

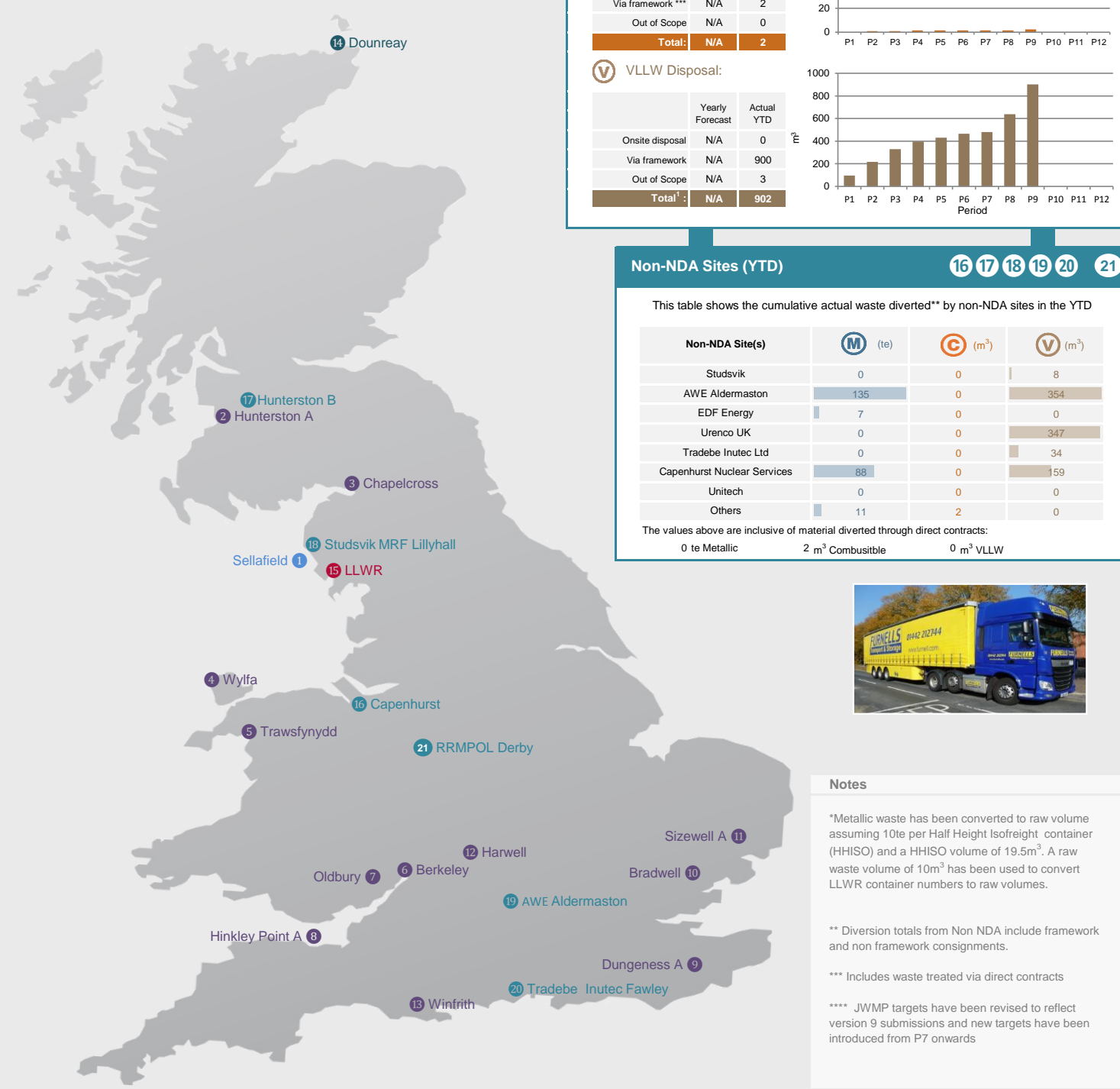
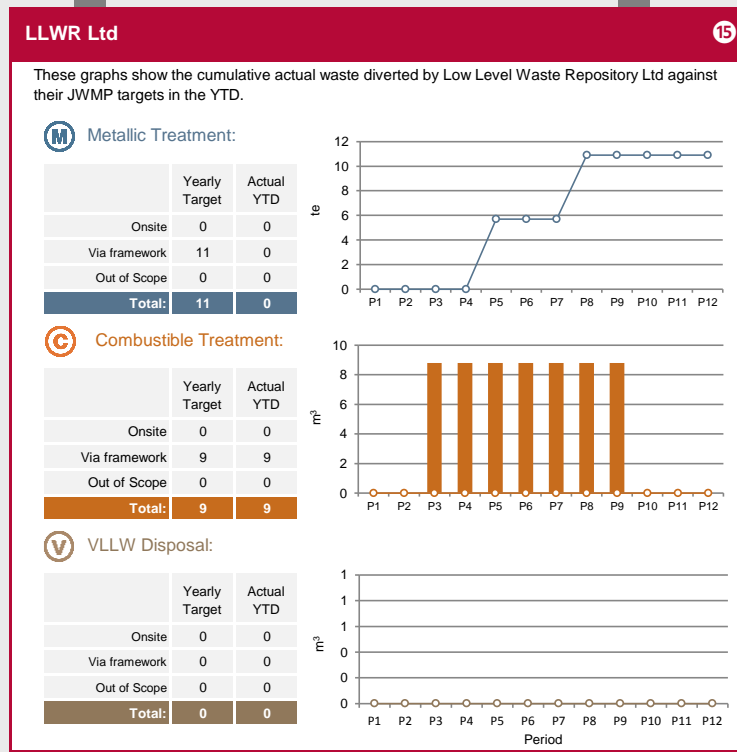
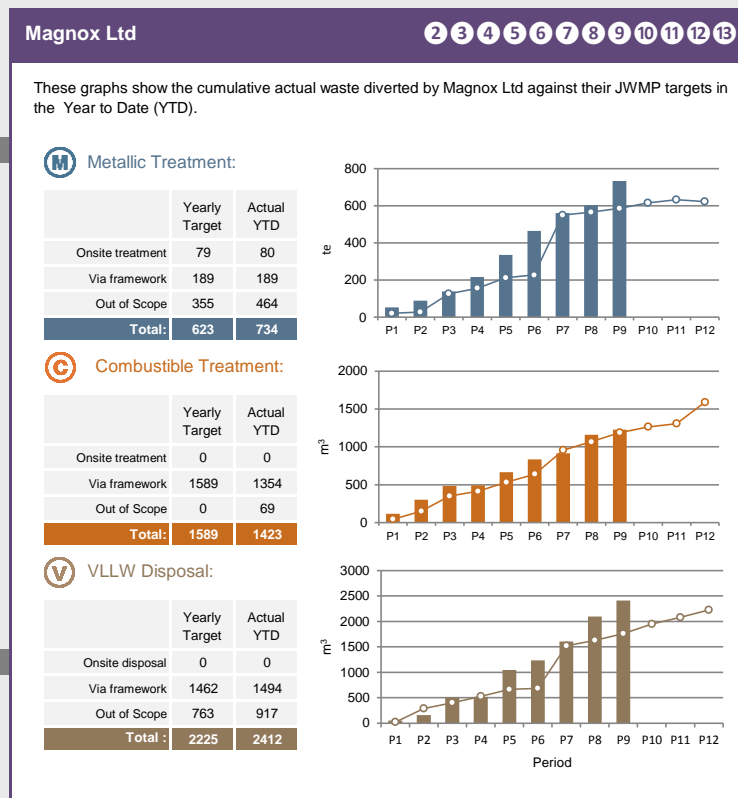
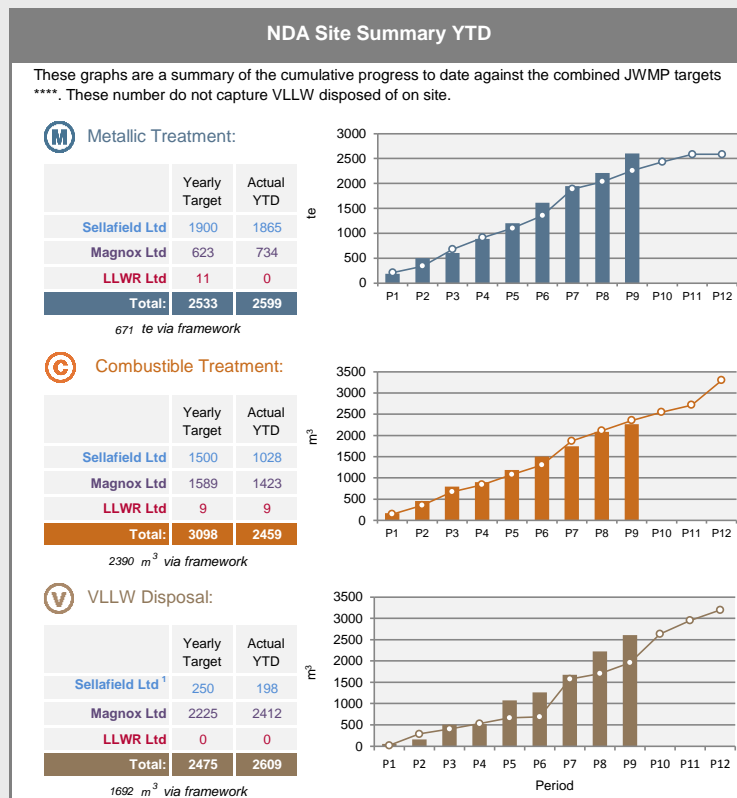
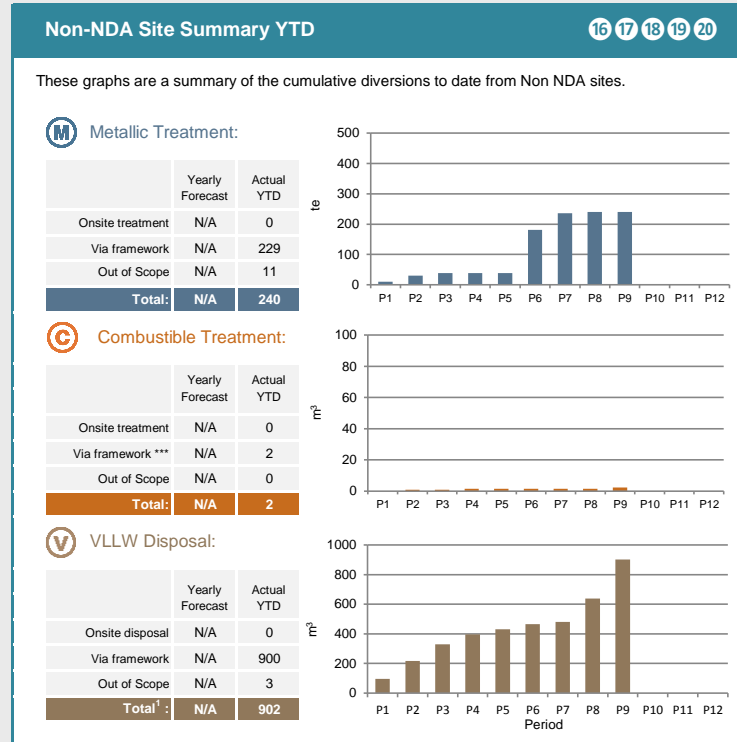
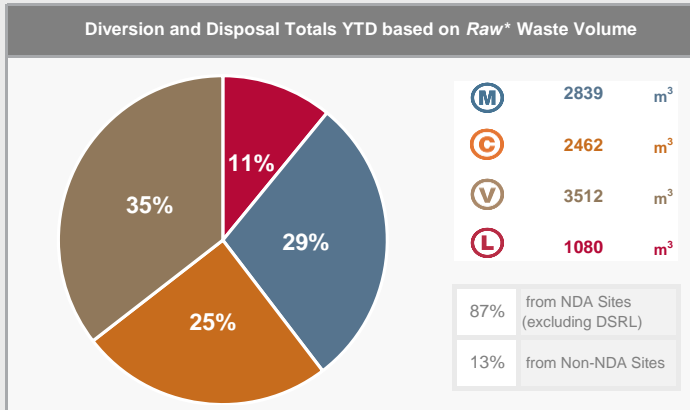
December 2015

Waste Metric Dashboard

Period 9 : 22nd November to 26th December FY 15/16

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.



Non-NDA Sites (YTD) 16 17 18 19 20 21

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

Non-NDA Site(s)	(M) (te)	(C) (m <sup>3</sup> )	(V) (m <sup>3</sup> )
Studsvik	0	0	8
AWE Aldermaston	135	0	354
EDF Energy	7	0	0
Urenco UK	0	0	347
Tradebe Inutech Ltd	0	0	34
Capenhurst Nuclear Services	88	0	159
Unitech	0	0	0
Others	11	2	0

The values above are inclusive of material diverted through direct contracts:  
0 te Metallic    2 m<sup>3</sup> Combustible    0 m<sup>3</sup> VLLW



**Notes**

\*Metallic waste has been converted to raw volume assuming 10te per Half Height Isofreight container (HHISO) and a HHISO volume of 19.5m<sup>3</sup>. A raw waste volume of 10m<sup>3</sup> has been used to convert LLWR container numbers to raw volumes.

\*\* Diversion totals from Non NDA include framework and non framework consignments.

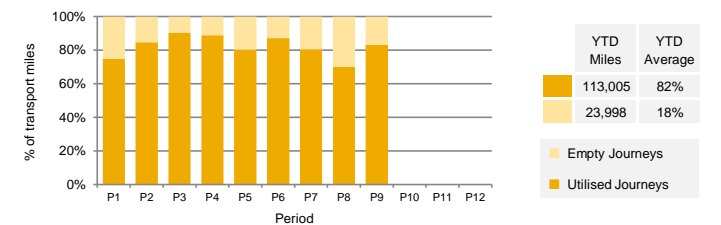
\*\*\* Includes waste treated via direct contracts

\*\*\*\* JWMP targets have been revised to reflect version 9 submissions and new targets have been introduced from P7 onwards

### Transport and Packaging

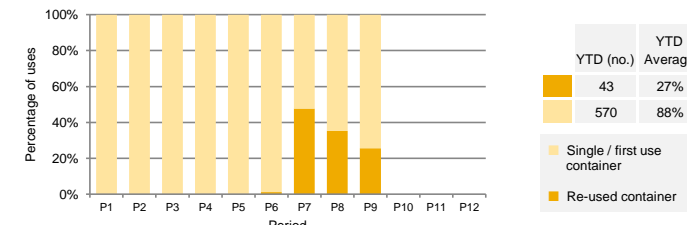
#### Utilisation of Transport Fleet

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.



#### Package Re-use

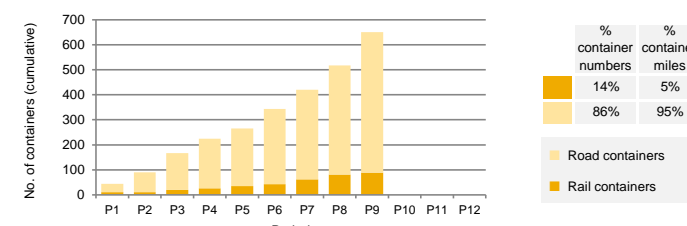
This graph shows, of the total number of containers transported, the percentage of packages that were a re-used container. A high re-use % shows transport assets being used effectively.



NOTE: Package reuse data reported from P6 onwards

#### Road vs. Rail Transports

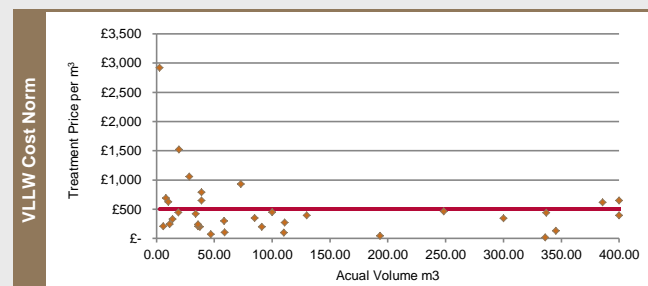
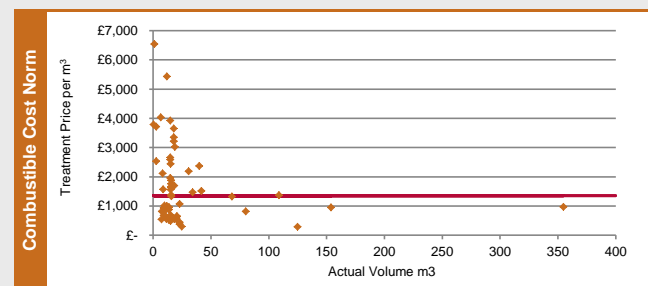
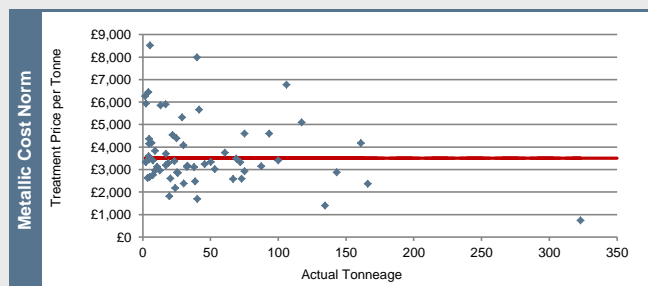
This graph shows of the total number of containers transported, which were by rail and which were by road. This includes rail shipments from Sellafield to LLWR.



### 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

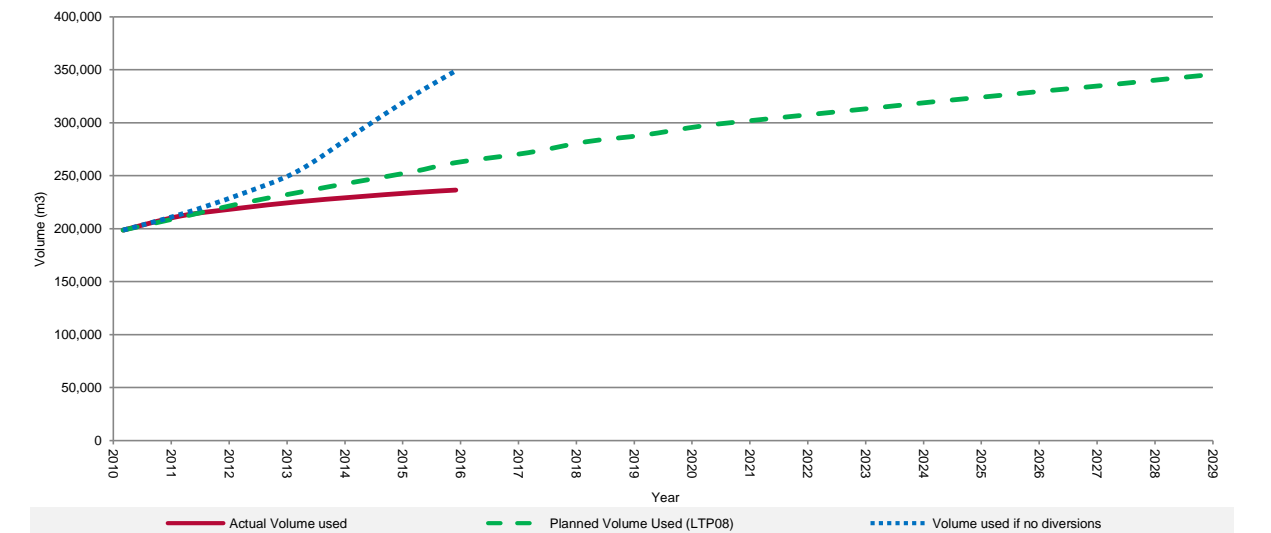
#### LLW Disposals

This table gives the number of LLW containers sent to LLWR for disposal in the YTD.

Site(s)	No. of Containers sent for LLWR Disposal in the YTD												Total	No. of containers disposed of by DSRL in the YTD		
	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12		Period	No.	
NDA	Sellafield Ltd	5	6	6	4	15	0	10	19	15	0	0	0	80	Period 1	0
	Magnox Ltd	4	0	0	2	0	0	1	1	0	0	0	0	8	Period 2	4
	LLWR Ltd	0	0	0	0	0	0	0	0	0	0	0	0	0	Period 3	4
	Studsvik	0	0	0	0	0	0	0	0	1	0	0	0	1	Period 4	10
	AWE Aldermaston	0	0	0	0	0	0	0	0	0	0	0	0	0	Period 5	21
Non-NDA	EDF Energy	0	0	0	0	0	0	0	1	0	0	0	0	1	Period 6	0
	Urenco UK	0	0	0	0	0	0	0	0	0	0	0	0	0	Period 7	0
	Tradebe Inutec Ltd	0	0	3	2	0	1	0	3	2	0	0	0	11	Period 8	0
	Capenhurst Nuclear Services	0	0	0	0	0	0	0	0	0	0	0	0	0	Period 9	0
	Unitech	0	0	0	0	0	0	0	0	0	0	0	0	0	Period 10	0
	Others	2	0	3	2	0	0	0	0	0	0	0	0	7	Period 11	0
	TOTAL	11	6	12	10	15	1	11	25	17	0	0	0	108	Period 12	0
	TOTAL													TOTAL	39	

#### 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 22.8m<sup>3</sup> 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<sup>3</sup> 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: **112,673 m<sup>3</sup>**      Total no. of equivalent HHISO containers saved by diversion: **4,942**

### Usage of Waste Routes

#### Route Status

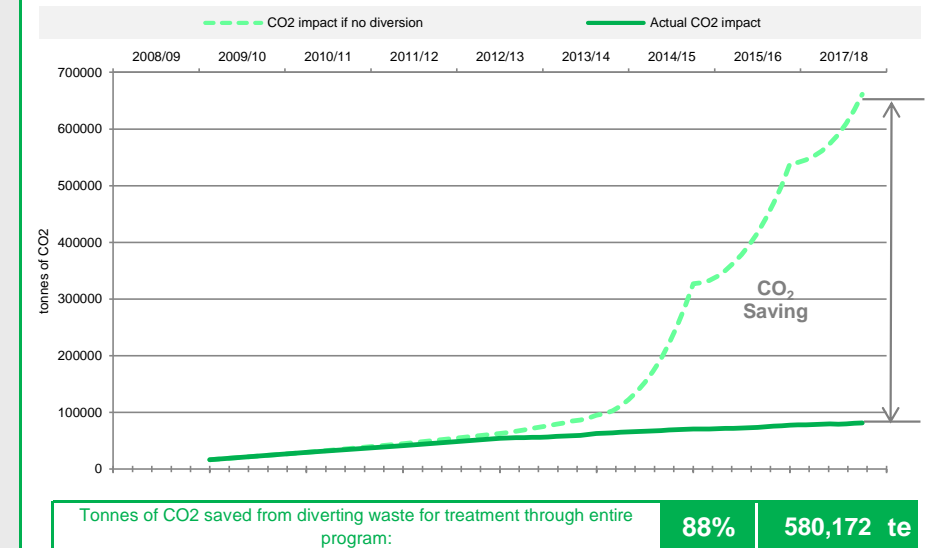
This table shows the routes available to each of the sites, which have been utilised and which are yet to be utilised. This date is reflective of waste route usage from 2008 to the YTD for LLWR framework suppliers. This does not reflect any consignments made via direct contracts.

SLC	Site	M	C	V	L	SLC	Site	M	C	V	L	
LLWR	LLWR	●	●	●	●	EDF - Energy	Dungeness B	●	●	●	●	
DSRL	Dounreay	●	●	●	●		Hartlepool	●	●	●	●	
Sellafield Ltd	Sellafield	●	●	●	●		Heysham 1	●	●	●	●	
Magnox Ltd	Berkeley	●	●	●	●		Heysham 2	●	●	●	●	
	Bradwell	●	●	●	●		Hinkley Point B	●	●	●	●	
	Chapelcross	●	●	●	●		Hunterston B	●	●	●	●	
	Dungeness A	●	●	●	●		Sizewell	●	●	●	●	
	Hinkley Point A	●	●	●	●		Torness	●	●	●	●	
	Hunterston A	●	●	●	●		MoD Sites	RRMPOL	●	●	●	●
	Oldbury	●	●	●	●			HMNB Rosyth	●	●	●	●
	Sizewell A	●	●	●	●	HMNB Devenport		●	●	●	●	
	Trawsfynydd	●	●	●	●	HMNB Clyde		●	●	●	●	
	Wylfa	●	●	●	●	AWE Aldermaston		●	●	●	●	
Harwell	●	●	●	●	Barrow	●		●	●	●		
Winfrith	●	●	●	●	Eskmeals	●		●	●	●		
					Urenco UK Ltd	●		●	●	●		
					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



#### Dashboard Commentary:

- Commencing the 15/16 FY, the following changes have been made to both the format and content of this dashboard:
- RSRL graphics have been merged with Magnox Ltd in order to reflect the change in Parent Body Organisation for the 12 sites
- New graphic added to summarise Non-NDA waste diversions in addition to that of individual site / organisation contributions
- LLW disposals data and route status graphics have been updated to include non-NDA sites
- New graphic added to provide an overview of Dounreay Site disposals at their recently commissioned LLW facility
- Revised capacity graph to show the estimated total impact of waste diversions on the LLWR Site as opposed to focusing on Vault 9
- Removal of RIDDOR/OSHA and Supply Chain Non-Conformance graphics
- General re-arrangement and update of graphics to accommodate the above changes
- August 2015 DSRL contribution removed from pie chart on page 1

### National Waste Programme | Key Achievements This Quarter

#### Quarter 2 Milestones 2015/2016

- ✓ LLWR to hold an LFE session for the Incineration trial
- ✓ Magnox to implement and review the operability of the Waste Tracking System
- ✓ SL to prepare a trial for diversion of bulk wood to incineration
- ✓ DSRL to Process Drums through the LLW Supercompactor under active commissioning

#### Quarter 3 Milestones 2015/2016

- ✓ LLWR (National Programme Office) to deliver a model PWMP template and associated guidance
- ✓ Magnox to prove the route for FED (as per its JWMP9 transformational activity)
- ✓ Sellafield to recommence consignments of LLW to LLWR
- ✓ DSRL to complete active commissioning of supercompactor and start normal operations