

Local Authority Waste statistics - Recycling measures

Important – please note:

The definitions and measures described in this document apply to waste and recycling reporting and statistics up to and including the 12 month period ending 31st March 2021.

Any future changes in these definitions or calculations resulting from the implementation of the Circular Economy Programme across the UK will be described in future editions of this document.

1. Waste Collection

Across the UK, waste is generated from a variety of different sources including the public sector, commercial businesses, industry, agriculture, mining, forestry, fishing and households.

Local authorities have statutory duties to arrange for the collection and deposit of household waste in their area. In undertaking these duties, local authorities offer access to waste services to householders such as kerbside collections, bulky collections, [bring banks](#) and household waste recycling centres ([HWRC](#)). Local authorities also have duties to arrange for collection of commercial waste from premises in their areas (if requested) and ensure highways and roads are kept clean from litter and refuse.

Local authorities are required to report information on the types and quantities of waste they collect through undertaking these duties. The information is reported in a web-based system called [WasteDataFlow](#). This is the data source used to produce 'waste from households', 'household' and 'local authority collected municipal waste' (referred to as 'local authority collected waste in England') for National and UK waste statistics.

All other waste generated in the UK is collected and managed by private sector companies and therefore excluded from household and local authority collected municipal waste statistics. This includes where a householder makes alternative arrangements for removing some waste from their home such as via private sector waste skips.

2. Local authority collected waste and devolution

Waste policy is largely a devolved matter in the UK. Therefore, in England, Northern Ireland, Scotland and Wales, the devolved administrations are responsible for strategy and policy relating to waste management. This has led to each country having their own targets and methods of monitoring progress against those targets. This means that there can be substantial differences on what is included in [waste arisings](#) and what counts as recycled between each country, making comparisons difficult.

3. Official Recycling measures published by UK government's

There are three main local authority waste recycling measures (and recycling rates) presented in the National and Official statistical publications and datasets which are calculated from waste collection and disposal tonnages. These measures are hierarchical in terms of the different waste streams they include:-

Figure 1

Waste from households

Waste collected kerbside from Households and HWRC bring banks etc

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Household waste

As for **Waste from Households** plus waste collected via other local authority waste activities such as street cleaning, parks and grounds, street bins etc.

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Local authority collected municipal waste

As for **Household** plus non household waste and any commercial waste collected and managed by local authorities. Essentially all waste collected by local authorities.

These measures are described below. There are significant differences in the way recycling tonnages and rates are calculated across the UK countries. The table at Annex 1 below provides a summary of the main differences. Further information on specific calculation and data validation methods can be accessed for each UK country via the 'Useful Links' section.

3 a) Waste from households

This calculation was chosen as the UK interpretation of the European Commission term 'household waste'. It is defined as 'waste generated by households' and is applied as consistently as possible across the four UK devolved administrations. This means that it is the most accurate dataset to use to make comparisons between England, Northern Ireland, Scotland and Wales household waste statistics.

In general terms, these statistics include waste collected via local authority kerbside collections from households, HWRCs and bring banks. They exclude construction & demolition type waste (i.e. rubble, plasterboard, soil) collected by local authorities and waste collected via street cleaning activities.

3 b) Household waste

Household waste is broader in its scope of waste types included than Waste from households. The Household waste recycling rate is part of a suite of National local authority [key performance indicators](#) set up to monitor performance across local authorities in the UK. This measure includes those waste types within the waste from household definition and additionally waste collected from parks & grounds, street cleaning & gully emptying, street bins and separately collected health care waste.

3 c) Local authority collected municipal waste

Referred to as "Local authority collected waste" in England. This measure essentially relates to all waste collected by local authorities from households, non-household waste and

commercial waste. There are significant differences in the way recycling tonnages and rates are calculated across the UK countries – see Annex 1 below.

4. What is “recycling”?

The differentiation between the terms reuse, recycling and recovery is important for the understanding and application of targets in the UK.

Recycling of waste is defined as any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes.

It includes the reprocessing of organic material by [composting](#) or [anaerobic digestion](#) but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for [backfilling](#) operations.

When the UK has in the past reported progress on achieving EU targets, it followed the definition of recycling set by the EU. Generally, most UK countries apply this same definition to their own country targets. For example, all UK countries count the recycling of organic materials (e.g. via composting or anaerobic digestion) towards recycling rates and exclude any material that is disposed of via [incineration](#) and [landfill](#).

However, there is some variation in recycling reporting between UK countries such as differences in the inclusion of certain material types. For example, some UK countries include ash recovered after incineration in their national targets but this activity is not counted towards EU targets.

[Annex 1](#) of this document summarises the main differences between each UK countries reporting. The '[Useful links](#)' section provides links where further detail on each dataset can be found.

5. Accuracy of underlying data used to calculate waste and recycling measures

The management of waste in the UK is a complicated matter. Waste is collected from householders and businesses via different waste collection methods and is sent to facilities for storing, sorting and treatment throughout the UK prior to it being recycled or disposed. The waste is sent to a variety of different waste facilities depending on the method of collection, type of waste and available infrastructure. During this movement, the flow of waste does not remain unique to a specific origin because it is aggregated with similar waste from other origins e.g. paper bulked from a variety of different UK local authorities and businesses from all over the UK before being sent to a paper mill. Therefore, local authorities work with their contractors and the waste industry to track their waste as pragmatically as possible.

The accuracy of the data reported to WasteDataFlow is entirely dependent on the measurement, data management and reporting by local authorities and waste operators. While UK countries carry out validation in accordance with their own established procedures, the validation of WasteDataFlow and the cross checks with other available waste data is limited by the accuracy of that reporting.

6. How do local authorities report their waste figures?

Waste collection and disposal tonnages are reported by local authorities via the WasteDataFlow web portal. The data collected is extensive, covering [kerbside](#) recycling and [residual](#) waste collections, HWRCs and other collections or operations as specified below. Waste disposal data is complex and the WasteDataFlow system aims to record what

happens to the waste at important steps in its processing, sorting, contaminant removal, composting or anaerobic digestion, incineration or landfill. Local authorities will generally report as fully as they are able.

7. What counts as recycling in the above recycling measures?

The tonnage of waste 'sent for (preparing for) reuse, recycling and composting (inc. anaerobic digestion)' is that which is accepted by the re-processor. Local authorities report the tonnage of material by type (glass, paper etc) with the details of the re-processor it was sent to. At this point material will exclude any recycling rejects that occur during collection, sorting or further treatment. Waste diverted for recycling from the residual (or 'black bag waste') stream by further processing is included in recycling tonnages.

8. Regulation of Waste in the UK

8 a) Waste duty of care - code of practice

The duty of care applies to anyone who imports, produces, carries, keeps, treats, disposes of, or are a dealer or broker that has control of controlled waste, referred to for the purpose of the Code as a "waste holder". Failure to comply with the duty of care is an offence with no upper limit on the courts' power to fine. There are links to the Duty of Care Code of Practice at the ['Useful links'](#) section below.

8 b) Local Authority responsibilities

In summary under the code local authorities have to ensure that the waste they collect is disposed of in line with duty of care requirements. This means that: -

Local authority waste has to be treated in line with the waste hierarchy of prevention, reuse, recycling, recovery, disposal.

Local authorities have to check that their waste is correctly described, is going on to an authorised person, and that it will undergo the correct process at its destination. This applies to all destinations whether local, national or international.

This means that the data and destinations for recycling etc reported in WasteDataFlow are based on the legal requirement to keep accurate records of waste treatment and processing, ensuring good levels of accuracy for tonnages and destinations. However, it should be noted that waste from one authority may be combined with waste from others before being sent on for processing. This can present a challenge to report to final destinations and a pragmatic approach to estimating tonnages or destinations may be made in that instance.

There are further regulations covering material that is exported.

8 c) Regulation of the export of waste or material for recycling

Exports of waste are well regulated. As well as being covered by the duty of care, the transfrontier shipment (TFS) regulations lays down rules and regulations for the recording and documentation of waste exports. These regulations allow for the seizure of waste shipments not meeting the regulations and the prosecution in the courts of the parties involved.

It is therefore in the interest of any local authority whose waste is ultimately being exported to ensure it fully meet requirements around these rules and to report final destination of waste materials as fully as possible.

8 d) Reporting of materials exported for recycling

Where possible local authorities report exported waste material to the same level of detail as waste materials re-processed in the UK. However, notwithstanding the legal obligations outlined at 8 a) above waste export does present extra challenges in reporting to this level of detail. For example [recyclate](#) from a given local authority may be combined with that from other sources before being sold on and subsequently exported, or recyclate from multiple sources may be exported to various overseas destinations where it may not be possible to identify how much has gone to a particular country or facility.

9. How are the recycling rates for the 3 national measures listed above calculated?

The recycling rate is calculated for each of the recycling measures by taking the tonnage of all materials reported as being sent for (preparation for) reuse, recycling, and composting (inc. anaerobic digestion) as a proportion of all of the waste types / streams applicable to that particular measure. This is a simple proportional calculation:-

Recycling rate = Tonnes of material “recycled” / Tonnes of material collected.

Multiplied by 100 to show the result as a percentage

Where “recycled” is the tonnage of materials prepared for reuse, recycled, composted (inc. Anaerobic digestion).

Material collected is the tonnage of all waste types / streams within the scope of the measure

However, this recycling rate calculation is the last part of a series of more detailed set of methodology rules and calculations to obtain the tonnage of recycling for each of “household” “waste from household” and “Local authority collected municipal waste” definitions.

The calculations are quite detailed and further documentation on these can be found in the useful links section below.

Annex 1 - Summary of differences between reporting of local authority waste measures between UK countries

Collection types made by local authorities and specified materials	All UK countries (a)	Wales (b) national	Wales (b) national	England (c)	England (c)	Northern Ireland (d)	Northern Ireland (d)	Scotland National (e)
	'Waste from households'	'Household waste'	'Local authority municipal waste'	'Household waste'	'Local authority collected waste'	'Household waste'	'Local Authority Collected Municipal Waste'	'Household waste'
Residual & recycling collected waste – from kerbside, HWRC, bulky, bring banks & other household sources.	✓	✓	✓	✓	✓	✓	✓	✓
Parks & grounds	✗	✓	✓	✓	✓	✓	✓	✗
Street Cleaning which may inc gully emptying wastes	✗	✓	✓	✓	✓	✓	✓	✗
Street Bins	✗	✓	✓	✓	✓	✓	✓	✗
Separately collected healthcare waste	✗	✓	✓	✓	✓	✓	✓	✗
Commercial collections	✗	✗	✓	✗	✓	✗	✓	✗
Beach cleansing	✗	✗	✓	✗	✓	✗	✓	✗
Clearance of fly-tipped materials	✗	✗	✓	✗	✓	✗	✓	✗

Collection types made by local authorities and specified materials	All UK countries (a)	Wales (b) national	Wales (b) national	England (c)	England (c)	Northern Ireland (d)	Northern Ireland (d)	Scotland National (e)
	'Waste from households'	'Household waste'	'Local authority municipal waste'	'Household waste'	'Local authority collected waste'	'Household waste'	'Local Authority Collected Municipal Waste'	'Household waste'
Other 'non-household' waste categories in WasteDataFlow	✗	✗	✓	✗	✓	✗	✓	✗
Inclusion of waste sent to non PAS 110 / non Anaerobic Digestion Quality Protocol facilities	✓	✓	✓	✓	✓	✓	✓	✗
Inclusion of waste sent to non PAS 100 / non Compost Quality Protocol facilities	✓	✓	✓	✓	✓	✗	✗	✗
Asbestos waste	✗	✓	✓	✗	✗	✓	✓	✗
Soil	✗	✓	✓	✓	✓	✗	✓	✓
Rubble & plasterboard	✗	✗	✓	✗	✓	✗	✓	✓
Ash recovered after incineration	✗	✓	✓	✗	✗	✗	✗	✗
Metal recovered after incineration	✓	✓	✓	✗	✗	✗	✗	✗

Notes:

- a) Waste from Household recycling rate is published at UK and Country level for each of the 4 UK countries. N Ireland publish down to Local Authority level.
- b) Household Recycling rate for Wales published at Country level.
- c) Household Recycling rates for England published at England, regional and local authority level. "Local authority waste" is published at country, region and at local authority level for waste disposal authorities and unitary authorities only.
- d) Northern Ireland publish both recycling measures at country, region and local authority levels.
- e) Scotland publish household recycling measures at country and local authority levels.

Term	Explanation
Anaerobic digestion	The use of micro organisms to break down biodegradable waste material in the absence of oxygen. The process produces biogas which can be used as fuel.
Backfilling	The use of waste for reclamation purposes in excavated areas or for landscaping and where the waste is a substitute for non-waste materials.
Biodegradable waste	Any waste that is capable of undergoing anaerobic decomposition, such as food and garden waste, and paper and paperboard.
Bring bank	Also called "Bring site" An unmanned site with a container or a collection of containers for depositing recyclable 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.
Household waste	Includes materials 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).
HWRC	Household waste recycling centre. May also be referred to as civic amenity sites.
Incineration	Disposal through the combustion of waste. This includes waste that has been processed into a fuel. There may also be recovery of energy from the generation of heat and power.
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.
Landfill	Waste disposed of at a landfill site. 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 waste	May also be referred to as "local authority municipal waste". Waste which is collected under arrangements made by a local authority.
Non household waste	This includes: Asbestos, beach cleansing, fly-tipped materials, gully emptying's, 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.
Recyclate	Materials sent for recycling.
Residual waste	Waste that is not sent for preparing for reuse, sent for recycling or composting.
Waste arisings	The amount of waste collected in a given locality over a period of time.

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, household waste recycling centres etc).
WasteDataFlow	The web based system for local authority collected municipal waste data reporting by UK local authorities to government (www.wastedataflow.org).

Useful links

Regulation of waste

[Waste duty of care - code of practice](#)

<https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice/waste-duty-of-care-code-of-practice>

<https://www.daera-ni.gov.uk/publications/waste-management-duty-care-code-practice>

[Waste hierarchy - Guidance on applying the Waste Hierarchy](#)

<https://www.gov.uk/government/publications/guidance-on-applying-the-waste-hierarchy>

England:

National statistics methodology paper

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1040566/Methodology_summary_202021_accessible.pdf

[Waste from Households – WasteDataFlow guidance document.](#)

https://www.wastedataflow.org/Documents/GuidanceNotes/WastefromHouseholds/WfH_recycling_guidance_2020-02-21.pdf

[Household waste – \(legacy measures\) calculations](#)

https://www.wastedataflow.org/documents/guidancenotes/NationalIndicators/GN30a_BVPI_and_NI_comparator_calculations_Qu100.pdf

England Local Authority waste statistics web page

<https://www.gov.uk/government/statistics/local-authority-collected-waste-management-annual-results>

Northern Ireland:

[Waste from Households Calculation Methodology – WasteDataFlow guidance](#)

https://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/OtherGuidanceNotes/WfHrecyclingguidanceNI_v3.pdf

[Household Waste Calculation Methodology - WasteDataFlow guidance](#)

[https://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/KeyPerformanceIndicators/kpi_\(a2\)_v7.pdf](https://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/KeyPerformanceIndicators/kpi_(a2)_v7.pdf)

[Local Authority Collected Municipal Waste Calculation Methodology - WasteDataFlow guidance](#)

[https://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/KeyPerformanceIndicators/kpi_\(e2\)_v6.pdf](https://www.wastedataflow.org/documents/guidancenotes/NorthernIreland/KeyPerformanceIndicators/kpi_(e2)_v6.pdf)

[Northern Ireland local authority collected municipal waste management statistics – Web page](#)

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

Scotland:

[Household waste statistics](#)

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

[Household waste discover tool on Scotland's Environment Web](#)

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

[Household waste quality report](#)

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

[Zero waste plan recycling guidance for Scottish local authorities](#)

https://www.wastedataflow.org/documents/guidancenotes/Scotland/zero_waste_plan_recycling_guidance1.pdf

Wales:

[Wales local authority municipal waste management statistics – Web page](#)

[Local authority municipal waste \(gov.wales\)](#)

<https://myrecyclingwales.org.uk/>

[Natural Resources Wales / SoNaRR2020: Waste](#)