

SDR 76/2013

23 May 2013

## Local Authority Municipal Waste Management, October – December 2012

This release covers provisional quarterly results from Natural Resource Wales' (NRW) WasteDataFlow system for October - December 2012 (Quarter 3, 2012-13). The results for this quarter are provisional; however final figures on waste collected and waste disposed will be published along with the January - March (Quarter 4) release at the end of the financial year. The release provides information on the total amount of local authority municipal waste generated and the percentage prepared for reuse, recycled or composted in Wales.

From 1 April 2012 there have been changes in definitions relating to local authority municipal waste. These changes affect the total amount of local authority municipal waste generated and the percentage prepared for reuse, recycled or composted in Wales. As a result, from 2012-13 figures published within this quarterly statistical release will be directly comparable for the first time with those in the annual statistical bulletin 'Local Authority Municipal Waste Management Report for Wales' and the National Strategic Indicator which is used to monitor progress towards Welsh Government targets. Furthermore all historical data within this release has been recalculated based on the new definitions to allow direct comparisons to be made over time. A detailed description of these definition changes and their impacts can be found in the recently released Statistical article [Local Authority Municipal Waste Management - Change in Definition](#) (see also notes 14 & 15 in the Key quality information section).

Data on waste management is collected in order to monitor progress towards national and local targets; in particular against the requirements of the EU Landfill Directive. The aim of this Directive is to reduce the amount of methane emitted from landfill sites by setting targets for Member States to reduce the amount of biodegradable municipal waste sent to landfill. In its current waste strategy 'Towards Zero Waste', the Welsh Government set statutory targets of recycling 52 per cent by 2012-13 and 70 per cent of waste by 2024-25. The information is also used to monitor the effectiveness of current policy, particularly progress against the [Programme for Government 2011 -2016](#) objectives and for future policy development.

### Key Results

The combined reuse/recycling/composting rate of local authority municipal waste increased to 52 per cent for the 12 months to the end of December 2012, based on provisional data, compared to 49 per cent for the 12 months to the end of December 2011 (Table 1).

The percentage of local authority municipal waste prepared for reuse, recycled or composted in Wales continued to increase for the October to December quarter, reaching a peak of 50 per cent in October to December 2012 (Table 2).

The total amount of local authority municipal waste generated in Wales has generally been decreasing, although in October to December 2012 the amount of waste generated was 2 per cent higher than for the same quarter in 2011 (Table 4).

The residual household waste produced per person in Wales has generally been decreasing, although in October to December 2012 it increased to 54kg/ person from 53kg/ person for the same quarter in 2011 (Table 5).

**Statistician:** Rhiannon Caunt  
**Next Update:** August 2013

**Tel:** 029 2082 5616

**E-mail:** [stats.environment@wales.gsi.gov.uk](mailto:stats.environment@wales.gsi.gov.uk)

**Twitter:** [www.twitter.com/ystadegaucymru](http://www.twitter.com/ystadegaucymru)  
[www.twitter.com/statisticswales](http://www.twitter.com/statisticswales)

Cyhoeddwyd gan Y Gwasanaethau Gwybodaeth a Dadansoddi  
Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ  
Ffôn – Swyddfa'r Wasg **029 2089 8099**, Ymholiadau Cyhoeddus **029 2082 3332**  
**[www.cymru.gov.uk/ystadegau](http://www.cymru.gov.uk/ystadegau)**

Issued by Knowledge and Analytical Services  
Welsh Government, Cathays Park, Cardiff, CF10 3NQ  
Telephone – Press Office **029 2089 8099**, Public Enquiries **029 2082 5050**  
**[www.wales.gov.uk/statistics](http://www.wales.gov.uk/statistics)**



Llywodraeth Cymru  
Welsh Government

## Local authority municipal waste prepared for reuse, recycled or composted

In addition to additional types of waste being included in the new definition of local authority municipal waste (see glossary for details), there has been a change in the definition of percentage of local authority municipal waste being prepared for re-use, recycling or composting. Previously data was based on the amount of waste **collected** for reuse, recycling or composting. However under the new definition this has changed to the amount **sent** for reuse, recycling or composting.

As local authority waste management information is affected by seasonality, Table 1 below shows the combined preparation for reuse, recycling and composting rates for Wales over a rolling 12 month period (i.e. the 12 months to the end of December 2012). This is to allow a better indication of progress made across Wales in meeting the waste targets, without the effect of the changes seen quarterly.

### Rolling Averages (12 month):

**Table 1 – Combined local authority municipal waste preparation for reuse, recycling and composting rates, by local authority, 12 month rolling averages (a) (r)**

	Percentage				
	12 months to the end of:				
	Dec 2011	Mar 2012	Jun 2012 (p)	Sep 2012 (p)	Dec 2012 (p)
Isle of Anglesey	57	57	53	57	54
Gwynedd	47	48	47	49	50
Conwy	46	47	54	53	54
Denbighshire	55	56	58	57	57
Flintshire	47	48	52	52	52
Wrexham	52	53	50	55	54
Powys	41	43	44	46	49
Ceredigion	55	55	56	55	54
Pembrokeshire	50	51	49	52	53
Carmarthenshire	47	49	51	52	54
Swansea	45	45	45	45	46
Neath Port Talbot	44	44	43	44	44
Bridgend	54	56	55	55	54
Vale of Glamorgan	51	52	52	55	54
Cardiff	50	53	52	55	54
Rhondda Cynon Taf	48	48	43	45	45
Merthyr Tydfil	41	44	45	50	49
Caerphilly	58	59	57	59	58
Blaenau Gwent	39	42	45	49	49
Torfaen	47	48	45	47	46
Monmouthshire	55	55	56	56	56
Newport	48	48	47	48	48
Rural (b)	50	51	52	53	54
Urban (b)	48	50	49	51	51
Valley (b)	47	48	48	50	49
<b>Wales</b>	<b>49</b>	<b>50</b>	<b>50</b>	<b>51</b>	<b>52</b>

Source: WasteDataFlow

(a) This table shows combined reuse, recycling and composting rates for rolling 12-month periods to the end of the months shown. For example the year ending December 2012 includes the 12 months from January 2012 to December 2012 inclusive.

(b) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012.

(p) Based on provisional data. See point 17 in 'Key Quality Information'.

The combined preparation for reuse, recycling and composting rate for Wales (known as the reuse/recycling/composting rate) continued to increase from 49 per cent for the 12 months to the end of December 2011 to 52 per cent for the 12 months to the end of December 2012<sup>1</sup>, an increase of 3 percentage points.

The Welsh Government’s current waste strategy “Towards Zero Waste” has set a target of 70 per cent recycling/composting of municipal waste by 2025. To help achieve this overarching target, Statutory Recycling Targets (SRT) have been set during key years. 2012-13 is an SRT year with a target of 52 per cent for all local authority collected municipal waste.

The local authority with the highest reuse/recycling/composting rate in the 12 months to the end of December 2012 was the valley authority of Caerphilly at 58 per cent whilst the valley authority of Neath Port Talbot had the lowest rate at 44 per cent. More than half of Local Authorities in Wales have now reached or passed the current Statutory Recycling Target of 52 per cent.

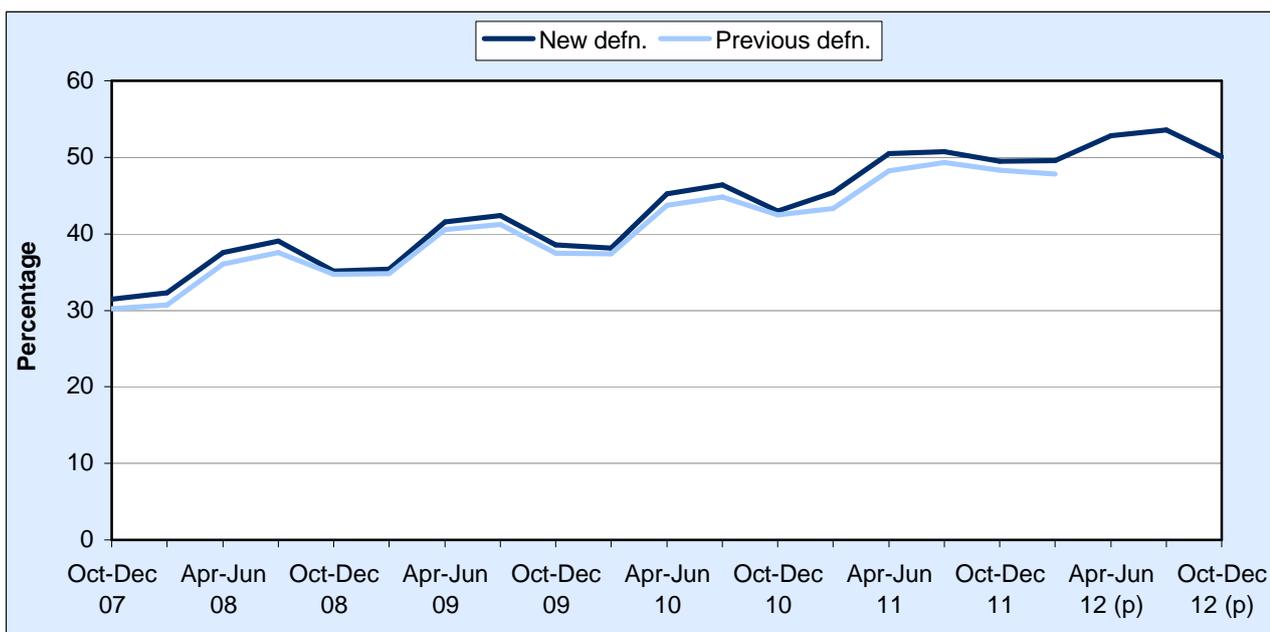
Whilst all three Local Authority groupings have recorded increases in reuse /recycling /composting rates, rural authorities have seen the biggest percentage point increase since December 2011 rising to 54 per cent in the 12 months to the end of December 2012.

The overall rates and how these change across local authorities will probably be affected by peoples willingness to participate in recycling schemes as well as differences in waste collection /recycling schemes used in each local authority. These schemes will differ due to variations in contracts, costs and methods of collection.

**Information on a Quarterly Basis:**

It should be noted that from 1 April 2012 there was a change in how waste was reported as sent. The new reporting method classes waste as sent when it reaches its final destination rather than when it was released by local authorities. This can potentially result in a time lag that can overlap into other quarters. Therefore year-on-year comparisons with quarters using the previous reporting method (i.e. prior to April 2012) should be treated with caution since data collected under the previous reporting method did not face this potential time lag. See point 16 in the Key Quality Information for further details.

**Chart 1 – Percentage of local authority municipal waste prepared for reuse, recycled or composted (Quarterly)**



Source: WasteDataFlow

(p) Based on provisional data. See point 17 in ‘Key Quality Information’.

<sup>1</sup> This is based on provisional data for October to December 2012.

Chart 1 presents the historic data based on both the new and previous definitions. This shows that across Wales as a whole, the percentage of local authority municipal waste prepared for reuse, recycled or composted is higher during all quarters over the last five years under the new definition than under the previous definition; however, the general trend remains unchanged.

It is noticeable from Chart 1 that the reuse/recycling/composting rates tend to peak during the July to September quarter each year and fall slightly in the October to December and the January to March quarters. This seasonality seen within the data may be due to higher levels of garden waste generated during the summer months, which are subsequently composted.

The percentage of local authority municipal waste prepared for reuse, recycled or composted in Wales, under the new definition, continued to increase on a quarterly basis reaching a peak, for the October to December quarter, of 50 per cent (Table 2).

The local authority municipal waste reuse/recycling/composting rate for Wales, on a quarterly basis, increased from 49 per cent in October to December 2011 to 50 per cent in October to December 2012.

Whilst rural authorities generally had the highest combined reuse/recycling/composting rates during October to December 2012, the valley authority of Caerphilly had the second highest rate at 56 per cent behind Denbighshire (57 per cent).

When comparing rates in October to December 2012 with the same quarter in 2011 it can be seen that Powys and Conwy had the biggest percentage point increases in their reuse/recycling/ composting rates.

Some local authorities may be showing a decrease in recycling rates compared with the previous definition due to the change in definition of recyclate with the statutory recycling targets i.e. an increase in the materials that are included but a decrease in certain treatment processes that are counted as recycling (processes that solely divert waste from landfill are no longer included). The Welsh Government is still reviewing these treatment processes and this may result in changes to the data throughout the year.

**Table 2 – Combined local authority municipal waste reuse / recycling / composting rates, by local authority, October to December quarter (r)**

	Percentage					
						Percentage point change
	Oct - Dec 08	Oct - Dec 09	Oct - Dec 10	Oct - Dec 11	Oct - Dec 12 (p)	(2011 to 2012) (a)
Isle of Anglesey	44	48	51	54	51	-3
Gwynedd	41	47	48	48	52	4
Conwy	38	37	38	47	54	7
Denbighshire	31	51	55	56	57	2
Flintshire	36	40	43	45	47	2
Wrexham	33	40	44	54	47	-6
Powys	41	39	36	47	56	9
Ceredigion	36	42	57	54	50	-4
Pembrokeshire	37	45	47	50	53	3
Carmarthenshire	35	38	42	49	53	5
Swansea	29	31	38	43	46	4
Neath Port Talbot	28	32	38	42	40	-2
Bridgend	32	30	52	55	51	-4
Vale of Glamorgan	38	36	39	54	52	-2
Cardiff	36	37	34	53	53	-
Rhondda Cynon Taf	33	34	46	46	44	-2
Merthyr Tydfil	32	33	36	49	46	-3
Caerphilly	34	49	49	57	56	-1
Blaenau Gwent	22	31	38	45	46	1
Torfaen	47	45	43	47	44	-3
Monmouthshire	35	38	47	54	52	-2
Newport	36	38	46	47	49	2
Rural (b)	38	42	46	51	53	2
Urban (b)	34	37	41	48	49	-
Valley (b)	33	36	43	49	47	-2
<b>Wales</b>	<b>35</b>	<b>39</b>	<b>43</b>	<b>49</b>	<b>50</b>	<b>1</b>

Source: WasteDataFlow

(a) See point 27 in 'Key Quality Information' for calculation.

(b) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012.

(p) Provisional data. See point 17 in 'Key Quality Information'.

**Table 3 – Local authority municipal waste reuse / recycling and composting rates by local authority, October to December quarter (r)**

	Percentage					
	Reuse / Recycling			Composting		
	Oct - Dec 11	Oct - Dec 12 (p)	Percentage point change (2011 to 2012) (a)	Oct - Dec 11	Oct - Dec 12 (p)	Percentage point change (2011 to 2012) (a)
Isle of Anglesey	26	25	-1	28	26	-2
Gwynedd	24	29	4	24	23	-1
Conwy	25	34	10	22	20	-3
Denbighshire	34	38	4	22	19	-3
Flintshire	26	30	3	19	18	-1
Wrexham	36	31	-5	18	17	-1
Powys	22	27	5	25	29	4
Ceredigion	39	34	-4	15	16	1
Pembrokeshire	34	37	3	16	16	-
Carmarthenshire	33	38	5	16	15	-
Swansea	28	30	2	15	16	1
Neath Port Talbot	31	30	-1	11	10	-1
Bridgend	42	36	-6	13	15	2
Vale of Glamorgan	35	33	-2	19	19	-1
Cardiff	32	37	5	20	16	-5
Rhondda Cynon Taf	35	37	1	10	7	-3
Merthyr Tydfil	32	34	2	17	13	-4
Caerphilly	43	42	-1	14	14	-
Blaenau Gwent	30	36	5	14	10	-4
Torfaen	31	32	1	16	12	-4
Monmouthshire	28	30	2	27	23	-4
Newport	28	30	2	19	19	-
Rural (b)	30	32	3	21	21	-1
Urban (b)	30	31	1	18	17	-1
Valley (b)	35	35	-	14	12	-2
<b>Wales</b>	<b>32</b>	<b>33</b>	<b>2</b>	<b>18</b>	<b>17</b>	<b>-1</b>

Source: WasteDataFlow

(a) See point 27 in 'Key Quality Information' for calculation.

(b) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012.

(p) Provisional data. See point 17 in 'Key Quality Information'.

When looking at the percentage of local authority municipal waste prepared for reuse or recycled in Wales, the reuse/recycling rate in October to December increased from 32 per cent in 2011 to 33 per cent in 2012. It is noticeable from Table 3 above when looking solely at reuse/recycling rates, that valley authorities as a whole continued to have the highest rates.

In comparison, composting rates remain lower for valley authorities as a whole than rural and urban authorities. This contributes to valley authorities having slightly lower combined reuse /recycling /composting rates than rural or urban authorities.

Composting rates fell amongst most authorities and overall decreased from 18 per cent in 2011 to 17 per cent in 2012. This decrease may be due to unusual weather conditions; October to December 2011 was one of the hottest autumns on record whilst October to December 2012 was one of the

wettest, which may have effected garden waste levels in particular.

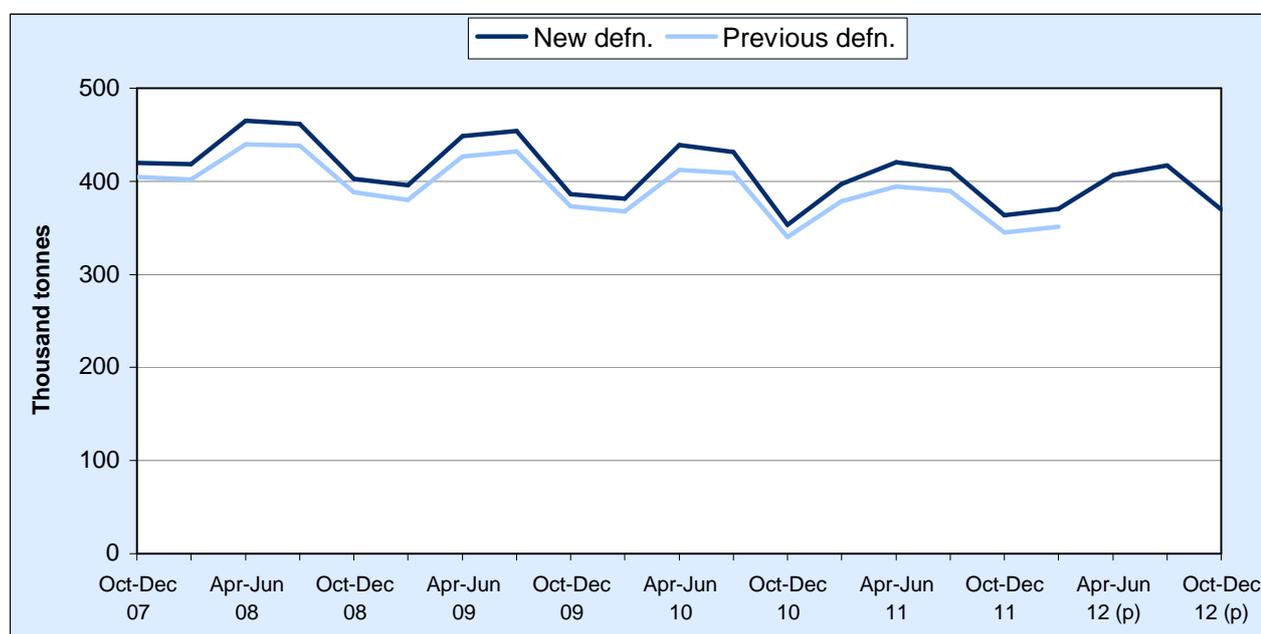
Some local authorities may be showing a decrease in recycling rates compared with the previous definition due to the change in definition of recycle with the statutory recycling targets, as described in more detail on page 4.

### Local authority municipal (household and non-household) waste generated

This section provides information on the total amount of local authority municipal waste generated which includes household and non-household waste, but excludes abandoned vehicles, that is collected, directly or from sites, by local authorities.

Under the previous quarterly definition, the total amount of local authority municipal waste generated included household and non-household waste, but excluded rubble, incinerator residues, matter from beach cleansing, plasterboard and abandoned vehicles, that is collected directly or from sites by local authorities. The new definition includes all household and non-household waste, and only excludes abandoned vehicles.

**Chart 2 – Total local authority municipal waste, October to December quarter**



Source: WasteDataFlow

(p) Based on provisional data. See point 17 in 'Key Quality Information'.

Chart 2 above presents the historic data based on both the new and previous definitions. In looking at the tonnage of municipal waste generated in Wales, the new definition leads to an increase over the whole time series, due to the inclusion of additional items of waste, although the trend over time remains the same as under the previous definition. In considering what is additionally classified as waste under the new definition, the rubble and plasterboard weighs heavily and will therefore add a substantial amount of tonnage to the local authority municipal waste generated.

As mentioned on page 4, year-on-year comparisons for October to December 2012 with previous quarters should be treated cautiously due to a change in reporting methods.

The total amount of local authority municipal (household and non-household) waste generated in Wales under the new definition has generally decreased, with the amount of waste generated 8 per cent lower in the October - December 2012 quarter compared to the same quarter in 2008. However, the amount of waste generated in October to December 2012 was 2 per cent higher than for the same quarter in 2011.

Around a third of local authorities across Wales saw a decrease in the total local authority municipal

waste generated in the October to December 2012 quarter, with the largest percentage decrease recorded in Torfaen. Within Torfaen significant work has been undertaken at civic amenity sites such as a meet and greet system, less residual bins and restrictions on vans. This may have led to a reduction in the amount of local authority municipal waste generated.

Around two thirds of local authorities across Wales saw an increase in the total local authority municipal waste generated in the October to December 2012 quarter, with the largest percentage increases recorded in Denbighshire, Powys and RCT. In Denbighshire, the high number of homes flooded during this period may have added to the amount of domestic waste generated.

The general downward trend in the generation of local authority municipal waste may have been affected by the Welsh Government's current and previous waste strategies, both of which outline the need to reduce the amount of waste generated across Wales, and the provision of additional funding by the Welsh Government to assist local authorities and others to meet targets for minimising municipal waste, limiting landfill and increasing recycling and composting.

**Table 4 - Total local authority municipal waste by local authority, October to December quarter (r)**

	Thousand tonnes					
	Oct - Dec 08	Oct - Dec 09	Oct - Dec 10	Oct - Dec 11	Oct - Dec 12 (p)	Percentage change (2011 to 2012) (a)
Isle of Anglesey	10.5	10.0	9.4	9.9	9.6	-3
Gwynedd	19.9	19.8	17.7	17.4	17.6	2
Conwy	18.1	16.5	14.8	15.3	15.7	2
Denbighshire	11.1	10.1	9.7	9.4	10.5	12
Flintshire	19.5	19.5	18.3	19.0	19.9	5
Wrexham	18.4	18.1	16.9	17.3	17.7	3
Powys	19.6	19.1	16.7	19.2	20.5	6
Ceredigion	9.8	9.4	8.6	8.3	8.1	-2
Pembrokeshire	17.1	16.2	15.3	14.9	15.5	4
Carmarthenshire	18.9	18.1	16.9	17.0	16.8	-1
Swansea	30.4	29.8	27.0	26.2	26.5	1
Neath Port Talbot	19.7	20.2	17.6	16.7	16.9	1
Bridgend	19.5	16.8	15.3	16.5	14.8	-10
Vale of Glamorgan	15.6	14.3	13.2	13.9	14.1	2
Cardiff	44.0	42.4	36.7	39.5	41.3	4
Rhondda Cynon Taf	28.8	28.7	26.1	27.3	29.1	6
Merthyr Tydfil	7.9	7.8	6.9	6.9	6.8	-1
Caerphilly	24.7	22.9	21.8	22.9	23.6	3
Blaenau Gwent	8.0	7.7	7.3	7.7	8.0	3
Torfaen	13.1	11.6	11.1	11.7	10.0	-15
Monmouthshire	11.4	11.0	10.3	10.8	10.8	-1
Newport	16.5	16.6	15.6	15.7	16.3	4
Rural (b)	152.0	144.4	132.6	136.0	139.1	2
Urban (b)	128.8	126.4	114.6	117.7	121.7	3
Valley (b)	121.6	115.7	106.0	109.7	109.1	-1
<b>Wales</b>	<b>402.4</b>	<b>386.4</b>	<b>353.2</b>	<b>363.5</b>	<b>369.9</b>	<b>2</b>

Source: WasteDataFlow

(a) See point 27 in 'Key Quality Information' for calculation.

(b) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012.

(p) Provisional data. See point 17 in 'Key Quality Information'.

## Residual household waste

This section provides information on household waste that is not prepared for reuse, recycled or composted and is therefore disposed of via landfill or other methods of disposal / treatment. This is known as residual household waste.

**Table 5 - Residual household waste produced per person by local authority, October to December quarter (a) (r)**

	Kilograms per person					Percentage change (2011 to 2012) (b)
	Oct - Dec 08	Oct - Dec 09	Oct - Dec 10	Oct - Dec 11	Oct - Dec 12 (p)	
Isle of Anglesey	84	73	66	62	67	8
Gwynedd	75	65	58	58	56	-5
Conwy	64	63	58	47	50	7
Denbighshire	78	51	45	40	45	13
Flintshire	77	73	63	58	54	-7
Wrexham	73	66	59	50	58	17
Powys	73	76	69	66	59	-10
Ceredigion	75	73	49	48	54	12
Pembrokeshire	80	65	59	54	54	-
Carmarthenshire	63	57	49	43	37	-14
Swansea	79	76	59	52	49	-6
Neath Port Talbot	98	94	73	65	68	5
Bridgend	87	78	46	48	47	-2
Vale of Glamorgan	77	72	64	48	54	12
Cardiff	71	67	60	48	50	4
Rhondda Cynon Taf	78	80	60	63	70	10
Merthyr Tydfil	92	88	69	52	59	13
Caerphilly	80	55	55	49	51	4
Blaenau Gwent	85	72	62	58	58	-
Torfaen	72	64	65	63	55	-12
Monmouthshire	76	68	52	47	47	-
Newport	65	64	53	52	51	-3
Rural (c)	73	66	57	51	51	-
Urban (c)	73	69	59	51	51	-
Valley (c)	84	75	60	57	59	3
<b>Wales</b>	<b>76</b>	<b>70</b>	<b>59</b>	<b>53</b>	<b>54</b>	<b>1</b>

Source: WasteDataFlow

(a) Residual household waste is the amount of waste that is not sent for reuse, recycling or composting. This is calculated as the total amount of household waste minus household waste sent for reuse, recycling and composting. See point 25 in 'Key Quality Information' for calculation.

(b) See point 27 in 'Key Quality Information' for calculation.

(c) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012. Also, the population of local authorities for 2008, 2009 and 2010 have been revised following release of data for the 2011 Census

(p) Provisional data. See point 17 in 'Key Quality Information'.

With consideration of changes in the population in Wales, residual household waste has generally been falling however it increased to 54 kg per person in October to December 2012. It should be noted that it is one of the aims of the Welsh Government's current waste strategy to reduce the amount of residual waste produced by households.

For Wales as a whole, residual household waste per person for October to December 2012 has increased by 1 per cent compared to the same quarter in 2011. The largest increases were in Wrexham (17 per cent), Denbighshire and Merthyr Tydfil (both 13 per cent).

More than a third of local authorities (8 of the 22) saw a decrease, with the largest decreases in Carmarthenshire (14 per cent), Torfaen (12 per cent) and Powys (10 per cent).

When grouped together valley authorities continued to produce the highest amount of residual

household waste per person in the October to December 2012 quarter which is unsurprising considering the lower rates of reuse / recycling / composting in these areas.

**Table 6 - Residual household waste produced per dwelling by local authority, October to December quarter (a) (r)**

	Kilograms per dwelling					Percentage change (2011 to 2012) (b)
	Oct - Dec 08	Oct - Dec 09	Oct - Dec 10	Oct - Dec 11	Oct - Dec 12 (p)	
Isle of Anglesey	175	151	136	126	135	8
Gwynedd	151	132	118	118	112	-5
Conwy	135	132	121	97	103	6
Denbighshire	171	111	96	85	96	13
Flintshire	182	171	148	135	125	-7
Wrexham	169	154	136	115	134	17
Powys	159	164	149	140	125	-11
Ceredigion	165	160	108	105	117	12
Pembrokeshire	169	137	125	113	113	-
Carmarthenshire	142	126	109	96	82	-15
Swansea	173	166	130	114	106	-7
Neath Port Talbot	218	208	159	141	147	4
Bridgend	202	180	106	110	107	-3
Vale of Glamorgan	177	165	146	110	123	12
Cardiff	162	153	139	112	115	3
Rhondda Cynon Taf	175	179	134	141	154	9
Merthyr Tydfil	207	198	153	117	132	12
Caerphilly	185	127	127	114	117	3
Blaenau Gwent	188	160	136	128	127	-
Torfaen	166	147	147	143	125	-12
Monmouthshire	174	157	120	107	107	-
Newport	151	150	122	120	116	-3
Rural (c)	159	142	123	110	109	-
Urban (c)	167	159	135	118	117	-
Valley (c)	190	170	135	129	132	3
<b>Wales</b>	171	156	131	118	119	1

Source: WasteDataFlow

(a) Residual household waste is the amount of waste that is not sent for reuse, recycling or composting. This is calculated as the total amount of household waste minus household waste sent for reuse, recycling and composting. See point 26 in 'Key Quality Information' for calculation.

(b) See point 27 in 'Key Quality Information' for calculation.

(c) Local authority groupings can be found in the glossary at the end of the release.

(r) Historic data (prior to April 2012) recalculated based on new definition introduced from 1 April 2012.

(p) Provisional data. See point 17 in 'Key Quality Information'.

Alternatively, considering the number of dwellings rather than the population, residual household waste per dwelling in Wales also increased, rising to 119 kilograms per dwelling in October to December 2012 from 118 kilograms per dwelling for the same quarter in 2011.

As with waste per person (Table 5), more than a third of authorities (8 of the 22) residual household waste per dwelling decreased compared with October to December 2011. Across Wales as a whole residual household waste per dwelling increased by 1 per cent in October to December 2012 compared to the same quarter in 2011.

When grouped together, valley authorities continued to produce the highest amount of residual household waste per dwelling in the October to December 2012 quarter whilst rural authorities continued to produce the lowest.

## Key Quality Information

1. Previously the term 'Municipal Waste' as used in the UK was used in waste policies and nationally reported data to refer to waste collected by local authorities. In fact the definition of municipal waste as described in the Landfill Directive includes both household waste and that from other sources which are similar in nature and composition, which will include a significant proportion of waste generated by businesses and not collected by Local Authorities. In 2010, discussions with the EU Commission led to the reinterpretation of the term 'municipal waste' and the definitions supporting national targets have changed to reflect this.
2. To remove ambiguity, for the purposes of this release, 'Local Authority Municipal Waste' is as defined in the Waste (Wales) Measure 2010. This and other definitions can be found in the glossary at the end of the release.
3. The [Programme for Government 2011 -2016](#), which is the current government programme, outlines the Welsh Government's commitment to becoming a "one planet nation", putting sustainable development at the heart of government. One of the outcome indicators within the Programme for Government is: 'Percentage of municipal waste recycled or composted'; this is based on the National Strategic Indicators definition.

## Quality

4. The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

5. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political reference.
6. These statistics adhere to the Welsh Government's [Statistical Quality Management Strategy](#).

## Symbols

7. The following symbols may have been used in this release:
  - = less than half (0.5) but greater than zero.
  - . = not applicable
  - .. = not available
  - = = not yet available
  - \* = disclosive or not sufficiently robust for publication
  - p = provisional
  - r = revised

## Data source and coverage

8. Results for the amount and type of waste collected and how it is disposed of are collected through the WasteDataFlow system ([www.wastedataflow.org](http://www.wastedataflow.org)). The recycling, preparation for reuse and composting targets (monitoring and penalties) (Wales) Regulations 2011, require that local authorities submit their data to WasteDataFlow each quarter. Each quarterly summary is therefore based on returns from all 22 authorities.
9. From 2004-05 this information was collected using an online reporting system for waste data called 'WasteDataFlow' ([www.wastedataflow.org](http://www.wastedataflow.org)). In Wales this is managed by the Natural Resource Wales and the Waste Strategy Branch of the Welsh Government extract the information for the report from WasteDataFlow.

## Comparability

10. It is important to note that there are inter-seasonal differences between the data for each quarter and each local authority. These differences may be due to the fact that some local authorities have a higher tonnage of waste in July to September due to an influx of tourists. Also the composting figures are usually lower in quarters 3 (October to December) and 4 (January to March) due to lower amounts of garden waste generated outside the growing season. For this reason, where quarterly information is shown comparisons should only be made with the same quarter in other years.
11. In order to account for the seasonality in the data and to give a better indication of progress made across Wales in meeting the waste targets, Table 1 shows the combined preparation for reuse, recycling and composting rates for Wales over a rolling 12 month period (i.e. the 12 months to the end of December 2012).
12. At various times, local authorities also introduce new services, for example collections of food waste, so composting figures for the relevant quarter will be higher than the previous quarter. Taking all of these factors into account, a degree of caution is needed when carrying out comparisons between successive quarters and each local authority.
13. Separate figures for reuse and recycling have been collected via WasteDataFlow from July to September 2010 onwards. Figures for recycling up until January to March 2011 include reuse as well as recycling. This applies to data published in previous releases.
14. Following changes to definitions relating to local authority municipal waste, rubble, incinerator residues, matter from beach cleansing and plasterboard are now included. However abandoned vehicles continue to be excluded. This makes the results presented in this quarterly series consistent with the definition of the National Strategic Indicator on waste and the annual statistical bulletin titled 'Local Authority Municipal Waste Management Report for Wales' for 2012-13 onwards.
15. Historic data within this release has also been re-calculated to allow for direct comparisons to be made with earlier periods. For further information on the specific details relating to the changes in definitions please refer to the Statistical Article accessed via the following link: [Local Authority Municipal Waste Management - Change in Definition](#). The article looks at historic data using both the previous and new definitions in order to make users fully aware of the impact these changes have on the data and how they use it.
16. From 1 April 2012 there was a change in how waste was reported as sent. The new reporting method classes waste as sent when it reaches its final destination rather than when it was released by local authorities. This can potentially result in a time lag that can overlap into other quarters as it is common for local authorities to store waste at a transfer station and then release it later in the year when market prices are more competitive, whereas the previous reporting method would classify waste as sent when transferred to storage (and so there was no such time lag). Therefore year-on-year comparisons for quarters after 1 April 2012 against quarters before this date should be treated with caution.

## Accuracy

17. Quarterly waste data for the current year is provisional, with final figures being calculated after the end of the financial year. This release tries to strike a balance between publishing early provisional results and waiting for more accurate data. We welcome feedback about how well we achieve this balance.
18. There may be some inconsistencies in the measurement of total waste since the waste is weighed when collected and again when it is sent for treatment. In addition, there may also be loss in weight through various treatment processes. Natural Resource Wales validate all local authority returns and require that the difference between the amount collected and the amount sent for treatment must not differ by more than 10 per cent in any quarter.
19. Where local authorities collect non-household waste (i.e. from a school, church or business etc) in the same collection round as household waste it may not be possible for them to provide an accurate split between the household and non-household waste collected, which may present an element of bias in the data.
20. In the tables where figures have been rounded to the nearest final digit, the constituent items may not add up exactly to the total.

## Validation

21. Under regulation 6 of the Landfill Allowances Scheme (Wales) Regulations 2004 (LAS Regulations) Local Authorities in Wales are required to report quarterly information on local authority collected municipal waste; the amount of local authority municipal waste sent to landfills and the amount of local authority municipal waste sent to other facilities. This information is submitted by local authorities via WasteDataFlow. The monitoring authority (Natural Resource Wales) is then responsible for validation of this information. Reporting requirements are detailed in the NRW reporting protocol published on WasteDataFlow 'LAS Guidance on reporting and notices' May 2008. It includes deadlines for when local authorities need to report prompt (Level 30) and accurate (Level 35) data and the deadlines for making changes to the data
22. NRW has 12 weeks to validate the data before releasing it. Validation involves a procedure of checking that all relevant WasteDataFlow questions have been completed by the local authorities and any discrepancies in calculations between entered inputs and outputs are identified. Any anomalies are then communicated to the individual local authorities and remedial action is taken to resolve them.

## Calculations

23. Reuse/recycling/composting rates are calculated based on the amount of waste in tonnes that was either sent for reuse or recycling or composted. The combined amount for these three types of processing is divided by the total amount of waste in tonnes collected by or on behalf of local authorities to give the rates by local authority, type of authority and for Wales as a whole.
24. Residual household waste is the amount of household waste that is not sent for reuse, recycling or composting and is instead sent for landfill or other forms of waste disposal, including incineration. As a result, residual household waste is calculated as the total amount of household waste minus household waste sent for reuse, recycling and composting.
25. The residual household waste per person is calculated by dividing the residual household waste by the total Mid-Year Estimate (MYE) population (ONS – see note 33 below).
26. The residual household waste per dwelling is calculated by dividing the residual household waste by the number of dwellings in Wales collected through the Welsh Government council tax dwellings survey (see note 34 below).
27. A percentage point change is the difference between two percentages. For example, an increase from 8 per cent to 10 per cent is a 2 percentage point increase. However, a percentage change represents

the relative change between two values. For example, an increase from 8 tonnes to 10 tonnes is a 25 per cent increase.

## Revisions

28. Figures for October 2012 to December 2012 are provisional and are subject to revision once end of year results have been calculated. Final figures will be published later in the year.
29. Local authorities are able to amend the quarterly figures they provide to WasteDataFlow within the current financial year. Revisions to data for previous quarters on StatsWales are made accordingly when data for subsequent quarters are published.
30. If local authorities wish to change previously submitted data they must submit a roll back request to the Waste Strategy Branch of the Welsh Government and the Natural Resource Wales detailing the reasons for the changes. This prevents any alterations being made that the Welsh Government is unaware of and acts as an incentive for local authorities to enter accurate data.
31. In order to validate data for previous years, figures are prepared by reproducing calculations from raw data where possible. This can uncover mistakes in the initial calculations. Where data has been revised it will be clearly marked with an (r).
32. We follow the Welsh Government's statistical revisions policy, details of which are available at: <http://wales.gov.uk/topics/statistics/publications/revisions/?lang=en>

## Coherence with other statistics

33. There is a National Strategic Indicator (NSI), which is used to measure performance of local authorities at a national level, on the percentage of local authority municipal waste collected by local authorities and prepared for reuse and/or recycled, including source segregated biowastes that are composted or treated biologically in another way. Prior to 2012-13 the definition used within this quarterly statistical release differed to that used in the NSI and the annual Local Authority Municipal Waste Management Report for Wales, which is published as a Statistical Bulletin. However from 2012-13 onwards all three will use consistent and directly comparable definitions.
34. Total population figures from the mid-year population estimates (MYE) produced by the Office for National Statistics (ONS) have been used to calculate residual household waste per person figures in Table 5. These MYE population figures are available on [StatsWales](#). The figures in Table 5 for October to December 2012 have been calculated using the 2011 MYE population last updated in December 2012 but will be recalculated in due course using MYE population for 2012 once they become available. Also, the population of local authorities for 2008, 2009 and 2010 have been revised following release of data for the 2011 Census.
35. Council tax dwelling figures have been used to calculate residual household waste per dwelling figures in Table 6. These figures are collected through the Welsh Government council tax dwellings survey each financial year. These figures are available on [StatsWales](#). Unrounded figures for the relevant financial year have been used. Different residual household waste per dwelling figures may be obtained using reports from WasteDataFlow as rounded dwellings figures are used instead of unrounded ones.

## Accessibility

36. Additional data is available to download from our StatsWales interactive website at the following link: <http://www.statswales.wales.gov.uk/ReportFolders/reportFolders.aspx> within the 'Environment' folder. Data is available for annual local authority municipal waste, quarterly local authority municipal waste, Construction & Demolition waste, and Industrial & Commercial waste.
37. The National Strategic Indicator data can also be downloaded from the StatsWales website and can be accessed via the 'National Strategic Indicators' folder.

## Users and uses

38. Waste statistics are important for policy development and planning the delivery of public services, such as waste management. Some of the uses include:
- Monitoring of progress towards waste targets
  - Policy development
  - Advice to Ministers
  - Informing debate in the National Assembly for Wales and beyond
  - Geographic profiling, comparisons and benchmarking
39. There is a variety of users of waste statistics including national and local government, researchers, students and individual citizens.
40. More specifically, data on waste management is collected in order to monitor progress towards national and local targets; in particular against the requirements of the EU Landfill Directive. The aim of this Directive is to reduce the amount of methane emitted from landfill sites by setting targets for Member States to reduce the amount of biodegradable municipal waste sent to landfill. Also in its current waste strategy 'Towards Zero Waste', the Welsh Government set statutory targets of recycling 52 per cent by 2012-13 and 70 per cent of waste by 2024-25. More detailed information on the minimum targets for each year can be found in the following document:  
<http://wales.gov.uk/consultations/environmentandcountryside/wastetargetsguidance/?lang=en>

## Related Statistics for Other UK Countries

41. More information on local authority collected waste statistics for England is available on the Department for Environment, Food and Rural Affairs website:  
<http://www.defra.gov.uk/statistics/environment/waste/>
42. More information on local authority collected waste statistics for Scotland is available on the Scotland Environment Protection Agency website  
[http://www.sepa.org.uk/waste/waste\\_data/lacw.aspx](http://www.sepa.org.uk/waste/waste_data/lacw.aspx)
43. More information on municipal waste management statistics in Northern Ireland is available on the Northern Ireland Environment Agency website  
[http://www.doeni.gov.uk/nea/waste/municipal\\_data\\_reporting.htm](http://www.doeni.gov.uk/nea/waste/municipal_data_reporting.htm)

## Glossary

### Composting

An aerobic, biological process in which organic wastes, such as garden and kitchen waste, are converted into a stable granular material which can be applied to land to improve soil structure and enrich the nutrient content of the soil.

### Dry recycling

Is the recycling of dry materials such as paper, card, cans, plastic bottles, mixed plastic, glass.

### Household waste

Includes materials collected directly from households (kerbside collections) or taken to bring sites, including civic amenity sites or collected by private and voluntary organisations not included elsewhere.

### Landfill sites

Any areas of land in which waste is deposited. Landfill sites are often located in disused mines or quarries. In areas where they are limited or no ready-made voids exist, the practice of landraising is sometimes carried out, where waste is deposited above ground and the landscape is contoured.

### **Local authority groupings**

In this release local authorities have been grouped to help compare similar local authorities. These groupings have been selected specifically for waste management reasons in discussion with Welsh local authorities.

**Rural authorities:** Carmarthenshire, Ceredigion, Conwy, Denbighshire, Gwynedd, Isle of Anglesey, Monmouthshire, Pembrokeshire, Powys, Vale of Glamorgan

**Urban authorities:** Cardiff, Flintshire, Newport, Swansea, Wrexham

**Valley authorities:** Blaenau Gwent, Bridgend, Caerphilly, Merthyr Tydfil, Neath Port Talbot, Rhondda Cynon Taff, Torfaen

### **Local authority municipal waste**

Includes household and non-household waste that is collected and disposed of by local authorities. It includes regular household collections, specific recycling collections, special collections of bulky items, waste received at civic amenity sites and waste collected from non-household sources.

Throughout this release the definition used is:

local authority municipal waste excluding abandoned vehicles

Excludes rubble, incinerator residues, matter from beach cleansing, plasterboard and abandoned vehicles

### **Non-household municipal waste**

Refers to all waste collected by an authority or its contractors, other than wastes within Schedule 1 and 2 of the Controlled waste Regulations 1992. Includes any other wastes collected by an authority, such as municipal parks and gardens waste, industrial or commercial waste and waste resulting from the clearance of fly-tipped materials.

### **Prepared for reuse**

See 'Reuse' below.

### **Recycling**

Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It does not include energy recovery and the reprocessing into materials that are used as fuels of backfilling operations.

### **Residual household waste**

Household waste that is not prepared for reuse, recycled or composted.

### **Reuse**

The use of household waste removed from the local authority collected municipal waste stream (e.g. furniture from households including that collected on behalf of a local authority by third parties) for its original or a different purpose without processing or treatment in a waste recovery operation other than one which has the purpose of repairing or refurbishing the household waste.

### **Reuse/Recycling/Composting Rates**

Percentage of local authority municipal waste that is recycled, reused or composted calculated at time of distribution to landfill or recycling/composting contractors. Therefore based on the amount of waste **sent** for reuse, recycling or composting, rather than **collected** for the purpose of being reused, recycled or composted.

### **Treatment**

Physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery.

## Further Information

Additional data broken down by management methods, recycling sources and local authority is also published on [www.statswales.wales.gov.uk](http://www.statswales.wales.gov.uk), within the Environment folder.

Further information on waste and recycling in Wales can be found on the Statistics for Wales website: <http://wales.gov.uk/topics/statistics/theme/environment/wasterecycle/?lang=en>

## Useful links

Previous Welsh Government waste strategy “Wise about waste”:

[http://wales.gov.uk/topics/environmentcountryside/epq/waste\\_recycling/publication/wiseaboutwaste/?lang=en](http://wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/publication/wiseaboutwaste/?lang=en)

Current Welsh Government waste strategy “Towards Zero Waste”:

[http://wales.gov.uk/topics/environmentcountryside/epq/waste\\_recycling/publication/towardszero/?lang=en](http://wales.gov.uk/topics/environmentcountryside/epq/waste_recycling/publication/towardszero/?lang=en)

More general information can be found on the NRW website:

<http://naturalresourceswales.gov.uk/splash?orig=/>

## Feedback

Following a review of environment and sustainability statistical outputs the format of this release has recently been updated to provide more up to date monitoring of progress towards waste targets. This has mainly involved the inclusion of a table presenting combined reuse/recycling/composting rates on a rolling 12 month basis, and re-ordering of some of the tables. We would welcome any feedback on the new format.

We actively encourage feedback from our users. If you have comments on any issues relating to this statistical release please complete our [feedback form](#)

For any queries on this output please contact:

Tim Evans  
Environment, Sustainability and Housing  
Statistics,  
Welsh Government  
Cathays Park  
Cardiff  
CF10 3NQ  
Tel: 029 2082 5616  
E-mail: [stats.environment@wales.gsi.gov.uk](mailto:stats.environment@wales.gsi.gov.uk)

Adam Evans  
Environment, Sustainability and Housing  
Statistics,  
Welsh Government  
Cathays Park  
Cardiff  
CF10 3NQ  
Tel: 029 2082 6380  
E-mail: [stats.environment@wales.gsi.gov.uk](mailto:stats.environment@wales.gsi.gov.uk)

For any further enquiries about the data please contact:

Catherine Osborne  
Welsh Government Waste Strategy Branch,  
Welsh Government  
Cathays Park  
Cardiff  
CF10 3NQ  
tel: 029 20 82 1775

e-mail: [Catherine.Osborne@Wales.GSI.Gov.UK](mailto:Catherine.Osborne@Wales.GSI.Gov.UK)