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# **76th Local Liaison Committee Meeting**

**26<sup>th</sup> March, AWE Aldermaston**



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# Agenda

- Introduction
- Apologies & actions from 75th meeting
- Chairman's remarks
- Environmental, Safety, Health & Quality Update
- Infrastructure Update
- AWE Waste Awareness
- Ask the Regulators
- Skills Academy Presentation
- LLC Review Update
- AOB
- Dates for next meetings
- Lunch



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# Introduction and overview

**Dr Andrew Jupp**

Managing Director



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# ESH&Q update

**Julie Taylor,**

Director, Environment, Safety, Health & Quality



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## ESH&Q Update

- Overview of Safety and Quality Performance
  - Highlights in Period
  - Improvement Opportunities
- Update on ESH Reporting Improvement Activity
- Next Period Key Events



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## Highlights in Period

- **ESH Performance Delivery**
  - World-class ESH performance in construction continues
    - Best year-end OSHA TRIR performance since 2006 for construction of 0.27
    - 2M hours without OSHA recordable incident on Aquarius
  - Improving safety trend across site
  - AKT Safety Workshop on the August 2010 Fire
  
- **Industry Benchmarking and Best Practices**
  - Accredited National Skills Academy training course “Process Safety Management for Operations”
  
- **Key Stakeholder Interactions**
  - Mensa Regulatory Permissioning
  - Annual Review of Environment
  - LRQA Surveillance Visit
  - Close out of EA Enforcement Notice
  - AWE shortlisted for storage of Submarine RPV's



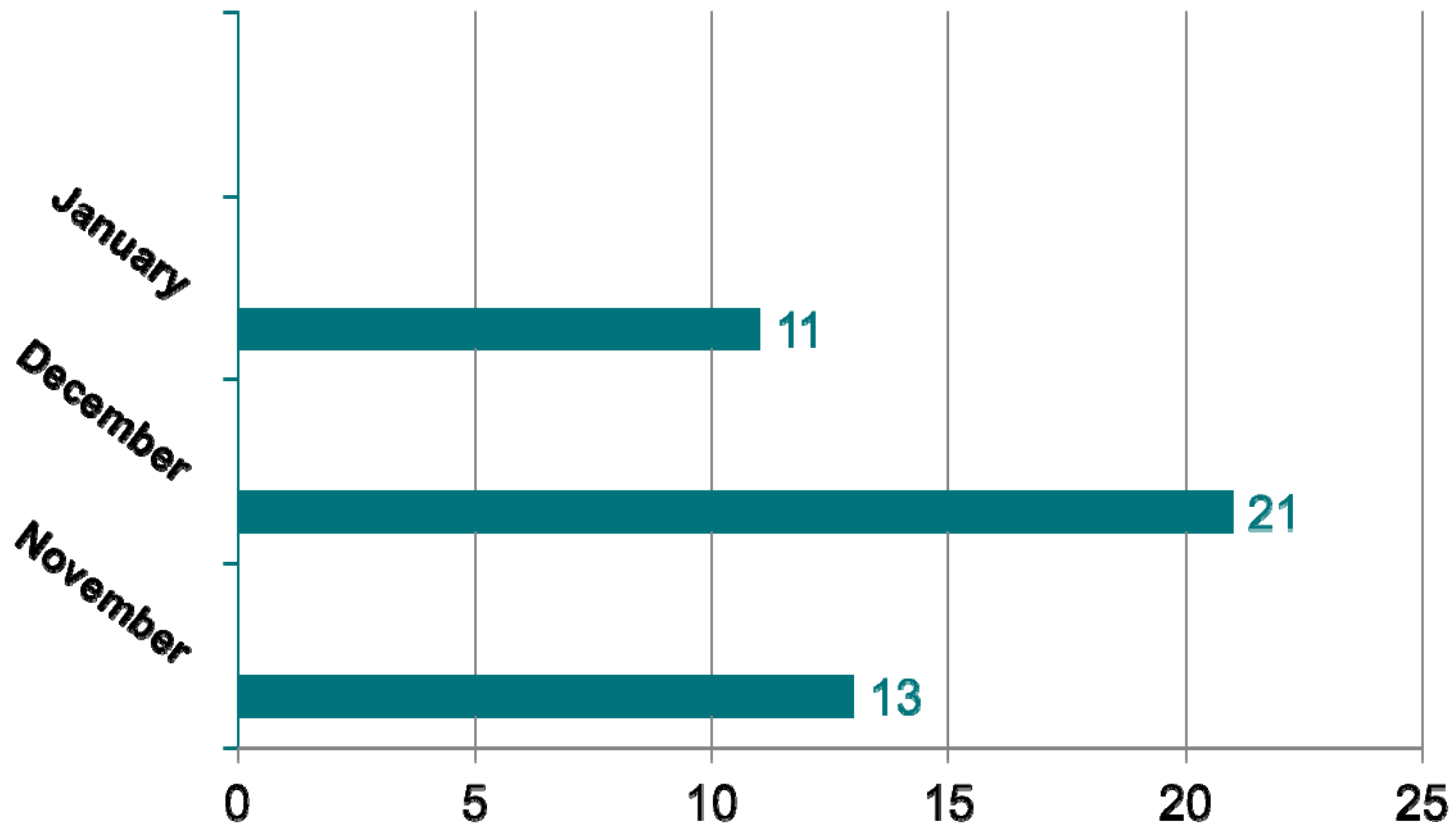
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## Improvement Opportunities

- ROSPA Awards
- HVAS Reading
- Expiry of Licence Instrument on storage of intermediate level waste



## Perfect Day Performance







# Update on ESH Reporting improvement activity

- Draft report shared with LLC Sub-Group
- Comments taken on board
- Report to be included on AWE website
- Future reports to be integrated into new AWE web pages



The management of Environment, Safety, Health and Quality (ESH&Q) underpins all activities at AWE, whether in support of complex nuclear processes or those things we do as part of our everyday working lives. The safety of our employees, our community and the sustainable protection of our environment is of paramount importance.

Our commitment to achieving the highest standards is reflected in the stringent internal targets we set ourselves, which in many cases are more demanding than the legal requirements placed upon us and monitored by our regulators. Being transparent about our performance is important and we welcome independent scrutiny and the help it offers in maintaining high standards and improved performance.

AWE's programme is one of the largest and most complex in the UK defence industry, with many of its latest facilities setting the blueprint for the nuclear structures of the future.

At the same time we must carry out comprehensive decommissioning programmes to safely dismantle redundant facilities being taken out of service. All of these operations must be achieved safely, securely, to the right quality and in a way that does not adversely impact on the environment. The requirement to work in this way is at the heart of the AWE business model. Our commitment to that model is readily demonstrated to our employees, our customers, our regulators and our neighbours.

**Julie Taylor**  
Director Environment, Safety, Health and Quality



*"The safety of our employees, our community and the sustainable protection of our environment is of paramount importance. We therefore welcome independent scrutiny and the help it offers in maintaining high standards and improved performance."*



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## Next Period Key Events

- AWE internal review of LI511 events
- ESH Culture Improvement Plan activities
- Stakeholder Interactions
  - LRQA Surveillance Visit (April)
  - Familiarisation visits for newly appointed Regulatory leads



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# Questions?



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# Site Update

**Haydn Clulow**

Director, Site



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## Sites Overview

- General Updates
- Waste Awareness
- Phoebe Update
- Haydn Clulow
- Johann Walker
- *Later in the agenda*

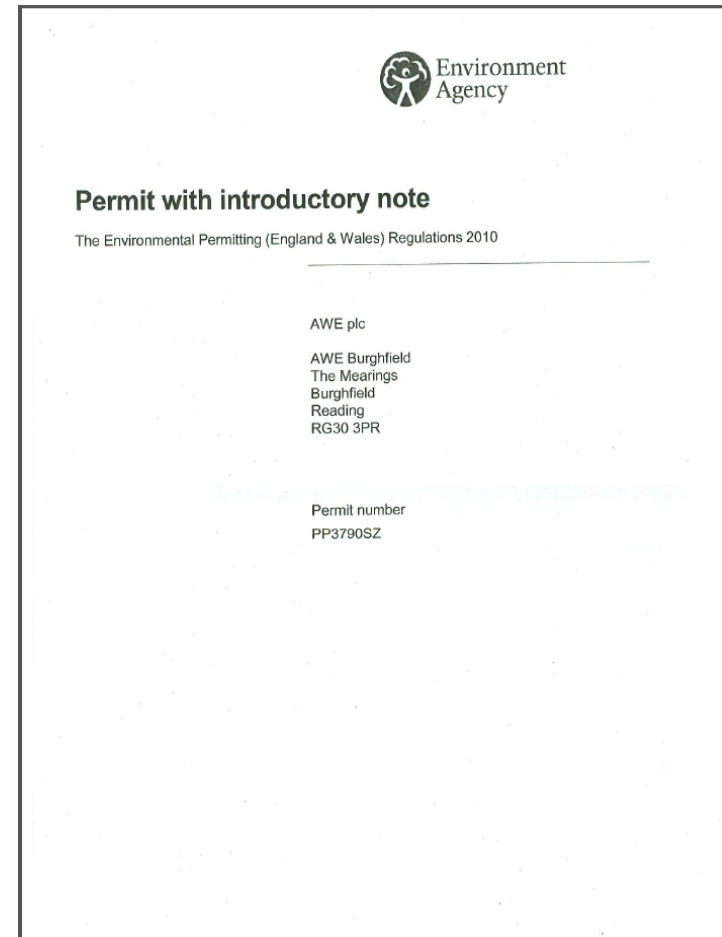


**Johann Walker**

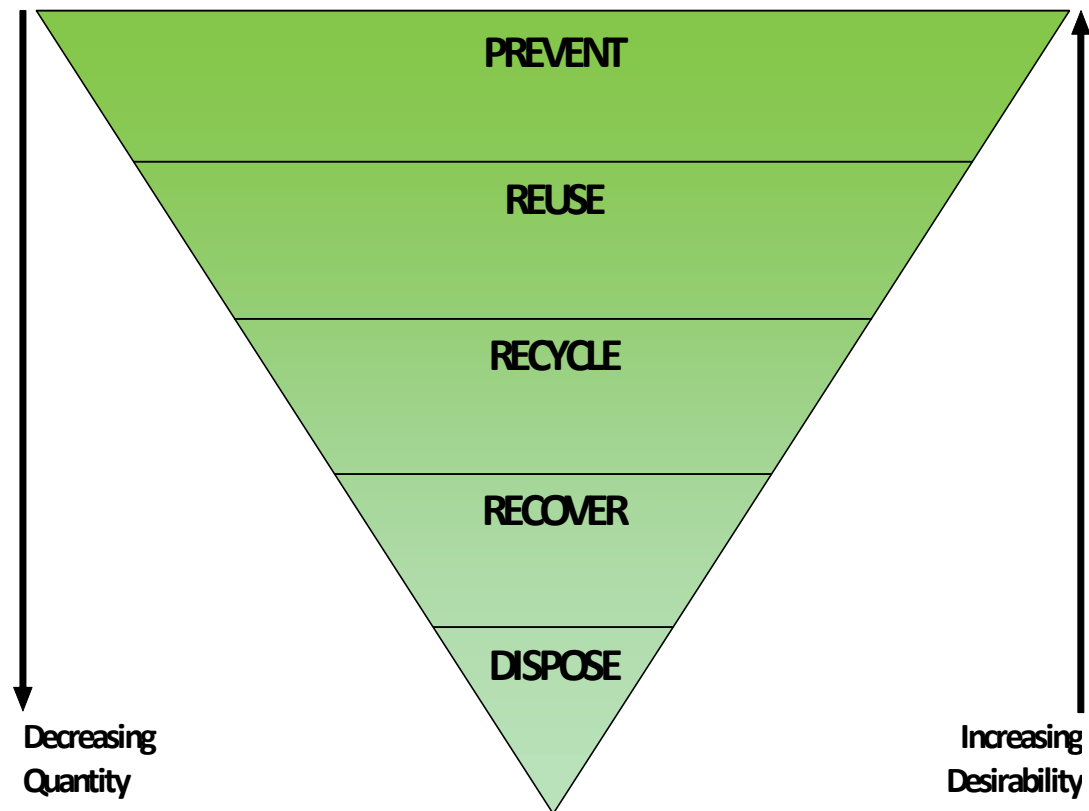
# **WASTE AWARENESS**

# Regulatory Requirements

- Permits Issued By Environment Agency
  - Schedule 21, 23
- Licensed Site - Office Nuclear Regulation
  - LC 32, LC33



# Waste Hierarchy



AWE has a legal obligation to apply the Waste Hierarchy





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## Storyboard

- 2007** Development of first Integrated Waste Strategy – Reviewed Annually
- 2008** Project Kick Off – Sustainable Waste Processes
- 2009** Implementation of a Waste Service Desk, Service Catalogue & the Controlled Waste Processes
- 2011** Implementation of Radioactive Processes
- 2012** Implementation of Aqueous Processes & Revised EA Permit Issued
- 2013** Generation/Issue of Corporate RA BAT



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# AWE Compliance Arrangements

- Arrangements Documents
- Company Standards & Procedures
- SQEP Personnel
- Internal Regulators (Independent Team)
- Regulatory Inspections (EA & ONR)



## Waste Services Group Accountabilities

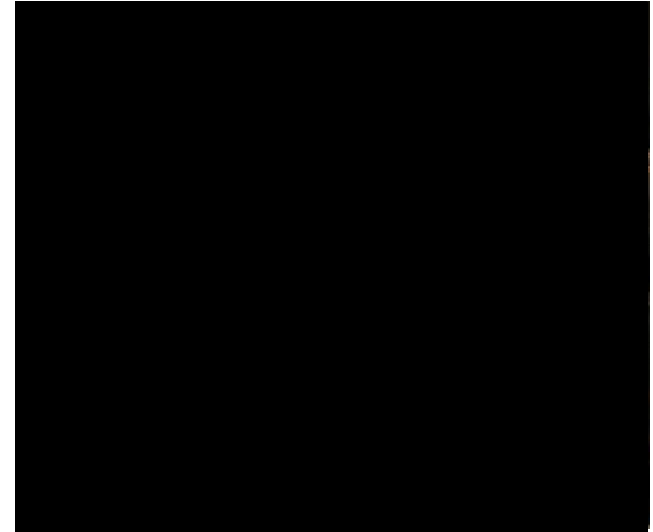
- Ensure that the company complies with all relevant legislation.
- Provide technical advice to all waste producers at AWE.
- Effectively manage waste disposal.
- Maintain the safe storage of HAW.





# AWE Wastes Generation

- Controlled
  - Hazardous Waste
  - Electrical (WEEE)
  - Recyclable
- Aqueous wastes
  - Trade
  - Foul
  - Surface (Rainwater)
  - Radioactive (Processes)





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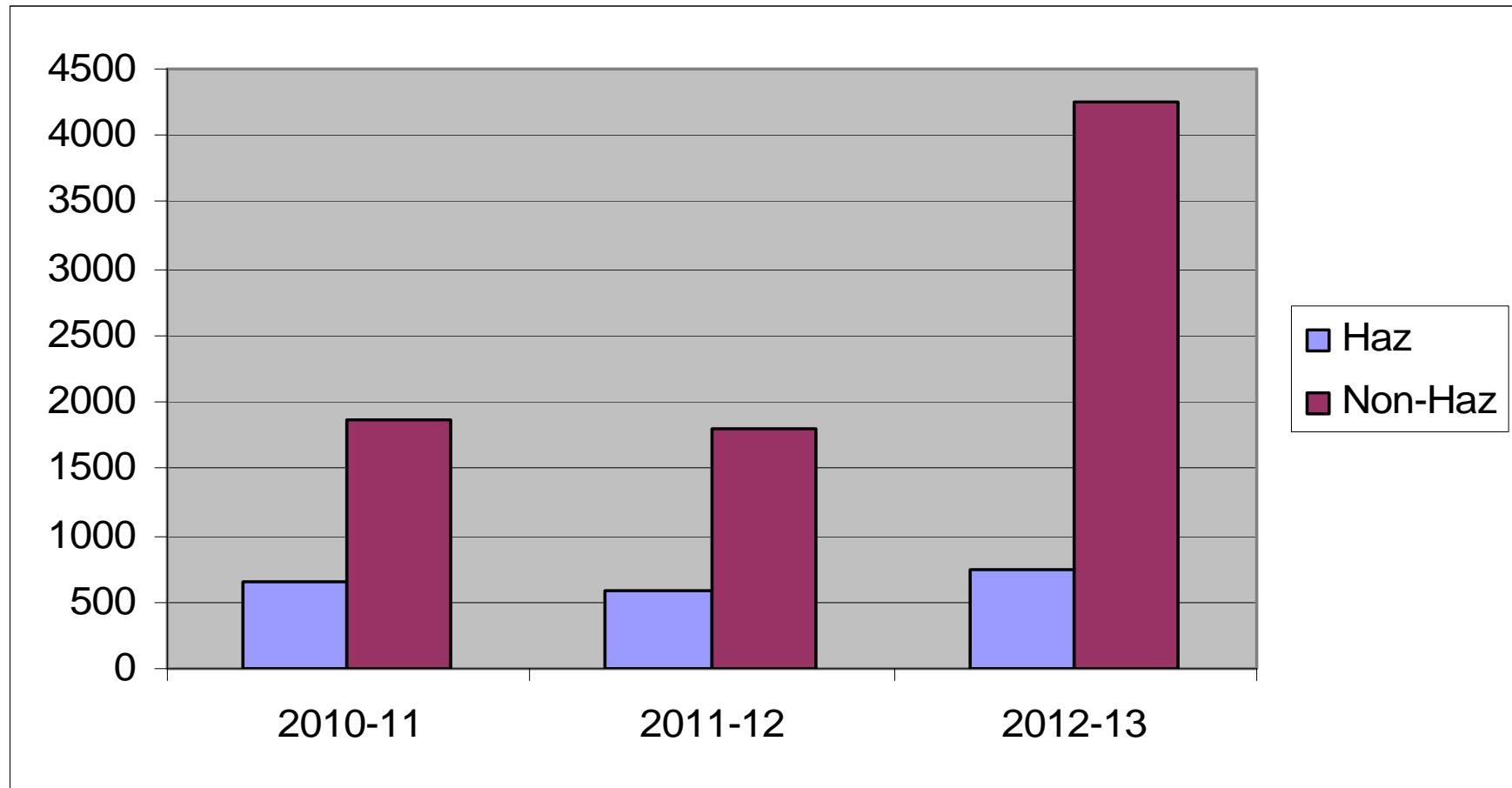
# AWE Wastes Generation

- Solid Radioactive
  - Very Low Level Waste (Brazil Nuts/Fish)
  - Low Level Waste (Old Wrist Watches)
  - High Activity Waste (Industrial Sources)



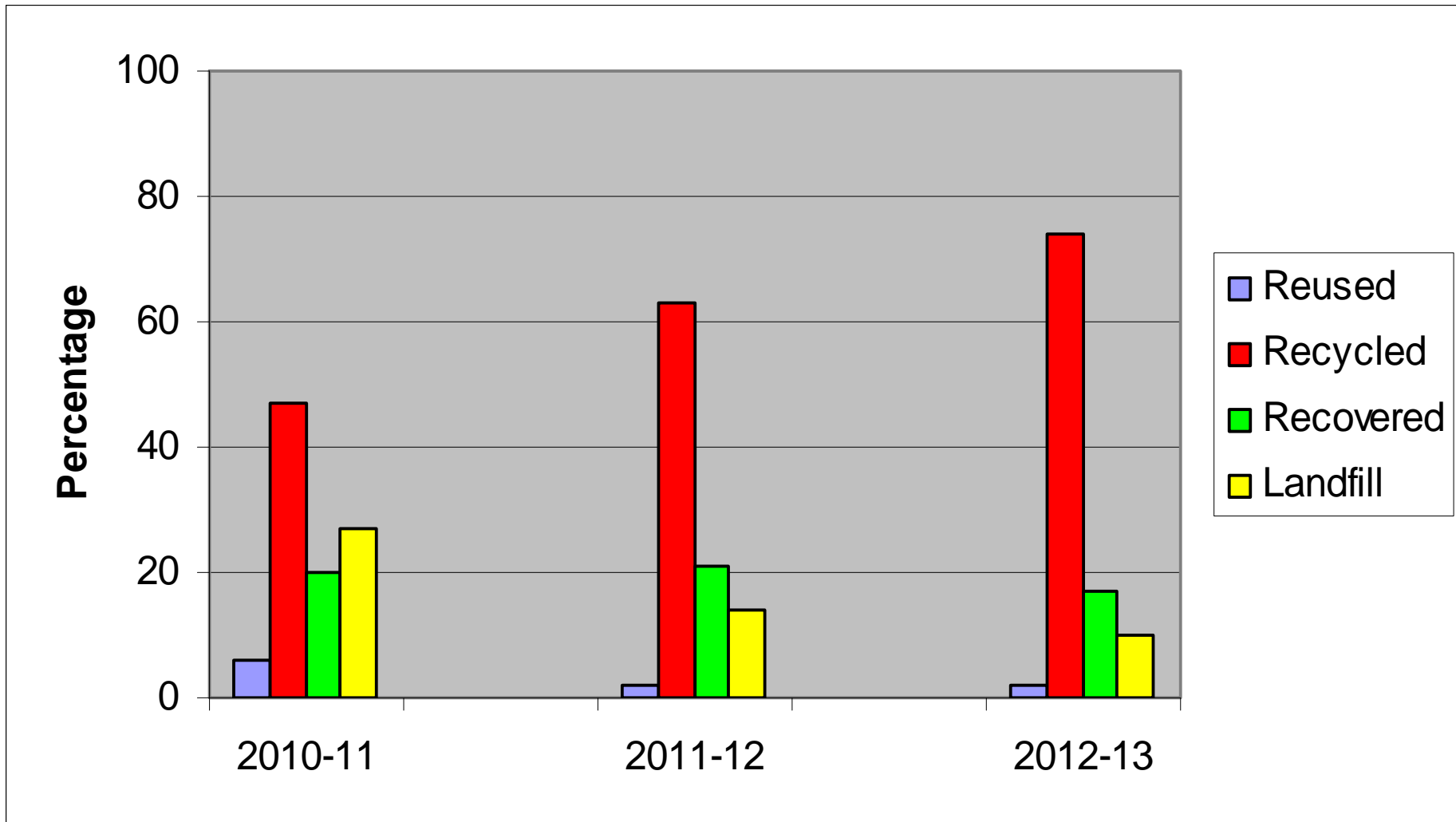


# Annual Controlled Waste Generation





# Controlled Waste Disposal





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## Recent Achievements

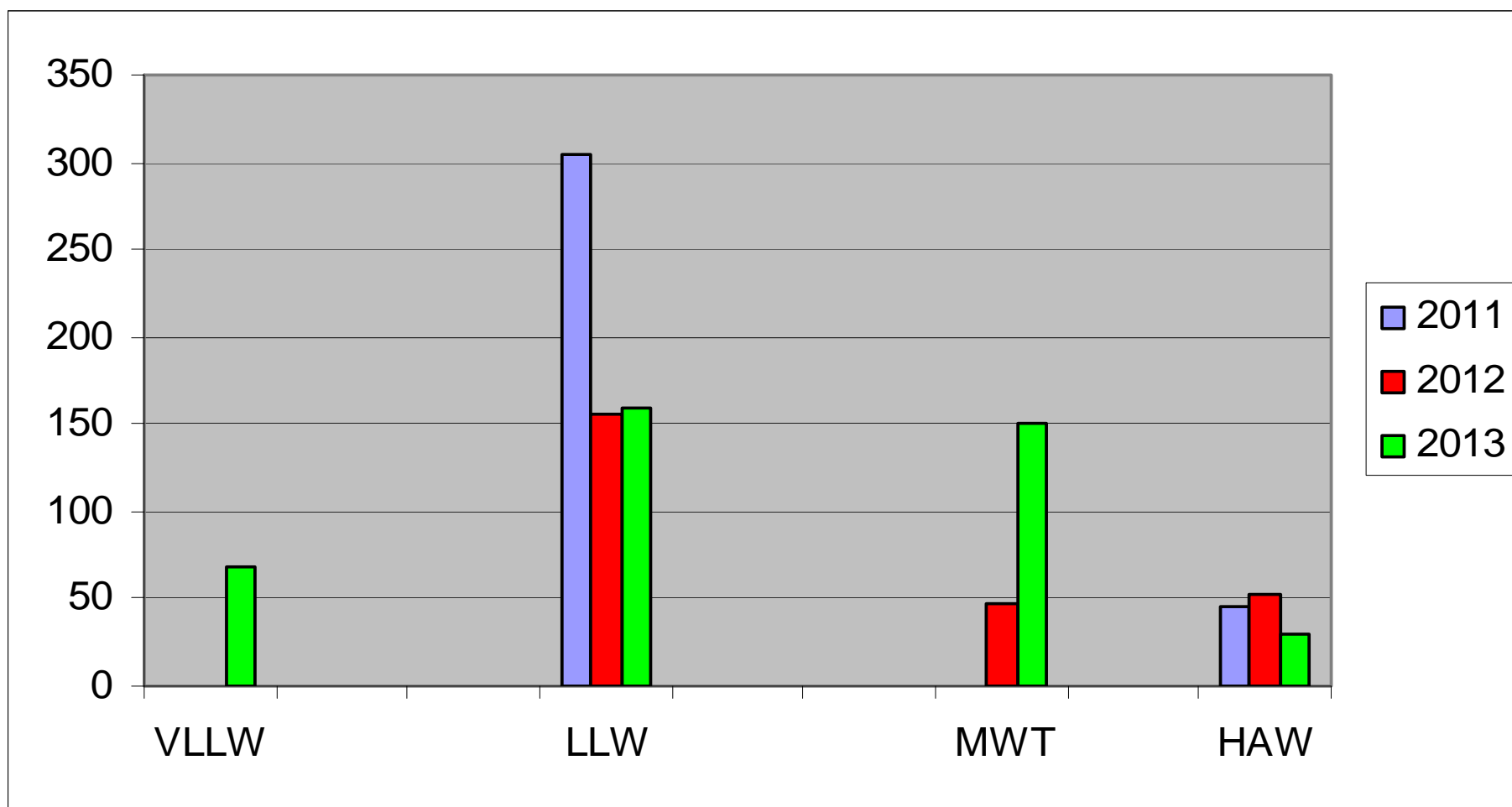
- Controlled
  - Machinery Re-sale
  - Cable Drums
  - Chip & Bin







# Annual Radioactive Waste Generation



## Recent Achievements

- Solid Radioactive
  - LLWR Diversion
  - Re-Characterisation/Disposal of HAW
  - VLLW Disposal
  - Non UK Treatment Facilities





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## Future Opportunities

- Close-out of Schedule 1 Permit Requirements
- Continued Optimisation of Waste Hierarchy
- Progression of future HAW Solutions
- Implementation of Improved Assay Equipment



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**Questions?**



# **The Energy Act**

## **ONR 2014**

Office for Nuclear Regulation

An agency of HSE

# HSWA

- Defines employers duties
- Creates HSE
- Allows for secondary legislation (regulations)
- ONR nuclear safety inspectors appointed under the HSWA
  - Defines Inspectors' HSWA powers
    - Improvement Notices
    - Prohibition notices
    - Entry etc
- Criminal offences are created
- HSE is the Enforcing Authority for HSWA for most industrial premises

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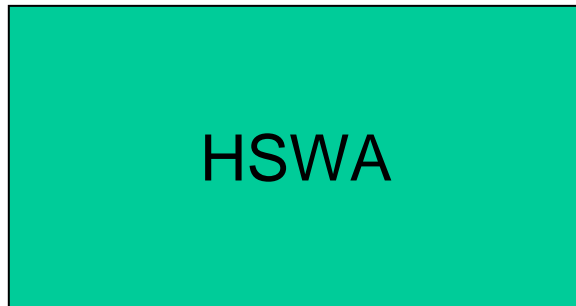
# NIA

- Previous to the Energy Act, safety sections of NIA were **Relevant Statutory Provisions** of the HSWA
  - HSE was responsible for enforcing NIA through ONR and its inspectors as an **agency of HSE**
- The NIA defines the concept of a nuclear **licensed site**
- The NIA allows **conditions** to be attached to the licence
- Contravention of nuclear site licence conditions is a criminal offence
- The NIA does not bind the Crown (hence MOD sites not licensed)
- The HSWA does bind the Crown, except many important sections (e.g. sections 21, 22, and 33)
- Separate administrative processes apply to the Crown
  - Crown Notices
  - Crown Censures

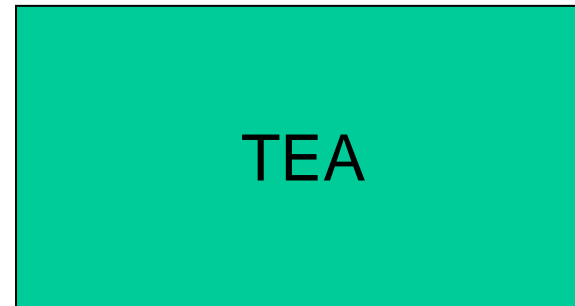
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# What the legal landscape now looks like



Conventional and  
nuclear safety



Nuclear safety  
Security (civil nuclear)  
Safeguards  
Transport

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# Enforcing Authority Jurisdiction for ONR – following the Energy Act 2013

- GB Nuclear Sites
  - Licensed Sites
- MoD sites which *would* be licensed if not for Crown control
- Operational Berths for REPPIR and IRRs
- Significant parts of the nuclear supply chain
- The wider construction site for new build

Described further in the Enforcing Authority Regulations

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# ONR powers

- Licence Conditions
- I/Ns
- P/Ns
- Directions (security)
- Powers to investigate
- Seize and Make safe
- Prosecution

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## Schedule 7 TEA

- Requires ONR to prepare a strategy and review <5 yearly
  - Requires this be agreed with SoS
  - Requires ONR to prepare an annual report



# Questions?

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# Update on Project Phoebe

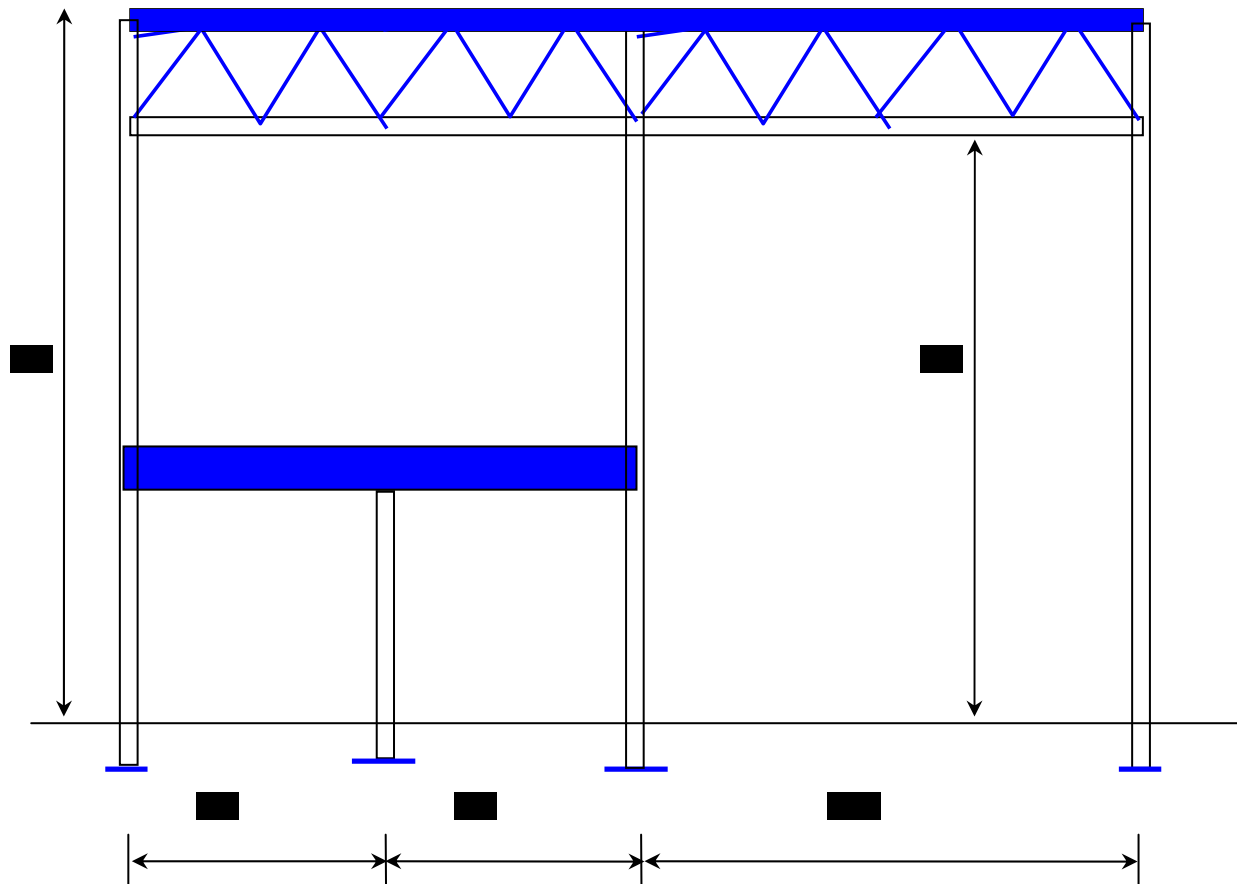


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## Background

- Issue relates to part of the uranium manufacturing building; civil engineering structure.
- Inspection in 2012.
  - Revealed degradation of a column.
  - Inspection of remaining columns carried out.
  - Varying levels of corrosion across other external columns (44 in total).
- All fissile material manufacturing processes suspended, September 2012.
- Project Phoebe created to remediate civil engineering shortfalls of the Class 1 structure.

# The Portal Frame





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## Current Position (1)

- Detailed inspection of roof completed on schedule.
- 3D finite element model of building completed on schedule.
- The work has identified that the corrosion of the columns has not precluded the ability of the primary structure to sustain the design basis loads, but the reserves of strength are reduced for some columns.
- We are undertaking structural strengthening to improve the resilience of the columns, and also on columns where corrosion has exceeded a significant proportion of the column cross section, in order to ensure the structure will deliver the requirements of the safety case for the continued use of the facility to decommissioning.





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## Current Position (2)

- 19 column repairs required out of the 44 columns.
- By use of the 3d model, we identified an emergent issue that the vertical bracing between the perimeter columns is overstressed under seismic loading. This will be strengthened.
- Structural engineering inspection of the remainder of the complex completed.



## Column Status

Type	Scope of Remediation February 2014	Progress to Date March 2014
Repair	19	14
Paint	14	7
No work	2	2
Inspection Hatches	9	Design Complete



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# The AWE Apprenticeship Programme





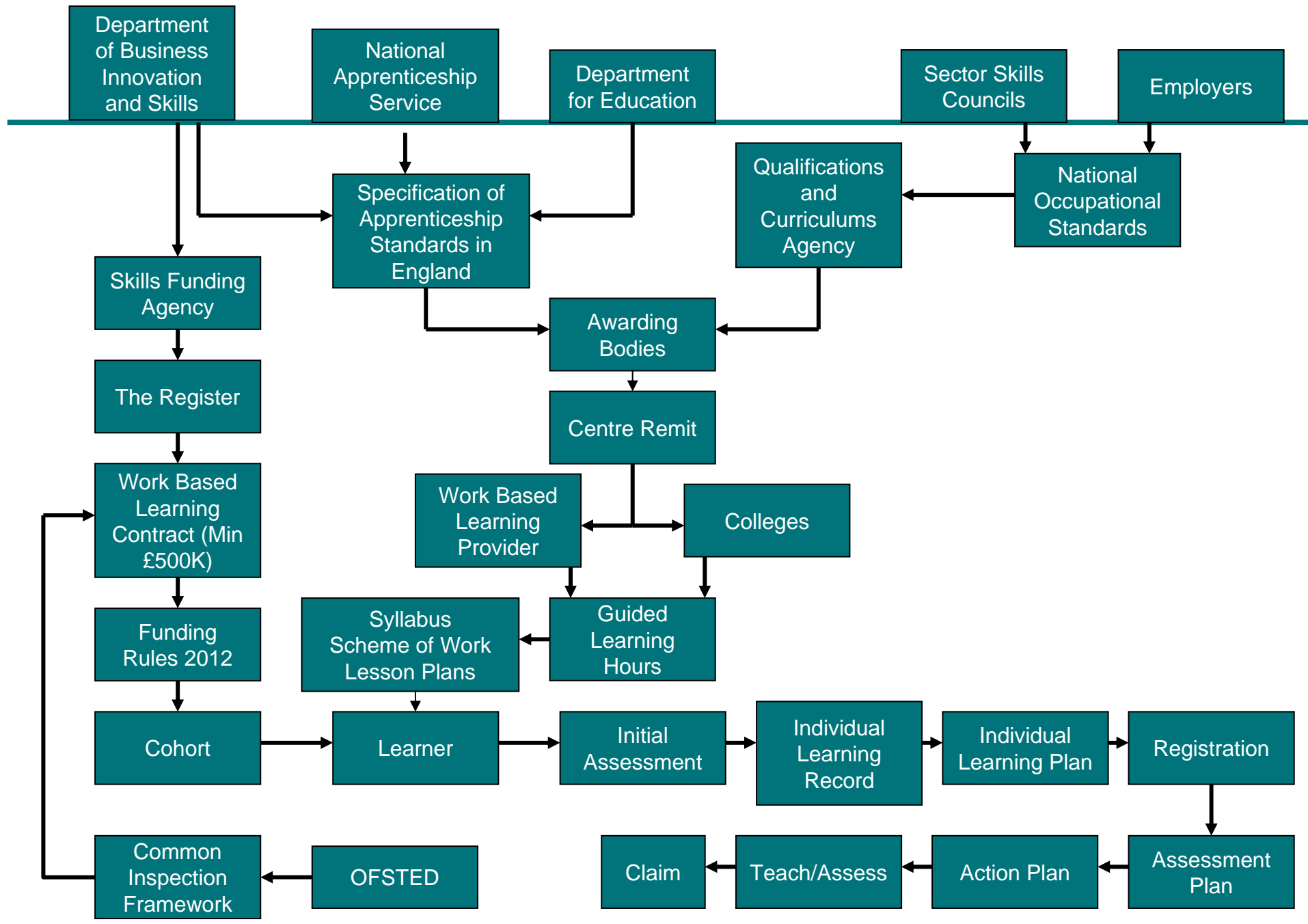
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- **The Apprentice Scheme started in 1952 with an intake of 10**
  - **The Skills Academy, former the Apprentice Academy and School became a dedicated training area**
  - **We recruited 39 apprentices in 2012 and 45 in 2013**





## **Apprenticeship Disciplines**

- **Electrical Maintenance**
- **Electronic Maintenance**
- **Control and Instrumentation Maintenance**
- **Precision Machining**
- **Mechanical Maintenance**
- **Technical Apprenticeship (tooling, packaging, manufacturing)**





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# Apprenticeships Now

## Two frameworks

1. Intermediate (L2) 3 year scheme
2. Advanced (L3) 4 year scheme

## Requirements of frameworks

- Employee Rights and Responsibilities (ERR)
- Functional Skills (IT, English & Maths)
- Personal Learning and Thinking Skills (PLTS)
- National Vocational Qualifications (NVQ 2, 3)
- Technical Certificate (First Diploma, National Diploma)



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## How and why we recruit

- Recruited against future job role
- The assessment centre process:
  - Psychometric assessment
  - Analysis task
  - Team task
  - Interview





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# Women in Engineering





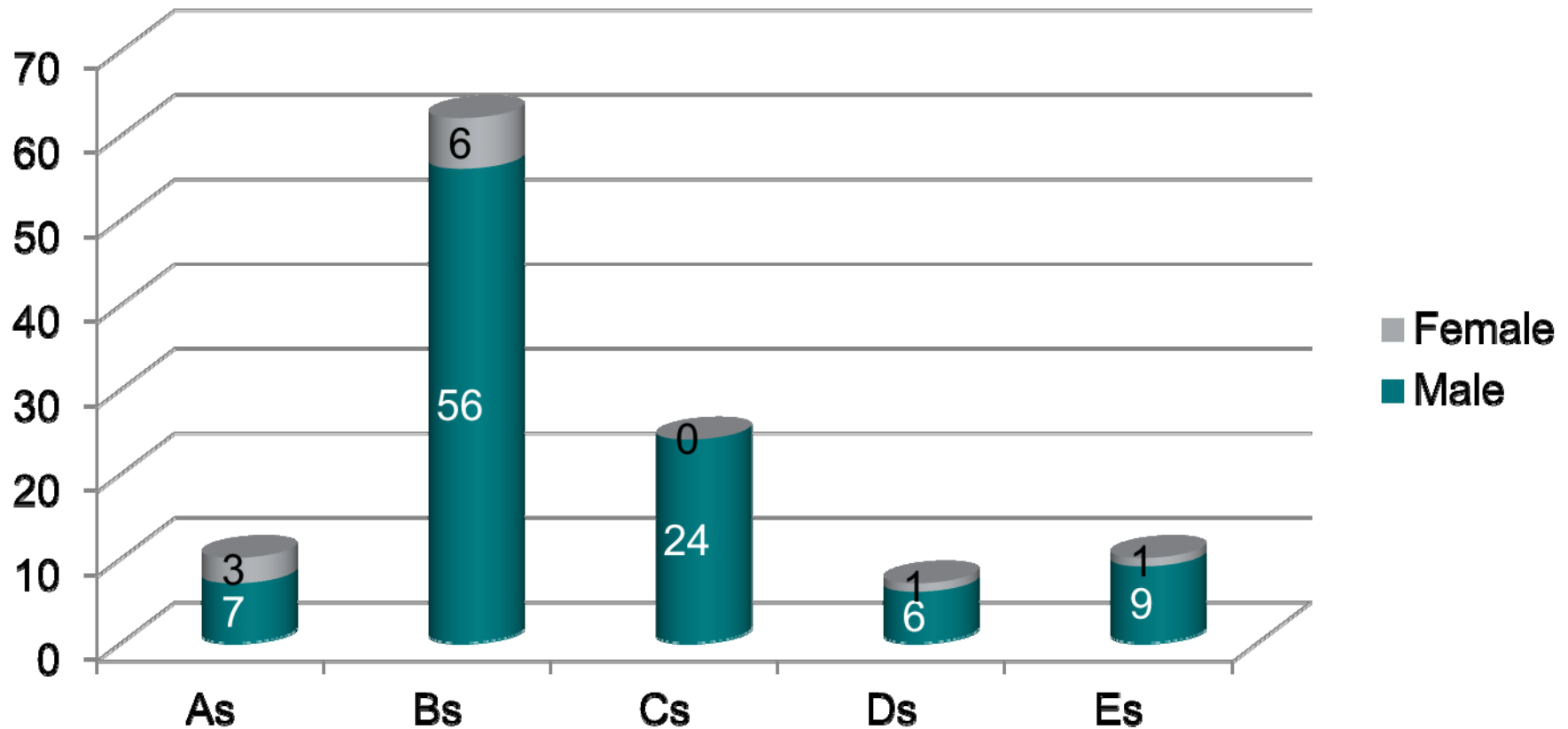
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## Promoting the apprenticeship and females into engineering

- I have helped out with the females engineering challenge days in 2012 and 2013
- I have visited schools, alongside Jude, to talk to the students about engineering as a potential career path
- Supported the up-coming females through the Skills Academy
- Designed and printed media (leaflets, banners, etc) to take to careers fairs and schools to promote the apprenticeship as much as possible
- Have supported various TeenTech activity days – an engineering day for students within the local community



# 2014 Recruitment Statistic Gender





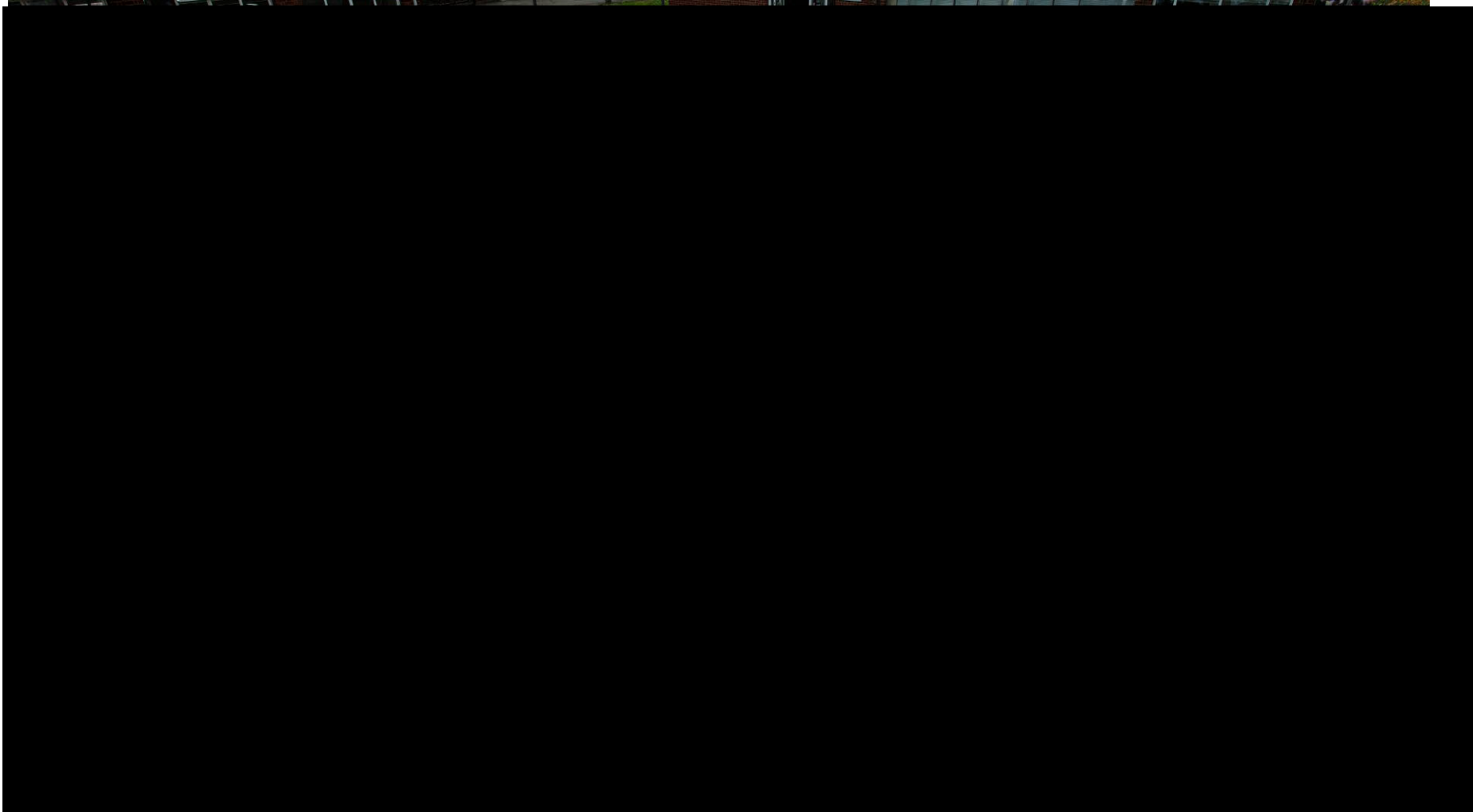
## Retention Statistics

Stats Month	Retention Year	Rolling Year	New Entrants	Number Remaining	Retention Rate
Oct 13	6 Years	01/11/06 31/07/07	51	33	62.3%
	4 Years	01/11/08 31/10/09	31	26	83.9%
	2 Years	01/11/10 31/10/11	43	36	83.7%



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# Any Questions





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**Questions?**



# LLC Review Joint Steering Group update



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# Closing points

- **AOB**
  
- **Forward meeting dates**
  - Wednesday 4<sup>th</sup> June
  - Wednesday 17<sup>th</sup> September
  - Wednesday 17<sup>th</sup> December