Waste Report

2015-2016

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Background

The University is committed to reducing its impact on the environment by monitoring waste streams produced as a by-product of its activity and seeking ways to move waste up the waste hierarchy in accordance with local, national and EU targets and its statutory Duty of Care.

This report will provide data on non-hazardous and hazardous waste produced at the University and how the waste was disposed of. Data was gathered from waste contractors servicing the University as part of their Duty of Care to record and report waste transfers. Carbon data is included in the report with conversion factors taken from the appropriate DEFRA data set.

Non-Hazardous Waste

The majority of waste at the University is non-hazardous. This includes municipal waste, food, paper and cardboard produced as part of the normal operation of the University and larger items such as wood and metal from furniture that has reached the end of its useful life. There is scope within these waste streams to both minimise waste produced and move waste up the waste hierarchy.

The University complies with the requirement to source segregate waste by segregating paper, dry mixed recyclates and residual waste. The Scottish Government have already announced that a ban on all biodegradable material from landfill will require all organisations to source segregate food waste by 2020.

Contractors & Waste Streams

Waste Stream	Contractor	Primary Disposal Method
Food	Keenans	Recycled
Metal	Panda Rosa	Recycled
Paper	Shred-it	Recycled
Cardboard	TWMA	Recycled
Dry Mixed Recyclates	TWMA	Recycled
Green	TWMA	Recycled
Residual (General) Waste	TWMA	Landfill & Incineration
Wood	TWMA	Recycled

	Keenans	Panda Rosa	Shred-it	TWMA						
				Wood	Plastic	Glass	Cans	Paper/Card	Green	General Waste
	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Disposal
August	1.602	2.260	17.920	0.000	0.433	0.009	0.071	8.333	21.080	39.294
September	2.796	1.540	18.047	3.400	0.495	0.044	0.087	9.078	15.800	51.426
October	3.049	2.620	15.812	0.000	0.470	0.076	0.445	9.822	12.740	48.763
November	4.033	1.120	13.945	5.680	0.637	0.048	0.072	11.461	20.720	40.759
December	3.097	0.000	13.297	1.420	0.151	0.009	0.025	10.689	7.200	49.336
January	2.707	0.840	11.506	0.000	0.210	0.003	0.247	9.474	11.880	42.250
February	3.686	1.060	15.126	0.000	0.222	0.055	0.040	12.017	3.540	50.068
March	4.353	1.060	14.084	2.540	0.396	0.179	0.050	12.048	8.740	49.547
April	2.978	6.180	15.888	3.880	0.406	0.114	0.155	10.569	8.300	43.120
May	3.847	5.000	12.395	2.260	0.615	0.058	0.107	12.337	3.720	50.113
June	2.566	2.260	15.316	0.000	0.384	0.050	0.173	13.455	12.680	45.563
July	2.522	2.900	12.014	6.340	0.146	0.025	0.068	10.862	12.540	36.149
Annual Total	37.235	26.840	175.350	25.520	4.565	0.670	1.540	130.145	138.940	546.388

Non-Hazardous Waste (Tonnes)

Hazardous Waste

The University produces a significant amount of hazardous waste. This includes IT and electrical items as part of the normal operation of the University and more specialised clinical and chemical waste from labs. There is limited scope within these waste streams to minimise waste produced or move waste up the waste hierarchy due to the nature of the waste, the environment it is produced in and health and safety requirements in the production, handling and disposal of the waste.

Contractors & Waste Streams

Waste Stream	Contractor	Primary Disposal Method
Chemicals	Veolia	Recycled
IT & WEEE[1]	TES-AMM	Recycled
Clinical OA	Healthcare Environmental	Incineration
Clinical FH	NHS Grampian	Incineration

[1] Waste Electrical and Electronic Equipment

	Clinical (OA)	Clinical (FH)	Veolia				TES-AMM			
	Disposal	Disposal	Disposal	EfW/Treated	Reuse (Ext)	Recycle	Reuse (Ext)	Recycle	EfW	Disposal
August	0.530	8.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
September	0.727	9.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
October	0.528	9.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
November	0.618	8.265	0.190	8.422	0.000	5.163	0.000	0.000	0.000	0.000
December	0.687	9.148	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
January	0.806	8.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
February	0.551	8.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
March	0.721	8.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
April	0.537	9.734	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
May	0.634	12.354	0.000	0.000	0.000	0.000	0.000	6.103	0.000	0.000
June	0.634	10.443	0.000	0.000	0.000	0.000	0.000	1.055	0.000	0.000
July	0.634	9.190	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Annual Total	7.607	113.340	0.190	8.422	0.000	5.163	0.000	7.158	0.000	0.000

Hazardous Waste (Tonnes)

Waste Totals

The total annual waste produced at the University increased slightly from last year. However we are seeing continued progress in the proportion of waste recycled although this is becoming increasingly difficult to achieve as less of the material sent for disposal is recyclable.

It should be noted that the disposal figure represents what the University sent for disposal and does not include sorting and processing of the waste off-site which can recover recyclables from the waste stream.

	Tonnes	Percentage
Reuse (Internal)	1.601	0.13%
Reuse (External)	8.386	0.68%
Recycle	553.126	44.64%
EfW	8.422	0.68%
Disposal	667.525	53.87%
Total	1239.060	100.00%

Waste Totals by Disposal Method

Carbon Emissions

Using the waste data supplied by contractors, together with their disposal routes and DEFRA carbon conversion factors the carbon emissions arising from waste was calculated to be 263.25 tonnes CO_2e. While carbon emissions are a useful indicator of progress they should be viewed in the context of wider sustainability issues such as resource efficiency. For example; putting waste metal into landfill results in lower carbon emissions than recycling it but would result in the loss of a resource.

Historic Waste Data

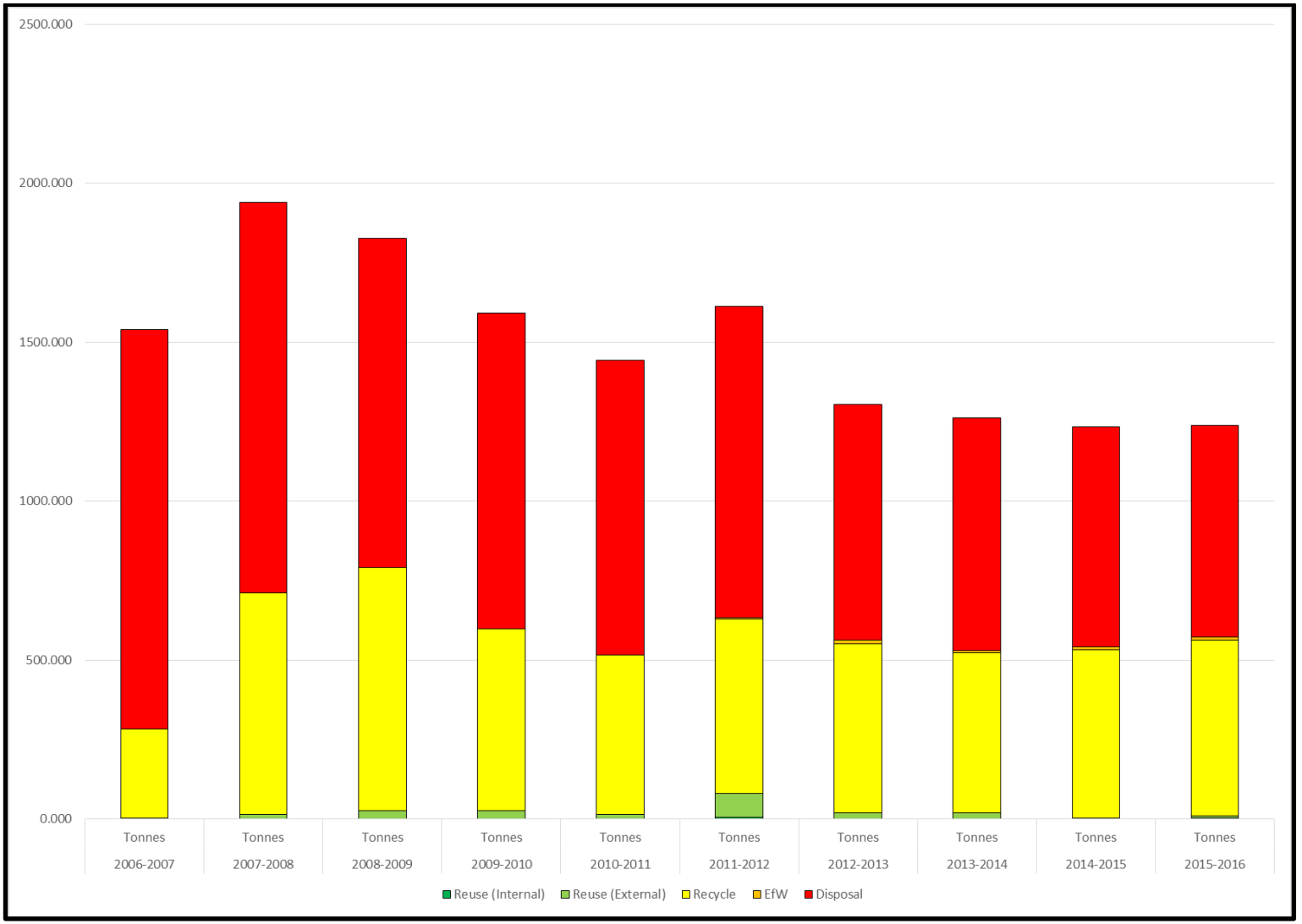
The University has seen a general reduction in total waste produced (1939 tonnes in 2007-2008, 1239 tonnes in 2015-2016) and a general increase in the proportion of waste that is recycled (36% in 2007-2008, 45% in 2015-2016).

	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011	
	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Reuse (Internal)	0.000	0.00%	0.000	0.00%	0.000	0.00%	0.000	0.00%	0.000	0.00%
Reuse (External)	1.990	0.13%	15.540	0.80%	25.350	1.39%	25.140	1.58%	13.520	0.94%
Recycle	280.700	18.23%	694.690	35.83%	766.580	41.95%	572.850	35.99%	501.180	34.76%
EfW	0.000	0.00%	0.000	0.00%	0.000	0.00%	0.000	0.00%	0.000	0.00%
Disposal	1256.910	81.64%	1228.800	63.37%	1035.220	56.66%	993.560	62.43%	927.240	64.31%
Total	1539.600	100.00%	1939.030	100.00%	1827.150	100.00%	1591.550	100.00%	1441.940	100.00%

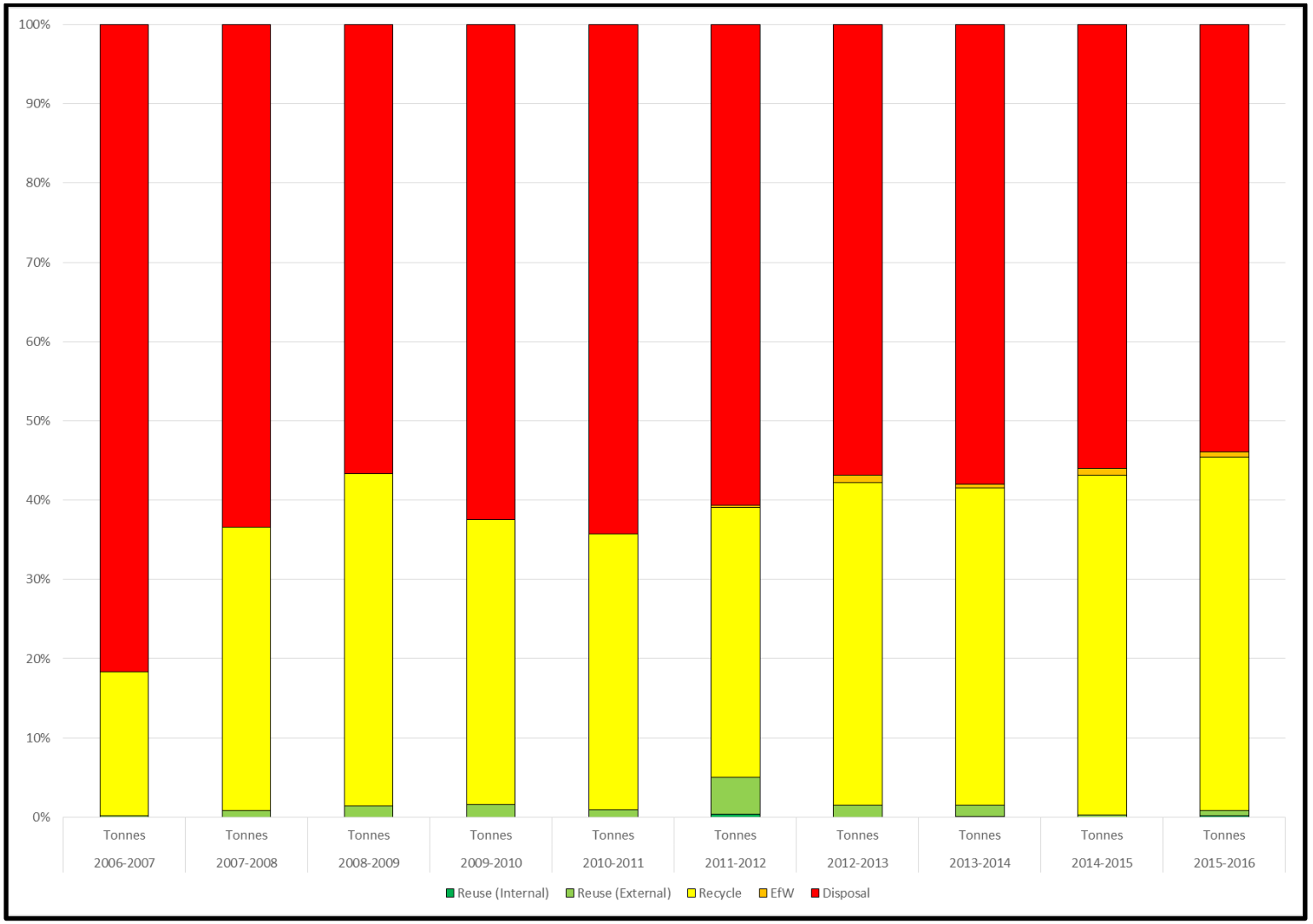
Historic Waste Totals by Disposal Method 2006-2011

	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Reuse (Internal)	5.344	0.33%	0.120	0.01%	0.824	0.07%	0.011	0.00%	1.601	0.13%
Reuse (External)	75.400	4.68%	19.163	1.47%	17.902	1.42%	3.466	0.28%	8.386	0.68%
Recycle	548.314	34.02%	531.499	40.72%	505.044	40.05%	528.288	42.83%	553.126	44.64%
EfW	4.290	0.27%	11.953	0.92%	6.154	0.49%	10.591	0.86%	8.422	0.68%
Disposal	978.210	60.70%	742.426	56.88%	730.993	57.97%	691.220	56.03%	667.525	53.87%
Total	1611.558	100.00%	1305.161	100.00%	1260.917	100.00%	1233.576	100.00%	1239.060	100.00%

Historic Waste Totals by Disposal Method 2011-2016



Historic Waste Totals by Disposal Method 2006-2016 (Tonnes)



Historic Waste Totals by Disposal Method 2006-2016 (Percentage)