Scottish Household waste – summary data 2017

This release shows the 2017 calendar year summary of household waste data generated in Scotland and managed by or on behalf of Scottish local authorities. 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

Scottish Household waste – 2017 calendar year

- The total amount of household waste generated in Scotland was 2.46 million tonnes (Table 1) in 2017, a decrease of 38,153 tonnes (1.5%) from 2016.
- For 2017, the Scottish household waste recycling rate was 45.6%, an increase of 0.6 percentage points from the 45.0% (Table 1) rate achieved in 2016[1]. The amount of household waste recycled decreased by 2,801 tonnes to 1.12 million tonnes.
- The amount of Scottish household waste landfilled in 2017 was 1.11 million tonnes, a decrease of 24,848 tonnes (2.2%) from 2016, and a decrease of 346,831 tonnes (23.9%) since 2011. This is the sixth consecutive decrease in household waste landfilled since 2011.
- For the first time, in 2017 there was more Scottish waste recycled (1.12 million tonnes) than landfilled (1.11 million tonnes).
- The carbon impact is a measure of the whole-life carbon impacts of waste, from resource extraction and manufacturing emissions, right through to waste management emissions. The carbon impact of household waste generated and managed in 2017 was 5.86 million tonnes of carbon dioxide equivalent (TCO2e, Table 1), which is the equivalent to 1.08 TCO2e per person (Table 2). This was a decrease of 115,938 TCO2e (1.9%) from 2016, and a decrease of 904,491 TCO2e (13.4%) from 2011.

All of the data in this report is available in the Household Waste Discover Data tool on Scotland's Environment website. Annual household 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 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.

[1] The 2016 recycling rate has been revised downwards from 45.2% to 45.0%. Refer to Table 11, *Revisions to 2016 Waste Data.*

Table 1. Scottish Household waste generated and managed in 2017 - summary data

Local Authority	Generated (tonnes)	Recycled (tonnes)	*Percentage Recycled (%)*	Other diversion from landfill (tonnes)	*Percentage Other diversion from Landfill (%)*	Landfilled (tonnes)	*Percentage Landfilled (%)*	Carbon Impact (TCO2e)	*2016 Recycled (Percentage)*
Aberdeen City	87,787	38,568	*43.9*	17,594	*20.0*	31,624	*36.0*	*198,580*	*39.0*
Aberdeenshire	127,632	55,714	*43.7*	1,997	*1.6*	69,921	*54.8*	*325,283*	*43.5*
Angus	56,278	31,072	*55.2*	11,840	*21.0*	13,367	*23.8*	*115,900*	*56.7*
Argyll and Bute	50,437	19,536	*38.7*	7,323	*14.5*	23,578	*46.7*	*127,000*	*33.9*
City of Edinburgh	200,720	82,277	*41.0*	5,206	*2.6*	113,237	*56.4*	*507,553*	*44.6*
Clackmannanshire	27,201	16,196	*59.5*	2,867	*10.5*	8,138	*29.9*	*55,349*	*56.5*
Dumfries and Galloway	76,289	21,245	*27.8*	23,318	*30.6*	31,725	*41.6*	*220,022*	*22.1*
Dundee City	64,297	22,844	*35.5*	37,486	*58.3*	4,017	*6.2*	*154,653*	*33.6*
East Ayrshire	55,842	29,547	*52.9*	5,353	*9.6*	20,941	*37.5*	*119,536*	*53.3*
East Dunbartonshire	56,445	27,043	*47.9*	6,295	*11.2*	23,107	*40.9*	*130,755*	*48.5*
East Lothian	50,612	26,885	*53.1*	227	*0.4*	23,499	*46.4*	*112,099*	*51.8*
East Renfrewshire	47,564	31,937	*67.1*	1,480	*3.1*	14,146	*29.7*	*95,976*	*60.8*
Falkirk	74,651	41,728	*55.9*	8,504	*11.4*	24,419	*32.7*	*149,870*	*51.3*
Fife	178,478	97,546	*54.7*	12,146	*6.8*	68,786	*38.5*	*349,263*	*54.7*
Glasgow City	224,525	59,876	*26.7*	13,706	*6.1*	150,943	*67.2*	*680,071*	*25.2*
Highland	130,190	56,704	*43.6*	1,493	*1.1*	71,966	*55.3*	*321,198*	*44.5*
Inverclyde	27,565	15,771	*57.2*	1,528	*5.5*	10,265	*37.2*	*56,720*	*53.4*
Midlothian	42,725	22,049.1	*51.6*	1,819	*4.3*	18,857	*44.1*	*98,306*	*51.4*
Moray	51,090	29,517	*57.8*	0	*0.0*	21,573	*42.2*	*97,536*	*59.1*
Na h-Eileanan Siar	14,453	3,461	*23.9*	1,639	*11.3*	9,353	*64.7*	*38,652*	*24.1*
North Ayrshire	62,954	35,125	*55.8*	1,778	*2.8*	26,052	*41.4*	*137,512*	*55.3*
North Lanarkshire	156,813	62,037	*39.6*	7,765	*5.0*	87,011	*55.5*	*406,737*	*41.1*
Orkney Islands	10,798	1,980	*18.3*	4,855	*45.0*	3,325	*30.8*	*29,073*	*19.4*
Perth and Kinross	74,789	41,578	*55.6*	4,715	*6.3*	28,496	*38.1*	*141,124*	*54.7*
Renfrewshire	83,526	39,923	*47.8*	19,871	*23.8*	23,641	*28.3*	*195,536*	*48.5*
Scottish Borders	53,471	21,324	*39.9*	1,555	*2.9*	30,593	*57.2*	*134,667*	*39.0*
Shetland Islands	9,754	778	*8.0*	6,798	*69.7*	2,178	*22.3*	*31,975*	*7.9*
South Ayrshire	56,772	31,349	*55.2*	5,295	*9.3*	20,128	*35.5*	*126,084*	*49.9*
South Lanarkshire	151,740	71,753	*47.3*	0	*0.0*	79,987	*52.7*	*370,821*	*53.0*
Stirling	40,774	22,470	*55.1*	6,187	*15.2*	12,117	*29.7*	*84,605*	*54.7*
West Dunbartonshire	43,551	20,735	*47.6*	3,654	*8.4*	19,162	*44.0*	*104,858*	*48.5*
West Lothian	71,051	43,556	*61.3*	6,688	*9.4*	20,807	*29.3*	*145,935*	*48.5*
Total Scotland	**2,460,772**	**1,122,124**	***45.6***	**230,983**	***9.4***	**1,106,959**	***45.0***	***5,863,249***	***45.0***

Table 2. Scottish Household waste generated and managed per person in 2017 - summary data

Local Authority	Generated (tonnes per person)	Recycled (tonnes per person)	Other diversion from landfill (tonnes per person)	Landfilled (tonnes per person)	Carbon Impact (TCO2e per person)
Aberdeen City	0.38	0.17	0.08	0.14	0.87
Aberdeenshire	0.49	0.21	0.01	0.27	1.24
Angus	0.48	0.27	0.10	0.11	1.00
Argyll and Bute	0.58	0.23	0.08	0.27	1.46
City of Edinburgh	0.39	0.16	0.01	0.22	0.99
Clackmannanshire	0.53	0.31	0.06	0.16	1.08
Dumfries and Galloway	0.51	0.14	0.16	0.21	1.47
Dundee City	0.43	0.15	0.25	0.03	1.04
East Ayrshire	0.46	0.24	0.04	0.17	0.98
East Dunbartonshire	0.52	0.25	0.06	0.21	1.21
East Lothian	0.48	0.26	0.00	0.22	1.07
East Renfrewshire	0.50	0.34	0.02	0.15	1.01
Falkirk	0.47	0.26	0.05	0.15	0.94
Fife	0.48	0.26	0.03	0.19	0.94
Glasgow City	0.36	0.10	0.02	0.24	1.10
Highland	0.55	0.24	0.01	0.31	1.37
Inverclyde	0.35	0.20	0.02	0.13	0.72
Midlothian	0.47	0.24	0.02	0.21	1.09
Moray	0.53	0.31	0.00	0.23	1.02
Na h-Eileanan Siar	0.54	0.13	0.06	0.35	1.43
North Ayrshire	0.46	0.26	0.01	0.19	1.01
North Lanarkshire	0.46	0.18	0.02	0.26	1.20
Orkney Islands	0.49	0.09	0.22	0.15	1.32
Perth and Kinross	0.49	0.28	0.03	0.19	0.93
Renfrewshire	0.47	0.23	0.11	0.13	1.11
Scottish Borders	0.46	0.19	0.01	0.27	1.17
Shetland Islands	0.42	0.03	0.29	0.09	1.39
South Ayrshire	0.50	0.28	0.05	0.18	1.12
South Lanarkshire	0.48	0.23	0.00	0.25	1.17
Stirling	0.43	0.24	0.07	0.13	0.90
West Dunbartonshire	0.49	0.23	0.04	0.21	1.17
West Lothian	0.39	0.24	0.04	0.11	0.80
Total Scotland	**0.45**	**0.21**	**0.04**	**0.20**	**1.08**

Trends

- The total amount of household waste generated in Scotland in 2017 was 2.46 million tonnes, a decrease of 38,153 tonnes (1.5%) from 2016 and 145,989 tonnes (5.6%) from 2011 (see Figure 1 below).

Figure 1. Household waste generated in Scotland 2011-2017

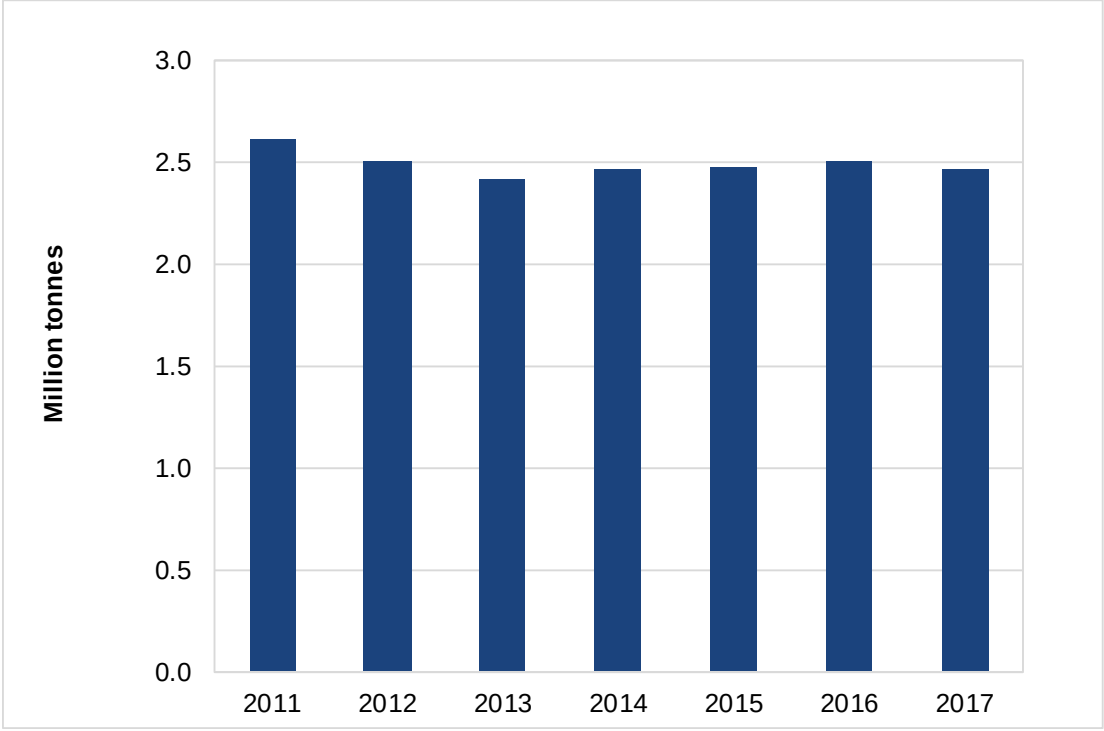


Table 3. Household waste generated in Scotland 2011-2017

Year	Waste generated (tonnes)
2011	2,606,761
2012	2,500,997
2013	2,412,549
2014	2,459,501
2015	2,468,730
2016	2,498,925
2017	2,460,772

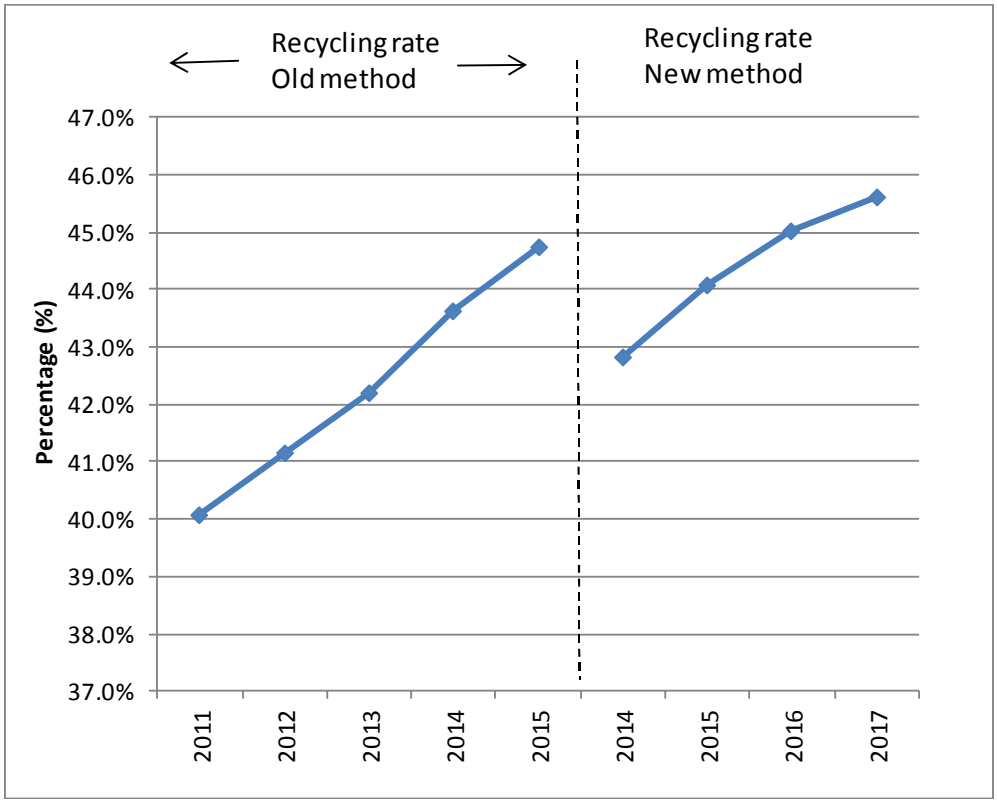
Waste Recycled

- Waste recycled includes waste reused, recycled or composted. A full description of what recycling includes is given in the glossary.

- For 2017, the Scottish household waste recycling rate was 45.6% (Figure 2), an increase of 0.6 percentage points from the 45.0% recycling rate achieved in 2016[2]. Prior to 2014, household waste composted that did not reach the quality standards set by PAS 100/110 was included in the recycling figures. If this management method was included, as in the previous method, the overall recycling rate in 2017 would have been 46.1%, an increase of 6.0 percentage points from the 40.1% achieved in 2011.

- For 2017, the total tonnage of Scottish household waste recycled was 1.12 million tonnes, an decrease of 2,801 tonnes (0.2%) from 2016. Prior to 2014, household waste composted that did not reach the quality standards set by PAS 100/110 was included in the recycling figures. If such waste was included, as in the previous method, the total household waste recycled in 2017 would have been 1.13 million tonnes, which is 88,418 tonnes (8.5%) greater than the 1.05 million tonnes of waste recycled in 2011.

Figure 2. Scottish household waste recycling rates 2011-2017



[2] The 2016 recycling rate is revised downwards from 45.2% to 45.0%. Refer to Table 11, Revisions *to 2016 Waste Data.*

Table 4. Scottish household waste recycling rates 2011-2017

Recycling rate	Percentage (%)
2011 - OLD METHOD	40.1%
2012 - OLD METHOD	41.1%
2013 - OLD METHOD	42.2%
2014 - OLD METHOD	43.6%
2015 - OLD METHOD	44.7%
2014	42.8%
2015	44.1%
2016	45.0%
2017	45.6%

Note: recycled includes waste recycled or reused and waste composted

- In 2017, household waste recycled and reused made up 62.9% of the household waste recycled, with household waste composted contributing the remainder (see Figure 3 below).

- For the first time, in 2017 there was more Scottish waste recycled (1.12 million tonnes) than landfilled (1.11 million tonnes).

Figure 3. Breakdown of Scottish household waste recycled 2011-2017

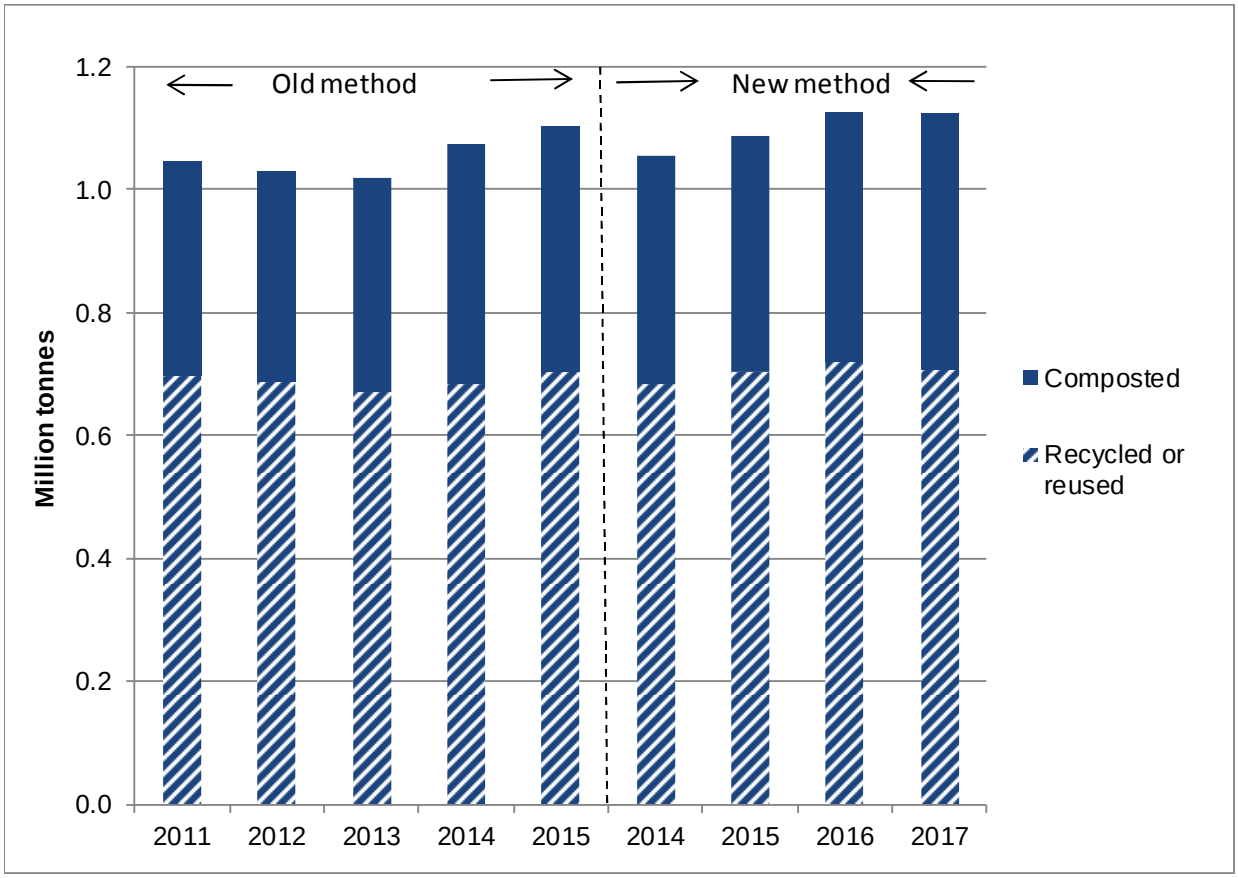


Table 5. Breakdown of Scottish household waste recycled 2011-2017

Year	Recycled + reused	Composted	Total
2014	684,194	369,040	1,053,234
2015	703,152	385,273	1,088,426
2016	721,181	403,743	1,124,925
2017	705,370	416,753	1,122,124

- The 705,370 tonnes of household waste recycled or reused in 2017 was a decrease of 15,811 tonnes (2.2%) compared with 2016 and an increase of 7,466 tonnes (1.1%) compared with 2011, indicating that the amount of household waste recycled or reused has remained relatively stable during the last five years.

- The largest type of household waste recycled or reused in 2017 was Paper and cardboard wastes (225,495 tonnes, 32.0% of all waste recycled or reused, see Figure 5, Table 6 below). The year on year decrease of Paper and cardboard wastes recycled or reused since 2011 has plateaued, with a small 2,426 tonne (1.1%) decrease in the recycling of these materials compared with 2016 (see Figure 4 below).

Figure 4 Scottish Paper and cardboard wastes recycled or reused 2011-2017

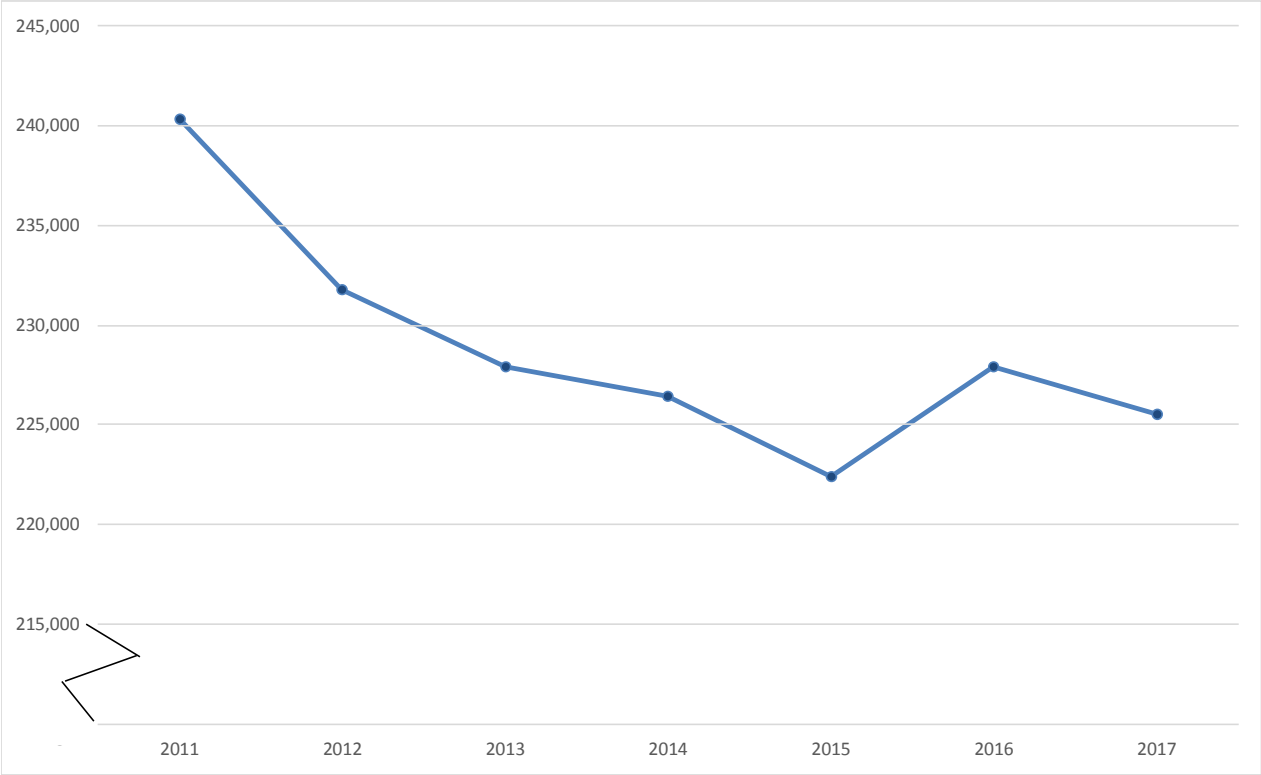


Figure 5 Scottish household waste recycled or reused by material 2011-2017

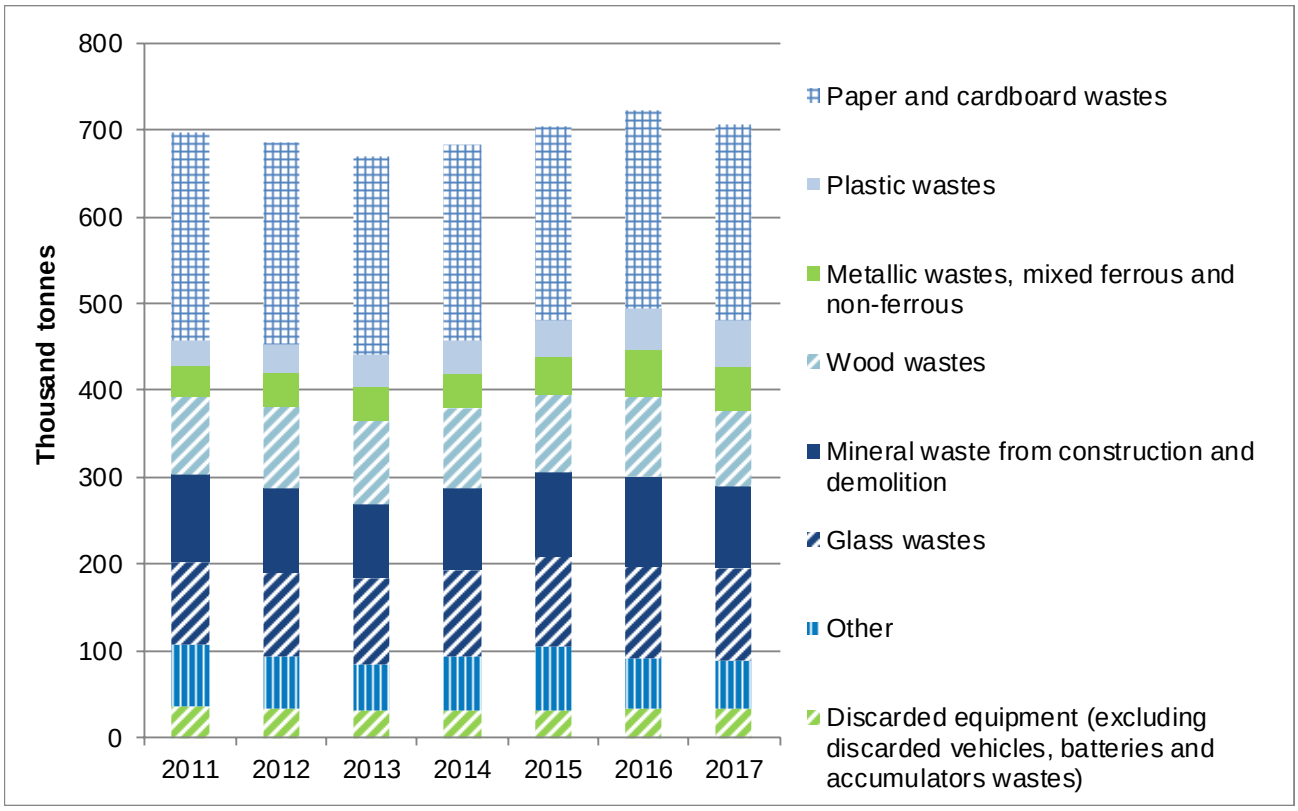


Table 6. Scottish Household waste recycled or reused by material 2011-2017 (tonnes)

Year	Paper and cardboard wastes	Glass wastes	Mineral waste from construction and demolition	Wood wastes	Metallic wastes, mixed ferrous and non-ferrous	Plastic wastes	Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	Other	Total
2011	240,346	94,903	101,810	89,002	35,281	29,299	36,616	70,646	697,904
2012	231,776	96,658	96,701	92,403	39,082	34,528	33,743	60,758	685,648
2013	227,899	99,973	84,907	96,827	38,313	38,097	31,366	52,374	669,756
2014	226,463	100,580	93,290	92,324	39,316	39,525	31,748	60,948	684,194
2015	222,403	102,033	97,158	89,212	45,025	41,285	31,740	74,297	703,152
2016	227,921	106,548	102,974	93,897	50,935	48,422	34,378	56,106	721,181
2017	225,495	104,679	94,037	89,426	50,275	51,833	33,604	56,022	705,370

- For 2017, the amount of Scottish household waste composted or digested was 416,753 tonnes, an increase of 13,010 tonnes (3.2%) from 2016. Prior to 2014, household waste composted or digested that attained the quality standards set by PAS 100/110 were included in the composting figures. If such waste was included, as in the previous method, the total household waste composted or digested in 2017 would have been 428,062 tonnes, which is 80,953 tonnes (23.3%) greater than the 347,109 tonnes composted or digested in 2011.

- In 2017, three-quarters of the household waste composted or digested was vegetal wastes (75.0%) with animal and mixed food waste, and wood wastes making up the

remainder (23.9% and 1.1% respectively). In 2011, the percentage of vegetal waste was higher (94.6%) and the percentages of animal and mixed food waste and wood waste were lower (5.2% and 0.1% respectively).

- For 2017, the total tonnage of Vegetal wastes composted was 312,518 tonnes, an increase of 5,837 tonnes (1.9%) from 2016. Prior to 2014, vegetal wastes composted that did not reach the quality standards set by PAS 100/110 was included in the composting figures. If such waste were included, as in the previous method, the total vegetal waste composted in 2017 would have been 323,500 tonnes, which is 5,038 tonnes (1.5%) less than the 328,539 tonnes of vegetal wastes composted in 2011. The amount of vegetal wastes composted has been fairly constant from 2011 through 2016, with annual tonnages composted not varying from the average by over 5% over this period.

- For 2017, the total amount of Animal and mixed food waste composted was 99,722 tonnes, an increase of 6,434 tonnes (6.9%) from 2016. Prior to 2014, Animal and mixed food waste composted that did not reach the quality standards set by PAS 100/110 was included in the composting figures. If such waste were included, as in the previous method, the total Animal and mixed food waste composted in 2017 would have been 100,047 tonnes, which is 81,943 tonnes (452.6%) greater than the 18,104 tonnes of food waste composted in 2011.+

- For 2017, the amount of Wood wastes composted was 4,514 tonnes, an increase of 739 tonnes (19.6%) from 2016, and an increase of 4,048 tonnes (868.5%) from 2011. There has been no wood recorded as composted at non PAS 100/110 composting facilities. Therefore the wood tonnage composted under the new method is the same as the method prior to 2014.

Figure 6. Scottish household waste composted by material 2011-2017

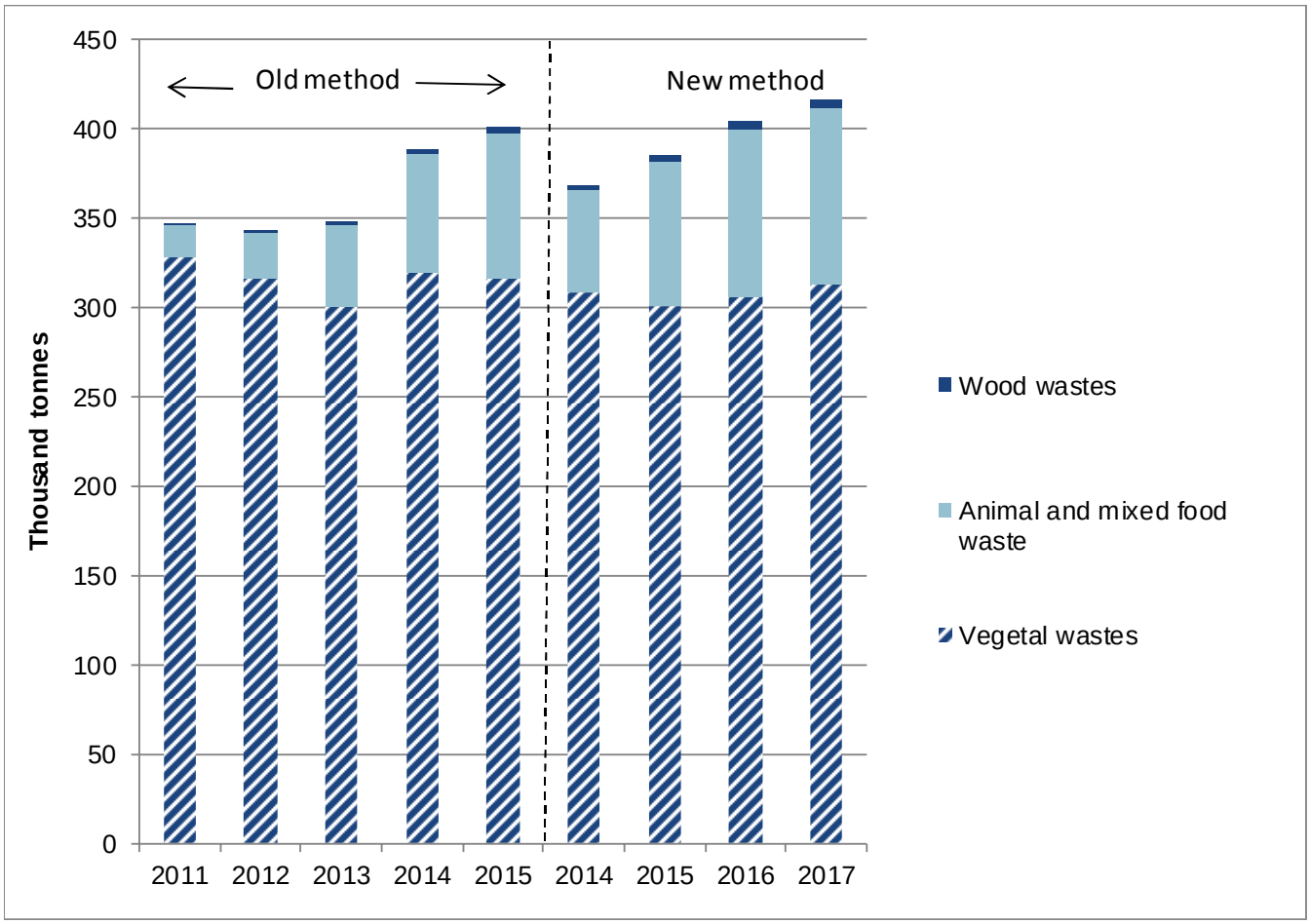


Table 7. Scottish household waste composted by material 2011-2017 (tonnes)

Year and method	Vegetal wastes	Animal and mixed food waste	Wood wastes	Total
2011 - OLD METHOD	328,539	18,104	466	347,109
2012 - OLD METHOD	315,751	26,296	1,454	343,501
2013 - OLD METHOD	300,899	45,672	1,861	348,433
2014 - OLD METHOD	319,247	67,029	2,477	388,753
2015 - OLD METHOD	315,754	81,348	3,860	400,962
2014	308,705	57,858	2,477	369,040
2015	300,463	80,951	3,860	385,273
2016	306,681	93,287	3,775	403,743
2017	312,518	99,722	4,514	416,753

Other Diversion from Landfill

- Other diversion from landfill is waste material not recycled or landfilled. This includes net waste incinerated, incinerator outputs recycled, and organic material recycled that does not meet quality standards. A full description is given in the glossary.

- For 2017, the total amount of Scottish household waste managed by other diversion from landfill was 230,983 tonnes, a decrease of 10,802 tonnes (4.5%) from the 241,785 tonnes[3] diverted in 2016 (see Figure 7 below). Prior to 2014, household waste composted that did not reach the quality standards set by PAS 100/110 was excluded from the other diversion from landfill figures. If such waste was excluded, as in the previous method, the total amount of household waste managed by other diversion from landfill in 2017 would have been 219,675 tonnes, which is 111,844 tonnes (103.7%) greater than the 107,831 tonnes of other waste diverted from landfill in 2011.

- In 2017, over three-quarters of the waste not recycled and otherwise diverted from landfill was managed by incineration (75.9%, 175,296 tonnes), followed by other treatment (19.2%, 44,378 tonnes) and non-certified composting/digestion (4.9%, 11,308 tonnes) (Figure 6 and Table 8).

- In 2017, 11,308 tonnes of waste were managed at non-PAS 100/110 certified composting processes which was 1,694 tonnes (13.0%) less than in 2016. Since the exclusion of non-PAS 100/110 compost from recycling figures in 2014, waste managed by non-PAS100/110 certified processes has decreased each year from 5.1% of all waste composted in 2014, to 3.9%, 3.1% and 2.6% of all composted in 2015, 2016 and 2017 respectively.

- There were 175,296 tonnes of Scottish household waste incinerated by Other diversion from landfill in 2017, which includes outputs from incineration such as incinerator bottom ash and metals diverted from landfill. This was 13,326 tonnes (7.1%) less than in 2016, but 94,681 tonnes (117.4%) greater in 2011.

- It should be noted that Scottish household waste incinerated by Other diversion from landfill is not the total household waste incinerated, as it excludes incinerator outputs landfilled. In 2017 the total input of Scottish household waste to incineration facilities was 207,178 tonnes.

- There were 44,378 tonnes of waste diverted by other treatments in 2017, which was 4,218 tonnes (10.5%) greater than in 2016. Other treatments include process loss associated with mechanical and biological treatments (e.g. production of CLO and production of RDF); process loss associated with waste composted that is disposed to landfill; and CLO diverted from landfill.

[3] The 2016 Other diversion from landfill has been revised upwards from 237,205 tonnes to 241,785 tonnes. Refer to Table 11, *Revisions to 2016 Waste Data.*

Figure 7. Other diversion of Scottish household waste from landfill breakdown 2011-2017

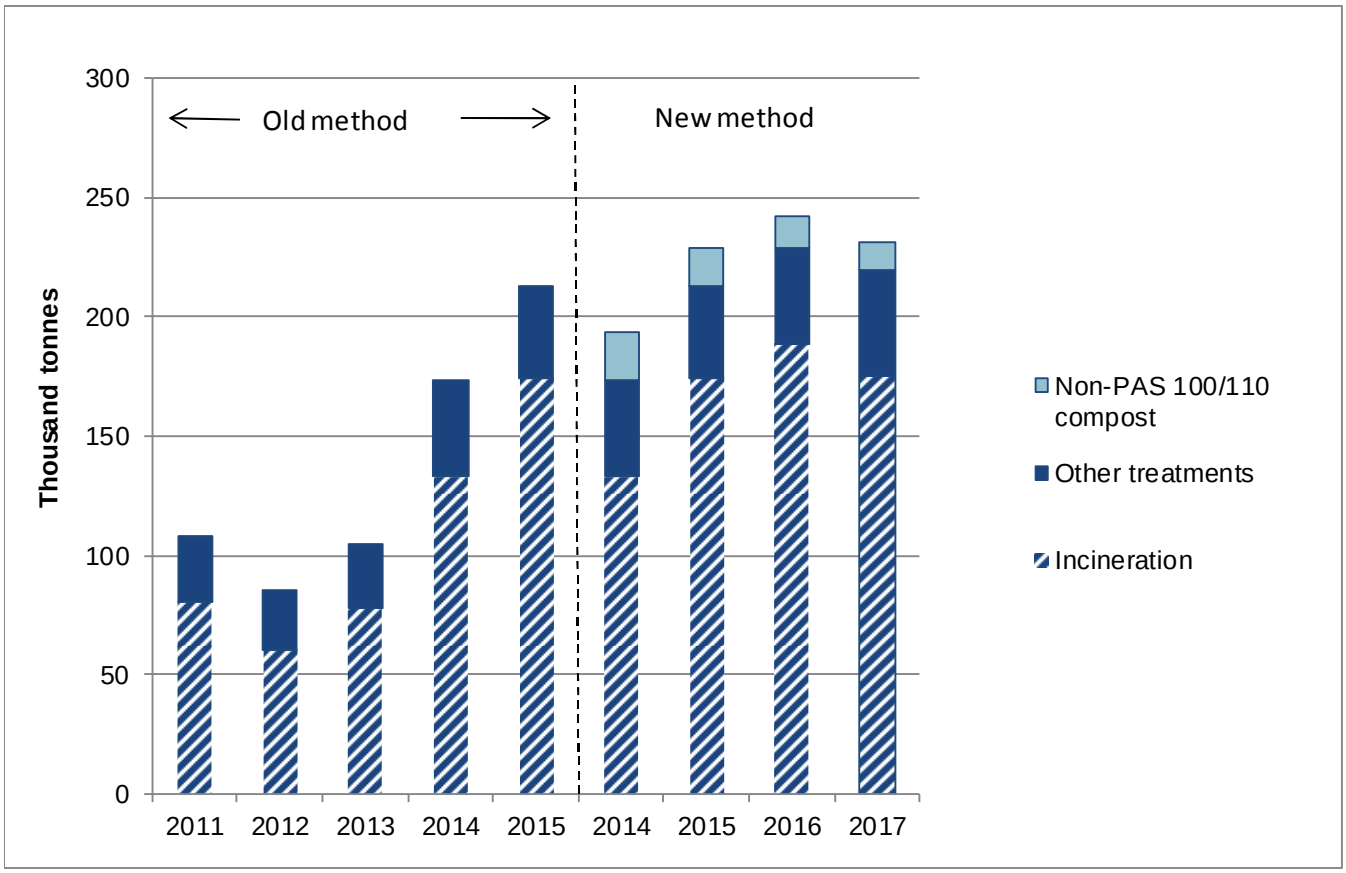


Table 8. Other diversion of Scottish household waste from landfill breakdown 2011-2017 (tonnes)

Year and method	Incineration	Other treatments	Non-PAS 100/110 compost	Total
2011 - OLD METHOD	80,616	27,215	0	107,831
2012 - OLD METHOD	60,452	25,302	0	85,754
2013 - OLD METHOD	78,257	26,256	0	104,512
2014 - OLD METHOD	132,881	40,552	0	173,433
2015 - OLD METHOD	174,594	38,143	0	212,737
2014	132,881	40,552	19,713	193,146
2015	174,594	38,143	15,689	228,425
2016	188,623	40,161	13,002	241,785
2017	175,296	44,378	11,308	230,983

Waste Landfilled

- The amount of household waste landfilled in 2017 was 1.11 million tonnes in 2017, a decrease of 24,848 tonnes (2.2%) from 2016, and a decrease of 346,831 tonnes (23.9%) since 2011. This is the sixth consecutive decrease in household waste landfilled since 2011. This decrease is due to more waste being recycled but it is also due in part to less waste generated and more waste being diverted from landfill to incineration, and to mechanical and biological treatments such as the production of Compost Like Outputs (CLO) and production of Refused Derived Fuel (RDF).

- For 2017, the household waste landfilled as a percentage of waste generated was 45.0%, a decrease of 0.3 percentage points from the same comparison in 2016 and a decrease of 10.8 percentage points from 2011.

- In 2017, 91.0% (1.03 million tonnes) of the total household waste landfilled comprised Household and similar wastes (see Figure 8 below).

- Over one quarter (27.2%, 300,735 tonnes) of the total household waste landfilled first passed through another waste management facility (data not shown). These included any reject wastes from mixed waste that was sent to waste sorting facilities for segregation prior to recycling, and it also included combustion waste outputs from incineration facilities.

Figure 8. Scottish household waste landfilled by waste category 2011-2017

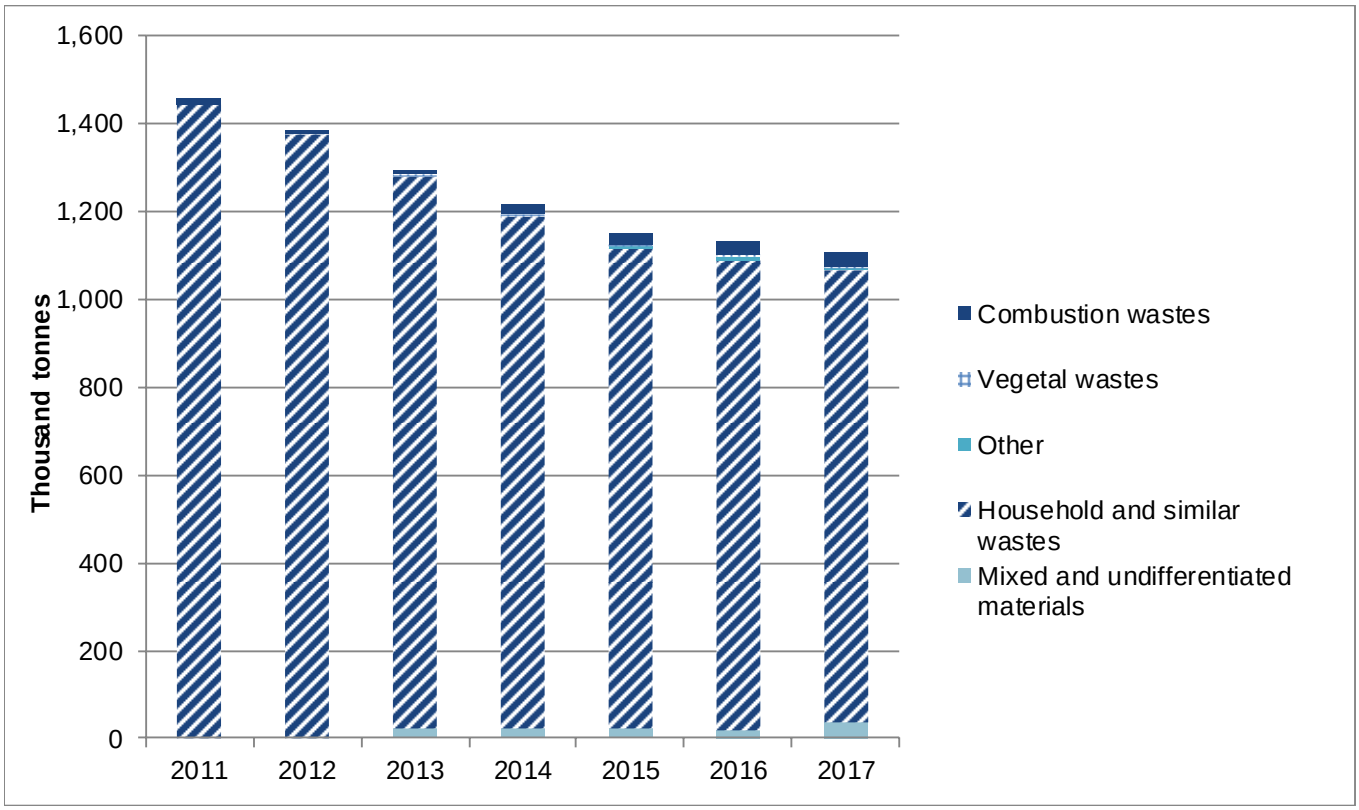


Table 9. Scottish household waste landfilled by waste category 2011-2017 (tonnes)

Year	Household and similar wastes	Mixed and undifferentiated materials	Combustion wastes	Vegetal wastes	Other	Total
2011	1,443,265	0	10,524	0	0	1,453,789
2012	1,372,426	0	8,050	1,333	344	1,382,153
2013	1,258,134	21,222	8,149	2,074	1,251	1,290,829
2014	1,165,939	20,767	20,209	3,733	1,832	1,212,479
2015	1,094,907	21,035	27,124	4,744	2,727	1,150,537
2016	1,070,399	17,570	32,375	5,184	6,278	1,131,806
2017	1,030,375	34,608	32,109	6,274	3,593	1,106,959

Carbon impacts of Scottish household waste

- The whole of life carbon impact of household waste generated and managed in 2017 was 5.86 million TCO2e. This was a decrease of 115,938 TCO2e (1.9%) from 2016, and a decrease of 904,491 TCO2e (13.4%) since 2011.

- The amount of waste generated by Scottish households was 5.6% below 2011 levels (see page 4). In contrast, the carbon impact of Scottish household waste generated and managed in 2017 was 13.4% (904,491 TCO2e) below the 2011 level.

- The lifecycle impact of a tonne of household waste (TCO2e/tonnes of waste) has been steadily declining since 2011, with a 8.2% decrease from 2011 to 2017. This was largely a result of improved recycling rates, particularly for high impact waste materials, as well as reduced landfilling of biodegradable waste.

Figure 9. Carbon impact of Scottish waste generated and managed 2011-2017 (TCO2e)

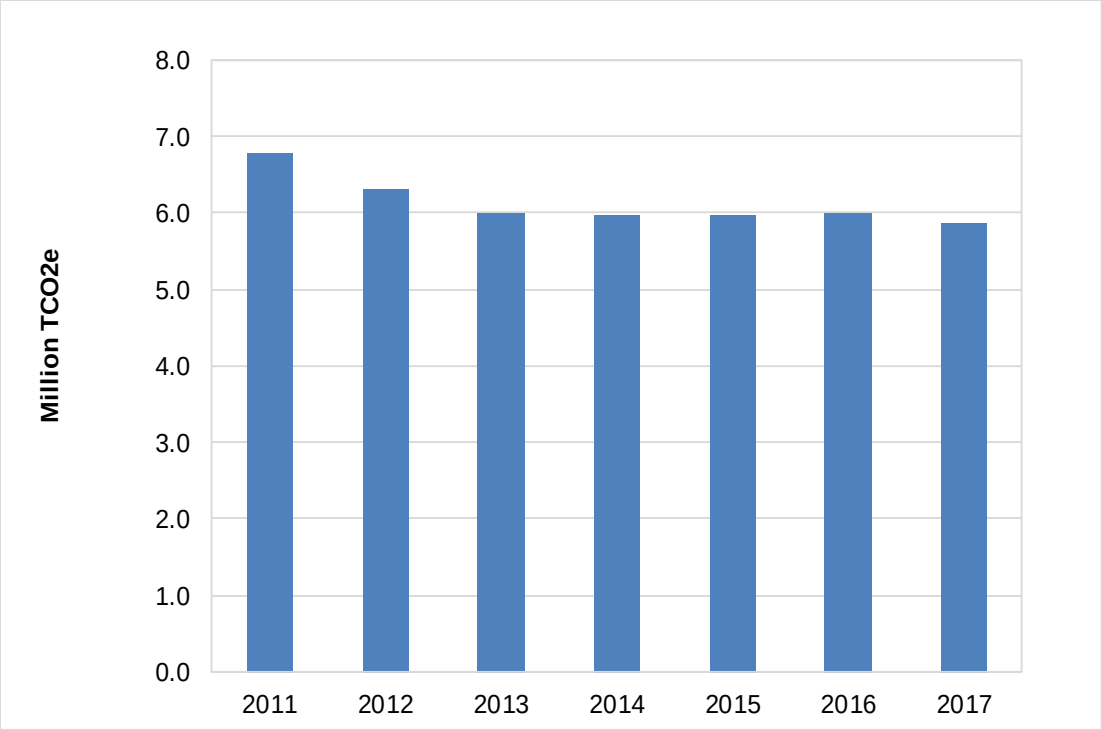


Table 10. Carbon impact of Scottish waste generated and managed 2011-2017 (TCO2e)

Year	TCO2e
2011	6,767,740
2012	6,304,982
2013	5,999,302
2014	5,948,383
2015	5,940,554
2016	5,979,187
2017	5,863,249

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

User Statement

Data on household waste generation and management are collected to support policy development and monitor policy effectiveness, particularly the commitments in Making Things Last - A Circular Economy Strategy for Scotland. The data are also used to meet legislative reporting targets on recycling as set out in the Waste Framework Directive (2008/98/EC) and in the Commission Decision establishing rules and calculation methods for verifying compliance with the targets set in the Waste Framework Directive (2011/753/EU). The data are used to fulfil the reporting requirements of the Waste Statistics Regulation (2002/2150/EC). The data are used extensively by local and central government, the waste industry, researchers and the general public.

Feedback

We welcome feedback on the data from all users including how and why the data are 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: WasteData.Flow@sepa.org.uk.

Revisions Policy

SEPA will provide information about any revisions made to published information in this statistics release and the 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 official release.

Corrections to 2016 local authority data since the last statistical publication in September 2017 are shown in Table 11 below. These corrections were published simultaneous with the 2017 dataset in September 2018.

Table 11. Revisions to 2016 Scottish household waste data[1]

Local Authority	Generated (tonnes)		Recycled (tonnes)		Percentage Recycled (%)		Other diversion from landfill* (tonnes)		Percentage Other diversion from Landfill (%)		Landfilled (tonnes)		Percentage Landfilled (%)	
	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised	Original	Revised
Aberdeen City	96,123	96,123	37,498	37,498	*39.0*	*39.0*	604	604	*0.6*	*0.6*	58,021	58,021	*60.4*	*60.4*
Aberdeenshire	131,863	131,864	57,305	57,305	43.5	43.5	1,564	1,564	1.2	1.2	72,995	72,995	55.4	*55.4*
Angus	58,847	58,847	33,371	33,371	56.7	56.7	10,206	10,206	17.3	17.3	15,270	15,270	25.9	*25.9*
Argyll and Bute	53,684	53,689	18,188	18,188	33.9	33.9	8,182	8,186	15.2	15.2	27,315	27,315	50.9	*50.9*
City of Edinburgh	193,333	193,333	86,318	86,317	44.6	44.6	3,424	3,426	1.8	1.8	103,590	103,590	53.6	*53.6*
Clackmannanshire	27,091	27,091	15,306	15,306	56.5	56.5	3,898	3,898	14.4	14.4	7,887	7,887	29.1	*29.1*
Dumfries and Galloway	79,805	79,808	21,291	17,660	26.7	22.1	26,541	30,173	33.3	37.8	31,975	31,975	40.1	*40.1*
Dundee City	67,998	67,944	22,861	22,861	33.6	33.6	40,499	40,499	59.6	59.6	4,638	4,638	6.8	*6.8*
East Ayrshire	56,433	56,434	30,063	30,062	53.3	53.3	5,935	5,935	10.5	10.5	20,437	20,437	36.2	*36.2*
East Dunbartonshire	55,852	55,852	27,085	27,085	48.5	48.5	5,909	5,909	10.6	10.6	22,858	22,858	40.9	*40.9*
East Lothian	50,874	50,874	26,337	26,337	51.8	51.8	86	86	0.2	0.2	24,451	24,451	48.1	*48.1*
East Renfrewshire	47,724	47,724	29,010	29,010	60.8	60.8	791	791	1.7	1.7	17,923	17,923	37.6	*37.6*
Falkirk	71,783	71,783	36,832	36,832	51.3	51.3	11,229	11,229	15.6	15.6	23,723	23,723	33.0	*33.0*
Fife	187,746	187,746	102,610	102,609	54.7	54.7	8,183	8,183	4.4	4.4	76,955	76,955	41.0	*41.0*
Glasgow City	216,873	216,873	54,552	54,552	25.2	25.2	5,983	5,983	2.8	2.8	156,337	156,337	72.1	*72.1*
Highland	130,959	130,959	58,232	58,232	44.5	44.5	995	995	0.8	0.8	71,733	71,733	54.8	*54.8*
Inverclyde	29,363	29,363	15,692	15,692	53.4	53.4	900	900	3.1	3.1	12,769	12,770	43.5	*43.5*
Midlothian	42,636	42,637	22,804	21,928	53.5	51.4	5,752	6,629	13.5	15.5	14,079	14,079	33.0	*33.0*
Moray	51,968	51,951	30,698	30,696	59.1	59.1	0	0	0.0	0.0	21,253	21,253	40.9	*40.9*
Na h-Eileanan Siar	14,959	14,960	3,607	3,607	24.1	24.1	1,929	1,929	12.9	12.9	9,423	9,423	63.0	*63.0*
North Ayrshire	63,838	63,838	35,309	35,309	55.3	55.3	1,916	1,916	3.0	3.0	26,615	26,615	41.7	*41.7*
North Lanarkshire	160,916	160,914	66,207	66,207	41.1	41.1	25,297	25,297	15.7	15.7	69,410	69,410	43.1	*43.1*
Orkney Islands	10,349	10,349	2,007	2,007	19.4	19.4	4,997	4,997	48.3	48.3	2,880	2,880	27.8	*27.8*
Perth and Kinross	78,730	78,730	43,095	43,033	54.7	54.7	8,627	8,689	11.0	11.0	27,008	27,008	34.3	*34.3*
Renfrewshire	83,661	83,661	40,547	40,547	48.5	48.5	22,869	22,869	27.3	27.3	20,245	20,245	24.2	*24.2*
Scottish Borders	51,921	51,921	20,264	20,265	39.0	39.0	955	955	1.8	1.8	30,702	30,702	59.1	*59.1*
Shetland Islands	9,996	9,996	787	787	7.9	7.9	6,953	6,953	69.6	69.6	2,256	2,256	22.6	*22.6*
South Ayrshire	56,485	56,485	28,190	28,190	49.9	49.9	5,974	5,974	10.6	10.6	22,320	22,320	39.5	*39.5*
South Lanarkshire	152,533	152,535	80,818	80,820	53.0	53.0	0	0	0.0	0.0	71,715	71,715	47.0	*47.0*
Stirling	44,267	44,270	24,233	24,237	54.7	54.7	7,835	7,835	17.7	17.7	12,201	12,201	27.6	*27.6*
West Dunbartonshire	44,936	44,936	21,785	21,785	48.5	48.5	4,282	4,282	9.5	9.5	18,869	18,869	42.0	*42.0*
West Lothian	75,436	75,438	36,591	36,591	*48.5*	*48.5*	4,893	4,894	*6.5*	*6.5*	33,952	33,952	*45.0*	*45.0*
Total Scotland	**2,498,981**	**2,498,925**	**1,129,493**	**1,124,925**	***45.2***	***45.0***	**237,205**	**241,785**	***9.5***	***9.7***	**1,131,806**	**1,131,806**	***45.3***	***45.3***

1. Cells shaded in grey represent revisions amounting to greater than 50 tonnes or greater than 0.1 percentage points

Methodology

Data was submitted by all 32 Scottish local authorities using the web-based reporting tool WasteDataFlow.

From 2014, composted wastes that did not reach the quality standards set by PAS 100/110 were accounted for as other wastes diverted from landfill and not as wastes composted, except where waste was processed at a new composting or anaerobic digestion site and the site indicated they had applied for and were working toward PAS compliance, in which case a 12-month grace period was applied for the purpose of including of wastes composted or digested in household recycling data. In 2017 there were no new sites that met this criterion.

Further details on the methodology used to produce the figures are provided in the "Household waste" section of the annual Waste Data Quality Reports on SEPA's web site. Please note that household waste figures published by individual UK countries may be based on alternative calculation methodologies and as such the figures may not be directly comparable.

Release

The release of this publication is in line with release practices specified in the Code of Practice for Official Statistics. The statistics are released at the standard time of 9.30 am on a preannounced weekday date. Pre-release access to the statistics in their final form is provided to Scottish ministers and those on a list of named officials advising them 5 working days before the public release. This is to ensure that at the time of release Scottish ministers are able to comment publicly on the statistics based on a correct understanding of them.

Glossary of terms

BSI PAS 100 / 110 – a national compost/digestate benchmark that specifies the minimum requirements for the process of composting/anaerobic digestion, the selection of material from which compost/digestate is made, and standards for the compost/digestate product quality. PAS 100 is applicable to composting facilities while PAS 110 is applicable to anaerobic digestion facilities. The use of this standard to improve the quality of compost/digestate in Scotland became Scottish Government policy in 2011, with 2014 being the first year it was applied to the household official statistics.

Carbon Impact – a measure of the whole-life carbon impacts of waste, from resource extraction and manufacturing emissions, right through to waste management emissions, regardless of where in the world these impacts occur. The carbon impact of waste was developed by Zero Waste Scotland (https://www.zerowastescotland.org.uk/content/what-carbon-metric)

Compost like output (CLO) – partially digested waste outputs generated from the biological treatment of residual municipal solid wastes at a process that involves both mechanical and biological treatment. Outputs typically do not conform to composting standards such as PAS 100/110.

Household waste – waste generated by households (see full definition in Paragraph 1.2 of the *Zero Waste Plan - guidance for local authorities* on the WasteDataFlow web site).

Other diversion from landfill – describes the fate of waste material not recycled or landfilled. It includes:

- household waste treated by incineration, including any incinerator bottom ash and metals from bottom ash that are diverted from landfill,
- weight loss that occurs during the composting/digestion of waste to PAS 100/110 and non PAS 100/110 compost/digestate where the output is landfilled,
- CLO that is not landfilled,
- weight loss that occurs during mechanical and biological treatment processes (e.g. production of CLO and RDF),
- from 2014, any waste composted/digested that has not reached the quality standards set by PAS 100/110 and is not landfilled.

Recycling rate –waste recycled as a percentage of all waste generated. Note that total waste generated does not equal total waste managed due to stockpiled waste, which is counted in the generation figures and will be included in the managed figures in the year it is sent to final management.

Refuse derived fuel (RDF) –waste separated from residual municipal solid waste with a calorific value suitable for use as a fuel in combustion processes.

TCO2e – Tonnes of carbon dioxide equivalent, which is a measure that allows the comparison of greenhouse gases relative to one unit of CO2.

Waste composted - is waste recycled by biological treatment through composting at a composting plant or through digestion at an anaerobic digestion facility.

Waste generated - is waste collected by or on behalf of local authorities that is managed within the relevant reporting year. This might include treated waste stockpiled prior to final management.

Waste landfilled –includes all household waste that is disposed of at a landfill site instead of being recycled or diverted from landfill through other methods. It also includes incinerator ash that is landfilled, plus any recycling and composting rejects that occur during collection, sorting or further treatment that go to landfill.

Waste managed - includes all wastes recycled, diverted from landfill and landfilled within the relevant reporting year. This includes stockpiled waste from a previous year sent to final management but excludes treated waste stockpiled prior to final management.

Waste recycled - includes recyclable materials that have been recycled or reused and also biodegradable materials that have been composted or digested. The amount of waste recycled, reused and composted is that accepted by the reprocessor facility. As such it excludes any recycling rejects that occur during collection, sorting or further treatment. From 2015, the composting figures using the new calculation methodology do not include any waste composted that has not reached the quality standards set by PAS 100/110.