

# Northern Ireland Local Authority Collected Municipal Waste Management Statistics

## Annual Report 2017/18



**Issue No:** 9

**Date of Publication:** 29 November 2018

**Theme:** Agriculture and Environment

**Reporting Period:**

1 April 2017 to 31 March 2018

**Issued by:**

Statistics and Analytical Services Branch  
Department of Agriculture, Environment and  
Rural Affairs  
Room 816, Dundonald House,  
Belfast BT4 3SB

**Contact:** David Finlay

**Telephone:** 028 9054 0916

**Email:** [env.stats@daera-ni.gov.uk](mailto:env.stats@daera-ni.gov.uk)

**URL:** <https://www.daera-ni.gov.uk/topics/statistics/environment-statistics>

### Contents

Key points and reader information	2
Introduction	3
Overview	4
Waste arisings	5
Recycling	8
Energy recovery	11
Landfill	14
Biodegradable landfill	16
NI Key Performance Indicators	18
Progress against targets	20
Appendix 1: User Guidance	21
Appendix 2: Glossary	28
Appendix 3: List of Acronyms	31



## Key Points for Northern Ireland

- Northern Ireland's councils collected 977,817 tonnes of LAC municipal waste. This was a 0.8% decrease on the 985,994 tonnes collected in 2016/17. Household waste accounted for 89.4% of total LAC municipal waste. Belfast generated the smallest amount of household waste per person at 425 kg whilst Antrim & Newtownabbey recorded the largest at 548 kg per person.
- In 2017/18, 48.1% of household waste was sent for preparing for reuse, dry recycling and composting, 3.7 percentage points higher than the 2016/17 rate of 44.3%. At council level, rates vary from 42.2% in Causeway Coast & Glens to 54.3% in Mid Ulster.
- The LAC municipal waste energy recovery rate was 18.4% in 2017/18, similar to the 18.5% recorded in 2016/17. Newry, Mourne & Down had the highest energy recovery rate in 2017/18 at 49.5% whilst the lowest was 5.5% in Fermanagh & Omagh.
- The landfill rate for household waste recorded a new low of 32.0% in 2017/18, a drop of 4.7 percentage points on the 2016/17 rate (36.7%) and a fall from 72.3% in 2006/07. There were 171,295 tonnes of BLACMW sent to landfill during 2017/18, 16.2% lower than the 204,380 tonnes sent in 2016/17, and at 69%, a lower proportion of the allowance used compared to 2016/17 (78%).

### Reader Information

This document may be made available in alternative formats, please contact us to discuss your requirements.

### 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.

### Next Updates

- Provisional figures for July to September 2018 will be available on 24 January 2019.
- The scheduled dates for all upcoming publications are available from the GOV.UK statistics release calendar: <https://www.gov.uk/government/statistics>

### National Statistics

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is a producer's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

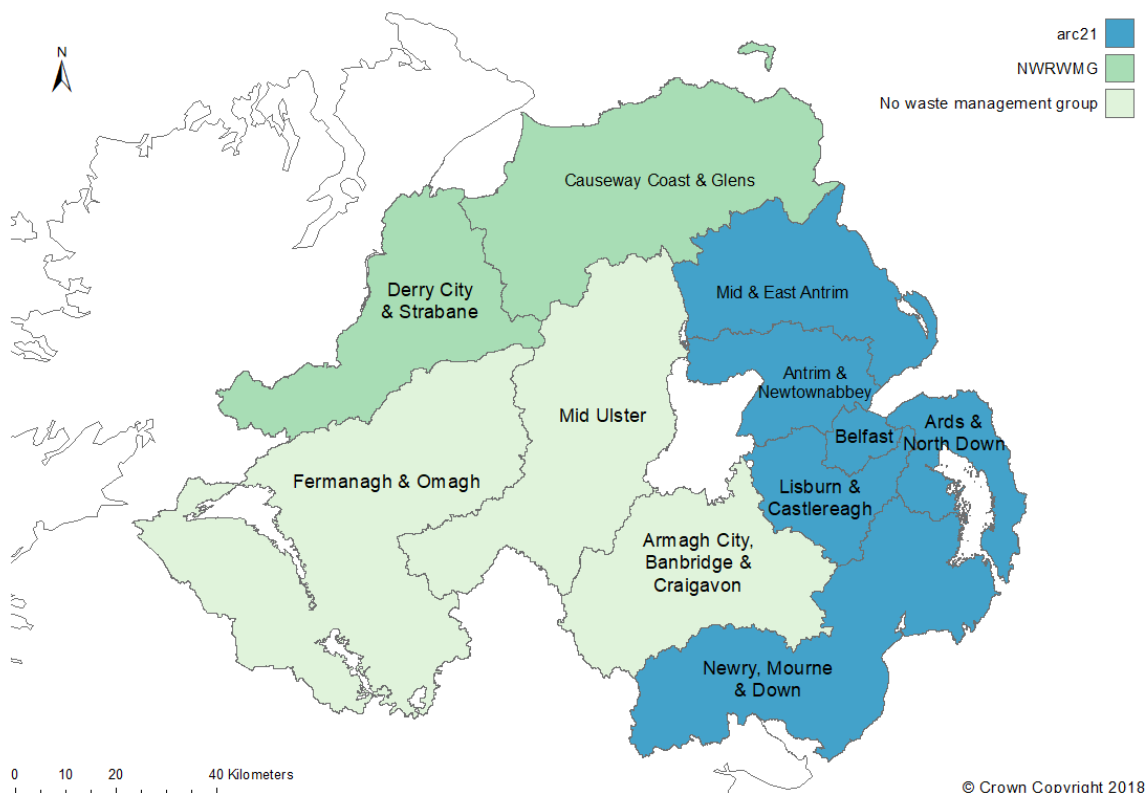
## Introduction

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 2017/18 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 third 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, 2016/17, 2017/18 and quarter 1 of 2018/19. 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%. The North West Regional Waste Management Group (NWRWMG) has 16% of the population with the remaining 25% 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**



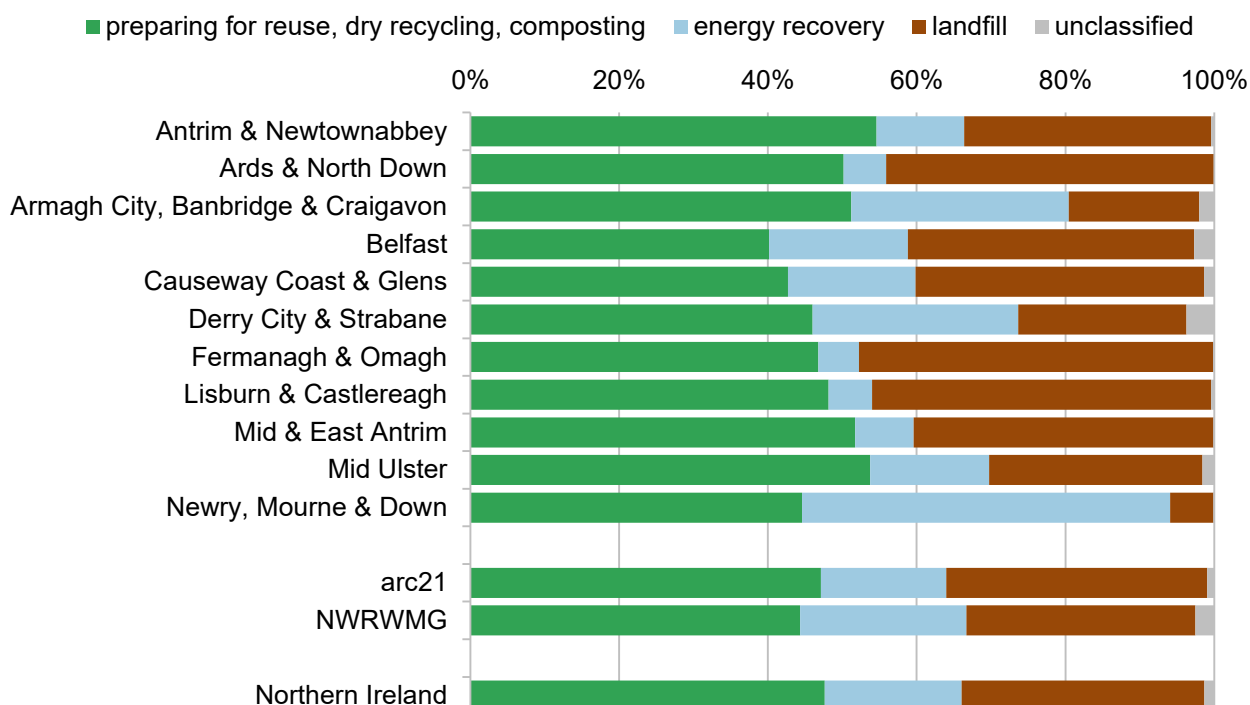
## Overview

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

- **waste arisings** (pages 5-7),
- **reuse, dry recycling and composting** (pages 8-10),
- **energy recovery** (pages 11-13),
- **landfill** (pages 14-15), and,
- **biodegradable landfill** (pages 16-17).

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, 2017/18**



At the Northern Ireland level, 47.6% of LAC municipal waste was sent for preparing for reuse, dry recycling and composting during 2017/18. Energy recovery accounted for 18.4% whilst 32.6% was sent to landfill. This left 1.3% unaccounted for which was likely to involve moisture and/or gaseous losses, much of which is as a result of a drying process involving mixed municipal waste and operated by a contractor used to varying degrees by several councils. Unclassified waste is calculated as a residual amount of municipal waste after municipal waste sent for preparing for reuse, dry recycling, composting, energy recovery and landfill have been accounted for, instead of being extracted directly from the WasteDataFlow system. 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 3.6 percentage points, from 44.0% in 2016/17. The energy recovery rate remained similar to the 18.5% recorded in 2016/17 and the landfill rate fell by 4.6 percentage points.

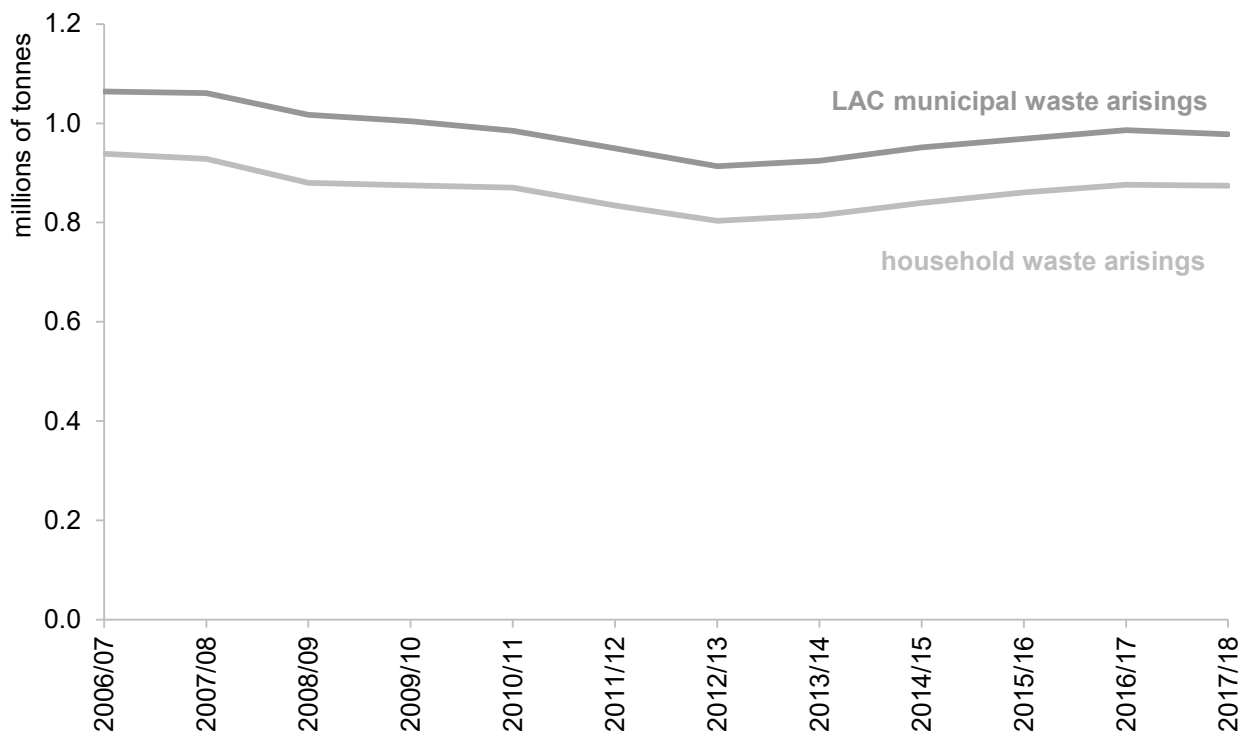
## Waste Arisings

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 2017/18, Northern Ireland's councils collected 977,817 tonnes of LAC municipal waste. This was a 0.8% decrease on the 985,994 tonnes collected in 2016/17.

Since 2006/07 household waste has accounted for 86-90% of total LAC municipal waste. In 2017/18 household waste accounted for 89.4%. 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 10.6% was non-household waste.

### Figure 3: Waste arisings

Northern Ireland, 2006/07 to 2017/18, KPI (j)

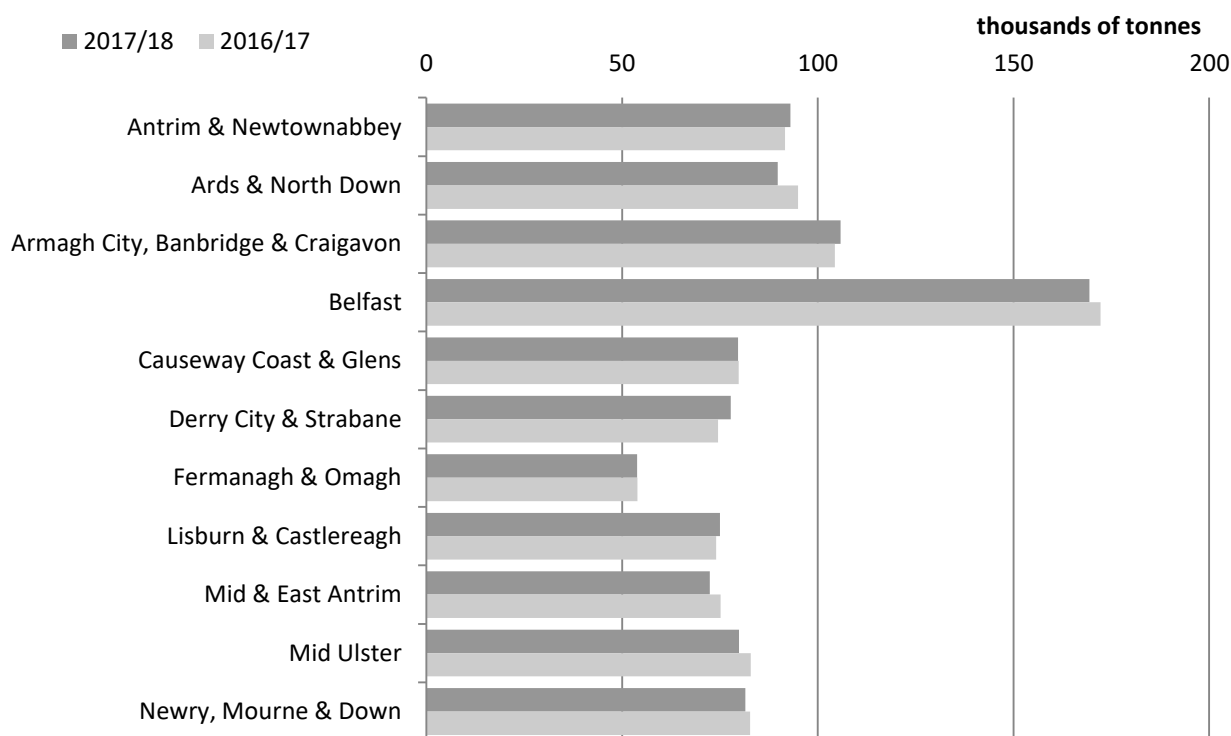


The longer term trend has been a reduction in LAC municipal waste arisings from 1,064,090 tonnes in 2006/07 to a low of 913,546 in 2012/13, a 14.1% decrease. Arisings have increased by 7.0% in the five years since.

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 which continues to show signs of recovery.

**Figure 4: LAC municipal waste arisings by council**

Northern Ireland, 2016/17 and 2017/18, KPI (j)



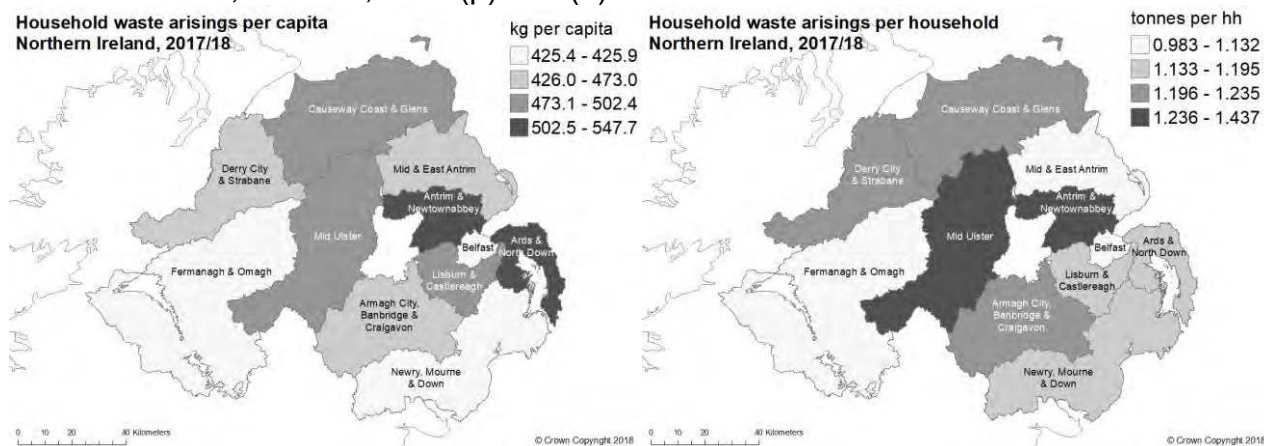
*Note: The NI and waste management group figures are not shown on this chart as their larger waste arisings distort the scale and make it difficult to distinguish the differences between councils. All figures are available from the data tables appendix.*

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 2017/18 with 169,368 tonnes. This was 17% of total NI LAC waste arisings, with 18% of the NI population living in this council area. It also had the largest proportion of non-household local authority collected municipal waste arisings, at 24%, likely reflecting the concentration of businesses in this area. Fermanagh & Omagh District Council had the lowest arisings in 2017/18 with 53,828 tonnes collected. This represented 6% of total NI arisings during this period, the same as the proportion of the NI population living in this council area.

Derry City & Strabane reported the largest increase in their LAC municipal waste arisings compared with last year, increasing by 4.3%. Antrim & Newtownabbey's arisings increased by 1.5%, whilst Armagh City, Banbridge & Craigavon and Lisburn & Castlereagh both reported increases of 1.4% compared to 2016/17. Fermanagh & Omagh and Causeway Coast & Glens reported similar levels of LAC municipal waste arisings to last year. Arisings fell by 5.5% in Ards & North Down and 3.7% in Mid & East Antrim, with Mid Ulster, Belfast and Newry, Mourne & Down reporting decreases between 3.6% and 1.5%.

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 1.177 tonnes per household during 2017/18. These were decreases on the 470 kg collected per person and 1.190 tonnes per household in 2016/17.

**Figure 5: Household waste arisings per capita and per household by council**  
Northern Ireland, 2017/18, KPIs (p) and (h)



Belfast generated the smallest amount of household waste per person at 425 kg in 2017/18, closely followed by Fermanagh & Omagh and Newry, Mourne & Down at 426 kg per person respectively. The largest quantity was recorded in Antrim & Newtownabbey at 548kg per person. The greatest increase in household waste per person compared to last year was recorded in Derry City & Strabane, increasing by 2.8% to 473 kg per person. Household waste per person fell by 4.0% to 505 kg per person in Ards & North Down, the largest decrease recorded.

The household waste arisings per household show a similar distribution across NI to household waste arisings per capita with some small differences. Belfast City Council generated the smallest quantity of household waste per household at 0.983 tonnes per household. The largest quantity per household was recorded in Mid Ulster at 1.437 tonnes per household. This may reflect the fact that Mid Ulster has the largest average household size of the 11 councils.

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.

<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2017>

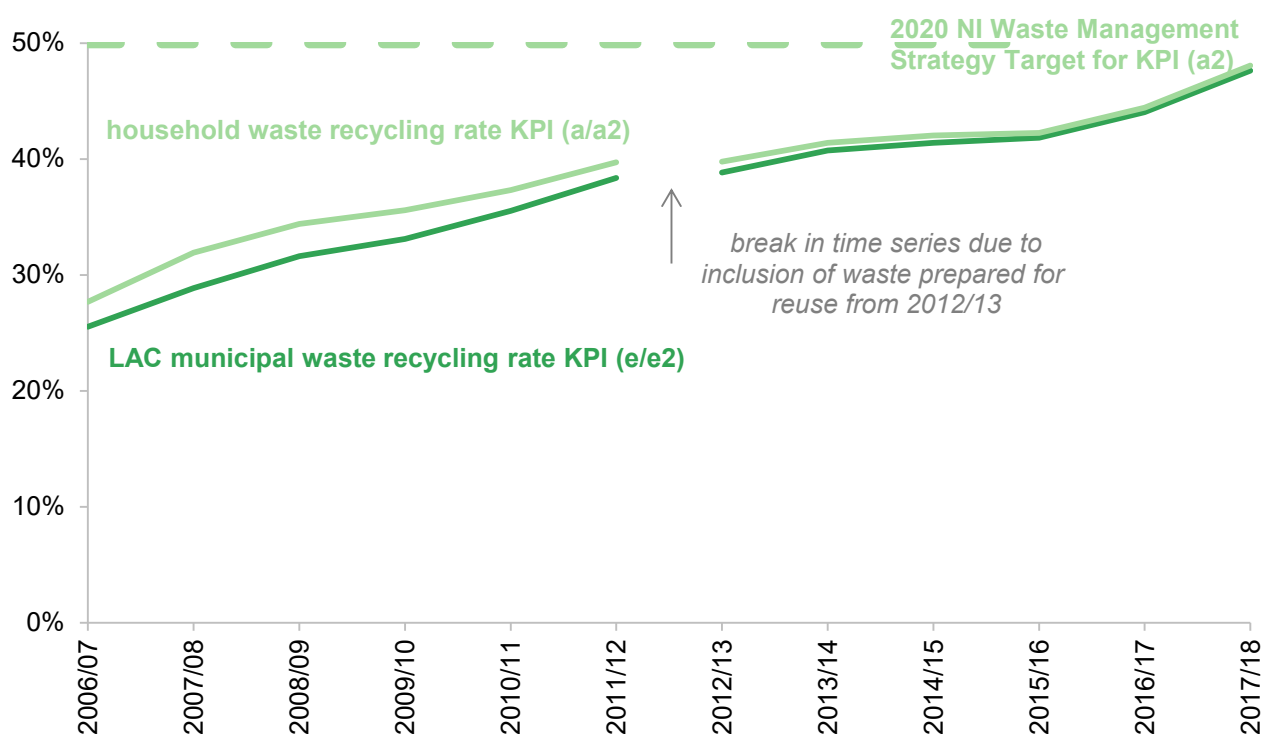


## Recycling (preparing for reuse, dry recycling and composting)

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.

**Figure 6: Waste sent for preparing for reuse, dry recycling and composting**

Northern Ireland, 2006/07 to 2017/18, KPIs (a), (a2), (e), (e2)



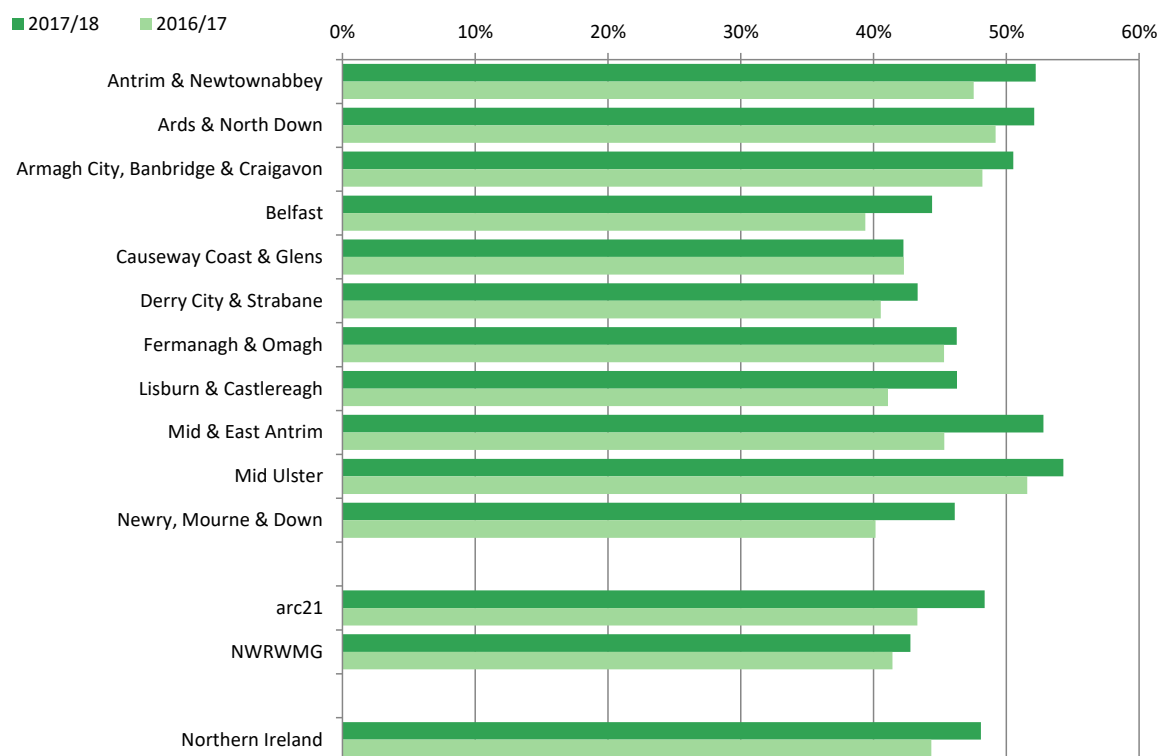
In 2017/18, the tonnage of LAC municipal waste sent for preparing for reuse, dry recycling and composting (referred to as 'recycling' for the rest of this section) increased by 7.3% to reach a record high of 465,777 tonnes. The LAC municipal waste recycling rate was 47.6%, 3.6 percentage points higher than the recycling rate recorded in 2016/17. The dry recycling rate increased by 0.6 percentage points to 25.3% whilst the composting rate increased by 3.0 percentage points to 22.2%. The tonnage sent for composting showed strong growth in 2017/18, increasing by 14.8% to 216,717 tonnes.

The household waste recycling rate was 48.1% in 2017/18, 3.7 percentage points higher than the 2016/17 recycling rate of 44.3% <sup>1</sup>. The tonnage sent for recycling increased by 8.2% to a new high of 420,265. The proportion of household waste sent for preparing for reuse was 0.2%, dry recycling made up 23.3% and composting was 24.6%. During 2016/17, the equivalent rates for preparing for reuse, dry recycling and composting were 0.2%, 22.8% and 21.4%.

<sup>1</sup> A revision to the way KPI(a2) is calculated resulted in the 2016/17 figure being revised from 44.4% to 44.3%.



**Figure 7: Household waste preparing for reuse, dry recycling and composting rate by council and waste management group**  
Northern Ireland, 2016/17 and 2017/18, KPI (a2)



The lowest household recycling rate was recorded in Causeway Coast & Glens at 42.2%, similar to the rate recorded last year. Just under one quarter (24.7%) of their waste was sent for dry recycling, 17.4% was sent for composting and 0.1% was sent for preparing for reuse. Mid Ulster had the highest recycling rate at 54.3%, an increase of 2.7 percentage points on 2016/17.

From April 2017, it became a statutory requirement for all councils in Northern Ireland to provide each household with a container for food (potentially with other bio-waste) to enable its separate collection. The purpose of this was to reduce the amount of this waste sent for disposal, if not collected separately it becomes contaminated/unrecyclable. The impact of this can be seen in Figure 7 above where all councils except Causeway Coast & Glens increased their household recycling rate compared to 2016/17. Differences in composting rates across the council areas can also be affected by variations in the urban-rural characteristics of the council areas.

Mid & East Antrim and Newry, Mourne & Down reported the largest increases on their recycling rates compared to last year. Mid & East Antrim increased their rate by 7.5 percentage points to 52.8%. The composting rate increased by 7.0 percentage points to 32.3%, accounting for most of this improved recycling rate. Newry, Mourne & Down recorded a 6.0 percentage point increase to report a 46.1% recycling rate for 2017/18, composting accounted for most of this with a 5.8 percentage point increase, giving a composting rate of 22.6%. Lisburn & Castlereagh increased their recycling rate compared to last year by 5.2 percentage points to 46.3% with their composting and dry recycling rates both improving by 3.2 percentage points and 2.0 percentage points respectively.

An additional recycling rate, called the waste from households recycling rate, was calculated for the first time in April to June 2015. It is not a key performance indicator and is not discussed in this report but can be found in the appendix tables of this report. It can be used to make comparable calculations between each of the four UK countries. For more information see *Waste from Households Recycling Rate* under *Data Developments* in the User Guidance. These figures can be found in Tables 16 and 17 of the data tables appendix and in the time series dataset. The waste from households figures are available in Table 23 and in the time series dataset.

<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2017>

## Energy recovery

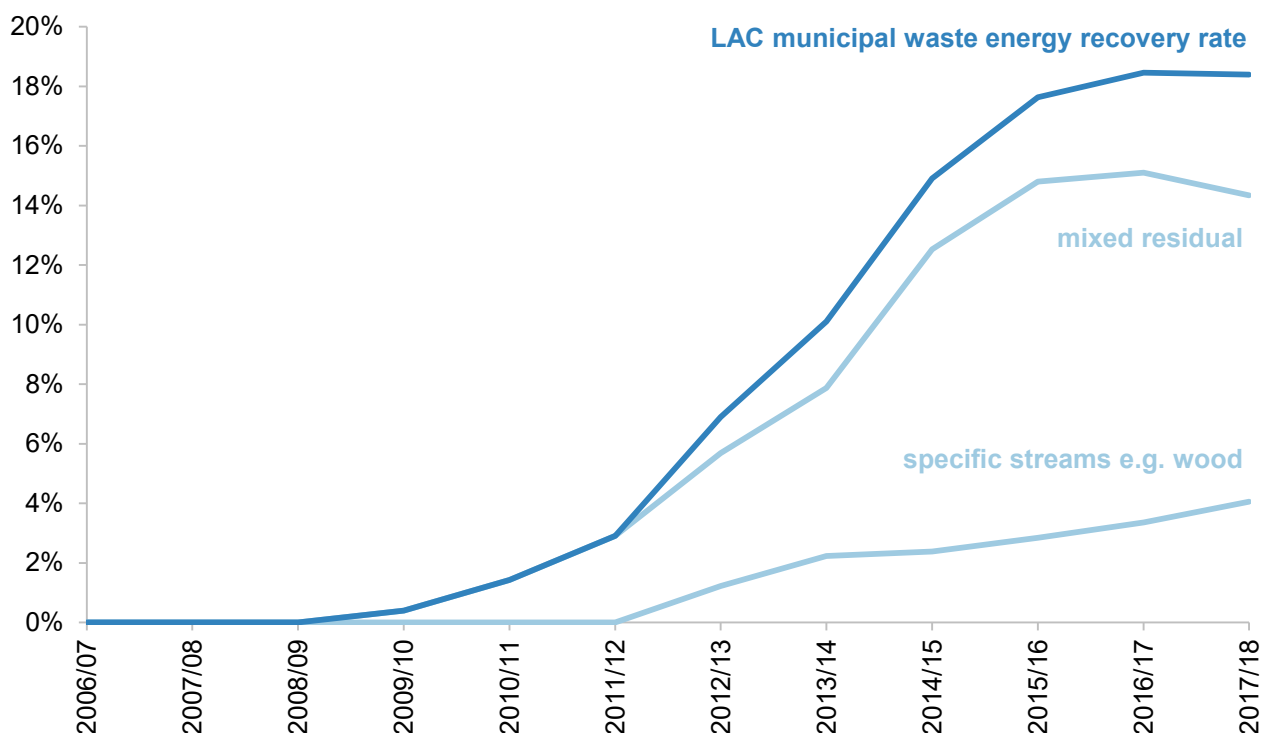
### Energy Recovery via incineration of LACMW

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 2017/18, 179,899 tonnes of LAC municipal waste arisings was sent for energy recovery. This gave a LAC municipal waste energy recovery rate of 18.4%, similar to the 18.5% recorded in 2016/17. In each year, the majority was mixed residual LAC municipal waste with a smaller proportion from specific streams, e.g. wood.

**Figure 8: LAC municipal waste sent for energy recovery**

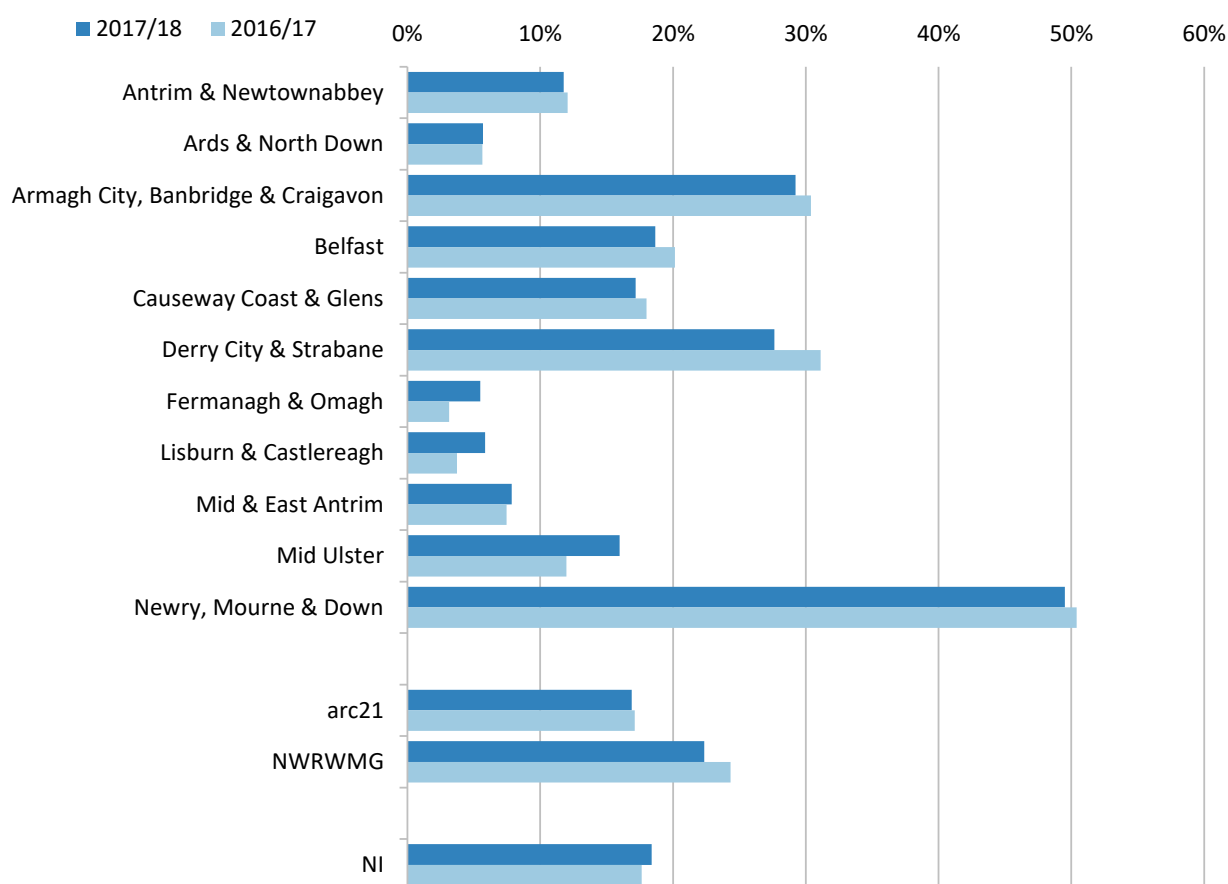
Northern Ireland, 2006/07 to 2017/18



There was zero, or very small quantities, of LAC municipal waste sent for energy recovery before 2009/10. Strong growth followed from 2010/11 to 2016/17 with the energy recovery rate increasing from 0.4% in 2009/10 to 18.5% in 2016/17. The rate remained similar in 2017/18 (18.4%). Whilst mixed residual LAC municipal waste sent for energy recovery fell by 0.8 percentage points, the specific streams proportion continued to grow, reaching 4.1% in 2017/18.

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 9: LAC municipal waste energy recovery by council and waste management group**  
Northern Ireland, 2016/17 and 2017/18



Newry, Mourne & Down had the highest energy recovery rate in 2017/18 at 49.5%, a decrease of 0.9 percentage points on last year. A fall in mixed residual LAC municipal waste counted for most of this decrease. The lowest energy recovery rate was 5.5 for Fermanagh & Omagh, an increase of 2.4 percentage points on 2016/17. The energy recovery rate also increased in Lisburn & Castlereagh and Mid Ulster, rising 2.1 and 4.0 percentage points respectively.

Whilst the energy recovery rate remained similar between 2016/17 and 2017/18 in Antrim & Newtownabbey, Ards & North Down and Mid & East Antrim, it fell in all other council areas. Derry City & Strabane reported a decrease of 3.5 percentage points to give a rate of 27.6%, whilst Belfast, Armagh City, Banbridge & Craigavon, Causeway Coast & Glens and Newry, Mourne & Down reported decreases between 1.5 and 0.8 percentage points.

For all councils except Antrim & Newtownabbey, Ards & North Down, Fermanagh & Omagh and Lisburn & Castlereagh, 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 6.8% whilst Newry, Mourne & Down had the highest energy recovery rate for mixed residual waste at 45.8%.

The NWRWMG had an energy recovery rate of 22.3%, down from 24.3% in 2016/17, but higher than that of arc21 which at 16.9% 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 of LACMW**

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.

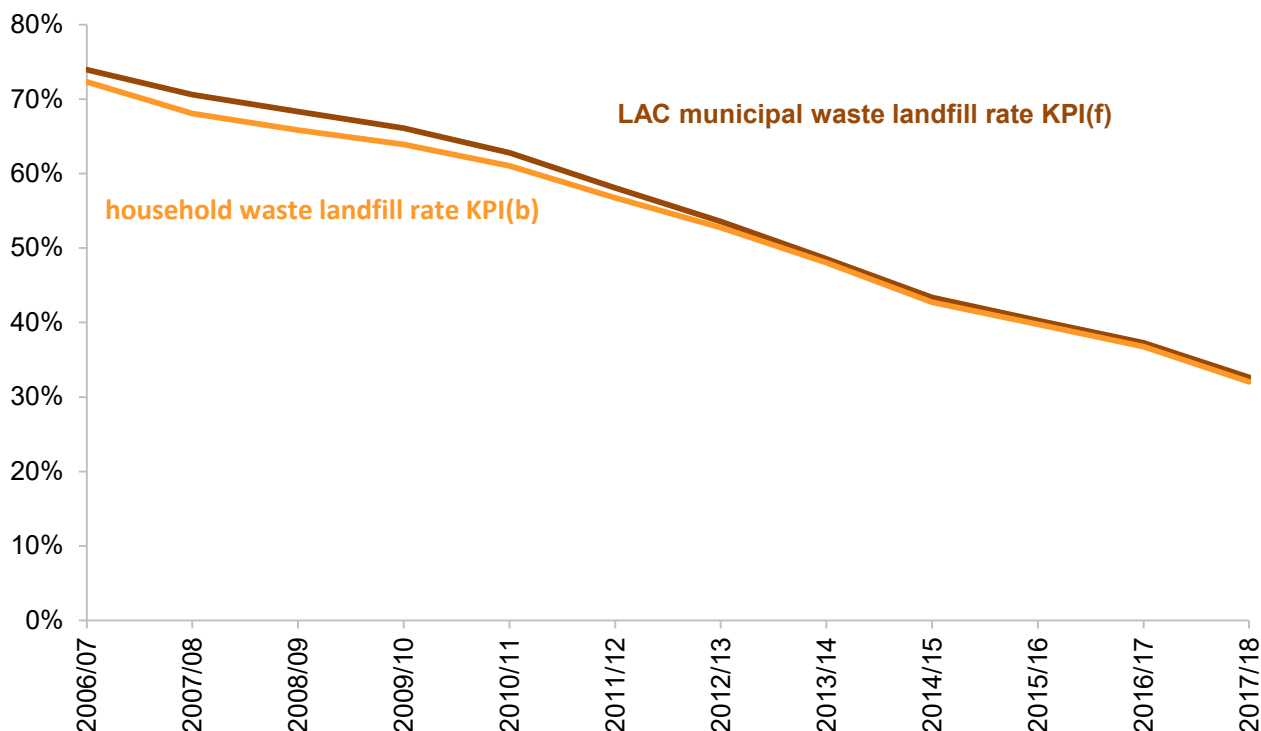
<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2017>

## Landfill

The quantity of LAC municipal waste sent to landfill decreased by 13.1% from 367,484 to 319,212 tonnes between 2016/17 and 2017/18. This gave a landfill rate of 32.6% for 2017/18, 4.6 percentage points lower than the 37.3% recorded in 2016/17 and the lowest ever recorded. Similarly, the landfill rate for household waste has recorded a new low of 32.0% in 2017/18, a drop of 4.7 percentage points on the 2016/17 rate of 36.7% and a fall from a high of 72.3% in 2006/07.

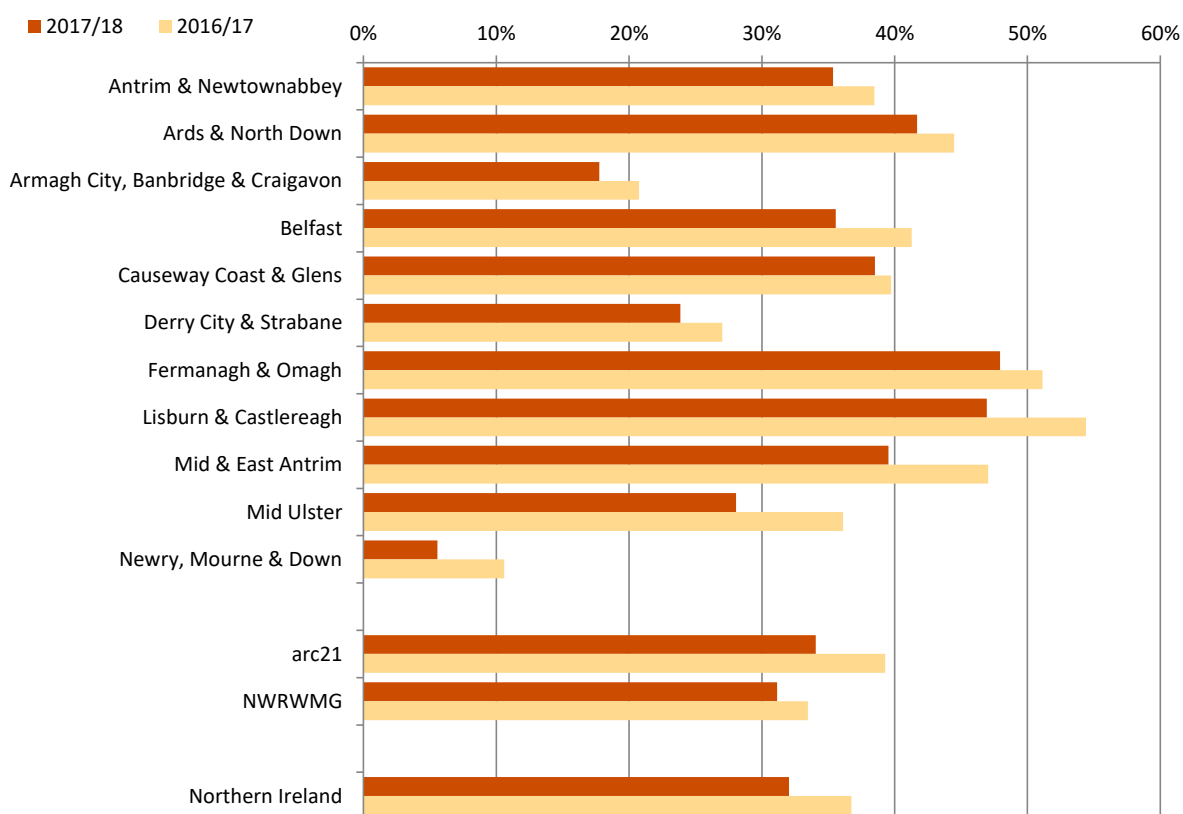
**Figure 10: Waste sent to landfill**

Northern Ireland, 2006/07 to 2017/18, KPIs (b) and (f)



The NWRWMG had a LAC municipal waste landfill rate of 30.8%, 1.8 percentage points lower than the NI rate, and 2.1 percentage points lower than recorded in 2016/17. Arc21's LAC municipal waste landfill rate was higher than the NI rate at 35.0%, however it fell by 5.0 percentage points compared to 2016/17.

**Figure 11: Household waste landfilled by council and waste management group**  
Northern Ireland, 2016/17 and 2017/18, KPI (b)



All councils recorded a decrease in their household landfill rate compared to last year. Decreases ranged from 8.1 percentage points in Mid Ulster to 1.2 percentage points in Causeway Coast & Glens.

Newry, Mourne & Down recorded the lowest landfill rate at 5.6%, less than one fifth of the Northern Ireland rate of 32.0% and an improvement of 5.0 percentage points on the 2016/17 rate for the council of 10.6%. Whilst Fermanagh & Omagh's household landfill rate decreased by 3.2 percentage points compared to 2016/17, the 47.9% reported for 2017/18 was higher than in any other council.

Increased recycling rates due to 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.

<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2017>



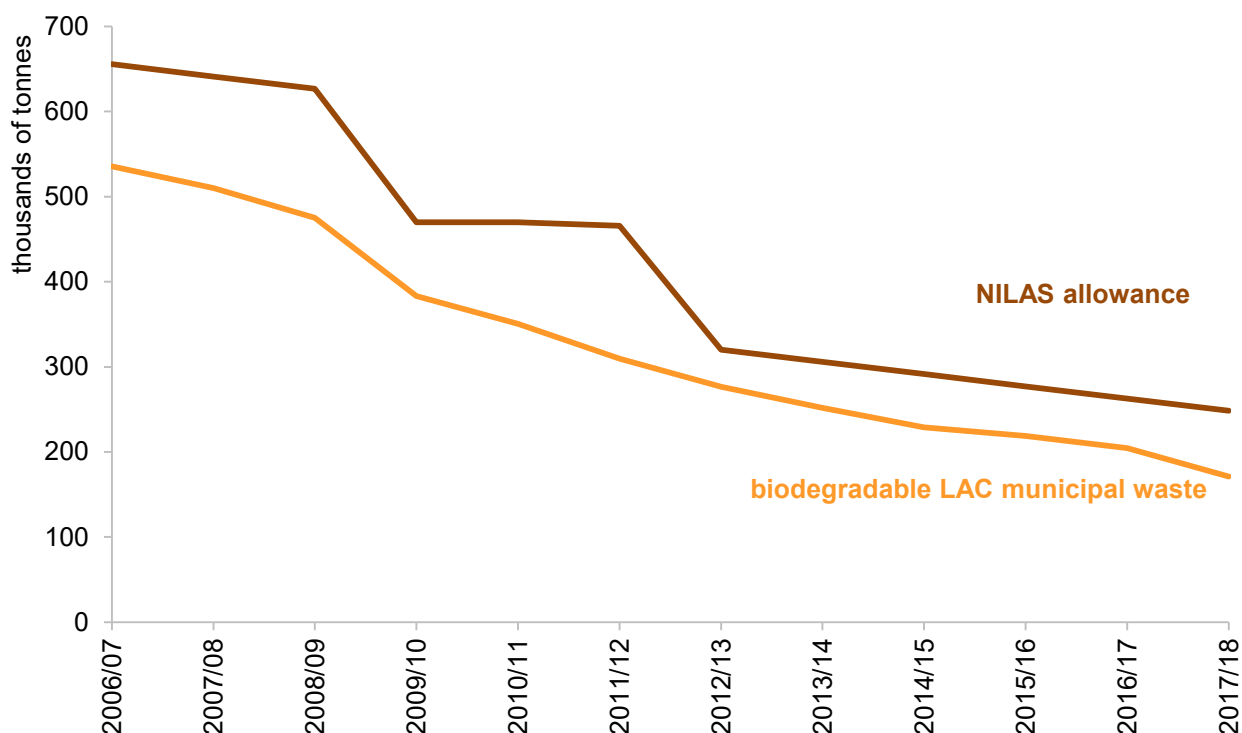
## Biodegradable local authority collected municipal waste to landfill

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 12: Biodegradable LAC municipal waste sent to landfill**  
Northern Ireland, 2006/07 to 2017/18, KPI (g)

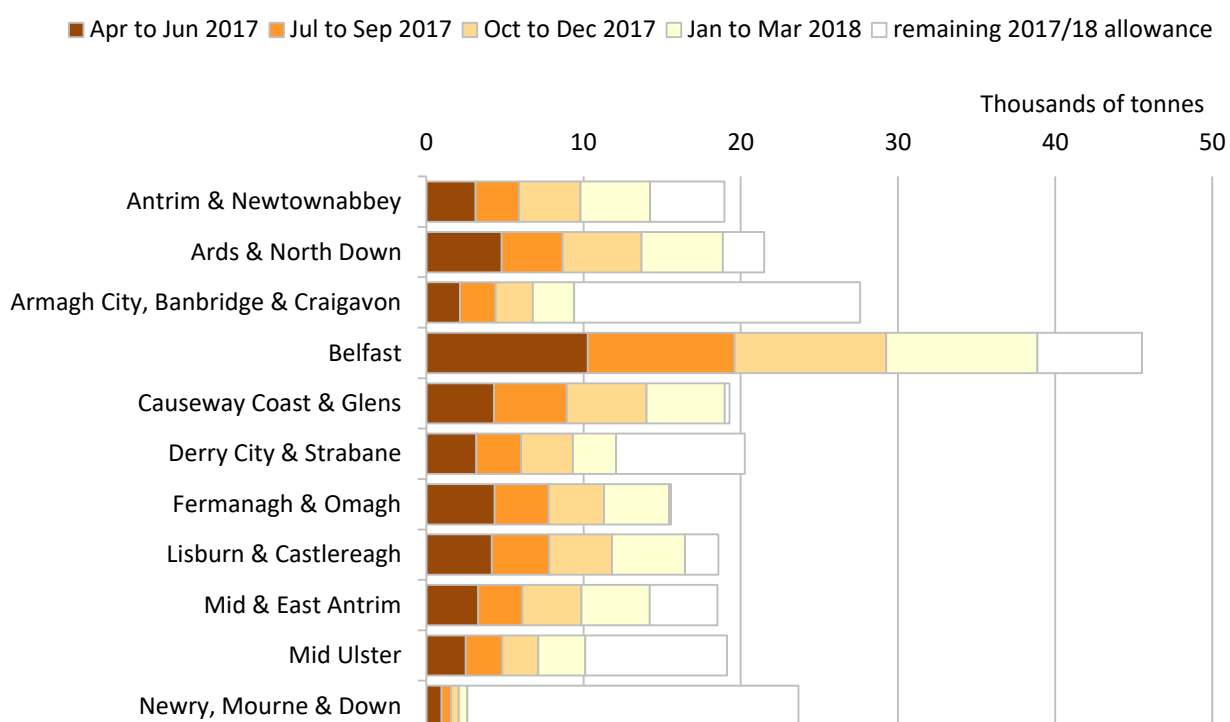


There were 171,295 tonnes of BLACMW sent to landfill during 2017/18. This was 16.2% lower than the 204,380 tonnes sent in 2016/17, and 69% of the allowance used compared to 78% in 2016/17. The 2017/18 NILAS allowance (248,570 tonnes) was 5.4% lower than the 2016/17 allowance (262,857 tonnes).

The amount of BLACMW sent to landfill in 2017/18 has fallen by 68.0% 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 remained similar at around 75-82%, with the exception of 2011/12 and 2012/13 when 66% and 86% of the allocation was used. In 2017/18, 69% of the allocation was used.

Councils within arc21 used 71.7% of their total allocation, down from 83.6% in 2016/17, whilst councils within NWRWMG used 78.6% of their allocation, an increase of 1.5 percentage points from 2016/17. 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 2017/18.

**Figure 13: Biodegradable LAC municipal waste landfilled by council and waste management group**  
Northern Ireland, 2017/18, KPI (g)



*Note: The NI 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 appendix.*

There is considerable variation between councils in the proportion of the 2017/18 allowance used – there were no transfers of allowances between Councils in 2017/18. Newry, Mourne & Down used the lowest share of its annual allocation at 11.0%, a fall of 10.5 percentage points compared to 2016/17. Fermanagh & Omagh used 99.2% of their 2017/18 allowance, down from 99.8% in 2016/17, whilst Causeway Coast & Glens recorded a 5.3 percentage point increase in the proportion of their allocation used compared to last year, using 98.5% of the 2017/18 allocation.

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

<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-2017>

## Northern Ireland Key Performance Indicators 2017/18

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 appendix. 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 2017/18	Section in report and Appendix Table
a2	48.1% of household waste sent for recycling (including composting and preparing for reuse)	Recycling (pages 8-10) Appendix table 17a
b	32.0% of household waste landfilled	Landfill (pages 14-15) Appendix table 17b
e2	47.6% of LAC municipal waste sent for recycling (including composting and preparing for reuse)	Recycling (pages 8-10) Appendix table 4a
f	32.6% of LAC municipal waste landfilled	Landfill (pages 14-15) Appendix table 4b
g	171,295 tonnes of biodegradable LAC municipal waste landfilled	Biodegradable landfill (pages 16-17) Appendix table 21
h	1.177 tonnes of household waste generated per household	Waste arisings (pages 5-7) Appendix table 18
j	977,817 tonnes of LAC municipal waste generated	Waste arisings (pages 5-7) Appendix table 1
m	See Tables 22i and 22ii for capture rates by primary waste category	Appendix tables 22i and 22ii
n	0.8% decrease in LAC municipal waste generated	Waste arisings (pages 5-7) Appendix table 2
p	467 kilogrammes of household waste generated per capita	Waste arisings (pages 5-7) Appendix 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 2017/18 figures presented in the data tables appendix for the January to March 2018 quarterly report.

<https://www.daera-ni.gov.uk/publications/northern-ireland-local-authority-collected-municipal-waste-management-statistics-january-march-2018> (Data tables appendix - Table 18)

### Comparison of provisional and final figures for 2017/18 key performance indicators

KPI	Definition	2017/18 provisional	2017/18 finalised	difference
a2	Percentage of household waste sent for recycling (including composting and preparing for reuse)	48.3%	48.1%	-0.20 percentage points
b	Percentage of household waste sent to landfill	31.9%	32.0%	0.16 percentage points
e2	Percentage of LAC municipal waste sent for recycling (including composting and preparing for reuse)	47.9%	47.6%	-0.26 percentage points
f	Percentage of LAC municipal waste landfilled	32.5%	32.6%	0.15 percentage points
g	Reported biodegradable LAC municipal waste sent to landfill	171,119	171,295	177 tonnes (0.10%)
h	Annual household waste collected per household	1.177	1.177	-0.00 tonnes (-0.03%)
j	LAC municipal waste arisings	978,005	977,817	-188 tonnes (0.02%)
m	Capture rates	See Tables 22i and 22ii for capture rates by primary waste category		
n	LAC municipal waste arisings growth rate	-0.8%	-0.8%	0.02 percentage points
p	Annual household waste collected per capita	467	467	-0.17 kg per person (0.04%)

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% (including preparing for re-use) of household waste by 2015		KPI (a2) Target not met in 2016/17 - 44.3% <sup>1</sup> Target met in 2017/18 – 48.1%
To achieve a recycling rate of 50% (including preparing for re-use) of household waste by 2020	Targets 1, 2 & 3 on p39 of the revised Northern Ireland Waste Management Strategy <a href="https://www.daera-ni.gov.uk/publications/delivering-resource-efficiency-northern-ireland-waste-management-strategy">https://www.daera-ni.gov.uk/publications/delivering-resource-efficiency-northern-ireland-waste-management-strategy</a>	KPI (a2) Progress in 2017/18 – 48.1%
To achieve a recycling rate of 60% (including preparing for re-use) of LACMW by 2020		KPI (e2) Progress in 2017/18 - 47.6%
To landfill no more than 248,570 tonnes of biodegradable LACMW by the end of March 2018.	Article 3 of The Landfill (Scheme Year and Maximum Landfill Amount) Regulations 2004	KPI (g) Target met in 2017/18 – 171,295 tonnes (69% of allowance used)
To landfill no more than 220,000 tonnes of biodegradable LACMW by the end of March 2020.	<a href="http://www.legislation.gov.uk/uksi/2004/1936/regulation/3/made">http://www.legislation.gov.uk/uksi/2004/1936/regulation/3/made</a>	Target met in 2017/18 – 171,295 tonnes (69% of allowance used)

<sup>1</sup> A revision to the way KPI(a2) is calculated resulted in the 2016/17 figure being revised from 44.4% to 44.3%.

## 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 NI Waste Management Strategy sets out targets for the management of local authority collected municipal waste.

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

<https://www.daera-ni.gov.uk/articles/waste-management-strategy>

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% 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/InteractiveMaps/Agriculture%20and%20Environment/Environment/Local%20Authority%20Collected%20Municipal%20Waste%20Recycling/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, NI 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 2017/18 this change added on 1,490 tonnes of waste sent for preparing for reuse to the recycling total. This added 0.2 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 data tables appendix; see Table 23. However the focus of this report is still the previous 'household waste' definition because it is the measure most directly related to current NI 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. The 'waste from households' measure may feature in the body of this report in future if it becomes more prominent in recycling targets.

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

Analysis using 2017/18 data has shown that the 'waste from households' rate is 1.0 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 1.2 percentage points higher to 5.4 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/html/datasets.aspx#NorthernIrelandGuidance](http://www.wastedataflow.org/html/datasets.aspx#NorthernIrelandGuidance)

### *Population Data*

Population data used to calculate KPI (p), household waste arisings per capita, are taken from the 2017 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 2018. 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.finance-ni.gov.uk/topics/statistics-and-research/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 16 November 2018. At that time, all the district councils had made a return, giving a 100% 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 2017/18 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.daera-ni.gov.uk/publications/construction-demolition-and-excavation-waste-arisings-use-and-disposal-northern-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 2007-08 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.

### **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% or more than 99.9%. Users should be aware that in such cases, the percentage is rounded to zero or 100% 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.

### **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% 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/collection/s/waste-and-recycling-statistics>

Scotland

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

Wales

<http://gov.wales/statistics-and-research/local-authority-municipal-waste-management/?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](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 NI 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.daera-ni.gov.uk/publications/waste-data-flow-northern-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 ( <a href="http://www.wastedataflow.org">www.wastedataflow.org</a> ).

### 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

# The Landfill Allowance Scheme (Northern Ireland) Regulations (2004) (as amended) (NILAS)

## 2017/18 Annual Report

29<sup>th</sup> November 2018

To obtain further information about this report, please contact:

Control and Data Management Team | Waste Regulation Unit  
Northern Ireland Environment Agency | Klondyke Building  
Gasworks Business Park | Cromac Avenue  
Lower Ormeau Road | Malone Lower | Belfast | BT7 2JA

Telephone: 028 9056 9428

Email: [NILAS@daera-ni.gov.uk](mailto:NILAS@daera-ni.gov.uk)

This document may be made available in alternative formats, please contact us to discuss your requirements.

This document is also available on the Northern Ireland Environment Agency's website at <https://www.daera-ni.gov.uk/articles/published-waste-data>

<b>Contents</b>	<b>Page</b>
Executive summary	v
List of acronyms	viii
<b>1. Introduction</b>	<b>1</b>
<b>2. Reporting</b>	<b>5</b>
<b>2.1 District Councils</b>	<b>5</b>
2.1.1 Penalty Guidance	6
2.1.2 Validation process	9
2.1.3 National Statistics	10
2.1.4 WasteDataFlow Northern Ireland User Group	11
2.1.5 WasteDataFlow Training	12
2.1.6 WasteDataFlow Guidance	12
2.1.7 WasteDataFlow Developments	12
<b>2.2 Landfill Operators</b>	<b>13</b>
2.2.1 Validation Process	14
2.2.2 Guidance to Landfill Operators	15
2.2.3 Landfill Operator Data Audit	15
<b>3. District Council Data Audit</b>	<b>17</b>
<b>4. Reconciliation Process</b>	<b>20</b>
<b>5. District Council Performance</b>	<b>21</b>
5.1 Northern Ireland local government reform programme	25
5.2 Northern Ireland Waste Compositional Study 2007/08	26
5.3 The Landfill Allowances Scheme (Amendment) Regulations (Northern Ireland) 2008	26
5.4 Looking Forward to 2019/20	27
<b>Annex A</b> Regulation 13 Draft Reconciliation by District Council	<b>28</b>

<b>Annex B</b>	Regulation 14 Final Reconciliation by District Council	29
<b>Annex C</b>	Northern Ireland Landfill Allowance Scheme Allocations (new district councils i.e. post April 2015)	30

## Executive Summary

This report covers the thirteenth scheme year of the Landfill Allowance Scheme (Northern Ireland) Regulations 2004 (as amended) and summarises district council compliance with the scheme during 2017/18.

The Waste and Emissions Trading Act 2003 (Amendment) Regulations 2011 and the Landfill Allowances Scheme (Amendment) Regulations (Northern Ireland) 2011 came into effect on the 21<sup>st</sup> and 22<sup>nd</sup> November 2011 respectively. Their main purpose was to provide for the use of the terms “local authority collected municipal waste” and “biodegradable local authority collected municipal waste”. This annual report only reports on Local Authority Collected Municipal Waste (LACMW) collected under “arrangements”<sup>1</sup> by district councils in Northern Ireland. This change has no impact on the WasteDataFlow data that is reported, and the calculation of Biodegradable Local Authority Collected Municipal Waste (BLACMW) as regards the Northern Ireland Landfill Allowances Scheme (NILAS).

This is the third NILAS annual report as regards the 11 new councils which came into existence on the 1<sup>st</sup> April 2015. All 11 district councils in Northern Ireland achieved their 2017/18 landfill allowance obligations by diverting BLACMW from landfill. BLACMW is calculated using a mass balance methodology via the WasteDataFlow online waste reporting system.

In 2017/18 the total amount of BLACMW which was permitted to be sent to landfill was 248,570 tonnes. The total amount of BLACMW reported to have been sent to landfill was 171,295 tonnes i.e. 31.1% of landfill allowances were not utilised. This was an increase of 8.8 percentage points compared to 2016/17 (22.3%). Since the implementation of the NILAS regulations in 2005 district councils have collectively reduced the amount of BLACMW sent to landfill by 386,714 tonnes. The proportion of local authority collected municipal waste statutorily defined to be biodegradable (i.e. BLACMW) decreased from 71% to 64% from 1<sup>st</sup> April 2009 following additional research (which included sampling) into the composition of various (local authority collected) municipal waste streams.

---

<sup>1</sup> s21 WET Act 2003 [as amended] (<http://www.legislation.gov.uk/ukpga/2003/33/section/21>)



The three district councils not associated with a waste management group (Armagh City, Banbridge and Craigavon Borough; Fermanagh and Omagh District and Mid Ulster District Councils) sent 34,957 tonnes of BLACMW to landfill, 43.9% less than their allocated allowances.

The North West Regional Waste Management Group (NWRWMG) consisting of Causeway Coast and Glens Borough and Derry City and Strabane District Councils sent 31,066 tonnes of BLACMW to landfill, 21.4% less than their allocated allowances.

arc21 consisting of Antrim and Newtownabbey Borough; Ards and North Down Borough; Belfast City; Lisburn and Castlereagh City; Mid and East Antrim Borough; and Newry, Mourne and Down District Councils sent 105,272 tonnes of BLACMW to landfill, 28.3% less than their allocated allowances.

After the final reconciliation Newry Mourne and Down District Council had a surplus of allowances which exceeded its allocation by at least 80%.

Armagh City, Banbridge and Craigavon Borough Council had a surplus of allowances which exceeded their allocations by at least 60%.

Derry City and Strabane District Council, and Mid Ulster District Council had surpluses of allowances which exceeded their allocations by at least 40%.

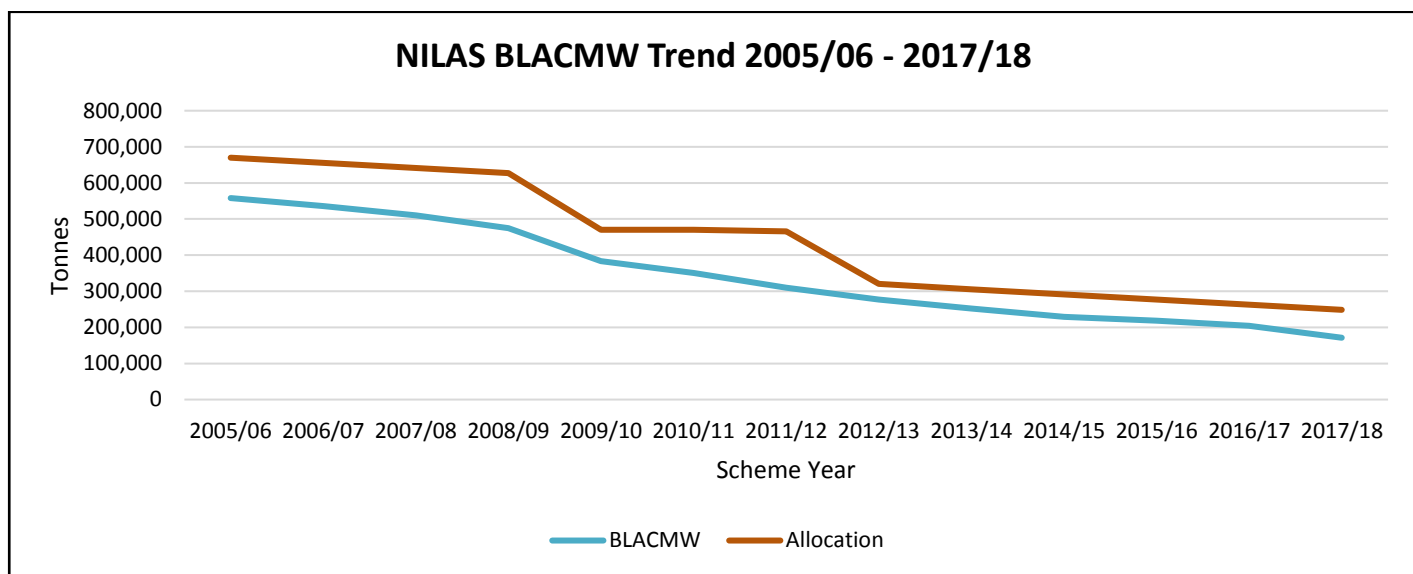
Antrim & Newtownabbey Borough Council, and Mid and East Antrim Borough Council had a surplus of allowances which exceeded their allocation by at least 20%.

Ards and North Down Borough Council, and Lisburn and Castlereagh City Council had a surplus of allowances which exceeded their allocations by at least 10%.

Over the next 2 years under NILAS the allocation for each district council, and consequently Northern Ireland as a whole, reduces toward the EU Landfill target making it vital for more BLACMW to be diverted from landfill. The EU Landfill Directive obligated Member States to reduce their BMW to landfill (which includes BLACMW) to 35, 50 & 75%

of 1995 baseline levels by 2010, 2013 & 2020 respectively. The revised Waste Management Plans (WMPs) of the WMGs detail how they propose to deal with Northern Ireland's LACMW up to 2020. The plans set out the range of facilities required to deliver both the statutory (NILAS) and other strategic targets within the Northern Ireland Waste Management Strategy – “Delivering Resource Efficiency” (<https://www.daera-ni.gov.uk/publications/delivering-resource-efficiency-northern-ireland-waste-management-strategy>).

The chart below shows the downward trend in BLACMW utilisation and allocation over the period which NILAS has been operational.



## List of Acronyms

<b>AA</b>	Allocating Authority (EPD)
<b>arc21</b>	Eastern Regional Waste Management Group
<b>BMW</b>	Biodegradable Municipal Waste
<b>BLACMW</b>	Biodegradable Local Authority Collected Municipal Waste
<b>CIWM</b>	The Chartered Institution of Wastes Management
<b>CWD</b>	Climate & Waste Division – DoE(NI)
<b>DAERA</b>	Department of Agriculture, Environment & Rural Affairs
<b>Defra</b>	Department of Environment, Food and Rural Affairs
<b>DoE(NI)</b>	Department of the Environment (Northern Ireland)
<b>EHS</b>	Environment and Heritage Service
<b>EPD</b>	Environmental Policy Division – DAERA
<b>EWC</b>	European Waste Catalogue
<b>LACMW</b>	Local Authority Collected Municipal Waste
<b>MA</b>	Monitoring Authority (NIEA)
<b>MRF</b>	Materials Recovery Facility
<b>MSW</b>	Municipal Solid Waste
<b>NIEA</b>	Northern Ireland Environment Agency
<b>NILAS</b>	Northern Ireland Landfill Allowance Scheme
<b>NWRWMG</b>	North West Regional Waste Management Group
<b>P&amp;EPG</b>	Planning and Environmental Policy Group – DAERA
<b>SASB</b>	Statistical & Analytical Services Branch
<b>SWaMP2008</b>	Southern Waste Management Partnership
<b>WDF</b>	WasteDataFlow
<b>WET Act</b>	Waste and Emissions Trading Act
<b>WMG</b>	Waste Management Group
<b>WMP</b>	Waste Management Plan

## Introduction

Council Directive 1999/31/EC, on the Landfill of Waste (the Landfill Directive) became law on the 26th April 1999. The aim of the Landfill Directive is to reduce the pollution from landfilled waste that can impact on surface water, groundwater, soil, air and also climate change. Article 5(2) of the EU Landfill Directive (1999/31/EC) requires member states (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0031:EN:HTML>) to reduce the amount of Biodegradable Municipal Waste (BMW) sent to landfill through setting challenging targets.

The targets for the reduction of BMW landfilled are:

- To reduce by 2010 the quantity of BMW landfilled to 75% of that produced in 1995.
- To reduce by 2013 the quantity of BMW landfilled to 50% of that produced in 1995.
- To reduce by 2020 the quantity of BMW landfilled to 35% of that produced in 1995.

The Landfill Allowance Scheme (Northern Ireland) Regulations 2004 (NILAS) (<http://www.legislation.gov.uk/nisr/2004/416/contents/made>) made under the Waste and Emissions Trading (WET) Act 2003 (<http://www.legislation.gov.uk/ukpga/2003/33/contents>), have been designed to help local authorities in Northern Ireland meet their targets as set out in the Landfill (Scheme Year and Maximum Landfill Amount) Regulations 2004 (<http://www.legislation.gov.uk/uksi/2004/1936/contents/made>) by allocating progressively challenging limits on the amount of BLACMW which can be landfilled by each District Council.

The NILAS Regulations came into operation in Northern Ireland on 1st April 2005 hence, 2017/18 is the thirteenth scheme year. The Regulations place a statutory responsibility on district councils, in each scheme year, to landfill no more than the quantity of BLACMW for which they have allowances (each allowance represents one tonne of BLACMW that can be sent to landfill). If the annual limit is exceeded this may result in financial penalties of £150 per exceeded allowance as per the Landfill Allowances Scheme (Amendment) Regulations (Northern Ireland) 2005 (<http://www.legislation.gov.uk/nisr/2005/588/contents/made>)

The scheme facilitates the transfer and borrowing (with restrictions e.g. allowances cannot be borrowed in a target year or in the year preceding a target year) of allowances between district councils which promotes a flexible and partnership working arrangement. The scheme in Northern Ireland does not facilitate the trading of landfill allowances. The methodology for allocating allowances to each district council was selected following consultation by P&EPG (now EPD), who are designated under NILAS as the Allocating Authority (AA).

The Department, after consultation, allocated NILAS allowances in 2005 to each council, for each year, to 2019/20 on the basis of an 'early convergence simple population' model, with weightings applied using population projections, and proportionately based each councils percentage share of the total population. Each allowance permits one tonne of biodegradable municipal waste to be landfilled and the allowances allocated to each council reduce over time in line with the Directive targets. In April 2015 the number of councils in Northern Ireland was reduced from 26 to 11 in line with planned local government reforms. Following local government reorganisation the Department re-allocated NILAS allowances to the 11 new councils from 1 April 2015 using the same approach as was used for the original allocations to the existing councils in 2005.

Consequently the AA, in order to facilitate long term planning, set the maximum allowance for each district council for each year of the scheme. Going forward for 2015/16 onwards the AA has used the mid 2012 NISRA population statistics as the basis for the NILAS allocations for the eleven new district councils (Annex C) i.e. each council has shared the overall allocation on the basis of its share of the Northern Ireland population. The overall NILAS allocation for Northern Ireland remains the same for each of the remaining years for the scheme.

The method used to determine the amount of BLACMW sent to landfill for a scheme year is the mass balance approach. At its simplest this takes the LACMW arisings in a scheme year and converts it to BLACMW by using the deemed biodegradable percentage (64%). For the purposes of calculating the BLACMW sent to landfill only, any distinct / separate rubble waste stream (rubble, soil & plasterboard) collected is excluded on the basis that it is unlike household waste and is therefore considered to be non-municipal in nature.

Biodegradable materials diverted from landfill for recovery or recycling are also subtracted from this figure at either 100% or 50% according to the schedule of the NILAS Regulations in order to determine the remaining BLACMW sent to landfill. Further details of the methodology used in WasteDataFlow throughout 2017/18 in calculating the mass balance can be found at

[http://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/LandfillAllowanceScheme/KPI\\_\(g\)\\_DC\\_Mass\\_Balance\\_Schematic\\_v4.pdf](http://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/LandfillAllowanceScheme/KPI_(g)_DC_Mass_Balance_Schematic_v4.pdf).

In line with local government reform on 1<sup>st</sup> April 2015 SWaMP2008 was formally dissolved and its assets, liabilities and staff transferred to Armagh City, Banbridge and Craigavon Borough Council (<http://www.legislation.gov.uk/nisr/2015/183/article/12/made>).

England, Scotland and Wales each have their own specific Landfill Allowance Regulations:

**England:** <http://www.legislation.gov.uk/ukxi/2004/3212/contents>

**Scotland:** <http://www.legislation.gov.uk/ssi/2005/157/contents/made>

**Wales:** <http://www.legislation.gov.uk/wsi/2004/1490/contents/made>

However, only the landfill allowance schemes in Northern Ireland and Wales are currently continuing to operate following England's decision to end its Landfill Allowance Trading Scheme (LATS) on the 30<sup>th</sup> September 2013. In Scotland the Landfill Allowance Scheme (LAS), which formerly administered a system of banking, borrowing and penalties concerning the disposal of Biodegradable Municipal Waste (BMW), was revoked by the Scottish Government in 2012.

### **Consultation paper on meeting EU landfill diversion targets:**

Following discussions with the European Commission it was agreed that the UK's approach to meeting the Landfill Directive's diversion targets should be changed. Consequently on 25 June 2010 the AA issued an initial consultation paper addressing the implications of this change in relation to Northern Ireland (NI).

The consultation included setting out the new interpretation of the definition of municipal

waste; revisions to the 1995 baseline and targets; and the reporting and monitoring obligations necessary to enable robust reporting against the targets to the European Commission. It also sought views on the future of the Northern Ireland Landfill Allowance Scheme (NILAS) in addressing both the district council and private sector elements of municipal waste and providing the necessary confidence that Northern Ireland will meet its overall Landfill Directive targets. The revised interpretation will mean that much more commercial and industrial waste than previously will fall within the scope of the term 'municipal waste'. This is because the new definition is based on waste types (as defined by European Waste Catalogue codes) rather than who manages the waste (i.e. district council).

The consultation closed on the 8<sup>th</sup> October 2010 and the Department subsequently published a summary of the comments received.

The Department considered policy options in respect of NILAS on the basis of this consultation and issued a policy position on the future of the scheme in February 2011.

Changes to legislation to incorporate the new definition of municipal waste were made across the UK during 2011/12. On the 21 and 22 November 2011 the Waste and Emissions Trading Act 2003 (Amendment) Regulations 2011

([http://www.legislation.gov.uk/ukxi/2011/2499/pdfs/ukxi\\_20112499\\_en.pdf](http://www.legislation.gov.uk/ukxi/2011/2499/pdfs/ukxi_20112499_en.pdf)) and the Landfill Allowances Scheme (Amendment) Regulations (Northern Ireland) 2011

([http://www.legislation.gov.uk/nisr/2011/373/pdfs/nisr\\_20110373\\_en.pdf](http://www.legislation.gov.uk/nisr/2011/373/pdfs/nisr_20110373_en.pdf))

came into effect. Their main purpose was to provide for the use of the terms "local authority collected municipal waste" and "biodegradable local authority collected municipal waste".

Therefore, this report uses the terminology above. However, these name changes have no impact on the WDF data that is reported.

## 2. Reporting

### 2.1 District Councils

District councils in Northern Ireland are required to report data on local authority collected waste arisings on a quarterly basis as per NILAS Regulation 10 (5). The data for each quarter must be submitted to the Monitoring Authority within 2 months after the relevant quarter end. Table 1 shows the NILAS reporting deadlines in each scheme year. District councils must submit their data via the WasteDataFlow (WDF) system (<http://www.wastedataflow.org>).

Initially developed in 2004 by the Chartered Institution of Waste Management (CIWM) WDF is now owned, operated, and managed by Defra in partnership with the UK's devolved administrations through an Operational Group and Programme Management Board who support the maintenance and development of the system via an IT contractor (currently Jacobs Ltd).

Northern Ireland district councils began formally reporting municipal waste data via WDF from January 2005. Data is managed within the system through various user levels representing district councils, WMGs, NIEA and public access. After the final reconciliations and annual report for the scheme year have been issued by NIEA, the raw data for the relevant scheme year is made publically available on WDF.

**Table 1: NILAS reporting deadlines**

Quarter	Period in scheme year	Return MUST be submitted by:
1	1 <sup>st</sup> April – 30 <sup>th</sup> June	31 <sup>st</sup> August
2	1 <sup>st</sup> July – 30 <sup>th</sup> September	30 <sup>th</sup> November
3	1 <sup>st</sup> October – 31 <sup>st</sup> December	28 <sup>th</sup> February
4	1 <sup>st</sup> January – 31 <sup>st</sup> March	31 <sup>st</sup> May

Table 2a shows when data was submitted to NIEA during the scheme year. For comparison, the date when the data was submitted to the WMG is also shown.



During the course of the 2007/08 scheme year an 'e-mail notification alert' was introduced aimed at improving the timeliness of returns. The relevant users, at each submission level, are informed by an automatically generated email that data is awaiting their approval and submission to the next level. This measure and the issue of further guidance from NIEA in February 2010 (see 2.1.1) have continued to improve data submission times.

**Table 2a: Date on which district council returns were submitted to WMG and NIEA in 2017/18**

District Council	Q1 due 31/08/2017		Q2 due 30/11/2017		Q3 due 28/02/2018		Q4 due 31/05/2018	
	WMG	NIEA	WMG	NIEA	WMG	NIEA	WMG	NIEA
Antrim & Newtownabbey BC	31/08/17	01/09/17	30/11/17	30/11/17	28/02/18	28/02/18	31/05/18	01/06/18
Ards & North Down BC	31/08/17	31/08/17	30/11/17	30/11/17	23/02/18	26/02/18	29/05/18	29/05/18
Armagh City, Banbridge & Craigavon BC*	30/08/17	31/08/17	30/11/17	30/11/17	27/02/18	27/02/18	31/05/18	31/05/18
Belfast CC	31/08/17	31/08/17	29/11/17	29/11/17	28/02/18	28/02/18	29/05/18	30/05/18
Causeway Coast & Glens BC	31/08/17	31/08/17	29/11/17	29/11/17	23/02/18	26/02/18	16/05/18	16/05/18
Derry City & Strabane DC	30/08/17	31/08/17	01/12/17	01/12/17	28/02/18	28/02/18	31/05/18	31/05/18
Fermanagh & Omagh DC*	25/08/17	31/08/17	29/11/17	29/11/17	27/02/18	27/02/18	25/05/18	25/05/18
Lisburn & Castlereagh CC	21/08/17	21/08/17	29/11/17	30/11/17	26/02/18	27/02/18	30/05/18	30/05/18
Mid & East Antrim BC	25/08/17	29/08/17	27/11/17	29/11/17	22/02/18	22/02/18	28/05/18	29/05/18
Mid Ulster DC*	31/08/17	01/09/17	30/11/17	30/11/17	28/02/18	28/02/18	01/06/18	01/06/18
Newry, Mourne & Down DC	29/08/17	29/08/17	30/11/17	01/12/17	27/02/18	27/02/18	22/05/2018	25/05/18
% received by WMG / NIEA by due date	100%	81.82%	90.91%	81.82%	100%	100%	90.91%	81.82%

Green font denotes return made on or before deadline.

Red font denotes late return.

\* Data rollup carried out by NIEA in absence of waste management group.

### 2.1.1 Penalty Guidance

In February 2010 NIEA, as NILAS Monitoring Authority in conjunction with the AA, introduced penalty guidance for district councils and landfill operators.

The purpose of the guidance was to improve the timeliness of WDF returns from district councils and from landfill operators submitting landfill operator returns. The guidance provides a framework by which procedures can be implemented to impose fines where late

returns are an issue. The guidance details the transparent, proportionate and fair process by which any fines would be applied.

The introduction of the guidance has improved the timeliness of all returns since its introduction in the second half of the 2009/10 scheme year as can be seen in table 2a.

To facilitate the production of accurate and timely quarterly waste management statistics NIEA request that any queries generated are responded to within five working days of issue.

Table 2b shows which district councils met the 5 working day turnaround time in relation to NIEA WDF queries for each quarterly return for the 2017/18 scheme year.

Although, most district councils are able to meet the five working day turnaround relatively easily, there are some who experience difficulties in meeting the deadline for various reasons. These district councils tend to have one person responsible for data entry, and no-one else trained in the compilation of the relevant data which creates difficulties in situations where the designated officer is absent due to leave or unforeseen circumstances such as sickness. NIEA has recommended from the outset of formal WasteDataFlow reporting in May 2005 that district councils should have more than one officer trained in the compilation of data and the operation of WasteDataFlow to deal with situations where the main designated officer is unable to deal with the issues concerned and to ensure that the various deadlines are met in order to provide accurate data in a timely manner.

Additionally, NIEA undertake an annual validation exercise during October each year in conjunction with SASB. This exercise looks at the data submitted during the scheme year and compares it with the previous scheme year's data for trends and analysis, and to prepare data for publication in the annual local authority collected municipal waste report (<https://www.daera-ni.gov.uk/articles/northern-ireland-local-authority-collected-municipal-waste-management-statistics>). Table 2c shows the dates by which district councils responded to annual queries for 2017/18.

**Table 2b: Date by which councils had responded to NIEA quarterly queries in 2017/18**

District Council	Q1 (Apr – Jun 2017)		Q2 (Jul – Sep 2017)		Q3 (Oct - Dec 2017)		Q4 (Jan – Mar 2018)	
	issue	response	issue	response	issue	response	issue	response
Antrim & Newtownabbey BC	18/09/17	28/09/17	07/12/17	15/12/17	15/03/18	27/03/18	05/06/18	22/06/18
Ards & North Down BC	13/09/17	14/09/17	07/12/17	12/12/17	09/03/18	13/03/18	05/06/18	12/06/18
Armagh City, Banbridge & Craigavon BC	11/09/17	20/09/17	06/12/17	12/12/17	05/03/18	09/03/18	05/06/18	12/06/18
Belfast City CC	14/09/17	20/09/17	11/12/17	13/12/17	13/03/18	21/03/18	07/06/18	14/06/18
Causeway Coast & Glens BC	12/09/17	19/09/17	06/12/17	13/12/17	05/03/18	12/03/18	06/06/18	12/06/18
Derry City & Strabane DC	12/09/17	18/09/17	07/12/17	15/12/17	09/03/18	14/03/18	06/06/18	11/06/18
Fermanagh & Omagh DC	14/09/17	15/09/17	11/12/17	14/12/17	09/03/18	14/03/18	06/06/18	11/06/18
Lisburn & Castlereagh CC	15/09/17	22/09/17	11/12/17	14/12/17	13/03/18	21/03/18	08/06/18	18/06/18
Mid & East Antrim BC	15/09/17	21/09/17	12/12/17	15/12/17	13/03/18	19/03/18	08/06/18	13/06/18
Mid Ulster DC	14/09/17	21/09/17	08/12/17	14/12/17	09/03/18	13/03/18	07/06/18	13/06/18
Newry, Mourne & Down DC	11/09/17	20/09/17	06/12/17	12/12/17	06/03/18	14/03/18	07/06/18	15/06/18
<b>% received by NIEA by due date</b>		<b>72.72%</b>		<b>81.81%</b>		<b>90.9%</b>		<b>72.72%</b>

**Table 2c: Date by which councils had responded to NIEA annual queries in 2017/18**

District Council:	Query Sheet Issued	Query Sheet Response
Antrim & Newtownabbey BC	24/10/18	06/11/18
Ards & North Down BC	18/10/18	22/10/18
Armagh City, Banbridge & Craigavon BC	15/10/18	24/10/18
Belfast CC	16/10/18	19/10/18
Causeway Coast & Glens BC	16/10/18	17/10/18
Derry City & Strabane DC	17/10/18	30/10/18
Fermanagh & Omagh DC	16/10/18	23/10/18
Lisburn & Castlereagh CC	19/10/18	23/10/18
Mid & East Antrim BC	22/10/18	28/10/18
Mid Ulster DC	17/10/18	24/10/18
Newry, Mourne & Down DC	15/10/18	25/10/18

Green font denotes return made within requested five working day target.

Red font denotes return made later than requested five working day target.

The only district councils to miss more than half of their deadlines were Antrim & Newtownabbey BC which missed all five and Newry, Mourne & Down DC which missed three during this year.

NIEA rely on the prompt receipt of comprehensive and accurate data to issue quarterly Official (National from October to December 2013 onwards) Statistic reports in conjunction with the DAERA's Statistical and Analytical Services Branch (SASB) which provides each

District Council with an indication on their waste management key performance indicators (KPIs) and how many landfill allowances they have utilised for the quarter. This is calculated using the mass balance calculation, which indicates the performance of local authorities in relation to their allocation of allowances and the diversion of biodegradable waste from landfill.

### **2.1.2 Validation Process**

To assist district councils with self-validation a summary spreadsheet has been developed within WDF through the data authorisation functionality. This enables quick checks to be viewed easily e.g. comparison of reported tonnages collected for recycling with reported tonnages of the waste sent for recycling; residual waste collected vs. residual waste treated/disposed etc. Similarly a spreadsheet detailing an indicative mass balance calculation has also been developed to enable district councils to easily review the calculated amount of BLACMW sent to landfill in any particular quarter and hence monitor their progress towards meeting their obligations under NILAS.

In previous years upon receipt of the district council's data NIEA, as Monitoring Authority, conducted a qualitative assessment of the municipal waste arisings data in WDF. The validation process involved cross checking figures between questions and previously submitted quarterly returns. However, since the 2009/10 scheme year NIEA have been assisted by Central Statistics & Research Branch (CSRB) primarily through a significant automation of the validation process. This involves downloading the relevant quarterly data and processing it through SPSS (Statistical Package for the Social Sciences) to identify trends and potential anomalies which allows a quicker and more detailed data analysis than was previously possible. This information was then used by NIEA to formulate queries to each district council. Queried data for the relevant quarter is rejected back to the WMG who then reject the data to the relevant district council to facilitate, where appropriate, any amendments. The data can usually only be entered and amended at district council level by data entry officers.

NIEA aims to complete the validation of all returns within one month of the relevant deadline and therefore requests that a response is made to all validation queries within 5 working days to ensure the production of timely and accurate local authority collected municipal waste statistics.

Data for the 2010/11 scheme year was validated, as in the preceding scheme years, by NIEA in its role as the Monitoring Authority but the responsibility for the compilation and publication of the reports was passed to CSRB from April 2009. CSRB published the quarterly reports to a specified timetable in line with the Pre-release Access to Official Statistics Order (Northern Ireland) 2009

(<http://www.legislation.gov.uk/nisr/2009/71/contents/made>)

These Official Statistics were compiled in accordance with Official Statistic Protocols and subsequently published on the Departmental website

(<https://www.daera-ni.gov.uk/articles/northern-ireland-local-authority-collected-municipal-waste-management-statistics>)

Until March 2011 CSRB was a branch within the Department for Regional Development (DRD) providing services to DoE(NI). In April 2011 CSRB became Analytical Services Branch (ASB) within DoE(NI). On 8<sup>th</sup> May 2016 DoE(NI) ceased to exist and its functions were transferred to a new department – the Department of Agriculture, Environment & Rural Affairs (DAERA). Since 1<sup>st</sup> July 2016 ASB has become Statistics and Analytical Services Branch (SASB) within DAERA.

### **2.1.3 National Statistics**

The data for October to December 2013 was the first LACMW quarterly dataset to be published to National Statistics accreditation. National Statistics are produced to a high professional standard. They undergo regular quality assurance reviews to ensure that they meet customer needs and are produced free from any political interference.

The UK Statistics Authority has designated the Northern Ireland quarterly waste statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 (<http://www.legislation.gov.uk/ukpga/2007/18/contents>) and signifying compliance with the

***Northern Ireland Environment Agency NILAS Annual Report 2017/18***

Code of Practice for Official Statistics (<https://www.statisticsauthority.gov.uk/code-of-practice/>).

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 further 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 <https://www.daera-ni.gov.uk/articles/dard-statistics-charter-and-pre-release-access-statements>.

The timetable for the publication of provisional quarterly and annual reports is published, and updated, on the Gov.uk website:

(<https://www.gov.uk/government/statistics/announcements?organisations=department-of-agriculture-environment-and-rural-affairs-northern-ireland>).

#### **2.1.4 WasteDataFlow Northern Ireland User Group**

On 10<sup>th</sup> July 2007 NIEA hosted the inaugural Northern Ireland WasteDataFlow User Group with the overall aim of contributing to making WasteDataFlow a successful data capture and reporting system with a high level of timely good quality data returns from district councils in Northern Ireland.

The main objective is to provide an accurate database of waste management information, with reporting functions available for district councils, WMGs and regional government.

The Group aims to achieve this by:

- Identifying barriers to the effective use of the WDF system by district councils.

***Northern Ireland Environment Agency NILAS Annual Report 2017/18***

- Proposing practical solutions to these barriers. For example through specific proposals on contents of on-line help, Guidance Manual, revisions to questions, adjustments to web-based data screens, reporting functionality etc.
- Identifying and sharing good practices in waste data management.
- Facilitating communication within the WasteDataFlow community.
- Providing input to reporting developments.

The User Group also enables NIEA to provide a forum for dialogue between the three parties as well as an element of training to district council users involved in the entry of data through demonstrations of the reporting functionality etc.

No user group meetings took place during 2017/18.

#### **2.1.5 WasteDataFlow Training**

One training session was conducted by NIEA during the 2017/18 scheme year for district councils. Such sessions are provided as and when required for new council officers involved in WasteDataFlow data entry and reporting.

#### **2.1.6 WasteDataFlow Guidance**

No guidance was amended or added to the WDF website during the year.

#### **2.1.7 WasteDataFlow Developments**

No major development work was carried out to the system during the course of the year.

## 2.2 Landfill Operators

Under NILAS Regulation 11 (4), landfill operators are required to report, in each year, the amount of LACMW deposited in landfill at their sites. In 2017/18, eight landfills in Northern Ireland reported accepting local authority collected municipal waste. LACMW data from landfill operators is statutorily required within 2 months of the quarter end, corresponding with the district councils' submissions of data via WDF.

Table 3 shows the dates on which landfills accepting LACMW for disposal made returns to NIEA.

**Table 3: Dates on which landfill operators submitted returns in 2017/18**

Landfil Site (Operator)	Apr-Jun 2017 Return Submitted Q1 due 31/08/17	Jul – Sept 2017 Return Submitted Q2 due 30/11/17	Oct – Dec 2017 Return Submitted Q3 due 28/02/18	Jan – Mar 2018 Return Submitted Q4 due 31/05/18
Baird's Brae (Biffa )	20/07/17	03/10/17	08/01/18	25/04/18
Craigahulliar (Causeway Coast & Glens DC)	17/08/17	22/11/17	22/02/18	10/05/18
Craigmore (River Ridge Recycling)	30/08/17	30/11/17	28/02/18	31/05/18
Crosshill (Eastwoods)	31/08/17	30/11/17	28/02/18	31/05/18
Drummee (Fermanagh DC)	31/07/17	21/11/17	12/02/18	22/05/18
Magheraglass (Mid Ulster DC)	29/08/17	28/11/17	N/A	N/A
Mullaghglass (Whitemountain Group)	31/07/17	30/10/17	26/01/18	01/05/18
Tullyvar (Mid Ulster DC)	31/08/17	27/11/17	21/02/18	23/05/18

Green font denotes return made on or before deadline.

N/A – Mid Ulster DC's Magheraglass landfill site closed on 19<sup>th</sup> May 2017 and is no longer accepting waste for disposal.

Landfill operator returns are submitted electronically to NIEA using the 'Landfill Operator – LACMW Data Return Form (NILAS 001)'

(<https://www.daera-ni.gov.uk/sites/default/files/publications/daera/NILAS-001-Landfill-Operator-Return-Form.xls>).



### 2.2.1 Validation Process

The return includes the following information:

- Weight of each load (to the nearest tonne);
- EWC code;
- District council area where the waste originates;
- Name of transfer station, where applicable;
- Any treatment applied to waste prior to its landfill.

The amount of residual LACMW reported by landfill operators on the landfill operator return was cross checked with the returns from district councils submitted via WasteDataFlow.

Where there was more than 10 tonnes difference and this variation exceeded +/- 1% of the total between the landfill operator return and the district council return, NIEA as the Monitoring Authority queried both sets of returns to establish the reason, and if appropriate to enable one or both sets of data to be corrected.

Some variation between the amounts of municipal waste reported as sent to landfill by landfill operators and by district councils will be attributable to:

- Rounding errors – landfill operators report the weight of each load which is rounded to the nearest tonne;
- Private contractors may deal with both commercial and municipal waste streams within the same facility and take the residue to landfill in the same collection vehicle and therefore an estimated apportionment is used;
- NIEA do not receive returns from landfill operators outside Northern Ireland;
- Accurate reporting by landfill operators is dependent on them knowing the origin of the waste. This can be difficult when waste arrives via intermediate stages such as transfer stations or residual material recovery facilities; this has increasingly become a factor in establishing an audit trail between the waste disposed of by district councils and landfill operators. Additionally, both local authority collected municipal and commercial wastes may be handled by such facilities and therefore the outputs are based on the proportion of inputs received from each source.

In the 2017/18 scheme year, in addition to the cross checks with WasteDataFlow, data checks were also carried out on the quarterly waste summary returns submitted to NIEA for waste management exemptions, licences and permits.

## 2.2.2 Guidance to Landfill Operators

The guidance for landfill operators had been updated in March 2015 to take account of the forthcoming local government reform.

## 2.2.3 Landfill Operator Data Audit

During the thirteenth scheme year seven audits were carried out on the landfill sites accepting LACMW in Northern Ireland (see Table 4). These audits were conducted by NIEA as NILAS Monitoring Authority under Regulation 11 (5) of the NILAS Regulations.

The returns submitted by the landfill operator were compared with actual weighbridge dockets to validate the submissions made via the landfill operator returns under NILAS Regulation 11. Records kept by landfill operators were in both paper and electronic form.

**Table 4: Landfill operators audited during the scheme year 2017/18.**

	Landfill Site (Operator)	Audit date	Quarter(s) audited
1.	Drumee (Fermanagh & Omagh DC)	10/08/17	January to March 17
2.	Tullyvar (Mid Ulster DC & Fermanagh Omagh DC)	10/08/17	January to March 17
3.	Magheraglass (Mid Ulster DC)	06/09/17	October to December 16; January to March 17; April to June 17
4.	Craigahulliar (Causeway Coast & Glens BC)	29/11/17	April to June 17; July to September 17
5.	Mullaghglass (Alpha Resource Management/ Lagan Group)	15/03/18	October to December 17
6.	Crosshill (Eastwood)	23/03/18	October to December 17
7.	Cottonmount (Biffa)	29/03/18	October to December 17

A sample of the submitted data was selected from each landfill site to be audited. A randomly selected period of at least one week for each month within each quarter was

audited. Any discrepancies found were discussed with the operator prior to the close of the audit, and resolved through an audit report subsequently agreed with the landfill operator.

Each of the seven landfills audited presented satisfactory records e.g. waste transfer notes, invoices and weighbridge printouts which were generally well ordered and readily available. The documentation matched or agreed closely with landfill return figures sent to NIEA. There were, on occasions, some missing waste transfer notes, however it was still possible to track the tonnages using the weighbridge printouts or other data sources such as invoices and customer reports from each site's weighbridge systems.

During the 2017/18 scheme year NIEA continued to seek data on LACMW sent to landfill via waste transfer stations both through WasteDataFlow and quarterly waste summary returns. This work has enabled the capture of appropriate data for these waste material streams, and helped the audit process and correlation between the data reported by district councils via WasteDataFlow and that reported by landfill operators in their quarterly NILAS landfill operator returns.

### 3. District Council Data Audits

Between 23<sup>rd</sup> June 2017 and 22<sup>nd</sup> March 2018, NIEA as Monitoring Authority carried out 6 audits of district councils for LACMW data submitted via WDF during the scheme year. The audits were conducted under Regulation 10 (6) (a) of the NILAS Regulations. The district councils selected from each WMG were contacted by telephone, letter and e-mail informing them of NIEA's intention to audit. Table 5 lists the district councils selected, the dates of the audits and the quarter for which the audit was conducted.

**Table 5: District councils audited during the scheme year 2017/18**

	<b>District council:</b>	<b>Audit Date</b>	<b>Quarter audited</b>
1.	Belfast CC	23/06/2017	October to December 2016
2.	Mid Ulster DC	17/08/2017	January to March 2017
3.	Fermanagh & Omagh DC	24/11/2017	April to June 2017
4.	Lisburn & Castlereagh CC	21/02/2018	July to September 2017
5.	Antrim & Newtownabbey BC	06/03/2018	July to September 2017
6.	Armagh, Banbridge & Craigavon BC	22/03/2018	July to September 2017

Each audit involved checking and confirming the relevant quarterly data which was submitted to the Monitoring Authority (NIEA) via WDF. One quarter of each district council's LACMW returns was selected, generally the most recent submission. The areas inspected related to:-

1. Landfilling of LACMW.
2. Collection, recycling, reuse and recovery of LACMW.
3. The standard of reporting / evidence for end destinations of recycled / recovered material streams.

In each case documentation was requested relating to each waste stream recorded within WDF. The documentation requested had to provide robust evidence of reported figures (e.g. waste transfer notes, Annex VIIs, invoices, Quality Protocol test results etc) and was compared against figures entered in WDF, and from landfill operator returns. The type of documentation used to compile returns was noted as were the names of any intermediate facilities, and waste carriers used. Where facilities had been selected which were not

considered to be final destinations, further information on the final destination of the waste stream was also requested.

Records were requested to confirm the data entered for household and non-household residual waste collections e.g. regular household collections and civic amenity site skips. Evidence was sought as to the composition of, and origin of components in the final residual waste stream as well as the methodology used to determine these respective tonnages. A similar methodology to the landfill operators was employed for the inspection of the residual waste tonnages sent directly to landfill i.e. at least one week in each month of the relevant quarter was inspected and compared with the landfill operator return.

Residual waste sent to MRFs for recovery was inspected on the basis of a sample of the waste transfer notes and invoices to confirm and verify the tonnage input to the facility. Evidence was sought in the form of waste transfer notes and / or export documentation (Annex VIIIs) to verify materials recovered for recycling or energy recovery.

All records for recycling, including weighbridge dockets and invoices, were inspected and totalled for comparison with the figures entered in WDF. Where minor discrepancies were discovered these were pointed out to the council officers concerned and rejected by NIEA for rectification on the WDF system accordingly.

Upon completion of the audit a draft report was issued to the district council within twenty five working days of the audit taking place. The draft report summarised the evidence presented during the course of the audit and highlighted where action was required. When the report's recommendations had been agreed the WDF data was rejected to enable the council officer(s) to make the necessary changes, and a final version of the audit report was issued to the district council and the relevant waste management group.

Arrangements for audits were made with the agreement of the council concerned which NIEA visited for 2-3 days. It is envisaged that in time records will be stored in a single location as local government reforms structures and consolidates contracts to deliver further efficiencies.

The systems used by district councils for the collection and storage of data varied. The majority of data is held in a paper format, although increasing amounts of data are managed through internal spreadsheets and databases. On occasions additional material was e-mailed to the NILAS Team subsequent to the audit. In the majority of cases the collection and storing of data was managed by one person thereby considerably increasing the risk to the district council as a corporate body for a failure to make a timely statutory submission should that person be absent due to sickness or leave.

Although, the information recorded regarding final destinations has improved considerably over the course of the thirteen scheme years more effort is urgently required by some district councils to determine this information. NIEA from the outset of WDF reporting has advised district councils that MRFs were not considered to be a final destination for the recovery of materials, and that councils should determine this information which is also required to discharge their obligations under NILAS Regulation 10 (1) (c). In a wider sense this is one of the main considerations addressed by the overall Duty of Care which covers the whole waste management industry (<https://www.daera-ni.gov.uk/publications/waste-management-duty-care-code-practice>).

NIEA recommends that information on final destinations is obtained on a regular basis, best practice is considered to be at least once every other quarter, to ensure that materials collected are being sent for recycling/ reuse/ recovery and that any rejection prior to reprocessing is accurately recorded. The minimum adequate evidence expected to adequately demonstrate final destinations would be sample copies of waste transfer notes for waste transfers within the UK and / or export documentation (Annex VII notifications) for waste transfers to destinations in other countries outside the UK showing the movement of a particular waste stream between the MRF and the reprocessing destination.

NIEA expect that reprocessing destinations within the UK are accurately recorded with the WDF system, and will accept the name of the country to which waste is sent for processing for EU and non-EU exports with the proviso that export documentation (Annex VII notifications) accompanies the evidence presented for the relevant period.

#### **4 Reconciliation Process:**

The Monitoring Authority (NIEA) has a statutory duty under NILAS Regulation 13 to calculate the amount of BMW sent to landfill by each district council for the scheme year and to prepare a draft reconciliation of the tonnages involved and allowances used. This process must be completed no later than 5 months after the end of the scheme year i.e. by 30<sup>th</sup> September. The BLACMW sent to landfill is calculated via a mass balance approach.

NIEA delivered each district council's draft reconciliation to the district council & WMG concerned as well as the Allocating Authority on 26<sup>th</sup> July 2018. This showed that all district councils had surpluses of allowances, and that no transfers of allowances from other district councils in order to meet their obligations under NILAS would be necessary for the scheme year.

The Monitoring Authority has a statutory duty under Regulation 14 to reconcile the allowances available with the amount of BLACMW as calculated under Regulation 13 as soon as reasonably practicable after the end of the reconciliation period. The final reconciliation was completed by 29<sup>th</sup> November 2018, and issued simultaneously with the annual municipal waste management report (<https://www.daera-ni.gov.uk/articles/published-waste-data>) and the publication of the NILAS Public Register (<https://apps.d.aera-ni.gov.uk/landfillallowances/>).

## **5. District Council Performance**

The scheme year 2017/18 was the thirteenth year of the landfill allowances scheme. In 2017/18 the total number of landfill allowances allocated under NILAS was 248,570 tonnes. Each allowance permits the landfilling of one tonne of BLACMW.

The total amount of BLACMW reported to have been sent to landfill was 171,295 tonnes, a decrease of 33,085 tonnes from 204,380 tonnes in 2016/17. In 2017/18, 31.1% of landfill allowances were not utilised compared to 22.3% not utilised in 2016/17. Over the past 13 years district councils in Northern Ireland have collectively reduced the amount of BLACMW sent to landfill by 386,714 tonnes. Although, it should be noted that the deemed BLACMW percentage in the NILAS Regulations decreased from 71% to 64% from 1<sup>st</sup> April 2009.

Councils not associated with a waste management group sent 34,957 tonnes of BLACMW to landfill, 43.9% less than their allocated allowances.

The amount of BLACMW sent to landfill by arc21 was 105,271 tonnes, 28.3% less than their allocated allowances.

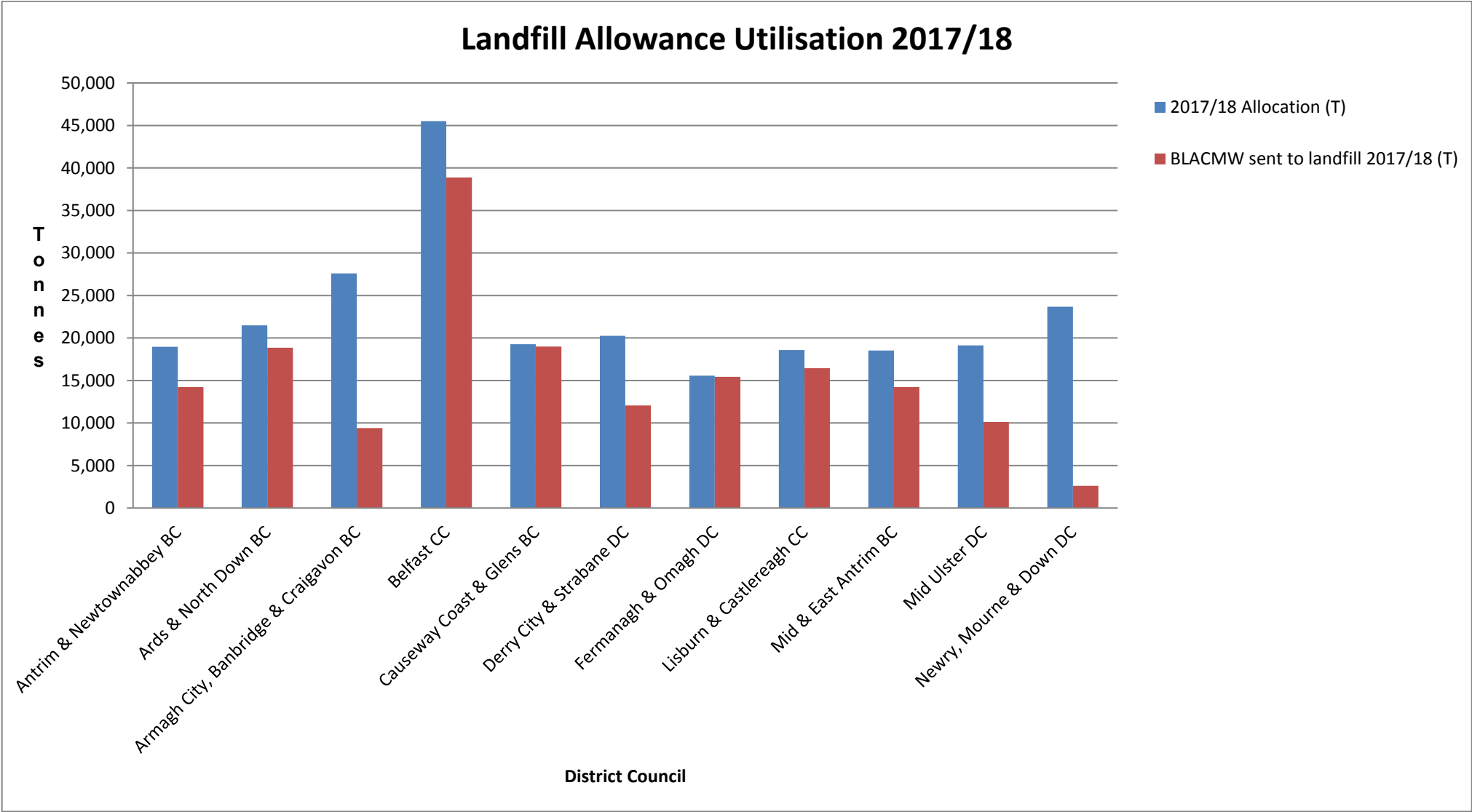
The amount of BLACMW sent to landfill in the North West Regional Waste Management Group (NWRWVG) was 31,066 tonnes, 21.4% less than their allocated allowance.

Figure 1 shows the calculated BLACMW for the thirteenth scheme year against the allowances allocated to each of the district councils

Table 6 shows the percentage of allowances utilised by each district council ranked according to the balance remaining of the allocation at the end of the scheme year.



Figure 1: Landfill Allowance Utilisation for 2017/18



**Table 6: Landfill Allowance Utilisation for 2017/18**

District Council	BLACMW allowance	BLACMW reported sent to landfill rounded to the nearest tonne	Allowances Utilised (%)
Newry, Mourne & Down DC	23,675	2,612	11.03%
Armagh City, Banbridge & Craigavon BC	27,588	9,401	34.08%
Mid Ulster DC	19,131	10,117	52.88%
Derry City & Strabane DC	20,257	12,074	59.60%
Antrim & Newtownabbey BC	18,968	14,235	75.05%
Mid & East Antrim BC	18,515	14,221	76.81%
Belfast CC	45,521	38,876	85.40%
Ards & North Down BC	21,487	18,869	87.82%
Lisburn & Castlereagh CC	18,580	16,458	88.58%
Causeway Coast & Glens BC	19,278	18,992	98.52%
Fermanagh & Omagh DC	15,570	15,439	99.16%
<b>Northern Ireland total</b>	<b>248,570</b>	<b>171,295</b>	<b>68.91%</b>

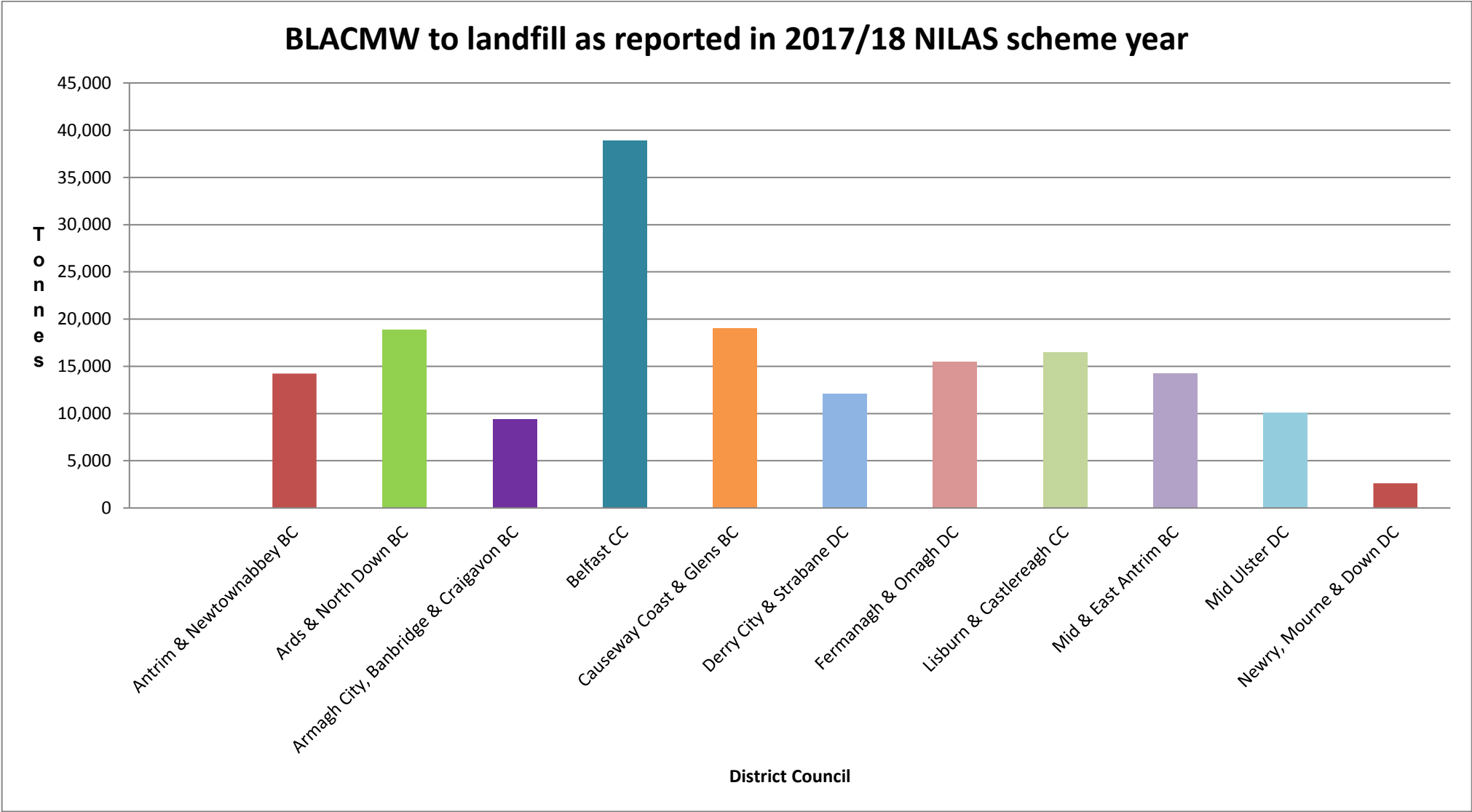
Table 7 illustrates the differences between the amount of BLACMW landfilled between the first and thirteenth; and previous and current, scheme years at the Northern Ireland level.

**Table 7: Comparison between 1<sup>st</sup> and current scheme years; and previous and current scheme years**

District Council:	Decrease from 2005/06 to 2017/18 (T)	Decrease / Increase from 2016/17 to 2017/18 (T)
<b>Northern Ireland – Total</b>	<b>-386,714</b>	<b>-33,085</b>

Figure 2 and Table 8 show and quantify the % increase or decrease in BLACMW landfilled in 2017/18.

Figure 2: Comparison of BLACMW sent to landfill broken down by district council 2017/18



**Table 8: Comparison of BLACMW reported as sent to landfill by district council & WMG by NILAS scheme year.**

<b>WMG</b>	<b>District Council</b>	<b>2016/17</b>	<b>2017/18</b>
<b>arc21</b>	Antrim & Newtownabbey BC	17,609	14,235
	Ards & North Down BC	20,462	18,869
	Belfast CC	47,399	38,876
	Lisburn & Castlereagh CC	19,687	16,458
	Mid & East Antrim BC	19,161	14,221
	Newry, Mourne & Down DC	5,393	2,612
<b>NWRWMG</b>	Causeway Coast & Glens BC	18,996	18,992
	Derry City & Strabane DC	13,242	12,074
<b>None</b>	Armagh City, Banbridge & Craigavon BC	11,107	9,401
	Fermanagh & Omagh DC	16,815	15,439
	Mid Ulster DC	14,509	10,117
<b>Northern Ireland</b>		<b>204,380</b>	<b>171,295</b>

## **5.1 Northern Ireland Local Government Reform Programme**

The reform of local government programme implemented a reduction of the current 26 district councils to 11. The process was completed by 1<sup>st</sup> April 2015. The new bodies should be more efficient and able to deliver more effective services. They will be citizen focused, responding to the needs, aspirations and concerns of their communities. In partnership with others, they will guide the future development of their areas. Therefore, 2014/15 was the last reporting year for the previous local government structures. In 2017/18 NIEA monitored NILAS on the basis of the 11 new councils which commenced operation on 1<sup>st</sup> April 2015.

The allocations for NILAS until 2020 were revised to take account of the new local government structures (Annex C). The revised allocations have been based on the proportion of the overall Northern Ireland population residing within the new administrative boundaries.

## **5.2 Northern Ireland Waste Compositional Study 2007/08**

NIEA as Monitoring Authority have an obligation under Regulation 9(2) to keep under review the assumed amount of biodegradable waste in collected municipal waste.

Regulation 12(2) deemed the biodegradable content of collected local authority municipal waste to be 71% as determined in 2000 by the Northern Ireland Waste Characterisation Study conducted by NI2000.

The results of the new 2007/08 Northern Ireland Waste compositional study were made public in February 2008. The main finding of this study was the determination that at this time 64% was a more representative figure for the biodegradable content of LACMW within Northern Ireland.

## **5.3 The Landfill Allowances Scheme (Amendment) Regulations (NI) 2008**

In September 2008 P&EPG issued a consultation paper on proposed amendments to the NILAS Regulations with a view to amending NILAS Regulation 12 (2)(a) from 71% to 64% in relation to the deemed biodegradable content in local authority collected municipal waste.

The Landfill Allowances Scheme (Amendment) Regulations (Northern Ireland) 2009 (<http://www.legislation.gov.uk/nisr/2009/46/regulation/2/made>) were made on 11<sup>th</sup> February 2009 to come into operation on 1<sup>st</sup> April 2009 changing the deemed statutory BLACMW percentage to 64% for the 2009/10 scheme year onwards. This change reflects the current levels of biodegradability of LACMW in Northern Ireland and is comparable to previously used levels in England (68%), Scotland (63%), and Wales (61%).

Assessment of the impact of the reduction in the BLACMW percentage must be seen in the context of the mass balance calculation, rather than a straightforward 7% reduction. Therefore, the impact of the figures for the BLACMW at 64% may appear greater than originally anticipated.

## **5.4 Looking Forward to 2019/20**

The third and final Landfill Directive target year will come in 2019/20. The UK will report to the European Commission on the basis of the new definition of municipal waste (LACMW plus similar commercial & industrial wastes), but it is expected that NILAS will play its part in helping to achieve overall Landfill Directive targets. However, due to the lack of data following the reform / reorganisation of Northern Ireland's local government in 2015 no forecasts have been made.

## Annex A: NILAS– 13<sup>th</sup> Scheme Year (2017/18) Regulation 13 Draft Reconciliation

District Council	2017/18 Allocation	BLACMW sent to landfill for scheme year 2017/18 (As reported)	BLACMW sent to landfill as % of 2017/18 allocation
Antrim & Newtownabbey BC	18,968	14,151	74.6%
Ards & North Down BC	21,487	18,869	87.8%
Armagh City, Banbridge & Craigavon BC	27,588	9,351	33.9%
Belfast CC*	45,521	38,870	85.4%
Causeway Coast & Glens BC	19,278	18,992	98.5%
Derry City & Strabane DC	20,257	12,074	59.6%
Fermanagh & Omagh DC	15,570	15,443	99.2%
Lisburn & Castlereagh CC	18,580	16,458	88.6%
Mid & East Antrim BC	18,515	14,221	76.8%
Mid Ulster DC	19,131	10,077	52.7%
Newry, Mourne & Down DC	23,675	2,612	11.0%
<b>Northern Ireland – Total:</b>	<b>248,570</b>	<b>171,119</b>	<b>68.8%</b>

**Annex B: NILAS progress – 13<sup>th</sup> Scheme Year (2017/18) Regulation 14 Final Reconciliation**

<b>District Council</b>	<b>2017/18 Allocation (T)</b>	<b>BLACMW sent to landfill 2017/18 (T)</b>	<b>BLACMW sent to landfill 2017/18 (% of allocation)</b>
Antrim & Newtownabbey BC	18,968	14,235	75.0%
Ards & North Down BC	21,487	18,869	87.8%
Armagh City, Banbridge & Craigavon BC	27,588	9,401	34.1%
Belfast CC	45,521	38,876	85.4%
Causeway Coast & Glens BC	19,278	18,992	98.5%
Derry City & Strabane DC	20,257	12,074	59.6%
Fermanagh & Omagh DC	15,570	15,439	99.2%
Lisburn & Castlereagh CC	18,580	16,458	88.6%
Mid & East Antrim BC	18,515	14,221	76.8%
Mid Ulster DC	19,131	10,117	52.9%
Newry, Mourne & Down DC	23,675	2,612	11.0%
<b>Northern Ireland total</b>	<b>248,570</b>	<b>171,295</b>	<b>68.9%</b>



## ANNEX C: Northern Ireland Landfill Allowance Scheme Allocations (tonnes) [New district councils]

District Council Name	2015 / 16	2016 / 17	2017 / 18	2018 / 19	2019 / 20	Population (mid-2012 %)
Antrim & Newtownabbey Borough Council	21,148	20,058	18,968	17,878	16,788	7.6%
Ards & North Down Borough Council	23,956	22,722	21,487	20,252	19,017	8.6%
Armagh, Banbridge & Craigavon Borough Council	30,759	29,173	27,588	26,002	24,417	11.1%
Belfast City Council	50,753	48,137	45,521	42,904	40,289	18.3%
Causeway Coast & Glens Borough Council	21,494	20,386	19,278	18,170	17,062	7.8%
Derry City & Strabane District Council	22,586	21,422	20,257	19,093	17,929	8.1%
Fermanagh & Omagh District Council	17,360	16,465	15,570	14,675	13,781	6.3%
Lisburn & Castlereagh City Council	20,716	19,648	18,580	17,512	16,444	7.5%
Mid & East Antrim Borough Council	20,644	19,579	18,515	17,451	16,387	7.4%
Mid Ulster District Council	21,330	20,231	19,131	18,032	16,932	7.7%
Newry, Mourne & Down District Council	26,396	25,036	23,675	22,314	20,954	9.5%
<b>Northern Ireland</b>	<b>277,142</b>	<b>262,856</b>	<b>248,570</b>	<b>234,284</b>	<b>220,000</b>	<b>100.0%</b>



*“A living, working, active landscape valued by everyone”*