

December 2016 Waste Metric Dashboard

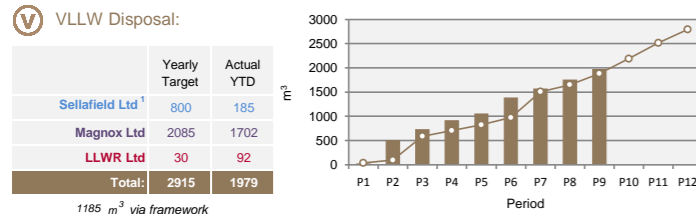
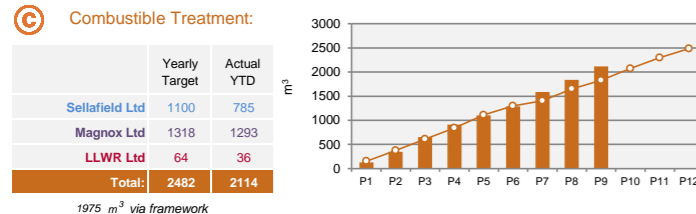
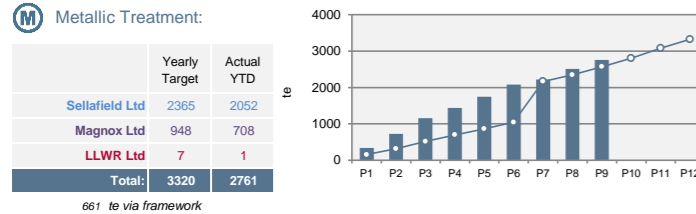
Period 9 : 27th November to 31st December FY 16/17

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.

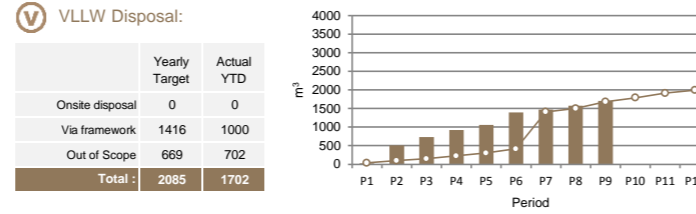
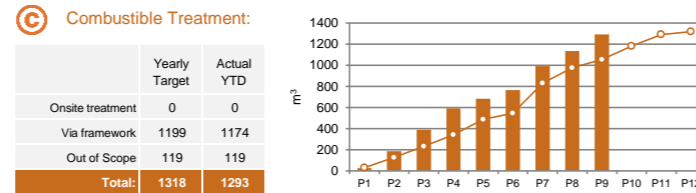
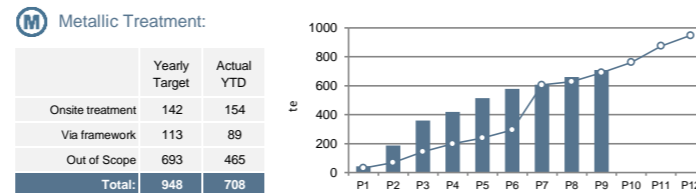
NDA Site Summary YTD

These graphs are a summary of the cumulative progress to date against the combined JWMP targets **. These numbers do not capture VLLW disposed of on site.



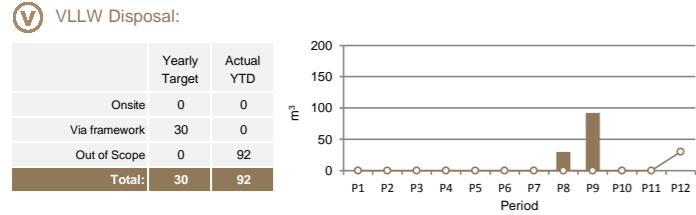
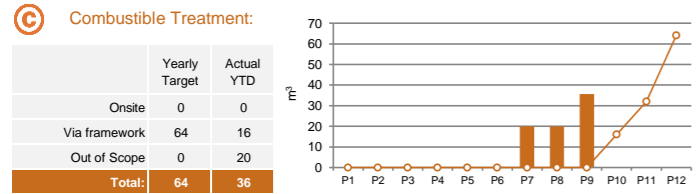
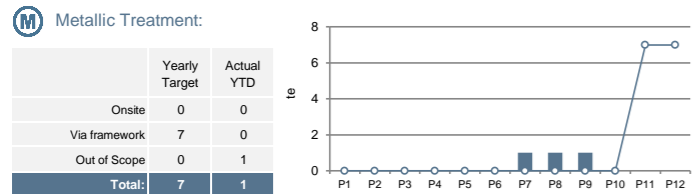
Magnox Ltd

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



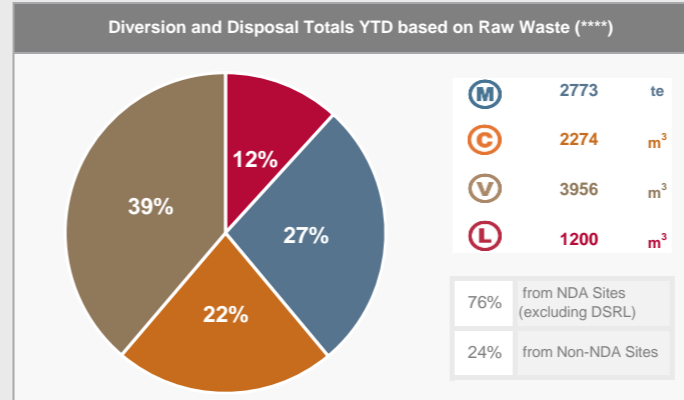
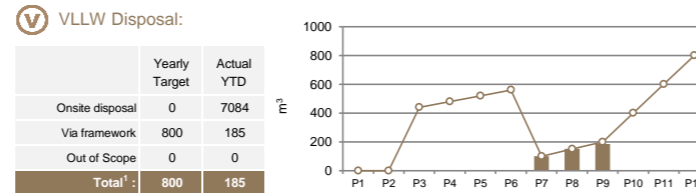
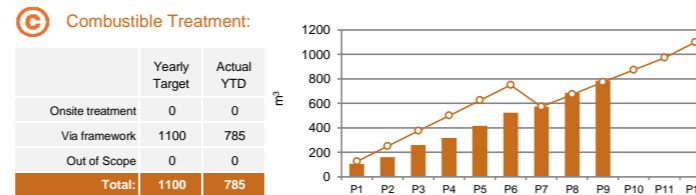
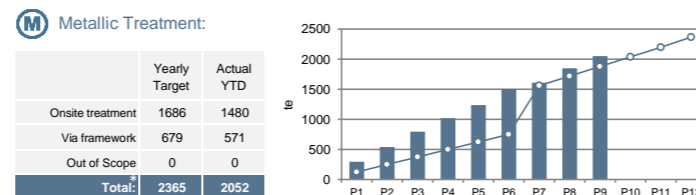
LLWR Ltd

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



Sellafield Ltd

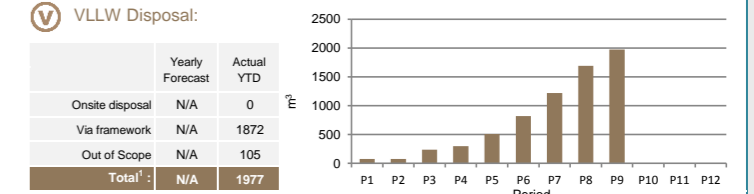
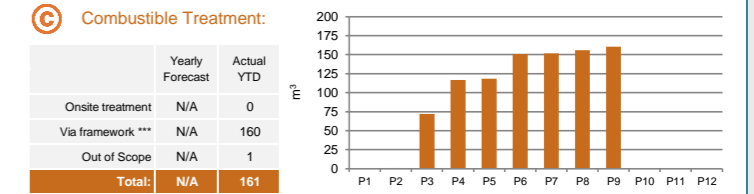
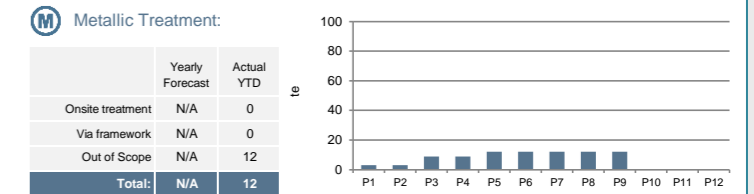
These graphs show the cumulative actual waste diverted by Sellafield Ltd against their JWMP targets in the YTD.



Non-NDA Site Summary YTD

16 17 18 19 20 21 22 23

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



Non-NDA Sites (YTD)*****

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

Non-NDA Site(s)	M (te)	C (m³)	V (m³)
Cyclife ⁽¹⁾	0	0	206
AWE Aldermaston	0	1	755
EDF Energy	0	0	0
Urenco UK	0	0	528
Tradebe Inutec Ltd	0	0	75
Capenhurst Nuclear Services	0	76	307
Unitech	0	4	0
Others	12	81	107

The values above are inclusive of material diverted through direct contracts:
0 te Metallic 81 m³ Combustible 0 m³ VLLW

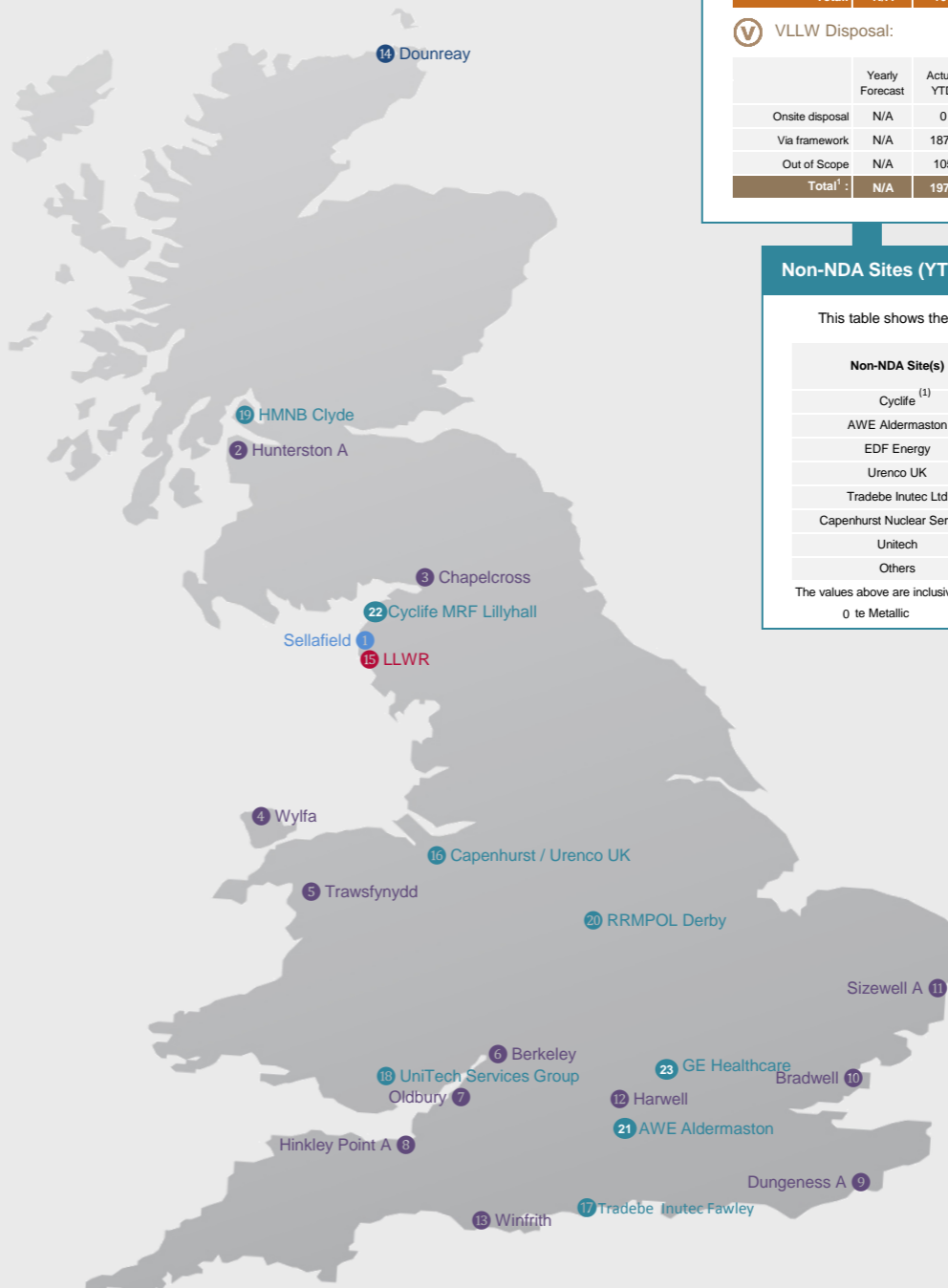


ILW → LLW Re-Classification

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

SLC	Actual Volume Re-Classified YTD (m³)
Magnox Ltd	63
Sellafield Ltd	
LLWR Ltd	
Dounreay	
Non-NDA estate	
Total	63

(Metric added for FY 16/17)

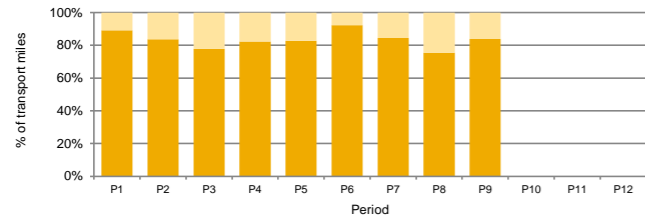


* Actuals/Target YTD only applies to VLLW via the framework

Transport and Packaging

Utilisation of Transport Fleet

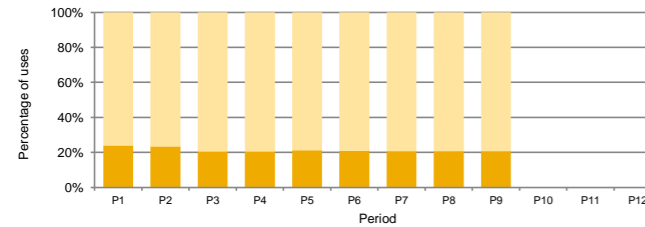
This graph gives the relative percentage for empty miles (miles transporting empty containers) and utilised miles (miles transporting containers holding waste). A high utilisation % shows transport assets being used effectively.



YTD Miles	YTD Average
120,589	83%
24,220	17%

Package Re-use

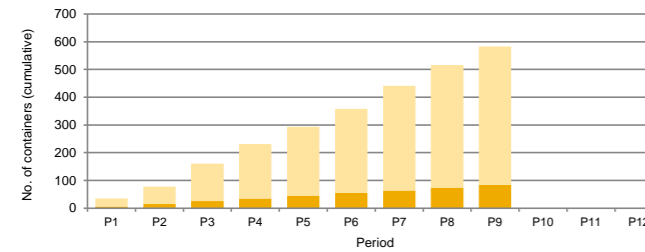
This graph shows, of the total number of containers transported, the percentage of packages that were a re-used container. A high re-use % shows transport assets being used effectively.



YTD (no.)	YTD Average
41	24%
159	76%

Road vs. Rail Transports

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

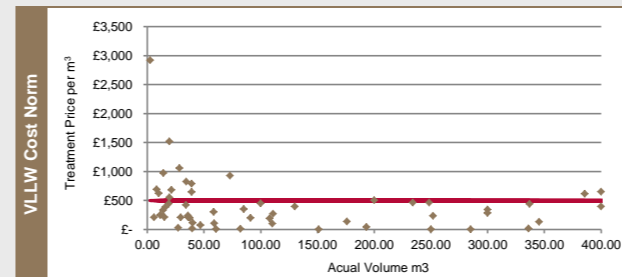
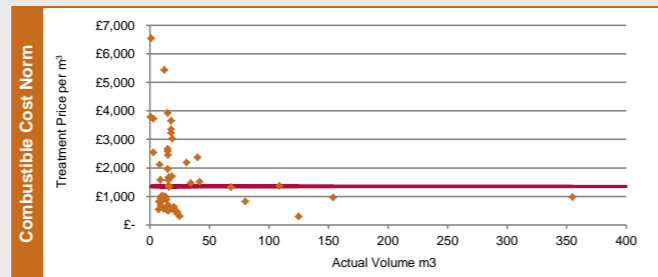
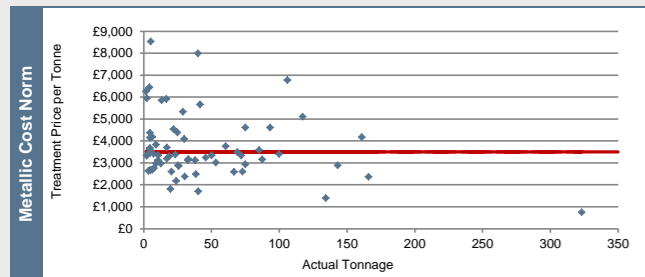


% Container No.s	% Container Miles
14%	2%
86%	98%

Cost Norms

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

Key: — Cost Norm ♦♦ Actual Price



LLW Disposals and LLWR Vault Capacity

LLW Disposals

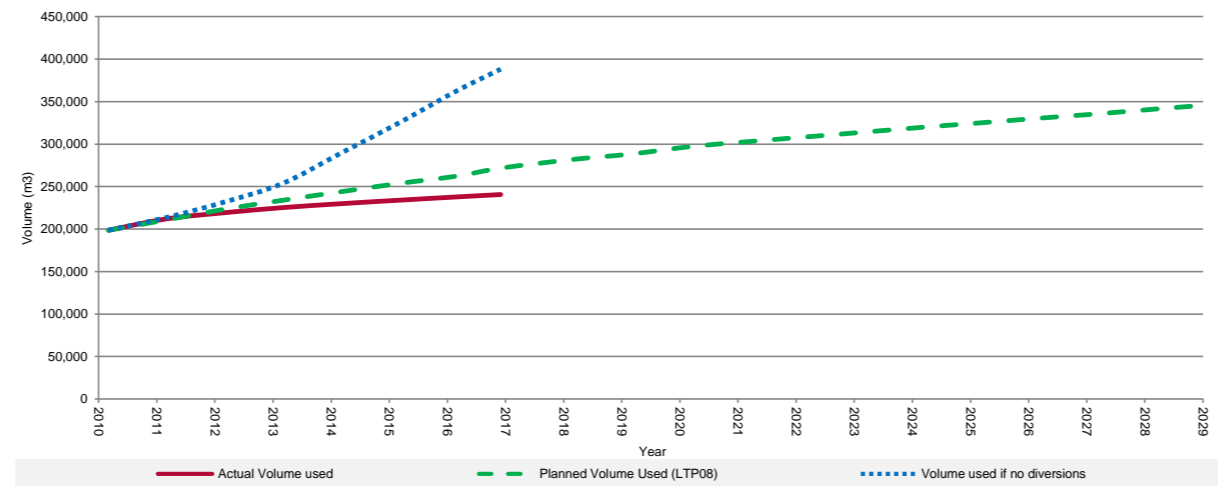
This table gives the number of LLW containers disposed of as LLW in the YTD.

Site(s)	No. of Containers sent for LLWR Disposal in the YTD												Total
	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	
NDA													
Sellafield Ltd	7	9	10	10	10	10	9	10	10				85
Magnox Ltd	0	1	0	1	0	0	0	6	3				11
LLWR Ltd	0	0	0	0	0	0	0	1	0				1
Cyclife	1	7	0	1	1	0	0	0	0				10
Non-NDA													
AWE Aldermaston	0	0	0	0	0	0	0	0	0				0
EDF Energy	0	0	0	0	0	0	0	1	0				1
Urenco UK	0	0	0	0	0	0	0	0	0				0
Tradebe Inutec Ltd	1	0	1	1	0	1	0	2	0				6
Capenhurst Nuclear Services	0	0	0	0	0	0	0	0	0				0
Unitech	0	0	0	0	0	0	0	0	0				0
Others	0	0	0	0	2	0	2	2	0				6
TOTAL	9	17	11	13	13	11	11	22	13	0	0	0	120

Dounreay Vaults	No. of Containers sent disposed of at Dounreay in the YTD												Total
	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	
Dounreay - Main Vault	26	0	0	16	0	0	0	0	0				42
Dounreay - Demolition Vault	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 received by LLWR per year. To convert between raw volume and container number it has been assumed that one container takes up 22.8m³ 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 266,180m³ of waste had been consigned to LLWR for disposal. For the purpose of this graph these values assume no secondary waste is received by LLWR from treatment providers.



Total volume saved by diversions: **147,572 m³** Total no. of equivalent HHISO containers saved by diversion: **6,472**

Usage of Waste Routes

Route Status

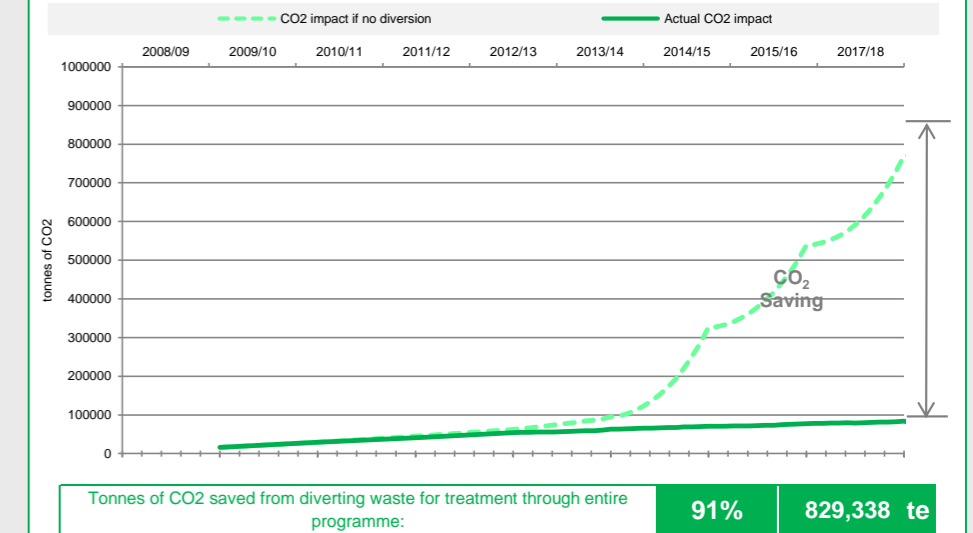
This table shows the routes available to each of the sites, which have been utilised and which are yet to be utilised. This date is reflective of waste route usage from 2008 to the YTD.

SLC	Site	M	G	V	L	
LLWR	LLWR	●	●	●	●	
DSRL	Dounreay	●	●	●	●	
Sellafield Ltd	Sellafield	●	●	●	●	
EDF - Energy	Berkeley	●	●	●	●	
	Bradwell	●	●	●	●	
	Chapelcross	●	●	●	●	
	Dungeness A	●	●	●	●	
	Hinkley Point A	●	●	●	●	
	Hunterston A	●	●	●	●	
Magnox Ltd	Hunterston B	●	●	●	●	
	Oldbury	●	●	●	●	
	Sizewell A	●	●	●	●	
	Trawsfynydd	●	●	●	●	
	Wylfa	●	●	●	●	
	Harwell	●	●	●	●	
	Winfrith	●	●	●	●	
	Mod Sites	Dungeness B	●	●	●	●
		Hartlepool	●	●	●	●
		Heysham 1	●	●	●	●
Heysham 2		●	●	●	●	
Hinkley Point B		●	●	●	●	
Hunterston B		●	●	●	●	
Sizewell		●	●	●	●	
Torness		●	●	●	●	
RRMPOL		●	●	●	●	
HMNB Rosyth		●	●	●	●	
Urenco UK Ltd	HMNB Devonport	●	●	●	●	
	HMNB Clyde	●	●	●	●	
	AWE Aldermaston	●	●	●	●	
	Barrow	●	●	●	●	
	Eskmeals	●	●	●	●	
	Capenhurst Nuclear Services (CNS)	●	●	●	●	
GE Healthcare Ltd Amersham	●	●	●	●		
UKAEA Culham JET Site	●	●	●	●		
Medical Research Council	●	●	●	●		

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

Environment

Environmental Impact



Tonnes of CO₂ saved from diverting waste for treatment through entire programme: **91%** **829,338 te**

Dashboard Commentary:

- May 2016 changes:
 - added ILW to LLW re-categorisation metric
 - Moved Notes to page 2
 - Removed Milestones section (these are reported elsewhere)
 - Expanded LLW disposals at Dounreay to include the Dounreay demolition vault.
- (1) Cyclife is the new name for the Metals Recycling Facility at Lillyhall, which was previously owned by Studsvik

Notes:

- * The SL Metallic forecast and YTD total includes 8.10te of metal forecast and consigned through direct contracts
- ** JWMP targets have been revised in P6 to reflect version 11 submissions
- *** Diversion totals from Non NDA include framework and non framework consignments.
- **** Metallic Waste (te) to (m3) Conversion: 1.00 te/m³ (assuming 10te per HHISO)
- ***** for Non NDA sites, "zero" diversion may either reflect no diversion or diversion via direct contracts or self-performance which is not reported to LLWR at this time