



# Northern Ireland Local Authority Collected Municipal Waste Management Statistics

Quarterly provisional estimates for October to December 2021



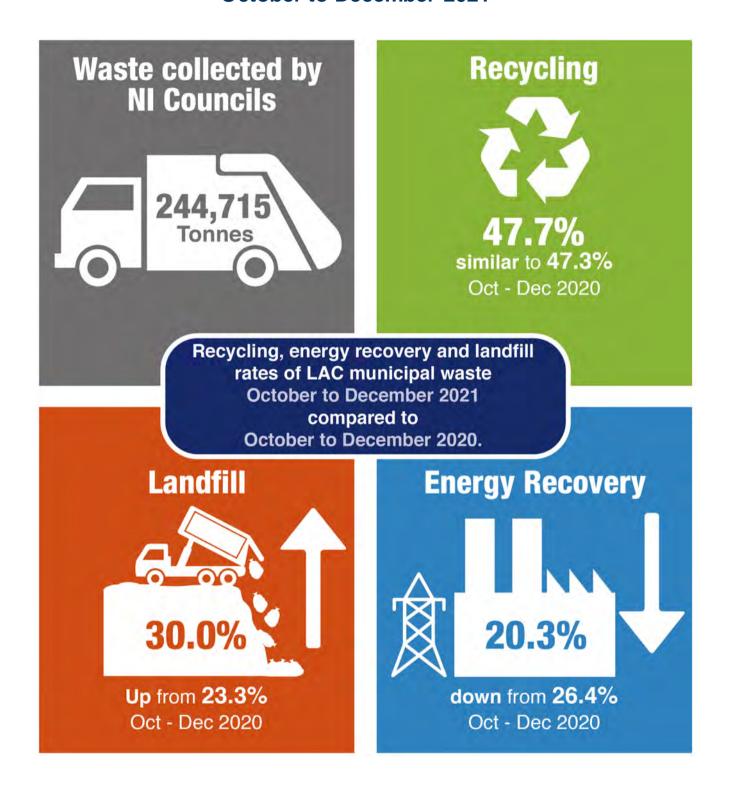


Sustainability at the heart of a living, working, active landscape valued by everyone.





# Northern Ireland waste management statistics – October to December 2021



# **Key Points**

- Northern Ireland's councils collected 244,715 tonnes of waste during October to December 2021, a 4.4 per cent decrease compared to October to December 2020.
- During October to December 2021, 47.7 per cent of waste collected by councils was sent for recycling, similar to the recycling rate for October to December 2020.
- The landfill rate for waste collected by councils was 30.0 per cent in October to December 2021, a fall from 75.4 per cent in October to December 2006, but higher than the 23.3 per cent recorded during October to December 2020.
- Just over a fifth (20.3 per cent) of waste arisings were sent for energy recovery in October to December 2021, lower than the 26.4 per cent reported in October to December 2020, but an increase from the 0.5 per cent rate during the same quarter in 2009.
- Household waste accounted for 88.3 per cent of all waste collected during this period.
- The recycling rate for household waste was 48.4 per cent, similar to 48.0 per cent in October to December 2020. The landfill rate for household waste was 29.2 per cent in October to December 2021, an increase from 23.0 per cent recorded during the same quarter of 2020.

Issue No: 51

**Date of Publication:** 28 April 2022 **Theme:** Agriculture and Environment

**Reporting Period:** 

1 October to 31 December 2021

**URL**: <a href="https://www.daera-ni.gov.uk/articles/northern-ireland-local-authority-collected-municipal-wastemanagement-statistics">https://www.daera-ni.gov.uk/articles/northern-ireland-local-authority-collected-municipal-wastemanagement-statistics</a>

#### Issued by:

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

Dundonald House Belfast BT4 3SB

Contact: David Finlay

Telephone: 028 9052 5450

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

#### **Contents**

Overview	1
Waste arisings	2
Recycling	4
Energy recovery	6
Landfill	8
National Statistics Status	11

#### Reader Information

This document may be made available in alternative formats, please contact us to discuss your requirements. Definitions of key terms used in this publication are available in <a href="#Appendix2-Glossary">Appendix2-Glossary</a> of the latest Annual Report.

#### **Purpose**

This is a quarterly publication which reports provisional statistics on the key measurements of local authority collected municipal waste for councils and waste management groups in Northern Ireland.

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

- The revised Northern Ireland Waste Management Strategy
- The Waste Framework Directive

Data on household recycling was a population indicator for the previous Programme for Government (PfG) and has been proposed as an indicator in the forthcoming PfG.

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

Further details are available in Appendix 1 – Main Uses of Data of the Annual Report.

#### **Next Updates**

- Provisional statistics for January to March 2022 are scheduled for publication in July 2022.
- Finalised data for 2021/22 are scheduled to be published in November 2022 and will supersede previously published data from the four quarterly returns for that financial year.
- The scheduled dates for all upcoming publications are available from the GOV.UK statistics release calendar: www.gov.uk/search/research-and-statistics

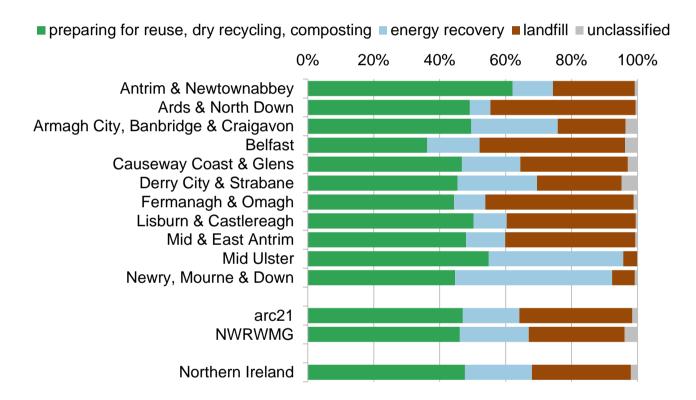
#### **Overview**

This report presents information on the quantities of local authority collected municipal waste managed in Northern Ireland between October and December 2021. The report is split into four sections, each of which cover local authority collected (LAC) municipal waste and, where appropriate, household waste:

- waste arisings (pages 2-3),
- recycling (pages 4-5),
- energy recovery (pages 6-7),
- landfill (pages 8-10).

Figure 1: Waste preparing for reuse, dry recycling, composting, energy recovery and landfill rates by council and waste management group

Northern Ireland, October to December 2021



At the Northern Ireland level, 47.7 per cent of waste collected by councils was sent for preparing for reuse, dry recycling and composting between October and December 2021. Energy recovery accounted for 20.3 per cent and 30.0 per cent was landfilled. The remaining 2.0 per cent unaccounted for is likely to involve moisture and/or gaseous losses. Each of the rates are discussed in detail in the appropriate section of the report.

The rate of waste sent for preparing for reuse, dry recycling and composting was similar to that reported in October to December 2020. The energy recovery rate decreased by 6.1 percentage points and the landfill rate increased by 6.7 percentage points compared to October to December 2020. Household waste accounted for 88.3 per cent of total waste collected by councils. Household waste includes materials collected directly from households via kerbside collections, material taken to bring sites and civic amenity sites as well as several other smaller sources.

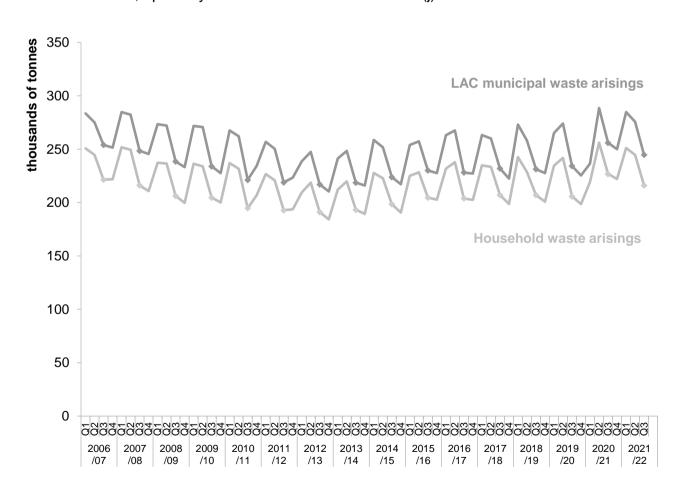
## **Waste arisings**

Northern Ireland's councils collected 244,715 tonnes of waste between October and December 2021. This was 4.4 per cent lower than the 255,973 tonnes collected during October to December 2020. During October to December 2020, Covid-19 restrictions and advice pertaining during the period contributed to the highest tonnage of waste ever collected during this quarter, with many people continuing to work from home. This peak contributed to the reduction in waste arisings recorded during October to December 2021.

The total quantity of local authority collected (LAC) municipal waste arisings is a key performance indicator, KPI (j). This indicator is used to monitor performance under the Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015.

Since 2006/07 household waste has accounted for 86-90 per cent of total waste collected by councils each quarter, apart from April to June 2020 when Covid-19 restrictions resulted in a larger than normal proportion of household waste being collected. During October to December 2021 household waste accounted for 88.3 per cent. The remaining 11.7 per cent was non-household waste such as rubble/soil and commercial/industrial waste.

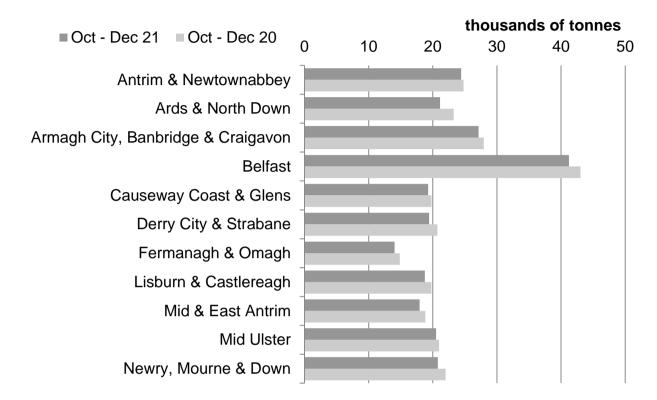
Figure 2: Waste arisings
Northern Ireland, quarterly from 2006/07 to 2021/22 KPI (j)



The longer term trend for October to December saw a gradual reduction in waste arisings of 14.6 per cent across six years, from a high of 253,956 tonnes between October and December 2006 to a low of 216,987 tonnes between the same three months of 2012.

Since 2012, arisings have generally shown an increasing trend in the October to December quarters.

Figure 3: Waste arisings by council
Northern Ireland, October to December 2020 and October to December 2021, KPI (j)



The proportion of waste collected by each council broadly reflects the population within the councils. Belfast collected the most waste at 41,228 tonnes, whilst Fermanagh and Omagh collected the least at 14,033 tonnes.

All councils reported a decrease in total arisings in October to December 2021 compared to the same period in 2020, with the largest decrease recorded in Ards & North Down at 9.1 per cent. The quantity of waste collected at kerbside and civic amenity sites fell by 2.1 and 9.7 per cent respectively compared to October to December 2020.

These statistics can be found in Table 1 accompanying data tables spreadsheet and in the <u>time series dataset</u>.

# Recycling

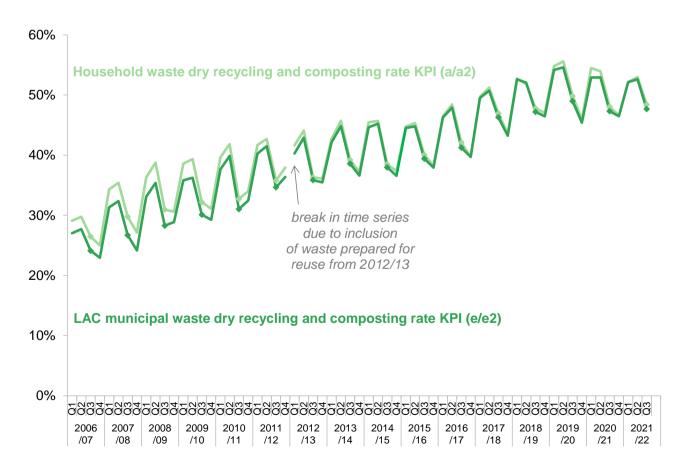
This section of the report looks at local authority collected (LAC) municipal waste and household waste recycling rates, both of which include waste sent for preparing for reuse, dry recycling and composting.

There were 116,633 tonnes of waste sent for preparing for reuse, dry recycling and composting (referred to as 'recycling' for the rest of this section) between October and December 2021. The waste recycling rate was 47.7 per cent. This was similar to the 47.3 per cent of waste sent for recycling between October and December 2020.

The recycling rate for household waste only was 48.4 per cent between October and December 2021, similar to the 48.0 per cent recorded during the same three months of 2020. The proportion of household waste sent for dry recycling made up 23.8 per cent, composting 24.4 per cent and preparing for reuse 0.2 per cent. Last year the equivalent rate for preparing for reuse was 0.3 per cent, whilst the dry recycling and composting rates were 25.2 per cent and 22.6 per cent respectively.

Waste sent for recycling is included in a number of key performance indicators, KPI (a), (a2), (e), and (e2). These indicators are used to monitor performance under the Local Government (Performance Indicators and Standards) Order (Northern Ireland) 2015. The household waste annual recycling rate was a population indicator for <a href="Programme for Government">Programme for Government (PfG)</a> 2016-2021 and is being proposed as an indicator for the next PfG.

Figure 4: Waste sent for preparing for reuse, dry recycling and composting Northern Ireland, quarterly from 2006/07 to 2021/22, KPIs (a), (a2), (e) and (e2)

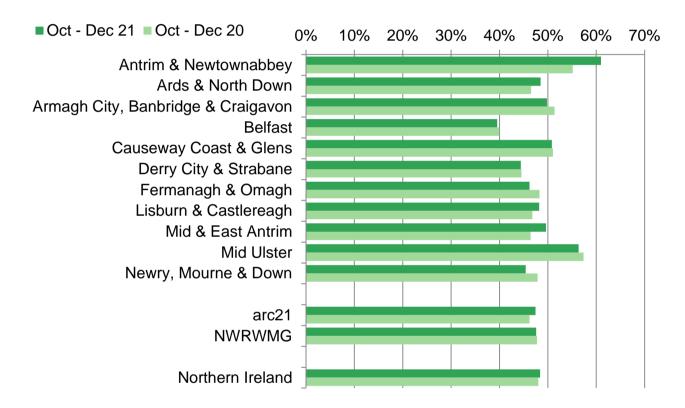


These statistics show seasonal variation which is driven by the quantities of garden waste sent for composting. Greater quantities of garden waste are collected and sent for composting during the spring and summer quarters, April to June and July to September.

The longer term trend for this quarter has been a steady increase from 26.5 per cent in October to December 2006 to 48.4 per cent in October to December 2021. Waste sent for preparing for reuse (522 tonnes this quarter) has been included since 2012/13 and adds 0.2 percentage points to the overall household recycling rate in October to December 2021.

Figure 5: Household waste preparing for reuse, dry recycling and composting rate by council and waste management group

Northern Ireland, October to December 2020 and October to December 2021, KPI (a2)



Newry, Mourne & Down reported the largest decrease in their household recycling rate compared to October to December 2020 at 2.5 percentage points, with a decrease in waste sent for dry recycling the largest contributing factor in this fall. Three other councils reported decreases in their household recycling rates, whilst the rate increased in four council areas, the largest of which was recorded in Antrim & Newtownabbey at 5.8 percentage points. Belfast, Causeway Coast & Glens and Derry City & Strabane reported similar rates to those in October to December 2020.

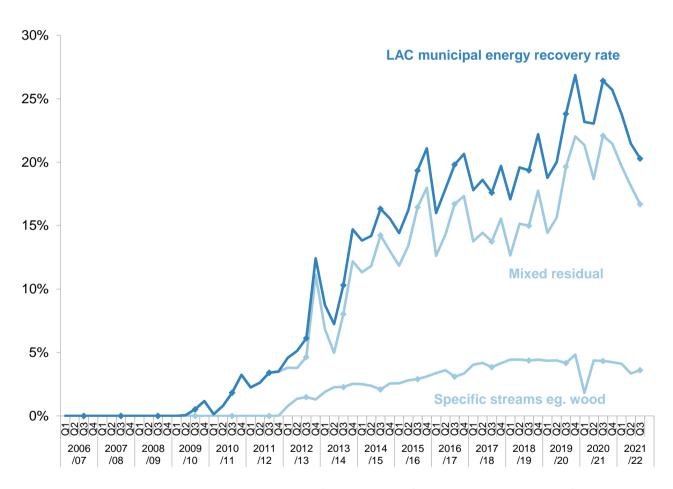
These statistics can be found in Tables 4 and 12 of the accompanying data tables spreadsheet and in the <u>time series dataset</u>.

## **Energy recovery**

This quarterly report includes statistics on energy recovery, which is the term used when value is gained from waste products by converting them into energy. All energy recovery statistics reported in this section are derived from material sent for energy recovery via incineration, although other technologies exist. Energy recovery via anaerobic digestion is not included in this section and is explained further in <a href="Appendix 1 - Limitations of Data">Appendix 1 - Limitations of Data</a> of the latest Annual Report.

Between October and December 2021, 49,665 tonnes of waste arisings were sent for energy recovery. This produced a waste energy recovery rate of 20.3 per cent, lower than the 26.4 per cent rate reported for the same period in 2020. For each period, the majority of energy recovery was from mixed residual waste, with a smaller proportion from specific streams, e.g. wood.

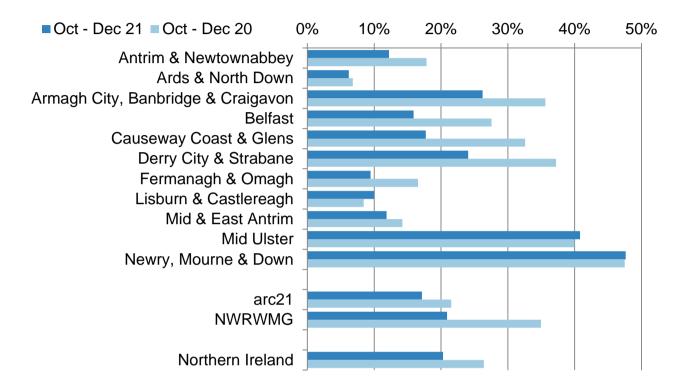
Figure 6: Waste sent for energy recovery via incineration Northern Ireland, quarterly from 2006/07 to 2021/22



There was zero, or very small quantities, of waste sent for energy recovery before 2009/10. Strong growth began during 2009/10 with the energy recovery rate increasing from 0.5 per cent during October to December 2009 to a high of 26.4 per cent for the same three months of 2020. The rate fell by 6.1 percentage points in October to December 2021. Most of the growth since 2010/11 has been driven by mixed residual waste sent for energy recovery (from 0.5 per cent during October to December 2009 to 16.7 per cent in October to December 2021). The specific stream proportion was 3.6 per cent in October to December 2021.

Mixed residual waste sent for energy recovery is combustible residual waste collected from the kerbside and from civic amenity sites which is 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 7: Waste energy recovery rate by council and waste management group Northern Ireland, October to December 2020 and October to December 2021



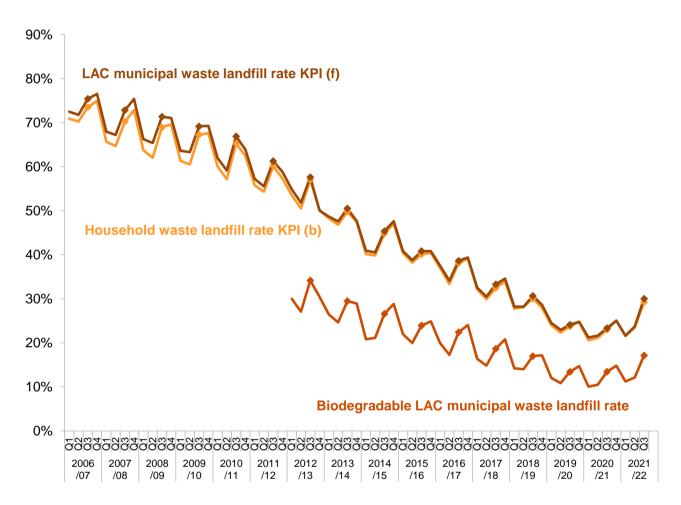
The highest waste energy recovery rate was recorded in Newry, Mourne & Down at 47.6 per cent, whilst the lowest was recorded in Ards & North Down at 6.2 per cent. Large decreases in the waste energy recovery rate were recorded in a number of councils, the largest of which were in Causeway Coast & Glens and Derry City & Strabane at 14.9 and 13.2 percentage points respectively.

These statistics can be found in Tables 3 and 4 of the accompanying data tables spreadsheet and in the <u>time series dataset</u>.

#### Landfill

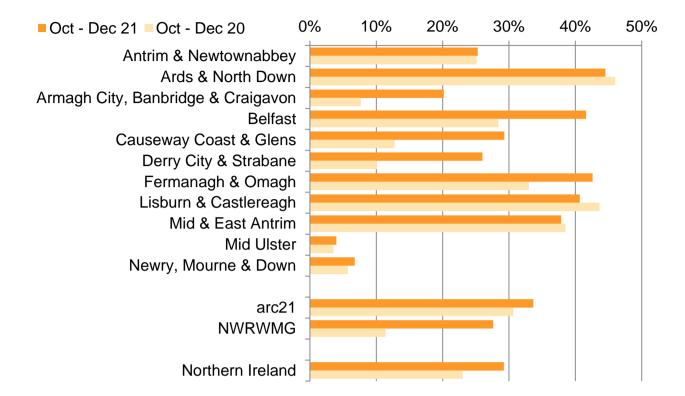
The quantity of LAC municipal waste sent to landfill increased by 22.9 per cent, from 59,733 tonnes during October to December 2020 to 73,438 tonnes between October and December 2021. This gave a quarterly landfill rate of 30.0 per cent, higher than the 23.3 per cent recorded during the same quarter of 2020. The latest quarterly landfill rate for household waste only is 29.2 per cent, an increase of 6.2 percentage points on the same three months of 2020.

Figure 8: Waste sent to landfill Northern Ireland, quarterly from 2006/07 to 2021/22, KPIs (b) and (f)



The long term trend has seen the October to December household waste landfill rate fall from 73.5 per cent in 2006 to a low of 23.0 per cent in 2020. The 6.2 percentage point increase in October to December 2021 is the first time the household waste landfill rate has increased for this quarter during this time series. Note that the landfill rate exhibits seasonality and the April to June and July to September quarters tend to have lower rates than October to December and January to March. The seasonality stems from the higher level of compostable garden waste arising during spring and summer.

Figure 9: Household waste landfilled by council and waste management group Northern Ireland, October to December 2020 and October to December 2021, KPI (b)



The household waste landfill rate increased for six councils in October to December 2021 compared to the same three months in 2020, with Causeway Coast & Glens and Derry City & Strabane reporting increases of 16.5 and 15.9 percentage points respectively. A reduction in waste sent for energy recovery was the main contributing factor for these increases. Two councils reported similar household waste landfill rates to October to December 2020, whilst Lisburn & Castlereagh, Ards & North Down and Mid & East Antrim reported a fall in their household waste landfill rates.

The statutory requirement for all councils in Northern Ireland to provide households with a container for food to enable its separate collection has contributed to a long-term drop in landfill rates, though increasing energy recovery rates for some councils have also contributed.

#### Biodegradable waste to landfill

The Landfill Allowance Scheme (NI) Regulations 2004 (as amended) placed a statutory responsibility on councils, in each scheme year, to landfill no more than the quantity of biodegradable waste for which they had allowances. The scheme concluded at the end of the 2019/20 financial year, however the continued monitoring of Biodegradable waste is required for existing target commitments which specify that it must be reduced to 35 per cent of the total amount (by weight) of biodegradable municipal waste produced in 1995.

Northern Ireland's councils sent 41,943 tonnes of biodegradable waste to landfill between October and December 2021, which was 57.1 per cent of all waste sent to landfill. During the same quarter last year, 34,703 tonnes of biodegradable waste was sent to landfill which was 58.1 per cent of all waste sent to landfill.

Figure 10 displays the tonnages of LAC biodegradable and non-biodegradable waste sent to landfill by each council, comparing them with other councils and to the same quarter last year.

Figure 10: Biodegradable and non-biodegradable waste to landfill by council Northern Ireland, October to December 2020 and October to December 2021,



There is considerable variation between councils in the quantities of biodegradable waste sent to landfill, as well as the proportion of biodegradable waste in total landfill. In Derry City & Strabane, 64.7 per cent of all waste sent to landfill was biodegradable, whilst the figure for Mid Ulster was 48.5 per cent.

#### **National Statistics Status**

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

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

A compliance check <u>assessment</u> was completed for the waste statistics produced by each of the UK regions in 2020 with the results of the finding published in October 2020.

The trustworthiness, quality and value of the statistics, including the coherence of the data source, methods and quality assurance (QA) arrangements, and the presentation of the statistics were reviewed with a final outcome that the statistics can continue to be designated as National Statistics.

The conclusion of the compliance check cited the following actions as strengths:

- Ongoing quality assurance of the data contained within the report by reviewing methods on a quarterly basis.
- Improved statistical output by creating a <u>time series</u> of Northern Ireland local authority collected municipal waste management statistics to accompany the report and tables.
   This <u>dataset</u> is also available on Open Data NI along with a <u>time series</u> of materials collected at Northern Ireland local authority waste management sites.
- Improved statistical output by creating <u>infographics</u> to accompany the report and tables.
- Improved statistical output by creating an <u>interactive dashboard</u> to accompany the report and tables.
- Hosted a workshop with users in February 2020 to review publications and statistical outputs.
- Sought and implemented recommendations from GSS good practice team to improve the publication.

Some areas for minor improvement were also suggested and these will be addressed as we continually improve the statistical output.

One suggestion was to liaise with the other UK regions to produce a guide on how waste is defined as recycled and explain the main definitional differences in recycling rates between countries. The recycling explainer is now available at the following link:

Recycling Explainer

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



