



The strategic skills alliance for the Nuclear Industry

Nuclear Advisory Council

21 April 2010

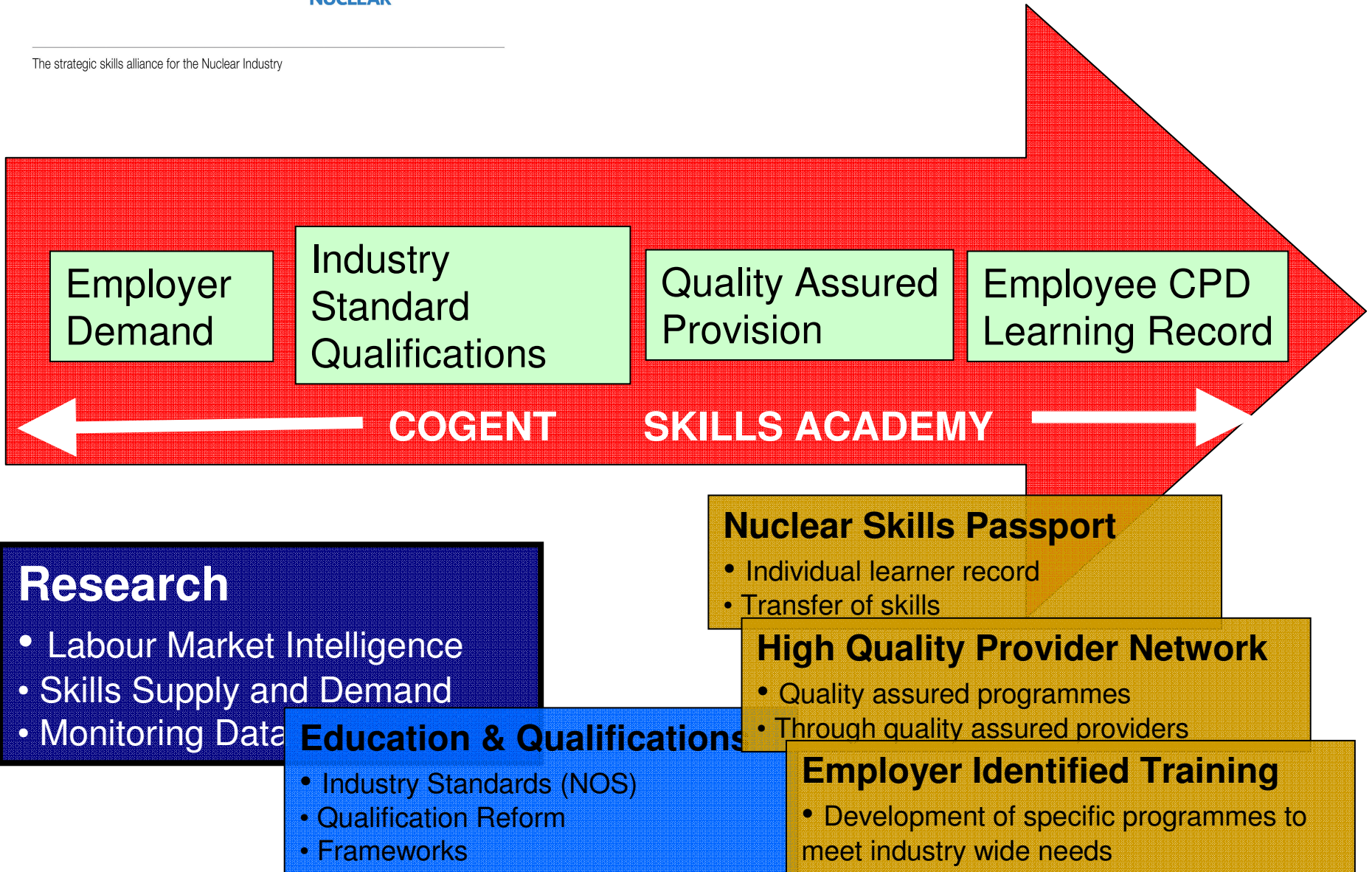
Topics

1. Introductions and Welcome
2. Report of the Twelfth Nuclear Advisory Council (23 Sep 09)

(<http://www.cogent-ssc.com/industry/nuclear/NAC.php>):

3. Labour Market Intelligence Research (CS)
 - Nuclear industry New Build Report
<http://www.cogent-ssc.com/research/nuclearresearch.php>
 - Project Oracle
4. Nuclear Skills Passport Update
 - Overall Passport Progress (CB)
 - Skills Match Tool (CS)
 - Job Contexts (CS)
5. HE Strategy
 - Higher Level Skills Strategy (CDS)
 - Certificate of Nuclear Professionalism (CB)
6. Qualifications, Training Standards programme report
 - NOS, Quas and Training Standard update (CSS)
 - Award in Nuclear Industry Awareness (CB)
7. Funding Opportunities
 - RAE HE STEM Project (CDS)
 - Women-in-Work (CS)
 - BIS Joint Investment Programme (JH)
<http://www.bis.gov.uk/assets/biscore/corporate/docs/j/10-812-jip-prospectus.pdf>
8. Any Other Business
9. Date of Next Meeting – October 2010 to be aligned with Skills Academy Regional Steering Group

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Labour Market Intelligence

- Lack of national data
- Lack of common role descriptors
- On formation of NDA ~900 role description now at 51. Another company has 22 skillsets, another 54 resource codes, another 9 competence frameworks
- A description of the roles in the nuclear industry required – Job Contexts

Job Contexts

1. Energy Production Operations
2. Decommissioning Operations
3. Process Operations
4. Maintenance Operations
5. Safety & Security
6. Radiation Protection
7. Project Management
8. Engineering Design
9. Scientific & Technical Support
10. Business
11. Construction
12. Waste & Repository Operations
13. Commissioning Operations

Role Levels

5. Senior Managers
4. Middle Managers/Graduates
3. Technician
2. Skilled
1. Semi-skilled

Power People

The Civil Nuclear Workforce 2009 - 2025



The Renaissance series:

- Renaissance 1** – Power People: The Civil Nuclear Workforce
- Renaissance 2** – Next Generation: Skills for New Build Nuclear
- Renaissance 3** – Assurance: Skills for Nuclear Defence
- Renaissance 4** – Illuminations: Future Skills for Nuclear

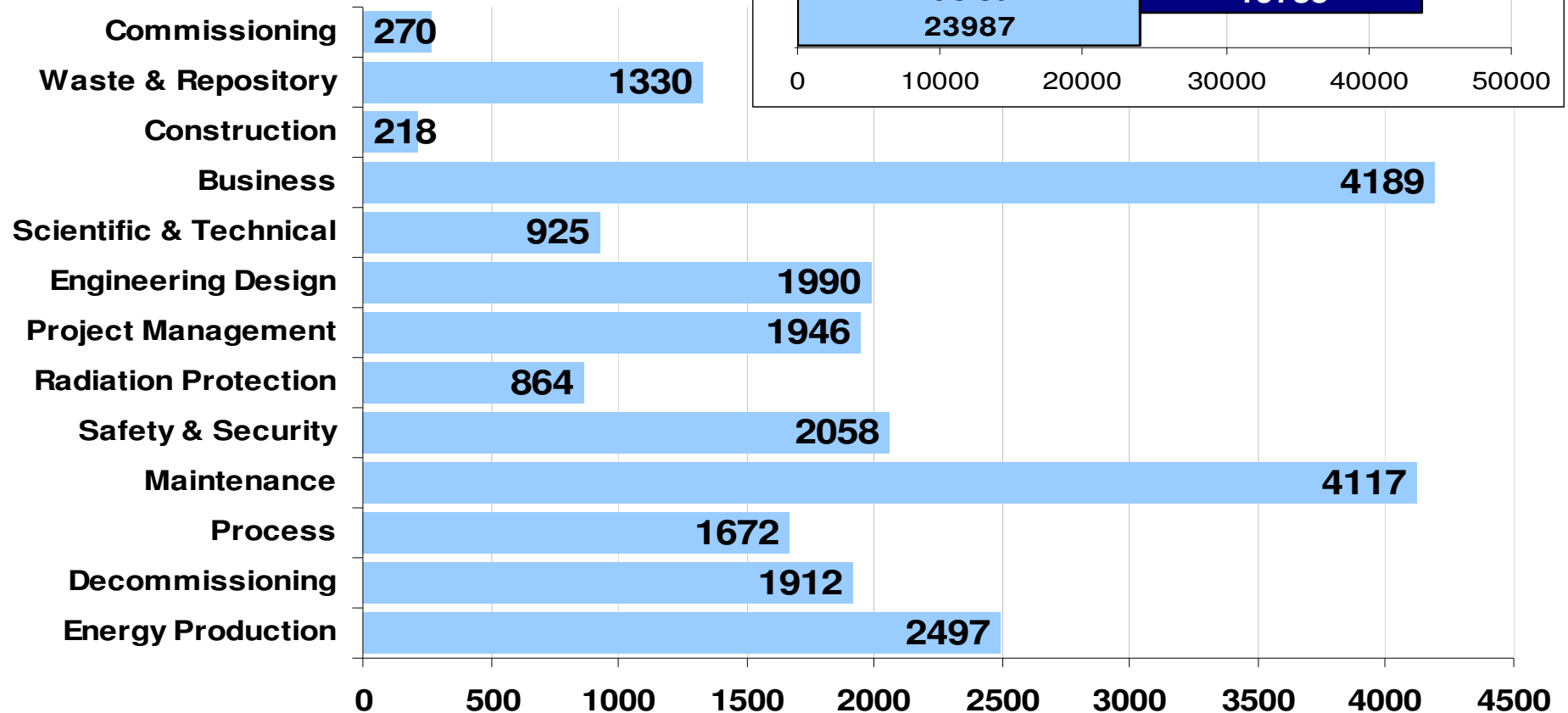
[www.cogent-ssc.com/research/
nuclearresearch.php](http://www.cogent-ssc.com/research/nuclearresearch.php)

Power People

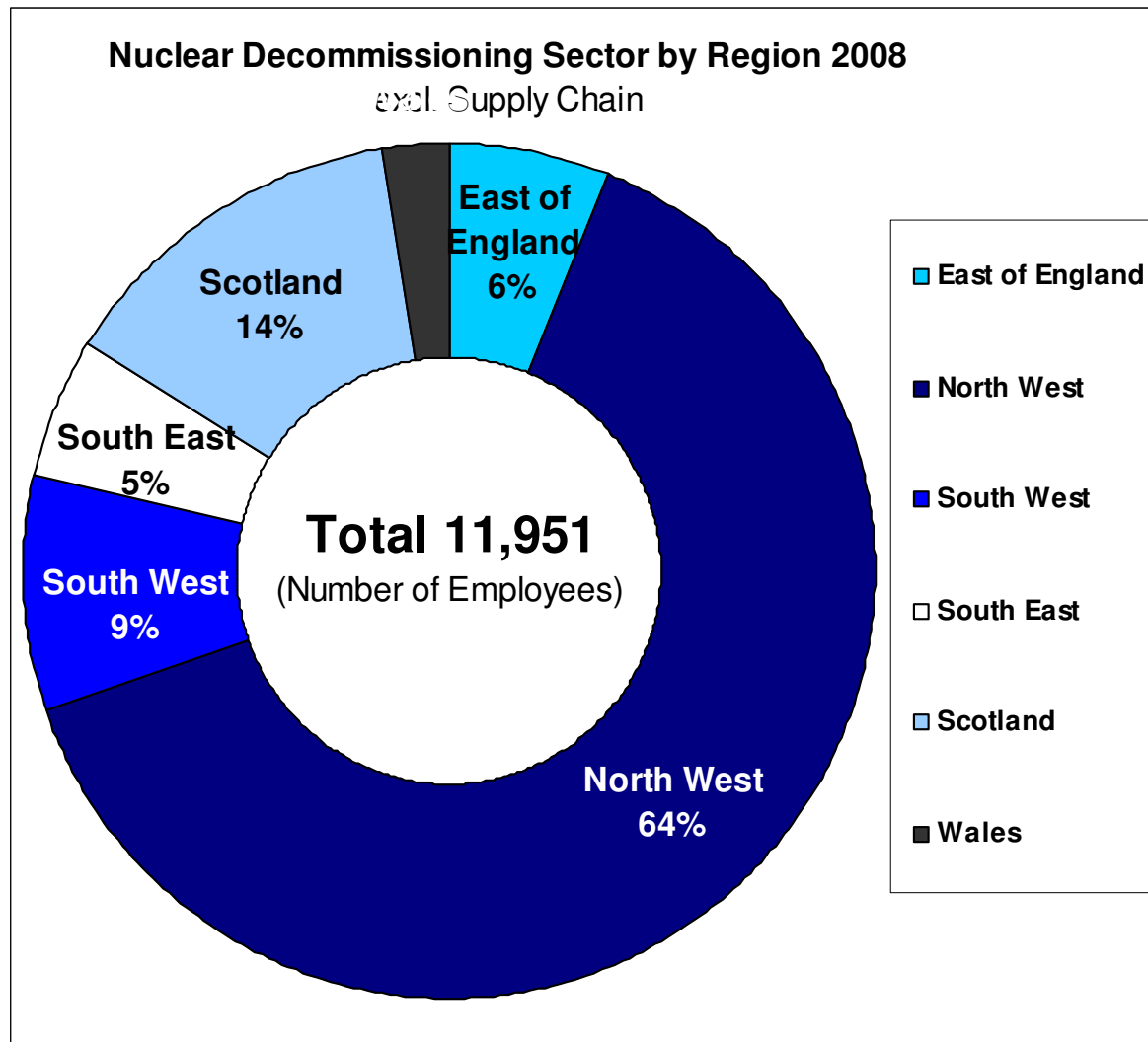
Nuclear Workforce – Job Contexts

Civil Nuclear Industry - Job Context Population 2009

Total: 43,690



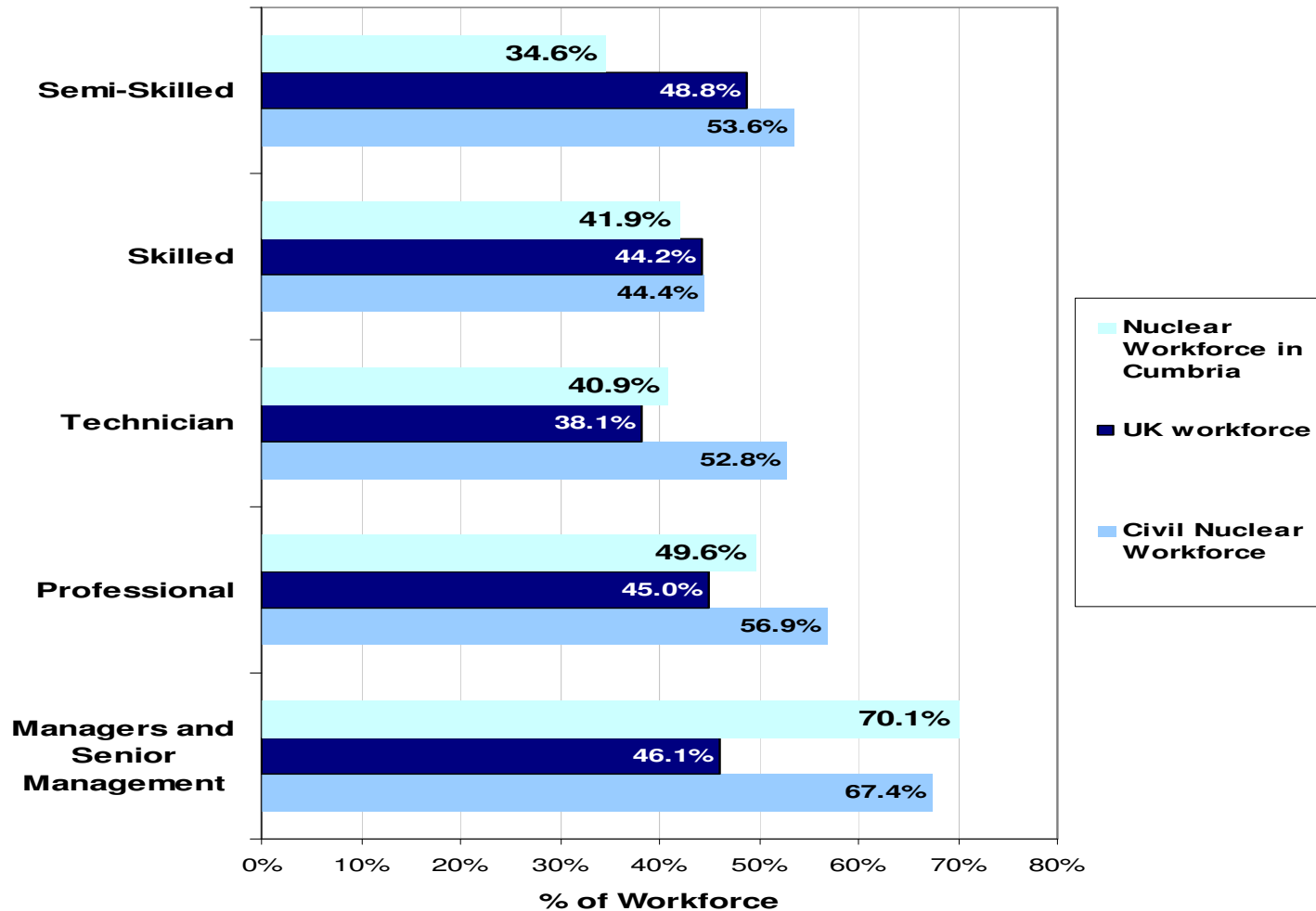
Nuclear Workforce – Decommissioning



Comparison of Total Retirement by Skill Level to 2025

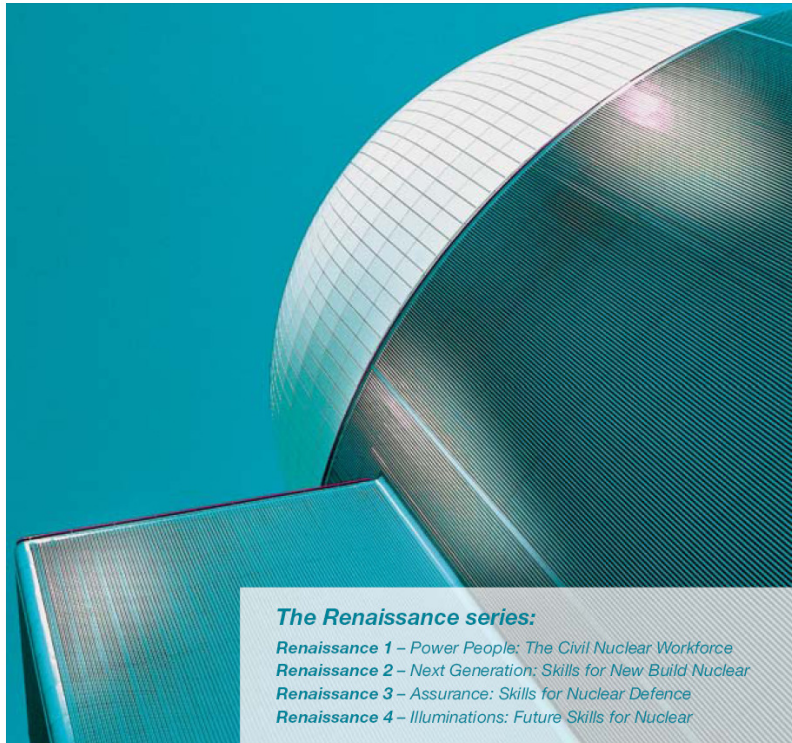
ir Industry

Comparison of Total Retirement- Skill Level by 2025



Next Generation

Skills for New Build Nuclear



The Renaissance series:

- Renaissance 1 – Power People: The Civil Nuclear Workforce*
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[www.cogent-ssc.com/research/
nuclearresearch.php](http://www.cogent-ssc.com/research/nuclearresearch.php)

Renaissance 1:

Power People: The Civil Nuclear Workforce

Renaissance 2:

Next Generation: Skills for New Build Nuclear

Renaissance 3:

Assurance: Skills for Nuclear Defence

Renaissance 4:

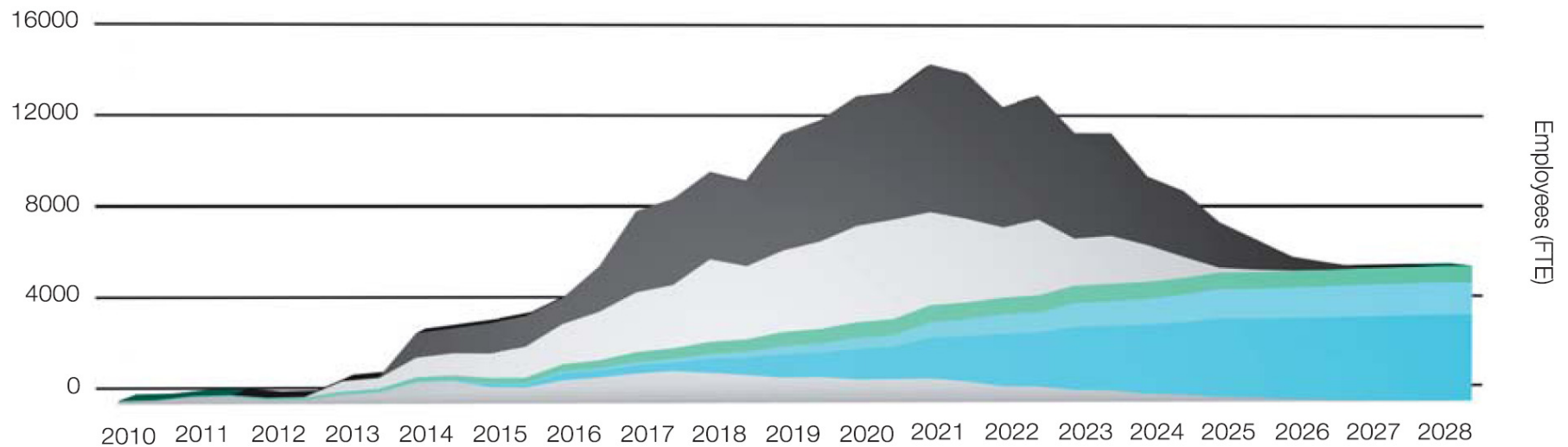
Illuminations: Future Skills for Nuclear

Next Generation Workforce for 16GWe New Build

Figure 2.7.1b
Indicative 16 GWe New Build Scenario

Integrated Workforce (6 twin-unit Stations)

- Electrical and Mechanical
- Construction
- Operation (HQ Support)
- Operation (Supply Chain)
- Operation
- Site Prep & Technical Support



Research *Skills Oracle: An Update*



The Sector Skills Council for
Chemicals and Pharmaceuticals, Nuclear,
Oil and Gas, Petroleum and Polymers



cogent

The logo for Cogent, featuring three curved lines above the word "cogent" in a lowercase, sans-serif font.

April 2010



Skills Oracle 2010
Report prepared for
YOUR COMPANY

- 40% return rate
- 69 companies responded:

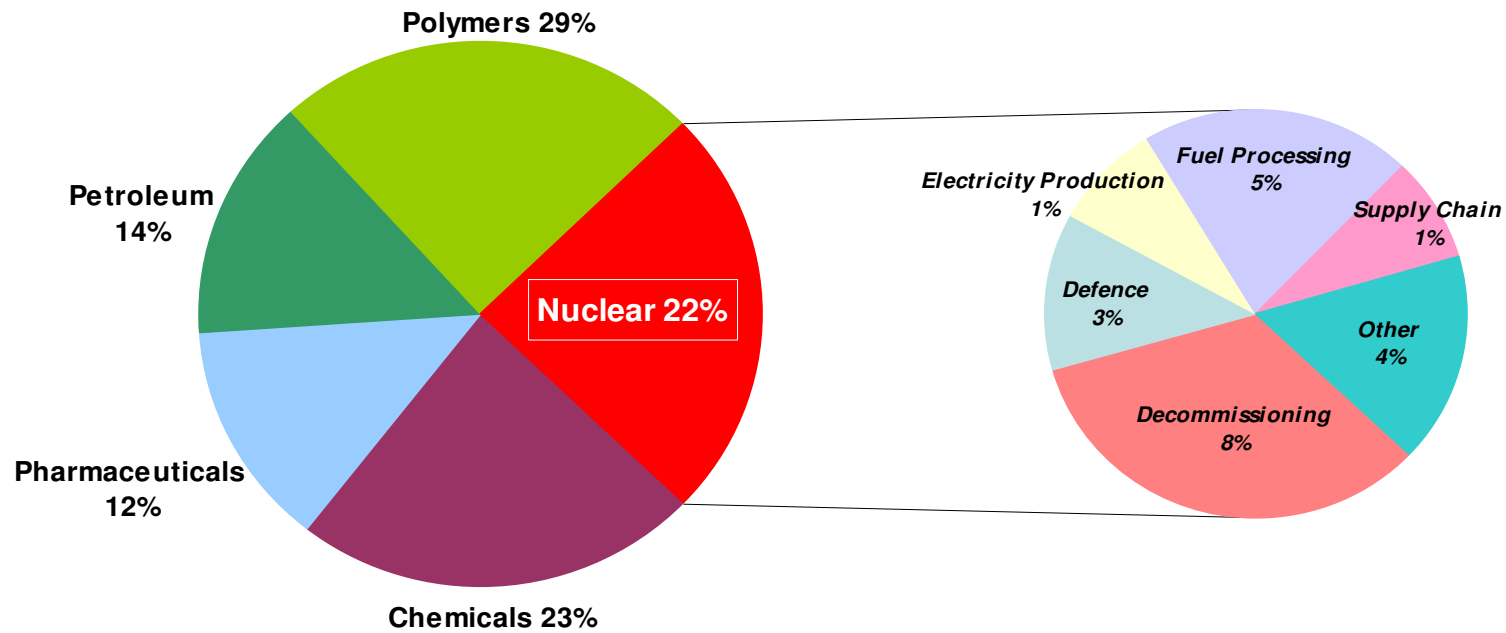
Representing:

- 280 UK sites
- 40,000 UK employees
- 920 sites globally
- 420,000 global employees
- 7% employees & 0.5% employers in 5 Cogent sectors



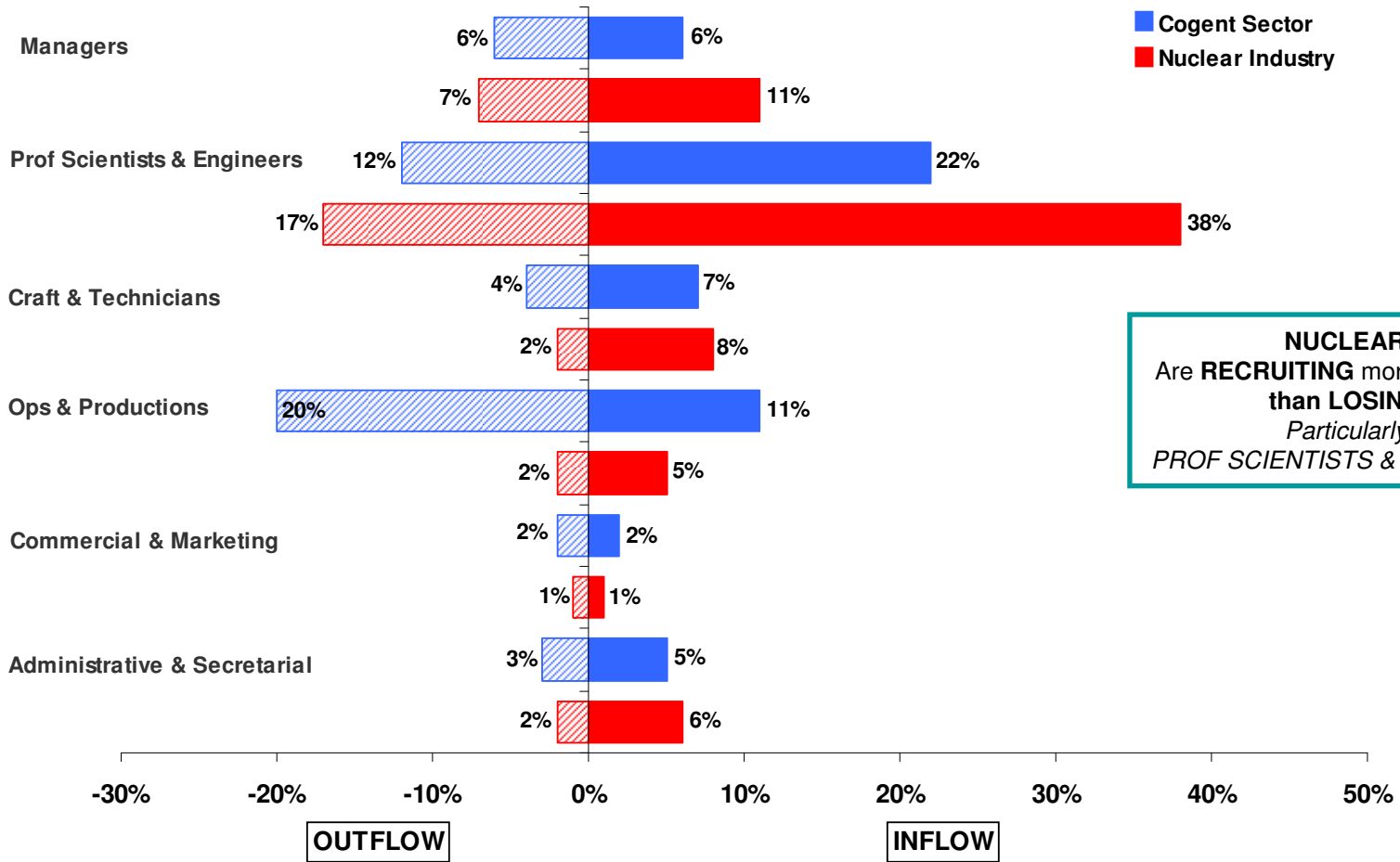
Employer Composition

Figure 1: Respondents by Industry



Survey: 40% return rate (69 respondents)

Skills Oracle – Employment Trends

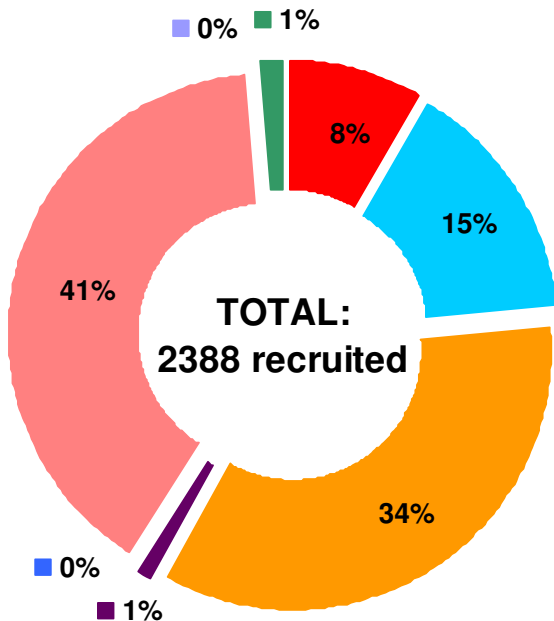


NUCLEAR:
Are **RECRUITING** more employees
than **LOSING**.
Particularly:
PROF SCIENTISTS & ENGINEERS

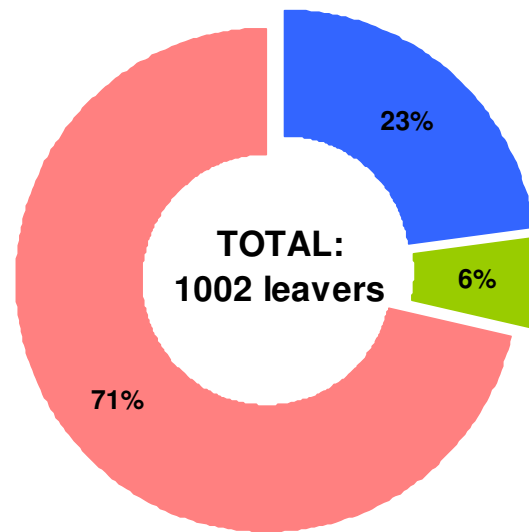




Nuclear Industry:



- School Leavers
- Apprentices
- Graduates
- Mature Entrants
- Migrant Workers (EEA)
- Migrant Workers (Non EEA)
- Agency Supply
- Other



- Retirees
- Redundancies
- Other

NUCLEAR:
Reinforces that the Sector is **recruiting** more employees **than losing**.



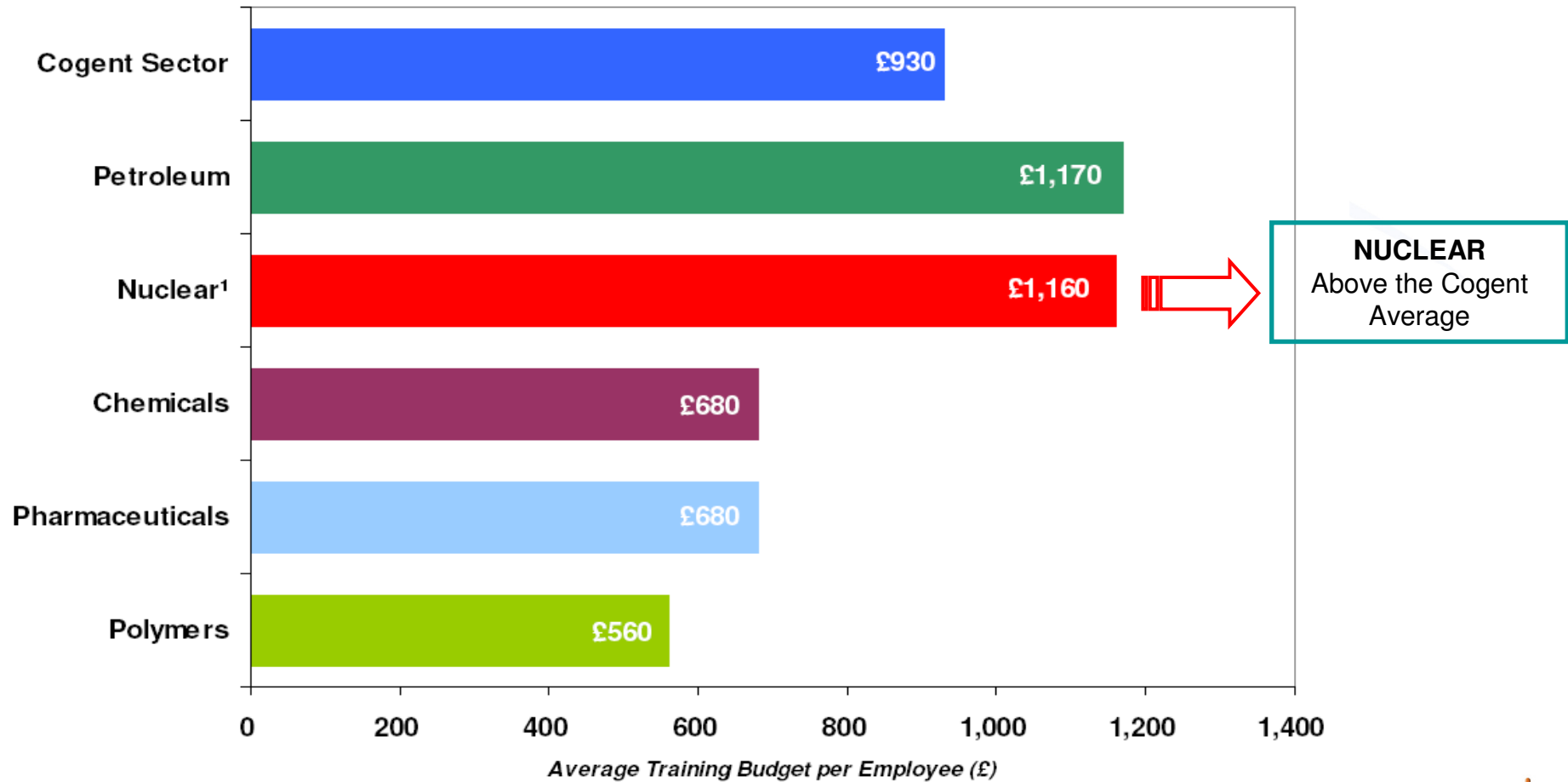
NUCLEAR:
Largest proportion **RECRUITED:**
Agency Supply



NUCLEAR:
Largest proportion **LEAVING:**
'Other'

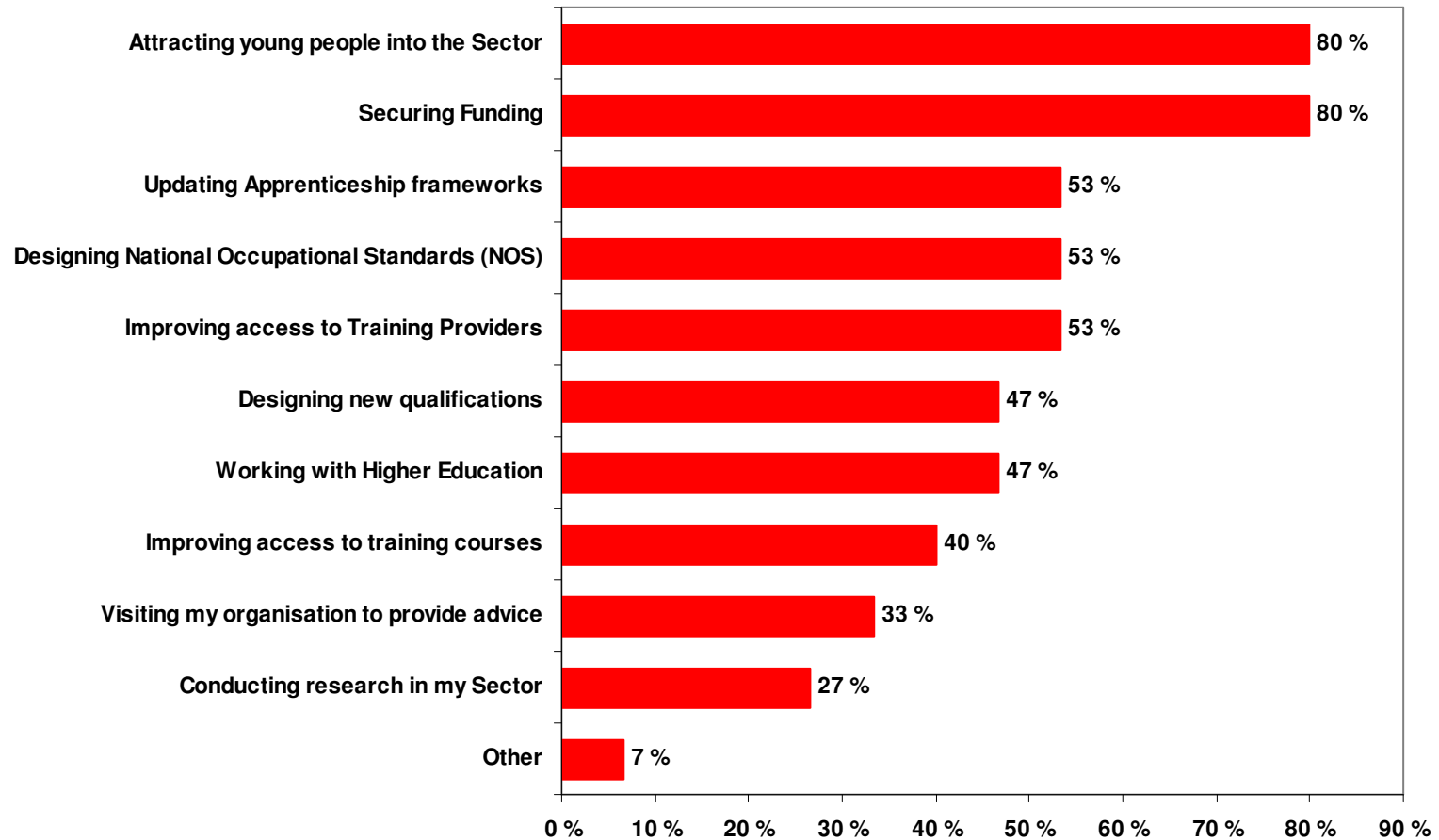


Average Training Budget (£)





How can Cogent help you?





- Delivering Benchmarked Reports (n=69; April)
- Annual Skills Report (including Industry reports)
- Next round: **Skills Oracle 2010!**



Questions for Consideration:

- What was missing in the Skills Oracle Survey 2009?
- What was not needed?
- What was needed?
- Specialist areas we can consider for your sector?

4. Nuclear Skills Passport Update

- Overall Passport Progress (CB)
- Skills Match Tool (CS)
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Leading to a sustainable, skilled, competent and safe UK nuclear workforce to achieve current and future demands

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Certificate of Nuclear Professionalism

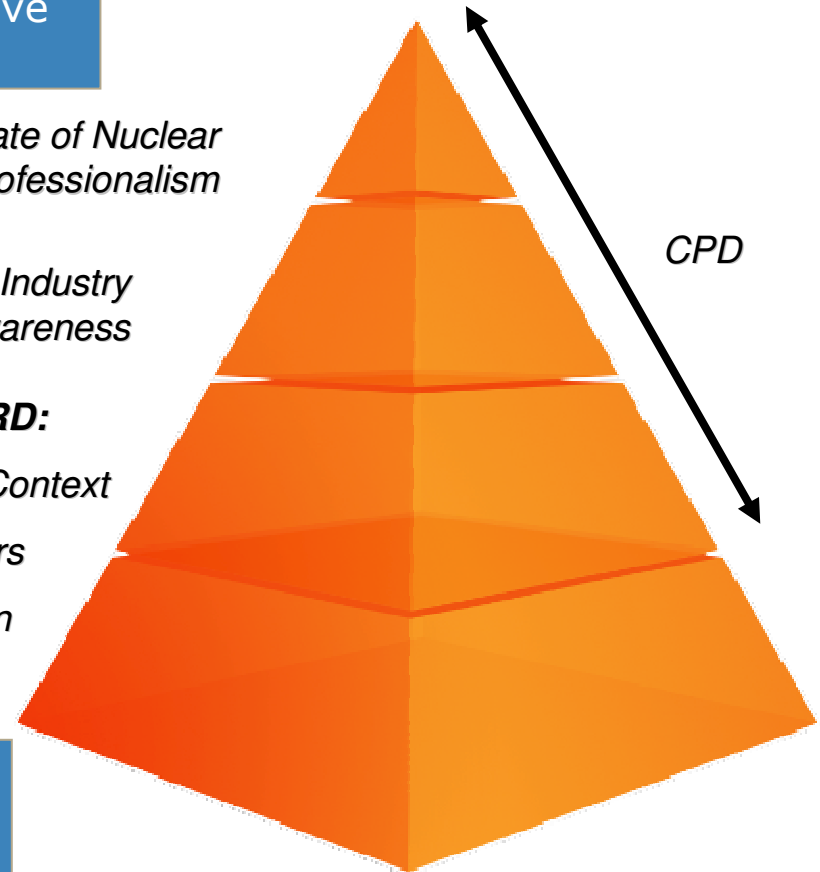
Award for Nuclear Industry Awareness



THREE BAR STANDARD:

- Basic Nuclear Industry Context*
- Basic Nuclear Behaviours*
- Basic Common Induction*

CPD



The Nuclear Skills Passport recording nationally recognised skills and training across and underpinning the skills pyramid

Demonstrating Excellence in Nuclear Skills



The strategic skills alliance for the Nuclear Industry

Cogent Skills Match Tool

**[http://www.cogent-
skillsmatch.com/](http://www.cogent-skillsmatch.com/)**



Skill Area	Knowledge and behaviours	qualifications and training standards
Technical Competence	<ul style="list-style-type: none"> •Prepare work for decomm' •Assemble and dismantle decomm equipment •Operate, maintain, monitor and adjust equipment •Dismantle contaminated plant etc. •Decontaminate radioactive plant etc •Remover and transfer hazardous materials. •Operate in pressurised suite environment 	<p>PAA/VQSET Level 2 Diploma in Nuclear Decommissioning (NVQ) (QCF)</p>
Business Improvement	<p>Solve routine decomm problems with efficiency techniques Apply workplace organisation techniques Understand variety of efficiency improvement techniques</p>	<p><i>Optional</i> Level 2 Diploma in Business Improvement</p>
Compliance	<ul style="list-style-type: none"> •safety, security expectations on nuclear sites •Principles and implications of radiation hazards •Procedures for radioactive discharge, waste, enviro' control, etc •Safety management systems eg Permit to Work, SOPs and Risk •Company policy, legislation and regulation 	<p>Basic Common Induction Standard Basic NI Behaviours training Basic NI Context Training Standard * Working Safely Training Standard</p>
Functional and Behavioural	<p>Communications Numeracy ICT Team working and Personal Development Take responsibility for completing tasks and procedures Coach others</p>	<p>Can be acquired through GCSE and Core/Functional Skills programmes</p> <p><i>Optional</i> Level 2 ILM Award in Personal Development</p>

Job Contexts

<http://www.cogent-ssc.com/industry/nuclear/nitfjs.php>

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Developed

- Nuclear Decommissioning
- Radiation Protection
- Process Operations
- Nuclear Maintenance

2010 Programme

- Safety Case Preparation
- Construction
- Project Management
- ??

Training Standards



- **Basic Common Induction Standard**
- **Basic Nuclear Industry Context**
- **Basic Nuclear Industry Behaviours**
- Managing Safely
- Working Safely
- First Aid at Work & Re-qualifier
- Working at Height
- Ladder Safety
- Introduction to Project Management
- Foundations in Project Management
- Project Management Practitioner
- Occupational Health and Safety (Engineering Contractors)
- Occupational Health and Safety (Engineering Supervisors)
- Asbestos Awareness
- Radiation Protection – Health Physicist
- Gas Bottle Safety

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Skills Standards - Transferrable Workforce

Industry Training Framework supports:

Skills Academy Nuclear Skills Passport

<http://www.nuclear.nsacademy.co.uk/nuclear-skills-passport>

And Cogent Skills Match Tool <http://www.cogent-skillsmatch.com/>



Industry Standard Training and Qualifications



+



Qualifications

+



**Industry training
standards**



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Operations Support Worker

First Line Supervisor

Supervisor - Production or Maintenance team

Technician - Production & Maintenance

Engineer - Production or Maintenance

Manager - Production or Maintenance

Director - Production

Support Services Worker

Technician - Support Services

Scientist/Engineer - Support Services

Manager - Support services

Director - Technical

Science Technician

Scientist/Engineer - Safety & Environment

Manager - Safety and Environment

Monitor

Supervisor - Monitoring team

Nuclear

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HE Strategy Caroline Sudworth

Certificate of Nuclear Professionalism Charlie Bray

Topics

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Award in Nuclear Industry Awareness Charlie Bray

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Regional Steering Group

Royal Academy of Engineering HE STEM Project Caroline Sudworth

Women & Work – what is it?

An opportunity for Women to access the skills development they need to enable progression and/or promotion within the sector

- *100 development opportunities*
- *3 Strands*
 - *Pre apprentice/technical work experience*
 - *Skills Update (skills updating)*
 - *21st Century Managers (L&M development)*
 - *12 month programme beginning now*



Women & Work – training offer

- Statutory training obligations not supported
- No other restrictions on type of training
- Maximum grant of £650 grant available per individual



Women & Work

– funding constraints

- Employer must make 50% contribution to the ‘total’ costs of training
- 15% of this cost must be a **cash** payment to a provider/accreditor of training
- In house training is eligible but must have an element of accreditation to future learner development

Women & Work

Work Shadowing experience – (Strand 1)

- Cost of Third Party training: £450
- Employee's time work shadowing: £450
- 'In house' shadowing support: £450
- Total training costs including 'in kind':
£1350

Company Contributions

- Cash input from Company: £202.50
- Balance of Training Costs: £1147.50
- Potential grant (50% of total costs) £675
- W&W Grant: £650 (max)

Women & Work



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E –Learning – (Strand 2)

- Cost of Third Party training: £650
- Employee on e-learning programme: £300
- Employer support: £250
- Total training costs including 'in kind': £1200

Company Contributions

- Cash input from Company: £180
- Balance of Training Costs: £1020
- Potential Grant (50% of total costs) £600
- W&W Grant: £600

Women & Work

Redundancy – (Strand 2) – 3 x Female employees

- Cost of outplacement support: £600
- Employee's time on the programme: £600
- Employer support: £150
- Total training costs including 'in kind':
£1350

Company Contributions

- Cash input from Company: £202.50
- Balance of programme Costs: £1147.50
- Potential Grant (50% of total costs) £675
- W&W Grant: £675

Women & Work - key documents

- Employer and Individual registration details
- Beneficiary Training plan
- Indicative Training Costs form
- Indicative maximum grant form
- Completion of Training/Grant Claim form (+ supporting evidence of training having taken place)

Women & Work

Questions

BIS Joint Investment Programme

John Holton

<http://www.bis.gov.uk/assets/biscore/corporate/docs/j/10-812-jip-prospectus.pdf>

Topics



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AOB



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Career Fairs

- One North East Youth Engineering Show 13-16 July Metro Radio Arena Newcastle 2010
- Skills Cymru Millenium Stadium Cardiff 16-18th September 2010
- Skills Yorkshire and Humber Sheffield Arena 29-30th September 2010
- Skills London Excel Docklands 7-9th October 2010

Energy Foresight

AOB

SC@Nuclear Phase 2

Keith Parker