2017was higher than 2016 (1,125 tonnes compared with 245 tonnes). The majority of this increase was one site which incinerated 705 tonnes of liquid combustible wastes containing dangerous substances (EWC 19 02 08*) in 2017 but only 82 tonnes in 2016, due to a reduced amount of this waste produced due to production issues.

Figure 1. Waste incinerated in Scotland by waste category 2011 - 2017

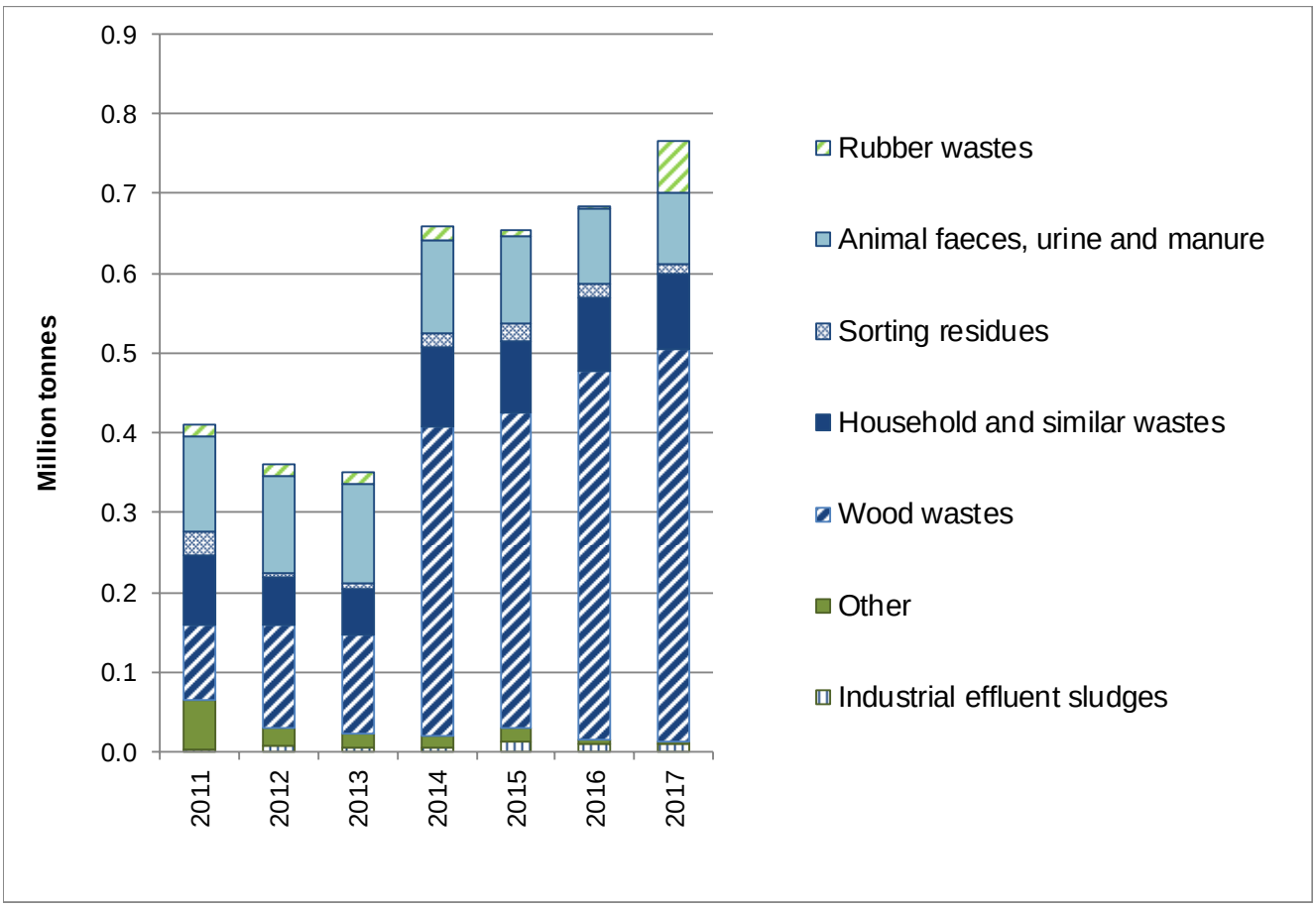


Table 2. Waste incinerated in Scotland by waste category 2011 - 2017

Waste Category	Year						
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)	2017 (tonnes)
Wood wastes	94,477	130,449	123,121	388,394	394,199	464,311	493,081
Animal faeces, urine and manure	119,309	120,509	123,748	117,431	108,194	94,685	89,009
Household and similar wastes	87,693	58,759	59,034	98,041	90,837	90,646	94,636
Rubber wastes	15,235	14,539	15,025	16,183	8,594	2,940	65,855
Sorting residues	29,648	6,270	7,578	17,836	22,912	16,582	12,043
Industrial effluent sludges	2,404	8,243	5,191	5,295	11,542	9,991	9,266
Other	61,293	21,364	17,448	15,326	18,518	4,071	2,683
Total	**410,059**	**360,132**	**351,145**	**658,506**	**654,797**	**683,226**	**766,574**

Figure 2. Waste incinerated in Scotland by incineration method 2011 - 2017

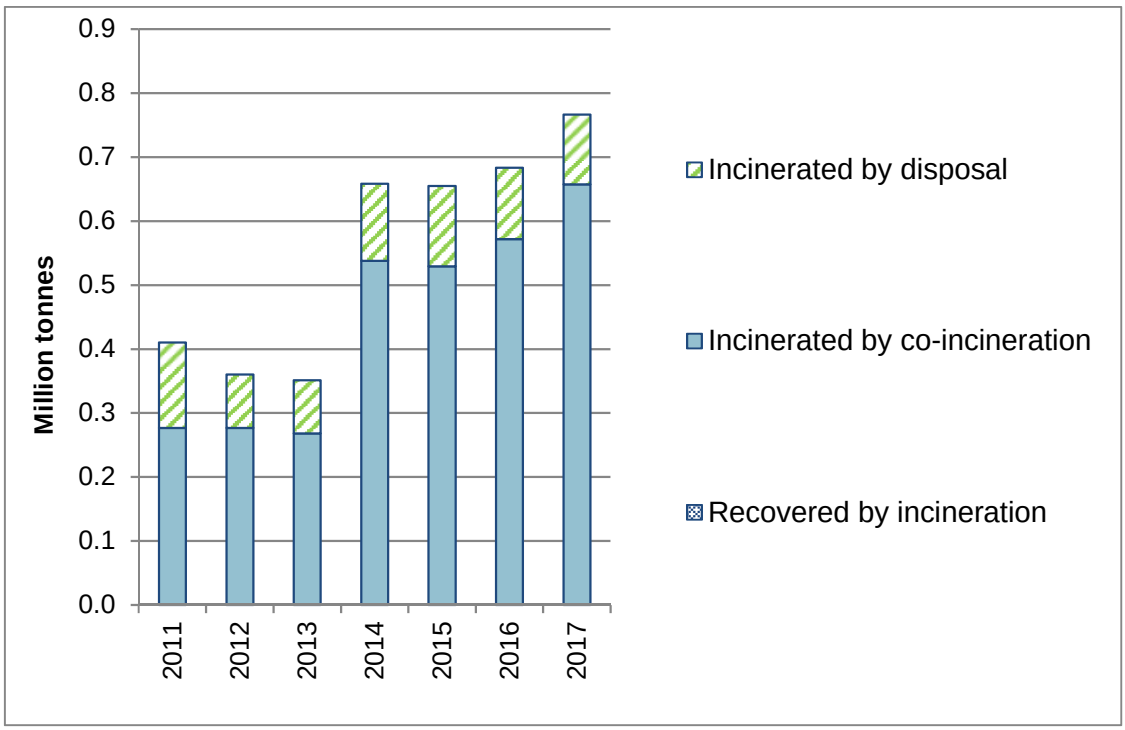


Table 3. Waste incinerated in Scotland by incineration method 2011 - 2017

Year	Recovered by incineration	Incinerated by co-incineration	Incinerated by disposal
2011	0	276,869	133,190
2012	0	276,899	83,234
2013	0	268,295	82,850
2014	0	537,817	120,689
2015	0	529,303	125,494
2016	0	572,009	111,218
2017	0	657,352	109,221

Figure 3. Hazardous waste incinerated in Scotland 2011 – 2017

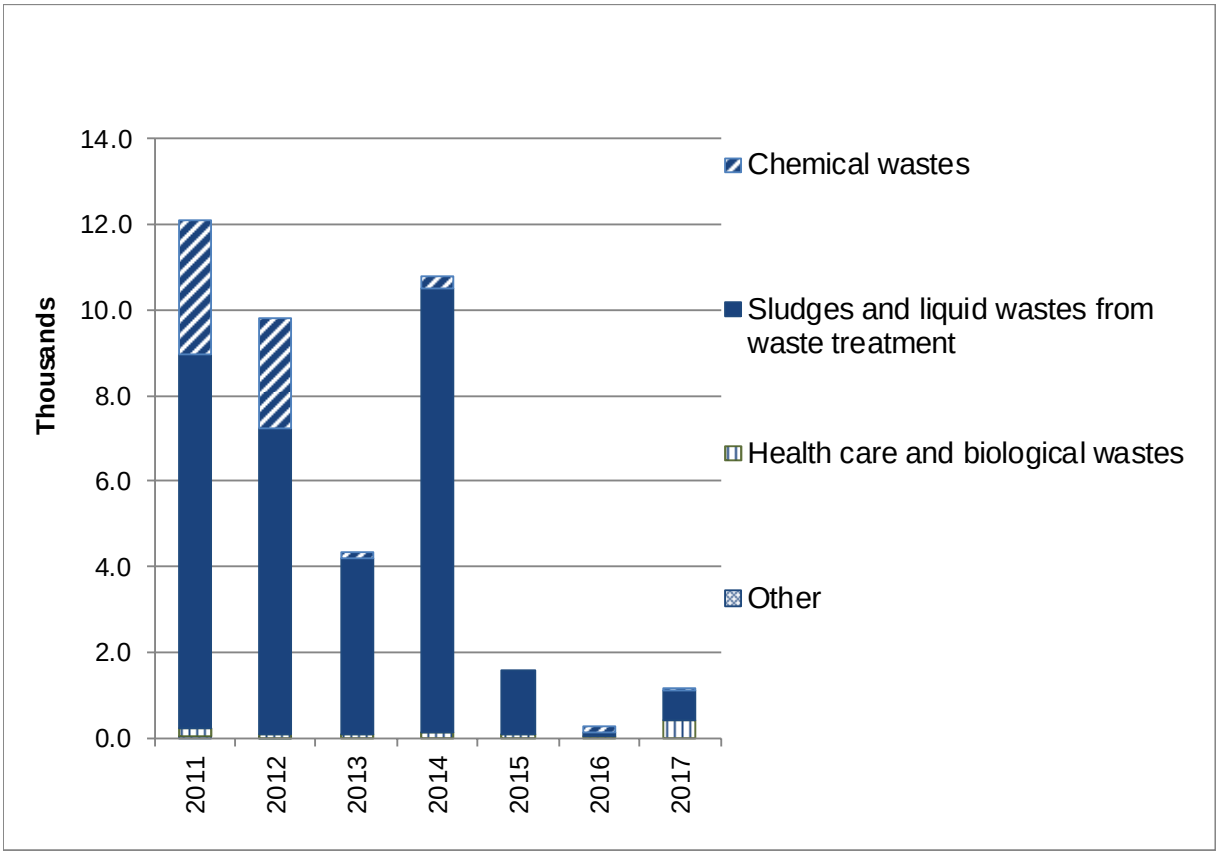


Table 4. Hazardous waste incinerated in Scotland 2011 – 2017

Waste Category	Year						
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)	2015 (tonnes)	2016 (tonnes)	2017 (tonnes)
Sludges and liquid wastes from waste treatment	8,745	7,150	4,082	10,410	1,476	82	705
Health care and biological wastes	172	90	94	107	82	49	387
Chemical wastes	3,134	2,567	172	244	0	114	33
Other	52	3	0	0	0	0	0
Total	**12,103**	**9,811**	**4,348**	**10,761**	**1,558**	**245**	**1,125**

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 2016 incineration dataset has been revised upwards from 683,112 tonnes to 683,226 tonnes of waste incinerated in Scotland in 2016. The difference is due to a revision of the Chemical wastes incinerated, from the originally published zero tonnes to 114 tonnes.

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.