

Northern Ireland Local Authority Collected Municipal Waste Management Statistics

Annual Report 2018/19





A living, working, active landscape valued by everyone





A National Statistics publication

Northern Ireland Local Authority Collected Municipal Waste Management Statistics

Annual Report 2018/19

National Statistics

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

These statistics were first designated as National Statistics, and underwent a full <u>assessment</u> against the Code of Practice, in January 2014 by the UK Statistics Authority.

No official compliance checks have been completed since, however, we have continued to comply with the Code of Practice since designation and have made the following improvements:

- Added more value by <u>consulting</u> on the report in 2015 prior to the 26 councils covered being reorganised into 11 new councils.
- Ongoing quality assurance of the data contained within the report by reviewing methods on a quarterly basis.
- Improved statistical output by creating a <u>time series</u> of Northern Ireland local authority collected municipal waste management statistics to accompany the report and tables.
 This <u>dataset</u> is also available on Open Data NI along with a <u>time series</u> of materials collected at Northern Ireland local authority waste management sites.
- Improved statistical output by creating <u>infographics</u> to accompany the report and tables.
- Improved statistical output by creating an <u>interactive dashboard</u> to accompany the report and tables.

Issue No: 10

Date of Publication: 28 November 2019 **Theme:** Agriculture and Environment

Reporting Period:

1 April 2018 to 31 March 2019

URL: https://www.daera-

<u>ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-</u>

statistics-2018

Issued by:

Statistics and Analytical Services Branch Department of Agriculture, Environment and Rural Affairs (DAERA), Room 816,

Dundonald House Belfast BT4 3SB

Contact: David Finlay Telephone: 028 90540916

Email: env.stats@daera-ni.gov.uk

Contents

Key points for reader information	1
Introduction	3
Overview	4
Waste arisings	5
Recycling	9
Energy recovery	14
Landfill	17
Biodegradable landfill	19
Overview of KPIs	21
Progress against targets	23
Appendix 1: User Guidance	24
Appendix 2: Glossary	31
Appendix 3: List of Acronyms	34

Key Points for Northern Ireland

- Northern Ireland's councils collected 990,233 tonnes of LAC municipal waste in 2018/19. Belfast generated the smallest amount of household waste per capita at 416 kg whilst Antrim & Newtownabbey recorded the largest at 569 kg per capita.
- In 2018/19, 50.0 per cent of household waste was sent for preparing for reuse, dry recycling and composting. This is the highest rate ever recorded for Northern Ireland, and meets the Northern Ireland Waste Management Strategy target to recycle 50% of household waste by 2020 for the first time.
- The landfill rate for household waste recorded a new low of 28.4 per cent in 2018/19, a fall from 72.3 per cent in 2006/07.
- A fifth of LAC municipal waste arisings were sent for energy recovery in 2018/19 compared to zero 10 years ago.

Reader Information

This document may be made available in alternative formats, please contact us to discuss your requirements. Definitions of key terms used in this publication are available in Appendix 2 – Glossary.

Purpose

This is an annual publication which reports finalised figures on the key measurements of local authority collected municipal waste for councils and waste management groups in Northern Ireland.

The data contained are used by local authorities, waste management groups, Devolved Administrations, UK Government and the EU to measure progress towards achieving targets from various waste strategies including:

- The revised Northern Ireland Waste Management Strategy
- The draft Programme for Government Framework 2016-2021
- The EU Waste Framework Directive

The data are also used by media, the general public and special interest groups to inform policy and lifestyle choices related to the treatment of waste.

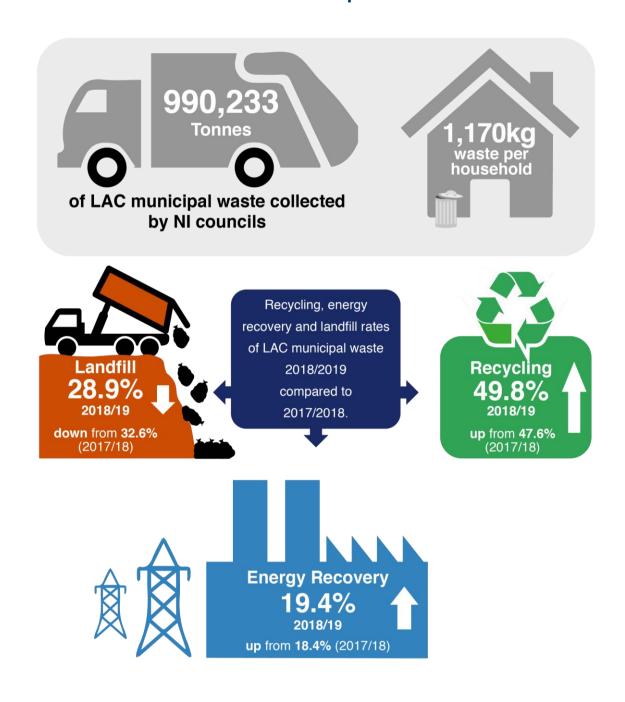
Further details are available in Appendix 1

– Main Uses of Data

Next Updates

- Provisional figures for July to September 2019 will be available on 23 January 2020.
- Finalised data for 2019/20 are scheduled to be published in November 2020 and will supersede previously published data from the four quarterly returns for that financial year.
- The scheduled dates for all upcoming publications are available from the GOV.UK statistics release calendar: https://www.gov.uk/government/statistics

Northern Ireland local authority collected municipal waste management statistics annual report 2018/19



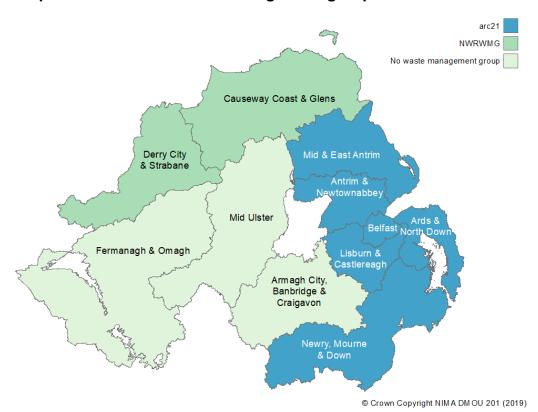
Introduction

This report presents finalised and validated information on the quantities of local authority collected (LAC) municipal waste collected and managed in Northern Ireland over the 2018/19 financial year, as well as trend data over previous years. It provides information on the quantities and rates of local authority collected municipal waste arising, sent for preparing for reuse, dry recycling, composting, energy recovery and sent to landfill. Some of these measurements are key performance indicators (KPIs). These are used to assess progress towards achieving waste strategy targets and where appropriate this is highlighted in the tables and charts.

The 26 councils covered by previous reports were reorganised into 11 new councils from 1 April 2015. This is the fourth annual release on an 11 council basis. Quarterly reports presenting provisional estimates for local authority collected municipal waste management statistics have already been published on an 11 council basis for 2015/16 to 2018/19 and quarter 1 of 2019/20. During this period in Northern Ireland, 8 of the 11 councils were split into two Waste Management Groups (WMGs) with 3 councils unaffiliated to any group. WMGs produce, develop and implement Waste Management Plans for their areas of responsibility and are an important part of the data submission process. The group with the largest share of the population is arc21 with 59 per cent. The North West Regional Waste Management Group (NWRWMG) has 16 per cent of the population with the remaining 25 per cent residing in councils belonging to no waste management group.

There are six councils in arc21: Antrim & Newtownabbey; Ards & North Down; Belfast; Lisburn & Castlereagh; Mid & East Antrim; and Newry, Mourne & Down. NWRWMG contains two councils: Causeway Coast & Glens; and Derry City & Strabane. The remaining three councils are not members of any WMG: Armagh City, Banbridge & Craigavon; Fermanagh & Omagh; and Mid Ulster.

Figure 1: Map of councils and waste management groups in Northern Ireland



3

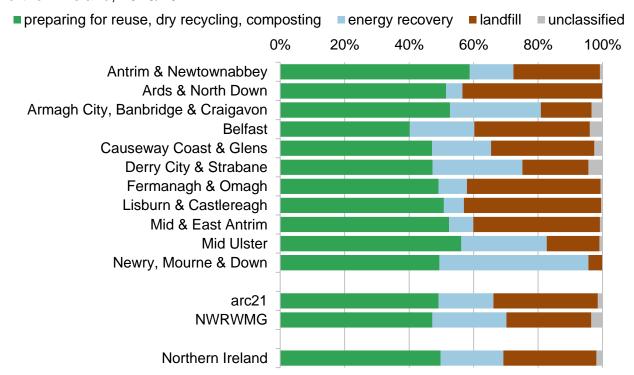
Overview

The report is split into five sections, each of which cover local authority collected (LAC) municipal and, where appropriate, household waste:

- waste arisings (pages 5-8),
- reuse, dry recycling and composting (pages 9-13),
- energy recovery (pages 14-16),
- landfill (pages 17-18), and,
- biodegradable landfill (pages 19-20).

The purpose of this overview is to show at a glance the proportions of the total LAC municipal waste arisings sent for preparing for reuse, dry recycling, composting, energy recovery and landfill.

Figure 2: LAC municipal waste preparing for reuse, dry recycling, composting, energy recovery and landfill rates by council and waste management group Northern Ireland, 2018/19



At the Northern Ireland level, 49.8 per cent of LAC municipal waste was sent for preparing for reuse, dry recycling and composting during 2018/19. Energy recovery accounted for 19.4 per cent whilst 28.9 per cent was sent to landfill. This left 1.9 per cent unaccounted for which was likely to involve moisture and/or gaseous losses. Each of the rates is discussed in detail in the appropriate section of the report.

The rate of LAC municipal waste sent for preparing for reuse, dry recycling and composting increased by 2.1 percentage points compared to 2017/18. The energy recovery rate increased by 1.0 percentage point and the landfill rate fell by 3.8 percentage points.

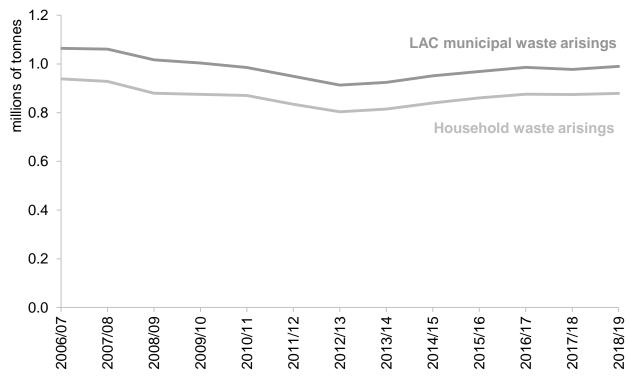
Household waste accounted for 88.8 per cent of total LAC municipal waste. Household waste includes materials collected directly from households via kerbside collections, material taken to bring sites and civic amenity sites as well as several other smaller sources.

Waste Arisings

The total quantity of local authority collected (LAC) municipal waste arisings is a key performance indicator, KPI (j). This indicator is also used to monitor performance under the Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015. In 2018/19, Northern Ireland's councils collected 990,233 tonnes of LAC municipal waste. This was a 1.3 per cent increase on the 977,817 tonnes collected in 2017/18.

Since 2006/07 household waste has accounted for 86-90 per cent of total LAC municipal waste. In 2018/19 household waste accounted for 88.8 per cent. Household waste includes materials collected directly from households via kerbside collections, material taken to bring sites and civic amenity sites as well as several other smaller sources. The remaining 11.2 per cent was non-household waste.

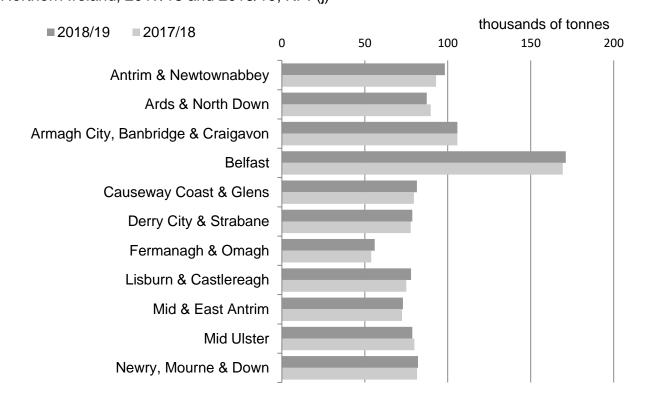
Figure 3: Waste arisings
Northern Ireland, 2006/07 to 2018/19, KPI (j)



The longer term trend has seen a reduction in LAC municipal waste arisings from 1,064,090 tonnes in 2006/07 to a low of 913,546 in 2012/13, a 14.1 per cent decrease. Arisings have increased by 8.4 per cent in the six years since.

Factors affecting LAC municipal waste arisings, the majority of which is household waste, include individual household behaviours, the advice and collection services provided by councils and to some extent the state of the economy.

Figure 4: LAC municipal waste arisings by council Northern Ireland, 2017/18 and 2018/19, KPI (j)



Note: The Northern Ireland and waste management group figures are not shown on this chart as their larger waste arisings distort the scale and make it difficult to distinguish the differences between councils. All figures are available from the data tables appendix.

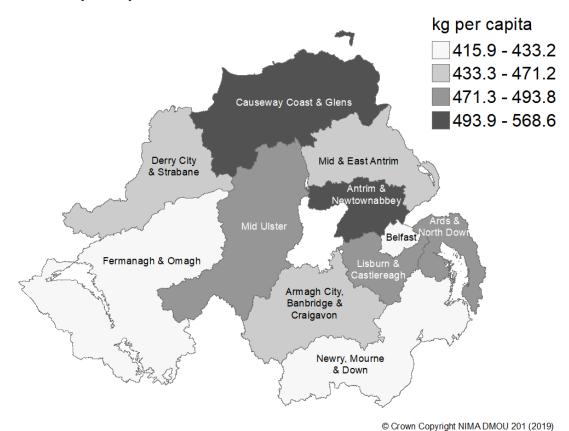
The proportion of Northern Ireland's total LAC municipal waste collected by each council broadly reflects the population within the councils. Belfast City Council had the greatest LAC municipal waste arisings in 2018/19 with 171,118 tonnes. This was 17 per cent of total Northern Ireland LAC waste arisings, with 18 per cent of the population living in this council area. Fermanagh & Omagh District Council had the lowest arisings in 2018/19 with 55,931 tonnes collected. This represented 6 per cent of total arisings during this period, the same as the proportion of the population living in this council area.

Antrim & Newtownabbey reported the largest increase in their LAC municipal waste arisings compared with last year, increasing by 5.6 per cent. Fermanagh & Omagh and Lisburn & Castlereagh reported increased LAC municipal waste arisings compared with last year by 3.9 and 3.8 per cent respectively. The largest decreases in LAC municipal waste arisings were recorded in Ards & North Down and Mid Ulster, where they fell by 2.7 and 1.5 per cent respectively.

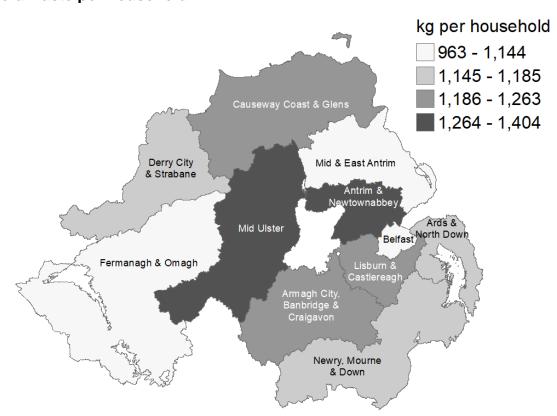
There are two key performance indicators which look at household waste arisings in more detail by considering household waste arisings per capita, KPI (p), and per household KPI (h). In Northern Ireland there were 467 kilogrammes (kg) of household waste collected per capita (per head of population) and 1,170 kg per household during 2018/19, similar to that reported in 2017/18.

Figure 5: Household waste arisings per capita and per household by council Northern Ireland, 2018/19, KPIs (p) and (h)

Household waste per capita



Household waste per household



© Crown Copyright NIMA DMOU 201 (2019)

Belfast generated the smallest amount of household waste per capita at 416 kg in 2018/19, followed by Fermanagh & Omagh and Newry, Mourne & Down. The largest quantity was recorded in Antrim & Newtownabbey at 569kg per capita. The greatest increase in household waste per capita compared to last year was also recorded in Antrim & Newtownabbey, increasing by 3.8 per cent. Household waste per capita fell by 3.2 per cent in Ards & North Down, the largest decrease recorded.

The household waste arisings per household show a similar distribution across Northern Ireland to household waste arisings per capita with some small differences. Belfast City Council generated the smallest quantity of household waste per household at 963 kg per household. The largest quantity per household was recorded in Antrim & Newtownabbey at 1,404 kg per household.

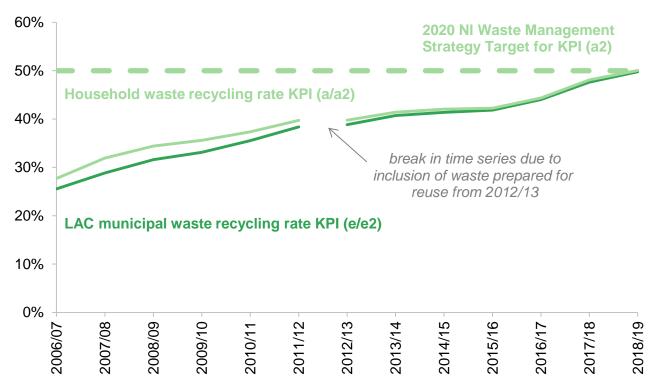
The arisings figures can be found in Tables 1 and 2 of the data tables appendix. The per capita and per household figures can be found in Table 18. All figures are also available from the time series dataset.

Recycling (preparing for reuse, dry recycling and composting)

This section of the report looks at local authority collected (LAC) municipal and household waste recycling rates. Both are key performance indicators and now include waste sent for preparing for reuse, dry recycling and composting. Previously used key performance indicators KPI (a) and (e) have been modified, in line with the rest of the UK, to include waste sent for preparing for reuse, and relabelled as KPI (a2) and (e2). The impacts were small, adding 0.1-0.2 percentage points to the rates, and resulted in the break in the time series visible in Figure 6. The KPI (a2) indicator is also used to monitor performance under the Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015.

In 2018/19, the tonnage of LAC municipal waste sent for preparing for reuse, dry recycling and composting (referred to as 'recycling' for the rest of this section) increased by 5.8 per cent to reach a record high of 492,957 tonnes. The LAC municipal waste recycling rate was 49.8 per cent, 2.1 percentage points higher than the recycling rate recorded in 2017/18. The dry recycling and composting rates both increased by 1.1 percentage points, whilst the tonnages sent for dry recycling and composting increased by 5.6 and 6.2 per cent respectively.

Figure 6: Waste sent for preparing for reuse, dry recycling and composting Northern Ireland, 2006/07 to 2018/19, KPIs (a), (a2), (e), (e2)



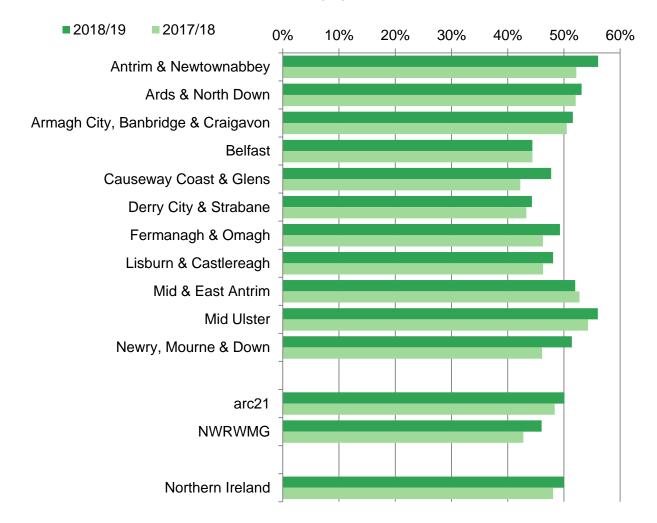
The household waste recycling rate was 50.0 per cent in 2018/19, 2.0 percentage points higher than the 2017/18 household waste recycling rate. The proportion of household waste sent for preparing for reuse was 0.2 per cent, dry recycling made up 23.9 per cent and composting was 26.0 per cent. The household waste recycling rate met the Northern Ireland Waste Management Strategy target to recycle 50% of household waste by 2020 for the first time, and is the highest household recycling rate ever recorded for Northern Ireland. Additionally, the draft Programme for Government Framework 2016-2021 contains the percentage of household waste reused, recycled or composted as a measure for

indicator 36: increase environmental sustainability under outcome 2: we live and work sustainably – protecting the environment. The household recycling rate of 50.0% is an increase of 8.0 percentage points since the baseline year for PfG reporting (2014/15) and therefore is considered as a positive change for PfG reporting.

Figure 7a compares the household recycling rates for 2018/19 and 2017/18, whilst Figure 7b illustrates changes to the component parts of the household recycling rates for each council.

Figure 7a: Household waste preparing for reuse, dry recycling and composting rate by council and waste management group

Northern Ireland, 2017/18 and 2018/19, KPI (a2)



The lowest household waste recycling rates were recorded in Derry City & Strabane at 44.3 per cent, and Belfast at 44.4 per cent. The highest household waste recycling rates were recorded in Antrim & Newtownabbey and Mid Ulster at 56.1 per cent and 56.0 per cent respectively.

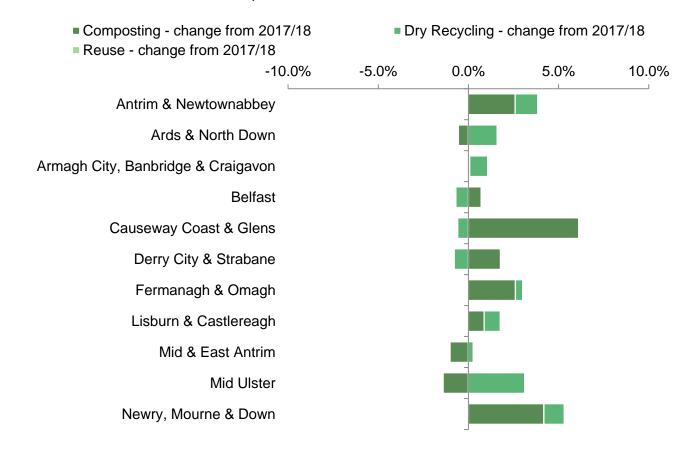
Nine councils reported increased household recycling rates compared to 2017/18, with Causeway Coast & Glens reporting the largest increase at 5.5 percentage points. The improved recycling rate for Causeway Coast & Glens can be attributed to a rise in household waste composting which increased by 6.1 percentage points to 23.5 per cent. Newry, Mourne & Down and Antrim & Newtownabbey reported increased household recycling rates by 5.3 and 3.9 percentage points respectively. Again, increases in the household waste composting rates were the biggest attributor to these improvements.

Ards & North Down, Armagh City, Banbridge & Craigavon, Derry City & Strabane, Fermanagh & Omagh, Lisburn & Castlereagh and Mid Ulster reported increased household recycling rates compared to 2017/18 by between 3.0 and 1.0 percentage points. The household waste recycling rate fell by 0.8 percentage points in Mid & East Antrim compared to 2017/18, a fall that can be attributed to a 1.0 percentage point decrease in the household waste composting rate. Belfast reported a similar household waste recycling rate to last year.

Overall, there was considerable variation between household dry recycling and composting rates. Derry City & Strabane recorded the highest dry recycling rate at 29.5 per cent, whilst Lisburn & Castlereagh recorded the lowest rate at 18.4 per cent. The highest composting rate was in Antrim & Newtownabbey at 33.5 per cent with Derry City & Strabane having the lowest rate at 14.6 per cent.

Dry recycling and composting rates remained relatively stable for most councils compared with the previous year. The largest increases were recorded in Mid Ulster where the dry recycling rate increased by 3.1 percentage points, and in Causeway Coast & Glens where the composting rate increased by 6.1 percentage points. The household waste composting rate fell 1.4 percentage points in Mid Ulster – the largest decrease reported, whilst the dry recycling rate fell 0.8 percentage points in Derry City & Strabane compared to 2017/18. Differences in composting rates across the council areas can be affected by variations in the urban-rural characteristics of the council areas. The household recycling rates for the Waste Management Groups were 50.1 per cent for arc21 and 46.0 per cent for NWRWMG, the Northern Ireland household recycling rate was 50.0 per cent.

Figure 7b: Change reported for household waste preparing for reuse rate, dry recycling rate and composting rate by council
Northern Ireland, 2018/19 compared to 2017/18



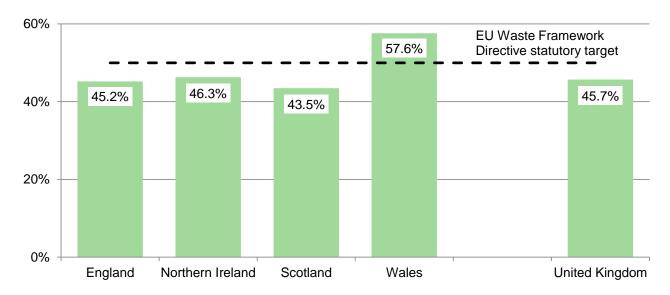
Waste from households recycling rate (including preparing for reuse and composting)

An additional recycling rate, called the waste from households recycling rate, is now also calculated. It is not a key performance indicator, but can be used to make comparable calculations between each of the four UK countries. The EU Waste Framework Directive statutory target requires member states to recycle 50 per cent of waste from households by 2020. The UK waste from households recycling rate is reported by calendar year and was 45.7% in 2017, an increase from 45.2% in 2016. The 2017 waste from household recycling rate for England was 45.2%, compared with 46.3% in Northern Ireland, 43.5% in Scotland and 57.6% in Wales.

The latest comparison for finalised annual figures (by calendar year) is shown in Figure 8, with further data available at https://www.gov.uk/government/statistics/uk-waste-data

Figure 8: Waste from households recycling rate (including preparing for reuse and composting)

Comparison of UK Countries, 2017

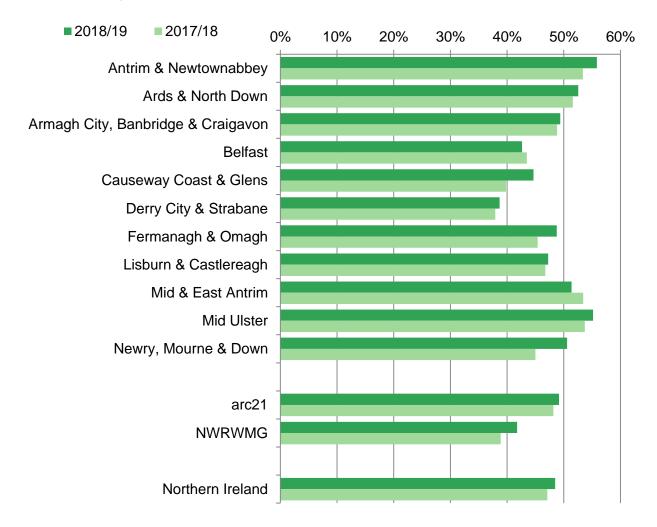


The latest statistics available for waste from household in Northern Ireland are provided below and relate to the 2018/19 financial year.

In 2018/19 there were 408,962 tonnes of waste from households sent for recycling (including preparing for reuse and composting). The waste from households recycling rate was 48.5 per cent. This was an increase of 1.4 percentage points on the 47.1 per cent of waste from households sent for recycling in 2017/18.

Figure 9: Waste from households recycling rate (including preparing for reuse and composting)

Northern Ireland, 2017/18 and 2018/19



All figures for the recycling section can be found in the accompanying data tables spreadsheet and also in the time series dataset.

- Tables 3 and 4 (LAC municipal waste recycling)
- Tables 16 and 17 (Household waste recycling)
- Table 23 (Waste from household recycling)

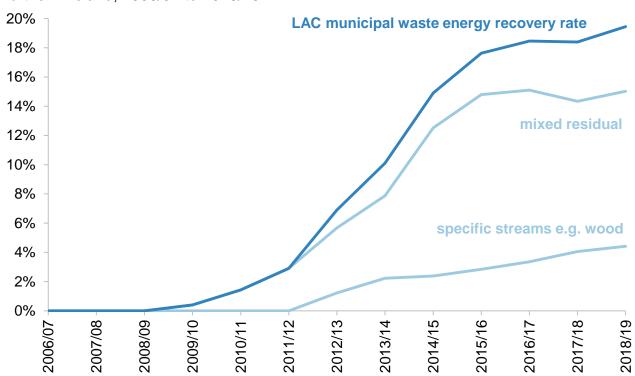
Energy recovery

Energy Recovery via incineration

This annual report includes figures on energy recovery, which is the term used when value is gained from waste products by converting them into energy. All energy recovery figures reported in this section are derived from material sent for energy recovery via incineration, although other technologies exist. Energy recovery via anaerobic digestion is discussed at the end of this section. For more information see *Energy Recovery Data* in the *Data Developments* section of the user guidance.

In 2018/19, 192,537 tonnes of LAC municipal waste arisings were sent for energy recovery. This gave a LAC municipal waste energy recovery rate of 19.4 per cent, higher than the 18.4 per cent recorded in 2017/18. In each year, the majority was mixed residual LAC municipal waste with a smaller proportion from specific streams, e.g. wood.

Figure 10: LAC municipal waste sent for energy recovery Northern Ireland, 2006/07 to 2018/19

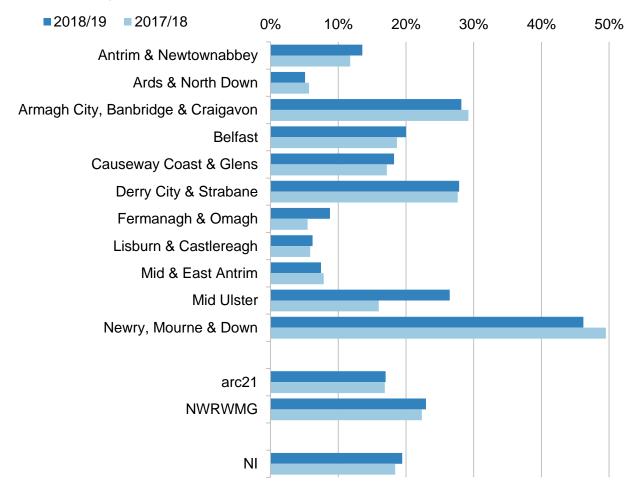


There was zero, or very small quantities, of LAC municipal waste sent for energy recovery before 2009/10. Strong growth followed from 2010/11, with the energy recovery rate increasing from 0.4 per cent in 2009/10 to 19.4 per cent in 2018/19.

Mixed residual LAC municipal waste sent for energy recovery is combustible residual waste collected from the kerbside and from civic amenity sites and processed into refuse derived fuel at material recovery facilities. The specific streams element of energy recovery is mostly wood but also includes furniture, carpets and mattresses, mostly collected from civic amenity sites.

Figure 11: LAC municipal waste energy recovery by council and waste management group

Northern Ireland, 2017/18 and 2018/19



Newry, Mourne & Down had the highest energy recovery rate in 2018/19 at 46.2 per cent, a decrease of 3.3 percentage points on last year. This can be attributed to a fall in mixed residual LAC municipal waste. The lowest energy recovery rate was 5.1 for Ards & North Down, a decrease of 0.6 percentage points on 2017/18.

Five councils reported an increase in the energy recovery rate in 2018/19 compared to 2017/18, the largest of which was in Mid Ulster at 10.5 percentage points. Antrim & Newtownabbey, Belfast, Causeway Coast & Glens and Fermanagh & Omagh reported increases between 3.3 and 1.1 percentage points.

For Armagh City, Banbridge & Craigavon, Belfast, Causeway Coast & Glens, Derry City & Strabane, Mid Ulster and Newry, Mourne & Down, energy recovery for mixed residual waste accounted for a greater proportion of their total energy recovery than specific streams such as wood. Antrim & Newtownabbey had the highest energy recovery rate for specific streams at 7.2 per cent whilst Newry, Mourne & Down had the highest energy recovery rate for mixed residual waste at 42.3 per cent.

The NWRWMG had an energy recovery rate of 23.0 per cent, up from 22.3 per cent in 2017/18, and higher than that of arc21 which at 17.0 per cent remained similar to last year.

Generating energy from waste by incineration is preferable to landfill, although preparing for reuse, dry recycling and composting are preferable to both.

Energy Recovery via Anaerobic Digestion

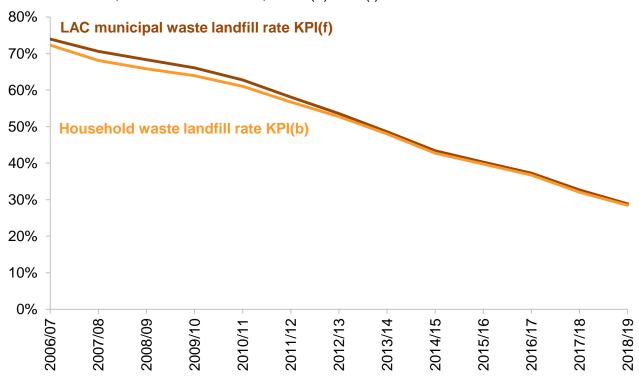
The tonnages relating to energy recovery from material undergoing anaerobic digestion are still accounted for under the recycling section since the vast majority of the tonnage of waste undergoing this process eventually ends up as a compost (once the methane generated from the anaerobic digestion process has been collected). Table 13 in the data tables appendix shows the amount of food waste anaerobically treated to recover energy before ending up as a compost.

These figures can be found in Tables 3, 4 and 13 of the data tables appendix and in the time series dataset.

Landfill

The quantity of LAC municipal waste sent to landfill decreased by 10.4 per cent from 319,212 to 285,905 tonnes between 2017/18 and 2018/19. This gave a landfill rate of 28.9 per cent for 2018/19, 3.8 percentage points lower than the 32.6 per cent recorded in 2017/18 and the lowest ever recorded. Similarly, the landfill rate for household waste has recorded a new low of 28.4 per cent in 2018/19, a drop of 3.6 percentage points on the 2017/18 rate of 32.0 per cent and a fall from a high of 72.3 per cent in 2006/07.

Figure 12: Waste sent to landfill Northern Ireland, 2006/07 to 2018/19, KPIs (b) and (f)

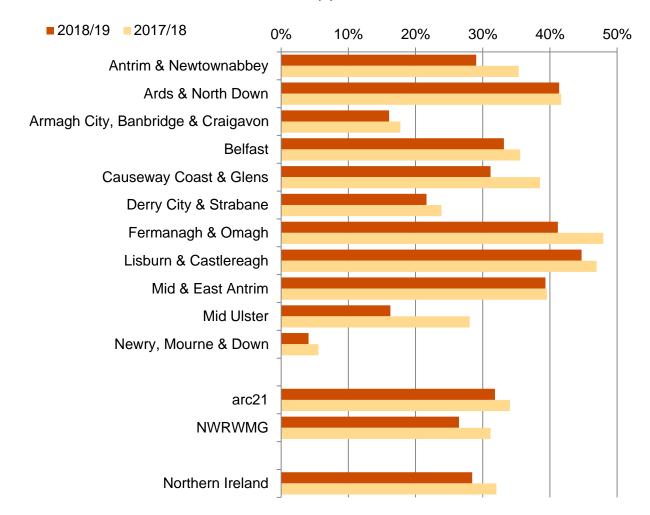


The NWRWMG had a LAC municipal waste landfill rate of 26.4 per cent, 2.5 percentage points lower than the Northern Ireland rate, and 4.4 percentage points lower than recorded in 2017/18. Arc21's LAC municipal waste landfill rate was higher than the Northern Ireland rate at 32.4 per cent, however it fell by 2.7 percentage points compared to 2017/18.

Nine councils recorded a decrease in their household landfill rate compared to last year. Decreases ranged from 11.8 percentage points in Mid Ulster to 1.5 percentage points in Newry, Mourne & Down. The household landfill rates were similar in Ards & North Down and Mid & East Antrim to those recorded in 2017/18.

Newry, Mourne & Down recorded the lowest landfill rate at 4.1 per cent, one seventh of the Northern Ireland rate of 28.4 per cent. Whilst Lisburn & Castlereagh's household landfill rate decreased by 2.2 percentage points compared to 2017/18, the 44.7 per cent reported for 2018/19 was higher than in any other council.

Figure 13: Household waste landfilled by council and waste management group Northern Ireland, 2017/18 and 2018/19, KPI (b)



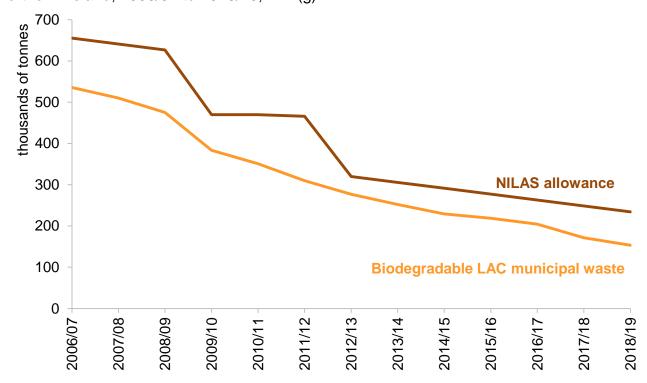
The statutory requirement for all councils in Northern Ireland to provide households with a container for food to enable its separate collection contributed to the drop in landfill rates, though increasing energy recovery rates for some councils also contributed. Material, mainly from residual waste treatment, can be sent for energy recovery in the form of refuse derived fuel (RDF) which diverts it from landfill. Landfill Tax for household waste continues to be the main driver for local authorities to reduce landfill. Other considerations include a limit on the amount of biodegradable LAC municipal waste as measured by KPI (g). Generating energy from waste by incineration is preferable to landfill, although recycling and reuse are preferable to both. This data and more information including collection method can be found in the data tables appendix. Tables 3 and 4 cover LAC municipal waste and Tables 16 and 17 cover household waste. The data are also available from the time series dataset.

Biodegradable local authority collected municipal waste to landfill

Article 5(2) of the EC Landfill Directive (1999/31/EC) requires member states to reduce the amount of biodegradable municipal waste sent to landfill, setting challenging targets. The Landfill Allowance Scheme (NI) Regulations 2004 (as amended) place a statutory responsibility on councils, in each scheme year, to landfill no more than the quantity of biodegradable LAC municipal waste (BLACMW) for which they have allowances. In order to ensure compliance with these targets, the amount of biodegradable LAC municipal waste sent to landfill, KPI (g), is monitored. This indicator is also used to monitor performance under the Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015.

Under the Northern Ireland Landfill Allowance Scheme (NILAS) regulations councils have been allocated a number of allowances (each allowance represents 1 tonne of BLACMW) for each year until 2019/20. However in any scheme year a council may transfer allowances to other councils in order to ensure that each council does not exceed the amount it is permitted to send to landfill. Transfers of allowances are not included in the provisional quarterly figures but are included in these finalised annual figures. More information on the NILAS regulations can be found on the DAERA website: https://www.daera-ni.gov.uk/articles/northern-ireland-landfill-allowance-scheme-nilas

Figure 14: Biodegradable LAC municipal waste sent to landfill Northern Ireland, 2006/07 to 2018/19, KPI (g)

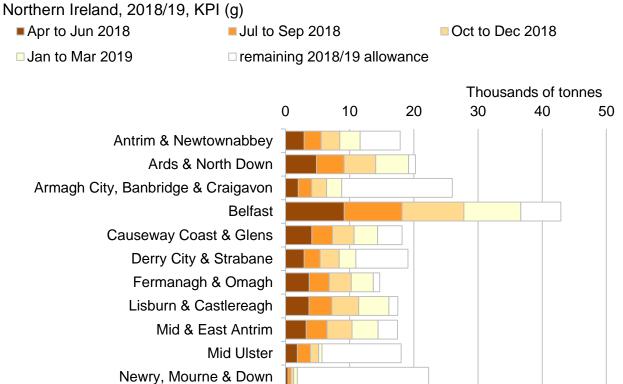


There were 153,323 tonnes of BLACMW sent to landfill during 2018/19. This was 10.5 per cent lower than the 171,295 tonnes sent in 2017/18, and 65 per cent of the allowance used compared to 69 per cent in 2017/18. The 2018/19 NILAS allowance (234,284 tonnes) was 5.7 per cent lower than the 2017/18 allowance (248,570 tonnes).

The amount of BLACMW sent to landfill in 2018/19 has fallen by 71.4 per cent compared with the amount sent in 2006/07. Whilst the tonnage of biodegradable LAC municipal waste being sent to landfill is decreasing in line with the allocation, the proportion of the allocation used in previous years has varied between 66 per cent and 86 per cent. In 2018/19, 65 per cent of the allocation was used.

Councils within arc21 used 72.2 per cent of their total allocation, similar to 2017/18, whilst councils within NWRWMG used 68.0 per cent of their allocation, a decrease of 10.6 percentage points from 2017/18. If comparing the extent to which allowances have been used against last year, it is important to note that there has been a reduction in the allocations in 2018/19.

Figure 15: Biodegradable LAC municipal waste landfilled by council and waste management group



Note: The Northern Ireland and waste management group figures are not shown on this chart as their figures distort the scale and make it difficult to distinguish differences between councils. The figures are available from the data tables.

There is considerable variation between councils in the proportion of the 2018/19 allowance used, although there were no transfers of allowances required between councils in 2018/19. Newry, Mourne & Down used the lowest share of its annual allocation at 8.3 per cent, a fall of 2.8 percentage points compared to 2017/18. Ards & North Down used 94.7 per cent of their 2018/19 allowance, up from 87.8 per cent in 2017/18 and the highest reported. Mid Ulster and Causeway Coast & Glens reported the largest decreases in the proportion of their allocation used compared to last year at 21.4 and 19.5 percentage points respectively.

This data can be found in Table 21 of the data tables appendix and in the <u>time series</u> <u>dataset</u>.

Northern Ireland Key Performance Indicators 2018/19

Key Performance Indicators (KPIs) are a set of measures used to gauge performance in terms of meeting waste strategy targets. They were originally defined in the Environment and Heritage Service (now the Northern Ireland Environment Agency) municipal waste data monitoring and reporting: interim guidelines, published in March 2003.

The table below has been included to help users find a specific KPI value or location in the report or data tables. Previously used key performance indicators KPIs (a) and (e) have been modified, in line with the rest of the UK, to include waste sent for preparing for reuse, and relabelled as KPI (a2) and (e2).

KPI	Performance during 2018/19	Section in report and Appendix Table
a2	50.0 per cent of household waste sent for recycling (including composting and preparing for reuse)	Recycling (pages 9-13) Data table 17a
b	28.4 per cent of household waste landfilled	Landfill (pages 17-18) Data table 17b
e2	49.8 per cent of LAC municipal waste sent for recycling (including composting and preparing for reuse)	Recycling (pages 9-13) Data table 4a
f	28.9 per cent of LAC municipal waste landfilled	Landfill (pages 17-18) Data table 4b
g	153,323 tonnes of biodegradable LAC municipal waste landfilled	Biodegradable landfill (pages 19-20) Data table 21a
h	1,170 kg of household waste generated per household	Waste arisings (pages 5-8) Data table 18
j	990,233 tonnes of LAC municipal waste generated	Waste arisings (pages 5-8) Data table 1
m	See Tables 22i and 22ii for capture rates by primary waste category	Data tables 22i and 22ii
n	1.3 per cent increase in LAC municipal waste generated	Waste arisings (pages 5-8) Data table 2
p	467 kilogrammes of household waste generated per capita	Waste arisings (pages 5-8) Data table 18

The fully validated figures that are published in the annual report have undergone audit by the Northern Ireland Environment Agency (NIEA) and further validation by Statistics and Analytical Services Branch (SASB) in the Department of Agriculture, Environment and Rural Affairs (DAERA). The annual validation acts as a check that all issues raised at the quarterly validation stage have been addressed. Additional validation checks incorporated later in the working year are then also applied backwards to all quarters in the reporting year via the annual validation.

The table below outlines the differences between finalised data in this annual report and the provisional twelve-month rolling figures and time series dataset for April 2018 to March 2019 presented in the data tables for the <u>January to March 2018 quarterly report</u>. (Data tables - Table 18)

Comparison of provisional and final figures for 2018/19 key performance indicators

KPI	Definition	2018/19 provisional	2018/19 finalised	difference
a2	Percentage of household waste sent for recycling (including composting and preparing for reuse)	50.0 per cent	50.0 per cent	0.04 percentage points
b	Percentage of household waste sent to landfill	28.6 per cent	28.4 per cent	-0.15 percentage points
e2	Percentage of LAC municipal waste sent for recycling (including composting and preparing for reuse)	49.7 per cent	49.8 per cent	0.10 percentage points
f	Percentage of LAC municipal waste landfilled	29.1 per cent	28.9 per cent	-0.21 percentage points
g	Reported biodegradable LAC municipal waste sent to landfill	153,512	153,323	189 tonnes (0.12 per cent)
h	Annual household waste collected per household	1,172	1,170	2 kg (-0.17 per cent)
j	LAC municipal waste arisings	988,440	990,233	1,793 tonnes (0.18 per cent)
m	Capture rates		22i and 22ii mary waste	for capture rates by category
n	LAC municipal waste arisings growth rate	1.1 per cent	1.3 per cent	0.18 percentage points
p	Annual household waste collected per capita	468	467	-0.77 kg per capita (0.17 per cent)

The differences between provisional and final figures are small but arise due to the additional validations carried out before the finalisation of this annual publication.

Progress against targets

Data contained in this release are published primarily to provide an indication of the progress towards achieving waste strategy targets. They allow for the assessment of the performance of the councils and waste management groups in Northern Ireland in managing waste arisings, recycling, composting and landfill.

Overview of progress against targets

Indicator	Source	Progress/ Outcome
To achieve a recycling rate of 45 per cent (including preparing for re-use) of household waste by 2015	Targets 1, 2 & 3 on p39 of the revised Northern Ireland Waste Management Strategy	KPI (a2) Target first met in 2017/18 – 48.1 per cent Target met in 2018/19
•		– 50.0 per cent
To achieve a recycling rate of 50 per cent (including preparing for re-use) of household waste by 2020	As above	KPI (a2) Target met in 2018/19 – 50.0 per cent
To achieve a recycling rate of 60 per cent (including preparing for re-use) of LACMW by 2020	As above	KPI (e2) Progress in 2018/19 – 49.8 per cent
To landfill no more than 234,284 tonnes of biodegradable LACMW by the end of March 2019.	Article 3 of The Landfill (Scheme Year and Maximum Landfill Amount) Regulations 2004	KPI (g) Target met in 2018/19 – 153,323 tonnes (65 per cent of allowance used)
To landfill no more than 220,000 tonnes of biodegradable LACMW by the end of March 2020.	As above	Target met in 2018/19 – 153,323 tonnes (65 per cent of allowance used)
Percentage household waste that is reused, recycled or composted.	Indicator 36 of the draft Programme for Government Framework 2016-2021	8.0 percentage points higher than 2014/15 baseline figure – positive change

Appendix 1: User Guidance

This statistical release is part of a regular data series presenting finalised information on local authority collected municipal waste managed in Northern Ireland.

Description of data

Local authority collected municipal waste (LACMW) data in Northern Ireland. This is municipal waste which is collected under arrangements made by a district council.

Main Uses of Data

Data contained in this release are published primarily to provide an indication of the progress towards achieving waste strategy targets. They allow for the assessment of the performance of the councils and waste management groups in Northern Ireland in managing waste arisings, recycling, composting and landfill. Targets are set for an annual period and performance against targets is considered in the Progress against targets section.

The revised Northern Ireland Waste Management Strategy sets out targets for the management of local authority collected municipal waste.

- To achieve a recycling rate of 45 per cent (including preparing for re-use) of household waste by 2015.
- To achieve a recycling rate of 50 per cent (including preparing for re-use) of household waste by 2020.
- Proposals to achieve a recycling rate of 60 per cent (including preparing for re-use) of LACMW by 2020.

https://www.daerani.gov.uk/articles/waste-managementstrategy

The draft Programme for Government Framework 2016-2021 contains 'percentage of household waste that is recycled or composted' as a measure for indicator 36: increase household waste recycling. The second consultation on this

framework opened on 28 October 2016 and closed on 23 December 2016.

The Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015 came into operation on 28 September 2015. It contains three waste management indicators which correspond to KPIs (a2), (g) and (j) in this publication.

The EU Waste Framework Directive statutory target requires member states to recycle 50 per cent of waste from households by 2020.

The data are also used to assess performance against the Landfill Directive targets.

http://www.ciwm.co.uk/ciwm/knowledge/landfill-directive.aspx

This annual report provides final validated information on several key performance indicators (KPIs) used to assess progress towards achieving local authority collected municipal waste targets.

The waste data may help to inform particular lifestyle choices of the public, specifically decisions about how to treat their waste. This information feeds into Northern Ireland specific and UK wide research projects and articles carried out and published by Waste and Resource Action Programme (WRAP) – see the following web resources for more information:

https://www.recyclenow.com/ni http://www.wrap.org.uk/ http://laportal.wrap.org.uk/

These projects are funded by each of the governments within the UK and the EU. The results of research by WRAP assist governments to devise strategies to deal with issues such as using resources sustainably, helping people to recycle more and to waste less both at home and

at work, offering economic as well as environmental benefits.

Additionally, waste management information is used to inform the media, special interest groups such as the Chartered Institute of Waste Management (CIWM) which is the professional body representing waste and resource professionals, academics, for example those who would have an interest and/or involvement in the WRAP research mentioned above, and by DAERA to respond to parliamentary / assembly questions and ad hoc queries from the public.

The Northern Ireland Neighbourhood Information Service (NINIS) provides access to waste information with the aim of making it available to as wide an audience as possible by providing interactive charts and mapping facilities that enable the statistics to be interpreted readily in a spatial context. http://www.ninis2.nisra.gov.uk/Interactive-Maps/Agriculture-per-cent20and-per-cent20Authority-per-cent20Collected-per-cent20Municipal-per-cent20Waste-per-cent20Recycling/atlas.html

Local Government Reorganisation

The 26 councils covered by previous reports were reorganised into 11 new councils from 1 April 2015. Prior to this, we consulted with users of the report, the proposed changes and summary of responses are available on the Statistics and Analytical Services Branch (SASB) website https://www.daera-ni.gov.uk/consultations/proposed-changes-northern-ireland-local-authority-collected-municipal-waste-management-statistics

At that stage the opportunity was also taken to update the report using feedback from NISRA's peer review group.

Data Developments

Key Performance Indicators (a) and (e)
Prior to 2015/16, Northern Ireland
recycling KPIs did not include waste sent
for preparing for reuse, unlike the other
UK devolved administrations. Waste sent
for preparing for reuse has been added to
the calculations of these KPIs and they
have been renamed KPI (a2) and
KPI (e2). This change has been
backdated to include data from 2012/13
onwards and allows comparisons across
time to be made for these KPIs.

The difference this makes to the quantity of waste recycled is small. During 2018/19 this change added on 1,437 tonnes of waste sent for preparing for reuse to the recycling total. This added 0.2 and 0.1 percentage points to the KPI (a) and KPI (e) rates respectively.

These measures are now more consistent with the rest of the UK and more consistent with the definition of the targets in the Waste Management Strategy 2020 and the Local Government (Performance Indicators and Standards) Order (NI) 2015, which include waste sent for preparing for reuse.

Waste from households recycling rate In Northern Ireland, the household recycling rate is based on 'household waste' as defined in the Waste and Contaminated Land (NI) Order 1997 (the 1997 Order) and Schedule to the Controlled Waste and Duty of Care Regulations (NI) 2013. The new 'waste from households' recycling rate has been introduced for statistical purposes to provide a harmonised UK indicator with a comparable calculation in each of the four UK countries.

This 'waste from households' measure has been added to the report and data tables to enable UK comparisons. However the main focus of this report is still the previous 'household waste' definition because it is the measure most directly related to current Northern Ireland

policy targets. There are targets in the revised Waste Management Strategy, the 2015-16 Programme for Government and the Local Government (Performance Indicators and Standards) Order (NI) 2015 that reference the prior 'household waste' definition.

There is a difference between 'household waste' and 'waste from households'. The latter has a generally narrower definition than the former. There are a number of sources of waste that were considered under 'household waste' that are not considered by 'waste from households', for example waste from street recycling bins and street cleaning. More information is available from the 'waste from households' calculation guidance on the WDF website.

http://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/OtherGuidanceNotes/WfHrecyclingguidanceNI_v2.pdf

Analysis using 2018/19 data has shown that the 'waste from households' rate is 1.5 percentage points lower than the 'household waste' recycling rate at the Northern Ireland level. However, the difference between these rates vary across councils, with the waste from households being between 5.6 and 0.3 percentage points lower than the household waste. The time series file allows the difference in these rates to be compared over quarters and across councils.

Data Sources

Waste Management Data

The information presented in this report is taken from WasteDataFlow (WDF), a web based system for local authority collected municipal waste reporting by UK local authorities to central government. The data are based on returns made to WDF (relating to approximately 40 questions on local authority collected municipal waste management) by councils, within two months of the end of each quarter.

It is increasingly rare that residual waste may still be disposed of directly to landfill. Waste is collected by the councils directly from the kerbside and some civic amenity sites; third parties under contract to the council also collect from the remaining civic amenity sites and almost all of the bring banks. Some larger councils use intermediate bulking up stations where the waste is weighed both coming into and leaving the transfer station. In all cases the waste is weighed on arrival at treatment sites for recovery e.g. Material Recovery Facilities (MRFs) and/or disposal e.g. landfill sites.

MRFs, which sort the co-mingled waste into different resource streams, almost always have more than one input source and so the weighed tonnages of each stream coming out of the plant are assigned pro-rata to each source i.e. based on their input tonnages as a percentage of all input tonnages for that period. Weighbridge dockets are generated which form the basis for statutory Waste Transfer Notes (WTNs) as the waste moves further down the treatment chain/onto reprocessors. These WTNs and/or internal reports (which also form the basis for invoices) are then sent to the council on a monthly basis. These are summarised on a quarterly basis and organised into the relevant WDF questions/categories and finally input by hand into the WDF web portal. Data providers (councils in Northern Ireland) are supplied with technical guidance documents outlining the methodologies that should be used in the collection, reporting and validation of the data returns. These documents can be accessed on the WDF website. www.wastedataflow.org/htm/datasets.asp x#NorthernIrelandGuidance

Population Data

Population data used to calculate KPI (p), household waste arisings per capita, are taken from the 2018 mid-year estimates, produced by NISRA, and were the most

up to date available at the time of publication.

Household Data

Household data used to calculate KPI (h), household waste arisings per household, are based on the Land and Property Services (LPS) housing stock from April 2019. Note these household figures do not include caravans. An adjustment is made to account for the estimated number of vacant properties. A council-specific occupancy rate was calculated from 2011 Census data and is applied to the LPS data. The datasets can be accessed from the LPS website. https://www.finance-ni.gov.uk/topics/statistics-and-research/housing-stock-statistics

https://www.financeni.gov.uk/topics/statistics-andresearch/new-dwelling-statistics

Data Quality

The data are final and are based on, but supersede, previously published data from the four quarterly returns for the financial year. The data download from WDF were completed on 14 November 2019. At that time, all the district councils had made a return, giving a 100 per cent response rate.

Information contained in this report has been sourced from WasteDataFlow (WDF), which is the web based system for local authority collected municipal waste data reporting by UK local authorities to central government. The data in this report are based on returns made to WDF by district councils in Northern Ireland at the end of the 2018/19 financial year.

The fully validated figures that are published in this annual report have undergone audit by Northern Ireland Environment Agency (NIEA) and further validation by Statistics and Analytical Services Branch (SASB) beyond that which is done on a quarterly basis. The annual validation acts as a check

that all issues raised at the quarterly validation stages have been addressed. Additional validation checks incorporated later in the working year are then also applied backwards to all quarters in the reporting year via the annual validation. **Strengths of Data**

Data are derived from WDF with full coverage for all councils to support statutory NILAS diversion targets. As the data are derived from an administrative system, they provide a complete picture of council controlled waste activity in NI.

Validation and audits

Various validation checks are carried out by both NIEA and SASB. Validations are conducted for each individual question, with additional global validations carried out to ensure that total tonnage of waste types is equal to the sum of the component parts. Any discrepancies are queried with the data provider. Variance checks are employed as an integral part of the production process.

In addition, NIEA carry out a year round programme of audits of WDF returns by individual councils. These audits are conducted under Regulation 10 (6)(a) of the NILAS Regulations. Councils are selected from each waste management group and contacted by telephone, letter and e-mail informing them of NIEA's intention to audit. The audit involves checking and confirming relevant data submitted as a NILAS return to the Monitoring Authority via WDF. One quarter of each council's municipal waste returns are selected, generally being the most recent submission. The areas being inspected relate to:

- i. landfilling of municipal waste,
- ii. collection, recycling, reuse and recovery of municipal waste,
- iii. the standard of reporting/evidence for end destinations of recycled materials.

Councils are asked to provide original documentation to support reported figures in the WDF system for the quarter in question. Any anomalies or discrepancies

are subsequently queried with the relevant council. As WDF data can usually only be amended at council level, it is then necessary to 'reject' or release the data back to the waste management group and subsequently back to the council so that it might be corrected as appropriate.

Limitations of Data

Waste Management Data
Despite the intensive validation carried out on the data prior to publication, any administrative system involving manual data compilation will always be open to a degree of clerical error.

Unclassified waste

Unclassified waste is calculated as a residual amount of municipal waste after municipal waste sent to landfill, sent for recycling (including composting), sent for energy recovery and preparing for reuse have been accounted for, instead of being extracted directly from the WasteDataFlow system. The majority of the total unclassified tonnage can be attributed to moisture and/or gaseous losses. Small negative tonnages can arise in the unclassified column if more waste is sent for treatment in the quarter than was actually collected as is more likely at councils operating transfer stations. Transfer stations move waste quickly but if a particular transfer occurs the day after arriving, which also happens to be the start of the next quarter, then a small inconsistency can arise.

Types of waste

There are many different forms of waste, including municipal solid waste, commercial and industrial waste, construction, demolition and excavation waste, hazardous waste, agricultural waste, and waste water and sludges. The latest report on construction, demolition and excavation waste arisings is for 2009/10:

https://www.daerani.gov.uk/publications/constructiondemolition-and-excavation-waste-

<u>arisings-use-and-disposal-northern-</u>ireland

Following on from the UK's agreement to revise its interpretation of 'municipal waste' to include much more commercial and industrial waste than previously; it should be noted that this report, as with all previous ones, reflects local authority collected municipal waste only.

Material Recovery Facilities
MRFs usually have more than one input source and the pro-rata assignment to each source based on their input tonnages can lead to a small over or under estimation of the actual tonnage being recovered from each individual source.

Capture Rates

Capture rates are no longer included in the body of the report but are still available in the data tables appendix. The calculations for capture rates are based on a Compositional Study undertaken in 2017 and may not accurately reflect the current situation. However, it is the best available estimation of the proportions of the primary waste categories contained within kerbside residual waste. Levels of uncertainty around the results of the Compositional Study are discussed in the full report.

The accuracy of these estimates is expected to decrease over time as household recycling habits continue to change.

Waste Crime

Waste crime is the unauthorised management of waste, including illegal dumping. It can be difficult to quantify the impact of such activity upon these official figures as it is not always possible to determine the source, date and tonnage of illegally deposited waste. Where possible the extent and any implications of such activity will be communicated to users.

Energy Recovery via Anaerobic Digestion
The tonnages relating to energy recovery
from material undergoing anaerobic
digestion are still accounted for under the
recycling section since the vast majority
of the tonnage of waste undergoing this
process eventually ends up as a compost
(once the methane generated from the
anaerobic digestion process has been
collected).

Rounding and Summing

It should be noted that in some instances totals may not add up due to rounding. If tonnages work out to be less than 0.5 tonnes, they will be rounded to zero.

On occasion percentages work out to be less than 0.1 per cent or more than 99.9 per cent. Users should be aware that in such cases, the percentage is rounded to zero or 100 per cent respectively.

Whilst tonnages may be summed over councils and/or Waste Management Groups to give totals for higher level geographies, such totals may suffer from rounding errors when compared with any given totals.

However where fractions or proportions, such as recycling rates, waste arisings per capita etc are stated for councils or waste management groups, these indicators cannot be simply added or averaged to produce a rate for a higher level geography. Such information is often available in the data tables appendix, or otherwise may be available upon request.

Data for Northern Ireland and Waste Management Groups are only added to charts with rates and percentages to avoid distorting the scale of the charts.

Notation and Terminology

Please see the glossary (appendix 2) for clarification of key terms.

Guidance on using data

All figures in the report and the accompanying Excel tables are annual figures and refer to the stated period. These annual figures are the final, validated figures for the year and supersede those figures published in the quarterly reports for the period. Please note that any comparisons with prior year use the final validated figures as published in the annual report for that period. Very small increases or decreases in figures (<0.5 per cent or <0.5 percentage points) are not highlighted in the commentary and should be interpreted with care.

Waste Management information elsewhere in the United Kingdom and Europe

While it is our intention to direct users to waste management information elsewhere in the UK and Europe, users should be aware that local authority collected municipal waste statistics in other administrations are not always measured in a comparable manner to those in Northern Ireland. Details of waste management data published elsewhere in the UK and Europe can be found at the following links.

England

https://www.gov.uk/government/collections/waste-and-recycling-statistics

Scotland

http://www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/

Wales

http://gov.wales/statistics-andresearch/local-authority-municipal-wastemanagement/?lang=en

Ireland

http://www.epa.ie/waste/municipal/

European Union Member States http://ec.europa.eu/eurostat/statistics-explained/index.php/Municipal waste statistics

The basis of the data collection across the UK using WDF is broadly consistent, however there are some minor definitional differences such as Northern Ireland recycling KPIs do include material used as 'backfill' (using suitable waste material to refill an excavation instead of non-waste material) which is not directly comparable with the revised Waste Framework Directive recycling measurements.

The meetings of the WasteDataFlow Operational Group ensure a conscious effort to share waste management developments on a UK-wide basis with Northern Ireland representation on this group.

https://www.daerani.gov.uk/publications/waste-data-flownorthern-ireland-user-group-meeting-2012

A National Statistics Publication

National Statistics are produced to a high professional standard. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

The UK 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.

The Department demonstrates its commitment to the Code of Practice by publishing a series of supporting statements related to its use of administrative data, publication strategy, confidentiality arrangements, revisions policy, customer service and complaints procedure. For details see the statistics charter on the DAERA statistics website https://www.daera-ni.gov.uk/publications/daeras-statistics-charter

For further information

For more information relating to this publication, including additional analysis, breakdowns of the data or alternative formats please contact Statistics and Analytical Services Branch.

As we want to engage with users of our statistics, we invite you to feedback your comments on this publication at any time of the year. Contact details are available on the front cover of this report and in the data tables appendix.

Copyright

This publication is Crown copyright. It may be reproduced free of charge in any format or medium. Any material used must be acknowledged and the title of the publication specified.

Appendix 2: Glossary

Term	Explanation
Biodegradable waste	Any waste that is capable of undergoing anaerobic decomposition, such as food and garden waste, and paper and paperboard.
Bring site	An unmanned site with a container or a collection of containers for depositing recyclable waste.
Capture rate for household kerbside collected waste	The amount of 'available' material that is actually being collected for recycling through household kerbside collection schemes.
Civic amenity site	A manned site for depositing waste.
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.
Composting rate	The percentage of waste sent for composting. It excludes waste collected for composting that was rejected at collection or at the gate of the reprocessor.
Dry recycling	The recycling of dry materials such as paper, card, cans, plastic bottles, mixed plastic, glass.
Dry recycling rate	The percentage of waste sent for recycling. It excludes waste collected for recycling that was rejected at collection, during sorting or at the gate of the recycling reprocessor. It includes residual waste which was diverted for recycling but excludes waste sent for preparation for reuse.
Energy recovery rate	The percentage of waste sent for energy recovery. It includes mixed residual and specific sources components.
Household waste	Includes materials (except soil, rubble and plasterboard) collected directly from households (e.g. kerbside collections) or indirectly (e.g. bring sites, civic amenity sites, collected by private and voluntary organisations not included elsewhere or street sweepings).
Kerbside	A regular collection of waste from premises.
Key Performance Indicators (KPIs)	A set of measures used to gauge performance in terms of meeting waste strategy targets.
LAC	Local Authority Collected, as in LAC municipal waste.
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 collected municipal waste	Waste which is collected under arrangements made by a district council.

Term	Explanation
Mixed dry recyclables	Waste streams intended for recycling found together with each other but separately from other waste.
Mixed residual waste sent for energy recovery	Combustible residual waste collected from the kerbside and civic amenity sites and processed into refuse derived fuel at material recovery facilities.
NILAS	Northern Ireland Landfill Allowance Scheme
Non household waste	Asbestos, beach cleansing, civic amenity sites waste, fly- tipped materials, gully emptyings, commercial and industrial, construction and demolition, grounds waste, highways waste, other collected waste and other.
Other household waste	Healthcare waste, bulky waste, street cleaning and other household.
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.
Refuse Derived Fuel (RDF)	Consists largely of organic components of municipal waste (such as plastics and biodegradable waste). This can then be used in a variety of ways to generate electricity, most commonly as an additional fuel used with coal in power stations or in cement kilns.
Regular residual household waste	Household regular kerbside collection.
Residual waste	Waste that is not sent for preparing for reuse, sent for recycling or composting.
Specific streams e.g. wood	Used in the context of LAC municipal waste sent for energy recovery. It is mostly wood but also contains furniture, carpets and mattresses, mostly collected from civic amenity sites.
Waste arisings	The amount of waste collected in a given locality over a period of time.
Waste collected for disposal to landfill	Collected for disposal is residual waste that has not been sorted to separate out recyclable material from other waste before being presented to the Council for collection at various locations.
Waste from households	Not the same as 'household waste'. This is a narrower definition and includes material (except soil, rubble and plasterboard) collected only from households (e.g. kerbside collection, bring sites, civic amenity sites or community skips managed by councils).

Term	Explanation
Waste sent to landfill	The amount of waste sent to landfill. Excludes residual waste which was diverted for energy recovery, recycling or composting. Includes household waste collected for energy recovery, recycling or composting which was diverted to landfill.
Waste Transfer Note (WTN)	A note which must be created for any transfer of controlled waste. The exception to this is householders, who are not required to produce transfer notes.
WasteDataFlow	The web based system for local authority collected municipal waste data reporting by UK local authorities to government (www.wastedataflow.org).
Recycled material types	
Compostable (excluding wood)	Green waste only, green garden waste only, mixed garden and food waste, waste food only, other compostable waste (excluding wood).
Construction, Demolition and Excavation	Plasterboard, rubble and soil.
Electrical Goods	Large and small domestic appliances, TVs and monitors, fluorescent tubes and other light bulbs, fridges and freezers, auto batteries and post consumer batteries.
Glass	Brown, clear, green and mixed glass.
Metal	Aluminium, mixed and steel cans, aluminium foil, bicycles, aerosols, gas bottles, fire extinguishers and other scrap metal.
Paper and Card	Books, card, mixed paper and card, paper, yellow pages and cardboard beverage packaging.
Plastics	PET(1), HDPE(2), PVC(3), LDPE(4), PP(5), PS(6), other plastics(7), mixed plastic bottles, and plastics.
Textiles	Textiles and footwear, footwear only, textiles only and carpets.
Unclassified	Derived category including all other recycled material collected not included in the main categories.
WEEE (Waste Electrical and Electronic Equipment)	As electrical goods above but excluding auto batteries and post consumer batteries.
Wood	Wood, chipboard and MDF, composite wood materials and wood for composting.

Appendix 3: List of Acronyms

This is a list of commonly used acronyms in this report.

arc21 Regional waste management group in Northern Ireland
BLACMW Biodegradable Local Authority Collected Municipal Waste

CIWM Chartered Institution of Wastes Management

DAERA Department of Agriculture, Environment and Rural Affairs

EC European Commission

EU European Union

KPI Key Performance Indicator LAC Local Authority Collected

LACMW Local Authority Collected Municipal Waste

LPS Land and Property Services

MDR Mixed Dry Recyclables

MRF Materials Recovery Facility

NI Northern Ireland

NIEA Northern Ireland Environment Agency

NILAS Northern Ireland Landfill Allowance Scheme

NISRA Northern Ireland Statistics and Research Agency NWRWMG North West Regional Waste Management Group

RDF Refuse Derived Fuel

SASB Statistics and Analytical Services Branch, DAERA

UK United Kingdom WDF WasteDataFlow

WEEE Waste Electrical and Electronic Equipment
WRAP Waste and Resource Action Programme

Policy, Economics and Statistics Division
Department of Agriculture, Environment and Rural Affairs
Dundonald House
Upper Newtownards Road
Ballymiscaw
BELFAST BT4 3SB





