

Northern Ireland Local Authority Collected Municipal Waste Management Statistics

Quarterly provisional estimates for October to December 2022



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

Northern Ireland waste management statistics – October to December 2022

Waste collected by NI Councils



Recycling



48.0%

similar to 47.8% in
October - December 2021

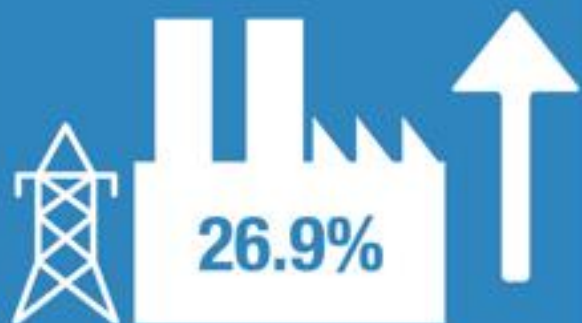
Recycling, energy recovery and landfill
rates of LAC municipal waste
October to December 2022
compared to
October to December 2021.

Landfill



down from 29.9% in
October - December 2021

Energy Recovery



up from 20.3% in
October - December 2021

Key Points

- Northern Ireland's councils collected 230,755 tonnes of waste during October to December 2022, a 5.7 per cent decrease compared to October to December 2021.
- During October to December 2022, 48.0 per cent of waste collected by councils was sent for recycling, similar to the recycling rate recorded for October to December 2021.
- The landfill rate for waste collected by councils was 23.4 per cent in October to December 2022, a fall from both 75.4 per cent in October to December 2006 and 29.9 per cent recorded during October to December 2021.
- Over a quarter (26.9 per cent) of waste arisings were sent for energy recovery in October to December 2022 which was higher than the 20.3 per cent reported in October to December 2021. In the longer term, energy recovery rates have increased from 0.5 per cent recorded during October to December 2009.
- Household waste accounted for 87.0 per cent of all Local Authority collected (LAC) waste during this period.
- The recycling rate for household waste was 49.1 per cent in October to December 2022, an increase from the same quarter of 2021. The landfill rate for household waste was 22.6 per cent, which was lower than the landfill rate of 29.2 per cent recorded in October to December 2021.

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Reader Information

This document may be made available in alternative formats, please contact us to discuss your requirements. Definitions of key terms used in this publication are available in [Appendix 2 – Glossary](#) 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 and UK Government 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

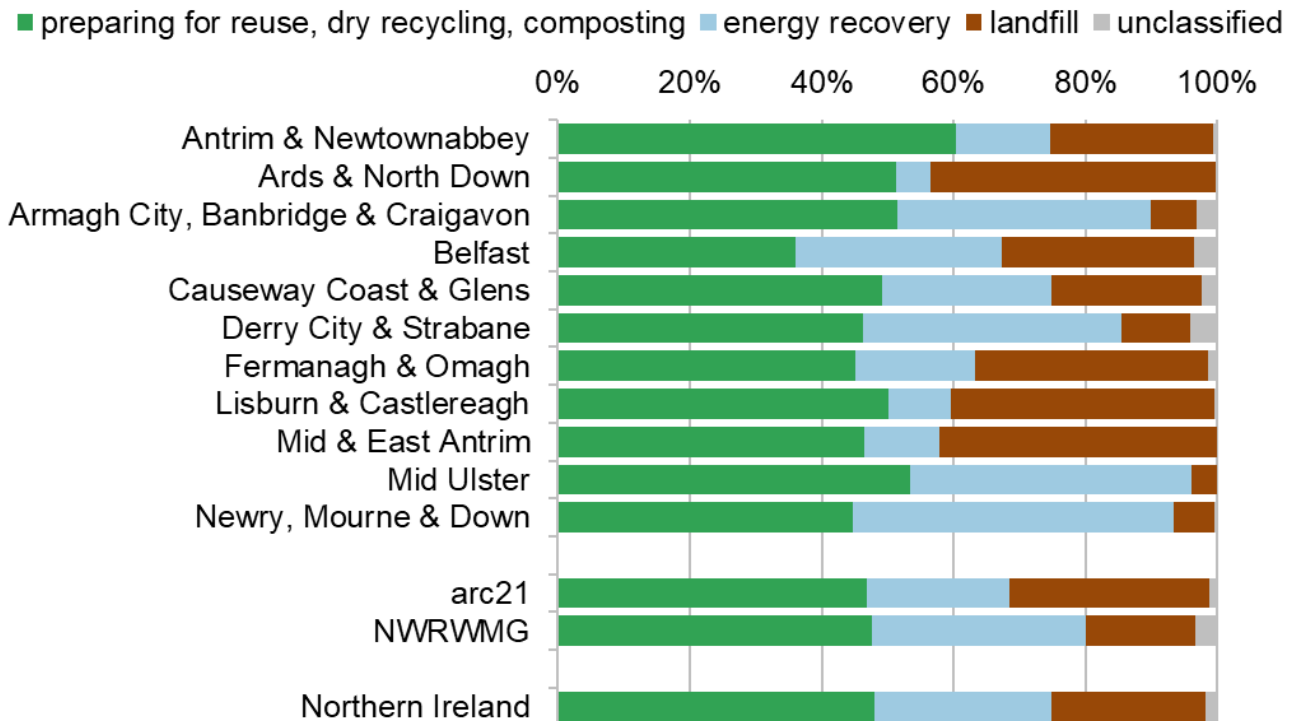
- Provisional statistics for January to March 2023 are scheduled for publication in July 2023.
- Finalised data for 2022/23 are scheduled to be published in November 2023 and will supersede previously published data from the four quarterly returns for that financial year.
- The scheduled dates for all 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 (LAC) municipal waste managed in Northern Ireland between October and December 2022. The report is split into four sections, each of which cover local authority collected 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 2022



At the Northern Ireland level, 48.0 per cent of waste collected by councils was sent for preparing for reuse, dry recycling and composting between October and December 2022. Energy recovery accounted for 26.9 per cent and 23.4 per cent was landfilled. The remaining 1.8 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 2021 (47.8%). The landfill rate decreased by 6.5 percentage points whilst the energy recovery rate increased by 6.6 percentage points from October to December 2021. Household waste accounted for 87.0 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

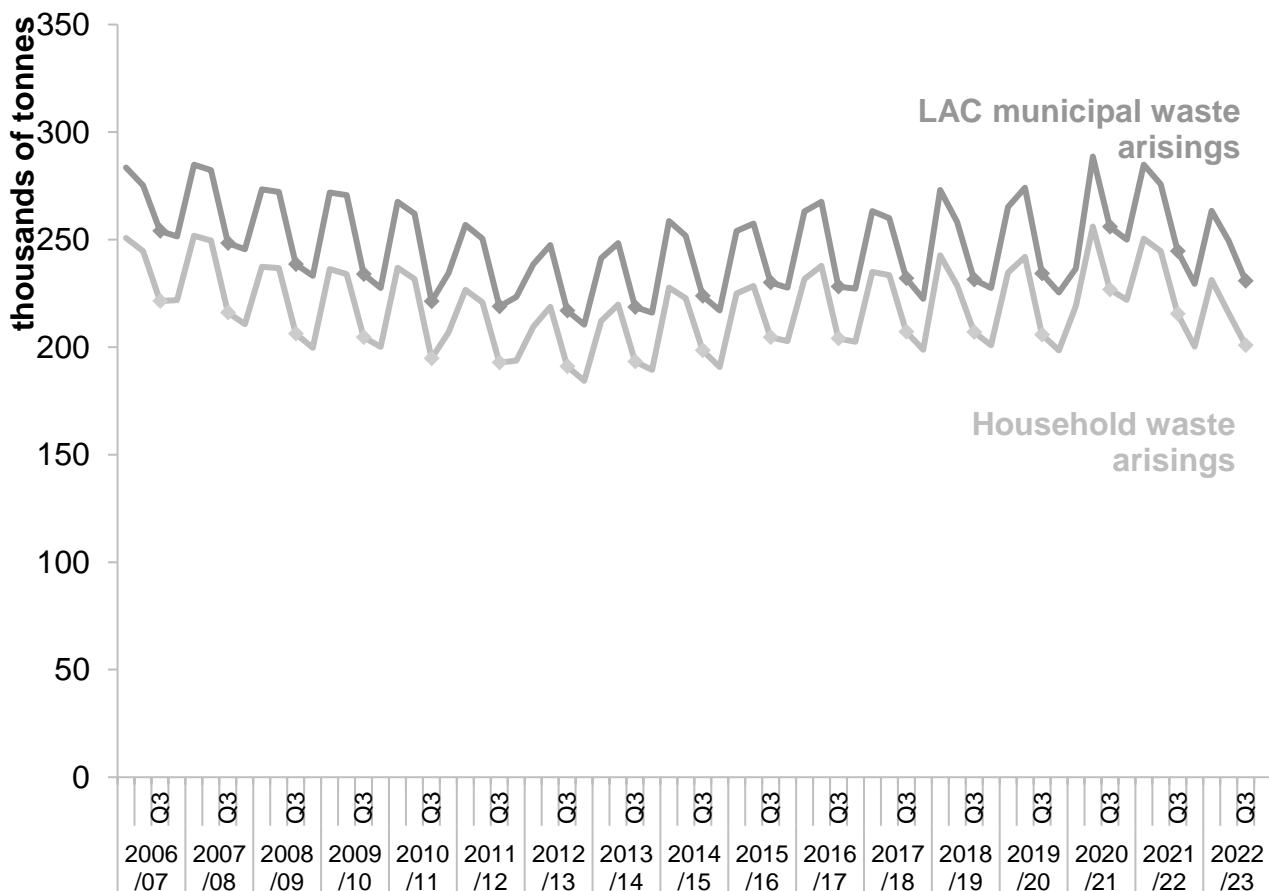
Northern Ireland’s councils collected 230,755 tonnes of waste between October to December 2022. This was 5.7 per cent lower than the 244,715 tonnes collected during October to December 2021. Factors affecting LAC municipal waste arisings, the majority of which is household waste, include individual household behaviours, the advice and collection services provided by councils, the state of the economy and weather conditions during the specific quarter.

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 2022 household waste accounted for 87.0 per cent. The remaining 13.0 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 2022/23 KPI (j)

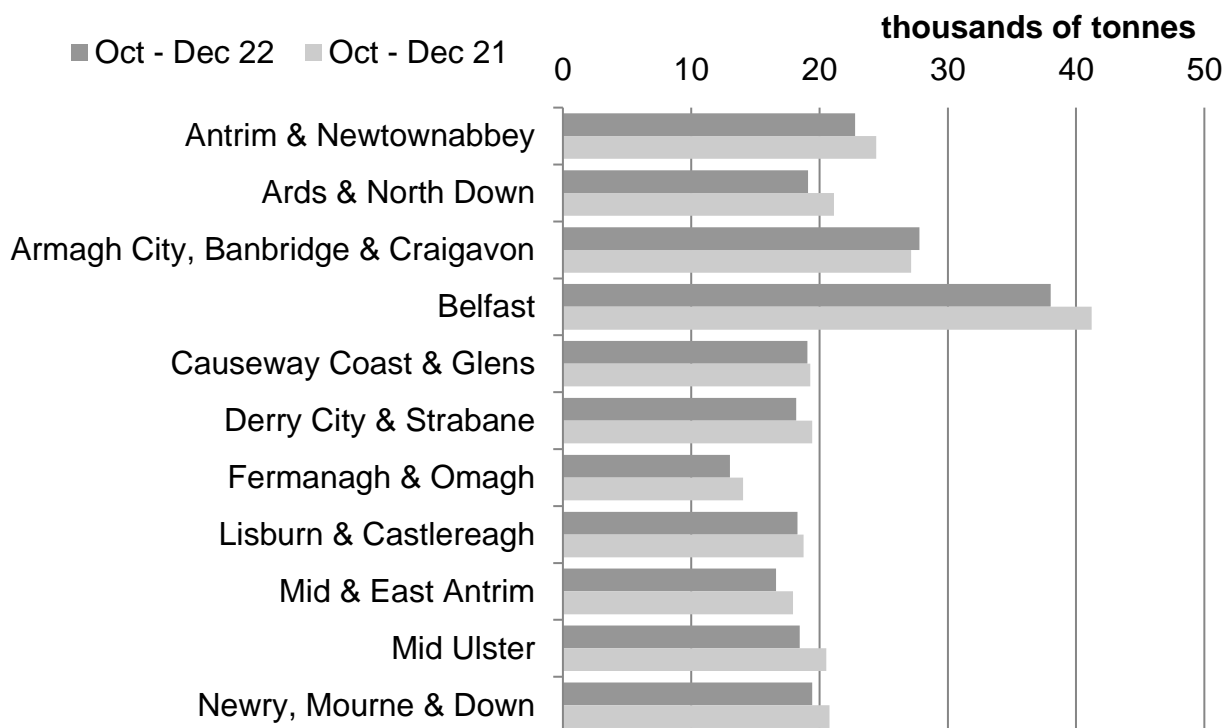


The longer term trend for October to December saw a gradual reduction in LAC municipal waste arisings of 14.6 per cent across six years, from 253,956 tonnes between October to December 2006 to a low of 216,987 tonnes between the same three months of 2012.

From October to December 2012 until a peak of 255,973 tonnes in October to December 2020, arisings have generally shown an increasing trend. Waste arisings in the October to December quarters since 2020 have decreased in each year.

Figure 3: Waste arisings by council

Northern Ireland, October to December 2021 and October to December 2022, KPI (j)



The proportion of waste collected by each council broadly reflects the population within the councils. Belfast collected the most waste at 38,027 tonnes, whilst Fermanagh and Omagh collected the least at 13,022 tonnes.

All councils except Armagh City, Banbridge & Craigavon reported a decrease in total arisings in October to December 2022 compared to the same period in 2021. The largest percentage decrease was recorded in Mid Ulster at 10.1 per cent followed by Ards & North Down at 9.7 per cent.

The total quantity of waste collected at kerbside and civic amenity sites in Northern Ireland fell by 6.1 and 6.0 per cent respectively compared to October to December 2021.

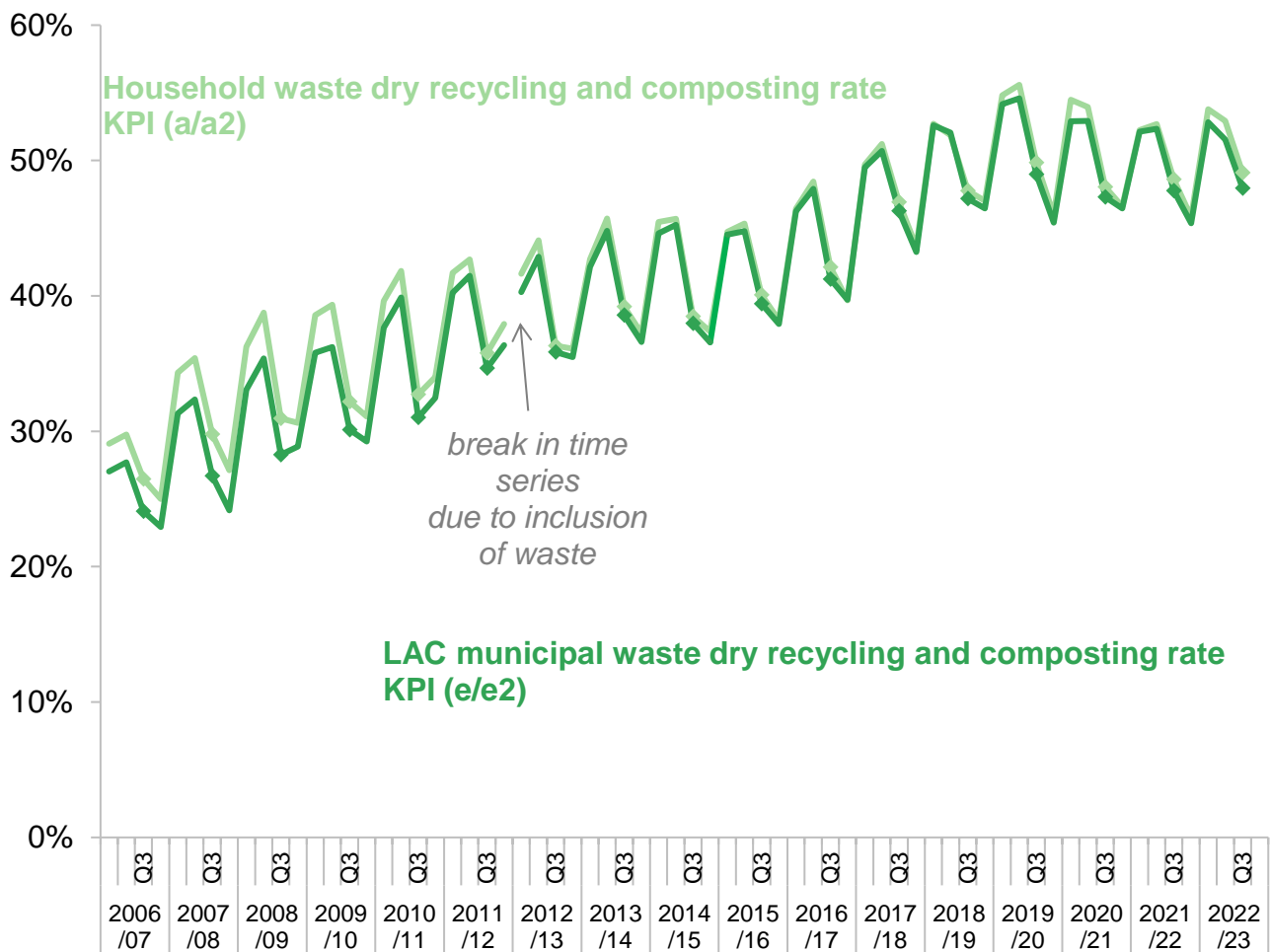
These statistics can be found in Table 1 accompanying data tables spreadsheet and in the [time series dataset](#).

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 110,679 tonnes of LAC municipal waste sent for preparing for reuse, dry recycling and composting (referred to as 'recycling' for the rest of this section) between October to December 2022. The waste recycling rate was 48.0 per cent similar to the 47.8 per cent of waste sent for recycling between October to December 2021.

Figure 4: Waste sent for preparing for reuse, dry recycling and composting
Northern Ireland, quarterly from 2006/07 to 2022/23, KPIs (a), (a2), (e) and (e2)



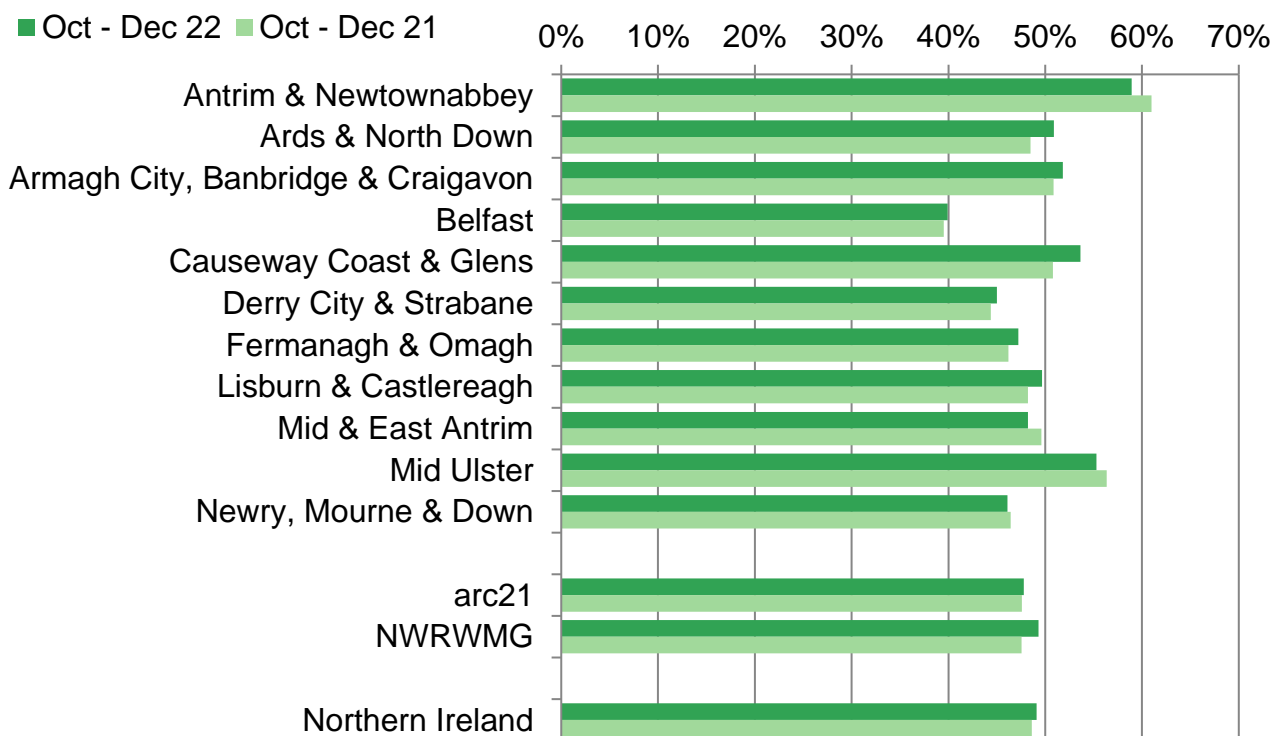
These statistics show seasonal variation which is driven by the quantities of garden waste sent for composting. Greater quantities of garden waste are collected and sent for composting during the spring and summer quarters, April to June and July to September.

The longer term trend for Local Authority Collected municipal waste recycling has been a steady increase from 24.1 per cent in October to December 2006 to 49.0 per cent in October to December 2019. The Local Authority Collected municipal waste recycling rate dropped to 47.3 per cent in 2020 and has since increased gradually to 48.0 per cent in the latest quarter. Waste sent for preparing for reuse (588 tonnes this quarter) has been included since 2012/13 and adds 0.3 percentage points to the overall LAC recycling rate in October to December 2022.

The recycling rate for household waste only was 49.1 per cent between October to December 2022, an increase from 48.6 per cent recorded during the same three months of 2021. The proportion of household waste sent for dry recycling made up 24.8 per cent, composting 24.1 per cent and preparing for reuse 0.3 per cent. Last year the equivalent rate for preparing for reuse was 0.2 per cent, whilst the dry recycling and composting rates were 23.9 per cent and 24.5 per cent respectively.

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

Northern Ireland, October to December 2021 and October to December 2022, KPI (a2)



Causeway Coast & Glens reported the largest increase in their household recycling rate compared to October to December 2021 at 2.8 percentage points, with an increase in waste sent for dry recycling the largest contributing factor in this rise. Ards & North Down, Lisburn & Castlereagh, Armagh City, Banbridge & Craigavon, Fermanagh & Omagh and Derry City and Strabane showed an increase in their household recycling rates. The household recycling rates decreased in Antrim & Newtownabbey, Mid & East Antrim and Mid Ulster district council areas ¹.

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 [Programme for Government \(PfG\) 2016-2021](#) and is being proposed as an indicator for the next PfG.

These statistics can be found in Tables 4 and 12 of the accompanying data tables spreadsheet and in the [time series dataset](#).

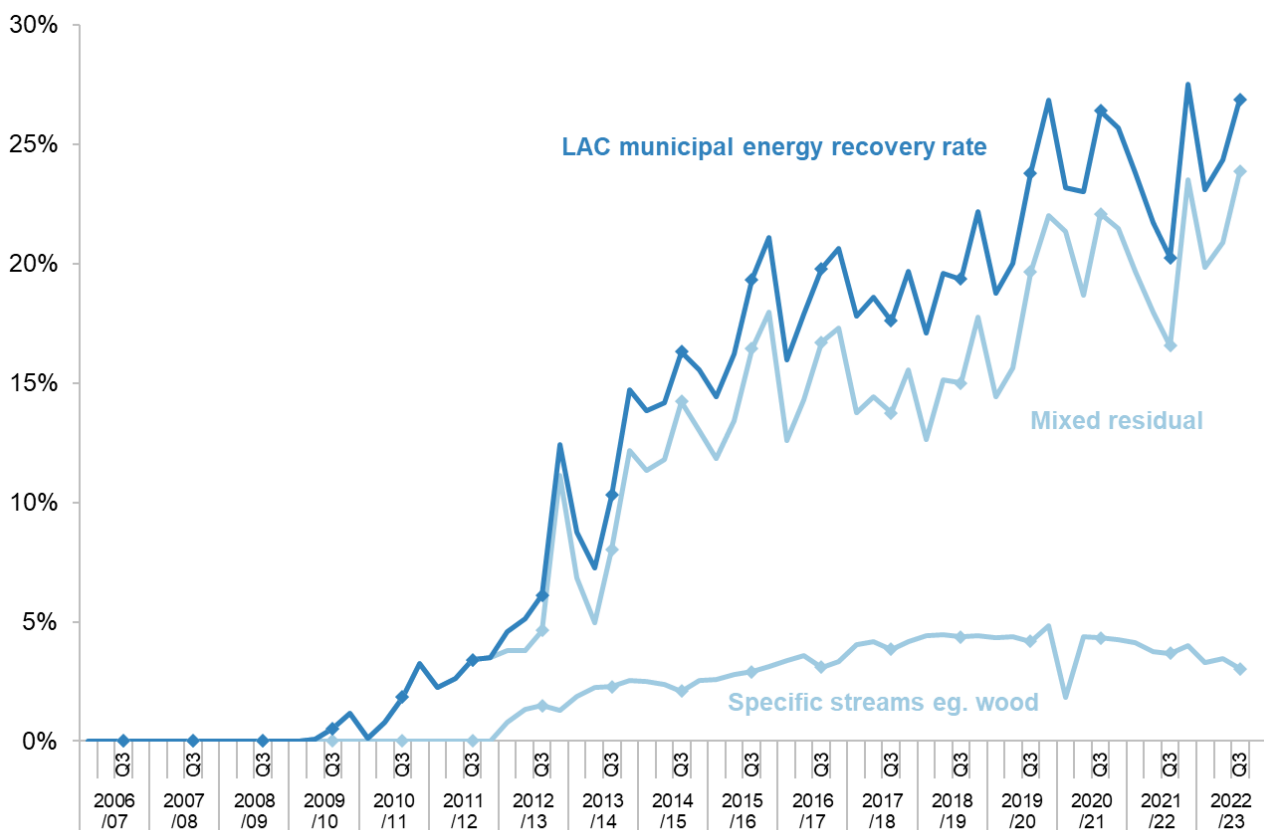
¹ Very small increases or decreases in figures (<0.5 per cent or <0.5 percentage points) are not highlighted in the commentary.

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/gasification, although other technologies exist. Energy recovery via anaerobic digestion is not included in this section and is explained further in [Appendix 1 – Limitations of Data](#) of the latest Annual Report.

Between October to December 2022, 62,036 tonnes of waste arisings were sent for energy recovery. This produced a waste energy recovery rate of 26.9 per cent, higher than the 20.3 per cent recovery rate reported for the same period in 2021. For each period, the majority of energy recovery was from mixed residual waste, with a smaller proportion from specific streams, e.g. wood.

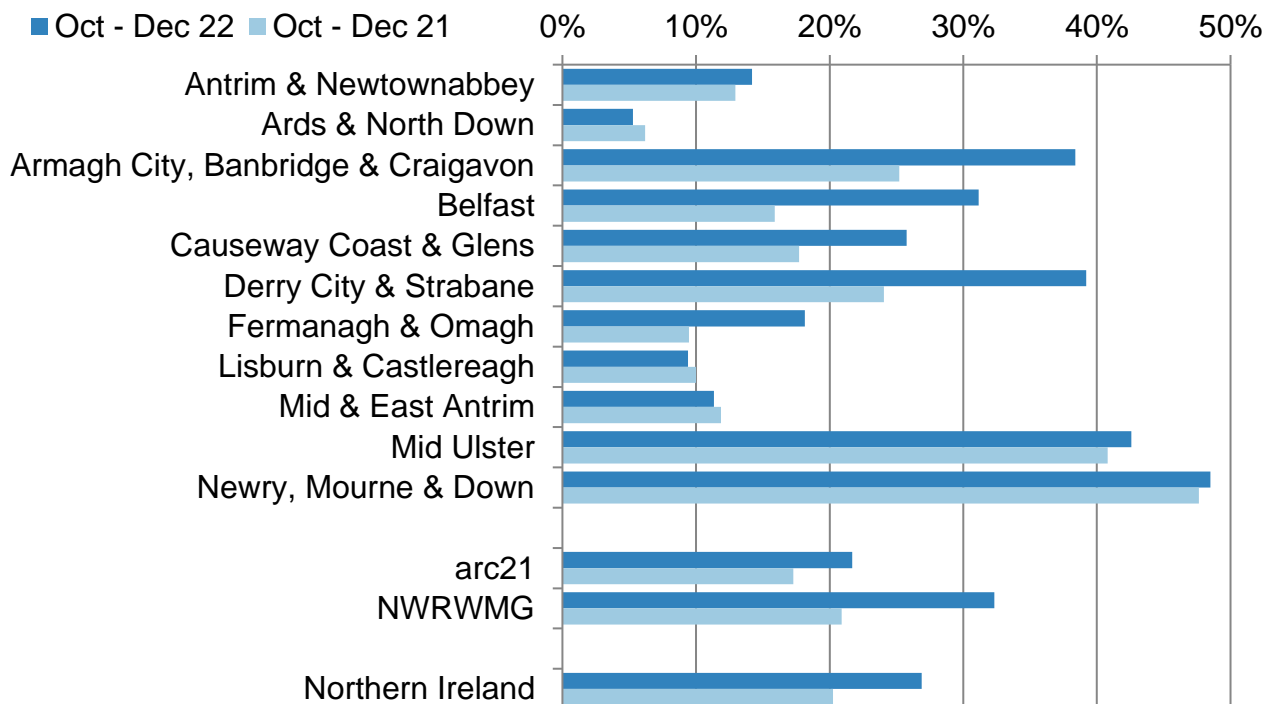
Figure 6: Waste sent for energy recovery via incineration
Northern Ireland, quarterly from 2006/07 to 2022/23



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 26.4 per cent for the same three months of 2020. The energy recovery rate dipped in October to December 2021 but has returned to a similar level as October to December 2020 in the latest quarter. Most of the growth since 2009/10 has been driven by mixed residual waste sent for energy recovery (from 0.5 per cent during October to December 2009 to 23.9 per cent in October to December 2022). The specific stream proportion was 3.0 per cent in October to December 2022.

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 2021 and October to December 2022



The highest waste energy recovery rate was recorded in Newry, Mourne & Down at 48.5 per cent, whilst the lowest was recorded in Ards & North Down at 5.3 per cent. Eight councils recorded an increase in the waste energy recovery rate in October to December 2022 compared to the same quarter in 2021 with the largest increase of 15.2 percentage points recorded in Belfast with the rate almost doubling there. Large increases in the energy recovery rate were also recorded in Derry City & Strabane, Armagh City, Banbridge & Craigavon, Fermanagh & Omagh and Causeway Coast & Glens compared to the same quarter in 2021. Three councils recorded a decrease in the energy recovery rate in October to December 2022 compared to the same quarter in 2021.

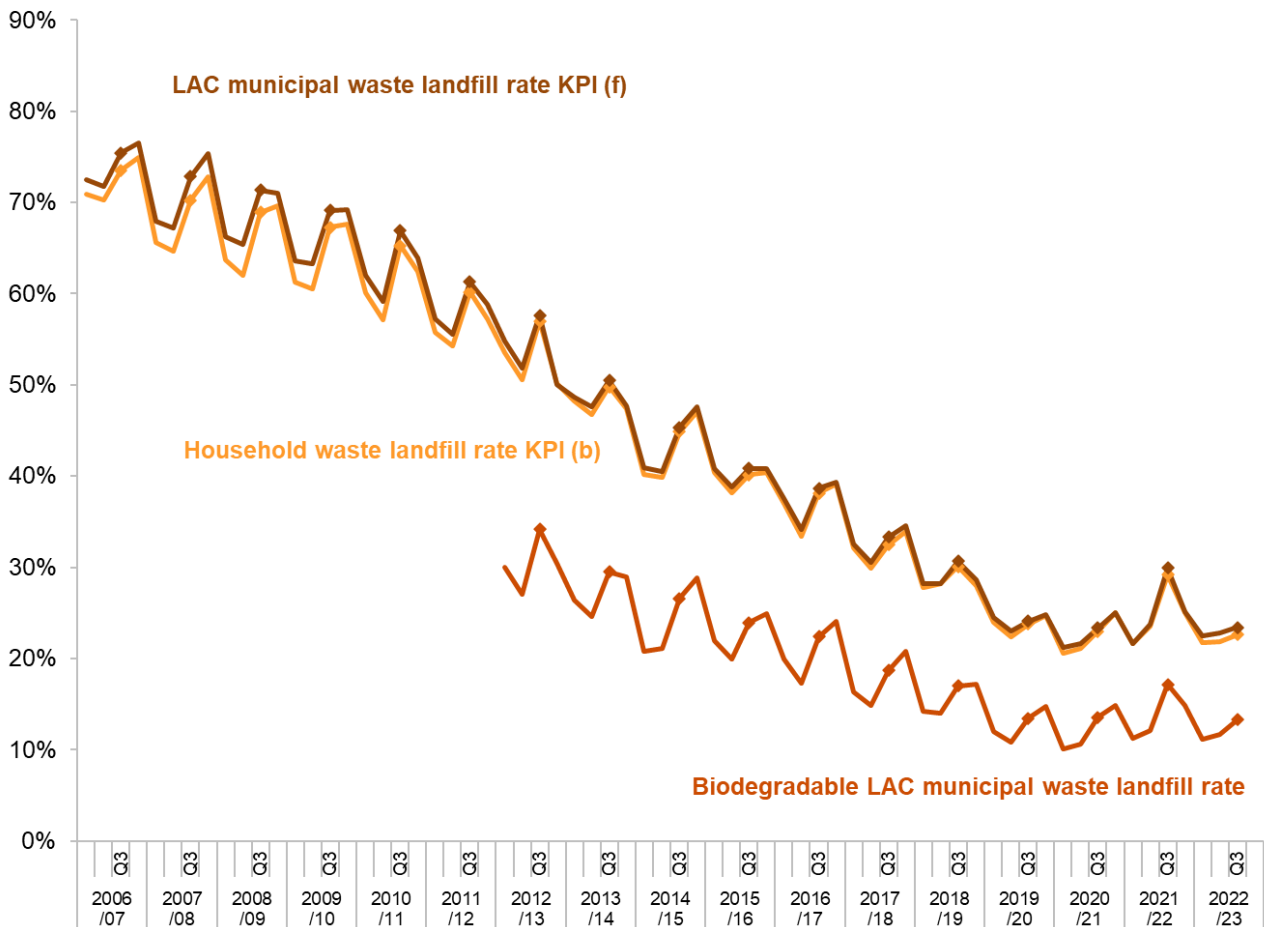
These statistics can be found in Tables 3 and 4 of the accompanying data tables spreadsheet and in the [time series dataset](#).

Landfill

The quantity of LAC municipal waste sent to landfill decreased by 26.3 per cent, from 73,239 tonnes during October to December 2021 to 53,969 tonnes between October to December 2022. The quarterly landfill rate for October to December 2022 is 23.4 per cent, lower than the 29.9 per cent recorded during the same quarter of 2021. The latest quarterly landfill rate for household waste only is 22.6 per cent.

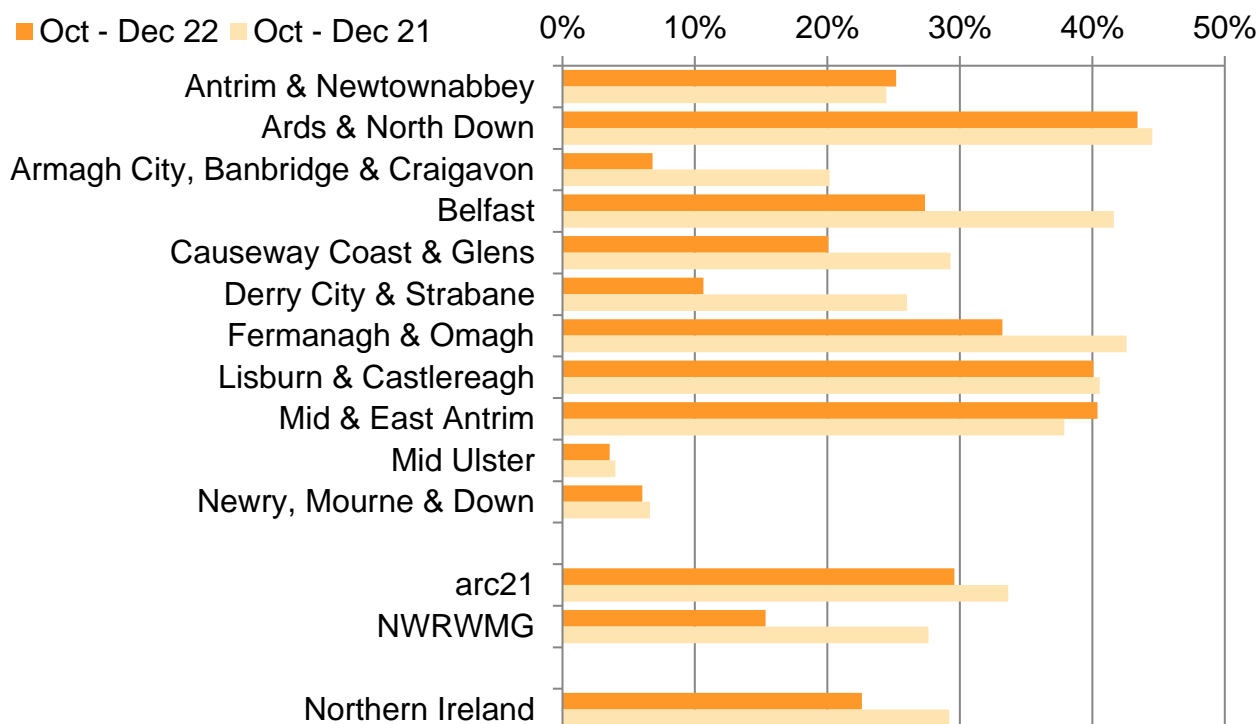
Figure 8: Waste sent to landfill

Northern Ireland, quarterly from 2006/07 to 2022/23, KPIs (b) and (f)



The longer 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 household waste landfill rate briefly increased in October to December 2021 but has returned to a similar rate as October to December 2020 in the latest quarter. 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 2021 and October to December 2022, KPI (b)



The highest household waste landfill rate was recorded in Ards & North Down at 43.4 per cent, whilst the lowest was recorded in Mid Ulster at 3.6 per cent. The household waste landfill rate decreased in eight district councils in October to December 2022 compared to the same three months in 2021, with the largest decrease recorded in Derry City & Strabane of 15.4 percentage points. Other large decreases in the landfill rate were recorded in Belfast, Armagh City, Banbridge & Craigavon, Fermanagh & Omagh and Causeway Coast & Glens compared to the same quarter in 2021. Two councils reported an increase in their household waste landfill rates compared to October to December 2021.

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.

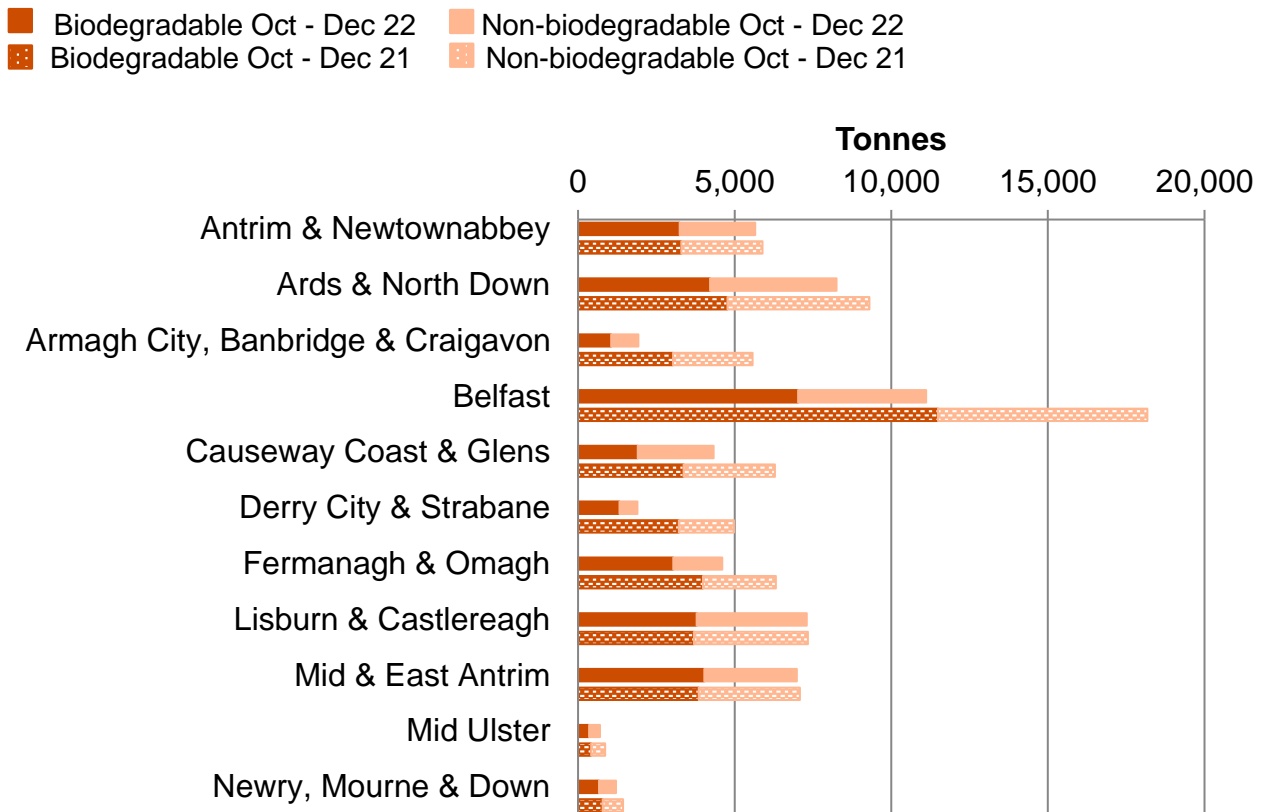
Biodegradable waste to landfill

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 30,648 tonnes of biodegradable waste to landfill between October to December 2022, which was 56.8 per cent of all waste sent to landfill. During the same quarter last year, 41,931 tonnes of biodegradable waste was sent to landfill which was 57.3 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 2021 and October to December 2022



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, 69.6 per cent (1,320 tonnes) of all waste sent to landfill was biodegradable, whilst in Causeway Coast & Glens, 44.0 per cent of all waste sent to landfill was biodegradable.

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 [assessment](#) against the Code of Practice, in January 2014 by the UK Statistics Authority.

A compliance check [assessment](#) 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.

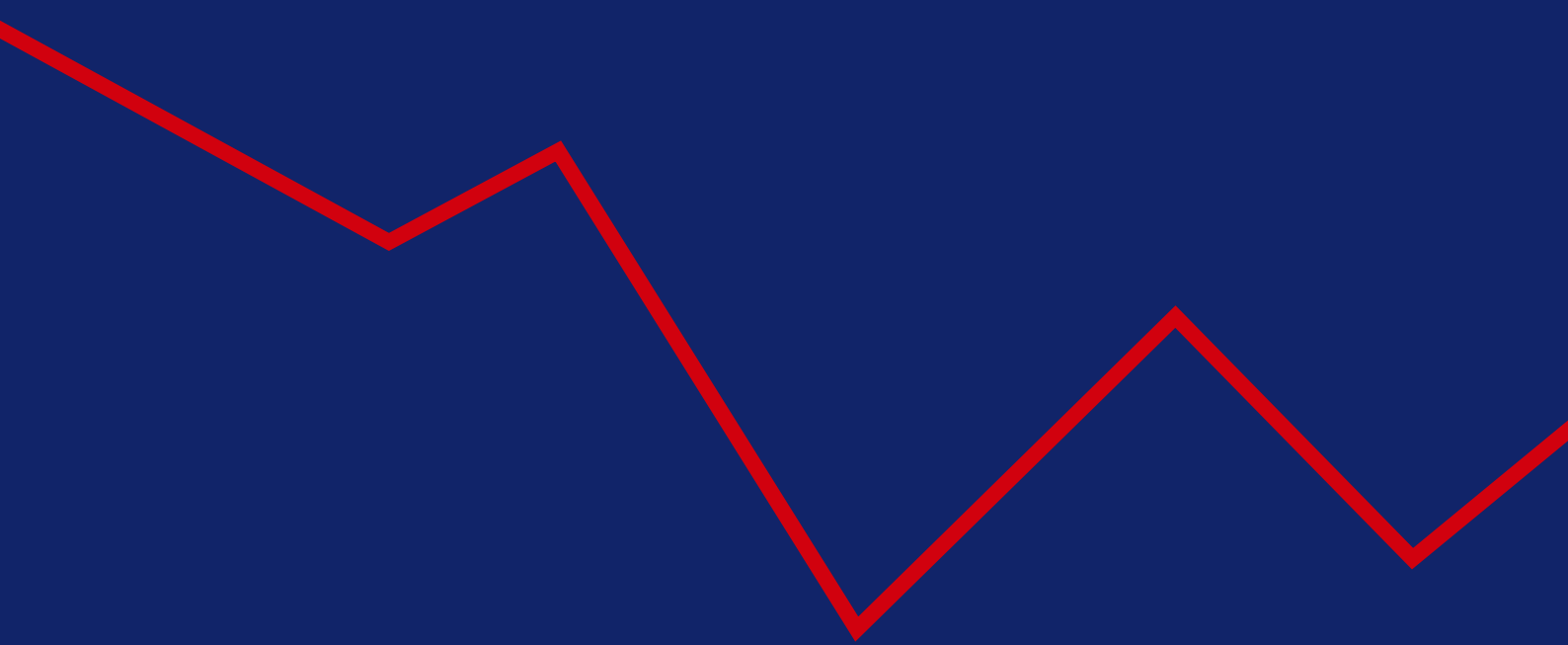
The conclusion of the compliance check cited the following actions as strengths:

- Ongoing quality assurance of the data contained within the report by reviewing methods on a quarterly basis.
- Improved statistical output by creating a [time series](#) of Northern Ireland local authority collected municipal waste management statistics to accompany the report and tables. This [dataset](#) is also available on Open Data NI along with a [time series](#) of materials collected at Northern Ireland local authority waste management sites.
- Improved statistical output by creating [infographics](#) to accompany the report and tables.
- Improved statistical output by creating an [interactive dashboard](#) 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](#)

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