Waste from all sources – Summary data 2014

This release provides a summary of Scottish waste generated and managed in calendar year 2014. The data in this release represent Waste From All Sources (WFAS) and this is the first time they have been published in this format. Further information including definition of terms is included in the methodology and glossary.

Key points

WFAS– 2014 calendar year

- The total quantity of WFAS generated in Scotland in 2014 was 10.22 million tonnes, a decrease of 11.0% since 2013. This follows a 12.2% increase the previous year.
- The amount of waste generated varies between 10% and 20% year on year, primarily due to changes in the amount of Construction and demolition (C&D) waste generated. This variation in C&D waste is sensitive to the number of large infrastructure projects in any given year.
- When C&D waste is discounted waste generation has fallen steadily every year since 2011.
- The quantity of separately collected Paper and cardboard waste generated in 2014 decreased by 3.0% (0.0043 million tonnes) from 2013, and by 22.7% (0.043 million tonnes) from 2011, thought to reflect a move away from print media.
- In 2014, the WFAS recycled estimated using a new recycling calculation methodology was 5.57 million tonnes. Using the old methodology, the WFAS recycled was 5.63 million tonnes, which was 0.66 million tonnes (10.5%) lower than in 2013. This followed a 1.33 million tonne (26.9%) increase the previous year. The bulk of the difference is due to a decrease in recycling of C&D waste such as Soils and Mixed waste from construction and demolition.
- Scotland's overall recycling rate in 2014 was 55.3%.
- 89.2% of C&D waste was recycled in 2014.
- The quantity of Animal and mixed food waste recycled in 2014 using the old recycling calculation increased by 21.3% (0.032 million tonnes) from 2013 and increased by 178.0% (0.12 million tonnes) from 2011.
- Scottish waste sent for energy recovery in 2014 was 0.47 million tonnes, an increase of 0.15 million tonnes (47.0%) from 2013, and increase of 0.20 million tonnes (73.7%) from 2011.
- Scottish waste disposed by landfill or incineration without energy recovery in 2014 was 4.16 million tonnes, similar to 2013.
- The WFAS landfill rate in 2014 was 39.2%, an increase of 1.6% from 2013. This follows a 2.0% decrease in landfill rate the previous year.

Data for WFAS generated and managed by waste type for 2011 - 2014 and the trends for WFAS generated, recycled and managed is available from WFAS Discover Data tool on Scotland's Environment Website.

Annual WFAS 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.

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Table 1. Waste from all sources- Summary data 2014

Waste type [2]	Generated (tonnes)	Recycled (tonnes)	Recovered (tonnes)	Disposed (tonnes) [2]	Recycled old method) (tonnes) [1]
Spent solvents	60,701	-	-	947	-
Acid, alkaline or saline wastes	12,006	871	-	0	871
Used oils	67,396	-	-	86	-
Chemical wastes	114,353	70	-	3,719	70
Industrial effluent sludges	69,126	1,034	5,295	13,988	1,192
Sludges and liquid wastes from waste treatment	-	45,938	10,410	1,118	47,288
Health care and biological wastes	33,689	-	-	5,151	-
Metallic wastes, ferrous	224,449	558,103	-	8	558,103
Metallic wastes, non-ferrous	29,385	60,104	-	110	60,104
Metallic wastes, mixed ferrous and non-ferrous	169,989	104,474	-	2	104,474
Glass wastes	135,210	267,689	-	2,227	267,689
Paper and cardboard wastes	146,703	164,467	-	1,134	164,467
Rubber wastes	37,833	30	16,183	111	30
Plastic wastes	44,894	38,996	-	1,395	38,996
Wood wastes	312,801	255,724	206,895	1,588	255,902
Textile wastes	22,129	2,187	-	9,753	2,193
Waste containing PCB	143	-	-	-	-
Discarded equipment (excluding discarded vehicles, batteries and accumulators wastes)	50,987	8,688	-	2,500	8,688
Discarded vehicles	70,601	1,916	-	0	1,916
Batteries and accumulators wastes	6,040	5,478	-	2	5,478
Animal and mixed food waste	320,310	183,980	-	11,532	189,400
Vegetal wastes	722,085	574,148	104	5,708	606,374
Animal faeces, urine and manure	127,439	9,615	117,431	156	9,727
Household and similar wastes	2,242,831	7,503	-	1,414,079	30,255
Mixed and undifferentiated materials	91,090	18,824	-	41,214	18,840
Sorting residues	60	5,713	95,377	779,131	6,113
Common sludges	110,750	237,614	22,430	21,599	237,614
Mineral waste from construction and demolition	1,395,850	786,909	-	152,154	786,909
Other mineral wastes	121,850	33,776	-	50,964	33,776
Combustion wastes	421,972	1,749	-	364,589	1,749
Soils	3,047,060	2,136,660	-	1,131,116	2,136,660
Dredging spoils	8,454	7,678	-	202	7,678
Mineral wastes from waste treatment and stabilised wastes	0	49,674	-	145,413	49,674
Total	**10,218,187**	**5,569,612**	**474,126**	**4,161,697**	**5,632,231**

1. Including composted wastes that do not reach the quality standards set by PAS 100/110
2. Waste disposed includes waste incineration by disposal and waste landfilled. Waste recovered includes waste incineration by recovery and waste incinerated by co-incineration
3. The amount of waste recycled may be larger than the amount of waste generated because waste may be generated as mixed waste, for example as 'household and similar wastes' or 'Metallic wastes, mixed ferrous and non-ferrous', and at a subsequent stage it is treated to separate it into its component parts before being recycled

Table 2. Key figures to support targets specified in Scottish waste policies*

Indicator	Year	Performance	Target / Target year
1. Reduce biodegradable municipal waste to be sent to landfill	2005	2.16 million tonnes	**< 2.7 million tonnes / 2010** **< 1.8 million tonnes / 2013** **< 1.26 million tonnes / 2020**
	2006	2.03 million tonnes	
	2007	1.97 million tonnes	
	2008	1.78 million tonnes	
	2009	1.57 million tonnes	
	2010	1.41 million tonnes	
	2011	1.28 million tonnes	
	2012	1.17 million tonnes	
	2013	1.08 million tonnes	
	2014	1.06 million tonnes	
2. Recycling and preparing for reuse of construction and demolition waste‡	2011	84.8%	**70% / 2020**
	2012	85.9%	
	2013	90.5%	
	2014	89.2%	
3. Recycling/composting and preparing for re-use of waste from all sources§	*2011 (old method)*	52.7%	**70% / 2025**
	2012 (old method)	*50.3%*	
	2013 (old method)	58.4%	
	2014 (old method)	55.6%	
	2014 (new method)	55.3%	
4. Percentage of all waste sent to landfill§	2011	43.4%	**< 5% / 2025**
	2012	45.4%	
	2013	37.7%	
	2014	39.2%	
5. Reduce waste generated in Scotland	2012	83.2%	**<93% of 2011 baseline / 2017** **<85% of 2011 baseline / 2025**
	2013	94.7%	
	2014	85.4%	

* Waste policies include Scotland's Zero Waste Plan (2010) and Safeguarding Scotland's Resources (2013). Figures for the carbon metric impacts of waste, targets and performance are published by Zero Waste Scotland at www.zerowastescotland.org.uk/content/scotland%E2%80%99s-carbon-metric-impact

‡ C&D recycling rates and household waste recycled by weight of waste materials are from on triennial data provided to Europe for reporting under the Waste Framework Directive. C&D recycling excludes hazardous waste and soil and stone recycled.

§ The methodology used to calculate recycling tonnages changed in 2011. Years reported are those available that have been compiled using the current methodology.

Waste Generated

- The total quantity of waste generated in Scotland in 2014 was 10.22 million tonnes, a decrease of 11.0% since 2013. Overall there was a 14.6% reduction in waste generated between 2011 and 2014.
- The change in waste generated year on year since 2011 varied considerably, with a 20.2% decrease from 2011 to 2012, 12.2% increase from 2012 to 2013, and 11.0% decrease from 2013 to 2014 (see Figure 1 below).
- Excluding C&D sourced waste, waste generated was less variable and trended downward between 2011 – 2014 (R^2 = 0.9192, see Figure 2 below).
- C&D waste was the source of waste with the largest change, decreasing from 5.27 million tonnes in 2013 to 4.45 million tonnes in 2014 (a decrease of 0.82 million tonnes; 15.5%) (see Figure 1 below).
- Between 2011 and 2014 the variability in waste generated is primarily due to C&D waste generated. The year on year change in C&D waste generated was a 15.5% decrease in 2014, 37.8% increase in 2013, and 28.4% decrease in 2012. In comparison, the household waste generated varied by no more than 5% year on year during the same period.
- The generation of C&D waste is sensitive to large regional projects, which accounts for the year on year variation in C&D waste generated. For example in 2013 almost 0.4 million tonnes of soils were generated and recycled as part of one project in Scotland – a major gas plant construction project.
- Excluding C&D waste, waste generated fell steadily from 6.63 million tonnes in 2011 to 6.14 million tonnes in 2012, 6.08 million tonnes in 2013 and 5.77 million tonnes in 2014 (see Figure 2 below).

Figure 1. WFAS generated by waste source in Scotland 2011-2014

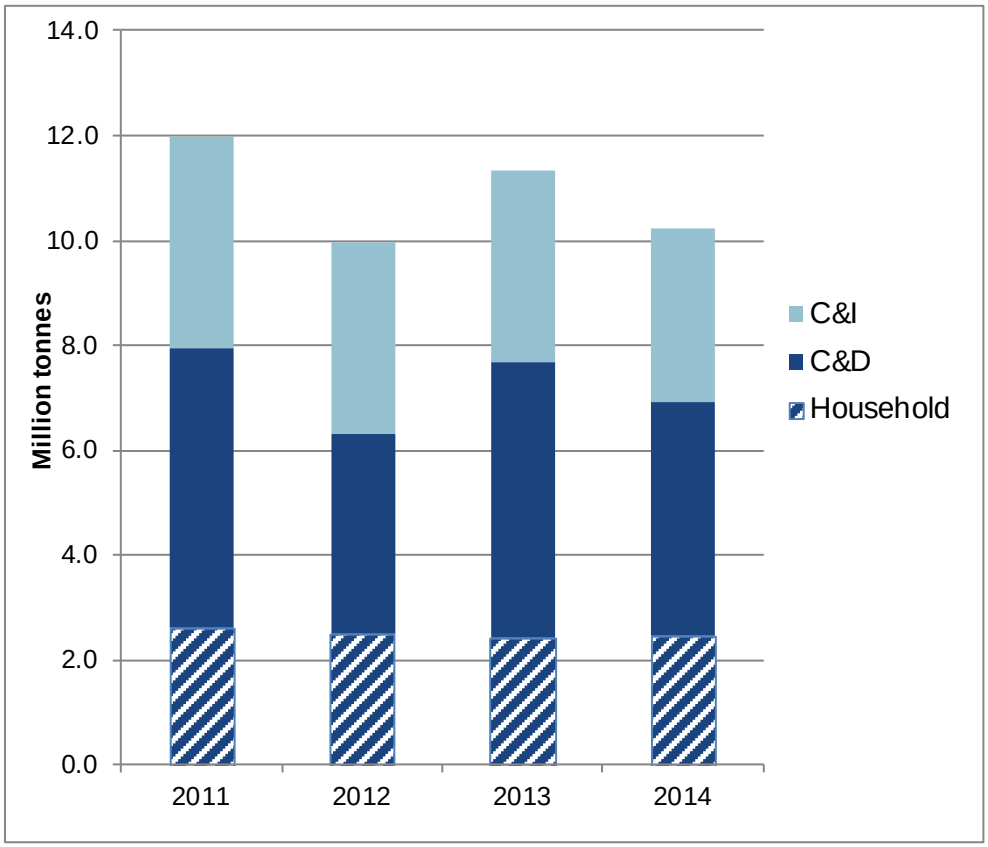
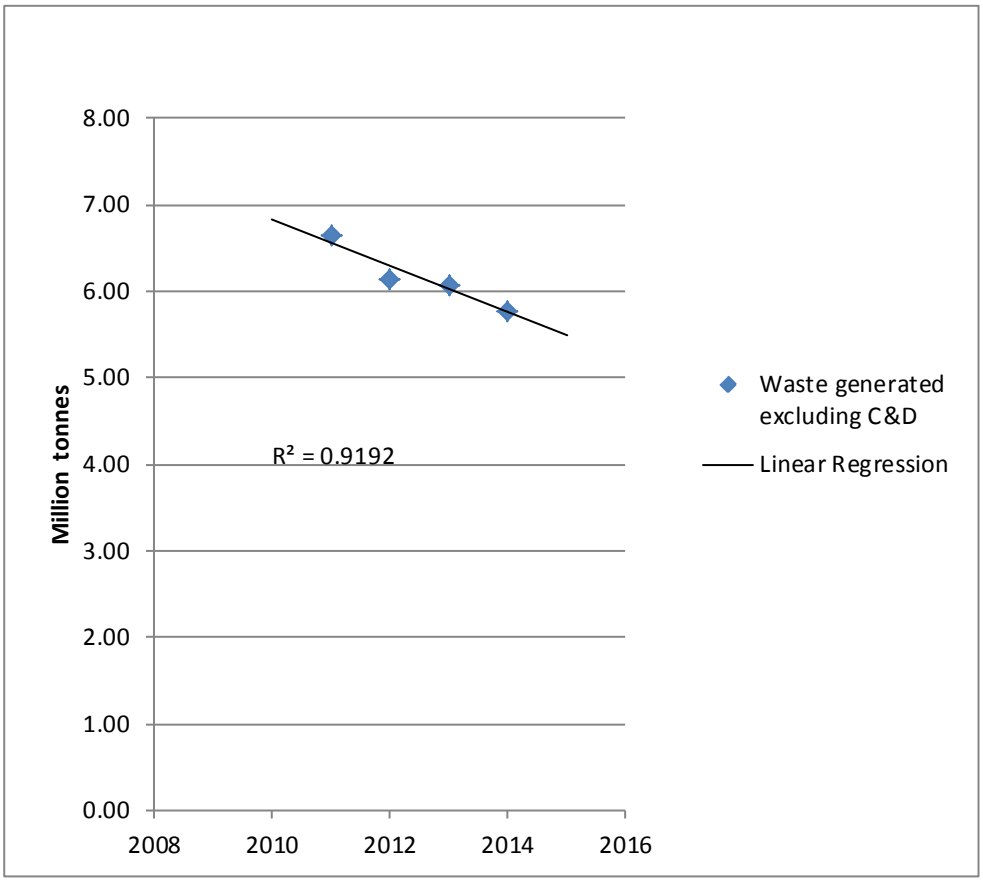


Table 3. Scottish WFAS generated by waste source 2011 - 2014

Year	C&I (tonnes)	C&D (tonnes)	Household (tonnes)	Total waste generated (tonnes)
2011	4,025,733	5,337,281	2,606,759	**11,969,774**
2012	3,639,627	3,819,510	2,500,836	**9,959,974**
2013	3,662,432	5,265,035	2,412,706	**11,340,173**
2014	3,310,131	4,448,497	2,459,559	**10,218,187**

Figure 2. Waste generation trend excluding C&D sources 2011-2014



- The largest waste category generated in Scotland in 2014 was Soils (3.05 million tonnes, 29.8%), followed by Household and similar waste (2.24 million tonnes, 21.9%) and Mineral waste from construction and demolition (1.40 million tonnes, 13.7%).
- It should be noted that the category Household and similar wastes shown in Figure 3 below includes waste generated by households as well as business. This category includes the refuse from regular waste collections provided by local authorities and other contractors. In 2014, there were 1.65million tonnes of household and similar waste generated by households, and 0.60million tonnes generated by Scottish businesses. The household and similar waste generated decreased year on year from 3.05 million tonnes in 2011 to 2.24 millions tonnes in 2014 (0.80 million tonne decrease, 26.4%). Of the 26.4% decrease in household and similar waste, 4.7% was due to a decrease in household and similar waste generated by households and 21.7% was due to a decrease from household and similar waste generated by business.
- The reduction in waste generation may be partly due to implementation of general policies targeted at reducing waste, including reduction in frequency of residual waste collections by local authorities, the implementation of source segregated recycling services to the commercial and public sector as required under the Waste Scotland Regulations (2012), and a new legislative duty of care that requires all waste producers (excluding householders) to segregate material for recycling.

Figure 3. Scottish waste generated by waste category 2011 - 2014

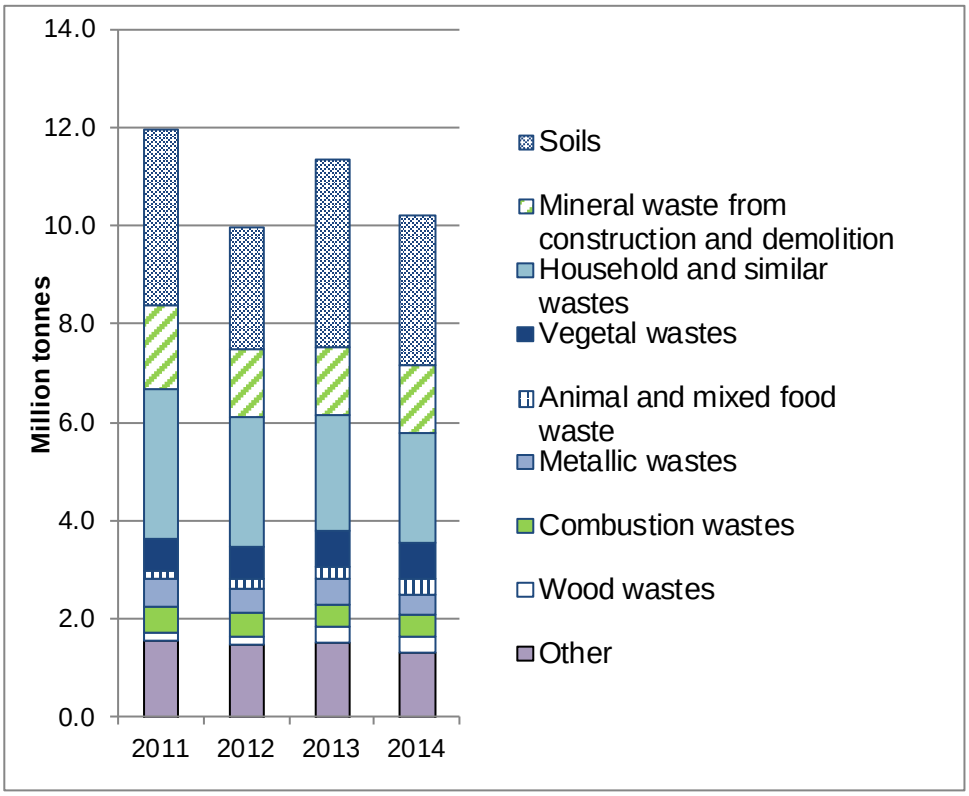


Table 4. Scottish waste generated by waste category 2011 - 2014

Waste Category	Year			
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)
Soils	3,593,459	2,456,728	3,808,590	3,047,060
Mineral waste from construction and demolition	1,703,764	1,387,762	1,377,447	1,395,850
Household and similar wastes	3,047,022	2,641,866	2,369,421	2,242,831
Vegetal wastes	641,525	676,960	743,333	722,085
Animal and mixed food waste	185,084	195,557	246,263	320,310
Metallic wastes	540,538	468,461	517,700	423,823
Combustion wastes	542,756	499,687	453,684	421,972
Wood wastes	176,684	152,756	292,218	312,801
Other	1,538,942	1,480,198	1,531,516	1,331,455
Total	**11,969,774**	**9,959,974**	**11,340,173**	**10,218,187**

- Separately collected Animal and mixed food waste increased from 0.19 million tones in 2011 to 0.32 million tonnes in 2014 (see Figure 4 below), an increase of 73.1%.

- Separately collected animal and mixed food waste from commercial sources appears to be starting to trend upward (see Figure 4 below), consistent with the upward trend of this waste category from household sources since 2011. This is also consistent with the implementation of the Waste (Scotland) Regulations 2012 that requires businesses in Scotland to source segregate materials including, in urban areas, food waste and requires local authorities to provide a minimum food waste recycling service to householders.
- It should be noted that the increase in separately collected animal and mixed food waste does not necessarily indicate an increase in the generation of food waste in Scotland. Rather, it likely indicates that this waste was previously disposed with general waste and is now being collected separately for recycling.

Figure 4. Separately collected Animal and mixed food waste generated from household and C&I sources 2011 - 2014

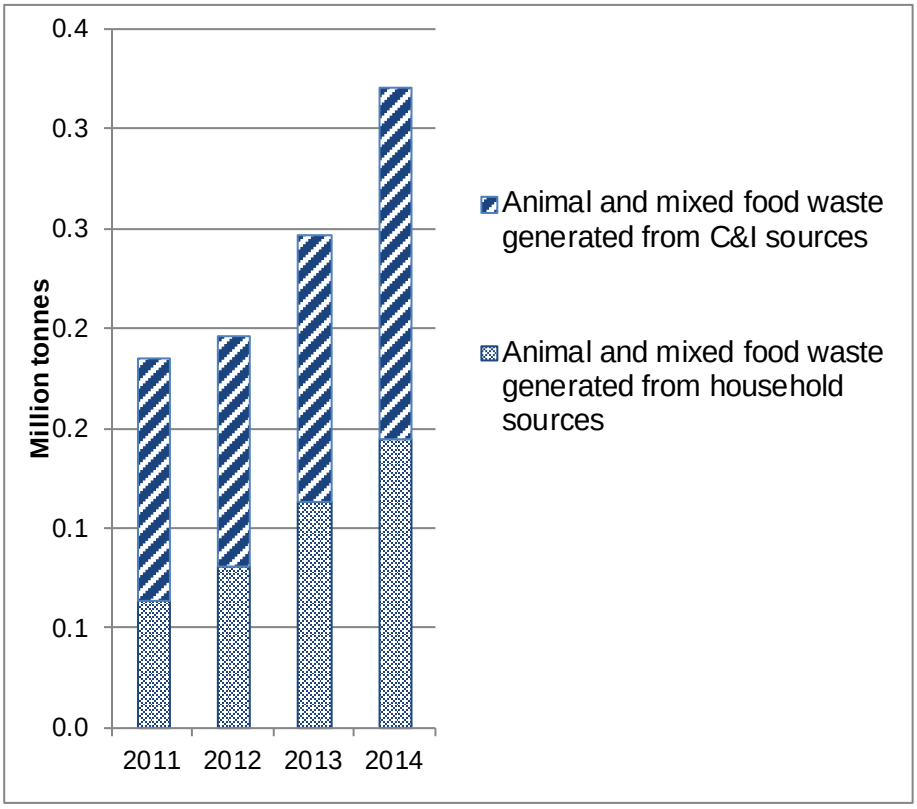


Table 5. Separately collected Animal and mixed food waste generated from household and C&I sources 2011 - 2014

Year	C&I (tonnes)	Household (tonnes)
2011	121,404	63,680
2012	114,788	80,769
2013	133,301	112,963
2014	175,581	144,729

- Between 2011 and 2014 the amount of separately collected Paper and cardboard waste generated in Scotland fell by 22.7% (0.043 million tonnes). C&I sources contributed 15.5% to this decrease while household sources contributed 7.3% to the decrease.
- Between 2013 and 2014 there was a decrease of 3.0% (0.0043 million tonnes) for separately collected Paper and cardboard generated. This was due to a 4.6% decrease of Paper and cardboard generated from C&I source, while there was a 9.5% increase of Paper and cardboard generated from household sources during the same period. Although separate data is not available for the individual paper or cardboard waste streams, the reduction in print media could be a contributing factor to the decrease in waste Paper and cardboard generated since 2011. It has been suggested that an increase in on-line shopping by households, with associated packaging, would increase the waste cardboard generated. The increase in waste Paper and cardboard from household source in 2014 is consistent with this hypothesis.

Figure 5. Separately collected Paper and cardboard waste generated from household and C&I sources 2011 - 2014

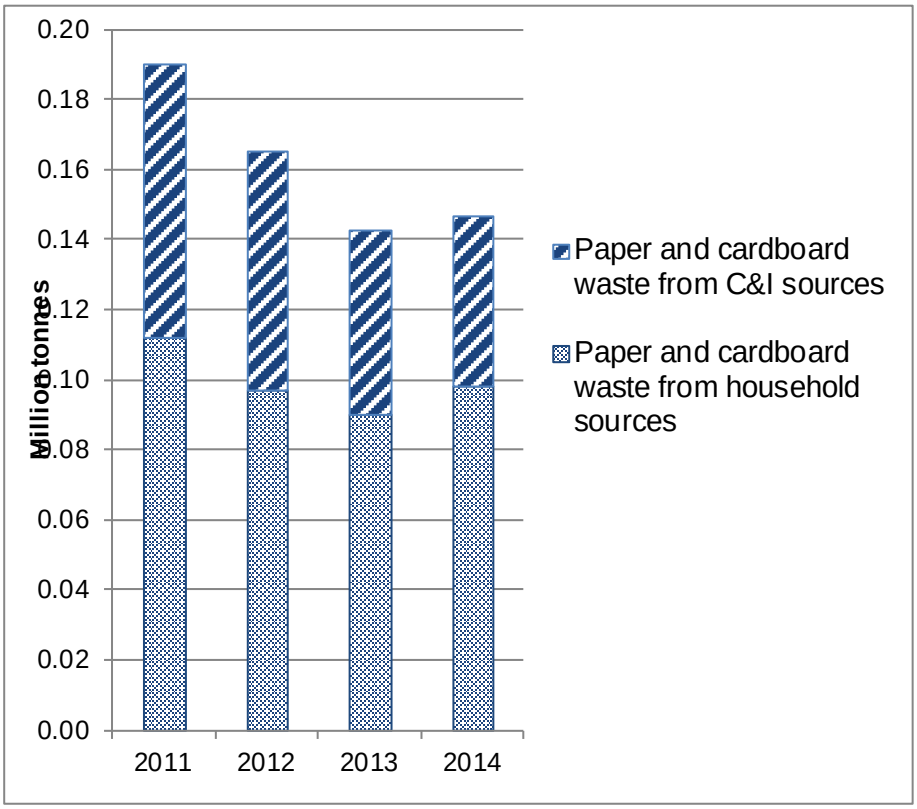


Table 6. Separately collected Paper and cardboard waste generated from household and C&I sources 2011 - 2014

Year	C&I (tonnes)	Household (tonnes)
2011	77,941	111,933
2012	68,515	96,624
2013	52,744	89,630
2014	48,597	98,105

- The total quantity of hazardous waste generated in Scotland was 0.52 million tonnes in 2014, an increase of 0.0053 million tonnes (1.0%) since 2013 (see Figure 6 below). Overall there has been a 5.1% decrease in the generation of Scottish hazardous waste since 2011. As in previous years, the bulk of hazardous waste generated in 2014 (77.4%, 385,134 million tonnes) was from C&I sources.

Figure 6. Scottish hazardous waste generated by waste source 2011 - 2014

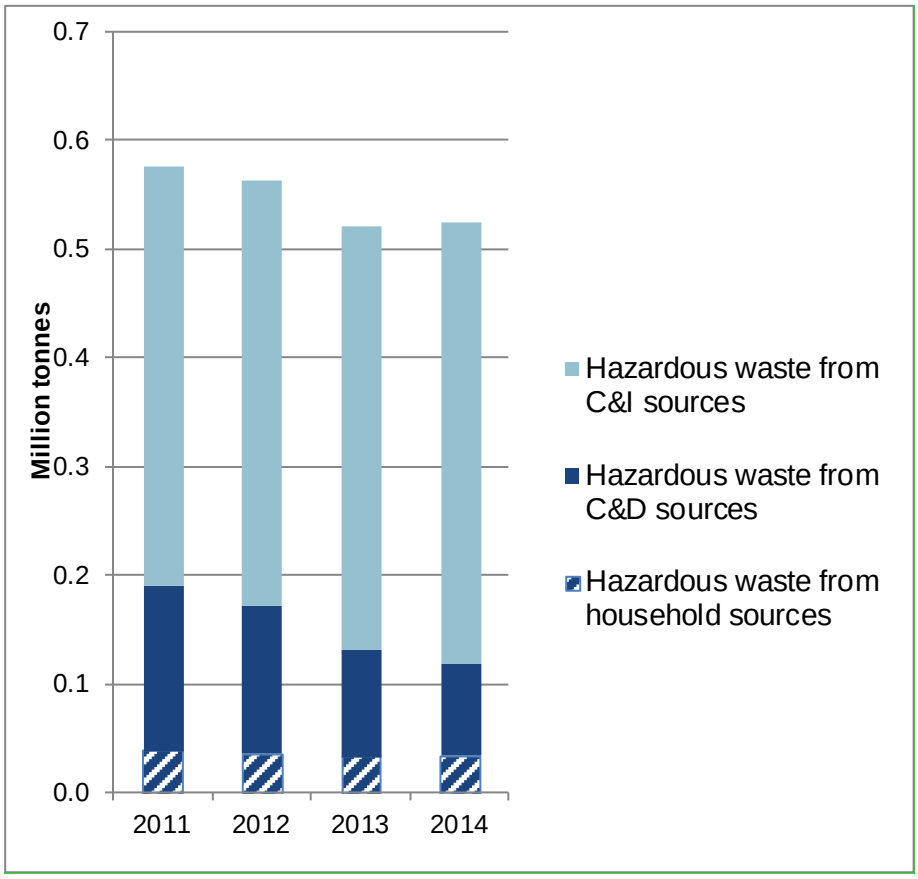


Table 7. Scottish hazardous waste generated by waste source 2011 - 2014

Year	C&I (tonnes)	C&D (tonnes)	Household (tonnes)
2011	385,134	152,737	37,324
2012	390,135	136,718	35,204
2013	389,319	97,669	32,368
2014	405,915	85,897	32,861

- In 2014 the main category of hazardous waste generated was Chemical wastes (0.11 million tonnes, 19.3%) followed by Used oils (0.067 million tonnes, 11.9%– see Figure 7 below). The low quantity of hazardous Soils waste generated in 2013 was replicated in 2014.

Figure 7. Scottish hazardous waste generated by waste category 2011 - 2014

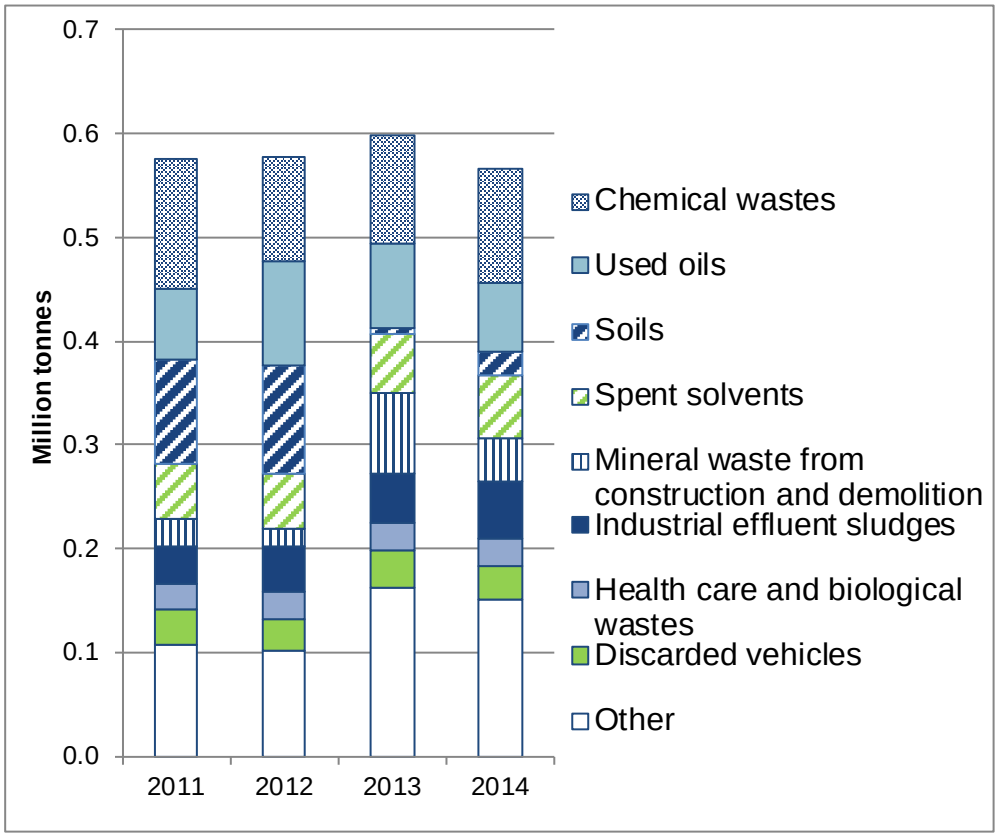


Table 8. Scottish hazardous waste generated by waste category 2011 - 2014

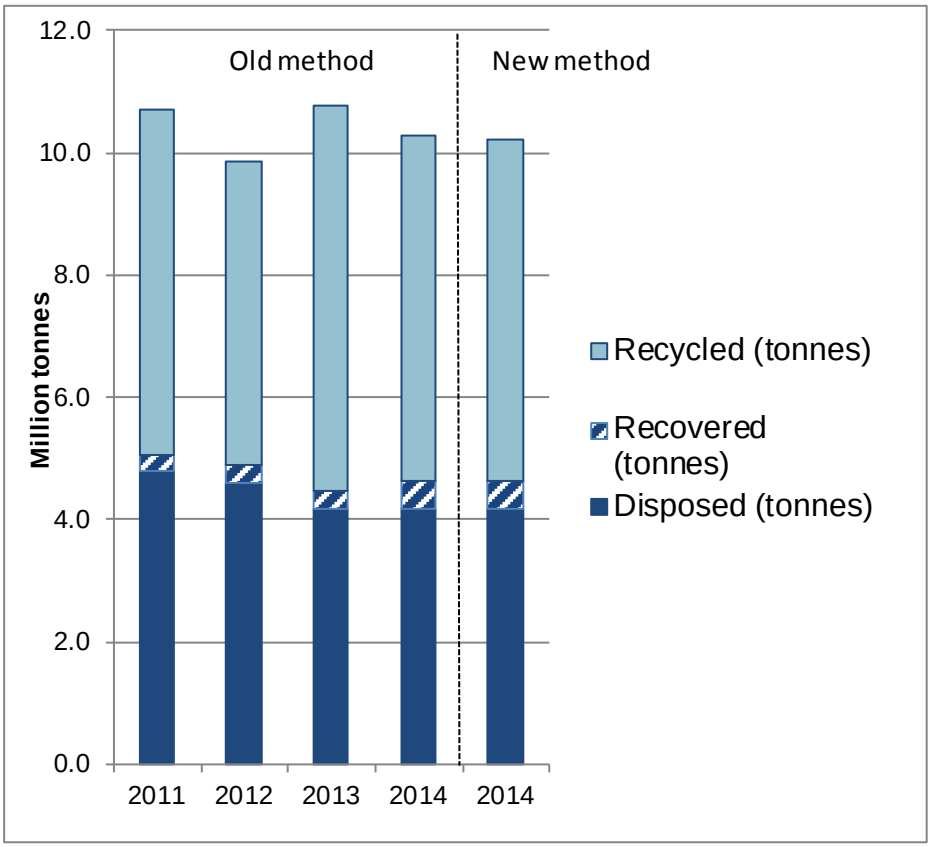
Waste Type	Year			
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)
Chemical wastes	124,506	100,521	104,941	109,390
Used oils	67,615	102,210	80,940	67,396
Soils	101,230	104,043	6,158	22,204
Spent solvents	53,365	53,267	55,927	60,701
Mineral waste from construction and demolition	25,453	16,353	78,927	41,063
Industrial effluent sludges	37,881	44,345	47,315	55,117
Health care and biological wastes	23,639	25,614	25,601	26,657
Discarded vehicles	33,977	31,320	37,097	32,895
Other	107,530	100,736	161,377	150,314
Total	**575,196**	**578,410**	**598,283**	**565,737**

Waste Managed

- In 2014 the total amount of Scottish waste recorded as managed by recycling, incineration or landfill was 10.21 million tonnes.

- For the 2014 calendar year, the measurement of the total tonnage of waste that was recycled was undertaken using a new methodology. The waste composted that did not reach the quality standards set by PAS 100/110 has not been included in the recycling figures. If such waste was included, as in the old method, the total waste managed in 2014 would have been 10.27 million tonnes, an decrease of 5.9%.
- Waste types managed do not necessarily correspond to the waste types generated. This is because waste may change form following collection and final management. For example, in 2014 there was only 0.000060 million tonnes of Scottish waste generated in the Sorting residues category. However, in the same period there was 0.88 million tonnes of Sorting residues recorded as managed, primarily disposed by landfill (0.76 million tonnes), incinerated by disposal (0.02 million tonnes) and incinerated by recovery (0.08 million tonnes). Sorting residues are typically produced as the result of the mechanical treatment of waste. A treatment plant may take waste inputs such as Mixed and undifferentiated materials (including co-mingled materials such as mixed packaging waste) and Household and similar waste. The treatment plant may then produce products that can be reused or recycled, such as metal, plastic or glass, and also produces reject material that is disposed. Consequently, the tonnage of these materials will be different in the waste generated tables compared to the waste managed tables.
- In 2014, the total amount of Scottish waste managed was 10.21 million tonnes which was 0.015 million tonnes (0.12% less than the amount of waste generated (see Table 3 on page 5). In historical publications the gap between waste managed and waste generated was larger, with the waste generated typically between 15% - 30% greater than waste managed. SEPA has produced more robust methodology for estimating C&I data generated (introduced with the 2011 publication with further refinements in 2013 and applied to historical data) and for C&D waste aggregates recycled (introduced with 2014 publication and applied to historical data). With these new methodologies this gap is not as large, ranging from 10.4% greater tonnages of waste generated than managed in 2011, 1.0% in 2012, 5.0% in 2013, to 0.12% less waste generated than managed in 2014. For further information, please refer to the quality report on SEPA's web site.
- As the waste managed is not equal to the tonnages of waste generated, the percentage recycling rate and landfill rates referred to in this document (see Table 2 on page 3) are all relative to the total waste managed rather than waste generated.

Figure 8. Scottish waste managed[1, 2] 2011-2014



1. Recycled includes waste recycled and reused and waste composted. Disposal include incineration by disposal and waste landfilled. Recovered includes incineration by recovery and incineration by co-incineration.
2. Waste managed is final management

Table 9. Scottish waste managed[1 2] in 2011-2014

Year	Recycled (tonnes)	Recovered (tonnes)	Disposed (tonnes)
2011	5,648,585	273,032	4,800,431
2012	4,959,802	283,952	4,612,755
2013	6,291,813	322,438	4,163,618
2014 - Old Method	5,632,231	474,126	4,163,618
2014 - New Method	5,569,612	474,126	4,161,697

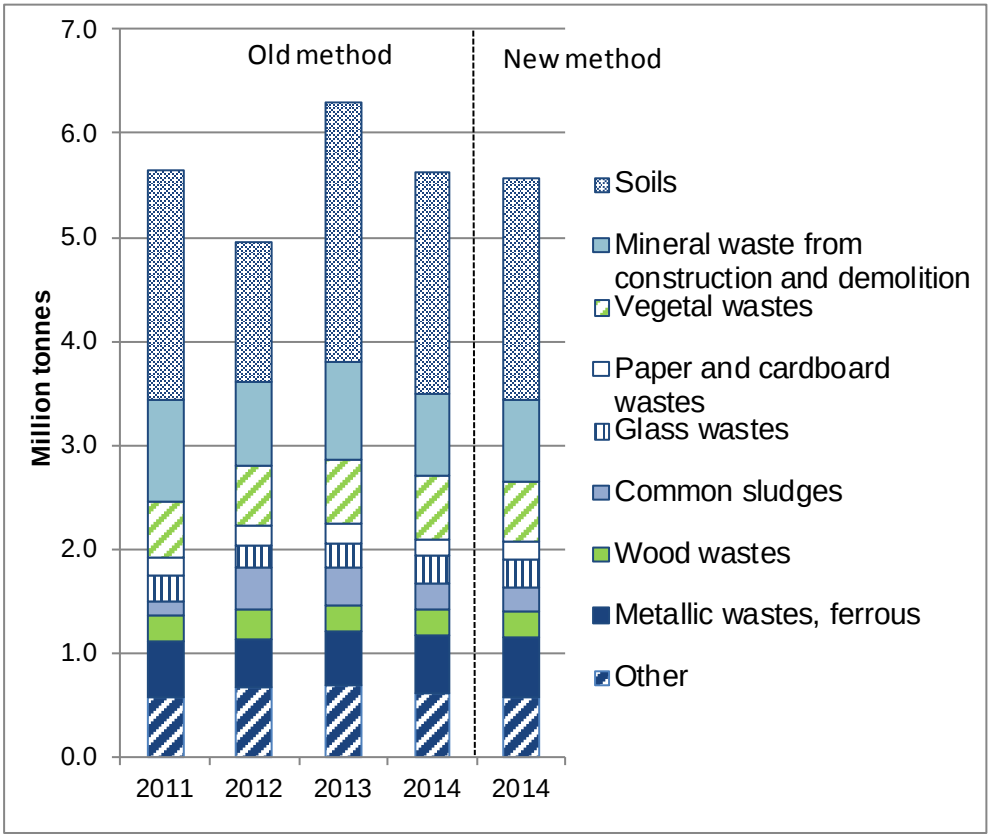
1. Recycled includes waste recycled and reused and waste composted. Disposal include incineration by disposal and waste landfilled. Recovered includes incineration by recovery and incineration by co-incineration.
2. Waste managed is final management

Waste Recycled

- For the 2014 calendar year, the total tonnage of waste recycled calculated using the new calculation methodology was 5.57 million tonnes. The waste composted that did not reach the quality standards set by PAS 100/110 has not been included in the recycling figures. If such waste was included, as in the previous method, the total waste recycled in 2014 would have been 5.63 million tonnes, a difference of 0.063 million tonnes (1.1%).

- In 2014 the waste category with the highest tonnage recycled was Soils (2.14 million tonnes, a decrease of 0.36 million tonnes or 14.3% recycled from 2013) followed by Mineral waste from construction and demolition (0.79 million tonnes, a decrease of 0.31 million tonnes 51% from 2013) (see Figure 9 below).

Figure 9. Scottish waste recycled[1, 2] by waste category 2011 - 2014



1. Recycled includes waste recycled and reused and waste composted.
2. Waste managed is final management

Table 10. Scottish waste recycled by waste category 2011 – 2014

Waste Category	Year				
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 – Old Method (tonnes)	2014 - New Method (tonnes)
Soils	2,218,276	1,344,982	2,492,680	2,136,660	2,136,660
Mineral waste from construction and demolition	963,273	800,937	941,212	786,909	786,909
Vegetal wastes	538,308	581,506	611,754	606,374	574,148
Paper and cardboard wastes	172,253	203,049	190,642	164,467	164,467
Glass wastes	256,362	197,904	227,394	267,689	267,689
Common sludges	132,449	403,278	367,864	237,614	237,614
Wood wastes	259,251	288,332	252,460	255,902	255,724
Metallic wastes, ferrous	529,196	462,383	512,865	558,103	558,103
Other	579,217	677,431	694,941	618,513	588,299
Total	**5,648,585**	**4,959,802**	**6,291,813**	**5,632,231**	**5,569,612**

- Using the previous recycling method, the waste recycled in 2014 was 0.66 million tonnes (10.5%) less than that recycled in 2013. This difference was primarily due to a decrease in the generation (and subsequent recycling) of Soils (0.36 million tonne decrease contributes 54.0% of the 10.5% decrease) and Mineral waste from construction and demolition (0.15 million tonne decrease, contributes 23.4% of the 10.5% decrease). Both these waste streams are primarily from the C&D sector, which varies considerably year on year with construction economic outputs and major projects in the country. For example, in 2013 nearly 0.4 million tonnes of soil recycled was from one project – a major gas plant construction project.
- There was 0.16 million tonnes of Paper and cardboard recycled in 2014. This is likely an underestimate, as the current methodology currently does not capture paper and cardboard in exported mixed waste collections. For further information, please refer to the quality report on SEPA's web site.
- In 2014 there was 0.49 million tonnes of organic wastes recycled by composting or anaerobic digestion facilities. Using the previous recycling method, the organic waste recycled was 0.56 million tonnes, which is a 0.043 million tonnes (8.5%) increase from that recycled in 2013.
- Using the previous recycling method, the highest tonnage of organic waste recycled (see Figure 10 below) was 0.29 million tonnes of Vegetal waste, an increase of 0.027 million tonnes (10.3%) from that recycled in 2013, followed by 0.18 million tonnes of Animal and mixed food waste, an increase of 0.032 million tonnes (21.3%) from 2013 and an increase of 0.12 million tonnes (178.0%) from 2011. The increasing trend in food waste recycling corresponds to the roll-out of separate food waste collections under the Waste Scotland Regulations (2012).
- The tonnage of Animal and mixed food waste recycled (0.18 million tonnes) in 2014 was 42.3% less than the tonnages generated (0.32 million tonnes) in 2014. The difference is due to a proportion of the Animal and mixed food waste generated, such as sludges from washing and cleaning of fish processing waste, disposed as a mixed waste following waste treatment.

Figure 10. Scottish organic waste recycled by composting or anaerobic digestion 2011 - 2014

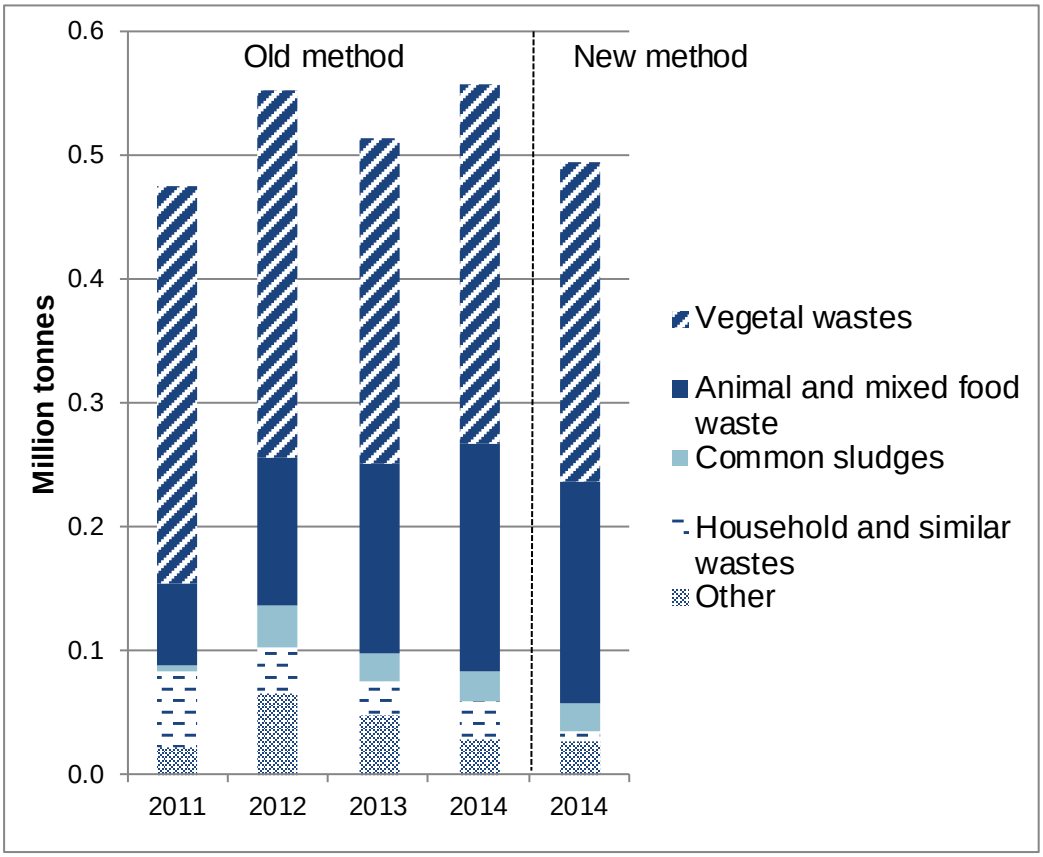


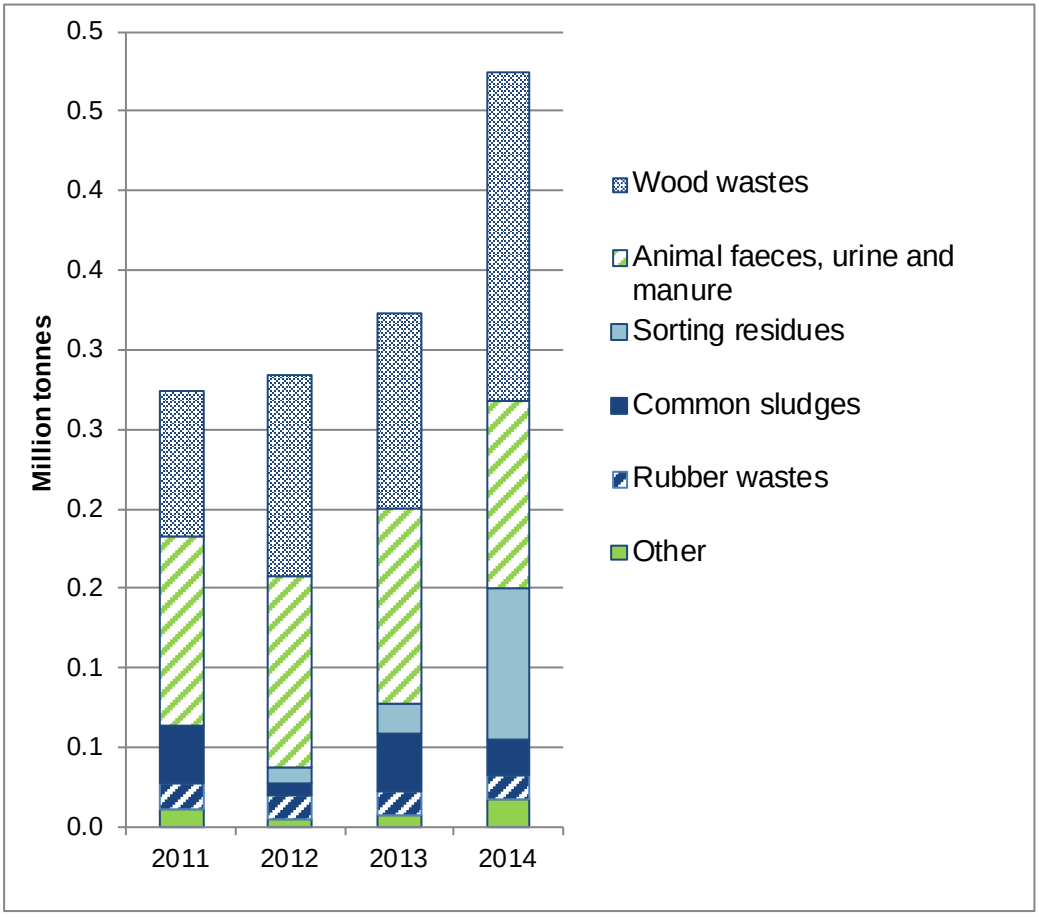
Table 11. Scottish organic waste recycled by composting or anaerobic digestion by waste category 2011 - 2014

Waste Category	Year				
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 - Old method (tonnes)	2014 - New Method (tonnes)
Vegetal wastes	320,025	296,333	261,760	288,663	256,437
Animal and mixed food waste	66,499	119,496	152,469	184,878	179,458
Common sludges	5,160	33,256	23,204	23,351	23,351
Household and similar wastes	60,593	37,352	26,812	30,255	7,503
Other	21,668	65,077	48,267	28,711	26,489
Total	**473,945**	**551,514**	**512,513**	**555,858**	**493,239**

Waste Recovered

- In 2014, there was 0.47 million tonnes of waste recovered through energy generation at co-incineration or incineration facilities. This is an increase of 0.15 million tonnes (47.0%) from 2013 and an increase of 0.20 million tonnes (73.7%) from 2011.
- The largest waste type recovered in 2014 was Wood waste (0.21 million tonnes) followed by Animal faeces, urine and manure (0.12 million tonnes) as depicted in Figure 11 below.

Figure 11. Scottish waste recovered[1] by waste category 2011 - 2014



1. Waste recovered includes waste inputs to co-incineration and incineration facilities that have been demonstrated to meet the R1 energy recovery efficiency specified in the EU Waste Framework Directive.

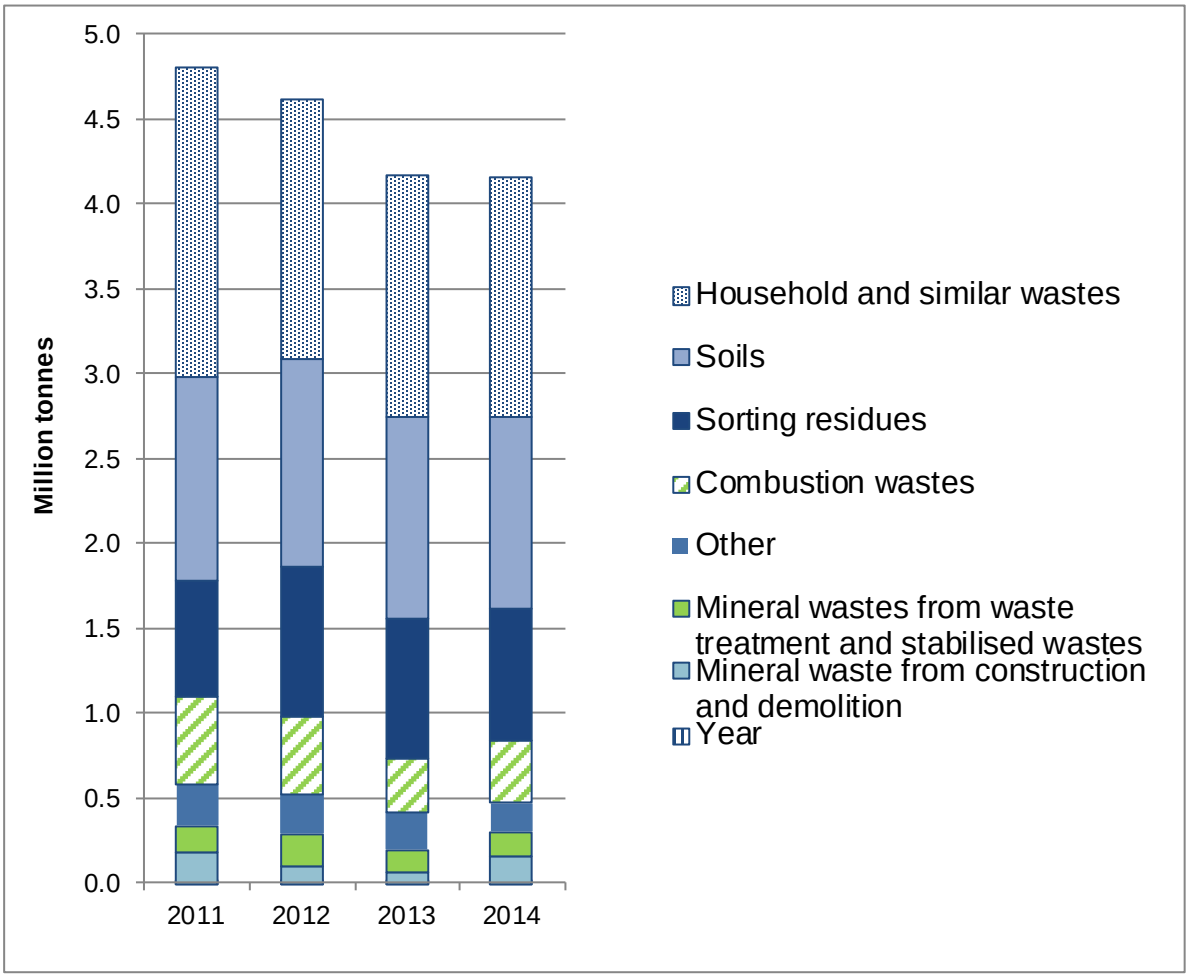
Table 12. Scottish waste recovered by waste category 2011 – 2014

Waste Category	Year			
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)
Wood wastes	90,616	127,621	122,523	206,895
Animal faeces, urine and manure	119,309	120,509	123,748	117,431
Sorting residues	-	-	-	-
Common sludges	37,200	7,150	36,060	22,430
Rubber wastes	15,235	14,539	15,025	16,183
Other	10,672	4,252	6,401	15,809
Total	**273,032**	**283,952**	**322,438**	**474,126**

Waste Disposed

- In 2014, there was 4.16 million tonnes of waste disposed at landfill or incineration without recovery facilities. This is a decrease of 0.0019 million tonnes (0.046%) from 2013 and a decrease of 0.64 million tonnes (13.3%) from 2011.
- The largest waste type disposed was Household and similar waste (1.41 million tonnes) followed by Soils (1.13 million tonnes) and Sorting residues (0.78 million tonnes) as depicted in Figure 12 below.

Figure 12. Scottish waste disposed[1] by waste category 2011 - 2014



1. Waste disposed includes waste landfilled and waste inputs to incineration facilities that have not been demonstrated to meet the R1 energy recovery efficiency specified in the EU Waste Framework Directive.

Table 13 Scottish waste disposed by waste category 2011 – 2014

Waste Category	Year			
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)
Household and similar wastes	1,817,999	1,528,431	1,415,035	1,414,079
Soils	1,202,936	1,217,230	1,197,673	1,131,116
Sorting residues	685,394	889,089	814,096	779,131
Combustion wastes	511,179	453,593	318,714	364,589
Mineral waste from construction and demolition	178,606	95,700	60,451	152,154
Mineral wastes from waste treatment and stabilised wastes	156,868	191,285	134,874	145,413
Other	247,449	237,427	222,774	175,216
total	**4,800,431**	**4,612,755**	**4,163,618**	**4,161,697**

- Scottish waste disposed to landfill in 2014 was 4.03 million tonnes, a decrease of 0.031 million tonnes (0.8%) from the 4.06 million tonnes landfilled in 2013. This decrease is part of a longer term trend of decreasing disposal to landfill (see Figure 13 below), with the waste disposed to landfill in 2014 2.98 million tonnes (42.5%) lower than that disposed to landfill in 2005 (7.01 million tonnes).
- As depicted in Figure 14 below, there was 0.035 million tonnes of Scottish Hazardous waste disposed to landfill in 2014, which amounts to 0.9% of all Scottish waste landfilled. The bulk of Scottish Hazardous waste landfilled was Other mineral wastes (0.021 million tonnes, 59.6%) which primarily comprise insulating materials such as asbestos, followed by hazardous Soils (0.012 million tonnes, 34.4%). In 2013, there was a marked reduction (0.10 million tonnes, 95.3%) in the landfilling of hazardous Soils, and these remained at low levels in 2014 (0.021 million tonnes).

Figure 13. Scottish waste disposed to landfill 2005 – 2014

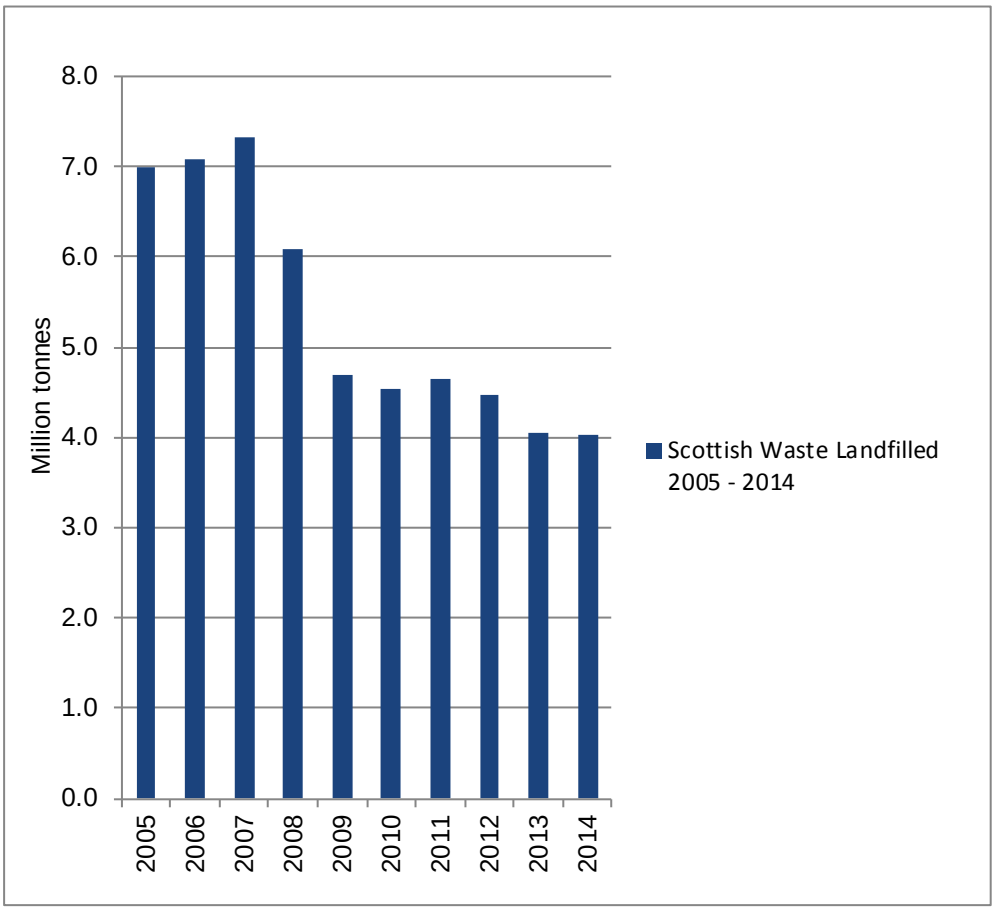


Table 14 Scottish waste disposed to landfill 2011 – 2014

Year	Landfilled (tonnes)
2014	4,029,484
2013	4,060,329
2012	4,477,873
2011	4,654,954
2010	4,543,226
2009	4,687,039
2008	6,094,926
2007	7,319,077
2006	7,078,197
2005	7,006,875

Figure 14. Scottish hazardous waste disposed by waste category to landfill 2011 – 2014

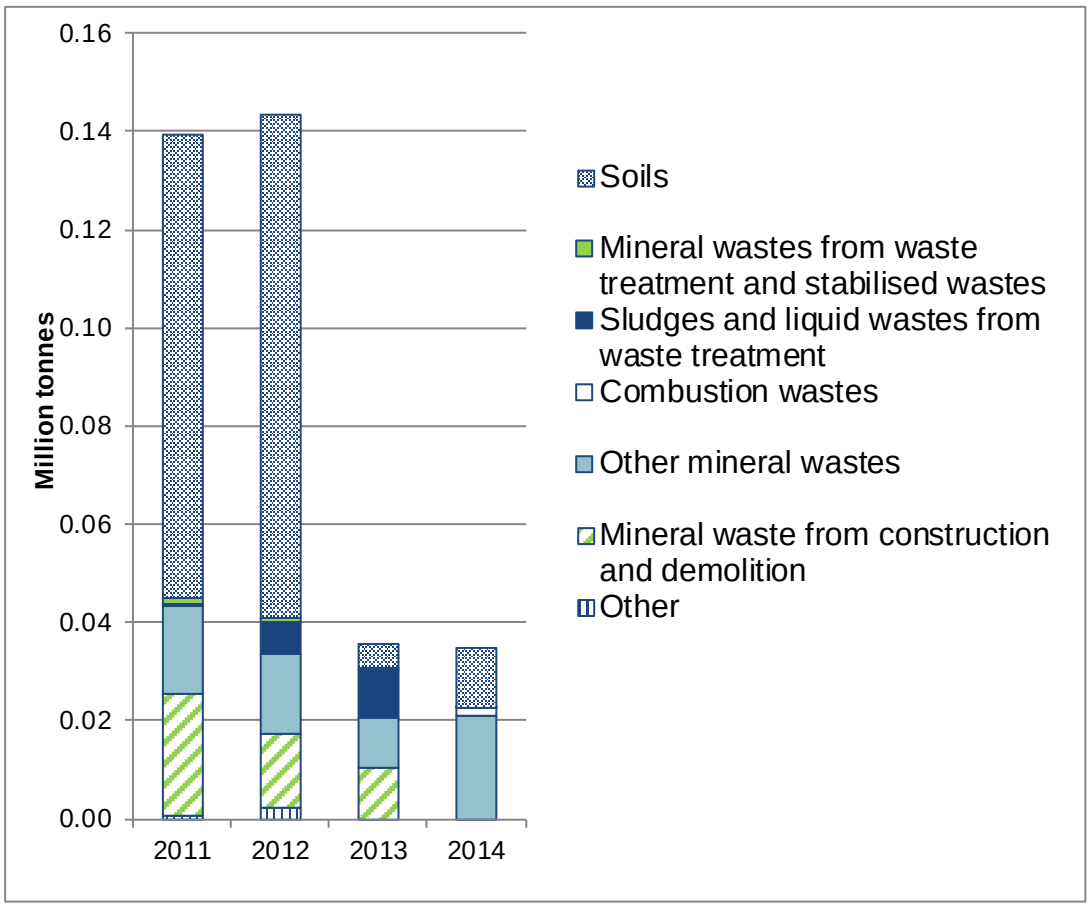
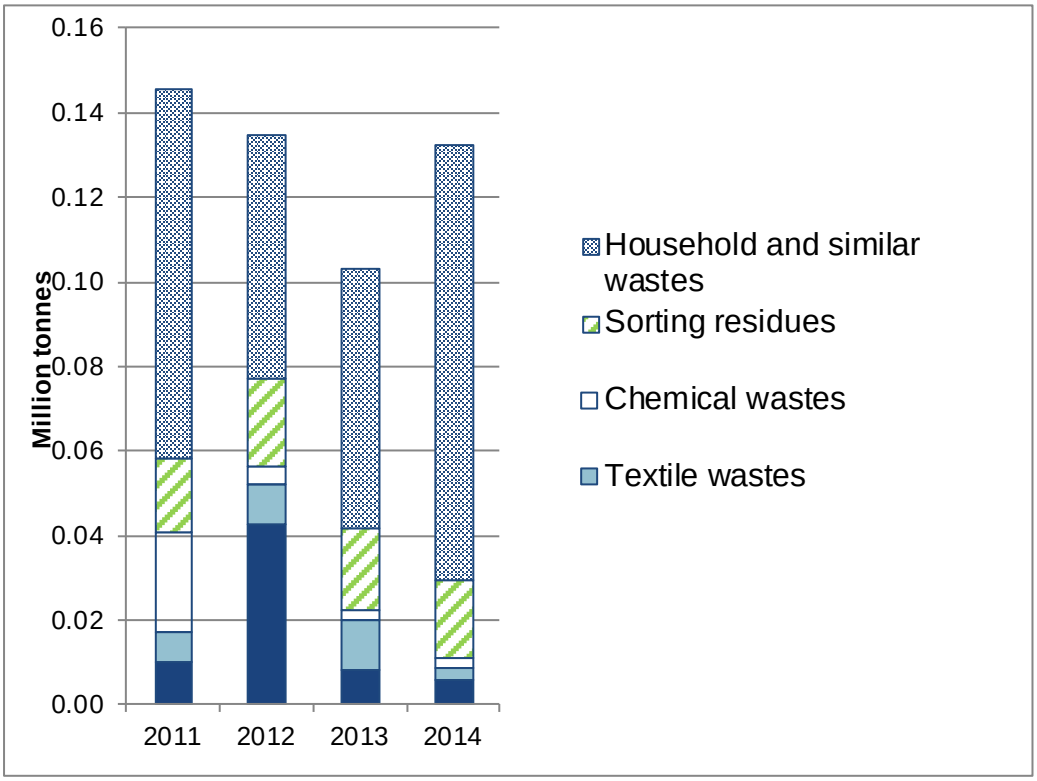


Table 15. Scottish hazardous waste disposed to landfill by waste category 2011 – 2014

Waste Category	Year			
	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)	2014 (tonnes)
Soils	94,663	102,497	4,788	11,978
Other mineral wastes	17,990	16,223	10,557	20,745
Mineral waste from construction and demolition	24,587	15,265	10,189	192
Sludges and liquid wastes from waste treatment	357	6,596	9,440	3
Mineral wastes from waste treatment and stabilised wastes	1,033	615	482	189
Combustion wastes	159	0	0	1,644
Other	744	2,201	87	53
Total	**139,534**	**143,395**	**35,543**	**34,805**

- Scottish waste disposed by incineration without energy recovery in 2014 was 0.13 million tonnes, an increase of 0.029 million tonnes (28.0% from 2013). This increase followed a decrease of 23.4% the previous year. Unlike the waste recovered by incineration (see Figure 11 on page 18) which has increased year on year from 2011, the waste incinerated by disposal has remained at relatively steady levels from 2011 (see Figure 15 below).
- The largest waste category incinerated by incineration without energy recovery in 2014 was Household and similar wastes (0.10 million tonnes, 77.7%), followed by Sorting residues (0.018 million tonnes, 13.9%).

Figure 15. Scottish waste disposed by incineration without energy recovery[1] by waste category 2011 – 2014



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

User Statement

Data on WFAS generation and management are collected to monitor policy effectiveness, particularly the commitments in the Zero Waste Plan, Safeguarding Scotland's Resources, and Scotland's Circular Economy Strategy and to support policy development. The data are also used to meet legislative reporting targets on recycling targets set out in the Waste Framework Directive (2008/98/EC) and Commission Decision establishing rules and calculation methods for verifying compliance with the targets set in the Waste Framework Directive (2011/753/EU) and to supply data for the Waste Statistics Regulation (2002/2150/EC). The data are used extensively by local and central government, the waste industry, researchers and the public as well.

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 published information in this 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 release.

Methodology

Data is taken from licence, permitted and exempt waste site returns submitted to SEPA, from accredited reprocessor returns, from voluntary returns provided by waste sites on the industry source of data provided to SEPA, from voluntary returns provided by aggregate producers on the quantity of waste used to produce an aggregate product, and from 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 does not contribute to the waste composted figures. Further details on the methodology used to produce the figures are provided in the annual Waste Data Quality Reports on SEPA's web site. Please note that WFAS figures published by individual UK countries may be based on alternative calculation methodologies and as such the figures may not be directly comparable.

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 including in recycling statistics for the 2014 dataset.

Co-incineration – 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.

C&I Waste – waste arising from commercial and industrial sources. Includes waste from business and industrial premises in Scotland, but excludes waste from the construction industry.

C&D Waste – waste arising from the construction and demolition industry

C&D Waste – construction and demolition waste

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.

Recycling rate – is defined as waste recycled as a percentage of all waste managed. Note that total waste generated does not equal waste managed due to differences in methodologies used to calculate the waste generated and waste managed.

Waste disposed - is waste incineration by disposal and waste landfilled.

Waste generated - is waste that directly arises from Scottish business' and households during the reporting year. It does not include waste that does not directly arise from the business, for example waste that is taken in by a business from another business and subsequently disposed is excluded from the waste generation.

Waste landfilled –includes all WFAS that is disposed of at landfill sites instead of being recycled or recovered. 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, disposed and recovered within the relevant reporting year..

Waste incineration by disposal- includes all wastes incinerated by 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 incineration by recovery - includes all wastes incinerated by co-incineration and waste incinerated at an incineration facility where the energy efficiency has been demonstrated to meet the R1 criteria specified in the EU Waste Framework Directive (Directive 2008/98/EC).

Waste recycled - includes recyclable materials that have been recycled or reused and also biodegradable materials that have been composted or digested. From 2014, 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.