This release was published on 7th November 2016 and is an update to that originally published on 20th September 2016. It incorporates an erratum to the original statistics in that release. Details are specified in the Revisions Policy section on page 12.

Household waste – Summary data 2015

This release shows the 2015 calendar year summary of household waste data generated and managed by or on behalf of Local Authorities in Scotland. Further information including definition of terms is included in the methodology and glossary.

Key points

Household waste – 2015 calendar year

- The total quantity of household waste generated in Scotland was 2.47 million tonnes in 2015, a increase of 9,241 tonnes (0.4%) since 2014. In general, household waste generation has been decreasing over the last few years with a reduction of 137,959 tonnes (5.3%) since 2011.

- For the 2015 calendar year, the household waste recycling rate was 44.2%, an increase of 1.4 percentage points from the 42.8% achieved in 2014. The amount of household waste recycled increased by 38,365 tonnes. 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 overall recycling rate in 2015 would have been 44.7%, an increase of 4.6 percentage points from the 40.1% achieved in 2011.

- For the 2015 calendar year, the total amount of household waste managed by other diversion from landfill was 226,390 tonnes, an increase of 33,200 tonnes (17.2%) from 2014. Prior to 2014, household waste composted that did not reach the quality standards set by PAS 100/110 was excluded from the diversion from landfill figures. If such waste were excluded as in the previous method, the total amount of household waste managed by other diversion from landfill in 2015 would have been 213,878 tonnes, which is 106,047 tonnes (98.3%) greater than in 2011.

- The quantity of household waste landfilled was 1.15 million tonnes in 2015, a decrease of 61,874 tonnes (5.1%) from 2014, and a decrease of 303,252 tonnes (20.9%) since 2011.

Data for household waste generated and managed for each local authority by waste type for 2011-2015 and the trends for household waste generated, recycled and managed since 2004 is available from the Household Waste Discover Data tool on Scotland's Environment web site.

Annual household waste summary data tables are also available to download in Excel format on SEPA's web site.

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

An Official Statistics publication. These statistics have been produced to the high professional standards set out 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 at http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html.

Table 1 Household waste - Summary data 2015

Local Authority	Generated (tonnes)	Recycled (tonnes)	*Percentage Recycled (%)*	Other diversion from landfill (tonnes)	*Percentage Other diversion from Landfill (%)*	Landfilled (tonnes)	*Percentage Landfilled (%)*
Aberdeen City	95,241	36,679	*38.5*	407	*0.4*	58,155	*61.1*
Aberdeenshire	130,249	56,902	*43.7*	172	*0.1*	73,175	*56.2*
Angus	57,609	34,102	*59.2*	10,810	*18.8*	12,697	*22.0*
Argyll & Bute	51,847	17,514	*33.8*	9,040	*17.4*	25,293	*48.8*
Clackmannanshire	26,621	12,792	*48.1*	2,433	*9.1*	11,397	*42.8*
Dumfries & Galloway	74,092	20,091	*27.1*	32,235	*43.5*	21,767	*29.4*
Dundee City	67,182	22,373	*33.3*	40,187	*59.8*	4,622	*6.9*
East Ayrshire	56,374	29,866	*53.0*	7,182	*12.7*	19,343	*34.3*
East Dunbartonshire	54,191	27,454	*50.7*	4,436	*8.2*	22,301	*41.2*
East Lothian	50,906	26,163	*51.4*	2,217	*4.4*	22,526	*44.2*
East Renfrewshire	46,880	26,449	*56.4*	290	*0.6*	20,141	*43.0*
Edinburgh, City of	189,574	80,130	*42.3*	13,631	*7.2*	95,813	*50.5*
Eilean Siar	14,013	2,973	*21.2*	1,948	*13.9*	9,092	*64.9*
Falkirk	72,329	39,011	*53.9*	4,592	*6.3*	28,727	*39.7*
Fife	191,153	99,965	*52.3*	9,088	*4.8*	82,100	*42.9*
Glasgow City	221,902	57,624	*26.0*	2,360	*1.1*	161,918	*73.0*
Highland	130,780	58,147	*44.5*	1,183	*0.9*	71,449	*54.6*
Inverclyde	28,493	15,592	*54.7*	141	*0.5*	12,760	*44.8*
Midlothian	42,076	20,136	*47.9*	7,714	*18.3*	14,227	*33.8*
Moray	50,116	28,778	*57.4*	0	*0.0*	21,338	*42.6*
North Ayrshire	64,194	35,949	*56.0*	1,587	*2.5*	26,658	*41.5*
North Lanarkshire	155,933	62,335	*40.0*	16,624	*10.7*	76,974	*49.4*
Orkney Islands	9,371	1,802	*19.2*	4,806	*51.3*	2,244	*23.9*
Perth & Kinross	76,187	41,328	*54.2*	8,011	*10.5*	26,849	*35.2*
Renfrewshire	83,068	36,427	*43.9*	19,821	*23.9*	26,819	*32.3*
Scottish Borders	49,848	18,600	*37.3*	892	*1.8*	30,355	*60.9*
Shetland Islands	10,250	939	*9.2*	7,052	*68.8*	2,258	*22.0*
South Ayrshire	55,653	28,653	*51.5*	7,500	*13.5*	19,499	*35.0*
South Lanarkshire	151,656	74,241	*49.0*	0	*0.0*	77,416	*51.0*
Stirling	41,924	22,582	*53.9*	1,563	*3.7*	18,029	*43.0*
West Dunbartonshire	45,088	20,915	*46.4*	4,138	*9.2*	20,036	*44.4*
West Lothian	74,000	35,092	*47.4*	4,331	*5.9*	34,559	*46.7*
Total Scotland	**2,468,800**	**1,091,602**	***44.2***	**226,390**	***9.2***	**1,150,537**	***46.6***

Trends

Figure 1. Household waste generated in Scotland 2011-2015

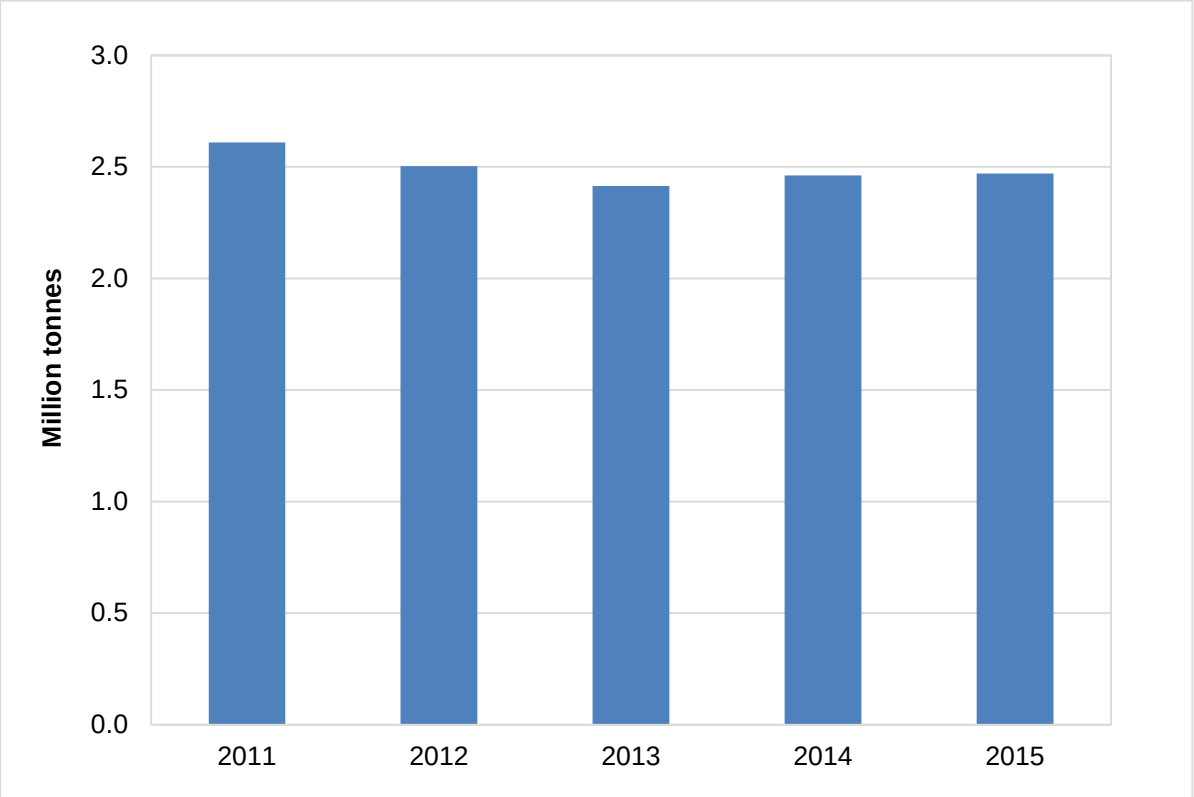


Table 2. Household waste generated in Scotland 2011-2015

Year	Waste generated (tonnes)
2011	2,606,759
2012	2,500,995
2013	2,412,706
2014	2,459,559
2015	2,468,800

Note: The methodology for calculating household waste generated did not change in 2014

- The total quantity of household waste generated in Scotland was 2.47 million tonnes in 2015, a increase of 9,241 tonnes (0.4%) since 2014. In general, household waste generation has been decreasing over the last few years with a reduction of 137,959 tonnes (5.3%) since 2011.

Figure 2. Household waste recycling rates in Scotland 2011-2015

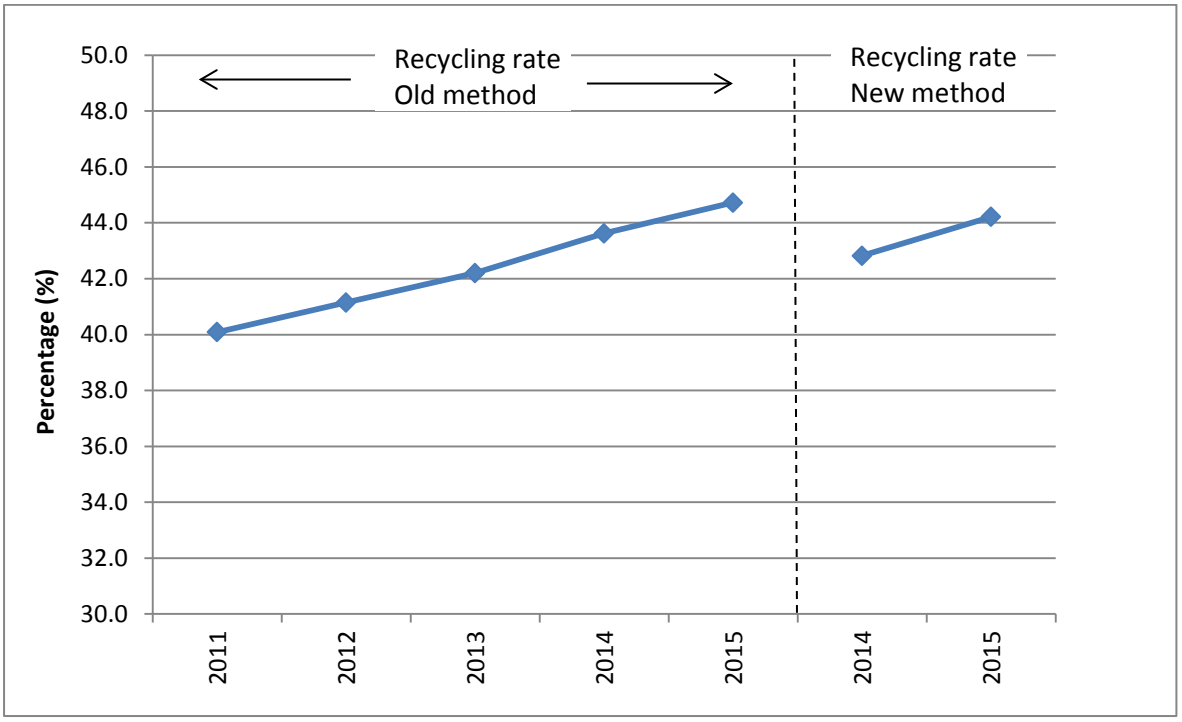


Table 3. Household waste recycling rates in Scotland 2011-2015

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	44.2

Note: recycled includes waste recycled and reused and waste composted

- For the 2015 calendar year, the household waste recycling rate was 44.2%, an increase of 1.4 percentage points from the 42.8% recycling rate achieved in 2014. 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 overall recycling rate in 2015 would have been 44.7%, an increase of 5.3 percentage points from the 40.1% achieved in 2011.

Figure 3. Household waste managed in Scotland 2011-2015

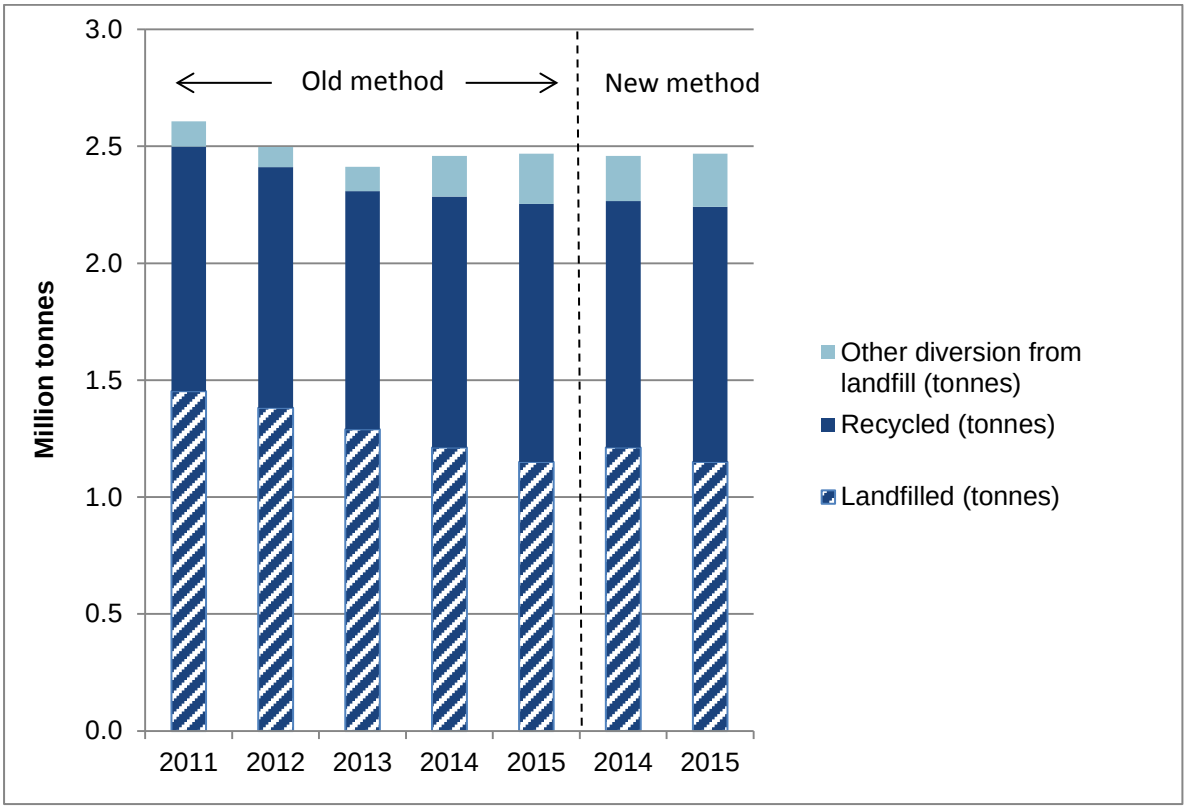


Table 4 Household waste managed in Scotland 2011-2015 (tonnes)

Year	Landfilled	Recycled*	Other diversion from landfill	Total Managed#
2011 - OLD METHOD	1,453,789	1,045,013	107,831	2,606,633
2012 - OLD METHOD	1,382,153	1,029,150	85,754	2,497,057
2013 - OLD METHOD	1,290,829	1,018,193	104,359	2,413,380
2014 - OLD METHOD	1,212,411	1,072,949	173,477	2,458,838
2015 - OLD METHOD	1,150,537	1,104,114	213,878	2,468,529
2014	1,212,411	1,053,237	193,190	2,458,838
2015	1,150,537	1,091,602	226,390	2,468,529

Notes: * Recycled includes waste recycled or reused, and waste composted
Waste managed excludes treated waste stockpiled prior to final management

- The total tonnage of household waste managed by or on behalf of local authorities in Scotland was 2.47 million tonnes in 2015. This is a increase of 9,691 tonnes (0.4%) from 2014 and a decrease of 138,104 tonnes (5.3%) from 2011 when the total waste managed was 2.61 million tonnes. The 2014 change in recycling method does not affect the total waste managed, only the breakdown of waste recycled and diverted.

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

- For the 2015 calendar year, the total tonnage of household waste recycled was 1.09 million tonnes, an increase of 38,365 tonnes (3.6%) from 2014. 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 2015 would have been 1.10 million tonnes, which is 59,101 tonnes (5.7%) greater than the 1.05 million tonnes recycled in 2011.

- There was 1.15 million tonnes of waste landfilled in 2015, a decrease of 61,874 tonnes (5.1%) from 2014, and a decrease of 303,252 tonnes (20.9%) from the 1.45 million tonnes landfilled in 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).

- Other diversion from landfill is waste material not recycled or landfilled. A full description of what this includes is given in the glossary.

- For the 2015 calendar year, the total amount of household waste managed by other diversion from landfill was 226,390 tonnes, an increase of 33,200 tonnes (17.2%) from the 193,190 tonnes diverted in 2014. 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 2015 would have been 213,878 tonnes, which is 98.3% (106,047 tonnes) greater than the 107,831 tonnes managed by other diversion in 2011.

Figure 4. Breakdown of household waste recycled in Scotland 2011-2015

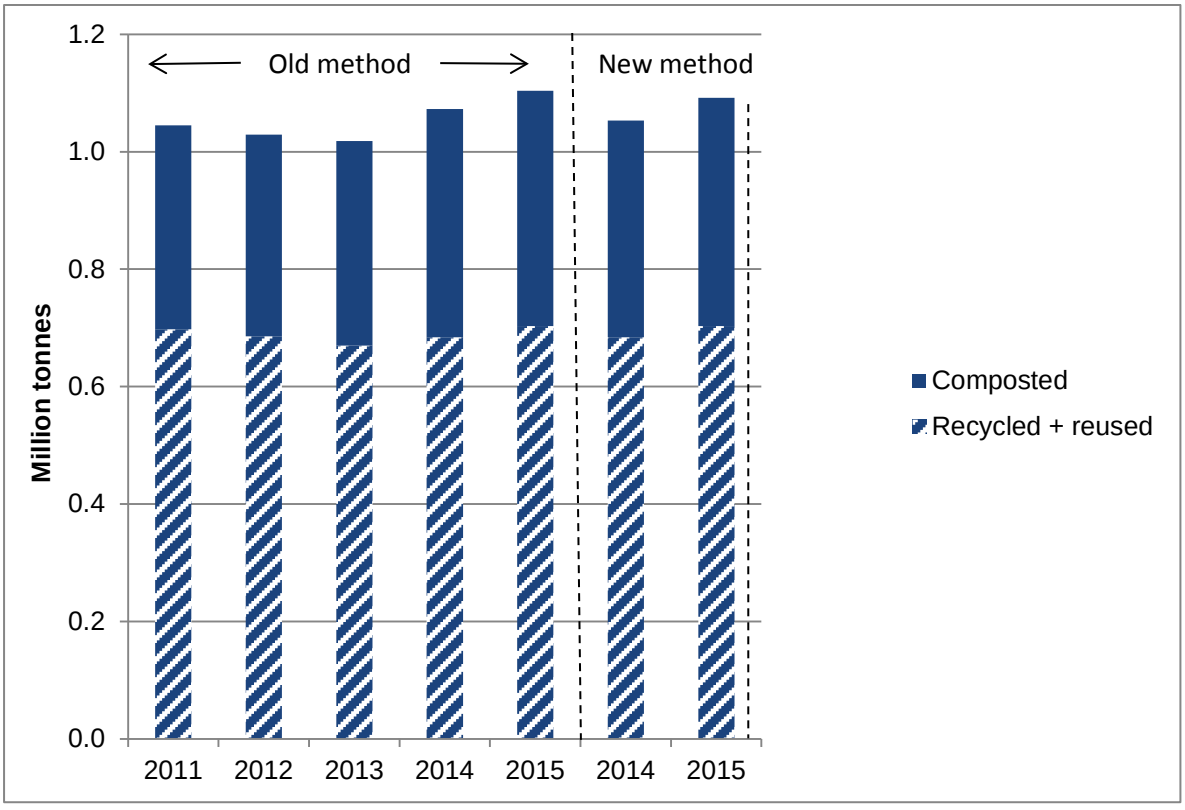


Table 5. Breakdown of household waste recycled in Scotland 2011-2015 (tonnes)

Year	Recycled + reused	Composted	Total
2011 - OLD METHOD	697,904	347,109	1,045,013
2012 - OLD METHOD	685,648	343,501	1,029,150
2013 - OLD METHOD	669,760	348,433	1,018,193
2014 - OLD METHOD	684,197	388,753	1,072,949
2015 - OLD METHOD	703,152	400,962	1,104,114
2014	684,197	369,040	1,053,237
2015	703,152	388,450	1,091,602

- In 2015 calendar year, household waste recycled and reused made up 64.4% of the proportion of household waste recycled with household waste composted contributing a further 35.6%.

- The 703,152 million tonnes of household waste recycled or reused in 2015 was an increase of 18,955 tonnes (2.8%) compared with 2014 but only an increase of 5,248 tonnes (0.8%) compared with 2011, indicating that the amount of household waste recycled or reused has remained relatively stable during the last five years.

- For the 2015 calendar year, the total tonnage of household waste composted was 388,450 tonnes, an increase of 19,410 tonnes (5.3%) from the 369,040 tonnes composted in 2014. Prior to 2014, household waste composted 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 in 2015 would have been 400,962 tonnes, which is 53,854 tonnes (15.5%) greater than the 347,109 tonnes composed in 2011.

Figure 5. Breakdown of household waste other diversion from landfill in Scotland 2011-2015

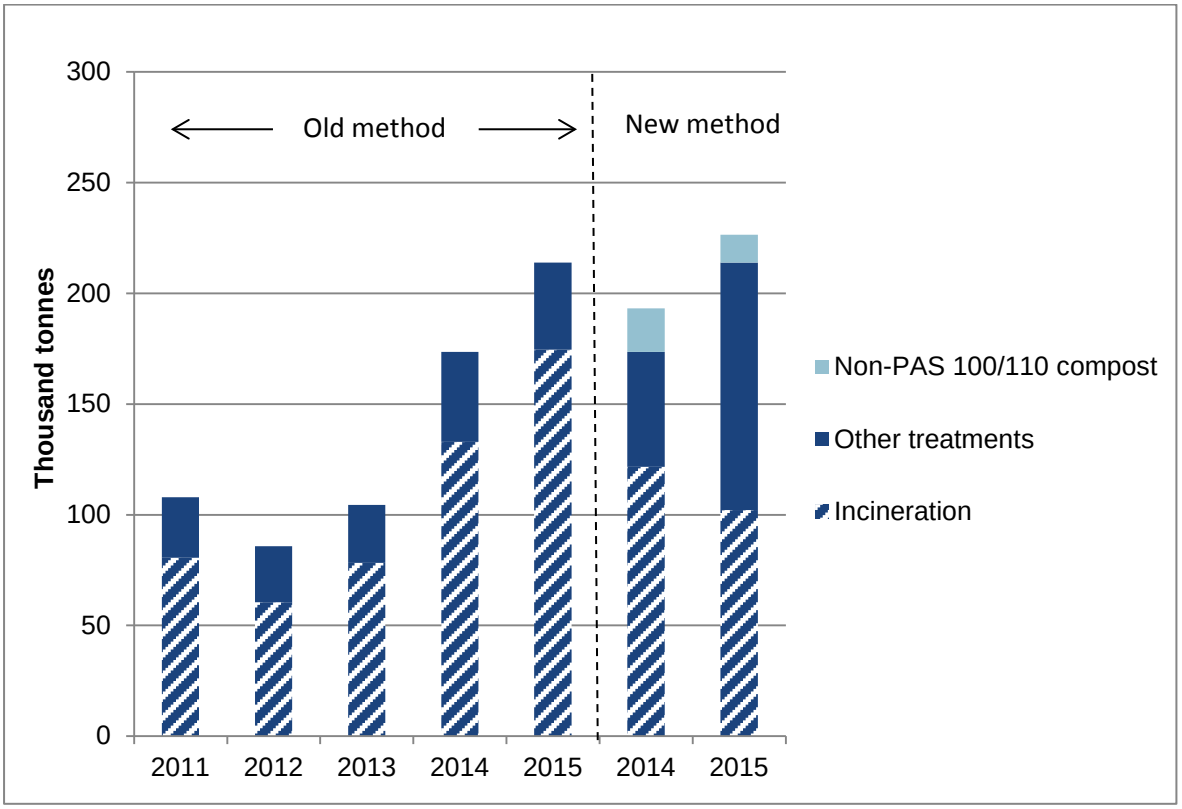


Table 6. Breakdown of household waste other diversion from landfill in Scotland 2011-2015 (tonnes)

Year	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	78,258	26,101	0	104,359
2014 - OLD METHOD	132,949	40,529	0	173,477
2015 - OLD METHOD	174,594	39,284	0	213,878
2014	132,949	40,529	19,713	193,190
2015	174,594	39,284	12,513	226,390

- The 174,594 tonnes of household waste incinerated in 2015, which includes outputs from incineration such as incinerator bottom ash and metals diverted from landfill, was 41,645 tonnes (31.3%) greater than the 132,949 tonnes incinerated in 2014, and 93,978 tonnes (116.6%) greater than the 80,616 tonnes incinerated in 2011.

- The 39,284 tonnes of waste diverted by other treatments in 2015 was 1,244 tonnes (3.1%) less than the 40,529 tonnes of waste diverted in 2014. 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.

- The 12,513 tonnes of non-PAS 100/110 compost in 2015 was 7,200 tonnes less than the 19,713 tonnes in 2014. Earlier figures are not available.

Figure 6 Household waste recycled or reused by material in Scotland 2011-2015

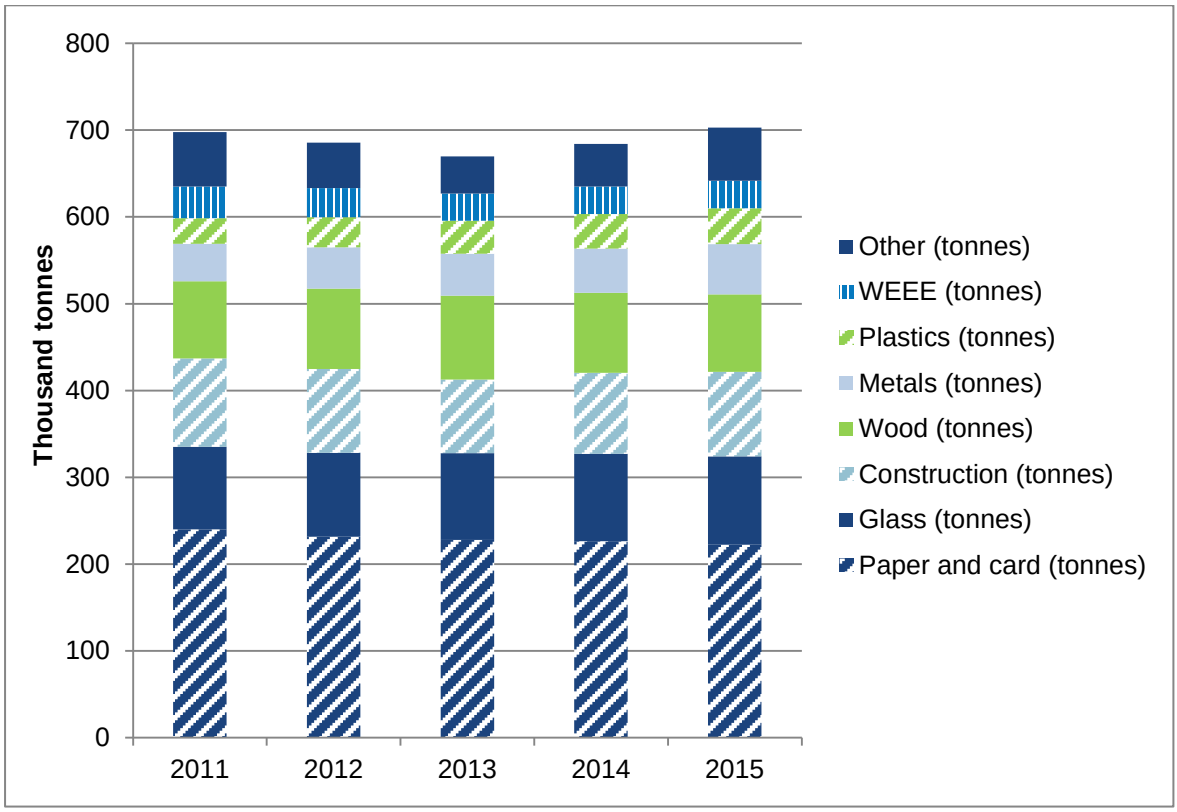


Table 7. Household waste recycled or reused by material in Scotland 2011-2015 (tonnes)

Year	Paper and card	Glass	Construction	Wood	Metals	Plastics	WEEE*	Other#	Total
2011	240,346	94,903	101,810	89,002	43,257	29,299	36,616	62,671	697,904
2012	231,776	96,658	96,701	92,403	47,711	34,528	33,743	52,129	685,648
2013	227,924	99,973	84,882	96,827	48,026	38,098	31,368	42,662	669,760
2014	226,491	100,580	93,308	92,323	51,129	39,527	31,748	49,090	684,197
2015	222,427	102,033	97,129	89,210	58,118	41,287	31,742	61,205	703,152

Notes:
* WEEE means waste electrical and electronic equipment
# Other materials includes textiles, discarded vehicles, soils; rubber wastes; chemical wastes; used oils; batteries; mixed and undifferentiated materials
§ The methodology for calculating household waste recycled and reused figures did not change in 2014

- The largest quantity of household waste material recycled or reused in 2015 were paper and card wastes (222,427 tonnes, 31.6%), followed by glass wastes (102,033 tonnes, 14.5%). The amount of paper and card wastes recycled or reused has decreased year on year from 2011 to 2015, with a decrease of 17,919 tonnes (7.5%) since 2011. Recycling or reuse of glass wastes has increased year on year during the same period, with an increase of 7,130 tonnes (7.5%) since 2011.

- In 2015, the main types of household wastes recycled or reused were paper and card wastes (31.6%), glass wastes (14.5%), construction wastes (13.8%), metals wastes (8.3%), plastics wastes (5.9%), and WEEE (4.5%). A range of other wastes such as soils, textiles, batteries, soils, discarded vehicles, used oils and mixed wastes contributed to the remaining 8.7%.

Figure 7. Household waste composted by material in Scotland 2011-2015

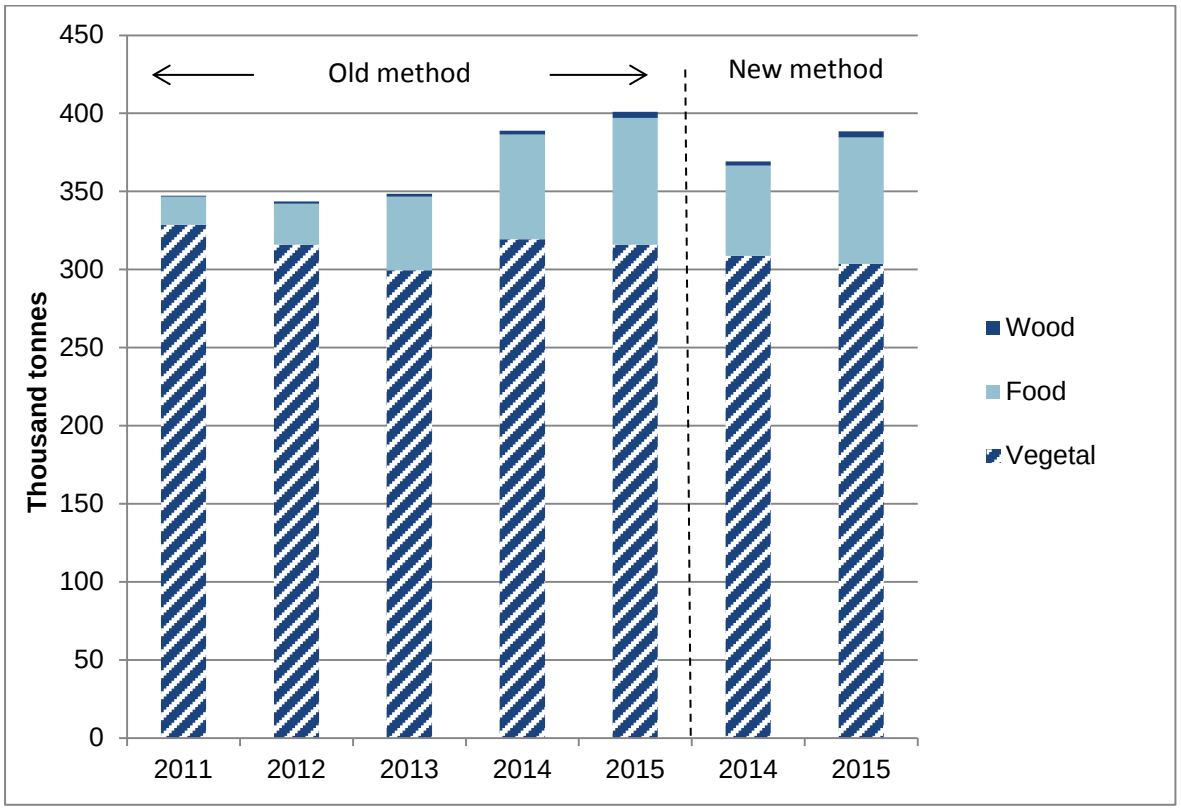


Table 8. Household waste composted by material in Scotland 2011-2015 (tonnes)

Year	Vegetal	Food	Wood	Total
2011 - OLD METHOD	328,538	18,104	466	347,109
2012 - OLD METHOD	315,751	26,296	1,454	343,501
2013 - OLD METHOD	299,384	47,187	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	308,706	57,858	2,477	369,040
2015	303,639	80,951	3,860	388,450

- In 2015 the components of the vegetal wastes and food wastes category changed. Previously, the WasteDataFlow material category 'mixed garden and food' waste mapped 100% to the food waste reporting category. This WasteDataFlow material category now maps to 75% vegetal waste and 25% food waste. All data from 2011-2015 has been revised in line with this new classification.

- For the 2015 calendar year, the total tonnage of vegetal wastes composted was 303,639 tonnes, a decrease of 5,067 tonnes (1.6%) from 2014. 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 2015 would have been 315,754 tonnes, which is 12,784 tonnes (3.9%) greater than the 328,538 tonnes of vegetal wastes composted in 2011.

- For the 2015 calendar year, the total tonnage of food waste composted was 80,951 tonnes, an increase of 23,094 tonnes (39.9%) from 2014. Prior to 2014, 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 food waste composted in 2015 would have been 81,348 tonnes, which is 63,244 tonnes (349.3%) greater than the 18,104 tonnes of food waste composted in 2011.

- The tonnage of wood wastes composted has increased year on year from 2011 to 2015, with an increase of 1,383 tonnes from 2014 to 2015, and an overall increase of 3,394 tonnes from the 466 tonnes of Wood wastes composted in 2011. There was no wood recorded as composted at non PAS 100/110 composting facilities in either 2014 or 2015. Therefore the wood tonnage composted under the new method is the same as the method prior to 2014.

- In 2015 calendar year, vegetal wastes comprised 78.2% of total household waste composted, a decrease from 83.7% in 2014. Food waste contributed 20.8% in 2015, an increase from 15.7% from 2014 and wood wastes contributed 1.0% in 2015, an increase from 0.7% in 2014.

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.

This statistic was first published on 20th September 2016. This revision contains an erratum which corrects the following:

Aberdeenshire: Amendment to waste generated, waste recycled, and waste landfilled. Recycling rate is 43.7%, 3.5 percentage points less than the original publication.

East Dunbartonshire: Amendment to waste recycled and other waste diverted from landfill. Recycling rate is 50.7%, 5.6 percentage points greater than the original publication.

Scotland: Amendment to waste generated, waste recycled, other waste diverted from landfill, and waste landfilled. Waste recycling rate is 44.2%, 0.1 percentage points less than the original publication. The step change increase in recycling rate from 2014 remains unchanged at 1.4 percentage points.

Methodology

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

From 2014, composted wastes that do not reach the quality standards set by PAS 100/110 are accounted for as other wastes diverted from landfill and not as wastes composted.

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.

In 2015, the mapping of WasteDataFlow materials into reporting categories changed. These do not impact on the overall waste generated or managed, or result in any change to headline recycling figures. They may, however, change the waste generated and managed for individual waste categories. The changes made are as follows:

WasteDataFlow Category	**Old Mapping**	**New Mapping**
Mixed garden and food waste	Animal and mixed food waste	Vegetal wastes (75%) Animal and mixed food waste (25%)
Carpets	Household and similar wastes	Textile wastes
Absorbent Hygiene Products (AHP)	Household and similar wastes	Health care and biological wastes
Co-mingled materials	Household and similar wastes	Mixed and undifferentiated materials
Incinerator bottom ash	Household and similar wastes	Combustion wastes

The first mapping (mixed garden and food waste) is the only change that has an impact on the contents of this report, in particular the table and graphic with the breakdown for waste types composted.

All data from 2011-2015 have been revised in line with this new classification.

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. For these 2015 statistics, the pre-release period for the Scottish Government was extended by 1.5 days to take account of the Autumn holiday.

Glossary of terms

BSI PAS 100 / 110 – a national compost benchmark that specifies the minimum requirements for the process of composting, the selection of material from which compost is made, and standards for the compost 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 in Scotland became part of Scottish Government policy in 2011, with 2014 being the first year it has been applied to the household official statistics. Organic waste recycled that do not meet this standard have not been included in recycling statistics for the 2015 dataset.

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 of waste to PAS 100/110 and non PAS 100/110 compost 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 that has not reached the quality standards set by PAS 100/110 and is not landfilled.

Recycling rate – is defined as waste recycled as a percentage of all waste generated. Note that total waste generated does not equal waste managed due to stockpiled waste which is counted in the generation figures and will be included in waste managed figures for the year when they are managed.

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

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 landfill sites 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. 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.