LLW Repository Ltd | NDA

National Waste Programme

January 2019 Waste Metric Dashboard

Period 10 : 30th December to 26th January FY 18/19

UK Waste Diversion

The National Waste Programme aims to communicate progress in the implementation of the Waste Hierarchy and the Nuclear Industry Strategy for Low Level Waste Management across the UK. This dashboard shows key metrics that demonstrate the successful diversion of waste away from direct disposal and the optimal use of key national assets, such as LLWR and waste treatment facilities on sites around the UK, typically based on delivery of Joint Waste Management Plans (JWMPs). The objective is to encourage transparency and communicate progress to all stakeholders.

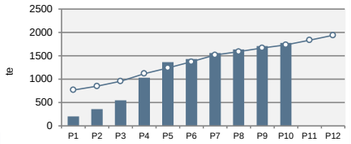
NDA Site Summary YTD

These graphs are a summary of the cumulative progress to date against the combined JWMP targets[1]. These number do not capture VLLW disposed of on site.

Metallic Treatment:

	Yearly Target	Actual YTD
Sellafield Ltd	800	719
Magnox Ltd	1031	994
LLWR Ltd	107	60
Total:	1938	1773

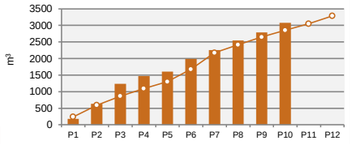
1187 te via framework



Combustible Treatment:

	Yearly Target	Actual YTD
Sellafield Ltd	1800	1729
Magnox Ltd	1251	1145
LLWR Ltd	234	202
Total:	3285	3076

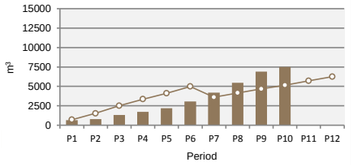
2980 m^3 via framework



VLLW Disposal:

	Yearly Target	Actual YTD
Sellafield Ltd	600	513
Magnox Ltd	5639	7004
LLWR Ltd	20	0
Total:	6259	7517

7517 m^3 via framework

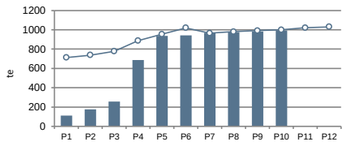


Magnox Ltd

These graphs show the cumulative actual waste diverted by Magnox Ltd against their JWMP targets in the Year to Date (YTD).

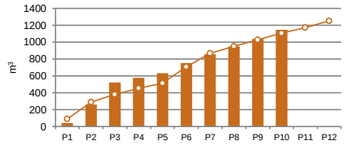
Metallic Treatment:

	Yearly Target	Actual YTD
Onsite treatment	58	44
Via framework	491	462
Out of Scope	482	488
Total:	1031	994



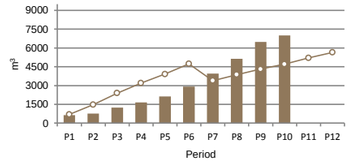
Combustible Treatment:

	Yearly Target	Actual YTD
Onsite treatment	0	0
Via framework	1155	1049
Out of Scope	96	96
Total:	1251	1145



VLLW Disposal:

	Yearly Target	Actual YTD
Onsite disposal	0	0
Via framework	5639	7004
Out of Scope	0	0
Total :	5639	7004

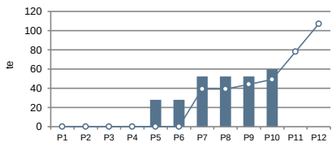


LLWR Ltd

These graphs show the cumulative actual waste diverted by Low Level Waste Repository Ltd against their JWMP targets in the YTD.

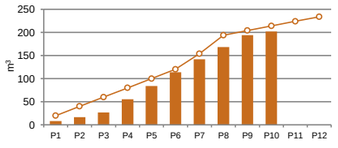
Metallic Treatment:

	Yearly Target	Actual YTD
Onsite	0	0
Via framework	79	6
Out of Scope	28	54
Total:	107	60



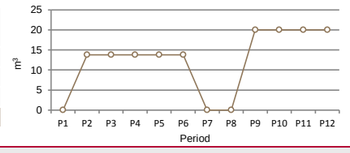
Combustible Treatment:

	Yearly Target	Actual YTD
Onsite	0	0
Via framework	234	202
Out of Scope	0	0
Total:	234	202



VLLW Disposal:

	Yearly Target	Actual YTD
Onsite	0	0
Via framework	20	0
Out of Scope	0	0
Total:	20	0

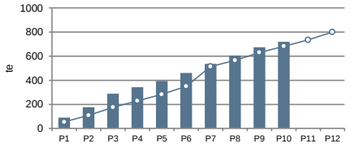


Sellafield Ltd

These graphs show the cumulative actual waste diverted by Sellafield Ltd against their JWMP targets in the YTD.

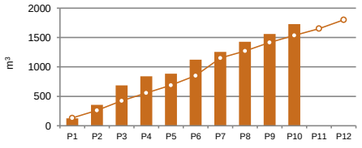
Metallic Treatment:

	Yearly Target	Actual YTD
Onsite treatment	0	0
Via framework	800	719
Out of Scope	0	0
Total:	800	719



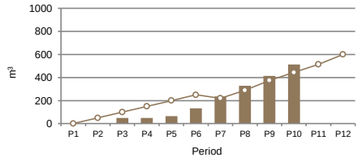
Combustible Treatment:

	Yearly Target	Actual YTD
Onsite treatment	0	0
Via framework	1800	1729
Out of Scope	0	0
Total:	1800	1729



VLLW Disposal:

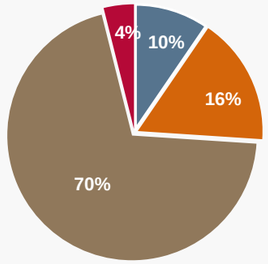
	Yearly Target	Actual YTD
Onsite disposal	3600	2152
Via framework	600	513
Out of Scope	0	0
Total[8] :	600	513



1 Actuals/Target YTD only applies to VLLW via the framework

Key: Cumulative Actual Waste diverted — Target / Forecast

Diversion and Disposal Totals YTD based on Raw Waste[5]



M	1805	te
C	3117	m^3
V	13237	m^3
L	740	m^3

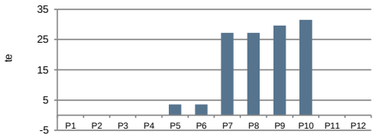
69%	from NDA Sites (excluding DSRL)
31%	from Non-NDA Sites

Non-NDA Site Summary YTD

These graphs are a summary of the cumulative diversions to date from Non NDA sites.

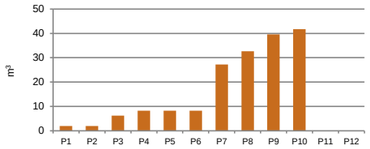
Metallic Treatment:

	Yearly Forecast	Actual YTD
Onsite treatment	N/A	0
Via framework	N/A	32
Out of Scope	N/A	0
Total:	N/A	32



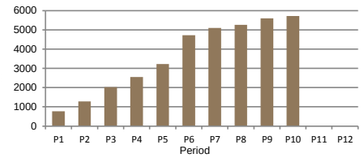
Combustible Treatment:

	Yearly Forecast	Actual YTD
Onsite treatment	N/A	9
Via framework[4]	N/A	8
Out of Scope	N/A	0
Total:	N/A	17



VLLW Disposal:

	Yearly Forecast	Actual YTD
Onsite disposal	N/A	0
Via framework	N/A	5721
Out of Scope	N/A	0
Total[6] :	N/A	5720



Non-NDA Sites (YTD)[3]

This table shows the cumulative actual waste diverted*** by non-NDA sites in the YTD

Non-NDA Site(s)	M (te)	C (m^3)	V (m^3)
Cyclife [2]	0	0	149
AWE Aldermaston	26	2	40
EDF Energy	0	0	0
Urenco UK	0	0	372
Tradebe Inutec Ltd	0	0	30
Urenco Nuclear Stewardship	4	24	4857
Unitech	0	0	0
Others	2	15	272

The values above are inclusive of material diverted through direct contracts.

ILW → LLW Re-Classification

This table shows the actual volume of waste re-classified from ILW to LLW in the YTD.

SLC	Actual Volume Re-Classified YTD (m^3)
Magnox Ltd	-
Sellafield Ltd	90
LLWR Ltd	-
Dounreay	-
Non-NDA estate	-
Total	90

LLW Repository Ltd

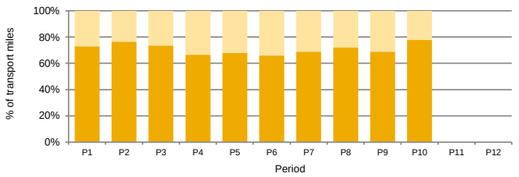
NDA

National Waste Programme

Transport and Packaging

Utilisation of Transport Fleet

This graph gives the relative percentage for empty miles (miles transporting empty containers) and utilised miles (miles transporting containers holding waste). A high utilisation % shows transport assets being used effectively.

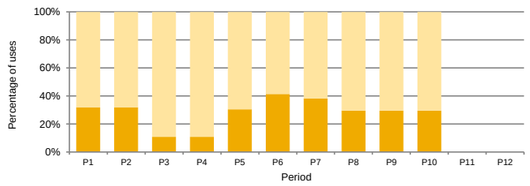


	YTD Miles	YTD Average
	181,965	71%
	75,950	29%

Empty Journeys
Utilised Journeys

Package Re-use

This graph shows, of the total number of containers transported, the percentage of packages that were a re-used container. A high re-use % shows transport assets being used effectively.

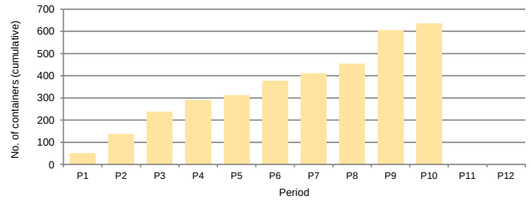


	YTD (no.)	YTD Average
	661	28%
	1570	72%

Single / first use container
Re-used container

Road vs. Rail Transports

This graph shows of the total number of containers transported, which were by rail and which were by road. This includes rail shipments from Sellafield to LLWR.



	% Container No.s	% Container Miles
	0%	0%
	100%	100%

Road containers
Rail containers

LLW Disposals and LLWR Vault Capacity

LLW Disposals

This table gives the number of LLW containers disposed of as LLW in the YTD.

No. of Containers sent for LLWR Disposal in the YTD

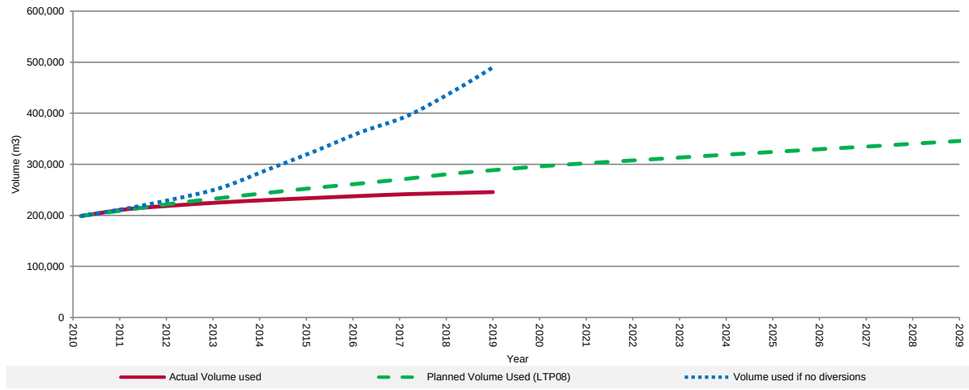
	Site(s)	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	Total
NDA	Sellafield Ltd	0	11	0	10	10	7	14	5	10	5			72
NDA	Magnox Ltd	0	0	0	0	0	1	0	1	0	0			2
NDA	LLWR Ltd	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	Cyclife	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	AWE Aldermaston	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	EDF Energy	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	Urenco UK	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	Tradebe Inutec Ltd	0	1	0	0	0	0	0	0	3	0			4
Non-NDA	Urenco Nuclear Stewardship	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	Unitech	0	0	0	0	0	0	0	0	0	0			0
Non-NDA	Others	0	0	1	0	1	0	0	0	0	0			2
	TOTAL	0	12	1	10	11	8	14	6	13	5	0	0	80

No. of Containers disposed of at Dounreay in the YTD

Dounreay Vaults	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	Total
Dounreay - Main Vault	0	0	0	0	0	0	0	0	0	0			0
Dounreay - Demolition Vault	0	0	0	0	0	0	0	0	0	0			0

Total Impact of Diversions on LLWR Site

This graph compares the actual site capacity used, against the planned capacity according to Life Time Plan (LTP) 08, and the capacity that would have been used if no treatment options were utilised. Actual disposals are based on the number of containers recieved by LLWR per year. To convert between raw volume and container number it has been assumed that one container takes up 22.8m^3 of vault space. For metallic wastes it has been assumed that 10te is contained within a HHISO. This graph starts in April 2010 when the new LLWR waste services contract was introduced. Up to this point 266,180m^3 of waste had been consigned to LLWR for disposal. For the purpose of this graph these values assume no secondary waste is recieved by LLWR from treatment providers.



Total volume saved by diversions:	244,454 m^3	Total no. of equivalent HHISO containers saved by diversion:	10,722

Usage of Waste Routes

Route Status

This table shows the routes available to each of the sites, which have been utilised and which are yet to be utilised. This date is reflective of waste route usage from 2008 to the YTD.

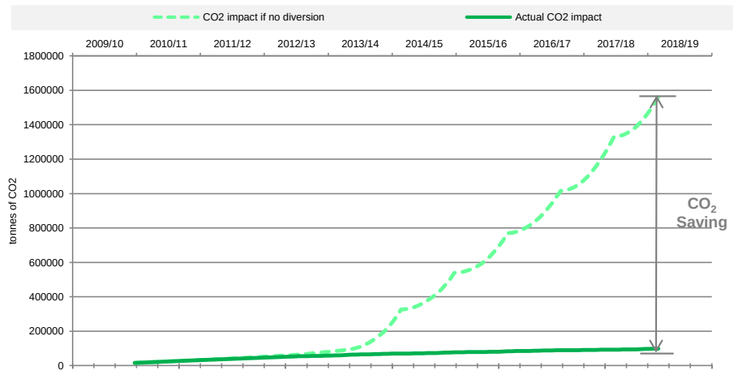
SLC	Site	M	C	V	L
LLWR	LLWR	●	●	●	●
DSRL	Dounreay	●	●	●	●
Sellafield Ltd	Sellafield	●	●	●	●
Magnox Ltd	Berkeley	●	●	●	●
	Bradwell	●	●	●	●
	Chapelcross	●	●	●	●
	Dungeness A	●	●	●	●
	Hinkley Point A	●	●	●	●
	Hunterston A	●	●	●	●
	Oldbury	●	●	●	●
	Sizewell A	●	●	●	●
	Trawsfynydd	●	●	●	●
	Wylfa	●	●	●	●
	Harwell	●	●	●	●
	Winfrith	●	●	●	●

SLC	Site	M	C	V	L
EDF - Energy	Dungeness B	●	●	●	●
	Hartlepool	●	●	●	●
	Heysham 1	●	●	●	●
	Heysham 2	●	●	●	●
	Hinkley Point B	●	●	●	●
	Hunterston B	●	●	●	●
	Sizewell	●	●	●	●
	Torness	●	●	●	●
MoD Sites	RRSL	●	●	●	●
	HMNB Rosyth	●	●	●	●
	HMNB Devonport	●	●	●	●
	HMNB Clyde	●	●	●	●
	AWE Aldermaston	●	●	●	●
	Barrow	●	●	●	●
	Eskmeals	●	●	●	●
Urenco UK Ltd		●	●	●	●
Capenhurst Nuclear Services (CNS)		●	●	●	●
GE Healthcare Ltd Amersham		●	●	●	●
UKAEA Culham JET Site		●	●	●	●
Medical Research Council		●	●	●	●

Key :
● Route not open
● Route available
● Route in use
✘ Recent status change

Environment

Environmental Impact

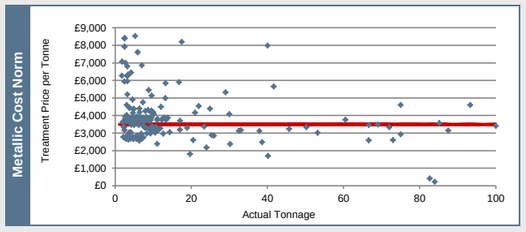


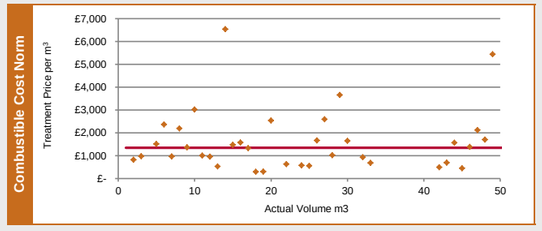
Tonnes of CO2 saved from diverting waste for treatment through entire programme:	94%	1,464,142 te

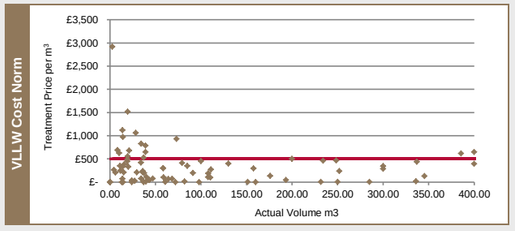
Cost Norms

The three graphs below show the cost norms with the actual price per contract for comparision.

Key: Cost Norm / Actual Price







Dashboard Commentary:

Notes:

1 - Diversion totals from Non-NDA include framework and non framework consignments.
2 - Metallic Waste (te) to (m3) Conversion: 1.00 te/m3 (assuming 10te per HHISO)
3 -for Non-NDA sites, "zero" diversion may either reflect no diversion or diversion via direct contracts or onsite treatment which is not reported to LLWR at this time
4 - Non-NDA Combustible table does not include consignments treated via direct contracts
5 - The 15 LLW Disposal containers received since August 2018 from Sellafield Ltd were WAGR Boxes, rather than standard HHISOs. These contain 40% less waste volume than a HHISO, and this is represented in the Diversion / Disposal data Pie Chart. These containers are also detailed in the LLW disposals table and ILW-LLW reclassification table.
6 - Actuals/Target YTD only applies to VLLW via the framework