



### The Nuclear Industry includes:

- Fuel manufacture and enrichment
- Defence – the nuclear deterrent
- Decommissioning and clean-up
- Fuel Processing
- Power Production
- Waste Management

Nuclear power provides about 18% of the UK's electricity and by doing so, saves the equivalent of the carbon emissions from most of the UK's cars on the road. The nuclear fuel-cycle operations in the UK are of major international importance and can provide for all the needs of the UK and for much of the export demand. The Ministry of Defence operates a fleet of nuclear-powered submarines, including the new Astute class and maintains the Trident programme.

The safe and cost-effective decommissioning and clean-up of the industry's power stations and fuel-processing facilities, which are being progressively shut down, are providing future technical and engineering challenges for the industry. The decommissioning of the UK's civil nuclear facilities and the clean-up of the sites has been the responsibility of the Nuclear Decommissioning Authority since 1st April 2005. The industry operators are supported by a wide variety of supply-chain companies, such as engineering and construction contractors, fabricators of specialist equipment, manufacturers and specialist service providers. Companies involved in the design or supply of safety-related equipment or materials must meet strict quality requirements and need underpinning knowledge about the work of the industry.

The UK industry also has a significant international element of its business. The experience and skills held by the industry in reactor operation, design and construction, maintenance and inspection, waste management and decommissioning technology provides a good basis for export business to a growing global market. Many British nuclear companies have substantial business in markets abroad. The recent release of the Energy White Paper also highlights the potential for new build in the UK.

## Economic picture of the Nuclear Fuel Processing Sector<sup>1</sup>

Industry	Turnover	GVA <sup>2</sup>	GVA per employee
<b>Totals</b>	<b>£1.55bn</b>	<b>£0.79bn</b>	<b>Average £60,692</b>

## Industry details<sup>3</sup>

The UK is the **10th** highest nuclear generating country globally

The UK Nuclear industry generated **69.2 billion kWh in 2006**

In May 2007 the UK Nuclear industry was **6th** globally for the number of power stations still in operation

The Royal Navy has **15** nuclear powered submarines in service

The last UK nuclear power station is due to close in 2035

Expected cost for decommissioning and clean-up in 2007/08 **£1.10bn**

<sup>1</sup>Annual Business Inquiry 2005 – data released November 2006, available through the Office of National Statistics (only processing nuclear fuel SIC 23.30)

<sup>2</sup>GVA is the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production

<sup>3</sup>Nuclear Energy Institute www.nei.org

## The Nuclear Industry Workforce<sup>4</sup>

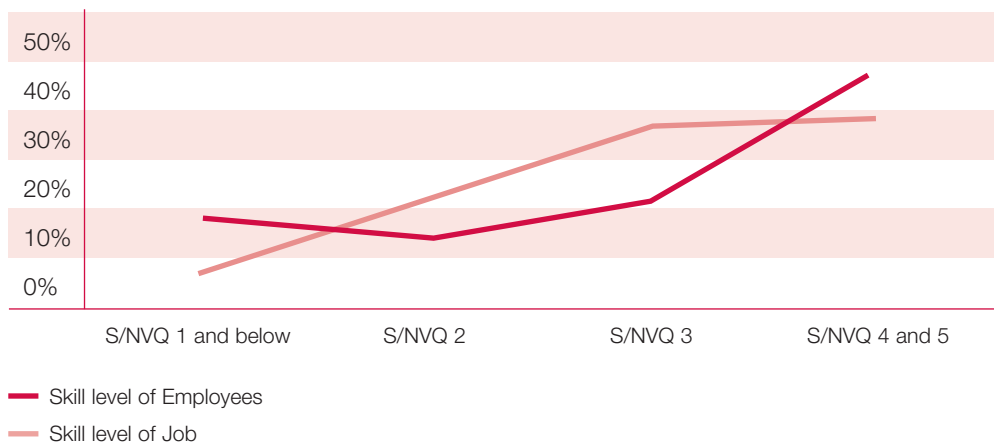
Workforce Distribution	
Number of Employers	200
<b>SET Employees</b>	<b>50,000*</b>
– Fuel Processing	13,000
– Decommissioning	12,000
– Defence	9,000
– Power Production	13,000
– Waste Management	3,000
Age of workforce <sup>5</sup>	
– 16-24	6%
– 25-34	28%
– 35-44	35%
– 45-54	21%
– 55+	10%

\* Industry estimates can exceed ABI employee data due to contractor workforce and SIC limitations

Ethnicity <sup>5</sup>	
– White	96%
– Non-white	4%
Gender <sup>5</sup>	
– Female	18%
– Male	82%
<b>Occupation Distribution<sup>6</sup></b>	
Managers and Senior Officials	4%
Professional Occupations	38%
Associate Professional and Technical	13%
Administrative and Secretarial	11%
Skilled Trades Occupations	24%
Sales and Customer Service Occupations	0%
Process, Plant and Machine Operatives	5%
Elementary Occupations	5%

## The Skills Gap<sup>5</sup>

### Skills Gap in the Nuclear Industry



There is an over supply of people qualified at S/NVQ level 1 and below compared to the number of jobs at that level in the Nuclear Fuel Processing Industry.

Elementary Occupations only account for 5% of the overall workforce.

**There is a 12% SURPLUS of people qualified at S/NVQ level 1 and below.**

There is an under supply of people qualified to S/NVQ level 2 and 3 compared to the proportion of jobs at those levels in the Nuclear Fuel Processing Industry.

Level 2 and level 3 occupations account for 53% of the Nuclear Industry.

**There is a 33% DEFICIT of people qualified at S/NVQ levels 2 and 3.**

## Standard Industrial Classification (SIC) Listing<sup>7</sup>

The Nuclear Industry by SIC code: 23.30 Nuclear Fuel Processing

<sup>4</sup>National Skills Academy - Nuclear Estimates 2007

<sup>5</sup>Nuclear Employer Skills Survey 2005

<sup>6</sup>Labour Force Survey January 2006 - December 2006 (Nuclear Fuel Processing Only)

<sup>7</sup>Office of National Statistics - Standard Industrial Classification (SIC) 2003

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