

**UNIVERSITY
OF ABERDEEN**

**Waste Report
2014-2015**

Author: Christopher Osbeck, Transport & Waste Manager
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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 last year saw the introduction of the requirement for all organisations to source segregate their waste. The University was compliant with this requirement by source 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							
	Recycle	Recycle	Recycle	Wood Recycle	Plastic Recycle	Glass Recycle	Cans Recycle	Paper/Card Recycle	Green Recycle	Matresses Recycle	General Waste Disposal
August	2.880	0.820	7.499	0.000	0.150	0.090	0.036	5.984	23.410	0.000	44.890
September	3.300	2.900	7.199	1.960	0.161	0.119	0.046	10.089	12.540	0.000	53.233
October	2.640	1.880	7.067	0.000	0.126	0.047	0.077	10.570	20.940	0.000	59.150
November	2.164	0.120	7.249	3.240	0.146	0.018	0.023	9.032	29.580	0.000	46.781
December	2.347	0.000	13.754	0.000	0.189	0.479	0.130	8.336	4.340	0.000	46.266
January	1.807	1.580	11.036	2.440	0.088	0.041	0.030	6.096	6.000	0.000	38.855
February	1.919	1.100	12.294	0.000	0.453	0.065	0.160	8.025	6.220	0.000	43.345
March	1.938	1.300	16.472	2.220	0.722	0.033	0.127	8.957	13.580	0.000	46.145
April	2.003	4.240	15.037	2.560	0.257	0.064	0.093	9.052	8.940	0.000	41.968
May	2.026	0.800	14.440	2.280	0.138	0.025	0.044	8.232	19.280	0.000	52.392
June	1.943	1.520	19.126	1.660	0.601	0.038	0.063	9.655	17.900	0.000	53.848
July	1.543	1.740	14.872	3.020	0.593	0.019	0.390	8.731	16.300	0.000	47.443
Annual Total	26.510	18.000	146.045	19.380	3.624	1.038	1.219	102.759	179.030	0.000	574.316

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 generation, handling and disposal of the waste.

The last year saw a minor change to the way hazardous waste is catalogued for disposal via the European Waste Catalogue. The University, in partnership with our hazardous waste contractors, ensured we were compliant with no impact on service delivery.

Contractors & Waste Streams

Waste Stream	Contractor	Primary Disposal Method
Chemicals	Enviroco	Recycled
WEEE ¹	Enviroco	Energy from Waste
Clinical OA	Healthcare Environmental	Incineration
Clinical FH	NHS Grampian	Incineration
IT	TES-AMM	Recycled

¹ Waste Electrical and Electronic Equipment

	Clinical (OA)	Clinical (FH)	Enviroco			TES-AMM				
	Disposal	Disposal	Disposal	EfW/Treated	Reuse (Ext)	Recycle	Reuse (Ext)	Recycle	EfW	Disposal
August	0.424	9.572	0.190	4.477	0.000	2.163	0.000	1.481	0.006	0.014
September	0.748	9.634	0.000	3.945	0.000	3.000	0.000	0.000	0.000	0.000
October	0.575	10.268	0.000	0.000	0.000	0.920	0.945	1.608	0.003	0.019
November	0.558	9.982	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
December	0.600	11.388	0.080	1.090	0.000	0.615	0.000	1.604	0.006	0.012
January	0.000	9.761	0.000	0.325	0.000	1.820	0.000	0.000	0.000	0.000
February	0.535	10.279	0.000	0.000	0.000	1.692	0.000	0.000	0.000	0.000
March	0.603	8.955	1.740	0.565	0.000	8.794	1.021	1.803	0.004	0.032
April	0.547	9.952	1.166	0.170	0.000	0.165	0.000	0.000	0.000	0.000
May	0.608	7.823	0.000	0.000	0.000	0.340	0.000	0.000	0.000	0.000
June	0.667	9.595	0.000	0.000	0.000	4.678	0.000	0.000	0.000	0.000
July	0.577	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Annual Total	6.442	107.209	3.176	10.572	0.000	24.187	1.966	6.497	0.019	0.077

Hazardous Waste (Tonnes)²

² Clinical (FH) figures are currently in dispute and could be revised

Waste Totals

The total annual waste produced at the University continues to decline. We are also seeing continued progress in the proportion of waste recycled although this is becoming increasingly difficult to achieve as waste reductions often impact on this figure. For example; improvements in IT mean that less paper is printed which reduces the waste overall but, as paper is recycled, also reduces the proportion of waste that is recycled.

	Tonnes	Percentage
Reuse (Internal)	0.011	0.00%
Reuse (External)	3.466	0.28%
Recycle	528.288	42.83%
EfW	10.591	0.86%
Disposal	691.220	56.03%
Total	1233.576	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 197.36 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

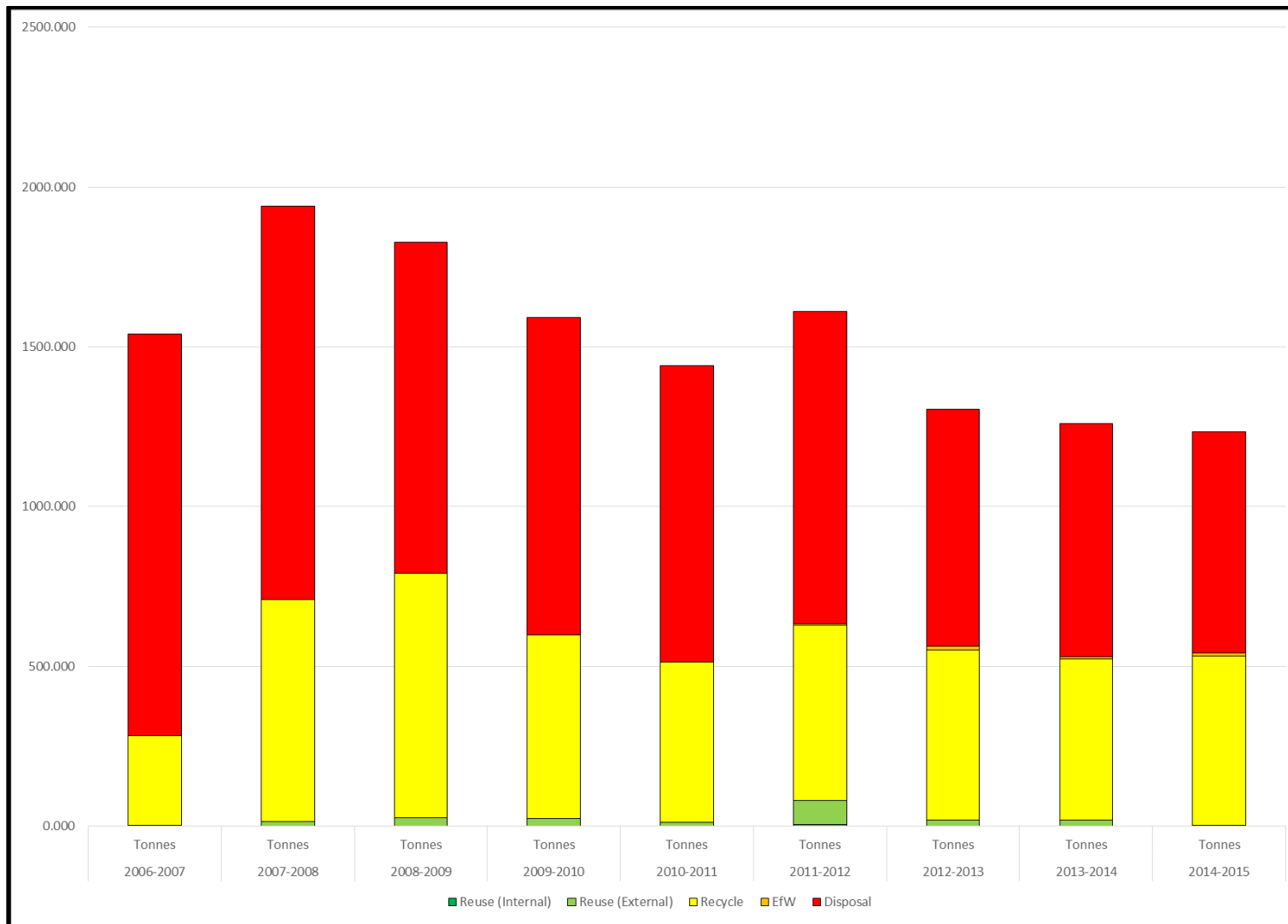
The University has seen a general reduction in total waste produced (1939 tonnes in 2007-2008, 1234 tonnes in 2014-2015) and a general increase in the proportion of waste that is recycled (36% in 2007-2008, 43% in 2014-2015).

	2006-2007		2007-2008		2008-2009		2009-2010	
	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%
Reuse (External)	1.990	0.13%	15.540	0.80%	25.350	1.39%	25.140	1.58%
Recycle	280.700	18.23%	694.690	35.83%	766.580	41.95%	572.850	35.99%
EfW	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%
Total	1539.600	100.00%	1939.030	100.00%	1827.150	100.00%	1591.550	100.00%

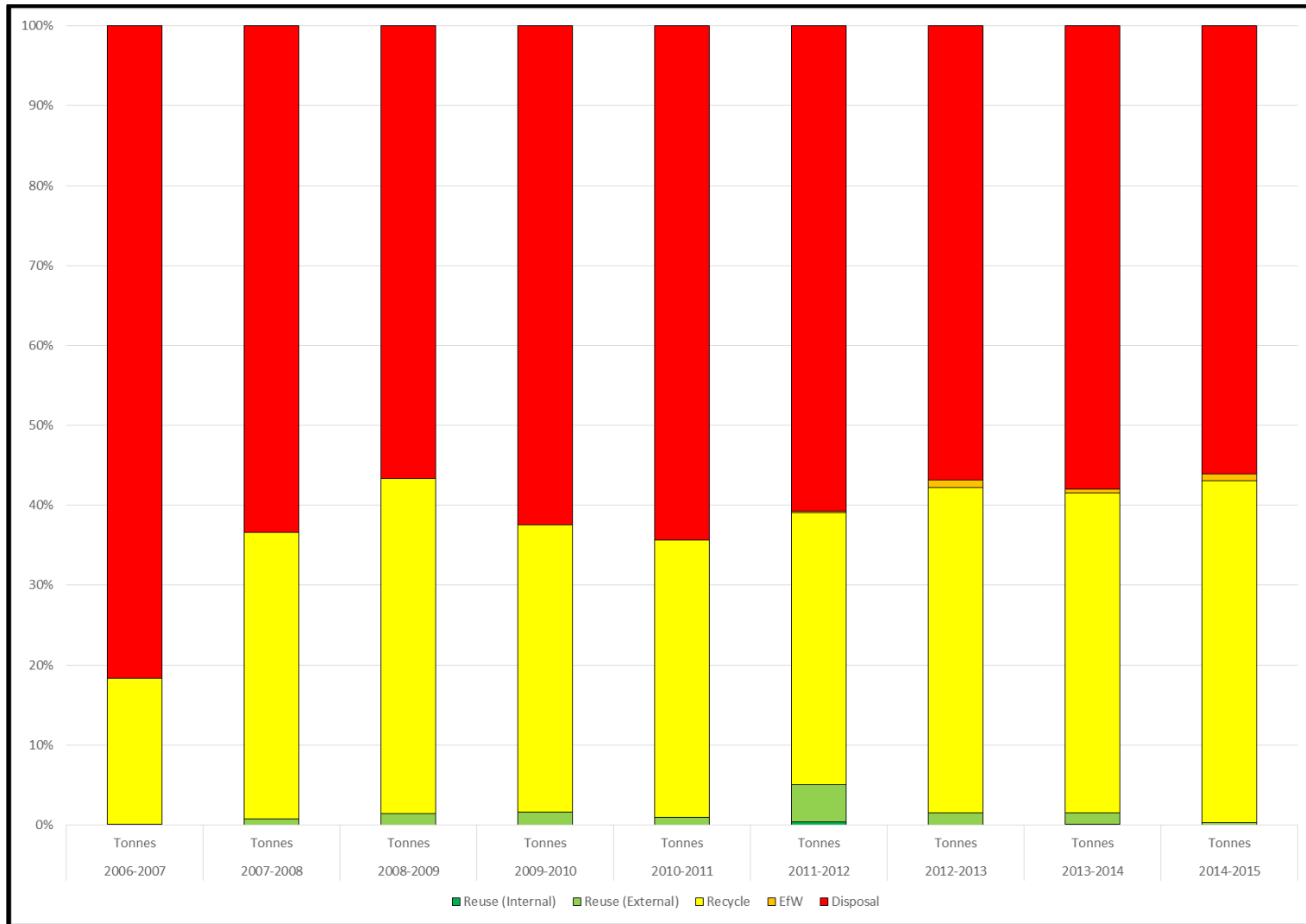
Historic Waste Totals by Disposal Method 2006-2010

	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage	Tonnes	Percentage
Reuse (Internal)	0.000	0.00%	5.344	0.33%	0.120	0.01%	0.824	0.07%	0.011	0.00%
Reuse (External)	13.520	0.94%	75.400	4.68%	19.163	1.47%	17.902	1.42%	3.466	0.28%
Recycle	501.180	34.76%	548.314	34.02%	531.499	40.72%	505.044	40.05%	528.288	42.83%
EfW	0.000	0.00%	4.290	0.27%	11.953	0.92%	6.154	0.49%	10.591	0.86%
Disposal	927.240	64.31%	978.210	60.70%	742.426	56.88%	730.993	57.97%	691.220	56.03%
Total	1441.940	100.00%	1611.558	100.00%	1305.161	100.00%	1260.917	100.00%	1233.576	100.00%

Historic Waste Totals by Disposal Method 2010-2015



Historic Waste Totals by Disposal Method 2006-2015 (Tonnes)



Historic Waste Totals by Disposal Method 2006-2015 (Percentage)