# 1 Introduction

This guidance document is designed to provide an overview of the reporting functionality available to Local Authority (LA) users of WasteDataFlow (WDF) within the "Reports" and "Data Management" sections of the WDF website. Separate guidance for public users is provided in guidance note GN4.9 Guidance for public users.

Reports can be generated in WasteDataFlow via either:

- "Data authorisation" found under the "Data" drop-down tab; or
- "Summary reports" found under the "Reports" drop-down tab.

This guidance note shows you how to generate reports and gives an overview of key aspects of selected reports. You can use the links below to take you directly to the sections within this document.

- Reports available from the Data authorisation page;
  - Performance indicators (section 2.1);
  - Mass Balance Report (section 2.2); and
  - EA Report (section 2.3).
- Reports available from the Summary reports page:
- Types of report available (section 3.1);
- How to run a report (section 3.2); and
- Understanding WasteDataFlow reports (overview of report types) (section 3.3) including:
  - Performance Indicator (PI) and Analytical reports (section 3.3.1);
  - Qu100 Recycling Report (section 3.3.2);
  - Question reports (section 3.3.3); and
  - Raw Data Reports (section 3.3.4).

Other useful guidance notes include:

- GN4.6: Full list of reports;
- GN30a: WDF Guidance Comparator calculations for NI 191-192 and BVPI 82a/b from Qu100; and
- GN30: WDF Guidance NI Calculations pre-Qu100.

The report functions of the WDF site allow you and others to view the data held within WDF in a variety of different formats, from raw question answers, to the outputs from complex performance indicator calculations. Reports are provided in Excel .xls or .xlsx format, with some able to be downloaded within .zip files to reduce transferred file size and increase download speed.

The range of reports available to you will depend on your user level (LA Data Entry, LA Data Administrator or Report User). Please see WDF System manual section 6: "Full List of Reports" (available to download from the Guidance page of the website) for further details of the reports available to different users and a summary of their contents and scope.

For English, Scottish and Welsh LAs there was a significant change to the way data is entered into the WDF system with the introduction of Question 100. Qu100 replaced several questions relating to the recycling, reuse, treatment and disposal of wastes. It has a different layout from older WDF questions in that the data is presented in a flow diagram "tree" structure with waste movements shown through progressive "branches" and "sub-branches" to the end destinations rather than data simply being entered into fixed boxes.

The Qu100 interface was first introduced to a trial group of Welsh local authorities for the October to December 2011 reporting period. After a gradual roll-out across Welsh LAs, for whom it became mandatory from April 2013, it was introduced in Scotland in April 2013 and became mandatory for all Scottish LAs from the October to December 2013 reporting period. Question 100 was opened to a selection of English LAs (UAs and "families" of WDAs and their WCAs) on a voluntary basis starting with data for April to June 2014 (2014-15 Quarter 1), with additional groups of LAs volunteering from a starting point of data for October to December 2014 (2014-15 Quarter 3) or January to March 2015 (2014-15 Quarter 4). All English LAs moved to Qu100 for data entry from Qtr1 2015-16 (April – June 2015).

Because the data in Qu100 is stored and processed differently, new reports have had to be developed in order to interrogate this data. Not all the report types support data entered using Qu100. If you wish to run a report covering a time period where a LA used the old data set in some quarters but Qu100 in others you will need to run 2 separate reports, where this is available.

# 2 Reports available from the Data authorisation page

There are three main reports available in the Data Authorisation section: Performance Indicators, Mass Balance and EA report.

# 2.1 Performance indicators (PIs)

This section focuses on the English performance indicator (PI) report. For details of the PI reports used by other regions please consult local guidance.

The Performance Indicator report provides an overview of current PI performance e.g. National Indicators (NI): NI191, NI192, NI193 and BVPIs<sup>1</sup> (England), WMT (Wales) and KPIs<sup>2</sup> (Northern Ireland). BVPIs ended in March 2008 and National Indicators ended in March 2011. Defra are no longer monitoring individual LAs for their performance against BVPI or National Indicator targets. However, WDF users will still be able to download reports based on the BVPIs and National Indicators from WDF, if they wish to produce consistent local data sets over a period of years. These BVPI and NI datasets<sup>3</sup> will continue to be based on the guidance which was established for the BVPIs (from April 2004 to March 2008) and National Indicators (from April 2008 to March 2011).

Guidance on the new "comparator" calculations can be found in "WDF Guidance – Comparator calculations for NI 191-192 and BVPI 82a/b from Qu100" on the WDF guidance page (England guidance section).

To access the Performance Indicator report click on the "PI" link on the Data Authorisation page. As with the validation report, the PI report generates an Excel workbook containing a number of different tabs as detailed in Table 1 below. The information available to view will depend on whether you are a WCA, WDA or UA.

The PI report for returns where Qu100 has been completed is slightly different from that generated for periods where the old question set was completed. This is to allow for the more complex tree like structure of Qu100 to be accommodated in the calculations.

<sup>&</sup>lt;sup>1</sup> Best Value Performance Indicators.

<sup>&</sup>lt;sup>2</sup> Key Performance Indicators.

<sup>&</sup>lt;sup>3</sup> NI and BVPI reports for periods where Qu100 has been used provide more information than previously but use "comparator" calculations rather than following exactly the same logic as the older versions. This is indicated in the reports by the designation (Provisional) in the title of each NI or BVPI on the Summary page.

Note: LAs which moved over to Qu100 part-way through 2014/15 will need to download two PI sheets to see data for that year; one for the last of the quarters where they used the non-Qu100 question set and one for when they moved over to Qu100.

Worksheet	Old question set	New question set
		(20100)
Summary	$\checkmark$	$\checkmark$
NI191 Detail	~	$\checkmark$
NI192 Detail	$\checkmark$	$\checkmark$
NI 193 Detail	✓	$\checkmark$
BVPI82a Detail	$\checkmark$	$\checkmark$
BVPI82b Detail	$\checkmark$	$\checkmark$
BVPI 82c Detail	$\checkmark$	$\checkmark$
BVPI 82d Detail	✓	$\checkmark$
BVPI 87 Detail	$\checkmark$	$\checkmark$
C-Variables	$\checkmark$	$\checkmark$
Qtr1 - Recycling Data Table	×	$\checkmark$
Qtr1 - Landfill Data Table	×	$\checkmark$
Qtr1 - EfW Data Table	×	$\checkmark$
Qtr2 - Recycling Data Table	×	$\checkmark$
Qtr2 - Landfill Data Table	×	$\checkmark$
Otr2 - EfW Data Table	×	$\checkmark$
Qtr3 - Recycling Data Table	×	$\checkmark$
Qtr3 - Landfill Data Table	×	$\checkmark$
Qtr3 - EfW Data Table	×	$\checkmark$
Otr4 - Recycling Data Table	×	$\checkmark$
Qtr4 - Landfill Data Table	×	$\checkmark$
Qtr4 - EfW Data Table	×	$\checkmark$
C-Variable Export	×	$\checkmark$

#### Table 1. Worksheets in PI report for periods using old question set and Qu100.

Once open the report contains several different tabs which are described in more detail below.

The figures below have all been taken from Jul-Sept 2015 so use data entered into Qu100.

#### a) Summary Tab

Once the PI report is opened the "Summary" tab will be displayed by default. The tab contains a number of tables, each relating to a different National Indicator or BVPI. A detailed overview of how the NIs and BVPIs are calculated is provided in the "C-Variables"<sup>4</sup> and "C-Variables Export" tabs. Further details on the National Indicator calculations can be found in the NI Guidance section of the Guidance page on the WDF website.

#### Figure 1 Example PI report summary tab

1 2 3 4 5	WasteDataFlow
6 7 8	NATIONAL INDICATORS & Metrics - Development
	THIS INFORMATION IS PROVIDED FOR GUIDANCE ONLY - VALIDATION OF THE QUARTER MAY LEAD TO INFORMATION HAVING TO BE CHANGED.
9 10	Calculation Details for National Indicators (NI191, NI192 & NI193) are available from their individual detail tabs
11	N and Comparator BVPI guidance can be found on the WDF website http://www.wastedalaflow.org/htm/datasets.aspxith/
12	nu no zenie proteste outende une enoues no opanies mote obnie nam new nam new new new proteste outende new new guarte from the data authorisation page Annual values mil only be genorated where Durit Data vesed for all quarters.
13	
14	NI191: Residual Household Waste per Household (Provisional)
15	
17	$\frac{1}{201546} = \frac{1}{201546} = \frac{1}$
	recucling, reuse or the second s
18	compositing - 1,213.67 tonnes Fram Detail Tab
19	Number of households
20	Hesidual Hirl Waste Kg ( Household
21	
22	NI192: Percentage HH waste sent for Reuse, Recycling or Composting (Provisional)
23	
24	Q1 Q2 Q3 Q4 Total For
25	2015/16 2015/16 2015/16 2015/16
26	HH waste sent for recycling.
20	Telester of composing - contast contrast
28	Reuse, Recycling and - 57.9% per cent
14 4	🕨 🕨 Summary / NI191 Detail / NI192 Detail / NI193 Detail / HHid Recycling Detail (82a) / HHid Composting Detail (82b) / HHid En Reci

The indicators displayed will depend on the type of authority that the report is being run for. This is highlighted in the table below.

<sup>&</sup>lt;sup>4</sup> The term "C-Variables" is short for "calculated variables", as described later. These "building blocks" for reports are also sometimes referred to as "C-Vars".

GN4: Section 5 – Reporting for Local Authority Users

Table 2.	BVPI	and NI	Reports.
----------	------	--------	----------

		Authority Type	
Indicator	WCA	WDA	UA
NI191	$\checkmark$	$\checkmark$	$\checkmark$
NI192	$\checkmark$	$\checkmark$	$\checkmark$
NI193	×	$\checkmark$	$\checkmark$
BVPI82a	$\checkmark$	$\checkmark$	$\checkmark$
BVPI82b	$\checkmark$	$\checkmark$	$\checkmark$
BVPI82c	$\checkmark$	$\checkmark$	$\checkmark$
BVPI82d	$\checkmark$	$\checkmark$	$\checkmark$
BVPI 84a	$\checkmark$	$\checkmark$	$\checkmark$
BVPI 84b	$\checkmark$	$\checkmark$	$\checkmark$
BVPI86	$\checkmark$	×	$\checkmark$
BVPI87	*	$\checkmark$	$\checkmark$
BVPI91a	$\checkmark$	×	$\checkmark$
BVPI91b	$\checkmark$	×	$\checkmark$

For the majority of indicators the table shows a quarterly as well as an annual figure. In situations where not all quarters have been completed during the year for which the report was generated, a year-to-date figure (totalling the data currently available) is shown in the annual column. The older version of the PI report (pre-Qu100) also shows annual data for the previous year but this is not available in the Qu100 PI report. The figures shown on this tab are pulled from the "C-Variables" tab or the relevant Detail tab (see below).

#### Figure 2 BVPI82a example.

Percentage of household waste arisings which have been sent for recycling - (BVPI82a Comparator) (Provisional)

	Q1	Q2	Q3	Q4	Total For		
	2015/16	2015/16	2015/16	2015/16	2015/16		
Household dry recycling	-	1,331.33	-	-	-	tonnes	From Detail Tab
Total HH Waste Collected	-	2,885.00	-	-	2,885.00	tonnes	CVAR
Dry recycling rate	-	46.15%	-	-	-	per cent	

WDF Tip – These reports should be reviewed in conjunction with the NI and BVPI guidance which is available to download from the WDF website. As the values for the PIs are ultimately based on the data entered into WDF, it can be worth comparing these figures with any in-house PI calculators you may use, as a further validation check to ensure the data entered into WDF is complete. There are guidance notes for the non-Qu100 reports (GN30 for NIs and GN33 for BVPIs) which include references to the old questions which have been replaced by Qu100, as well as a guidance document (GN 30a) to show how the calculations have been updated to account for the data provided by Qu100.

#### b) NI & BVPI Detail Tabs

These tabs give a detailed breakdown of how each of the relevant NIs and BVPIs are calculated, showing how the numerator and the denominator break down into their component parts, referred to as c-variables. The details of each c-variable are provided in the "C-Variables" tab (see below).

#### Figure 3 NI193 Detail tab.

#### NI193 – Percentage of Municipal Waste Sent To Landfill

Numerator : Municipal Waste Landfilled

	Q10,12, 16, 17, 33, 34 Rejects For Recycling and Reuse (All Materials)	Qu100 Direct to Landfill C1046	Qu100 Indirect to Landfill C1047	England NI 193 numerator - Total municipal waste sent to landfill C405
Q1	-	1,000.00	10.00	1,010.00
Q2	-	12,101.00	13.58	12,114.58
Q3	-	-		
Q4	-	-		
Total	-	13,101.00	23.58	13,124.58
2	Chiar Driven	From Data Table	From Data Table	Calculated here

#### Denominator : Total Municipal Waste Collected

	Q23 HH Residual Waste C17	Q23 NH Residual ¥aste C18	Q10, 11, 12, 16, 17, 18, 33, 34 Tonnage Collected For Recycling or Reuse C42	193 denominator - Total municipal waste collected C406
Q1	-	-		-
Q2	1,230.00	10.00	1,655.00	2,895.00
Q3	-	-	-	-
Q4	-	-		
Total	1,230.00	10.00	1,655.00	2,895.00
	C-Var Driven	C-Var Driven	C-Var Driven	C-Var Driven

NI193 numerator = C98 + C1046 + C1047

This represents C405

NI 193 Denominator = C42 + C17 + C18

This represents C406

#### c) Quarterly Data tables tabs

There are 3 tabs for each quarter showing recycling, Landfill and EfW data and these contain figures based on the Qu100 tree. These show information relating to:

- Facility details the facility and its root/ parent facility;
- Tonnage details (Recycling tab) or Tonnage (Landfill and EfW tabs) material tonnage, collection type, route, collection type (e.g. segregated, residual);
- Source source split applied, route (e.g. direct, from residual waste, via MRF, segregated collection etc.); and
- Tonnages (Recycling tab) or Indicators (Landfill and EfW tabs) details of tonnages included in relevant indicators.

#### Figure 4 Recycling Data Table example.

		Facility Details	2			
Root Facility Type	Root Waste Stream Type	Parent Type	Parent Organisation name	Parent Organisation Address	Output process type	Output process type Counts fe NI192?
Incineration with energy recovery	Residual waste	Reprocessor - recycling (qu19)	White Recycling Ltd	New Hall Farm, Liverpool Ro	Incinerator fly ash	No
RDF, autoclave, MHT or similar	Residual waste	Reprocessor - recycling (qu19)	Biffa Waste Management Lt	Nation Wide Works, Viking F	Incinerator bottom a	No
Materials recovery facility	Comingled recyclate	Reprocessor - recycling (qu19)	Other/Exempt	xyz	Dry recyclate	Yes
Materials recovery facility	Comingled recyclate	Reprocessor - recycling (qu19)	Outside UK-EU	Facility Outside The Uk But	Dry recyclate	Yes
Windrow or other composting	Green waste	Windrow or other composting	Biffa Leicester Ltd	Bridge Road C A Site, Bridge	Composting	Yes
Windrow or other composting	Mixed green and food waste	Windrow or other composting	Compost/Exempt		Composting	Yes
Other Method	Residual waste	Reprocessor - recycling (qu19)	Other/Exempt		Dry recyclate	Yes
Other Method	Residual waste	Reprocessor - recycling (qu19)	Other/Exempt		Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Other/Exempt	Test	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Biffa Waste Services Limited	Curran Embankment, Rivers	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Biffa Waste Services Limited	Curran Embankment, Rivers	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Biffa Waste Services Limited	Curran Embankment, Rivers	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Biffa Waste Services Limited	Curran Embankment, Rivers	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Biffa Waste Services Limited	Curran Embankment, Rivers	Dry recyclate	Yes
Reprocessor - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Recresco Ltd	Manisty Wharf, North Road,	Dry recyclate	Yes
Reuse (qu35)	Source segregated recyclate	Reprocessor - recycling (qu19)			Dry recyclate	Yes
Exporter - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Outside UK-EU	Facility Outside The Uk But	Dry recyclate	Yes
Exporter - recycling (qu19)	Source segregated recyclate	Reprocessor - recycling (qu19)	Outside UK-EU	Facility Outside The Uk But	Dry recyclate	Yes

#### d) C-Variables tab

The performance indicators available in the PI download are based on multi-stage calculations, which transform the raw data you enter into WDF into the single values displayed on the "Summary" tab. Each step in these calculations produces a figure which then feeds into the next. These intermediate steps are referred to as "calculated variables", which you will usually see shortened to "c-variables" or "c-vars".

Each c-variable used by WDF is given its own unique identifier in the format C1, C2, C3 etc. There are also different levels of c-variable, depending on where the numbers used to create it came from. The following bullets and examples have been selected to provide a guide to these levels and to highlight how c-variables are used to establish the PI numbers.

- Base Some c-variables are calculated directly from the raw data entered into WDF. For example C17 is the total household residual waste collected in Qu23.
- Secondary Secondary c-variables aren't created directly from raw data but instead are formed from a calculation containing Base c-variables. For example C205 = C17 + C21 (C205 is then used as the denominator for BVPI 82a).
- Tertiary There are also a small number of c-variables which are based on Secondary c-variables. For example C301 = C201 / C205 (in this example C301 is actually the figure for BVPI 82a).

A simple way to think of c-variables is as ingredients in a recipe. As mentioned the details of how the c-variables have been calculated is provided in the "C-Variables" tab of the PI report. The layout of this tab is provided below, along with a description of what is contained within each row and column.

#### Figure 5 C-Variables Tab

.A.	A	В	C	D	E	F	G	H
1		N B. From Apr 2010 those C Variables which indicate the exclusion of rubble also exclude plasterboard		Q1	Q2	Q3	Q4	
2	C Variable	Description	2014/15	2015/16	2015/16	2015/16	2015/16	2015/16
3	C2	Q10,12, 16, 17, 33, 34 HH Rejected For Recycling (excl green, other compost, rubble)			0			
4	C4	Q11 NH Collected For Recycling (excl green, other compost, rubble)			0			
5	C8	Q10, 12, 16, 17, 33, 34 Co-mingled Collected			500			
6	C10	Q11 Co-Mingled Collected			0			
7	C17	Q23 HH Residual Waste			1230			
8	C18	Q23 NH Residual Waste			10			
9	C21	Q10, 12, 16, 17, 33, 34 Collected For Recycling (excl rubble) plus Q18 HH			1655			
10	C24	Q10, 12, 16, 17, 33, 34 Green and other Compostable Rejected For Recycling			0			
11	C25	Q11 Green and other Compostable Collected For Recycling			0			
12	C42	Q10, 11, 12, 16, 17, 18, 33, 34 Tonnage Collected For Recycling or Reuse			1655			
13	C86	Q10, 12, 16, 17, 33, 34 Rejected For Reuse (excl. green, other compost and rubble)			0			
14	C88	Q11 Collected For Reuse (excluding green, other compost & rubble )			0			
15	C89	Q10, 11, 12, 16, 17, 33, 34 Green and Other Compostable Rejected For Reuse			0			
16	C92	Q11 Green and Other Compostable Collected For Reuse			0			
17	C98	Q10,12, 16, 17, 33, 34 Rejects For Recycling and Reuse (All Materials)			0			
18	C205	Total Household Waste collected (excl reuse. Sum of C17 and C21)			2885			
19	C206	Population of Authority			1000			
20	C207	Cost of HH and non-HH Waste Collection						
21	C208	Dwelling Stock in Authority Area			0			
22	C209	Cost of HH and non-HH Waste Disposal						
23	C210	Total Municipal Waste			2895			
24	C211	Households receving kerbside collection of 1 recyclable			0			
25	C212	Households receving kerbside collection of 2 recyclables			0			
26	C213	Ratio of C205 current year / previous year						
27	C214	Ratio of C206 current year / previous year						
28	C305	BVPI 84a						
29	C306	BVPI 84b						
30	C307	BVPI 86						
4 4	H H	tr3 - Landfil Data Table 🖌 Otr3 - EfW Data Table 🖌 Otr4 - Recycling Data Table 🖌 Otr4 - Landfil Data	Table / Qt	r4 - EfW D	ata Table	C-Vari	ables 🥖	C-Variables

- **Column A** lists the c-variable identifier e.g. C1, C2, C3.
- **Column B** provides a description of how the c-variable is generated. In most cases this description gives a breakdown of the questions that the tonnages/data have been taken from.
- **Column C** where available this provides the annual figure for the previous year's performance in relation to the associated c-variables.
- **Column D G** provides the data calculated for each c-variable for that quarter.
- **Column H** where applicable this provides the annual figure for the current reporting year's performance in relation to the associated c-variables.

The c-variables in themselves can provide interesting indicators, allowing you to drill down into the overall PIs to identify which specific areas may be performing better than others. They also allow for any discrepancies identified in the PI figures to be more easily tracked back to identify where they may have arisen.

#### e) C-Variables Export

This tab is similar to the C-Variables tab but includes secondary and tertiary c-variables as shown in Figure 6 below. The C-Variables tab includes c-variables which are generated by the WDF database and then imported to the PI sheet to support its calculations. The export tab is used for c-variables which have been calculated on the PI sheet itself and are then exported from the sheet, back into the WDF database ready for use in the Qu100-based PI summary reports.

#### Figure 6 C-Variables tab

	А	В	С	D	E	F	G	Н
1		N.B. From Apr 2010 those C Variables which indicate the exclusion of rubble		Q1	Q2	Q3	Q4	
2	C Variable	Description	2014/15	2015/16	2015/16	2015/16	2015/16	2015/16
3	C401	England NI 191 numerator - HH waste not sent for recycling, reuse or composting		0	1213.674	0	0	
4	C403	England NI 192 numerator - hh waste sent for recycling, composting or reuse		0	1671.326	0	0	
5	C405	England NI 193 numerator - Total municipal waste sent to landfill		1010	12114.58	0	0	
6	C1046	Qu100 Direct to Landfill		1000	12101	0	0	
7	C1047	Qu100 Indirect to Landfill		10	13.58	0	0	
8	C1048	Household Waste Sent For Dry Recycling		0	1331.326	0	0	
9	C1049	Household Waste Sent For Composting		0	340	0	0	
10	C1050	Qu100 Household waste Direct to Energy Recovery		0	99.193548	0	0	
11	C1051	Qu100 Household waste rejected to Energy Recovery		0	1019.9279	0	0	
12	C1052	Household Waste Used For Energy Recovery		0	1019.9279	0	0	
13	C1053	Qu100 Household waste Direct to landfill		0	12003.411	0	0	
14	C1054	Qu100 Household waste rejected to landfill		0	13.551129	0	0	
15	C1055	Household Waste Sent To Landfill		0	12016.962	0	0	
40								

# 2.2 Mass Balance Report

Following the end of LATS for English LAs in the 2012/13 reporting year, no further updates have been made to the English Mass Balance report to support Qu100. As all English LAs moved over to using Qu100 for reporting from April 2015 onwards, the Mass Balance report is only available up to Jan-Mar 2015 for English LAs.

The Mass Balance report is only available to WDAs and UAs and can be accessed from the Data Authorisation page by selecting the MBal link against the period for which you want to run the report. The report provides an indication of the LATS (England)<sup>5</sup> or LAS (Northern Ireland and Wales) mass balance calculation for the quarter selected i.e. the amount of Biodegradable Municipal Waste Landfilled (BMWL).

The report is downloaded as an Excel spreadsheet and for UAs it only contains one tab, the "Summary" tab. WDA reports include a "Summary" tab (total figures), and separate tabs for the WDA and each of their WCAs showing a breakdown of their recycling tonnages, which contribute to the overall total of BMW diverted from landfill.

WDF Tip – Details of how the various aspects of the mass balance calculation are calculated can be found in the WDA and UA Mass Balance Guidance notes, available to download from the WDF website. These notes explain which questions and assumptions are used to generate the different components of the MBal report.

When reviewing the mass balance report, it is important to note that the mass balance calculation is designed to give an indication of an authority's LATS performance. The accuracy of the calculation is dependent on the quality of the quarterly data which has been reported. The calculation is available once entered data has been rolled into a quarter (Level 10) and so can be used on data not validated by WDF. There is a risk associated with using the output figures from mass balance for any purpose other than as an estimate of performance.

<sup>&</sup>lt;sup>5</sup> The Landfill Allowances and Trading Scheme finished in England at the end of scheme year 2012-13 but this report can still be used for benchmarking and other monitoring uses up to March 2015.

#### Figure 7 The Mass Balance Report<sup>6</sup>

Indicat																		
					Respel	-						Ret			_	Hat Dire	e Namia	Hat
Bas Bar Hatasis	đ.	Callest		Tatal	Saut for		Sant fr	am Reet	Tatal	Calles	ta d Eall	Vatel	Saul 1	a Bartin	Intel	With the second	Binda	Sinds
1 Groot gie	4	742.4	9	742.4	324.0				324.6						· · ·	324		1
2 Drawn da		477.4	1	417.4	234.3	-			224.3	1		- 2	1	1		214	87	10
4 Houlds	<b>8</b> 2	1,849.3	+	1,141.3	2,747.1	- 4			2,797.5					1.4		2,707	1 A/	1.1
Paper		2,5%1.2	-	2,946.2	1,214.2				1,319.2				-			7,379.	18.8	
T Books		0.1		15.5	0.1				15.1							10		0.0
8. Hinden	ut B and	9.5	+	1.5	1.5				1.5		.4.					÷,	1941	9,5
* Sheal room	Contract Con										+		1.1				10.2	107
H History	E DEM	1292.2		1,242.2	1592.0				1312.0					1		1.512		1.12
12 Plattine	Second	291.0	+	281.0	\$65.7				666.7		4			+		606.	8 83	
34 Pintella	etie Battlas	72,4		32.2	97.4	-			87.4						1.4	97.		1.12
36 HOPE(2)			+			4	+	+		-	+			- 4		+		1.12
37 PV0(3)				14	1.1				1.0					. 4				1.19
20 Regitable	001	3.8	- ÷.	3.8	2.0	. 4			3.6		- 4.			. +		3.	100.	2.8
28 Marialo	ANT	0.8	1	4.8	11.5		1		0.8	- 2-	1	- 1				10.	1	10
50 Aurorale			4			- 4			- 4		4		4	4	+			1.5
60 Brierarbe	1000 C	5		- 20	1.			-	1.1		+							13
62 Fire unio	and an and a state of the state	45							1.2	1							1	10
43. Gurbattle	• Store 1.	2.8	+	1.0	1.0				1.1		+					7.		1
the ball trans	eartridgie /	93.9	+	92.8	12.5		· +		93.8	1	+			+	+	*5		1.13
36 Paint	Survey .		1	1.1	1.4					1	4			4				1.1
18 Teotike S	Familian ar	276.6		2014	211.4	-			211.4		÷	-				376	990	195.1
45 Tidestop	u, DYDe aud Olla			1		-			1.1	- 1			1					1
21 Other mat	uride	2.4	-	2.4	8.2				1.2		-			1.9				1.1
64 Bicyclar	200 and 1													1			87	1
14 Caminals	Induita Induita	6,241.4		8888		-	-		-					-			nin .	884
Recreting, Santo Restre, Santo Sector Buttern for State and Mar	HRF Reject Lite Rejected To Londfill Rejected To Londfill Longthed (pu54755)	192.2 • • •																
dicative Mace	HILF Reject Cry Rejected To Lead Hill Area the Constant Area the Constant Area the Constant Area the Constant Balance Calculation	192.2	ikcidge	chirs.Co	saty Ces	ncil Fo	r Qct 0	3 - Dec	83				_				e met e er,	
Reryeling, Sent. Reute, Sent. Levis Batten for Maradilles Mass	MRF Reject FPV Respond To Londfill Rescaled (as 54755) to rescaled (as 54755) to rescaled (as 54755) balance Colculation holds (Tarts	192.2	abcidge.	chirs.Co	saty Cer	ncil Fo	c Qct 0	3 - Dec	¥2		_		_				e ar terr,	
Rargenting, Sant, Henre, Sant, Sant Battem für Battem für Battem Massa Raridealt HEWy Taraftat	MRF Briess Fry. Rejected To Londith Rejected To Londith Research (19954752) Selected File Balance, Calculation Initia (19777) Balance, Calculation Initia (19777)	192.3	ibridge London	a <b>hirs Co</b>	anty Con	ncil Fo	e Oct O	2 - Dec	Q2				_					
Renzelling, Kant, Renze, Sant, Nacio Battan du Mac and Ha Mac and Ha Renided HSWy Tanditak Renz	Mill Reject Live Regented To Londition Resected To Londition Resected To Londition Resected To Londition Resected To Londition Include different Include different Include different	192.3 • • • • • • • • • • • • • • • • • • •	Bridgs Longfing Latte H	chirs Co	saty Cos	ncil Fo	e Oct O	3 - Dec	\$2 bal		=		_					
Renzy elling, Kant, Renzy, Sant, Renzy, Sant, Renzy, Sant, Renzy, Sant, History, Sant, History, Sant, History, Sant, Renzy, Renzy,	Mill Barjess Erk Reinsted Ta Leadrill Reinsted Ta Leadrill Reinsted Ta Leadrill Reinsted Ta Leadrich Indra Statistics In a second and for the second Indra Statistics Indra Statistics Indra Statistics	102.3 • • • • • • • • • • • • • • • • • • •	theidge Loude Littl H Eduard Brown	chirs Co references for and the produce of the resolution	saty Cos man from 196, in affection of 75	ncil Fo 4. 0, 4. 4	e Oct O 1. H. H. HP referience	2 - Dec Vice daju Fice daju	£3				_					
Racyoling, Sant, Bears, Sant, Bears, Sant, San Barton, Re- Mar and Sla Mar and Sla Martin Resided Hilly Tandical Brown Drowy Tandical	Mill Barjess Erk Rejacted To Leadill Rejacted To Leadill Rejacted To Leadill Rejacted To Leadill Rejacted To Sciences In The Sciences Sciences Internet Sciences and Heatiged Very Land Heatiged Very	192.3 • • • • • • • • • • • • • • • • • • •	bridgs brother brother brother brother	akira Co adarati Majarati Majarati Majarati	saty Cos man from 199, in addretion of 71 rhgs. didfe or	acil Fo 40.07.47.4	e Oct B I ut U, Hy rathe Lead	2 - Das Vicaj Hara da Ju	£3 HL				_					
Racy cling, Sant, Reace, Sant, Reace, Sant, Reace, Sant, Reace and Sta Reace and Sta R	Mill Barjess Erk Rejarted Ta Leadill Rejarted Ta Leadill Rejarted Ta Leadill Rejartes Ta Leadill Rejartes Calestation India of Paris ented Missiskel Wats	192.3 For Cas 36,210 19,241	bridgs bridgs bitti it britti it britti it britti it britti it	aline Co office land product the product of the mode of the state of t	unty Cox	ncil Fo st. 6, 9, 9, politician annotata factorian	e Oct B , u.u. sy ratio Load adaption Officiers	2 - Dec Vicej Hardelate Hardelate	£3				_					
Recycling, Seek Recycling, Seek Recycling, Seek Recycling, Mass Recordsoff H2Ny Tariolog BMNy Tariolog Day Tariolog Day Tariolog Day Tariolog	Mill Rejeast Erk Rejacted To Leadin Rejacted To Leadin Rejacted To Leadin Rejacted To Leadin India of Torre ented Nacional Ware Cardidio Maria di Ware Cardidio Maria di Ware Cardidio Maria di Ware Cardidio Maria di Ware	192.3 • • • • • • • • • • • • •	thready Longitus Longitus Longitus Distants Distants Longitus Longitus Distants Longitus Distants Distants	alire Co and room for the part of the service of th	sate Ces marte Ces marter (M. Marter (M. Mar	ncil Fo st. 6, 4, 4, 4 politician annotation factorian factorian	s. Oct. 8 , 4, 6, 6p mitheland mitheland on Little Tubert	2 - Dec. Vice) - Inter Children - Internet - Internet - Internet	83 Hel.									
Recy Hing, Sant Recy State Recy State Records and Records and Reco	HIT Depress Carbon Reported To Lead Hit Reported To Lead Hit Reported To Lead Hit Reported To Lead Hit Reported Hit Report Have and Hearing Have Lead Hearing Have Lead Hearing Have Lead Hearing Have Lead Hearing Have Lead Hearing Have	192.3 • • • • • • • • • • • • •	thread gas bergeling berge	atirs Co of root loss free states root of the root of the root of the root of	sate Cos much set (M) much set	Actil Fo	s. Oct. S. T. H. H. H. H. Hiller Land Marked Land On Little Land Haller Haller Land Haller Haller Haller Haller Haller Haller	2 - Dec. vice) - in control in Control in control in control in control in control in control in control in control	<b>93</b> 14.						2			
Rarge Hira, Kant, Brezz, Sant Sin Petter, Sin Petter, Sin Petter, Rardadh PENY Tanical Brite Ding Tentical Ding Tented Ding Tented Ding Tented	HIR Parence CP Reported To Leader Reported To Leader Reported To Leader Reported To Leader Reported To Leader Report Reported To Leader Report Report Reported To Leader Report Report Reported To Leader Report Report Reported To Leader Report Report Report Reported To Leader Report Report Re	192.2 • • • • • • • • • • • • •	bridge Lingelin Little H Robert D Freedor Freedor Statut Robert of Robert O	alters Co ministration free block per color block per color per color per color per color free block free block free color free colo	sata Can agar fron Sil Ingel for the Ingel f	an cill <b>F</b> o st. 61, 42, 4 posta atom accordination des contractor des contractor des contractor des contractor des contractor	C. G. C. B. Status and satisfied and satisfi	3 - Dec Marce (13) In the Explore In Contract In Contract (15) (15) (15) (15) (15) (15) (15) (15)	<b>03</b> He.						2			
Reception of the second	HIRE Research for Reported To Lange Hill Reported To Lange Hill Reported To Lange Hill Reported To Lange Hill Report Annual Constraints International Constraints Constraints of Hills Constraints of Hills	192.2	bridge Longfog 16111 H Ectored Brighter Friedlag Statut Reserved R	ables Co and reast law free places to per rate of the reast and the reas	sate Can mar from 99, and fullower 70 mar distance 70 mar dist	acil Fo 40.40,40,40 pediation according description description activities	e Oct O , 4, 8, 90 esticatura sateljatura on hiti jato on hiti jato di stiti iti	2 - Dec vice) - in a disjon - in Englant a vices of a vices of - in Table	<b>93</b>						2			
Re or official, status Resolution Resolu	HIRE Research Pro- Reserved I to the HIRE Reserved I to the HIRE Reserved I to the HIRE HIRE AND ADDRESS AND AD	192.3 • • • • • • • • • • • • • • • • • • •	Bridge Longelog Still Bi Ectorely Storgelog St	advine Co and rever law http://www.inter- http://wwwwwwww.inter- http://wwww.inter- http://wwww.inter- http://wwww.inter- http://wwwwwwwwwwwwwwwww.inter- http://wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww	saty Cos materials (M materials	acil Fo H. H. A. H. Selfation Antipologia Antipologia Antipologia Antipologia	e Oct 0 , u. u. u. ur nich die de mich die de mich die de mich die den Mi	2 - Dec Vice - In English - In	<b>14</b>						2			
Rest of the second seco	HIRE Research For Reported To Lange Hill Reported To Lange Hill Reported To Lange Hill Reported To Lange Hill Report Hill Report To Lange Hardta et Marcing of Varia end Hinacing of Varia Incent dist Provided Varia	192.3 • • • • • • • • • • • • •	Brogeling Statut M Edited V Brogeling Statut M Singeling	atters Co and receive loss formation and the personal of the second and the conversion of the second and the se	sate Con sector CR sentences T T are a data so are a data fun are	ACT ST	e Oct B , 40, 00, 00 reditation antripitant out to pro- ter-	2 - Dec Vice Mara da ju te la Esplant, a Victoria Startin Starti Starti	03 He.						2			
Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Development Development Respective, Marcola Development Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Respective, Marcola Santo Sa	HIRE Research for Reserved I to Second HIR Reserved I to Second HIR Reserved I to Second HIR Balances, Calculation and Provided Hire and P	192.3 	Artislas Art	address Can and recent from NY 101 (a state recent as a fill) recent as a fill (Dry Reference fill) recent as a Reference fill (a state (a state) (a state)	sate Con oper from 94, as attractions of the other states at the other at the other	AL CO. 40, 40, 40, 40, 40, 40, 40, 40, 40, 40,	COLLO 1, 54, 54, 54 1, 55, 54, 54 1, 55, 54 1, 55, 54 1, 55, 55 1,	2 - Dec vice) in in Explore in in Explore in order of the inform	<b>63</b>						2			
Renormality and and a second an	HIRE Research For Reported To Land Hitt Reported To Land Hitt Reported To Land Hitt Reported To Land Hitt Report of Land Hitt Report of Land Hitt Report of Hearing of Wars and Phasing of Wars	1923 For Com 36,210 16,210	Accident Econolisis Actually Econolisis Preside Secondary Million Preside Million Mill	alters Co and reast law (2000) factor for provide and the provide of the provide	saty Con mar from SR and full to r market to r r r r r r r r r r r r r r r r r r r	Actil Fo Actil Fo Actil Color Activity of a Actilia Char Activity of a Actilia Char Activity of a Activity of a Actilia Char Activity of a Actilia Char Activity of a Actilia Char Activity of a Activity of a Activ	C. Oct. 8 7, 44, 49, 947 milital and milital and mili	8 - Dec office (15 for the in Explore), a portface (15 for (15	83 14.						2			
Range office at the second sec	HITE Research Car Reported To Land Hard Reported To Land Hard Reported To Land Hard Reported To Land Hard Report Annotation Balance, Calculation Institution Balance, Calculation Institution Balance, Calculation Institution Inst	192.3 5 5 5 5 5 5 5 5 5 5 5 5 5	Accidges Exception Extended Ex	abirs Co ord receive loss formation of the receive	wate Cost	Active and a second and a secon	s Oct 9 - 44, 10, 94 - 44, 10, 10, 10, 10 - 44, 10, 10 - 44, 10	3 - Dec vice: 	<b>1</b> 22						2			
Rest of the second seco	HIRE Research for Research of the second second second Research of the second	192.3 For Can 36,200 16,441 1641 1661 1661 1661 2667 74.32 2479 247	Breading Breading Stitle B Bellevel Breading Statistics Breading B	atters Co ord recent face for the part of the formation of the control of the formation of the f	saty Cos systematics in a set first two in a set first two in a set first two in a set first two in a set of the cost of set of the cost of the cost of the set of the cost of the set of the set of the cost of the cost of the set of the cost of the set	acii fo st G. G. S. (chi dan den	C Oct 0	2 - Dec ocaj ocaj objec is is Endest is ocaj accel activi (filer)	<b>4</b> 22						2			
Recretelant and Recrete Anno Recrete Anno Recrete Anno Recrete Anno Recrete District Anno Recrete District Anno Recrete Recret	HIRE Research Ere Regioned To Lange Hill Regioned To Lange Hill Regioned To Lange Hill Regioned To Lange Hill Balance, Calculation International Controls International	192.3 	Brauding Brauding Balland Brauding Brau	athers. Co mention from the product of provide the for- mention of the theory of theory of the theory of the theory of the theor	saty Con man from 99, in addition of 99, in additio	acil Fo de la chiefe de acceste de Aceleration de la chiefe de aceleration de acelera	E Oct 0 , 44, 88, 99 order 1 and order 1 and order 2	2 - Dec VCaj trica CB In trica CB In trica CB In trica CB In trica CB In trica CB In In 1000	923						2			
Hearthur State Hearthur Ar Hearthur Ar Hearthur Ar Hillie Hearthur Ar Hillie Hearthur Hillie Hearthur Hillie Hearthur	HITE Research For Research I to the HITE Research I to the HITE Research I to the HITE Research I to the HITE Balance Calculated Hite HITE Research I to the HITE Rese	192.3 5 5 5 5 5 5 5 5 5 5 5 5 5	Brandfes Brandfes Brandfe Bran	address Co and restor loss free of the l	saty Cos must found the result of the result of the saturation of	accil Fo 40 Ki di 4 40 Ki di 4 5 Ki di 4	E Oct 0 , 44, 49, 49 order of the death metry of the death met	S - Dec Way there differ the statest and addition (first)	123 141						2			
Re or of Rive & Book Review & Sant Review & Sant Review & Sant Review & Sant Review & Sant Review & Sant Review & Sant Davy Tax (Coll Davy Tax (Coll Davy Tax (Coll Dave & Sant Dave & Sant Review & Sant Review & Sant Review & Sant Review & Sant Review & Sant Sant Law & Law (Sant Review & Sant Law & Law (Sant Review & Sant Review & Sant Review & Sant Law & Law (Sant Review & Sant Review	HIRE Research EVE Reported To Long Hill Reported To Long Hill Reported To Long Hill Reported To Long Hill Report Hill	192.3 	bridges stranging strangin	and receive lawson for the provided in the receive and the law of the receives and the law of the law of the law of the law of the	sats Constants	An cill F o 40.47, 47, 48, 44 40.47, 48, 44 An attacher An attache	E Gest & C, He H, H, HH Historia Land Hard Land Land Hereit Herei	B - Dec oral of a Children of Children of Children of Children of Children of Children of Children of Children	23 941 141 81						2		eerteer,	
Re or office at 26.0 Reverse 26.00 Reverse 26.00	HITE Research For Reserved I to See Provide Reserved I to See Provide Re	992.3 9 9 9 9 9 9 9 9 9 9 9 9 9	Brandine Brandine Beland Belan	echica Co Internet Inne Internet Inne Internet Inne	saty Cost over front UR, and the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the	acii Fo stell fo childre accenter de la childre de la childre accenter de la childre stati transit t	s Oct S , 11, 10, 11 , 11, 10, 10 , 11, 10, 10, 10 , 11, 10, 10, 10 , 11, 10, 10, 10, 10 , 11, 10, 10, 10, 10, 10, 10, 10, 10, 10	2 - Dec Will draw Stips in Estator. Abotes Strift Strift Diragente Diragente Strift	83 141 141 145 145 145 145 145 145 145 145						2			
He or Hill State Heart, 2014 Heart, 2014	HIRE Research For Research I to Learning H Research I to Learning H	192.3 	Beriefigen Freisfer Bereisfer	chiefen Co and result form motivation of the motivation of the motivation of the motivation of the second of the s	saty Cost and the cost of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the saturation of the	acii Fo 1951, 0, 1 1951, 0, 1 195	5. 0.c. 0. 5. 41, 40, 412 5. 41, 40, 412 5. 41, 40, 412 5. 41, 40, 412 5. 41, 40, 413 5. 41, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40	1 - Dec vcaj des caj i - Falari, altoriaj der 1 der 1 	22 14 14 15 10 10 10 10 10 10 10 10 10 10 10 10 10						2			
Re or office A and A Reverse A and A A Reverse A and A A A A A A A A A A A A A A	HITE Research for Reserved & Les Martin Reserved & Les Martin Res	193.3 6 7 or Con 34,210 19,241 19,241 193,	Breadline 1977 10 Benedice 1977 10 Bened	arketes. Cor and record they part and they fill a hard di- parts and the fill a hard di- they fill a hard di- fill a hard di- fill a hard di- fill a hard di- they fill	search Constitution of the search of the sea	acil fo 4. 0. 0. 0. 1 (1. 0. 0. 0. 1 (1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	E. Oct. 9: 1. 41. 40, 40 Feb 1. 41. 40, 40 Feb 1	3 - Dec Inca inca in a Callin in a Calli	83 Fe. 						2		*******	
An or Alling State	HIRE Research For Research For Sectors and Research For Sectors and	193.3 • • • • • • • • • • • • •	Burneling Barrel	skitts Co ordered in the first part of the first	seate Constitution of the seater of the seat	Acil Fo	s Oct S	B - Dec care office or a office and other and	83 941. 941. 941. 941. 941. 941. 941.						2		*******	
Reversity Land Reversity Land Reversity Land Reversity Land Reversity Land Reversity Land Reversity Land Reversity Land Lee Deversity Lee Deversity Lee Deversity Lee Land Lee	HIRE Research EVE Regioned & Low Ballin Regioned & Low Ballin Regioned & Low Ballin Regioned & Low Ballin Regioned & Low Ballin Balling and House and House of Low Balling Control All Mailing of Yang Control All Mailing of Wang Control All Mail Mail Mailing of Wang Control All Mail Mail Mailing	1993	Branding Statistics St	chica Co adress the second sec	seate Constitution of the seater of the seat	acii Fo steff di st internet da accent da acco	E Oct 9 C. N. N. HP of the second se	3 - Dec oreal of the USE of the Endent and welfare and welfare the Cont of the	83						2			
Rest of the second Rest of the second secon	HITE Research for a second sec	1992 3 5 5 5 5 5 5 5 5 5 5 5 5 5	Burgerson Branches Br	chiers Co adress Co free produces the produces of the produces of the produces of the produces of the produces of the produces of the second control of th	saity Can may from High High Canada High C	acii Fo statu a statu statu a statu a statu statu a statu statu a statu a statu statu a statu a statu statu a statu a statu statu a statu a statu a statu statu a statu a statu a statu statu a statu a statu a statu a statu statu a statu a statu a statu a statu a statu statu a statu a statu a statu a statu a statu a statu statu a statu a statu statu a statu a stat	E Oct S 5.9,0,977 million and million and other and setting to a setting to a setting to setting to setti	3 - Dec V(2) in a case of the international sector and sector definitions international internationa	83						2			
Rec e offen a sea Rec e a sea resta a sea	HIRE Research End	1992 3 For Case 5224 5225	Receiving and Receiving and Re	chiere Cor and result for the formation of the first land of the second of the results of the PDV Entropy Entropy Core Second of the second of the Second of the Se	search on the search of the se	a cil Po 4. (), (), () (	E. O.C. 9. 1. 41, 43, 44 1. 41, 44, 44 1. 41, 44, 44 1. 41, 44	Dec.	22 192. 193. 194. 194. 194. 194. 194. 194. 194. 194						2		********	
Re or of the second sec	HINE Research for Research of the second second Research of the second second Balance of the second second Balance of the second second end the second second second end to the second second second second end to the second second second second second end to the second	199.2 5 5 5 5 5 5 5 5 5 5 5 5 5	Breddings Roadings Roberts Roberts HEEL Heel HEEL Roberts Robe	chira Co adreation land termination termin	seate Con seate Con seate has the seate has a set seate has a set sea	Activities of a second	E Oct 8 4 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	2 - Dec w(a) is is Explore Record with the second wit	83						2		********	
Rec of the stand Rec of the s	HIRE Research End	1992 3 For Case 5220 5200 520 52	Brading Bradin	chiere Co and rough the first District and the first	seate Con man all blacks and all blacks all bla	acii Fo Acio, a, c indicata acced da acced da acced da acced da acced	E. Darit, B. 1, 4, 14, 14, 14, 14, 14, 14, 14, 14, 14	Dec.	22 101 101 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 1050000 10500000000						2		********	
Re or of the second sec	HITE REALESS FOR	1993 2 5 5 5 5 5 5 5 5 5 5 5 5 5	Brandford Brandford Britten Br	chiers Co and root have been and the second second second second second second second second second second second field and seco	saity Con synthesis and the second synthesis and the second second second second second second secon	acil Fo Acting to the second according to the second Acting the sec	E. Co. C. C. 5, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	Constraint of the second	82 94.						2		********	
Re or of the second sec	HIRE Research Car Research I to Learning History Research I	1992 3 5 5 5 5 5 5 5 5 5 5 5 5 5	Stradies Str	chiere Co orderone the DENSE bandwork for Second and the DENSE bandwork for Second and the Second and th			5. Cart 8. 7. 48, 48, 494 7. 48, 48, 494 7. 48, 48, 494 7. 48, 48, 494 7. 48, 494 7. 49, 494 7.	S - Deg.     voil     voi							2			
Re or of Market and Art Reverse Arter Reverse Arter Arter Arter Reverse Arter Arter Arter Reverse Arter Ar	HITE Research for Research for the second state Research for	1992 0 5 5 5 5 5 5 5 5 5 5 5 5 5	Bereidige Erreichte Bereidige	chiers Co metroso term (Construction) (Construction	setty Con many for the first or and the first	acia for second at a second at	Court Co	Constant Constant							2		********	

As can be seen in the example above, the summary page of the mass balance report contains three key aspects:

- a) Materials Summary;
- b) Indicative Mass Balance Report; and
- c) Data Status.

The key features of these aspects are detailed below.

#### a) Materials Summary

The Materials Summary is provided at the top of the "Summary" tab (section 1 in Figure 7Figure 8). This presents an overview of the tonnages, by material type, that are diverted from landfill in any given quarter, for both source-separated recycling/ reuse and recycling extracted from the residual waste stream (e.g. recycling extracted from an MBT process).

<sup>&</sup>lt;sup>6</sup> NB. The Materials section in Figure 8 has been shortened to enable a screenshot to be taken; all 67 categories will be present on any sheet you produce.

#### **Figure 8 Material Summary Section**

В	С	D	E	F	G	Н	1	J
				Recyclin	ng			
Madanial	Co	llected (all I	routes)	Sent to Dest	tinations	Sent from R	esidual	
Material	Collected	Rejected	Total	Sent for	Rejected	Sent for	Rejected	Total
Green glass	86.9	-	86.9	86.9		-	-	86.9
Brown glass	52.2	-	52.2	52.2	24	12	2.1	52.2
Clear glass	263.9	( ~ )	263.9	263.9	-2	14		263.9
Mixed glass	1,963.5	-	1,963.5	3,749.0	-	-	-	3,749.0
Paper	2,191.6		2,191.6	6,745.3	-	-	-	6,745.3
Card	648.3	-24	648.3	1,181.9	20	12	2.1	1,181.9
Books	22.9	-3	22.9	22.9	-2-	14		22.9
Mixed paper & card			-	-	-	-	-	
Steel cans	-		-	-	-	-	-	
Aluminium cans		-4	-	-	-2	12 0	20	
Mixed cans	1,432.0	- 2	1,432.0	1,854.3	-2	14	-	1,854.3
Plastics	239.4	-	239.4	948.0	-	-	-	948.0
Mixed Plastic Bottles	-	-	-	220.9	-	-	-	220.9
PET [1]				33.4		12		33.4
HDPE [2]	1.04	-2	1949	- Const	-2-	14		
PVC [3]	123	- 23	340	14	27	12	-	- 24
LDPE [4]	1.4	-2	1940		-2-	14		43
PP [5]			-	-	-	-	-	
PS [6]	-	-	-	-	-	-	-	
OTHER PLASTICS [7]			-	-		32	1	-
Green garden waste only	45.2	- 2	45.2	12.7	-2	14	-	12.7
Waste food only		-	-	-	-	-	-	
Mixed garden and food waste	22,033.3	-	22,033.3	22,065.9	-	-	-	22,065.9
Wood for composting	-	- 24	-	-	20	12	2	-
Other compostable waste	1.00	-2	1940	-	-2-	14	-	-3
Wood	1,670.6		1,670.6	1,670.6	-	-	-	1,670.6
Chipboard and mdf	-	-	-	-	-	-	-	-
Composite wood materials	-	-4	194		201	12.0	2	
WEEE - Large Domestic App	261.8	- 1	261.8	261.8	-2	14	-	261.8
WEEE - Small Domestic App	524.6	-	524.6	524.6	-	-	-	524.6
WEEE - Cathode Ray Tubes	-		-	-	-	-	-	
WEEE - Flourescent tubes and other light								
bulbs	3.3		3.3	3.3	-21	27	-	3.3
nmany Combridgeshire County Co	uncil C	ambridge (	iby Council	Fact Cambridge	chiro District	Co For	nland District (	ouncil

- **Column B** lists the various material types.
- **Column C, D and E** detail the tonnages of source-separated materials and commingled materials collected for recycling and subsequently rejected at the point of collection.
- Column F and G provides the tonnages which are sent for recycling from the sourceseparated materials and commingled materials collected (i.e. net of total collected minus rejected at point of collection) and subsequently rejected at the gate of or by the reprocessor.
- **Column H and I** provides the tonnages of materials which are extracted from the residual waste stream and subsequently recycled or rejected at the gate of or by the reprocessor.
- Column J this is the sum of columns F G + H I, i.e. the total waste diverted from landfill through recycling.

The reuse section of the material summary section is similar to the above. However, it does not include a section for materials extracted from the residual waste stream.

Each material type has an associated biodegradability factor, and the total of each material which has been diverted from landfill is multiplied by the biodegradability factor to give the total biodegradable content of the diverted waste for that period. This is totalled in cell S75 as the net biodegradable diversion.

#### b) Indicative Mass Balance Calculation

The mass balance calculation is used to generate the amount of Biodegradable Municipal Waste Landfilled ( $BMW_L$ ) based on the following calculation:

#### Figure 9 The Mass Balance formula (Shorthand)

This can be expanded to:

#### Figure 10 The Mass Balance formula (Expanded)

	= (Directly Landfilled MSW x RB%)
BMW∟	+ (Landfill after Thermal Treatment x 0)
	+ (Landfilled after MBT x (RB% x MBT Reduction factor))
	+ (Landfilled after Other Treatment x RB%)
	+ (Rejected diverted x RB%)

As highlighted in section 2 of Figure 7, the Mass Balance report provides a step-by-step breakdown of this calculation for your LA for the period selected.

#### Figure 11 Indicative Mass Balance Calculation

Indicative	Mass Balance Calculation For Ca	ambridges	hire County Council For Oct 09 - Dec 09
	Residual Municipal Waste	36,218	
MSWT	Total Collected Municipal Waste	70,956	Recycling and reuse tonnages from Q10, 11, 12, 16, 17, 18, 33, 34 (WCA) & Q11 & 14 (WDA) (including collection rejects) plus residual waste from Q23 (WDA).
	BMW %	68	National figure under LATS Deemed percentage of biodegradable component of municipal waste in England.
BMW <sub>T</sub>	Total Biodegradable Municipal Waste	48250	BMW% x MSW <sub>T</sub>
Div <sub>T</sub>	Total Collected Municipal Waste Diverted	34385	Recycling & Reuse tonnages sent to final destination Q19 & 35 (WCA & WDA) minus any tonnage rejected at the gate of the reprocessor.
Div <sub>B</sub>	Biodegradable Content of Diverted Waste	25306	Nominal biodegradable content of each material (see Material Summary) multiplied against the Net total collected municipal waste diverted in Q19 & 35 (DivT).
Res <sub>T</sub>	Total Residual Waste	36571	MSW <sub>T</sub> - Div <sub>T</sub>
Res <sub>B</sub>	Biodegradable Content of Residual Waste	22944	BMWy - Dive
RB%	Residual Biodegradable Percentage	62.7%	(Res <sub>B</sub> / Res <sub>T</sub> ) x 100
L <sub>D</sub>	Directly Landfilled Municipal Waste	36199.9	Tonnage of waste sent directly to landfill Q51-53 (WDA).
L <sub>Th</sub>	Landfilled after Thermal Treatment	2	Tonnage of Incinerator Bottom Ash sent to landfill Q54 & 55 (WDA) and tonnage of char/slag sent to landfill Q57 (WDA).
L <sub>MBT</sub>	Landfilled after MBT	0	Tonnage sent to landfill Q59 (WDA).
MBT <sub>AF</sub>	MBT Adjustment Factor	1.000	Site-specific factor calculated by Environment Agency by which MBT adjusts RB%
L <sub>ot</sub>	Landfilled after Other Treatment	0	Output tonnage of waste sent to landfill from Q56, 60, 64 , 65. Residue to landfill Q61, 62 & 63 (WDA).
Div <sub>R</sub>	Rejected Diverted	159	Recycling and reuse reject tonnages from Q10,11,12,16,17,33,34 (WCA) & Q11 & 14 (WDA). Rejects at gate of reprocessor Q19 & 35 (WCA&WDA). Plus MRF rejects Q58 (WCA&WDA).
BMWL	Biodegradable Municipal Waste Landfilled	22810.6	$(L_D \times RB\%) + (L_{TH} \times 0) + (L_{MBT} \times (RB\% \times MBT_{AF})) + (L_{OT} \times RB\%) + (Div_R \times RB\%)$

You should always refer to the UA and WDA Mass Balance Guidance notes (available to download from the WDF website) to understand the questions and assumptions that are used to generate the different components of the MBal report.

#### c) Data Status

Section 3 of Figure 7 highlights the status of the data, which is used to generate the mass balance report.

#### Figure 12 Data Status

99	Authority	Data Level
100	Cambridgeshire County Council	40
101	Cambridge City Council	40
102	East Cambridgeshire District Council	40
103	Fenland District Council	40
104	Huntingdonshire District Council	40
105	South Cambridgeshire District Council	40

When producing a report for a UA there will only be that authority shown here and it is likely that you will be familiar with the status of the data that you are viewing. However, if you are producing a report for a WDA it will also source data from the constituent WCAs. It may be that you as the WDA have authorised your return to Level 30, but one or more of your WCAs has yet to reach that point. Incomplete WCA data will obviously impact on the calculation and so it is always worth checking this section of the report to ensure the data for all WCAs is complete and validated.

# 2.3 EA Report

# Following the move by all English LAs to Qu100 from April-June 2015 reporting period, the EA Report is no longer supported.

The EA validation report was used by the Environment Agency to perform a number of data checks on an authority's return prior to it being rolled up to level 40. The report reviews the tonnages, rejections and final destinations from the following key questions:

- Qu23 only (once all authorities had moved over to Qu100)
- Qu19, Qu23, Qu56 -65, Qu58 and Qu61 to 63 (pre-Qu100)

If you are reviewing a WDA EA report, the data in Qu23 (and Qu19 pre-Qu100) will be broken down by WDA and its constitute WCAs.

The EA report isn't primarily designed as a validation tool in the same way as the others mentioned in this guide, but the data held within it can provide you with useful data summaries and so has been made available to you.

WDF Tip – As with the MBal report as covered in section 2.2, a WDA's report will include data from its constituent WCAs and it is therefore important to be aware of the status of the WCA data (e.g. some may only be at Level 10 or not yet present at all). No status indicator is provided within the EA report and so the MBal status indicator should be consulted.

#### Figure 13 Example EA Report

Question 1	9 Analysis								
			Tonnage Sent	Tonnage Rejected	Reject Zero				
VDA Questio	n 19: Reprocessors		29,108		CHECK				
Question 1	9 Detail								_
VDA Quest	ion 19 Details		lorth Yorkshire	County Counc	Craven Distr	rict Council	Hambleton Dis	trict Council	Harrogate E
National FacilityId	Facility	License	Sent	Rej	Sent	Rej	Sent	Rej	Sent
58	Glass Recycling (UK) Ltd	ER10199843	190				73		56
72	Reuse Collections Ltd t/a Berryman	ER102000306							
92	F D Todd & Sons Ltd	60158	149						
282	Severnside Recycling								1,31
535	Yorwaste Ltd		686						
2055	C & J Blackburn	61026	397						
2229	F D Todd & Sons Ltd	68712	449						31
3182	G & P Batteries Ltd	42701	7						
3242	Velico Ltd	65100	19						
3974	Farrow P	60163	16						
4360	Yorwaste Ltd	60179	1,046						
4963	Crossley Evans Ltd	60679	30		1				
5643	Yorwaste Ltd	60008	107		746				
7932	Other/Exempt		667		940		306		70
8311	OSS Group Ltd	PPC/A/1016835	0						
8442	Salvation Army Trading Co Ltd	No number	4	-					
12744	Timberpak Ltd	65268	10						
12754	Silver Lining Industries Ltd	65279			3				
12848	Environmental Waste Recycling Ltd	65427	70						
	Management and	00077	074				222		

# 3 Reports available from the Summary reports page

To access the report functions, navigate to the Data Manager page and log in. Select "Reports" from the top toolbar and Summary Reports from the drop-down.

WDF Tip - Please bear in mind that the Reports section is a tool for <u>viewing</u> data in various ways. It in no way edits the data and so feel free to experiment with the different tools, safe in the knowledge that you're not going to inadvertently change your data. There are several reporting options available to you through the Summary Reports page. Reports can be produced for specific regions, local authorities, periods of time and different data sets relating to:

- Performance Indicators;
  - England Best Value Performance Indicators (BVPIs), National Indicators (NIs) and the Landfill Allowance Trading Scheme (LATS). (These performance monitoring schemes have all now ended but it is still possible to run reports for comparison with historical data).
  - Wales WMT indicators and LAS reports.
  - Northern Ireland KPI and LAS reports.
- Destinations of waste; and
- Specific question answers.

The next section of this guidance note (section 3.1) will help you to understand the types of reports available and section 3.2 shows you how to run a report.

#### Figure 14 Summary reports page

This is the primery repair autocities and are any	iting page for Walde Data Flow. Rease select a record, one or some new periods and their clock flow linguist. More detail a available by clocking	ra tap Balan			
Report Selection					
Rational Region Period Type Report	© Explicit         © Wess         © N         © Scotland           © Building         © Armus             Exploit - 11 Meste Sent For Recycling         W	Report Types 🛞 (P)	OAwyter Ouwter	O cav	<u>Reporting output</u> <u>selections</u> (become the period and question selection
	Renty-Advenator 🗶 Solid Serec Desceit	Available Panoda           Available Panoda           Clin US - Data + C           All 31 - Data + S           Are 18 - Line + S           Are 18 - Line + S           Are 18 - Line + S           Are 18 - Data + S           Are 10 - Data + S	Seasched Farmers		areas for Question reports and Raw Data reports).
Farrity Group	0 antories added	And logi then logi finally logi	Adroity Adroity Adroity	M M PLa Spat	

# 3.1 Types of report available

A full list of the reports available and who can access them is available in section 6 of the WDF System manual, guidance note GN4.6: "Full List of Reports".

The choice of National Region here does not limit the local authorities you can benchmark against, e.g. you can select England as the region and still run the reports against Welsh authorities. Selecting the National Region will set the list of available reports to those common to all National Regions and those specific to the chosen National Region. N.B. whilst it is possible to run reports from one region against LAs from another, due to subtle differences between regions in the way questions are used or completed, the results generated from running reports in this way may not be comparable to those for the LAs of the region the report is designed for.

Some English reports are specific to LA type so please ensure you are selecting the correct report for the authority type you are reporting against otherwise the report may return blank. E.g. There are different versions of the NI192 report depending on whether you reporting against a WCA/UA or a WDA.

#### Figure 15 Report selection area

Report Type	ОPI	Analytical	Raw Data
	Download th	e data in a compressed ZIP t	format.
	Exclude blan	k data from the report.	

The Summary Reports page allows you to view the following reports for England, Wales, Northern Ireland and Scotland:

Performance Indicators (PI/ KPI) – available for Quarterly Periods only. The only exception to this
is BVPIs for England which can be obtained for an Annual Period (where the local authority has
completed the optional annual question set). As these questions are optional, many LAs no longer
complete them and where this is the case no data will be returned on the annual report). Reports
can be run against multiple authorities, and for multiple quarters.

Helpful tip – to produce an annual performance indicator value in situations where only quarterly reports are available, e.g. NI192, select the quarterly report type and when selecting the periods later in the process, pick all four quarters from the year you wish an annual figure to be generated for. When the report is created it will contain details for each of the quarters as well as a summary for the year. (Note – England, Wales and NI work to financial year reporting periods, whereas Scotland uses calendar years.)

- <u>England</u>: this includes Best Value Performance Indicators (BVPIs) and National Indicators (NIs). (See the BVPI section of the Guidance web page detailing how these are calculated.) Separate Qu100-based comparator reports have been created for each LA type for NI191, NI192, NI193 and BVPIs 82a-d and 84a as applicable to the LA type.
- <u>Northern Ireland</u>: known as Key Performance Indicators (KPIs). More information is provided in the Northern Ireland section of the Guidance web page.
- <u>Wales</u>: these include Welsh Performance Indicators (WMTs). More information is provided in the Wales Guidance section of the Guidance web page.
- <u>Scotland</u>: Not applicable. SEPA provide data relating to Scottish waste indicators on their website here: <u>http://www.sepa.org.uk/environment/waste/waste-data/</u>.
- Analytical Reports available for Quarterly Periods only (apart from Wales Financial Report and the Primary Reprocessor report for Scottish LAs) and provide the outputs of various data analysis methods. These aim to build on the analysis provided by the PI reports by giving additional details such as materials collected by various routes and breakdowns of final destinations. Reports can be run against multiple authorities and for multiple quarters. LAS reports for Wales and Northern Ireland can also be run by using this selection. Below is a list of the analytical reports available to local authority users for each region.

<u>All</u>:

- Destination Report (available for Unitary Authorities (UA) and Waste Disposal Authorities (WDA): this does not cover recycling or reuse; and
- Primary Reprocessor Report (for all LA types): this presents details of reprocessors receiving local authorities' materials for recycling and reuse.

#### All excluding Scotland:

 APSE report: APSE (Association for Public Service Excellence) is a not-for-profit local government body working with over 300 councils throughout the UK. This is a summary of recycling, composting and energy recovery tonnages by local authority (note: All Welsh LAs have been completing Qu100 since April 2013 while English LAs moved to Qu100 in phases over 2014-15 with all completing it for data from April to June 2015-16, but the APSE report pre-dates Qu100 and therefore should not be run for periods containing Qu100 data.).

#### England:

- Local Authority Collected Waste (LACW) by management method (available for UA and WDA);
- Total collected residual waste;
- Total waste sent for recycling, composting and reuse (UA and Waste Collection Authority (WCA);
- Total waste sent for recycling, composting and reuse (WDA);
- Local Authority Collected Waste (LACW) by final disposal route (WDA);
- Local Authority Collected Waste (LACW) by final disposal route (UA); and

#### • "Material collected" report.

#### Northern Ireland:

- CA site segregation efficiency: provides details of each CA site used by the selected LAs in terms of total material collected and that segregated for recycling and reuse;
- WfH Report: provides the percentage of Waste from Households Arisings sent for Recycling, Composting or prepared for Reuse (note: the definition of Waste from Households is not the same as Household waste. See the "Waste from Households" calculation guidance for further details); and
- Capture Rate: this gives the capture rate for collection schemes by material:
- NILAS Summary; and
- NILAS Detail.

Wales:

- Qu100 Final destination report; final destinations of all waste types by LA shown by material, FD type and waste stream type, along with the original source facility the material was first processed by after collection;
- Qu100 Reprocessor report: A list of all reprocessor types used by a council in each selected quarter. Combined input and output tonnages are provided as totals of all the sites used of the corresponding type during that period. For example, if 10t of material was to move through a reuse facility and then on to a second reuse facility, 20t would be recorded whereas only the 10t going into the primary facility would be reported in the Qu100 Primary reprocessor report below);
- Qu100 Reprocessor and Qu100 Primary Reprocessor reports;
- Material Arising Detail and Summary reports;
- MRF reject rates: this shows total input, reject rate and rejects' destination facility types by MRF;
- Qu100 Compliant Destinations;
- LA Municipal Waste Management;
- Qu100 Compliant Destinations; and
- LAS Detail and Summary reports.
- Question Reports can be run against a number of questions for a single authority and for a single reporting period. This report generates a spreadsheet replicating the layout of each selected question, populated with the data entered for that period. Each question is displayed on a separate tab of the workbook.
- Raw Data produces an Excel worksheet (.xlsx file) and can be run against multiple authorities for multiple periods. These files can look complicated at first but ultimately provide the greatest degree of flexibility for filtering and using as the base for running any formulae and macros you may create to query and process the data.

Helpful tip: When running a Raw Data report the documents are limited to around 4,000 rows if it is not zipped. If the data requested exceeds this the following message will display at the bottom of the data set: NOTE: The size of this download has been limited and some data not returned. Tick the "Download the data in a compressed ZIP format" and "Exclude blank data from the report" boxes in the Report Selection area. Selecting to exclude blank data will produce a file where only the rows containing reported data are included in the download. This has the benefit of greatly reducing the file size and in situations where large amounts of data are requested (e.g. the download of an entire region in one go). Whilst zipping a raw data download increases the maximum number of rows which can be contained

within the file to that of the maximum permissible in an .xlsx file of just over 1 million rows, the length of time taken to generate and download raw data will depend on the amount of data requested.

### 3.2 How to run a report

The following step-by-step guidelines show you how to run a report.

WDF Tip - As you navigate around this page as described below a red "please wait...." message will appear as selections are made. It is important to allow this message to disappear before making your next selection otherwise errors can occur.

### 3.2.1 Defining your parameters

In the Report Selection area select the:

- National Region: England, Wales, NI or Scotland;
- Period Type: Quarterly or Annual (see the "Types of Report" section to determine which reports are available on an annual and quarterly basis);
- Report Type: either PI, Analytical or Raw Data (only the available report types will be visible depending on the region and period type selected); and
- Report: select from the drop-down box the specific report you would like to run.

#### Figure 16 Report selection options

Wast	eDataFlow			-5	70234	- Notes	9
Home	Reports	Log Off					
lser : arobinson@gl	obalskm.com Authority : SKM Envir	05					-
This is the primary rep authorities and one or Report Selection	orting page for Waste Data Flow. Please select, more periods and then click Run Report. More de	a report, one or more stail is available by clicking the l	Help Button.			?	Click in the circle next to
National Region	England     OWales	NI O Scotland	Report Type	Он	Analytical	O Raw Data	Report Type
Period Type	Quarterly	O Annual		Report	Selection Area		and Period
Report	Municipal Waste By Management Method (	JA & WDA)				Run Report	would like to
Select Authority	Total Waste Sent For Recycling, Compositin Total Waste Sent For Recycling, Compositin Total Waste Sent For Recycling, Compositin	g & Reuse (UA & WCA) g & Reuse (WDA)	Select Periods				run the report
List	Municipal Waste by Final Disposal Route (M Arc21 Municipal Waste by Final Disposal Route (U APSE Report	A)	Available Period	is	Selected P	eriods	for
			Se rep dro	lect port fi pp-dowr	specific rom the menu		

#### 3.2.2 Selecting local authorities

There are four ways of selecting the local authorities that you wish to run your report against:

- using the pre-defined drop-down lists;
- creating a new list;
- carrying out an ad-hoc search; or
- family groups.

### Method 1: Pre-defined lists

The pre-defined lists which appear by default in the drop-down box in the Select Authority section consist of 15 regional groups<sup>7</sup> along with three local authority specific groups:

- Authority Authorisation: This is a group of those local authorities you have the rights to authorise;
- Own Authority: This would simply add your own authority; and
- Data Entry: This is a group of those local authorities you have the rights to enter data for.

In the Select Authority area click on the drop-down arrow and select the grouping that you would like to run the report for. Press the "Select" button to populate the Authority Selection area with the list of local authorities in your selection. (In the example below 50 North West local authorities have been selected). Choosing and selecting more than one group adds the second group to the first in the report list; it does not replace it, so you can create longer lists from multiple groups. If you select a group then change your mind, remove it by clicking on the Clear button to the right of the list before selecting another group.

#### Figure 17 Example of local authorities selected via UK Region (method 1)



#### Method 2: Creating a new authority list

It may be that the pre-defined lists don't adequately cover your specific needs. If you are reporting against a group which you are likely to use frequently you can set up your own lists. Once created, these bespoke lists will be available to select from the drop-down box.

To set up a new list simply navigate to the management tab of the data manager navigation bar and select "My Authorities". In the "Description of new list" box give your new list a title and press "Create new list". The page will refresh and you will be able to select the list you have just named from the "Please choose the selection list you wish to manage" drop-down.

#### Figure 18 Creating a new Authority list

Please choose the selection list you wish to manage:	Delete Selected List
Description of new list: Reporting List	Create New List

A brown box containing various column headings, but no details will now appear. To start populating the list click on, "Add Authority to List". You will be redirected to a screen where you will be able to

<sup>&</sup>lt;sup>7</sup> Note Arc21 (pre-April 2015), NWRWMG (pre-April 2015) and SWaMP2008 (pre-April 2015) are the three groupings for the Northern Ireland Authorities prior to April 2015, with Arc21, NWRWMG and NIOther being the three groupings for the Northern Ireland Authorities since April 2015.

search for the authorities you require, either by name, region, authority type, or any combination of these.

#### Figure 19 Selecting an authority for your list

	Name: manchester	Regio	n: North West Search	Y Author	rity Type:	*
Autho	ority Details Authority Name:	AC Number:	LA Code:	Country:	Authority Type:	Add to List:
View	Greater Manohester WDA (MBC)	601	E4200	England	Disposal	
View	Manchester City Council MBC	48	B4215	England	Collection	
Add Au	thority to List Cancel					

Once you have located an authority you wish to add to the list, tick the "Add to List" box and press "Add authority to list". After the page refreshes repeat the process to add all the required authorities to your list. When finished you can navigate back to the summary reports page and your newly created list will be included in the "Select authority" drop-down.

#### Method 3: Ad hoc searches

There are likely to be times when you will just want to run a one-off search which doesn't justify creating a new list for the drop-down. In these situations you can use the search facility located to the right-hand edge of the "Select authority" section to individually select the local authorities you want to run the report for.

Press the "Search" button in the Select Authority area. This opens a new screen which allows you to search for authorities using the following criteria: Authority name, National Region, Region, Population size, Index of Deprivation, Land Area, Dwelling Stock and Local Authority Type.

WDF Tip - The text searches are on a "contains" basis, i.e. if an authority name contains that word it will be returned as a result. For numeric searches the range can be left open, so population between: blank and 90000, would return all authorities with a population of 90000 or less. Up to 12 results can be displayed on this page, with any subsequent ones appearing on additional pages which can be accessed via the links visible at the bottom left of the list when required. Results can be ordered by any of the column headings in either ascending or descending order, by clicking on the relevant column heading.

#### Figure 20 Selecting local authorities using search criteria

Nume       Popular       Edgent         User : arobinson@globalskm.com       Authority : SKM Enviros         Select Authorities       Image: Comparison (b0) between:       Image:		WasteDataF	low	li		Lak	0	5.104	4	<b>190</b>	
Select Address         Authority Name         National Region         England         Weeking Stock         Dwelling Stock between:         and         Local         Authority Type         Althority Name         Population between:         and         Local Authority Type         Althority Name         Population between:         and         Dwelling Stock between:         and         Select All         Clear All		User : arobinson@globalskm.com	Authority : SKM Env	iros							
Select All       Clear All         Authority Mame       National Region       Region       Population       kcl       Land Area       Dwelling Stock       LA Type       JPP Order       Land Area         authorities       Copeland Borough Council       England       North West       69500       25 209       77265       32680       Collection       37         Copeland Borough Council       England       North West       51800       14.066       216133       25150       Collection       36         Robble Valley Borough Council       England       North West       58000       9.883       58472       24780       Collection       57		Authority Name National Region Region North West	Population between     Index of Deprivat     Land Area between     Dwelling Stock b	een: lion (IoD) between: sen: etween:	50000 a	and 70000	Loca JPP ha. LAC	Authority Type Order ode	All	Rese Sav	Go et Search e & Exit Cancel
authorities         Copeland Borough Council         England         North West         69500         25 209         77265         32800         Collection         37           matching your search criteria         Eden District Council         England         North West         51800         14.096         210133         25150         Collection         36           search criteria         Robble Valley Borough Council         England         North West         50800         9.883         58472         24780         Collection         57	Local	Select All Clear All Authority Name	National Region	Region	Populatio	n kaD	Land Area	Dwelling Stock	k LA Type	JPP Order	LA Cot
search criteria Representation Repre	authorities _	Copeland Borough Council	England	North West	69500	25.209	77265	3286	0 Collection	37	J095
1 1 PUSSENDE DOUALE CORD. 1000 WEST 07400 Z3.324 13309 30700 CORCION 30	search criteria	Ribble Valley Borough Council      Rossendale Borough Council	England	North West	58000	9.883	58472	2478	0 Collection	57	T235

When completed, press "Go" to perform the search. The lower part of the page will then display the search results. Once you have ticked the box next to the authority you searched for, you now have the option to press the "Save and Exit" button to confirm your selection and return to the summary reports page. If you want to continue searching for more authorities to report against, simply enter the search criteria for the next authority. You'll notice that previously ticked authorities will remain on your results after each search. To wipe your results and begin a completely new search press "Reset Search". You can press the "Select All" button to select all local authorities in the list.

Once you click "save and exit" the authorities that you selected in the ad hoc search now appear in your authority selection area.

WDF Tip – The Population, IoD, Area and Dwelling Stock search criteria can become useful tools when searching for similar authorities for benchmarking purposes. Two of the fields shown are of limited use, but have been included. JPPorder is a numeric ordering system that groups WDAs and their WCAs together. LA Code is the internal WasteDataFlow number for the local authority.

#### Method 4: Family Groups

This function is designed to allow a local authority to benchmark against similar authorities. Naturally you can build your own lists, but with this functionality we are including "official" groupings.

The only grouping available is the "Nearest Neighbour Method (2007)"<sup>8</sup> that covers English authorities. This has been developed by the Chartered Institute of Public Finance and Accountancy and gives the statistically similar authorities based on a range of demographic information.

To report on an authority and its nearest neighbours, first add the authority to the selection (as described above for ad-hoc searching). Then highlight the authority by clicking on it and press the "Add" button in the family grouping section at the bottom of the Select Authority area. After a small delay a "plus" will

<sup>&</sup>lt;sup>8</sup> The CIPFA Nearest Neighbour model is updated periodically and some comparator groups change from the lists used in WDF. More information and the latest version can be found at www.cipfastats.net. If your Nearest Neighbour councils have changed you can build a bespoke list based on the updated information.

appear next to the authority. If you click on the "plus" it will expand to show the full list. When you run the report it will be produced with data for all the authorities in the authority selection area.

#### Figure 21 Expanded family group

List	Eastern	¥	Select
— Brain	tree District Council		
elect Aut	hority		
List	Eastern	~	Select
🖃 Braint	ree District Council	~	
- N	ewark and Sherwood District Council		
- si	troud District Council		
- A	shford Borough Council		
- 5	outh Kesteven District Council	1	Search
- 9	t Edmondsbury Borough Council		Denne
- R	ugby Berough Council		Remove
- W	est Witshire District Council		Clear
- N	orth Wiltshire District Council		
- 0	rewe and Nantwich Borough Council		
- u	chfield District Council		
	AND A REAL PROPERTY OF A DATA AND A		

WDF Tip - The data we have for nearest neighbour currently does not have matches for the following <u>active English</u> authorities:

Table 3.	Active	English	LAs	without	Nearest	Neighbour	matches

Authority Name									
Bedford	Council of the Isles of Scilly	North London Waste Authority							
Brent LB	County Durham	Northumberland							
Central Bedfordshire	East London Waste Authority	Shropshire							
Cheshire East	Gloucester City Council	Warwick District Council							
Cheshire West and Chester	Greater Manchester WDA (MBC)	West London Waste Authority							
City of London	Leicester City Council	Western Riverside Waste Authority							
Cornwall	Merseyside WDA (MBC)	Wiltshire							
Dorset Waste Partnership									

#### 3.2.3 Removing authorities

You can refine the selection by clicking on local authorities you do not need data for (so a black box appears around them) and then pressing the Remove button. To select more than one local authority to remove, hold down the Ctrl key on your keyboard whilst selecting the local authorities. All the local authorities can be removed without having to highlight them by using the "Clear" button on the right.

#### Figure 22 Removing authorities from the list

		Select Authority	
1.	Click on local	List North West Select	2. Click the
	authorities to highlight ones to remove from the list	Blackburn with Darwen Borough Council Blackpool Borough Council Blackpool Borough Council Burnley Borough Council Burnley Borough Council Clear Clear Clear Clear Clear Clear Clear Clear S0 authorities selected	Remove button to delete highlighted local authorities from the list
		Family Group Nearest Neighbour  Add Remove	

WDF Tip – Removing an authority from the selection like this only removes its selection. It does not amend the list in the drop-down (either pre-defined or user created), nor does it stop you from searching for it again and adding it back in during this session.

a) Selecting Periods – Now that you have selected the report you wish to run and populated which authority or list of authorities you will run the report against, the next step is to define the time period for which results will be returned. Depending on the type of report you are trying to run a list of available periods to select from will be shown in the Select Periods area. Selecting the periods in this way give you the flexibility to compare the same quarter in different years or view the performance over a series of periods.

WDF Tip – If you want to produce an annual performance indicator value, e.g. NI192, then select the quarterly report type and when selecting the periods, pick all four quarters from the year you wish an annual figure to be generated for. When the report is created it will contain details for each of the quarters as well as a summary for the selected periods, which in the case of four consecutive quarters will, in effect, be the annual figures.

- Click on the Periods you want to run the report for. Multiple Periods can be selected by holding down the Ctrl key on your keyboard whilst selecting the Periods. The selected Periods are highlighted in blue. The shift key will also select a range if you click one extreme of your range and then the other end whilst holding down shift.
- Press the single arrow to move the highlighted Periods into the "Selected Periods" box.
- Once at least one period is selected the leftward pointing chevrons will become available, allowing you to remove periods from the selected list in the same way as above.
- If you want to run a report for all available Periods press the double arrow key to move all Periods into the Selected Periods box.

#### **Figure 23 Selecting periods**

	Select Periods		
Selected periods	Available Periods           Jan 12 - Mar 12           Oct 11 - Dec 11           Jul 11 - Sep 11           Apr 11 - Jun 11           Jan 11 - Mar 11           Oct 10 - Dec 10           Jul 10 - Sep 10           Apr 10 - Jun 10           Jan 10 - Mar 10           Oct 09 - Dec 09           Jul 09 - Sep 09           Apr 09 - Jun 09	Selected Periods	Double arrow moves all periods into the Selected Periods box Single arrow moves highlighted periods into the Selected Periods box
	Sorting Report Outp Sort by: then by: finally by:	ut Authority	

#### b) Sorting the report output (PI and Analytical reports only)

By this point you will have your report type, authority(s) and period(s) selected and so can either choose to produce the report by selecting "Run Report", or make further selections to alter the order in which the report displays the data.

The "Sorting Report Output" section allows you to sort by up to three criteria:

- Authority Name
- Authority Type
- Authority Group (JPP number)

This is an optional function but may prove useful when creating larger reports.

#### 3.2.4 Selecting Questions – (Questions and Raw Data reports only)

If you have chosen to run a Question or Raw data report there is one final step to complete after selecting the authority(s) and period(s). This is to select the WasteDataFlow questions you want to include in the report.

WDF Tip – A Question report can only be run against a single authority and single period at a time. When selecting a list of authorities so that more than one is selected in this section you will need to click on the authority you wish to report against. Once highlighted in grey the available periods box will populate.

The question selection process works in an identical way to the period selection described above, by highlighting the questions you wish to use and using the single chevron to move them to the selected questions area.

### 3.2.5 Selecting Facilities

If you are running a **Primary reprocessor** report you will see a **Select Facility** area rather than **Select Question.** Select the facility(ies) of interest as for Authority selection in b) (Method 1 or 2).

# 3.2.6 Run Report

Once you have selected all your report criteria you then need to press one of the "Run Report" buttons to generate your report.

Once you have selected "Run Report" a standard dialogue box will pop up allowing you to open or save the report. The report will generate an .xls file for each report type. Choosing to open the file doesn't remove your ability to save it. You will still be able to do this from within Excel or other compatible spreadsheet software once the file has opened.

# 3.3 Understanding WasteDataFlow reports

#### 3.3.1 Performance Indicator (PI) and Analytical reports

This section provides an overview of the PI and Analytical reports. The new report introduced in early 2019; the Qu100 Recycling Report, is covered in more detail in section 3.3.2.

WDF Notice – several questions and indicators refer to the "reuse" of material. It should be noted that this is a short form of "preparing for reuse", as per the revised Waste Framework Directive (rWFD); where further guidance relating to this term can be found.

#### Figure 24 Example PI/ Analytical report

1	A	В	C	D	E	F	G	Н						
1	Nation	al Indicat	ors 191 192 and BVPIs	(comparator c	alculations f	or England w	ith use of Que	stion 100)						
2	Induoti	annaioai		(comparator c	alculations	or England, W								
2	This report is calculated from data reported by local authorities to WasteDataFlow. Where returns are not at level 40 the data are subject to change. Further breakdown of the summary figures in the Report can be found on the 'Data' tab and the definition of the 'C-Variables' (or calculated variables) can be found on the 'Cutaribles' tab and othe the distingtion in terms of the question number in WasteDataFlow.													
3	variables) (	can be found o	in the Cvanables tab and give the del	inition in terms of the c	question number in v	vastebatati iow.								
5	National In were repea WasteData new Quest and BVPI of method as	dicators (NIs) aled in March 2 aFlow to allow tion 100 which calculations ha closely as is	191, 192 and 193 applied from 2008 u 2008. In spite of no longer being offici for continuity with past reporting. Fro replaced a number of past questions, ave therefore been reproduced, being practicable. This report contains thes	ntil March 2011. These al indicators, NIs and E m April 2014 some En From April 2015 all E amended where necess e "comparator" calcula	e replaced Best Valu 3VPIs have continue glish local authoritie inglish local authoriti sary to use Qu100 a ations.	e Performance Indicat d to be available as ca s reported in WasteDa es reported using Que nd to match the origina	ors (BVPIs) which Iculations in ItaFlow using the stion 100. The NI al calculation							
	lf data have equivalent	e been entered report with the	l into a period for a selected local auth "pre-Qu100" label.	nority which was before	the use of Question	100, you will need to	download the							
4														
5			F											
6			L											
1														
				MI404 (comporator)			11102 (comporator)	11102 (comporator)						
				wingi (comparator)			virigz (comparator)	virigz (comparator)						
				HH wasto not cont		NI101 (comparator)	Porcontago HH	Porcontago HH	MI102 (comparator)					
				HH waste not sent	(1191 (comparator)	NI191 (comparator)	- Percentage HH	- Percentage HH	NI192 (comparator)					
				HH waste not sent for recycling, N	ll191 (comparator)	NI191 (comparator) Residual Housebold Waste	- Percentage HH waste sent for	- Percentage HH waste sent for Reuse Recycling	NI192 (comparator) – Percentage HH waste sent for	'Ho				
				HH waste not sent for recycling, N reuse or composting -	II191 (comparator) denominator:	NI191 (comparator) Residual Household Waste	- Percentage HH waste sent for Reuse, Recycling or Composting -	- Percentage HH waste sent for Reuse, Recycling	NI192 (comparator) – Percentage HH waste sent for Reuse Recycling	'Ho				
8	Inn Order	r Authorityld	Authority	HH waste not sent for recycling, N reuse or composting –	II191 (comparator) denominator: Number of bousebolds	NI191 (comparator) Residual Household Waste per Household (Ka)	- Percentage HH waste sent for Reuse, Recycling or Composting -	<ul> <li>Percentage HH waste sent for</li> <li>Reuse, Recycling or Composting – denominator</li> </ul>	NI192 (comparator) – Percentage HH waste sent for Reuse, Recycling or Composting	'Ho				
8	Jpp Order	r Authorityld	l Authority Allerdale Barough Council	HH waste not sent for recycling, N reuse or composting – numerator 6 433 53	II191 (comparator) denominator: Number of households 46 060	NI191 (comparator) Residual Household Waste per Household (Kg) 139 68	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4 586 18	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11 019 71	NI192 (comparator) – Percentage HH waste sent for Reuse, Recycling or Composting 41.6%	'Ho				
8 9 10	Jpp Order 40 39	r Authorityld 273 343	I <b>Authority</b> Allerdale Borough Council Barrow-in-Furness Borough Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433.53 4 699 68	II191 (comparator) denominator: Number of households 46,060 33 440	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140 54	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,586.18 2 433.88	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7 133 56	NI192 (comparator) – Percentage HH waste sent for Reuse, Recycling or Compositing 41.6% 34.1%	'Ho				
8 9 10	Jpp Order 40 39 51	r Authorityld 273 343 230	I Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC	HH waste not sent for recycling, N reuse or composting – numerator 6,433.53 4,699.68 14 713.46	II191 (comparator) denominator: Number of households 46,060 33,440 123 210	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,586.18 2,433.88 10.286 75	<ul> <li>Percentage HH waste sent for Reuse, Recycling or Composting – denominator 11,019.71 7,133.56 25 000 21</li> </ul>	NI192 (comparator) – Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1%	'Ho				
8 9 10 11	Jpp Order 40 39 51 64	r Authorityld 273 343 230 406	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433.53 4,699.68 14,713.46 4,877.27	II191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,586.18 2,433.88 10,286.75 2 785.05	<ul> <li>Percentage HH waste sent for Reuse, Recycling or Composting – denominator 11,019.71 7,133.56 25,000.21 7 662.32</li> </ul>	NI192 (comparator) – Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1%	'Но				
8 9 10 11 12 13	Jpp Order 40 39 51 64 50	r Authorityld 273 343 230 406 300	I Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burney Borough Council Burry MBC	HH waste not sent for recycling, N reuse or composting – numerator 6,433.53 4,699.68 14,713.46 4,877.27 8.278.68	II191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53	<ul> <li>Percentage HH waste sent for Reuse, Recycling or Compositing – numerator 4,586.18 2,433.88 10,286.75 2,785.05 8,807.92</li> </ul>	<ul> <li>Percentage HH waste sent for Reuse, Recycling or Composting denominator 11,019.71 7,133.56 25,000.21 7,662.32 17.086.60</li> </ul>	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 36.3% 51.5%	'Но				
8 9 10 11 12 13 14	Jpp Order 40 39 51 64 50 38	r Authorityld 273 343 230 406 300 76	I Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cadrisle City Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699,68 14,713,46 4,877.27 8,278,68 6,133,10	II191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670	NI191 (comparator) Residual Household Waste per Household (Kg) 139.66 140.54 119.42 120.13 100.53 121.04	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566,16 2,433,88 10,286,75 2,785,05 8,807,92 5,457,70	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11 590.80	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 36.3% 51.5% 47.1%	Но				
8 9 10 11 12 13 14 15	Jpp Order 40 39 51 64 50 38 63	r Authorityld 273 343 230 406 300 76 65	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Chorley Borough Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699.68 14,713.46 4,877.27 8,278.68 6,133.10 5,739.99	1191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,266.75 2,785.05 8,807.92 5,457.70 6 140.23	- Percentage HII waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11 880.22	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 36.3% 51.5% 47.1%	'Ho				
8 9 10 11 12 13 14 15 16	Jpp Order 40 39 51 64 50 38 63 37	r Authorityld 273 343 230 406 300 76 65 146	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burny BBC Council Carlisle City Council Chorley Borough Council Coneland Borough Council	HH waste not sent for recycling, N composting – numerator 6,433.53 4,699.68 14,713.46 4,877.27 8,278.68 6,133.10 5,739.99 4 544.21	II191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7 467.88	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 65.5% 47.1% 51.7% 39.1%	'Ho				
8 9 10 11 12 13 14 15 16 17	Jpp Order 40 39 51 64 50 38 63 37 36	r Authorityld 273 343 230 406 300 76 65 146 288	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Chorley Borough Council Copeland Borough Council Fden District Council	HH waste not sent for recycling, N reuse or compositing – numerator 6,433,53 4,699,66 14,713,46 4,877,27 8,278,66 6,133,10 5,739,99 4,544,21 3,064,79	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,780	NI191 (comparator) Residual Household Waste per Household (Kg) 139.66 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 0416% 34.1% 36.3% 51.5% 51.7% 33.1% 47.3%	'Но				
8 9 10 11 12 13 14 15 16 17 18	Jpp Order 40 39 51 64 50 38 63 37 36 62	r Authorityld 273 343 230 406 300 76 65 146 288 204	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Chorley Borough Council Copeland Borough Council Eden District Council Evide Borrough Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699.68 14,713.46 4,877.27 8,278.68 6,133.10 5,739.99 4,544.21 3,064.79 3,554.10	1191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470	NI191 (comparator) Residual Household Waste per Household 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84 94.05	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,266.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 36.3% 51.5% 47.1% 39.1% 47.3% 59.2%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19	Jpp Orden 40 39 51 64 50 38 63 37 36 62 61	r Authorityld 273 343 230 406 300 76 65 146 288 204 277	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Chorley Borough Council Copeland Borough Council Eden District Council Fylde Borough Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,953,16	1191 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470 36,610	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84 94.05 107.98	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,153.87	<ul> <li>Percentage HH</li> <li>waste sent for</li> <li>Reuse, Recycling</li> <li>or Composting –</li> <li>denominator</li> <li>11,019,71</li> <li>7,133,56</li> <li>25,000,21</li> <li>7,662,32</li> <li>17,086,60</li> <li>11,590,80</li> <li>11,880,22</li> <li>7,467,88</li> <li>5,819,52</li> <li>8,633,07</li> <li>6117,03</li> </ul>	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 51.5% 47.1% 51.7% 39.1% 47.3% 59.2% 35.4%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Chorley Borough Council Copeland Borough Council Eden District Council Fylde Borough Council Hyndburn Borough Council Knowslew MBC	HH waste not sent for recycling, N reuse or compositing – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,953,16 8,678,25	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,360 50,670 48,630 33,270 25,790 37,470 36,610 65,690	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 140.54 140.54 140.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11	- Percentage HH waste sent for numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,153.87 6,134.32	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07 6,117.03 14,812.57	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 36.3% 41.1% 36.3% 47.1% 47.1% 47.7% 47.3% 47.3% 47.3% 43.2% 35.4%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335 11	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Chorley Borough Council Copeland Borough Council Eden District Council Fylde Borough Council Hyndburn Borough Council Knowsley MBC Lancaster City Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,5524,10 3,953,16 8,678,25 6,669,72	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470 36,610 65,290 62,710	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11 106.36	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,266.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,163.87 6,134.32 6,643.96	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019,71 7,133,56 25,000,21 7,662,32 17,086,60 11,590,80 11,880,22 7,467,88 5,819,52 8,633,07 6,117,03 14,812,57 13,313,68	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 51.5% 47.1% 51.5% 47.1% 39.1% 47.3% 52.2% 35.4% 41.4 %	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 71	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335 11 412	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Copeland Borough Council Eden District Council Fylde Borough Council Hyndburn Borough Council Hyndburn Borough Council Knowsley MBC Lancaster City Council Liveroaol City Council	HH waste not sent for recycling, N reuse or composting – 0,433,53 4,699,68 14,713,46 4,877,27 8,278,66 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,953,16 8,678,25 6,669,72 30,611,71	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470 36,610 65,690 62,711 218,690	NI191 (comparator) Residual Household Waste per Household ((kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11 106.36 139.98	- Percentage Hill waste sent for Reuse, Recycling or Composting - 1,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,764.73 5,108.97 2,163.87 6,134.32 6,643.96 14,983.19	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07 6,117.03 14,812.57 13,313.68 455594.89	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 41.1% 36.3% 51.5% 47.1% 51.7% 39.1% 47.3% 55.2% 35.4% 41.4% 49.9% 32.9%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 71 49	<ul> <li>Authorityld</li> <li>273</li> <li>343</li> <li>230</li> <li>406</li> <li>300</li> <li>76</li> <li>65</li> <li>146</li> <li>288</li> <li>204</li> <li>277</li> <li>335</li> <li>11</li> <li>412</li> <li>39</li> </ul>	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Copeland Borough Council Eden District Council Hyndburn Borough Council Hyndburn Borough Council Hyndburn Borough Council Liverpool City Council Liverpool City Council Liverpool City Council	HH waste not sent for recycling, N reuse or compositing – numerator 6,433,53 4,699,66 14,713,46 4,877,27 8,278,66 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,353,16 8,678,25 6,669,72 30,611,71 29,071,31	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,360 50,670 48,630 33,270 37,470 36,610 65,690 62,710 218,690 222,730	NI191 (comparator) Residual Household Waste per Household 140,544 140,544 119,42 120,13 100,53 121,04 118,03 136,59 118,84 94,05 107,98 132,11 106,36 139,96 139,96	- Percentage HH waste sent for numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,153.87 6,643.96 14,983.19 35,993.00	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,632.32 17,086.60 11,590.80 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07 6,117.03 14,812.57 13,313.68 45,594.89 44,206.61	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 36.3% 51.5% 47.1% 51.7% 33.1% 47.3% 55.2% 35.4% 41.4% 49.9% 32.9% 34.3%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 71 49 48	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335 11 412 39 104	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Chorley Borough Council Copeland Borough Council Eden District Council Fylde Borough Council Hyndburn Borough Council Hyndburn Borough Council Liverpool City Council Liverpool City Council Manchester City Council MBC Oldham MBC	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,554,10 3,953,16 8,678,25 6,669,72 30,611.71 29,071,31 12,204,237	III91 (comparator) denominator: Number of households 46,060 43,440 40,600 40,600 40,600 40,600 48,630 33,270 25,790 37,470 36,610 65,590 62,710 218,690 222,730 95,030	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 122.0.13 100.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11 106.36 139.98 139.52 126.72	- Percentage HH waste sent for Reuse, Recycling or Composting - numerator 4,566.18 2,433.88 10,266.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,163.87 6,134.32 6,643.96 14,983.19 15,189.30 7,795.17	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019,71 7,133,56 25,000,21 7,662,32 17,086,60 11,590,80 11,880,22 7,467,88 5,819,52 8,633,07 6,117,03 14,812,57 13,313,68 45,594,89 44,260,61 19,811,54	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 51.5% 47.1% 51.5% 47.1% 59.2% 55.2% 35.4% 41.4 % 49.9% 32.9% 33.3% 59.2% 32.9% 34.3% 59.2% 32.9% 34.3% 59.2% 32.9% 34.3% 59.2% 59.2% 59.2% 50.2%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 61 72 49 48 59	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335 11 412 39 104 83	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Chorley Borough Council Chorley Borough Council Eden Distric Council Hyndburn Borough Council Hyndburn Borough Council Liverpool City Council Liverpool City Council Manchester City Council Manchester City Council Oldham MBC Pendle Borough Council	HH waste not sent for recycling, N reuse or composting - numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,953,16 8,678,25 6,669,72 30,611,71 29,071,31 12,042,37 5,340,75	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 37,470 36,610 65,590 62,710 218,690 222,730 95,030 39,860	NI191 (comparator) Residual Household Waste per Household Waste 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 107.98 139.98 139.98 130.52 126.72 133.99	- Percentage Hif waste sent for Reuse, Recycling or Composting - 1,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,764.73 5,108.97 2,163.87 6,134.32 6,643.96 14,983.19 15,189.30 7,769.17 3,168.06	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07 6,117.03 14,812.57 13,313.68 45,594.89 44,260.61 19,811.54 8,608.81	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 41.1% 36.3% 51.5% 47.1% 51.7% 33.1% 47.3% 55.2% 44.4% 49.9% 32.9% 33.2%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 71 49 48 59 58	<ul> <li>Authorityld</li> <li>273</li> <li>343</li> <li>230</li> <li>406</li> <li>300</li> <li>76</li> <li>65</li> <li>146</li> <li>288</li> <li>204</li> <li>277</li> <li>335</li> <li>11</li> <li>412</li> <li>39</li> <li>104</li> <li>83</li> <li>223</li> </ul>	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Cartisle City Council Copeland Borough Council Copeland Borough Council Eden District Council Hyndburn Borough Council Hyndburn Borough Council Knowsley MBC Lancaster City Council Liverpool City Council Manchester City Council MBC Oldham MBC Pendle Borough Council Preston City Council	HH waste not sent for recycling, N reuse or compositing – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,524,10 3,524,10 3,524,10 8,678,25 6,669,72 30,611,71 29,071,31 12,042,37 5,340,75 7,804,29	III91 (comparator) denominator: Number of households 46,060 33,440 123,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470 36,610 65,690 62,710 218,690 222,730 95,030 39,860 60 960	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 140.54 140.54 140.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11 106.36 139.98 130.52 126.72 133.99 128.02	- Percentage HH waste sent for numerator 4,566.18 2,433.88 10,286.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,153.87 6,134.32 6,643.96 14,983.19 15,189.30 7,769.17 3,168.06 5,742.45	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019.71 7,133.56 25,000.21 7,662.32 17,086.60 11,590.80 11,880.22 7,467.88 5,819.52 8,633.07 6,117.03 14,812.57 13,313.68 45,594.89 44,260.61 19,811.54 8,508.81 13,546.67	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 41.1% 33.1% 47.1% 47.1% 47.7% 47.7% 47.7% 47.3% 47.3% 47.3% 42.2% 34.4% 49.9% 32.9% 33.2% 37.2% 42.4%	'Ho				
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	Jpp Order 40 39 51 64 50 38 63 37 36 62 61 72 60 71 49 48 59 58 57	r Authorityld 273 343 230 406 300 76 65 146 288 204 277 335 11 412 39 104 83 223 294	Authority Allerdale Borough Council Barrow-in-Furness Borough Council Bolton MBC Burnley Borough Council Bury MBC Carlisle City Council Copeland Borough Council Copeland Borough Council Copeland Borough Council Eden District Council Fylde Borough Council Hyndburn Borough Council Liverpool City Council Liverpool City Council Manchester City Council MBC Pendle Borough Council Preston City Council Preston City Council Preston City Council	HH waste not sent for recycling, N reuse or composting – numerator 6,433,53 4,699,68 14,713,46 4,877,27 8,278,68 6,133,10 5,739,99 4,544,21 3,064,79 3,554,10 3,953,16 8,678,25 6,669,72 30,611,71 29,071,31 12,042,37 5,340,75 7,804,22 3,470,22	III91 (comparator) denominator: Number of households 46,060 43,210 40,600 82,350 50,670 48,630 33,270 25,790 37,470 36,610 65,650 62,710 218,690 222,730 95,030 39,860 60,960	NI191 (comparator) Residual Household Waste per Household (Kg) 139.68 140.54 119.42 120.13 100.53 121.04 118.03 136.59 118.84 94.05 107.98 132.11 106.36 139.98 130.52 126.72 133.99 128.02	- Percentage HH waste sent for numerator 4,566.18 2,433.88 10,266.75 2,785.05 8,807.92 5,457.70 6,140.23 2,923.67 2,754.73 5,108.97 2,163.87 6,134.32 6,643.96 14,983.19 15,189.30 7,769.17 3,168.06 5,742.45 2,412.26	- Percentage HH waste sent for Reuse, Recycling or Composting - denominator 11,019,71 7,133,56 25,000,21 7,666,232 17,086,60 11,590,80 11,880,22 7,467,88 5,819,52 8,633,07 6,117,03 14,812,57 13,313,68 45,594,89 44,260,61 19,811,54 8,508,81 13,546,67 5,882,48	NI192 (comparator) - Percentage HH waste sent for Reuse, Recycling or Composting 41.6% 34.1% 41.1% 53.3% 51.5% 47.1% 39.1% 47.3% 59.2% 35.4% 44.4% 34.9% 32.9% 32.9% 32.9% 32.2% 37.2% 42.4%	'Ho				

The data displayed in the report will differ depending on the criteria used to generate it, but PI and Analytical reports will always output with the same three-tab format of: Report, Data, and C-Variables.

• The Report tab – contains the report with titles laid out in an easy-to-follow form. This is the tab where you would copy the formulae if you have more than 60 LAs and/or 4 periods. As the data is in Excel format you can easily create graphs or add extra formulae as you wish.

WDF Tip: The Excel template is set up to process 60 local authorities (rows of data) to the Report tab, as a way of limiting the download size. If more than 60 LAs are selected data will come through to the Data tab of the report. You will have to fill the rows below the bottom LA on the Report tab with formulae, in order for it to be pulled across from the Data tab.

The Data tab – contains the raw information from WasteDataFlow. This is in the form of the c-variables that are used throughout the system. The term "c-variable" is short for "calculated variable". We use c-variables to show the interim stages of calculations such as those done to work out performance indicators. C-variables themselves can provide useful pieces of information.

WDF Tip – As Data Entry or Authority Administrator users, data from other authorities becomes available to you once it has first reached level 20 for each period. At this point the data is still very much subject to change and so should be treated as such. You have the ability to check the level of the data for each authority and period on the Data tab, under the heading of "Authorised Status".

<b>Authority Type</b>	Authorised Status	C4
Collection	30	25.1
Collection	20	0
Collection	30	0
Collection	10	20.9
Collection	30	0

#### Figure 25 Authorised status check

• **The C-Variables tab** – includes a definition of the c-variable code numbers used in the report and displayed on the Data tab. See section 2.1 (Performance Indicator reports) part d) for more information about c-variables.

### 3.3.2 Qu100 Recycling Report

This report can be run for multiple local authorities and multiple periods. The report allows for easy viewing of the tonnages which feed into recycling totals, by material type, for published "Household" and "Waste from households" (published at national level only) recycling measures. Rows of data contain a regional identifier for comparison with neighbouring authorities or aggregation at regional level. Notes describing data fields and how to use them are contained within the file. Data will not be returned for periods where the selected local authorities were not using Qu100.

The report consists of the following tabs:

- **Report**: presents the data entered into Qu100 in table form along with a number of identifiers for different elements of the data. The columns can be filtered to extract specific information. The report's five final columns contain formulae which draw on earlier columns to provide tonnages according to the definitions of "household" and "waste from households" (WfH)
- WfH CVars: Contains C-Vars corresponding to the "waste from households" (WfH) and "waste not from households" (WfnH) definitions (which are used for reporting UK waste data to the European Union). The final four columns on this sheet contain formulae which draw on earlier columns to construct the WfH factors used. Information about which questions in WDF and the waste types included is provided.

- **HH CVars**: provides the Household Waste factors for residual waste, MRF, recycling and reuse (as required for Defra's statistical reporting of local authority level waste and recycling statistics in the UK). The C-Variables which are used to calculate the factors, along with an explanation of what they cover, are provided.
- **Data Dictionary**: gives information about data in each column of the report. This can help you to identify which columns will help you to interrogate the data for a particular purpose and which can be hidden in order to focus on the relevant columns.

# 3.3.3 Question reports

The question reports are generated with a separate tab for each question you have selected to run it against. The report displays the data in a way which is designed to mimic the layout of the data entry pages.

1	A 0	c	D	E	f	G	н						
1	Q010 : Tonnes of material co	ollected throug	gh kerbside s	chemes from	household								
2													
3	Data for Durham City Council for Oct 08 - Dec 08												
4	Material	Tonnage collected for recycling	Tonnage collected for recycling but actually rejected/disposed	No. of households receiving a collection	Tonnage Collected for Reuse	Tonnage Collected for reuse but actually rejected / disposed	Collected Co- mingled?						
5	Green glass		-										
6	Brown glass			A.:	*								
7	Clear glass	•	· · ·	•	•								
8	Mixed glass	618.58		39100			Yes						
9	Paper		-		-								
10	Card		-		-	-	-						
11	Books		-										
12	Mixed paper and card	989.04		39160		-	Yes						
13	Steel cans	*		×	×	*							
14	Aluminium cans			•									
15	Mixed care	163.00	×	39100	8	*	Yes						
16	Plastics	256.23		39160			Yee						
17	Textiles and footwear	~	-		· · · ·	-							
18	Co mingled materials	•											
19	Green waste only	160.88		6000		×	No						
20	Other compostable waste												
21	Wood		24	×		*							
<u>.</u>	0010 PJ												

#### Figure 26 Example Question report.

### 3.3.4 Raw Data Reports

The Raw Data report has superseded the CSV download which was available from the Reports section until September 2013. The Raw Data report offers a number of benefits over the CSV download including the ability to exclude rows which don't contain any data, a higher number of rows of data available in the report as well as support for Qu100 data.

The Raw Data download produces an Excel file (.xls) and can be run against multiple authorities for multiple periods. The file does not provide any formatting such as column widths, or different font settings and the data is arranged in its rawest form. These files can look complicated at first but ultimately provide the greatest degree of flexibility for filtering and using as the base for running any formulae and macros you may create to query and process the data.

The Raw Data report generated from within the summary reports creates an Excel worksheet (.xls file) with either two, three or four tabs dependent on the data requested:

- NotQ100 (present dependent on the questions selected for reporting) will contain information for all questions (currently excludes Qu100).
- **Q100** (present if Qu100 data has been requested) contains any Qu100 data if present.
- Service (present if downloading data from Welsh LAs) contains data from Qu170-Qu176 if present.
- **Comments** contains comments present for any of the questions contained within Tab 1, listed by Authority, Question number and date.

	А	В	С	D	E	F	G	Н	- I	J	K	L	М	N	0	P
1	This file c	ontains data	(subject to	change) fo	or the selecte	d authoritie	s and period	Is only if ret	urns have b	een comple	eted.					
2	Authority	Period	QuestionN	QuText	CollateTex	RowText	ColText	Data	RowOrder	ColOrder	Rowldent	Colldent	CollateID	columngrou	MaterialGroup	р
3	Knowsley	Nan 12 - N	1¢Q001	Authority	Data: Note th	Population	n of Authority	149100	1	1	587	271	-1			
4	Knowsley	Nan 12 - N	1¢Q001	Authority	Data: Note th	Area in He	ectares	8604.795	2	1	588	271	-1			
5	Knowsley	NJan 12 - N	1: Q001	Authority	Data: Note th	Population	Density of <i>i</i>	17.328	3	1	589	271	-1			
6	Knowsley	NJan 12 - N	1¢Q002	Authority	Data: Note th	Number of	f Household	61000	1	1	590	334	-1			
7	Knowsley	NJan 12 - N	1¢Q002	Authority	Data: Note th	Dwelling S	Stock	64680	2	1	591	334	-1			
8	Knowsley	NJan 12 - N	1¢Q002	Authority	Data: Note th	Index of D	eprivation	41.014	3	1	592	334	-1			
9	Knowsley	NJan 12 - N	1¢Q002	Authority	Data: Note th	BMW % C	onversion fa	68	4	1	706	334	-1			
10	Knowsley	NJan 12 - N	1¢Q002	Authority	Data: Note th	MBT Redu	uction Factor	1	5	1	2279	334	-1			
11	Knowsley	NJan 12 - N	1¢Q004	How man	ny households	Wheeled I	ENumber of	60799	2	1	262	2	-1			
12	Knowsley	NJan 12 - N	1¢Q004	How man	ny households	Wheeled I	EFrequency	Weekly	2	2	262	336	-1			
13	Knowsley	NJan 12 - N	1¢Q004	How man	ny households	Communa	I Number of	3881	7	1	267	2	-1			
14	Knowsley	Nan 12 - N	1¢Q004	How man	ny households	Communa	I Frequency	Weekly	7	2	267	336	-1			
15	Knowsley	Nan 12 - N	1¢Q005	How man	ny households	Wheeled I	b Number of	63386	8	1	277	5	-1			
16	Knowsley	NJan 12 - N	1¢Q005	How man	ny households	Wheeled I	b Frequency	Fortnightly	8	2	277	6	-1			
17	Knowsley	NJan 12 - N	1¢Q005	How man	ny households	Wheeled I	b Are materia	Yes	8	3	277	7	-1			
18	Knowsley	NJan 12 - N	1¢Q005	How man	ny households	Wheeled I	b If Yes % K	100	8	4	277	8	-1			
19	Knowsley	NJan 12 - N	1: Q005	How man	ny households	Wheeled I	b and %MR	100	8	5	277	338	-1			
20	Knowsley	NJan 12 - N	1: Q006	How man	ny households	Wheeled I	b Number of	63386	4	1	284	10	-1			
21	Knowsley	NJan 12 - N	1: Q006	How man	ny households	Wheeled I	b Frequency	Fortnightly	4	2	284	11	-1			
22	Knowsley	NJan 12 - N	1: Q006	How man	ny households	Wheeled I	b Is Kitchen	No	4	3	284	339	-1			
23	Knowsley	NJan 12 - N	1: Q007	How man	y households	Four or me	o Actual Num	63386	4	1	291	12	-1			
24	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Green gar	c Tonnage c	789.14	1	1	1445	21	-1		Organic	
25	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Green gar	c No. of hous	63386	1	3	1445	61	-1		Organic	
26	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Green gar	c Collected (	No	1	6	1445	342	-1		Organic	
27	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Waste foo	Tonnage c	236.68	1	1	1446	21	-1		Organic	
28	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Waste foo	No. of hous	11632	1	3	1446	61	-1		Organic	
29	Knowsley	NJan 12 - N	1: Q010	Tonnes of	of material col	Waste foo	Collected (	No	1	6	1446	342	-1		Organic	
30	Knowsley	Man 12 - N	1: Q010	Tonnes of	of material col	WEEE - F	r Tonnage c	5.32	1	1	1455	21	-1		WEEE	
31	Knowsley	NJan 12 - N	1: Q010	Tonnes o	of material col	WEEE - F	r No. of hous	64680	1	3	1455	61	-1		WEEE	
22	N Not0100	· 1 10 ·	0040	T				NI-		-	4455	0.40				

#### Figure 27 NotQ100 tab of a Raw data report.

Key points about the NotQ100 tab:

- **Columns A to D** contain data relating to the authority, period and question number and can be filtered to display the data you require.
- Column E contains collated data from the responses to certain questions, e.g. destinations for material.
- Column H contains all the data entered under each question. It is important to note that depending on the questions downloaded this therefore means it could contain not only tonnage data, but also bin numbers, collection frequency, household numbers etc.
- Columns F to G contain a description of the data held in column H. Therefore, it is possible to apply filters to these columns to reduce the amount of data displayed to only that which is of interest to you, for example only data relating to the tonnage of glass.
- Columns I to N contain various id tags which relate to where the data resides within the system. They can prove useful if you plan on building more advanced formulae and macros to process the data but in most cases they do not provide any benefit when simply viewing the file. In these cases you may wish to consider hiding or deleting these columns to avoid confusion. Once these columns are removed from view you will also have more space to expand the remaining columns.
- Column O contains the material descriptor, where appropriate, for that data line. Some of these
  map directly to the 60+ materials available for local authorities to record data under (e.g.
  Furniture), others group two or more of these together. For example, all organic materials
  (Green garden waste only, Mixed garden and food waste, Other compostable waste and Waste
  food only) are grouped under "Organic".

#### Figure 28 Q100 tab of a Raw data report.

1	A	В	С	D	E	F	G	Н	The second	J	K	L	М	N	0	P	Q
2	WasteProd	WasteStre	WasteProc S	SenderW	a Authority	AuthorityId	Period	PeriodId	WasteStre	WasteStre	FacilityTyp	FacilityTyp	NationalFa	FacilityNan	r FacilityAdd	FacilityPos	FacilityLic
3	150813	150882	0	(	Aberdeen	s 442	Jan 13 - Ma	194	5	Residual w	2	Non-hazard	8719	Stoneyhill	Stoneyhill	AB42 OPR	PPC/N/00
4	150814	150883	0	(	Aberdeen	s 442	Jan 13 - M	194	5	Residual w	2	Non-hazard	25989	Easter Hat	t Easter Hat	tAB23 8YY	PPC/N/00
5	150815	150884	0	(	Aberdeen	s 442	Jan 13 - Ma	194	5	Residual w	3	Hazardous	25989	Easter Hat	t Easter Hat	tAB23 8YY	PPC/N/00
6	150816	150879	292909	(	Aberdeen	s 442	Jan 13 - Ma	194	3	Food waste	0		0				
7	150816	150879	0	(	Aberdeen	s 442	Jan 13 - Ma	194	3	Food waste	12	In vessel c	26830	Ley Farm (	Ley Farm	AB45 2XS	PPC/A/10
8	150816	150879	292908	(	Aberdeen	s 442	Jan 13 - Ma	194	3	Food waste	22	Final Destin	0				
9	150817	150880	292911	(	Aberdeen	s 442	Jan 13 - Ma	194	4	Green was	0		0				
10	150817	150880	0	(	Aberdeen	s 442	Jan 13 - Ma	194	4	Green was	12	In vessel c	26830	Ley Farm (	Ley Farm	(AB45 2XS	PPC/A/10
11	150817	150880	292910	(	Aberdeen	s 442	Jan 13 - M	194	4	Green was	22	Final Destin	0				
12	150818	150881	292913	(	Aberdeen	s 442	Jan 13 - M	194	. 4	Green was	0		0				
13	150818	150881	0	(	Aberdeen	s 442	Jan 13 - Ma	194	4	Green was	13	Windrow of	8275	Grant Keer	Hillhead O	fAB53 6YH	WML/N/02
14	150818	150881	292912	(	Aberdeen	s 442	Jan 13 - Ma	194	4	Green was	22	Final Destin	0				
15	150818	150881	0	(	Aberdeen	s 442	Jan 13 - Ma	194	. 4	Green was	13	Windrow of	8275	Grant Keen	r Hillhead O	fAB53 6YH	WML/N/02
16	150818	150881	292912	(	Aberdeen	s 442	Jan 13 - Ma	194	4	Green was	22	Final Desti	0				
17	150819	150851	0	(	Aberdeen	s 442	Jan 13 - M	194	. 1	Source seg	16	Reprocess	146	Upm Kymr	Weighbrid	CH5 2LL	NPWD108
18	150819	150851	292880	(	Aberdeen	s 442	Jan 13 - Ma	194	. 1	Source seg	22	Final Destin	0				
19	150820	150852	0	(	Aberdeen	s 442	Jan 13 - Ma	194	. 1	Source seg	16	Reprocess	170	Jfc Plastics	Unit 6, Gol	CV37 7NE	NPWD108
20	150820	150852	292881	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	22	Final Destin	0				
21	150821	150853	292882	(	Aberdeen	s 442	Jan 13 - Ma	194	. 1	Source seg	22	Final Destin	0				
22	150821	150853	0	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	16	Reprocess	3182	G & P Batt	Crescent \	/WS10 8JF	42701
23	150822	150854	0		Aberdeen	s 442	Jan 13 - M	194	1	Source seg	16	Reprocess	8263	A&M Smith	Bankhead	AB12 4RX	WML/N/00
24	150822	150854	292883	(	Aberdeen	s 442	Jan 13 - M	194	1	Source seg	22	Final Desti	0				
25	150822	150854	0	(	Aberdeen	s 442	Jan 13 - M	194	. 1	Source seg	16	Reprocess	8263	A&M Smith	Bankhead,	AB12 4RX	WML/N/00
26	150822	150854	292883	(	Aberdeen	s 442	Jan 13 - Ma	194	. 1	Source seg	22	Final Destin	0				
27	150823	150855	0	(	Aberdeen	s 442	Jan 13 - M	194	1	Source seg	16	Reprocess	8270	Nathans W	13, Winch	FK6 6QE	WML/XS/
28	150823	150855	292884	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	22	Final Destin	0				
29	150824	150856	0	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	16	Reprocess	8271	Panda Ros	Harehill, B	AB23 8BC	WML/N/00
30	150824	150856	292885	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	22	Final Destin	0				
31	150825	150857	0	(	Aberdeen	s 442	Jan 13 - Ma	194	1	Source seg	16	Reprocess	8374	Severnside	18 Garrel	G65 9JX	WML/XS/
32	150825	150857	292886	(	Aberdeen	s 442	Jan 13 - M	194	1	Source seg	22	Final Destin	0				
22	Not0100	0100 Comme	nts P1	,		- 440	1 40 14	404		·	14 11 10	<b>D</b>	0.4.40	O-1	0.4.0224	0000117	181

Key points about the Q100 tab:

- The Q100 tab contains more information about the movement of waste streams between facilities used and the processes undergone by the waste than the NotQ100 tab. It has more columns, all of which can be filtered to display the data you require. Care should be taken when filtering as some rows will be blank in one column but may contain relevant information in another. It may be advisable to save an unaltered version of the spreadsheet before applying multiple filters.
- Columns A and B contain a pair of ID numbers. These are unique to this instance of the data and will be overwritten each time data is rolled through level 10. You will notice that the numbers in columns A and B will differ, but pairing will remain constant. For example where 123456 appears in column A and 987654 appears on the same row in column B, this association will be constant and so they will only ever appear together. A new pairing is created for each primary node recorded in Qu100 and will also be applied to every node which can be traced back to it. Therefore in circumstances where you see pairings repeat over a number of rows you can conclude that those rows are all part of the same Qu100 branch (they have a common starting point). For example, the first one may be a MRF and then the subsequent ones of the same AB pairing will be its various outputs, and where required the outputs of its outputs and so on.
- **Column C** This column will either contain a 0 or a multi digit number (6 or more) and denotes the ID given to the waste output instance which has created it. As a primary level node will not be the output of anything else, there is no number to give to it and therefore a 0 will be provided. This means that where ever you see a 0 in column C, you can be sure it is a primary facility. Where a number is given it will be a secondary or lower level facility or process. Numbers in Column C can occur multiple times in situations where more than one material type is recorded at a facility.
- Column D This column contains the WasteProcessorOutputID (column C) of its parent facility. Therefore will return 0 in instances where the site is a primary level facility (as it doesn't have a parent) or a secondary level facility (as primary level facilities are recorded with a 0 in column C). Where a multi digit number (6 or more) is present in column D, you will be able to find it in a preceding row in column C, this preceding row will be the parent of the row(s) with the same value in column D. Numbers in Column D can occur multiple times in situations where more than one material type is recorded at a facility.

Therefore columns A to D can be used in combination to reconstruct the links between the individual rows of data in the raw data.

- Pairings of values in columns A-B represent a branch of Qu100 data

- Pairings will only ever have one instance of a 0 in column C <u>AND</u> a 0 in column D. This identifies this row as representing the primary facility of the branch.
- Pairings with a multi digit value in column C and a 0 in column D are the direct outputs of the primary facility, (secondary level facilities or processes)
- Pairings with a multi digit value in both columns C and D represent a facility or process at the tertiary level of a branch or below.
- The repetition of a number between column C and D can be used to identify the parent and therefore level of a facility or process with multi digit values in both columns C and D.
- The table below provides an example using real data taken from one of the English LAs trailing Qu100They can be identified as all relating to a common branch of Qu100 data at they all have the same number pairing in columns A and B.
- Row 1 contains the primary facility of the branch as shown by the presence of 0s in both columns C and D
- Rows 2, 3, 4, 7, 11, and 15 are the secondary level facilities or processes as identified by the presence of a 0 in column D and a number in column C.
- Row 3 can be identified as the parent of five other rows, (row 3 contains 994018 in column C whilst 994018 then appears five times in column D.
- Row 7 and 11 have the same values in columns A-D as they represent different materials recorded at the same facility (later columns can be queried to identify this).
- Rows 8 and 12 can be identified as the outputs related to rows 7 and 11 by the presence of 994015 in column D of row 8 & 12, being the same as the values in column C of rows 7 & 11.

	Column A Column B Column C					
Row 1	417573	417649	0	0		
Row 2	417573	417649	994016	0		
Row 3	417573	417649	994018	0		
Row 4	417573	417649	994019	0		
Row 5	417573	417649	994052	994018		
Row 6	417573	417649	994053	994018		
Row 7	417573	417649	994015	0		
Row 8	417573	417649	994048	994015		
Row 9	417573	417649	994050	994018		
Row 10	417573	417649	994061	994050 0		
Row 11	417573	417649	994015			
Row 12	417573	417649	994048	994015		
Row 13	417573	417649	994050	994018		
Row 14	417573	417649	994061	994050		
Row 15	417573	417649	994017	0		
Row 16	417573	417649	994049	994017		
Row 17	417573	417649	994051	994018		
Row 18	417573	417649	994062	994051		

- **Columns E H** contain data relating to the authority and period.
- **Columns I J** contain data relating to the waste stream type.
- Columns K S contain data relating to the facility (type, National ID, name, address, license number, output process). It may be better to identify the facility of interest then use the relevant WasteProcessorID in column A to filter as not all rows in columns K-S contain data and there will often be information regarding a particular facility on multiple rows, (e.g. where multiple materials are recorded).
- **Columns T U** contain data relating to the output process and tonnage.
- **Columns V X** contain data relating to the input material.
- Columns Y AD contain data relating to source (household, commercial or industrial in Scotland and household, non-household, WfH and WnfH in England where completed. These columns are unused for raw data from Welsh LAs).

- Columns AE AF contain data relating to the usage of the output material, where applicable.
- **Columns AG AH** contain monthly and quarterly comments entered by the local authority in Qu100, where applicable. Comments for all other questions are displayed on the Comments tab.
- Column AI contains the material group descriptor, where appropriate, for that data line. Some of these map directly to the 60+ materials available for local authorities to record data under (e.g. Furniture), others group two or more of these together. For example, all organic materials (Green garden waste only, Mixed garden and food waste, Other compostable waste and Waste food only) are grouped under "Organic" and Metal applies to Aluminium cans, Steel cans and Other scrap metal.

If you have any further questions in relation to WasteDataFlow reports please contact the WasteDataFlow helpdesk on 0845 6000 890 or email <u>helpdesk@wastedataflow.org</u>.