

# Appendix 3

## Nations & Regions Factsheets 2010

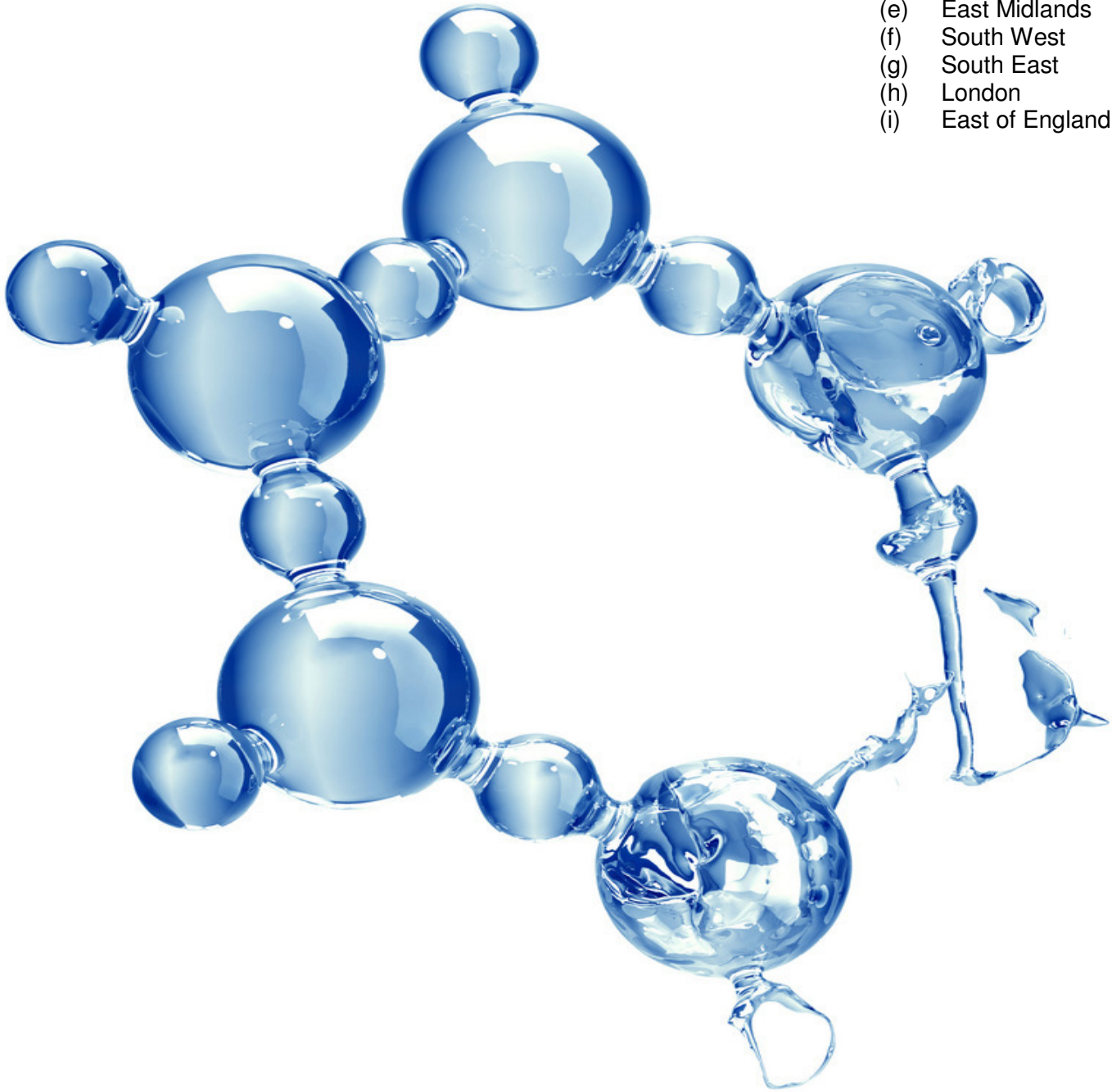
**Contents:**

**Nations:**

- (a) England
- (b) Scotland
- (c) Wales
- (d) Northern Ireland

**Regions:**

- (a) North West
- (b) North East
- (c) Yorkshire & Humber
- (d) West Midlands
- (e) East Midlands
- (f) South West
- (g) South East
- (h) London
- (i) East of England



# England

## Cogent in England

- The Cogent Industries are strategically important in England and collectively represent **67% of employees** and **83% of employers** within the UK Cogent sector.
- The Cogent workforce accounts for **14% of the manufacturing workforce** and **12% of manufacturing employers in England**.
- Cogent manufacturing industries **contributed 20% of manufacturing gross value (GVA)** and **17% of the turnover** in 2008.

The impact of the recession has shown substantial variation across the English regions. The proportion of companies reporting vacancies has decreased by 11% between 2007 and 2009.

### Life sciences

The UK is a world leader in life sciences sector. Pharmaceuticals, medical technologies and biotechnology are the key strategic areas of life sciences. The UK Biotechnology sector is the second largest globally, with a turnover of at least £5.2bn. The UK Pharmaceutical industry is the 4th largest exporter in Europe (£20.8bn). England has 80% of the pharmaceuticals, medical biotechnology and medical technology employers within the UK<sup>5</sup>. Regions of high concentration in the industry are the South East, the North West, and the East of England for the Pharmaceuticals sector. These regions employ, respectively, 24%, 21% and 12% of the total workforce. The regions also coincide with clusters of population, density of discovery/venture companies, regional skills priorities, and the locations of providers of suitably qualified graduates from Higher Education<sup>7</sup>



## Economic and Employment Update <sup>1,4,5,6</sup>

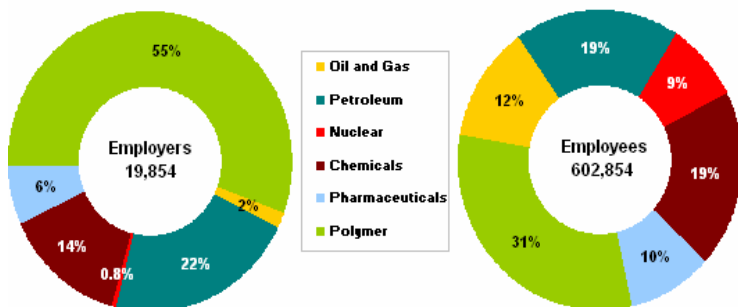
Industry	Turn-over	GVA**	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	£ / bn	£ / bn	Median/£	n	%	n	%
Oil and Gas	*	*	1183	337	49%	74,709	29%
Petroleum	*	1.4	928	4,280	79%	112,849	77%
Nuclear	-	-	-	152	76%	51,339	89%
Chemicals	26.7	8.0	534	2,736	88%	115,620	83%
Pharmaceuticals	10.5	5.8	591	1,223	80%	58,793	80%
Polymer	17.2	6.2	396	11,126	86%	189,544	86%
<b>Cogent - England</b>	-	-	726	<b>19,854</b>	83%	<b>602,854</b>	67%
<b>England</b>	2,707	780	374	<b>2,161,305</b>	88%	<b>23,073,714</b>	86%

## Cogent - UK Headlines

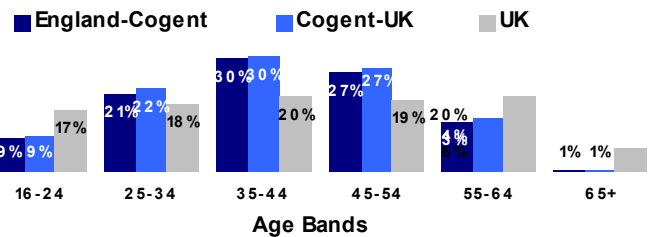
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup>



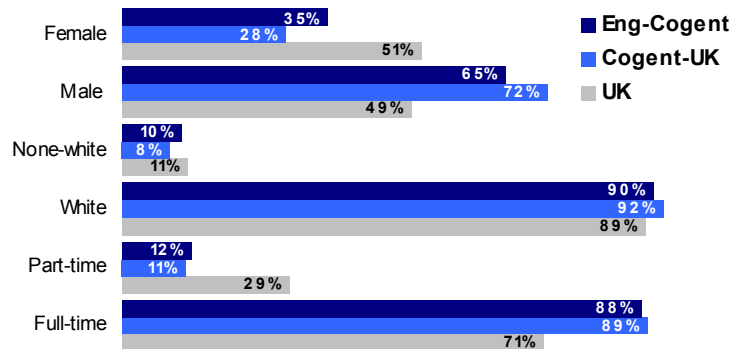
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>Cogent - England</b>	68%	23%	7%	2%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>England</b>	85%	11%	3%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

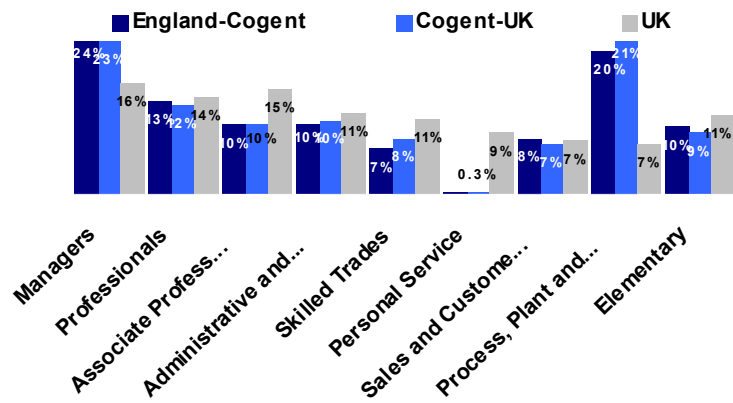
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed— ONS 2010

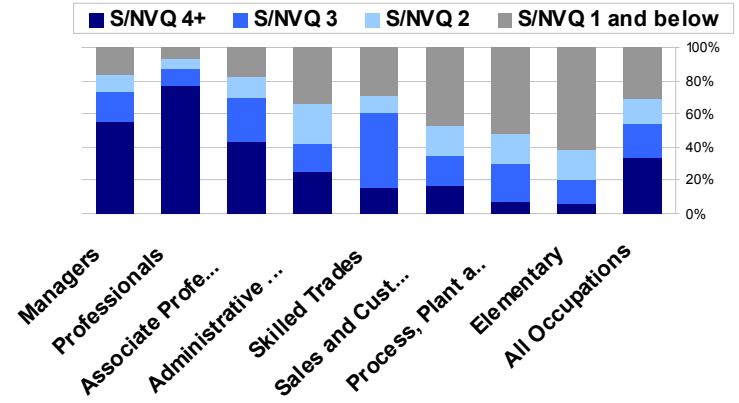
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



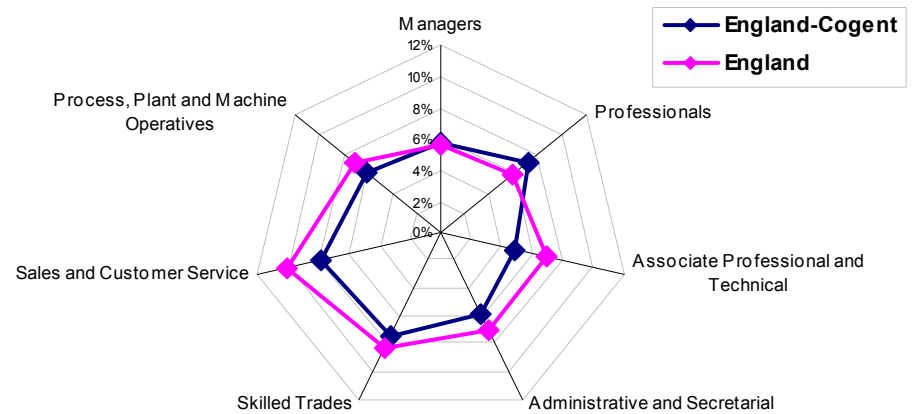
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	22%	8%
Petroleum	22%	7%
Chemicals	19%	5%
Pharmaceuticals	23%	6%
Polymer	19%	7%
<b>Cogent - England</b>	21%	6%
<b>England</b>	19%	7%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

In the period of 2007-2009:

- the proportion of companies reporting vacancies has decreased by 11pp, but internal skills gaps increased by 3pp.
- the proportion of employers reporting skills gaps is higher than the UK average by 2pp.
- the proportion of employers providing training fell by 3pp, while the proportion of employees receiving training decreased by 4pp.

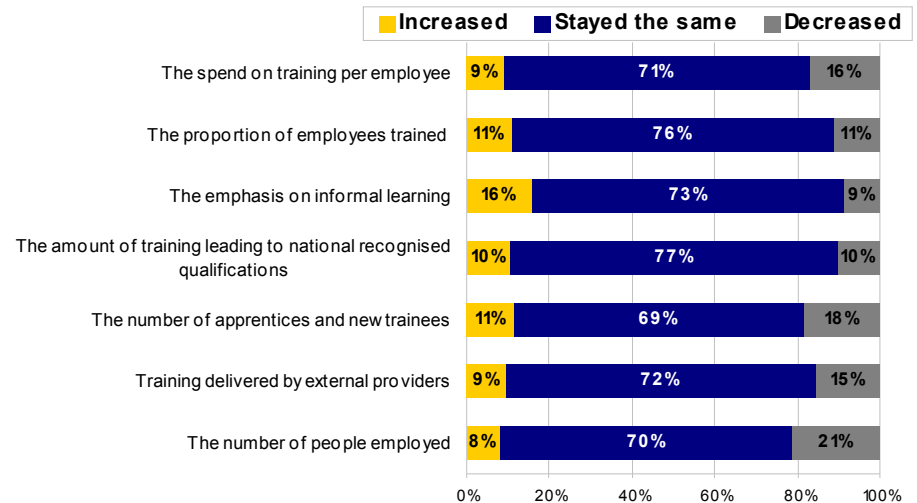
(pp) - Percentage points

	Cogent-Eng		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	18%	9%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	2%	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	1%	6%	2%
Proportion of firms reporting internal skills gaps	18%	21%	16%	19%
Proportion of firms providing training (last 12 months)	69%	66%	67%	68%
Proportion of workforce trained (last 12 months)	54%	50%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	80%	52%
Petroleum	68%	52%
Chemicals	68%	53%
Pharmaceuticals	78%	71%
Polymer	57%	39%
<b>Cogent - England</b>	66%	50%
<b>England</b>	68%	56%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent 2010  
 7. Life Sciences & Pharmaceuticals, Cogent, SEMTA, Skills for Health 2010  
 Standard Industrial Classification (SIC 07 code), ONS 2010

More information on Regional and Industry Research can be found at:  
[www.cogent-ssc.com/research](http://www.cogent-ssc.com/research)

# Scotland

## Cogent in Scotland

The Cogent industries are strategically important to Scotland.

- The Cogent workforce accounts for **14% of the nations manufacturing workforce** and **17% of the manufacturing employers**.
- In Scotland, the Chemical industries invested **£160m in R&D** and account for 29% of the nation's R&D investment in 2008<sup>6</sup>. The Cogent industries account for **25% of the nation's GVA** and contributed of the order of **£21.92bn** to the nation's wealth in 2008.
- **8% of Cogent employers** and **26% of Cogent employees** are based in Scotland.
- The UK is a world leader in life sciences sector. Pharmaceuticals, medical technologies and biotechnology are the key strategic areas of **life sciences**. Scotland has **10% of these employers** within the UK.

### Scotland has a cluster of Oil and Gas, Polymer and Chemical companies:

There are clusters of polymer and chemicals industries in central Scotland; the oil and gas extraction industries in Aberdeenshire; and around the Ineos Refinery at Grangemouth. The Petrochemical and Polymer companies stretch across Forth Valley, Ayrshire, Renfrewshire, Fife and Dumfries and Galloway areas. North Ayrshire and Falkirk chemical and pharmaceutical cluster employers include well known companies such as Glaxo SmithKline, Novartis, Syngenta, and KemFine. The nuclear industry resides in the far North at Dounreay (decommissioning); and also in Ayrshire, East Lothian and Dumfriesshire, where there are Nuclear Power Stations. There is a MoD base at Faslane. In the Highlands and Islands, key oil and gas employer clusters are in Orkney and Shetland for oil storage and processing and in the Cromarty Firth.



## Economic and Employment Update <sup>1,4,5,6</sup>

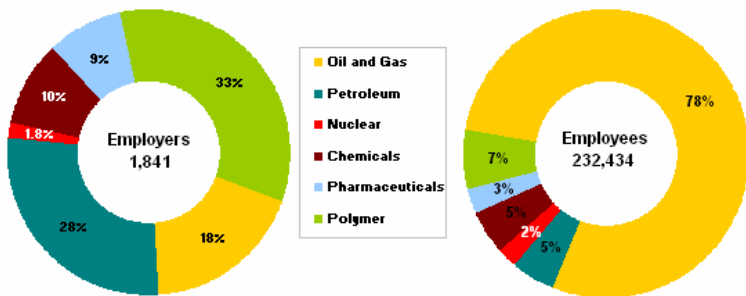
Industry	Turn-over	GVA**	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	£ / bn	£ / bn	Median/£	n	%	n	%
Oil and Gas	28.48	19.48	1,318	338	49%	182,000	70%
Petroleum	0.096	0.02	*	510	9%	11,433	8%
Nuclear	-	-	-	33	17%	5,137	9%
Chemicals	*	1.73	497	178	6%	11,708	8%
Pharmaceuticals	0.51	0.21	657	159	10%	6,902	9%
Polymer	*	0.48	430	623	5%	15,255	7%
Cogent-Scotland	-	<b>21.92</b>	<b>726</b>	<b>1,841</b>	<b>8%</b>	<b>232,434</b>	<b>26%</b>
<b>Scotland</b>	<b>236.41</b>	<b>91.40</b>	<b>385</b>	<b>181,470</b>	<b>7%</b>	<b>2,420,441</b>	<b>9%</b>

## Cogent - UK Headlines

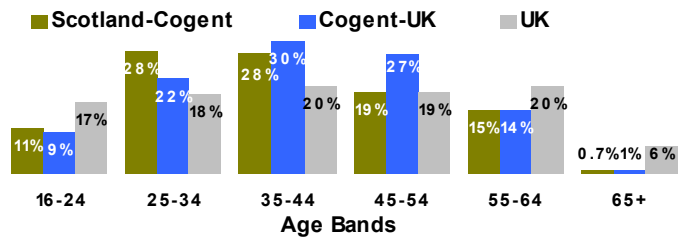
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect employment)



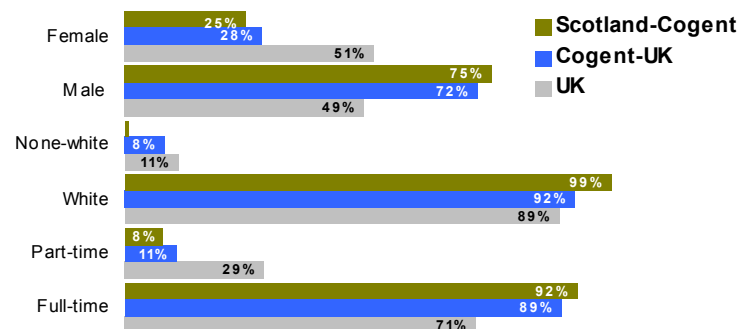
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>Cogent-Scotland</b>	64%	23%	9%	3%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>Scotland</b>	81%	14%	3%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>

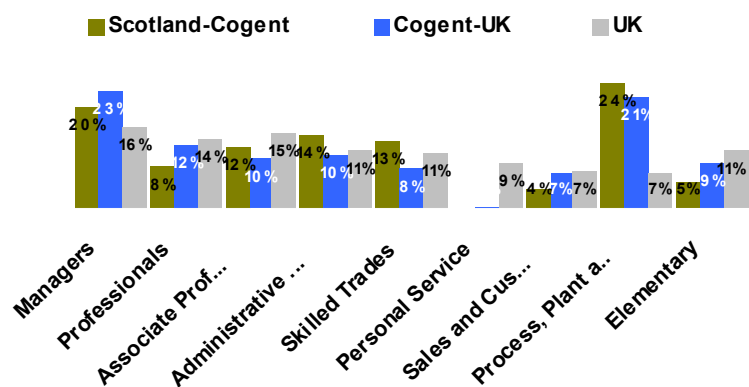


1. Annual Business Enquiry (ABI) 2008-data released June 2010, ONS  
 2. Scottish Employer Skills Survey SESS 2008 and 2010  
 3. Labour Force Survey (LFS) 2009, ESDS 2010  
 4. Annual Survey of Hours and Earnings 2008

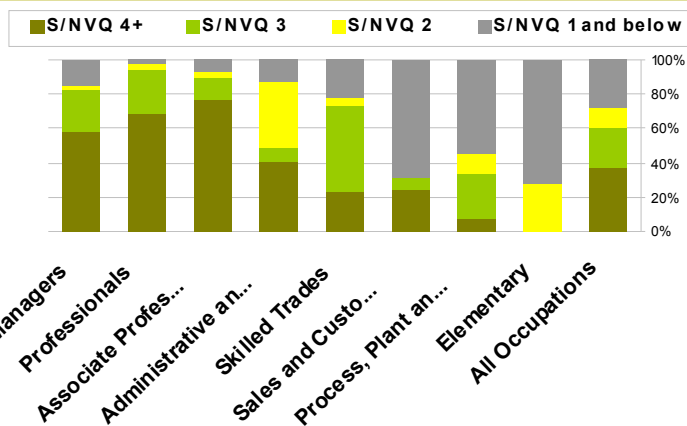
\* Data suppressed— ONS 2010  
 \*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

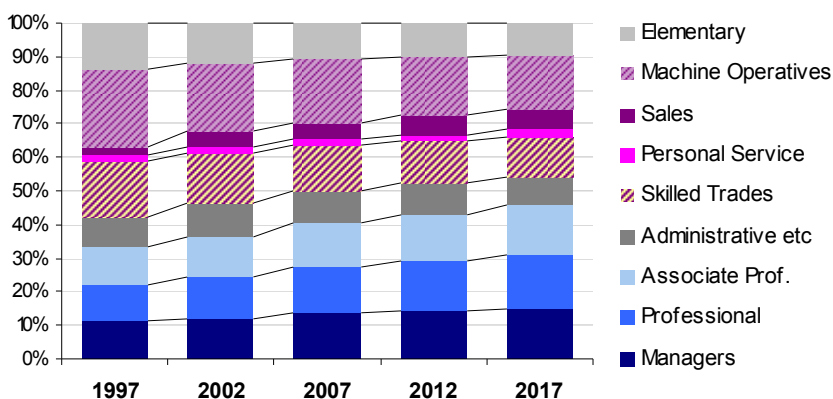
## Occupational Distribution<sup>3</sup>



## Skill Level by Occupation<sup>3</sup>



## Changes in Occupational Structure 1997-2017<sup>7</sup>



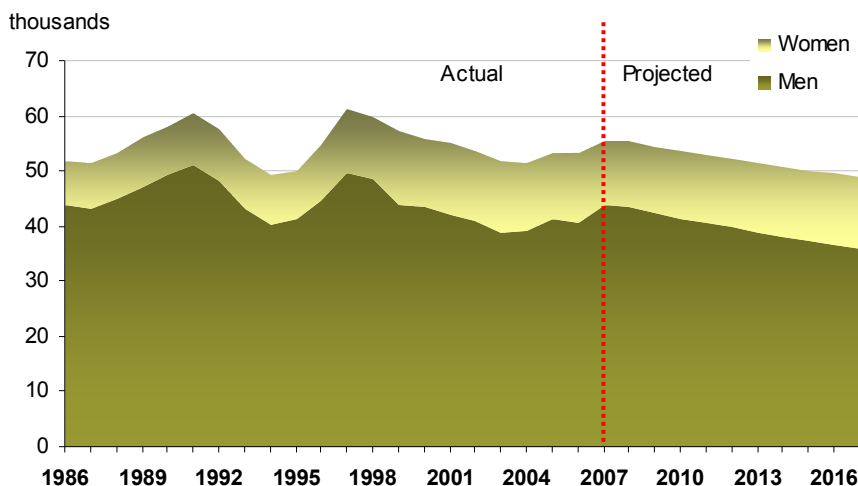
- The pace of change in occupational employment structure is expected to be gradual (-12%) between 2007-2017.
- Declining employment levels are projected for the majority of all occupations. The groups that are expected to show the greatest decline are: Skilled trades (25%), and Machine operatives (25%).
- Higher level occupations such as: Managers, Professionals and Associate professionals are expected to show the least change (1%) in employment in between 2007-2017.

## Skills Demand, Skills Gaps and Training<sup>2</sup>

- The proportion of 'hard-to-fill' vacancies in the Cogent sector in Scotland fell by 25pp between 2008 and 2010.
  - The proportion of companies reporting skills gap has decreased by 7pp in Cogent sector.
  - The proportion of companies training staff in the previous 12 months fell by 8pp between 2008 and 2010.
- (pp) - Percentage points

	Cogent - Scotland		All Scotland	
	2008	2010	2008	2010
Vacancies as % of employees	3%	2%	3%	2%
'Hard-to-fill' vacancies as % of all vacancies	49%	24%	50%	35%
Skill shortages as a % of 'hard-to-fill' vacancies	40%	17%	47%	52%
Proportion of firms reporting internal skills gaps	26%	19%	20%	15%
Proportion of firms providing training (last 12 months)	70%	62%	65%	61%

## Employment Forecast to 2017<sup>7</sup> (direct employment)



- Overall, the total employment (head count) in the Cogent workforce in Scotland is projected to fall by 12% in between 2007 and 2017.
- Over the same period, the number of females employed are to increase by 11%, as a result the proportion of females employed are expected to go up by 5% by 2017.
- The key factors underlying these developments (political, economical, social, technological change, environmental, globalisation and international competition) are summarised in the full SSA<sup>8</sup> report.

Following the effects of the "credit crunch", the short-term outlook over the next 2-3 years is uncertain. This projection focuses on medium to longer term trends.

5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)

6. Business Expenditure on Research & Development

7. Working Futures 2007-2017, UKCES 2008

8. Sector Skills Assessment (SSA), Scotland 2011, Cogent 2011

# Wales

## Cogent in Wales

- The **Nuclear, Petroleum, Polymer, Chemical and Pharmaceuticals** industries are strategically important to Wales and collectively represent **5% of employees** and **6% of employers of UK industries** in their sectors.
- The Cogent workforce accounts for **16% of the nations manufacturing workforce** and **17% of manufacturing employers**.
- In Wales, the Chemical industries invested **£38m in R&D** and account for 16% of the nations R&D investment<sup>6</sup>. The Cogent manufacturing industries account for **15% of the nations manufacturing GVA** and **contributed in the order of £836m** into the nations economy.
- The UK is a world leader in life sciences sector. Pharmaceuticals, medical technologies and biotechnology are the key strategic areas of **life sciences**. Wales has **8% of these employers** within the UK.

### Wales has a dominant cluster of Nuclear, Polymer, Petroleum and Chemical companies:

The presence of the Nuclear industry is localised to the north west Wales with two nuclear facilities – in Gwynedd, Trawsfynydd Power Station is a decommissioned reactor; and, in Anglesey, Wylfa Power Station continues to generate until 2012. There are a number of polymer and chemicals companies clustered around Cardiff, Swansea and Newport in the South of Wales, and Wrexham in the North. There are two petroleum refineries at Milford Haven and Pembroke. There is a decommissioned refinery in Waterston, which currently has an oil storage and jetty facility in operation. The South Hook Terminal, in Milford Haven is the largest Liquefied Natural Gas (LNG) terminal in Europe and is a major contributor to the UK's energy needs.



## Economic and Employment Update <sup>1,4,5,6</sup>

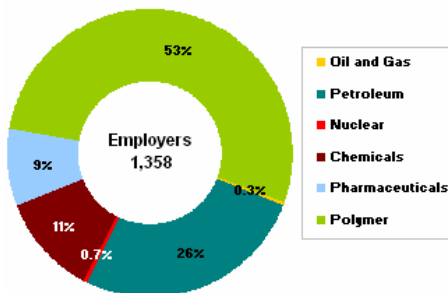
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	£ / bn	£ / bn	Median/£	n	%	n	%
Oil and Gas	*	-	-	4	1%	780	0%
Petroleum	*	*	*	357	7%	8,293	6%
Nuclear	-	-	-	10	5%	1,468	3%
Chemicals	*	0.42	457	155	5%	10,156	7%
Pharmaceuticals	0.28	0.14	435	117	8%	5,621	8%
Polymer	*	0.41	350	715	6%	14,366	7%
<b>Cogent - Wales</b>	-	-	<b>414</b>	<b>1,358</b>	<b>6%</b>	<b>40,683</b>	<b>5%</b>
<b>Wales</b>	<b>92.48</b>	<b>25.76</b>	<b>355</b>	<b>103,240</b>	<b>4%</b>	<b>1,183,045</b>	<b>4%</b>

## Cogent - UK Headlines

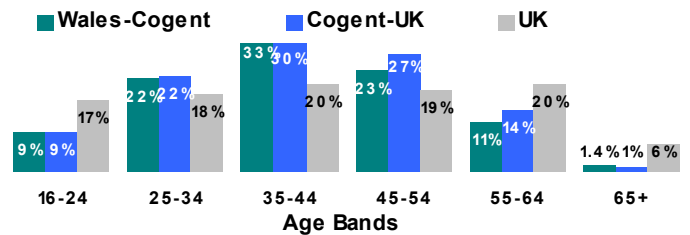
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
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- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect employment)



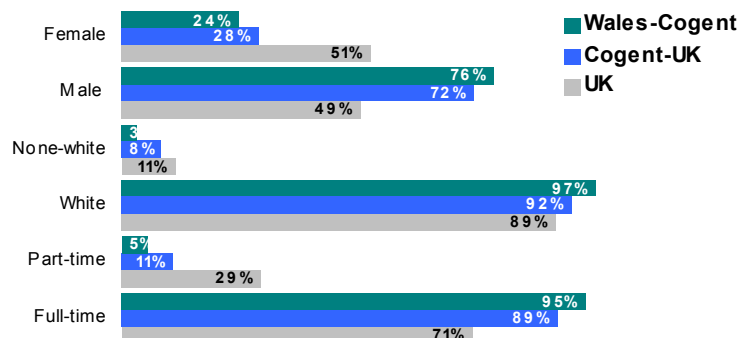
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>Cogent - Wales</b>	70%	19%	8%	3%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>Wales</b>	84%	13%	3%	1%

### Workforce Distribution – Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>

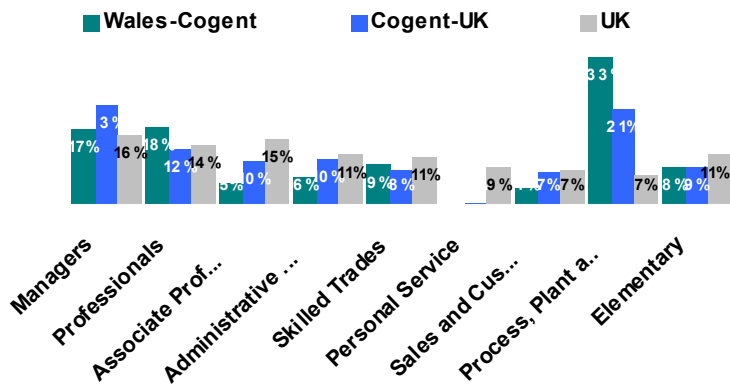


1. Annual Business Enquiry (ABI) 2008-data released June 2010, ONS  
 2. Future Skills Wales (FSW ) 2005  
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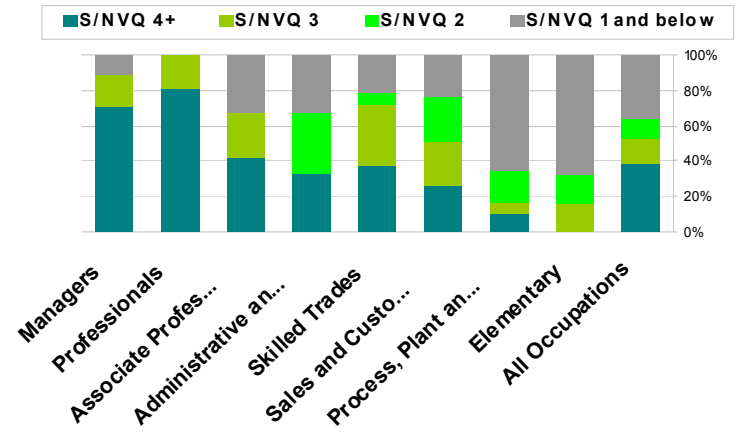
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# Occupational Distribution, Skill Level and Skills Needs

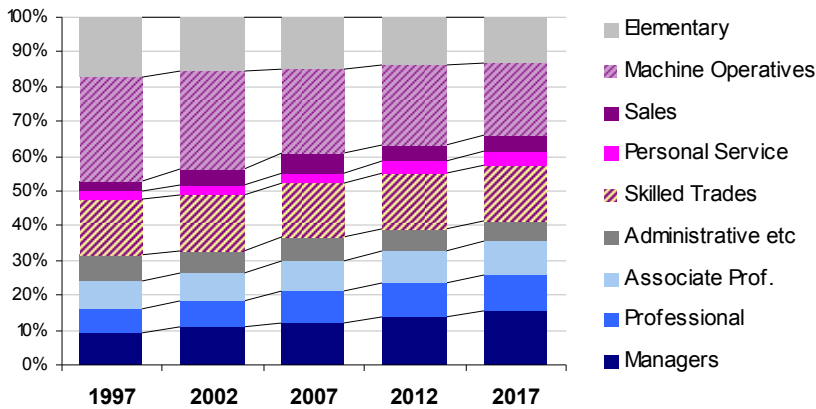
## Occupational Distribution<sup>3</sup>



## Skill Level by Occupation<sup>3</sup>



## Changes in Occupational Structure 1997-2017<sup>7</sup>



- The pace of change in the occupational employment structure is expected to be slow (-1% per annum) between 2007-2017.
- The groups that are expected to show the most significant increase in employment (between 2007-2017) are in higher level occupations such as: Managers (12%) and Professionals (6%).
- Declining employment levels are projected for Level 3 occupations such as: Skilled Trades (10%) and Machine Operatives (25%).

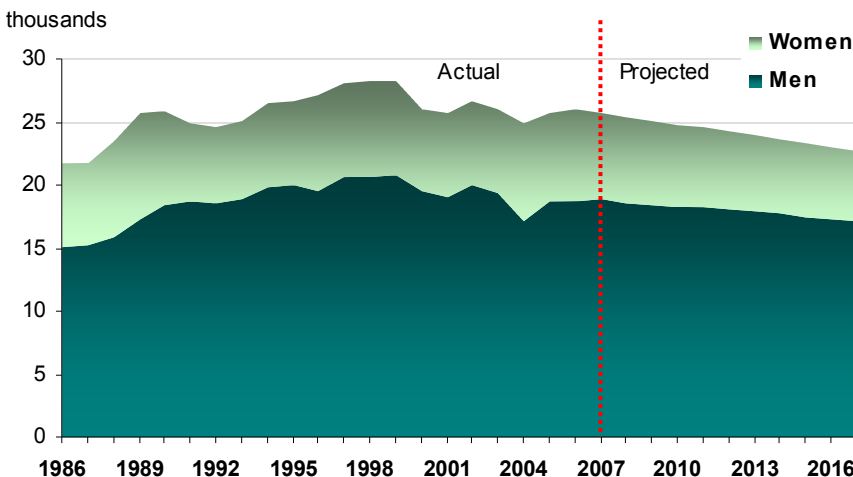
## Skills Demand, Skills Gaps and Training<sup>2</sup>

- The proportion of companies reporting vacancies in the Cogent sector in Wales is lower than the national average by 5pp.
- The proportion of employers reporting hard to fill vacancies was lower by 3pp than the national average. However internal skills gaps reported in the Cogent sector was slightly higher (2pp) than the national average in 2005.

(pp) - Percentage points

	Wales-Cogent	Wales All	UK	
	2005	2005	2007	2009
Proportion of firms reporting vacancies	15%	21%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	10%	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	4%	6%	2%
Proportion of firms reporting internal skills gaps	20%	18%	16%	19%
Proportion of firms providing training (last 12 months)	54%	58%	67%	67%

## Employment Forecast to 2017<sup>7</sup> (direct employment)



- Overall, the total employment (head count) in the Cogent workforce in Wales is projected to fall by 12% between 2007 and 2017.
- Over the same period, the number of females employed are to decline by 20%, as a result the proportion of females employed is expected to fall by 3% by 2017.
- The key factors underlying these developments (political, economical, social, technological change, environmental, globalisation and international competition) are summarised in the full SSA report.

Following the effects of the "credit crunch", the short-term outlook over the next 2-3 years is uncertain. This projection focuses on medium to longer term trends.

5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)

6. Business Expenditure on Research & Development 2010

7. Working Futures 2007-2017, UKCES 2008

# Northern Ireland

## Cogent in Northern Ireland

- The **Petroleum, Polymer, Chemical and Pharmaceutical** industries are strategically important to Northern Ireland and collectively represent **3% of employers** and **2% of employees** in their sectors.
- The Cogent industries **contributed of the order of £553m** into the nations economy in 2008.
- In Northern Ireland, the industries invested **£44m in capital expenditure** and **£16m in R&D** and account for **12.6% of Northern Ireland's** manufacturing GVA.
- The UK is a world leader in life sciences sector. Pharmaceuticals, medical technologies and biotechnology are the key strategic areas of **life sciences**. Northern Ireland has **2%** of these employers within the UK.

The distribution of employers in Northern Ireland is heavily loaded in and around Belfast, probably as a result of the transport and freight infrastructure. In the Polymer industry, 53% of the employers are located in the Co Armagh and Co Antrim areas, with a further 23% in Co Down.

This reflects not only the areas of population, but again the transport infrastructure to deliver their goods to the UK and European Markets. Petroleum products are networked across Northern Ireland to serve the population.



## Economic and Employment Update <sup>1,4,5,6</sup>

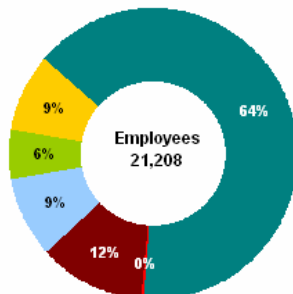
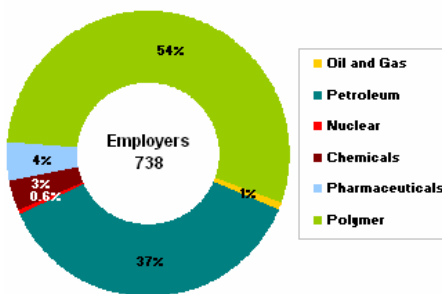
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	£ / bn	£ / bn	Median/£	n	%	n	%
Oil and Gas	0.32	0.008	432	7	1%	1,831	1%
Petroleum	0.017	0.005	*	270	5%	13,725	9%
Nuclear	-	-	-	5	2%	36	0%
Chemicals	0.48	0.25	660	24	1%	2,545	2%
Pharmaceuticals	*	*	721	33	2%	1,882	3%
Polymer	0.74	0.29	412	399	3%	1,189	1%
<b>Cogent-NI</b>	<b>1.54</b>	<b>0.55</b>	-	<b>738</b>	<b>3%</b>	<b>21,208</b>	<b>2%</b>
<b>Northern Ireland</b>	<b>57.8</b>	<b>17.5</b>	<b>367</b>	<b>132,040</b>	<b>3%</b>	<b>499,864</b>	<b>2%</b>

## Cogent - UK Headlines

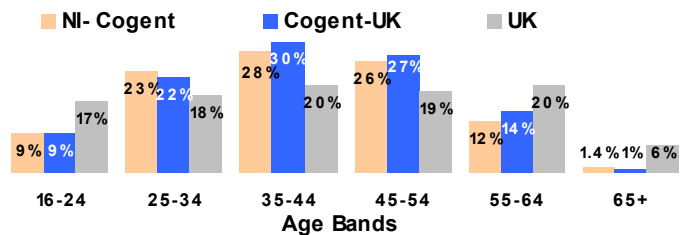
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect employment)



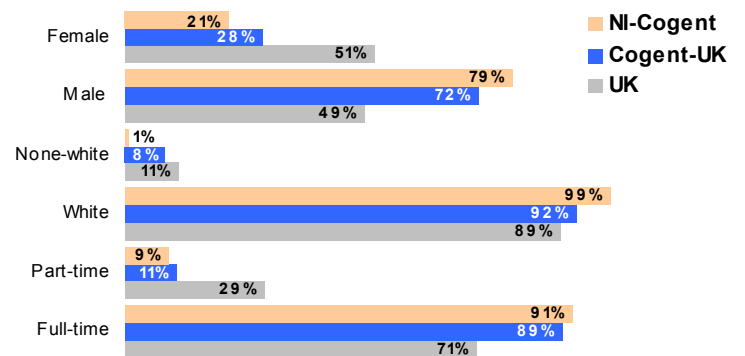
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>2</sup>

	Employees			
	2-10	11-49	50-199	200+
<b>Cogent-Northern Ireland</b>	54%	40%	5%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>Northern Ireland</b>	88%	9.6%	1.2%	0.3%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



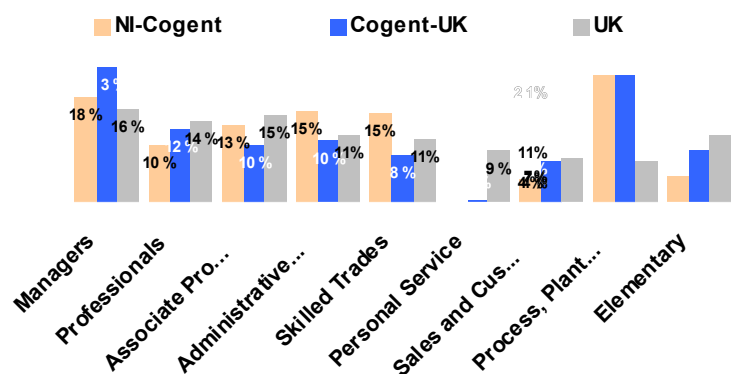
1. The Northern Ireland Annual Business Enquiry (NIABI) 2007-data released June 2010,  
 2. Northern Ireland Skills Monitoring Survey (NISMS) 2008  
 3. Labour Force Survey (LFS) 2009, ESDS 2010  
 4. Northern Ireland Annual Survey of Hours and Earnings 2008

\* Data suppressed— ONS 2010

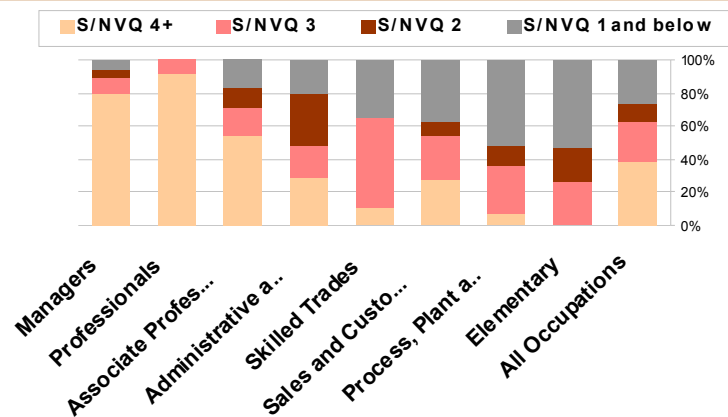
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

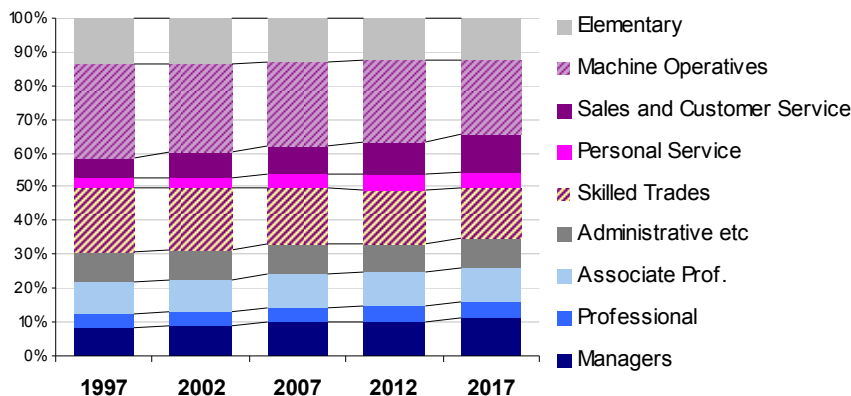
## Occupational Distribution<sup>3</sup>



## Skill Level by Occupation<sup>3</sup>



## Changes in Occupational Structure 1997-2017<sup>8</sup>



- Declining employment levels are projected for level 3 occupations between 2007-2017.
- The greatest decline in employment is expected to be in Machine Operatives (-21%,-2% per annum) and Skilled Trades (-22%,-2% per annum).
- A slow and gradual increase in employment is projected for Managers (2%) and Sales and personal services occupations (1% per annum) between 2007-2017.

## Skills Demand, Skills Gaps and Training<sup>2</sup>

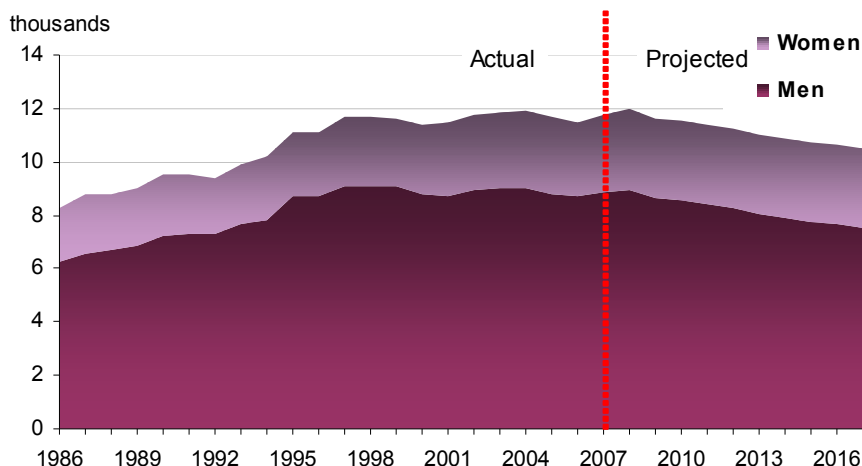
In the period of 2005-2008:

- the proportion of companies reporting vacancies fell by 9pp, however internal skills gaps increased by 11pp.
- the proportion of employers reporting 'hard-to-fill' vacancies fell by 9pp.
- the proportion of employers providing training increased by 46pp.

(pp) - Percentage points

	NI-Cogent		UK	
	2005	2008	2007	2009
Proportion of firms reporting vacancies	17%	8%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	10%	1%	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	3%	6%	2%
Proportion of firms reporting internal skills gaps	10%	21%	16%	19%
Proportion of firms providing training (last 12 months)	32%	78%	67%	67%

## Employment Forecast to 2017<sup>8</sup> (direct employment)



- Overall, the total employment (head count) in the Cogent workforce in Northern Ireland is projected to fall by 11% between 2007 and 2017.
- Over the same period, the number of females employed are to rise slightly by 2%, in contrast, the number of males employed are expected to decrease by 13%.
- The key factors underlying these developments (political, economical, social, technological change, environmental, globalisation and international competition) are summarised in the full SSA report.

Following the effects of the "credit crunch", the short-term outlook over the next 2-3 years is uncertain. This projection focuses on medium to longer term trends.

5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS...etc)  
 6. Business Expenditure on Research & Development 2010  
 7. Department of Enterprise, Trade and Investment IDBR, Published on 30th June 2009  
 8. Working Future 3, UKCES 2008

# North West

## Cogent in the Region

- The **Chemicals, Pharmaceuticals, Nuclear, Petroleum and Polymer** industries are strategically important to the North West region and collectively represent **12% of employers** and **14% of employees** of their sectors in the UK.
- The Cogent sector workforce accounts for **18% of the regions manufacturing workforce** and **14% of manufacturing employers**.
- Cogent industries account for **32% of manufacturing GVA** and **contribute of the order of £5.2bn** to the regional economy.

### The region has a dominant cluster of Cogent industries:

Sellafield, Springfields, Capenhurst, Windscale and Calder Hall nuclear facilities are all located in the North West region as well as the Headquarters of the Nuclear Decommissioning Authority and many supply chain companies. The Shell Stanlow Petrochemical complex is situated in the Wirral with an associated storage and distribution network. The Chemical, Pharmaceutical and Polymer industries are spread across the North West. Hydrocarbons (oil, natural gas and petroleum) are produced in areas of the Irish Sea, including Morecambe and Liverpool Bays.



## Economic and Employment Update <sup>1,4,5,6</sup>

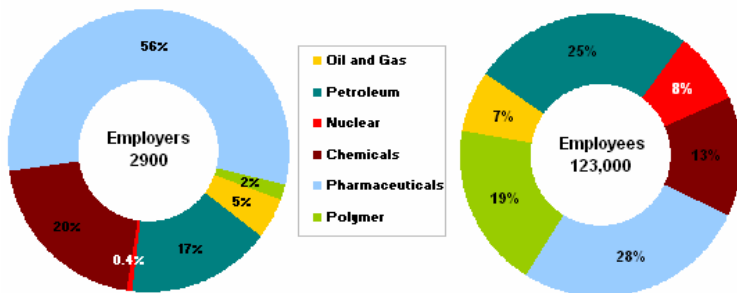
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	NW % of UK Total	Employees	NW % of UK Total
	Median/£				
Oil and Gas	1,183.2	11	2%	10,400	4%
Petroleum	891.40	590	11%	16,591	11%
Nuclear	*	48	24%	23,103	40%
Chemicals	606.60	488	16%	30,973	22%
Pharmaceuticals	623.70	136	9%	8,561	12%
Polymer	432.10	1,627	13%	33,343	15%
<b>NW- Cogent</b>	<b>638.40</b>	<b>2,899</b>	<b>12%</b>	<b>122,971</b>	<b>14%</b>
<b>NW- Region</b>	<b>478.50</b>	<b>255,377</b>	<b>10%</b>	<b>3,004,076</b>	<b>11%</b>

## Cogent Industry Headlines

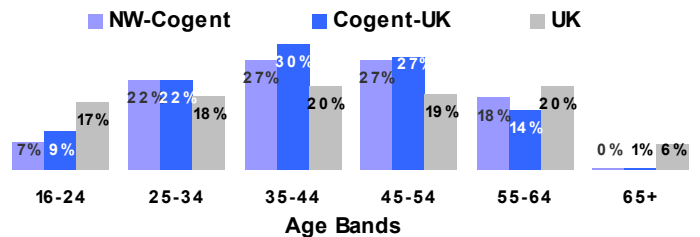
- £ 201bn Turnover
- £ 65.5bn GVA
- 7.1% of UK GVA
- 900,000 employees
- 23,000 employers
- 14% of UK manufacturing workforce
- 12% of UK manufacturing enterprises

## The Workforce

### Employers and Employees by <sup>5,6</sup>(direct and indirect)



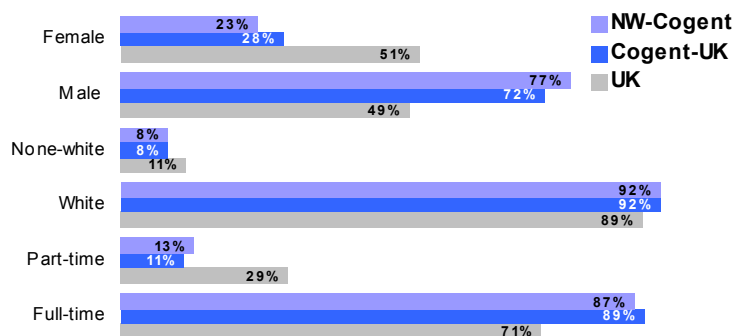
### Age Profile<sup>3</sup>



### Employers by Sizeband<sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>NW-Cogent</b>	65%	23%	10%	2%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>NW-Region</b>	84%	12%	3%	1%

### Workforce Distribution– Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

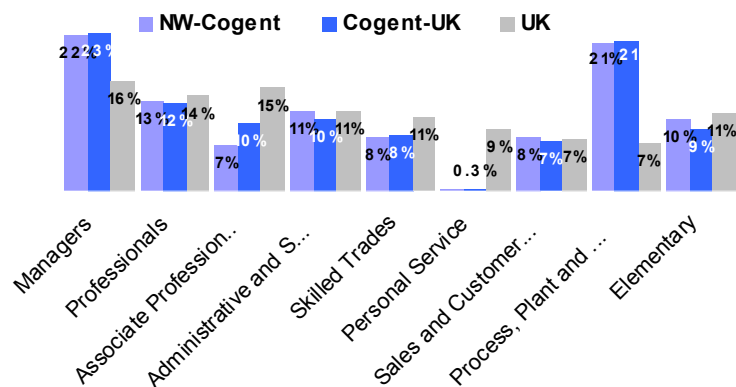
4. Annual Survey of Hours and Earnings

\* Data suppressed– ONS 2010

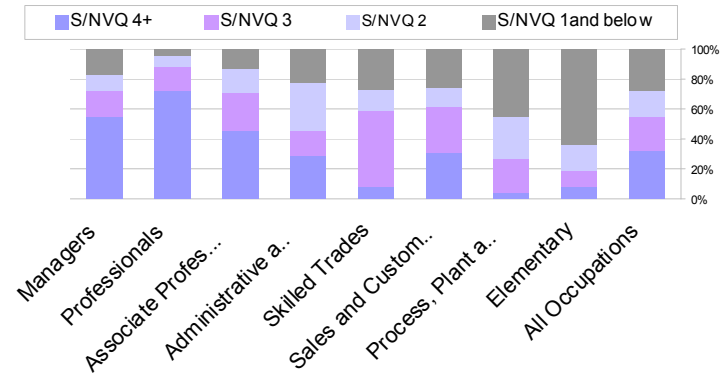
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



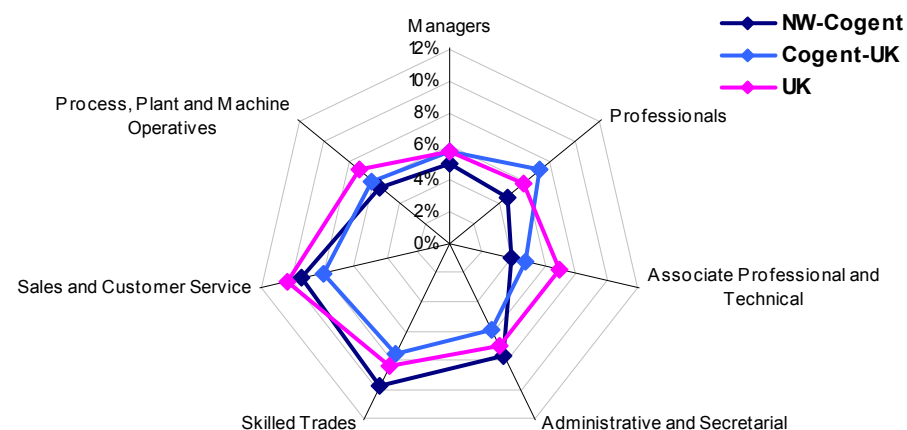
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	47%	24%
Petroleum	24%	9%
Chemicals	21%	3%
Pharmaceuticals	12%	8%
Polymer	27%	8%
NW- Cogent	24%	7%
NW- Region	19%	7%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

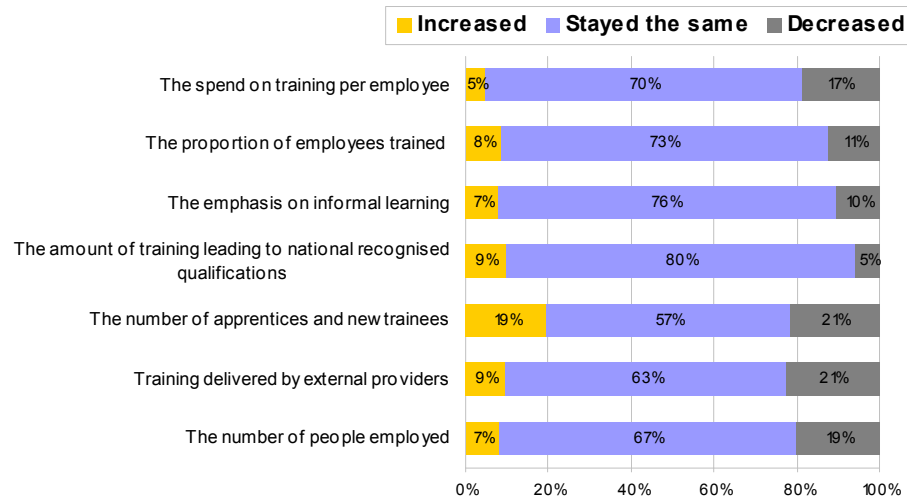
- The proportion of companies reporting vacancies fell by 6%, 'hard-to-fill' vacancies are down by 3% and skills shortage vacancies fell by 2% in 2009 from 2007.
- The proportion of employers reporting internal skills gap is higher than the national average by 5%.
- The proportion of employers providing training fell by 10% in 2009 from 2007.

	NW-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	15%	9%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	3%	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	1%	6%	2%
Proportion of firms reporting internal skills gaps	22%	24%	16%	19%
Proportion of firms providing training (last 12 months)	72%	62%	67%	67%
Proportion of workforce trained (last 12 months)	62%	49%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	100%	53%
Petroleum	55%	41%
Chemicals	72%	57%
Pharmaceuticals	78%	69%
Polymer	69%	43%
NW- Cogent	62%	49%
NW- Region	67%	55%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# North East



## Cogent in the Region

- The Cogent industries are strategically important to the North East region making up **5% of employees** and **5% employers** in the region.
- The Cogent workforce accounts for **18% of the manufacturing workforce** and **15% of manufacturing employers** in the region.
- The Chemicals and Pharmaceuticals industries account for **23% of the manufacturing GVA** and **5% of regional economy**.

### The region has a dominant cluster of Cogent employers:

Northumberland and Tyne and Wear have a concentration of **pharmaceuticals** and **specialty chemicals** companies and there is a focus on **Petrochemical** and **Oil and Gas** industries around the Tees Valley area. The petrochemical cluster at Wilton, Billingham and Seal Sands is the largest integrated chemicals complex in the UK in terms of manufacturing capacity. The region has a strong company base in sub-sectors such as power generation, oil and gas, nuclear and more recently renewables and low carbon technologies. The development of bio-fuels and bio-refining is becoming increasingly focused in the area. The North East Process Industry Cluster (NEPIC) has a strong presence in the region with its remit encompassing industries beyond the scope of Cogent, details can be found at: [www.nepic.co.uk](http://www.nepic.co.uk)

## Economic and Employment Update <sup>1,4,5,6</sup>

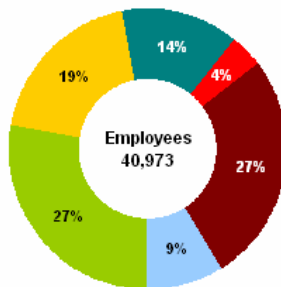
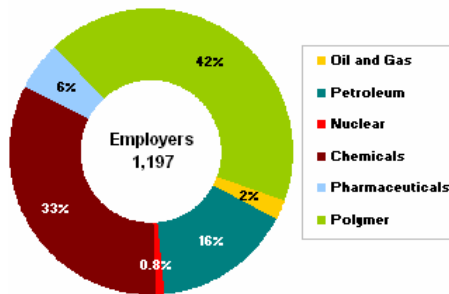
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	NE % of UK Total	Employees	NE % of UK Total
	Median/£	n	%	n	%
Oil and Gas	*	27	4%	7,800	3%
Petroleum	*	189	3%	5,641	4%
Nuclear	*	10	5%	1,529	3%
Chemicals	594	396	13%	10,960	8%
Pharmaceuticals	496	66	4%	3,751	5%
Polymer	398	509	4%	11,293	5%
<b>NE- Cogent</b>	-	<b>1,197</b>	<b>5%</b>	<b>40,973</b>	<b>5%</b>
<b>NE- Region</b>	<b>446.4</b>	<b>74,795</b>	<b>3%</b>	<b>1,031,089</b>	<b>4%</b>

## Cogent - UK Headlines

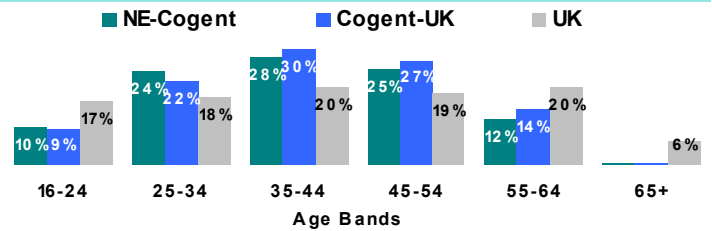
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect)



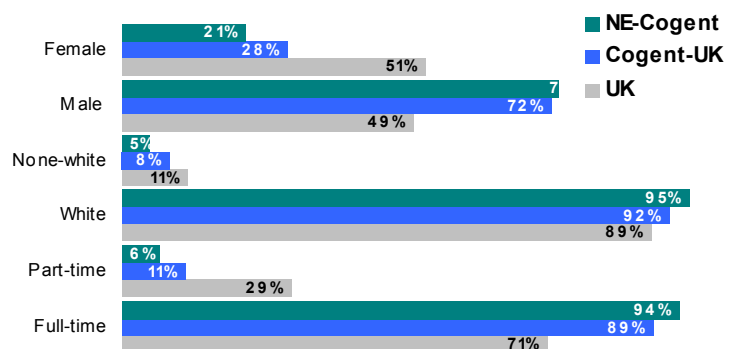
### Age Profile<sup>3</sup>



### Employers by Sizeband<sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>NE-Cogent</b>	62%	24%	11%	4%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>NE-Region</b>	81%	15%	4%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

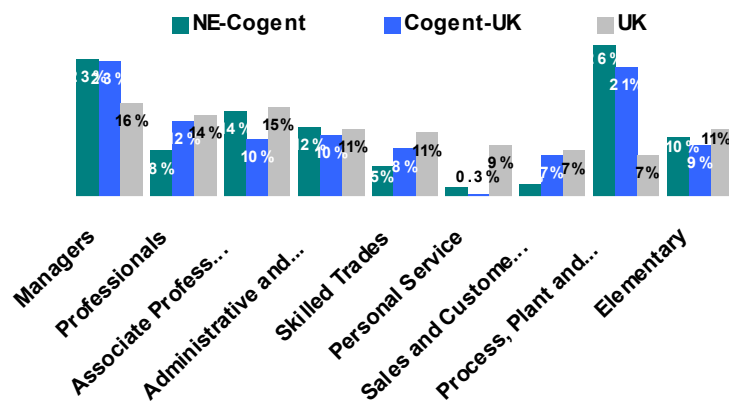
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed— ONS 2010

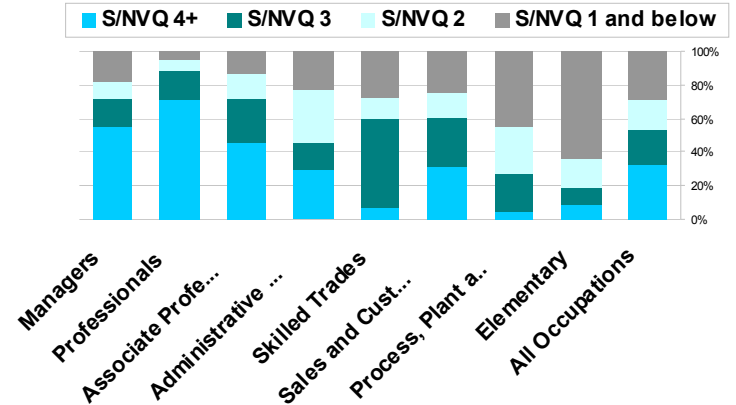
\*\* \* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



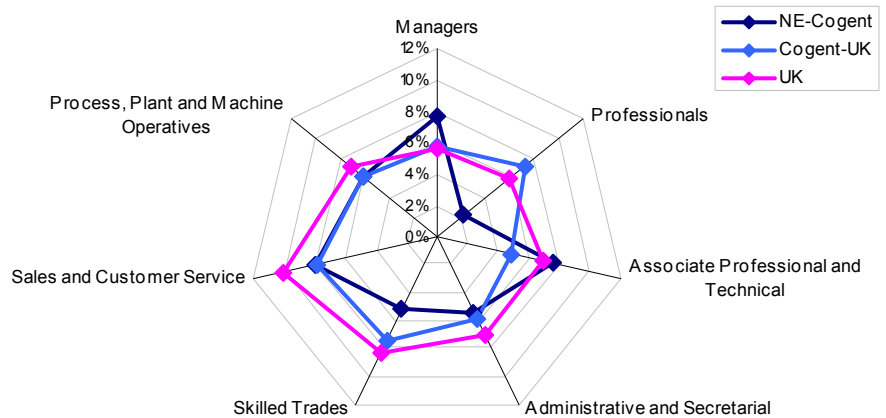
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	61%	8%
Petroleum	29%	8%
Chemicals	26%	5%
Pharmaceuticals	38%	8%
Polymer	17%	3%
NE- Cogent	28%	6%
NE- Region	20%	6%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

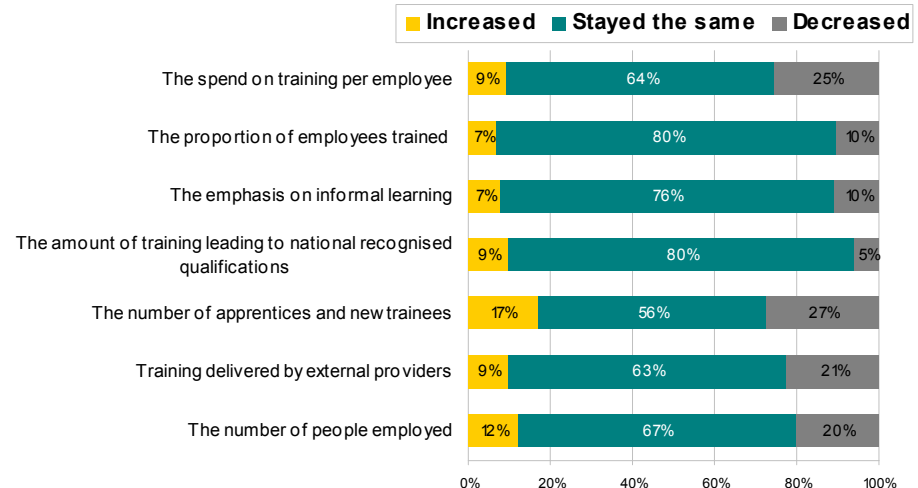
- The proportion of companies reporting vacancies fell by 14%, however internal skills gap increased by 5% from 2007- 2009.
- The proportion of employers reporting skills gap is higher than the national average by 9% in 2009.
- The proportion of employers providing training fell by 19% in the 2009 from 2007.

	NE-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	23%	8%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	10%	-	8%	3%
Proportion of firms reporting a skills shortage vacancy	7%	-	6%	2%
Proportion of firms reporting internal skills gaps	23%	28%	16%	19%
Proportion of firms providing training (last 12 months)	77%	69%	67%	67%
Proportion of workforce trained (last 12 months)	76%	57%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	66%	45%
Petroleum	62%	50%
Chemicals	73%	67%
Pharmaceuticals	90%	78%
Polymer	80%	24%
NE- Cogent	69%	57%
NE- Region	68%	57%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# Yorkshire and Humber

## Cogent in the Region

- The Cogent industries are strategically important to the Yorkshire and Humber region and collectively represent **7% of employees** and **9% of employers** in the region.
- The Cogent industries account for **14% of the manufacturing workforce** and **12% of manufacturing employers** in the region.
- Cogent industries account for **20% of manufacturing GVA** and **contribute of the order of £2.8bn** to the regional economy.

### The region has a dominant cluster of Chemical and Polymer industries:

The Chemical and Polymer industries are clustered in the Humber area with a further cluster in North Yorkshire. Two oil refineries and a number of distribution terminals are also based in the region, importing and processing approximately 20 million tonnes of crude oil.

The region imports up to 20% of the UK's gas supply. The region also supports the cross-fertilization between clusters, with bioscience companies including agriculture and food production, healthcare and environmental protection / improvement.



## Economic and Employment Update <sup>1,4,5,6</sup>

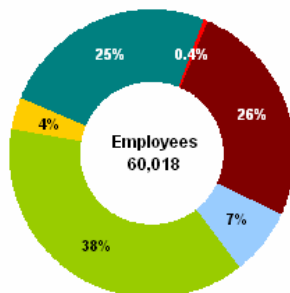
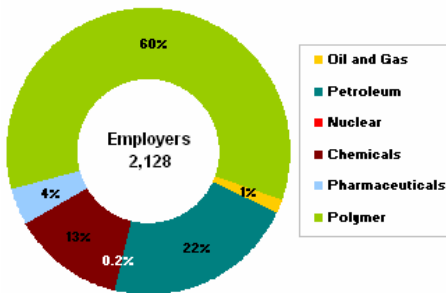
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	Median/£	n	%	n	%
Oil and Gas	815	27	4%	2,206	1%
Petroleum	380	467	9%	14,713	10%
Nuclear	-	5	2%	264	0%
Chemicals	627	268	9%	15,374	11%
Pharmaceuticals	545	88	6%	4,436	6%
Polymer	461	1,273	10%	23,025	10%
<b>Y&amp;H- Cogent</b>	<b>566</b>	<b>2,128</b>	<b>9%</b>	<b>60,018</b>	<b>7%</b>
<b>Y&amp;H- Region</b>	<b>364</b>	<b>182,437</b>	<b>7%</b>	<b>2,232,345</b>	<b>8%</b>

## Cogent - UK Headlines

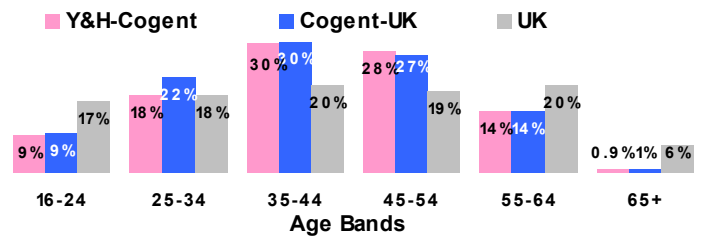
- £ 201bn Turnover
- £ 65.5bn GVA
- 7.1% of UK GVA
- 900,000 employees
- 23,000 employers
- 14% of UK manufacturing workforce
- 12% of UK manufacturing enterprises

## The Workforce

### Employers and Employees <sup>5,6</sup>(direct and indirect)



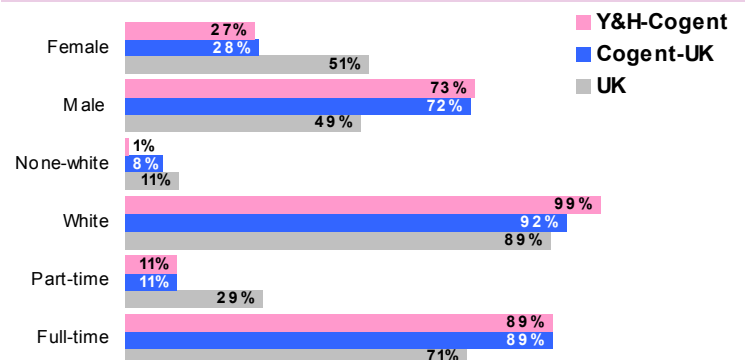
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>Y&amp;H-Cogent</b>	65%	25%	8%	2%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>Y&amp;H-Region</b>	83%	13%	3%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

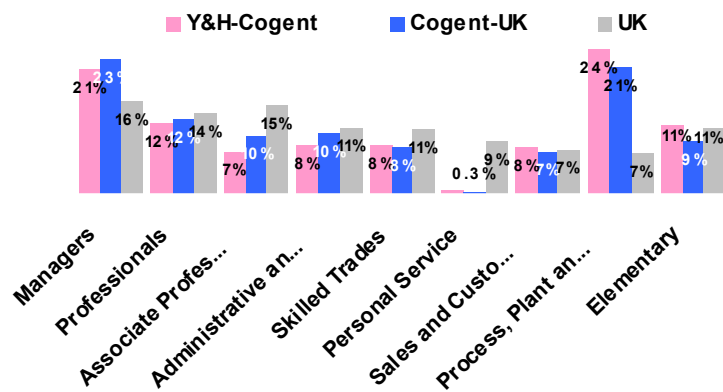
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed— ONS 2010

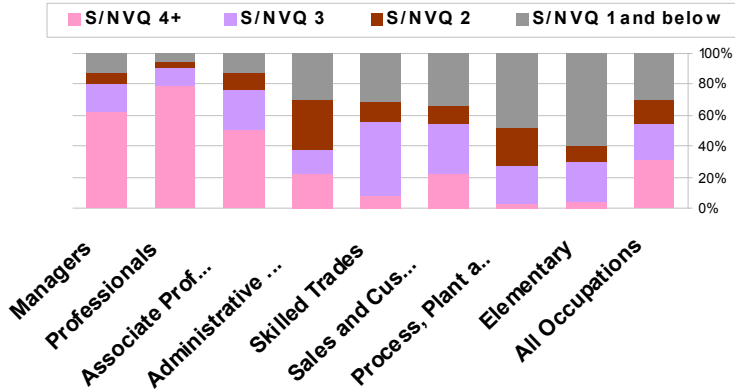
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



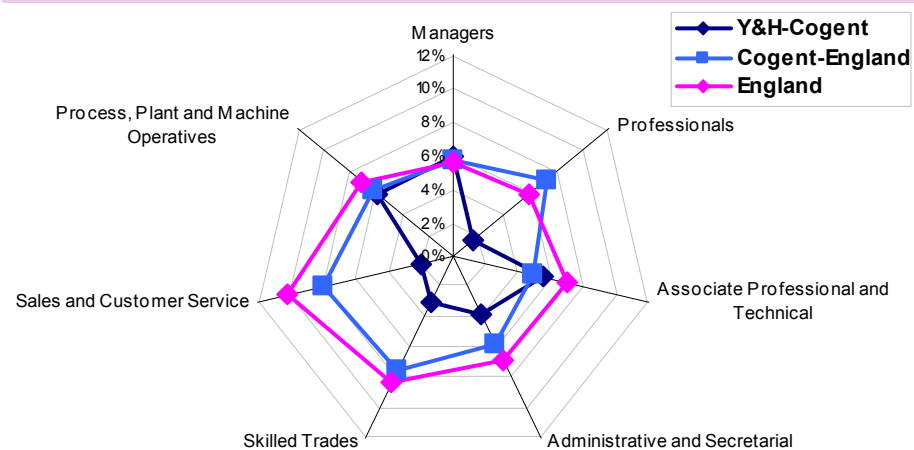
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	5%	1%
Petroleum	15%	3%
Chemicals	20%	4%
Pharmaceuticals	11%	0%
Polymer	33%	7%
Y&H- Cogent	21%	4%
Y&H- Region	17%	6%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

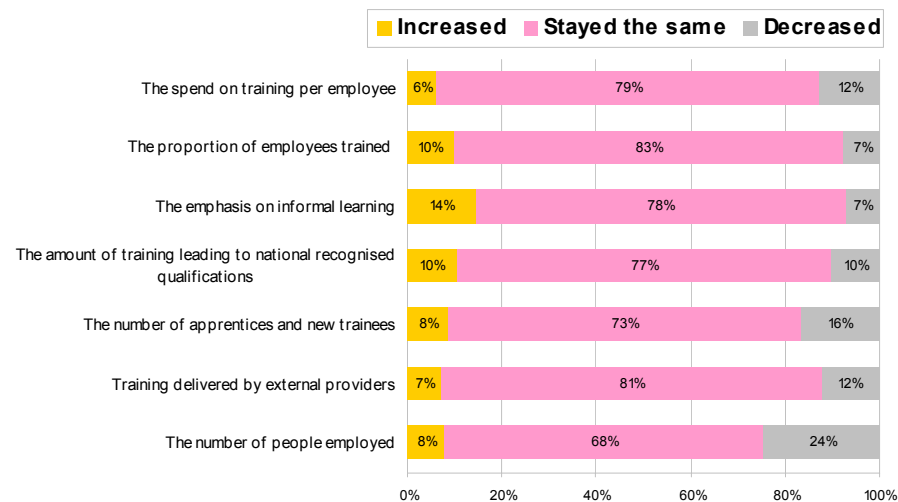
- The proportion of companies reporting vacancies decreased by 13% and internal skills gaps fell by 11% from 2007- 2009.
- The proportion of employers reporting skills gap is higher than the national average by 4% in 2009.
- The proportion of employers providing training fell by 15%, however workforce training has increased by 18% in 2009 from 2007.

	Y&H-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	23%	10%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	10%	3%	8%	3%
Proportion of firms reporting a skills shortage vacancy	4%	2%	6%	2%
Proportion of firms reporting internal skills gaps	32%	21%	16%	19%
Proportion of firms providing training (last 12 months)	76%	61%	67%	67%
Proportion of workforce trained (last 12 months)	37%	55%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	100%	28%
Petroleum	59%	55%
Chemicals	66%	73%
Pharmaceuticals	80%	92%
Polymer	56%	19%
Y&H- Cogent	61%	55%
Y&H- Region	65%	53%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# West Midlands

## Cogent in the Region

- The Cogent industries are strategically important to the West Midlands region and collectively represent **6% of employers** and **10% of employees** of UK industries in their sectors.
- The Cogent industries account for **10% of the manufacturing workforce** and **11% of manufacturing employers** in the region.
- The Cogent industries account for **12% of manufacturing GVA** and **contribute of the order of £1.4bn** to the regional economy.

**The region has a dominant cluster of Chemical and Polymer processing companies:** Polymer employers are spread across the region but as a result of significant inward investment in the past 20 years, Telford in Shropshire has been dubbed “plastics valley” with well over 50 companies based there. Polymer businesses supply a large number of end user industries to include automotive components and food packaging products and are an important part of the region’s manufacturing sector.



## Economic and Employment Update <sup>1,4,5,6</sup>

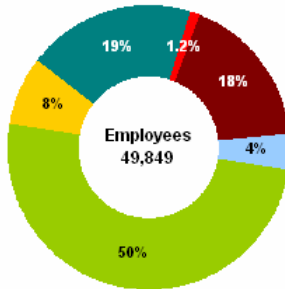
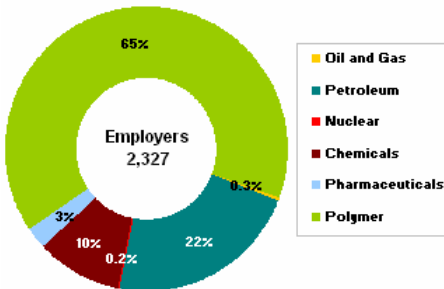
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	Median/£	n	%	n	%
Oil and Gas	*	3,900	2%	7	1%
Petroleum	*	9,531	7%	516	10%
Nuclear	-	576	1%	5	2%
Chemicals	451	8,748	6%	227	7%
Pharmaceuticals	*	1,991	3%	59	4%
Polymer	449	25,103	11%	1,514	12%
<b>WM-Cogent</b>	-	<b>49,849</b>	<b>6%</b>	<b>2,327</b>	<b>10%</b>
<b>WM-Region</b>	<b>373</b>	<b>207,049</b>	<b>8%</b>	<b>2,355,350</b>	<b>9%</b>

## Cogent - UK Headlines

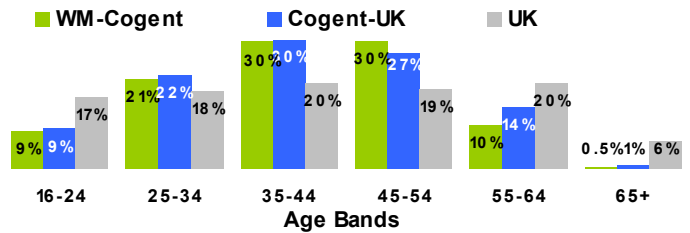
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect)



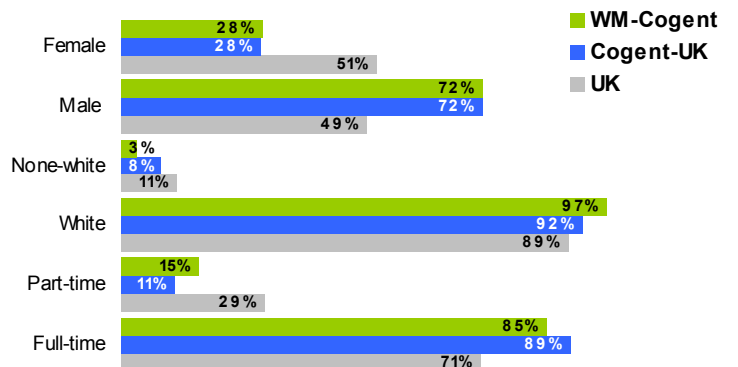
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>WM-Cogent</b>	69%	23%	6%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>WM-Region</b>	84%	12%	3%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>

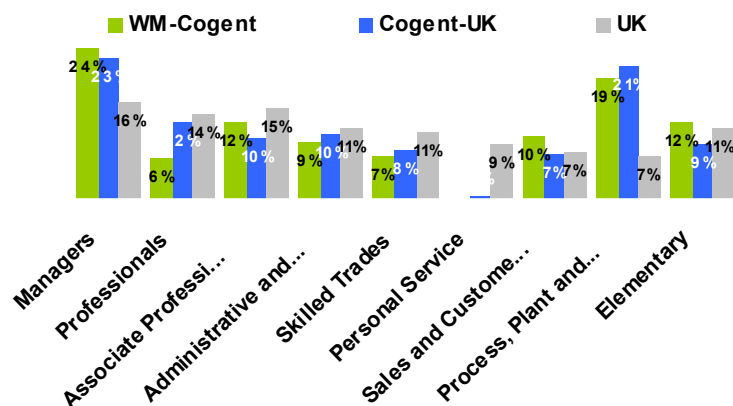


1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010  
2. National Employers Skills Survey (NESS) 2009

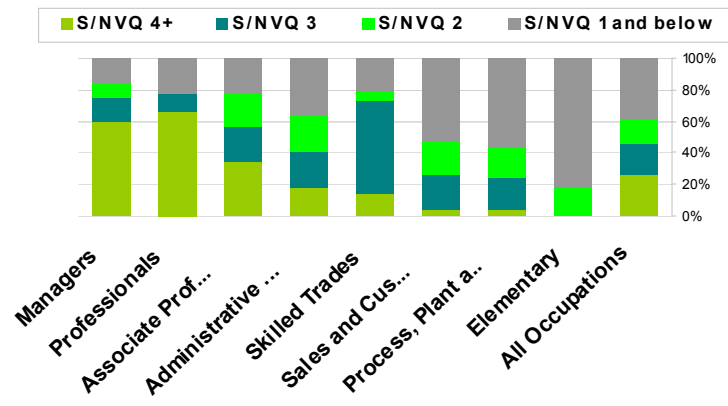
3. Labour Force Survey (LFS) 2009, ESDS 2010  
4. Annual Surveys of Hours and Earnings 2009  
\* Data suppressed— ONS 2010

# Occupational Distribution, Skill level and Skills Needs

## Occupational Distribution<sup>3</sup>



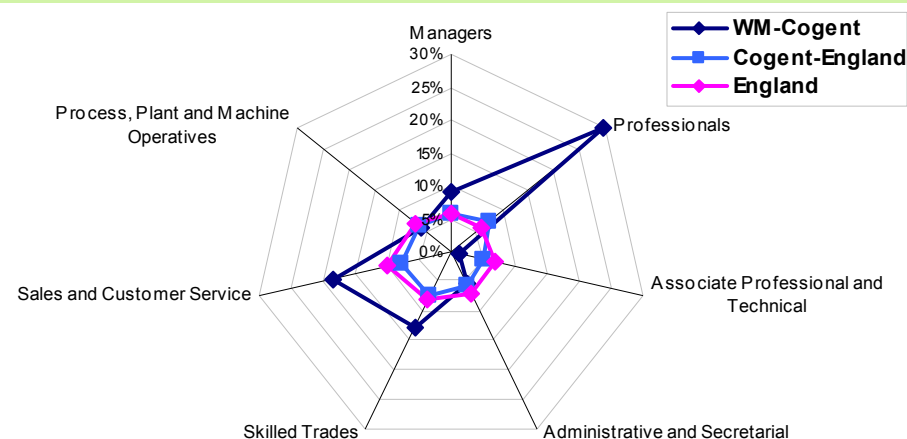
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	-	-
Petroleum	21%	17%
Chemicals	15%	4%
Pharmaceuticals	0%	0%
Polymer	18%	9%
<b>WM- Cogent</b>	20%	11%
<b>WM- Region</b>	20%	8%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

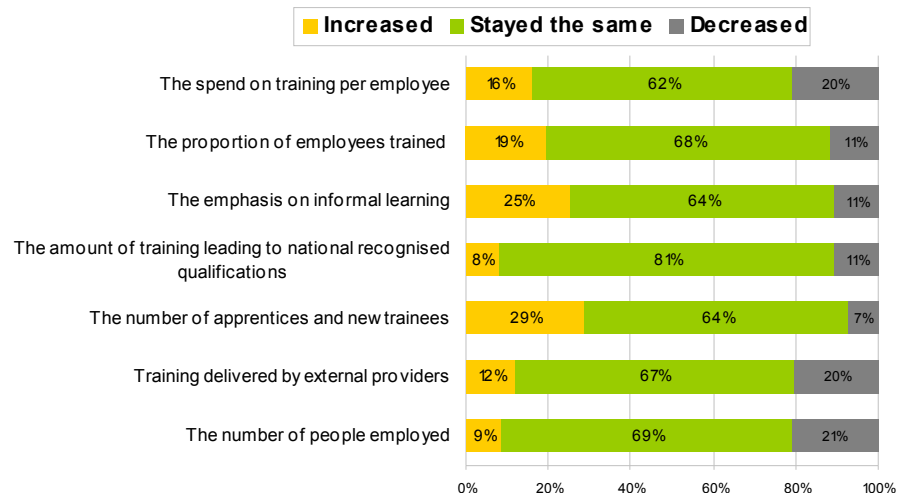
- The proportion of companies reporting vacancies fell by half in 2009 from 2007.
- The proportion of employers reporting internal skills gap is the same as in 2009.
- The proportion of employers providing training increased by 3%, but workforce trained fell by 23% in 2009 from 2007.

	WM-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	14%	7%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	-	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	-	6%	2%
Proportion of firms reporting internal skills gaps	20%	20%	16%	19%
Proportion of firms providing training (last 12 months)	60%	63%	67%	67%
Proportion of workforce trained (last 12 months)	66%	43%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	-	-
Petroleum	68%	55%
Chemicals	74%	30%
Pharmaceuticals	100%	56%
Polymer	49%	39%
<b>WM- Cogent</b>	63%	43%
<b>WM- Region</b>	68%	51%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

Due to SIC limitations nuclear workforce data is not fully represented in national data sources. For specific information on nuclear , regional and industry research can be found at: [www.cogent-ssc.com/research](http://www.cogent-ssc.com/research)  
**Published Q1 2011**

# East Midlands

## Cogent in the Region

- The Cogent industries are strategically important to the East Midlands region and collectively employ **6% of employees and 9% of employers in their sector**.
- The Cogent industries account for **14% of the manufacturing workforce** and **12% of manufacturing employers** in the region.
- The Cogent industries account for **12% of manufacturing GVA** and **contribute of the order of £1.5bn** to the regional economy.

### The region has a dominant cluster of Cogent industries:

There is a concentration of Cogent industries in the East Midlands which is dominated by the Polymer industry. Recent studies have confirmed continued growth in Polymers. The Cogent sector is a primary element of the supply chain for regional industries including high technology engineering, and food and drink.

The region has a concentration of plastics and rubber processing companies including packaging and extrusion moulding companies. The region also has a significant concentration of Chemical and Pharmaceutical companies.



## Economic and Employment Update <sup>1,4,5,6</sup>

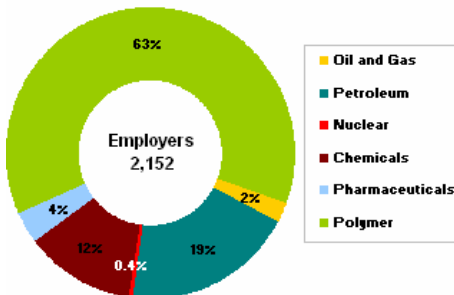
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	EM % of UK Total	Employees	EM % of UK Total
	Median/£				
Oil and Gas	*	45	7%	2,303	1%
Petroleum	*	415	8%	8,018	5%
Nuclear	-	10	5%	4,034	7%
Chemicals	422	264	9%	12,852	9%
Pharmaceuticals	474	82	5%	2,188	3%
Polymer	357	1,337	10%	27,620	13%
<b>EM- Cogent</b>	-	<b>2,152</b>	<b>9%</b>	<b>57,014</b>	<b>6%</b>
<b>EM- Region</b>	<b>531</b>	<b>171,337</b>	<b>7%</b>	<b>1,891,271</b>	<b>8%</b>

## Cogent - UK Headlines

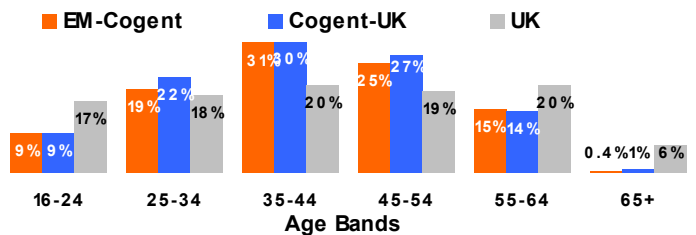
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup>(direct and indirect)



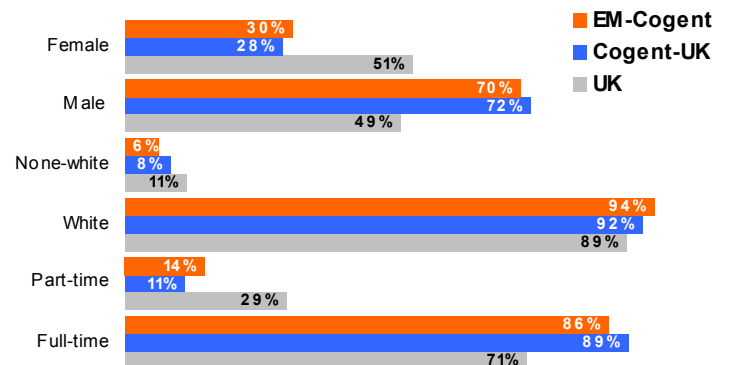
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>EM-Cogent</b>	65%	25%	9%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>EM-Region</b>	84%	12%	3%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

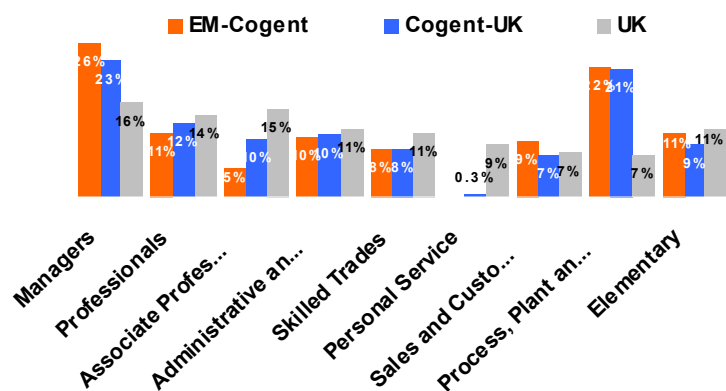
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed— ONS 2010

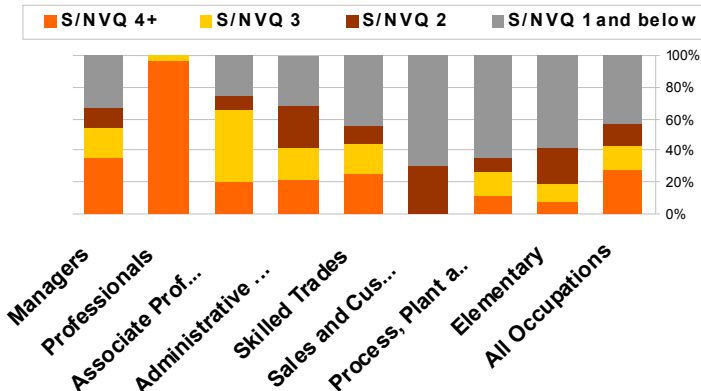
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



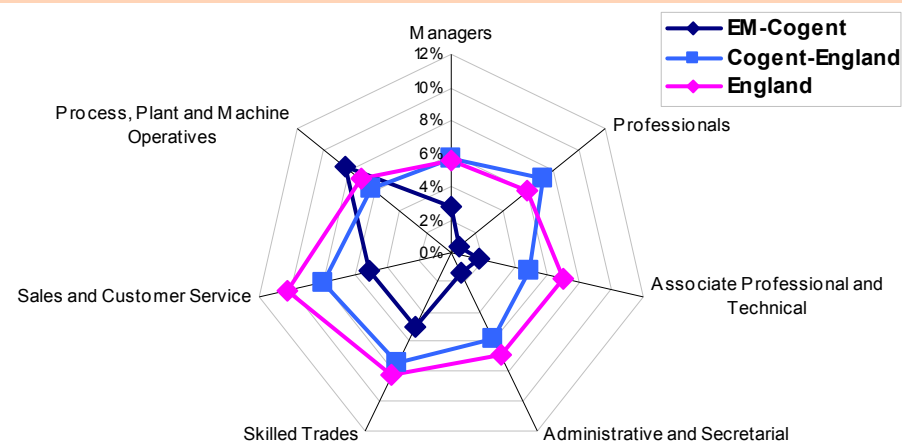
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	15%	1%
Petroleum	24%	6%
Chemicals	17%	2%
Pharmaceuticals	29%	6%
Polymer	20%	6%
EM- Cogent	21%	5%
EM- Region	18%	7%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

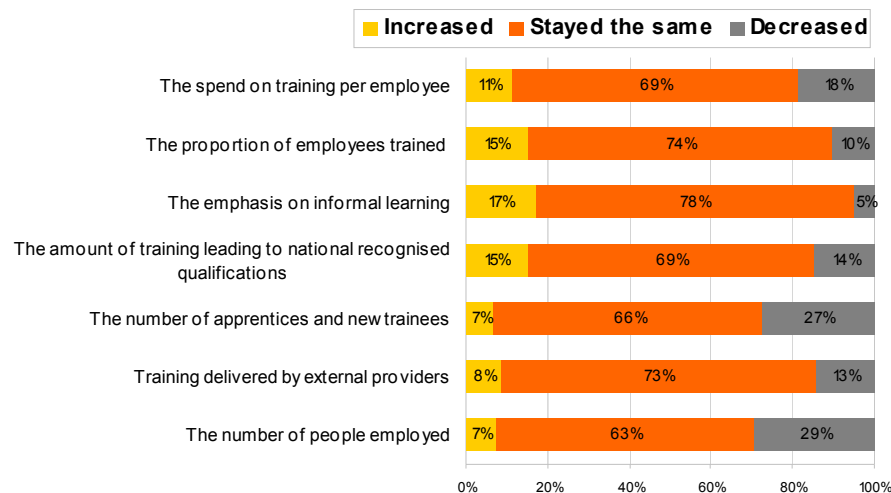
- The proportion of companies reporting vacancies decreased by 4%, but internal skills gaps increased by 11% from 2007-2009.
- The proportion of employers reporting skills gap is higher than the national average by 4%.
- The proportion of employers providing training increased by 5%, however workforce trained fell by 29% in the 2009 from 2007.

	EM-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	16%	7%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	1%	8%	3%
Proportion of firms reporting a skills shortage vacancy	5%	1%	6%	2%
Proportion of firms reporting internal skills gaps	13%	21%	16%	19%
Proportion of firms providing training (last 12 months)	80%	57%	67%	67%
Proportion of workforce trained (last 12 months)	56%	54%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	66%	48%
Petroleum	56%	30%
Chemicals	70%	56%
Pharmaceuticals	100%	77%
Polymer	52%	60%
EM- Cogent	57%	54%
EM- Region	67%	55%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# South West

## Cogent in the Region

The **Nuclear and Polymers** industries are strategically important to the South West region.

- The Cogent workforce account for **12% of the manufacturing workforce** and **12% of manufacturing employers** in the region.
- Cogent manufacturing industries account for **17% of manufacturing GVA** and **contribute of the order of £1.5bn** to the regional economy.
- **8% of Cogent employers** and **6% of Cogent employees** are based in the South West region.

**The region has a dominant cluster of Nuclear and Polymer companies:**

Oldbury, Hinkley Point A & B and Berkeley Nuclear Power Stations are situated the region. Only two are still generating power, the remaining activities are focused upon decommissioning of facilities, apart from Devonport dockyard where nuclear submarines are serviced. The region has a focus upon travel and tourism – the rural filling station infrastructure is vital in supporting this key sector. The pharmaceutical and biomedical industry in the South West is dynamic, constantly exploring opportunities for partnering, licensing and forging collaborations.



## Economic and Employment Update <sup>1,4,5,6</sup>

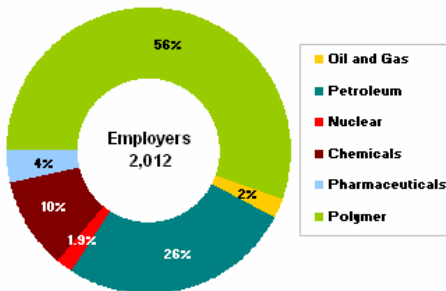
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	Median/£				
Oil and Gas	*	45	7%	6,500	3%
Petroleum	380	533	10%	11,257	8%
Nuclear	-	38	19%	6,641	11%
Chemicals	564	203	7%	6,631	5%
Pharmaceuticals	670	75	5%	5,823	8%
Polymer	453	1,118	9%	16,810	8%
<b>SW- Cogent</b>	-	2,012	8%	53,661	6%
<b>SW- Region</b>	<b>368</b>	<b>225,318</b>	<b>9%</b>	<b>2,240,626</b>	<b>8%</b>

## Cogent - UK Headlines

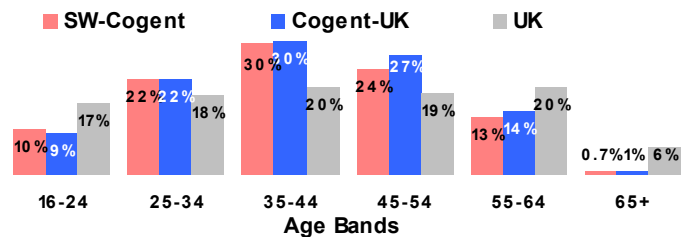
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup> (direct and indirect)



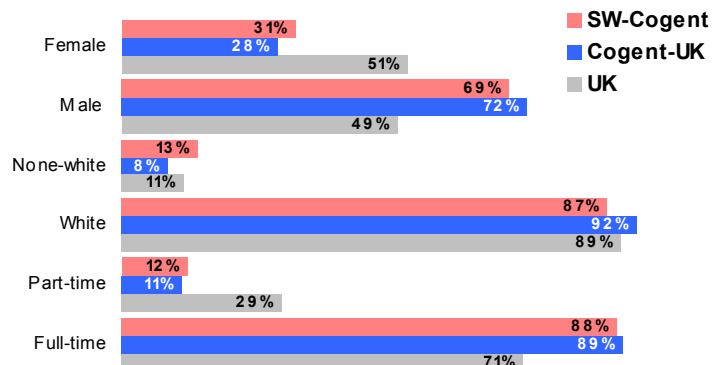
### Age Profile<sup>3</sup>



### Employers by Sizeband<sup>1</sup> (direct and indirect)

	Employees			
	1-10	11-49	50-199	200+
<b>SW-Cogent</b>	73%	20%	5%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>SW-Region</b>	86%	11%	3%	1%

### Workforce Distribution– Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

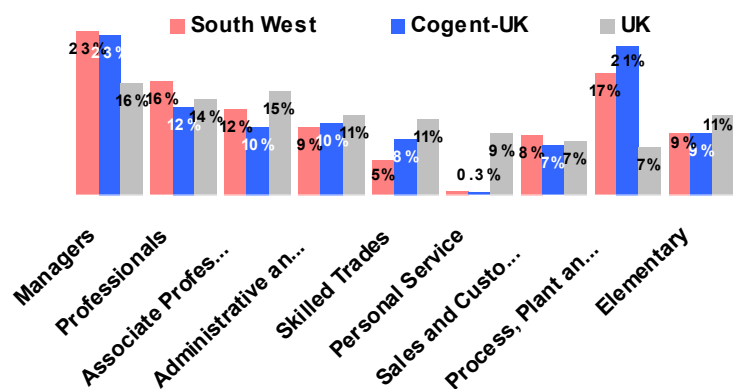
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed– ONS 2010

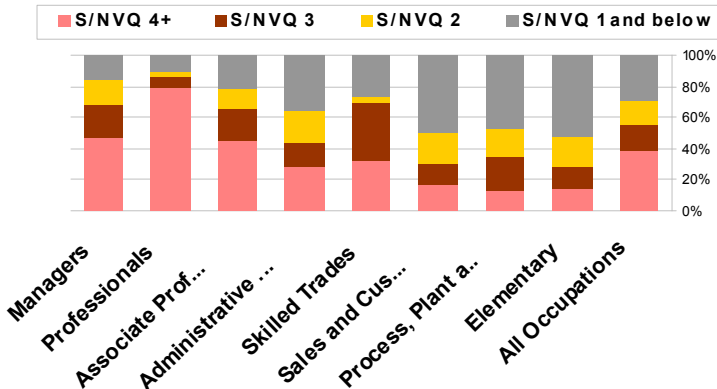
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



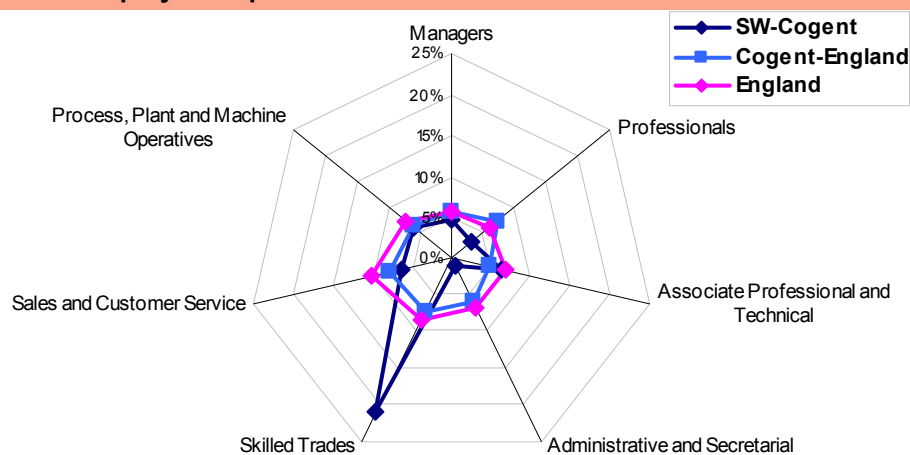
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	16%	2%
Petroleum	23%	6%
Chemicals	14%	4%
Pharmaceuticals	62%	6%
Polymer	16%	7%
SW- Cogent	20%	6%
SW- Region	22%	9%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

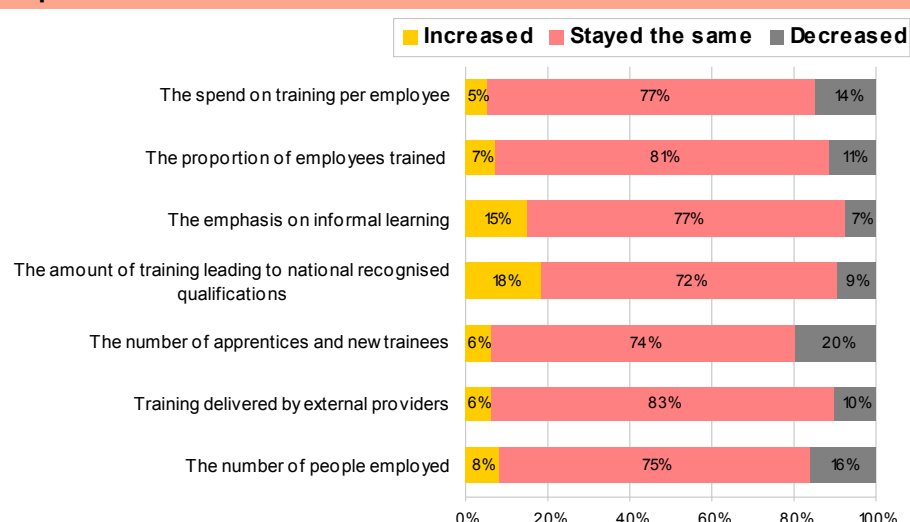
- The proportion of companies reporting vacancies decreased by 13% and internal skills gaps fell by 11% from 2007- 2009.
- The proportion of employers reporting skills gap is higher than the national average by 4% in 2009.
- The proportion of employers providing training decreased by 15%, however workforce trained increased by 18% in 2009 from 2007.

	SW-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	20%	10%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	4%	2%	8%	3%
Proportion of firms reporting a skills shortage vacancy	6%	1%	6%	2%
Proportion of firms reporting internal skills gaps	17%	20%	16%	19%
Proportion of firms providing training (last 12 months)	73%	72%	67%	67%
Proportion of workforce trained (last 12 months)	67%	44%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	100%	29%
Petroleum	77%	56%
Chemicals	68%	20%
Pharmaceuticals	57%	33%
Polymer	59%	37%
SW- Cogent	72%	44%
SW- Region	70%	55%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS...etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# South East

## Cogent in the Region

- The **Pharmaceuticals and Polymer** industries are strategically important to the South East region.
- The Cogent workforce accounts for **14% of the manufacturing workforce** and **11% of manufacturing employers** in the region.
- In South East, Cogent industries account for **23% of manufacturing GVA** and **contribute of the order of £3.3bn** to the regional economy.
- **13% of Cogent employers** and **11% of Cogent employees** are based in the South East region.

**The region has a dominant cluster of Pharmaceutical and Polymers companies:** Kent accommodates four of the world's top ten pharmaceutical companies - Abbott, Glaxo Wellcome, Pfizer and Rhone - Poulenc Rorer. Bio-pharmaceuticals is a major emerging activity in the South East. The region has the largest European onshore oil field at Wytch Farm along with the largest refinery in the UK at Fawley, Southampton. In addition, this refinery is linked to a significant petrochemical complex. Many of the UK's major airports are in the South East and they require significant quantities of jet kerosene fed by refineries or storage farms. The LNG plant at Isle of Grain will become a significant input point for Natural Gas into the national grid. For the Polymer industry, there is a cluster of companies on the Isle of Wight applying composite materials for producing wind turbine blades and aerospace applications.



## Economic and Employment Update <sup>1,4,5,6</sup>

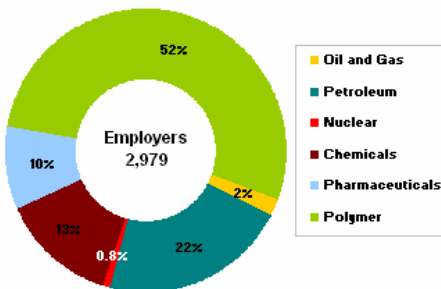
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	Median/£	n	%	n	%
Oil and Gas	*	56	8%	15,600	6%
Petroleum	1,253	649	12%	21,641	15%
Nuclear	-	24	12%	12,844	22%
Chemicals	572	396	13%	11,538	8%
Pharmaceuticals	626	286	19%	15,051	21%
Polymer	470	1,569	12%	21,757	10%
<b>SE- Cogent</b>	-	<b>2,979</b>	<b>13%</b>	<b>98,431</b>	<b>11%</b>
<b>SE- Region</b>	<b>415</b>	<b>395,591</b>	<b>13%</b>	<b>3,757,711</b>	<b>14%</b>

## Cogent - UK Headlines

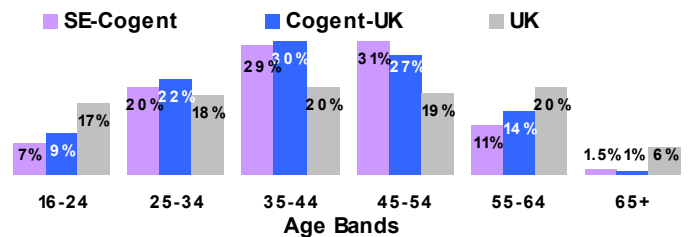
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup>(direct and indirect)



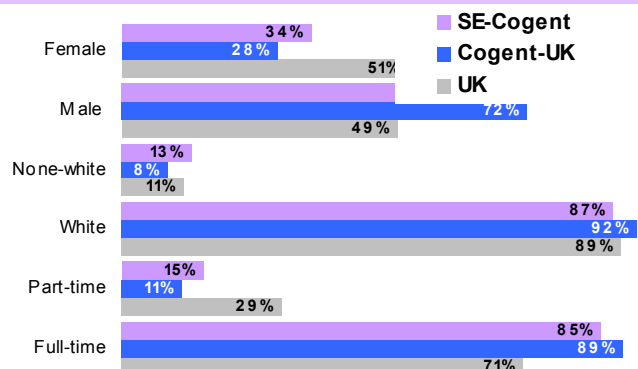
### Age Profile<sup>3</sup>



### Employers by Sizeband<sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>SE-Cogent</b>	67%	25%	6%	2%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>SE-Region</b>	87%	10%	2%	1%

### Workforce Distribution— Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

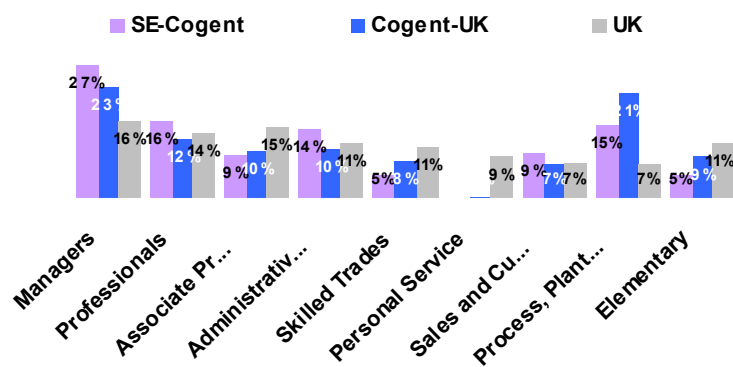
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed— ONS 2010

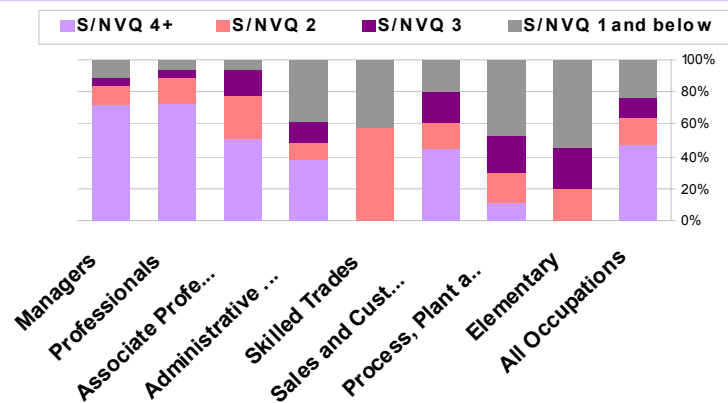
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



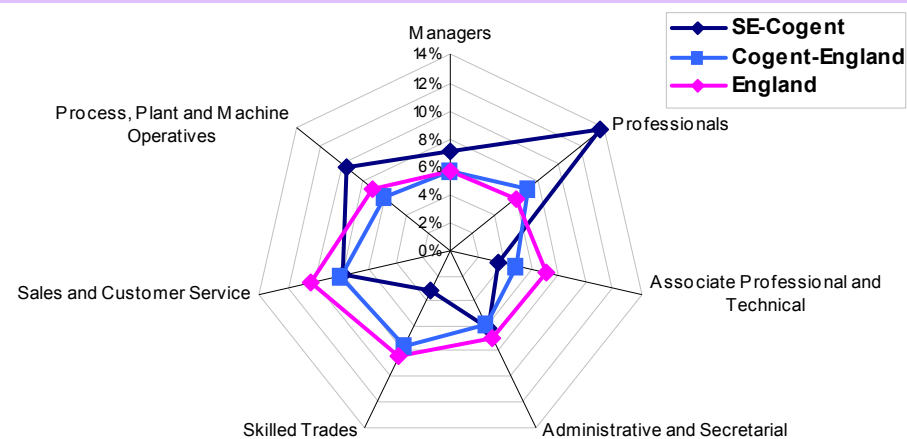
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

Industry	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	23%	18%
Petroleum	23%	7%
Chemicals	15%	4%
Pharmaceuticals	36%	10%
Polymer	18%	5%
SE- Cogent	21%	7%
SE- Region	20%	8%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

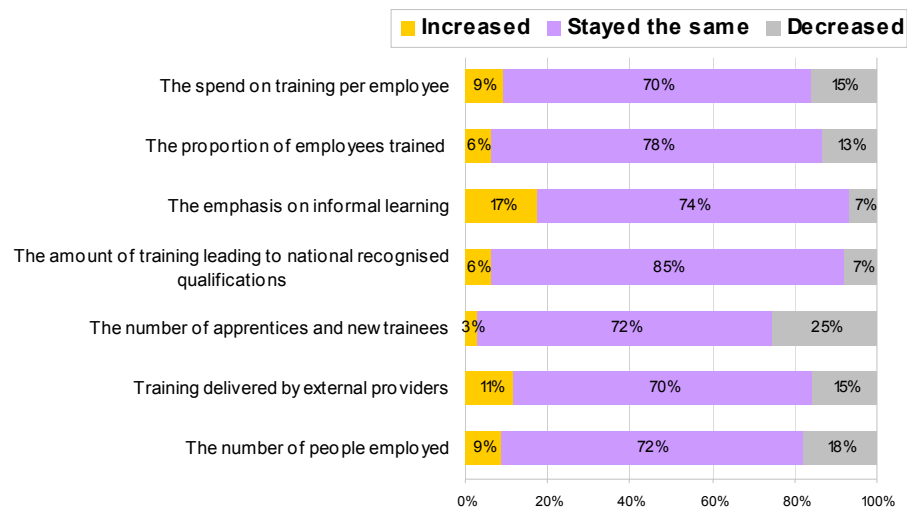
- The proportion of companies reporting vacancies decreased by 4% and internal skills gaps has fallen by 3% from 2007-2009.
- The proportion of employers reporting skills gap is higher than the national average by 2% in 2009.
- The proportion of employers providing training increased by 6%, but workforce training fell by 25% in 2009 from 2007.

	SE-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	18%	14%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	7%	2%	8%	3%
Proportion of firms reporting a skills shortage vacancy	4%	2%	6%	2%
Proportion of firms reporting internal skills gaps	24%	21%	16%	19%
Proportion of firms providing training (last 12 months)	76%	70%	67%	67%
Proportion of workforce trained (last 12 months)	77%	52%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

Industry	% of firms provided training	% of staff trained
Oil and Gas	70%	58%
Petroleum	77%	53%
Chemicals	47%	44%
Pharmaceuticals	64%	78%
Polymer	61%	28%
SE- Cogent	70%	52%
SE- Region	69%	53%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

# London

## Cogent in the Region

- The Cogent workforce accounts for **12% of the manufacturing workforce** and **9% of manufacturing employers** in the region.
- The Cogent industries account for **4% of regions GVA** and **contribute of the order of £9.2bn** into the regional economy.
- **6% of employers** and **5% of Cogent employees are based in London**, however this includes a large proportion of registered headquarters and the retail sale of automotive fuels.

### The region has a dominant cluster of Cogent industries:

Employment within the region is centred on company headquarter activities although fore-court retail is the predominant sectoral employer and accordingly London shows the highest proportion of micro employers of all areas of the country.

London has the most ethnically diverse workforce for the sector in the UK with 16% of the workforce being non-white compared to 8% for the overall Cogent-UK sector workforce. The region also shows a higher proportion of women employed in the sector.



## Economic and Employment Update <sup>1,4,5,6</sup>

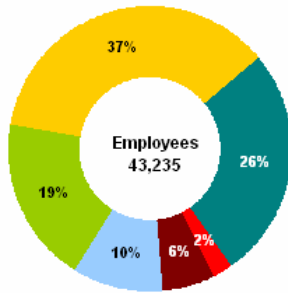
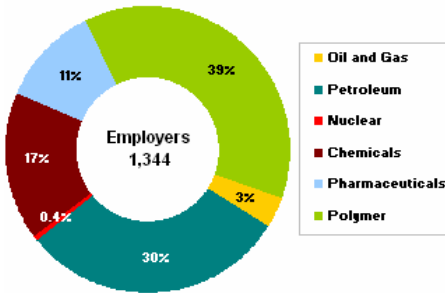
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	% of UK Total	Employees	% of UK Total
	Median/£				
Oil and Gas	1,577	45	7%	15,600	6%
Petroleum	*	408	8%	11,364	8%
Nuclear	*	5	2%	976	2%
Chemicals	577	224	7%	2,741	2%
Pharmaceuticals	843	153	10%	4,420	6%
Polymer	503	509	4%	8,134	4%
<b>London- Cogent</b>	-	<b>1,344</b>	<b>6%</b>	<b>43,235</b>	<b>5%</b>
<b>London- Region</b>	<b>678</b>	<b>401,209</b>	<b>16%</b>	<b>4,168,527</b>	<b>16%</b>

## Cogent - UK Headlines

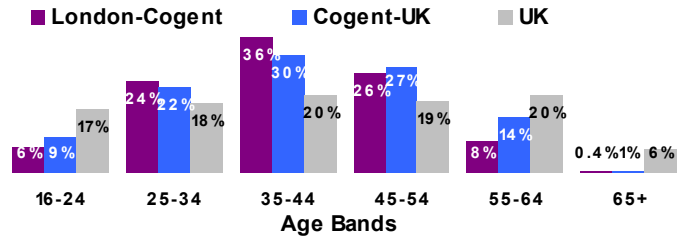
- **£ 201bn Turnover**
- **£ 65.5bn GVA**
- **7.1% of UK GVA**
- **900,000 employees**
- **23,000 employers**
- **14% of UK manufacturing workforce**
- **12% of UK manufacturing enterprises**

## The Workforce

### Employers and Employees <sup>5,6</sup>(direct and indirect)



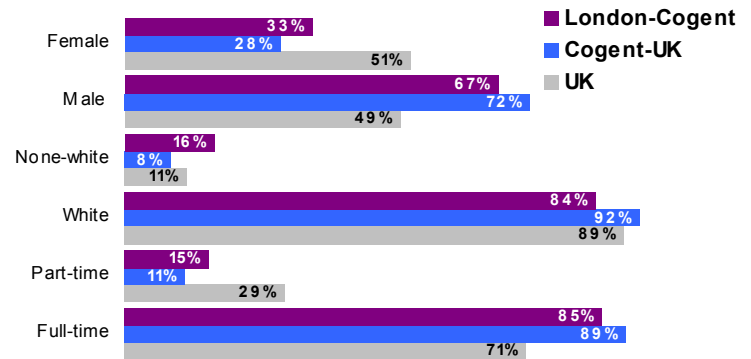
### Age Profile<sup>3</sup>



### Employers by Sizeband<sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>London-Cogent</b>	74%	22%	4%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>London-Region</b>	87%	9%	3%	1%

### Workforce Distribution– Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

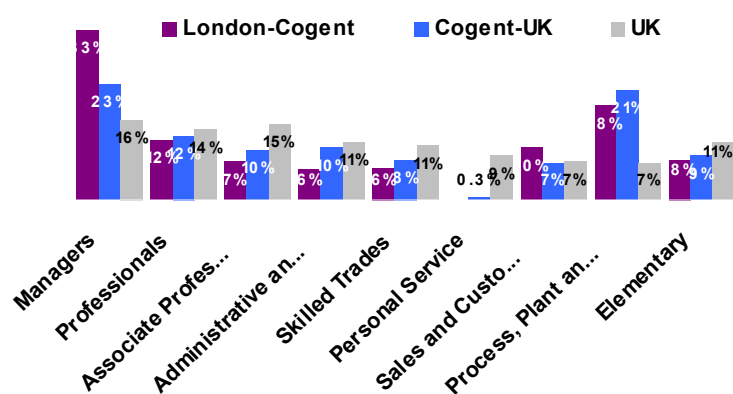
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed– ONS 2010

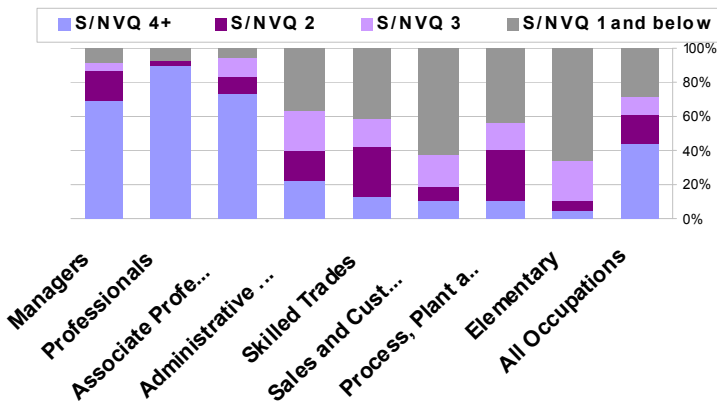
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



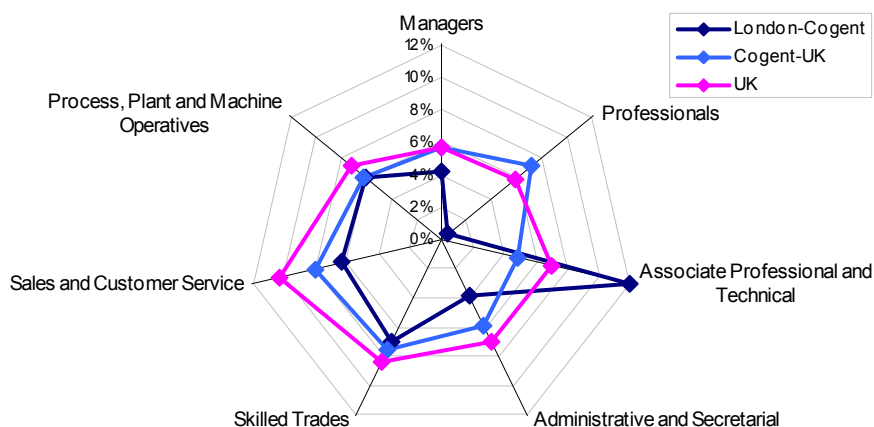
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	18%	2%
Petroleum	25%	5%
Chemicals	24%	3%
Pharmaceuticals	32%	3%
Polymer	15%	5%
<b>London- Cogent</b>	<b>23%</b>	<b>5%</b>
<b>London- Region</b>	<b>17%</b>	<b>7%</b>

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

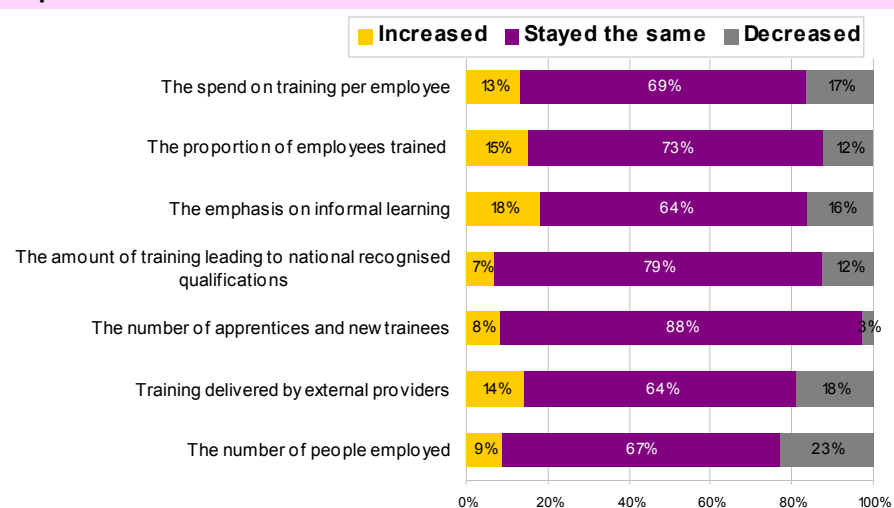
- The proportion of companies reporting vacancies decreased by 4%, but internal skills gaps increased by 11% in 2009 from 2007.
- The proportion of employers reporting skills gap is higher than the national average by 4%.
- The proportion of employers providing training gone up by 5%, however workforce trained fell by 29% in the 2009 from 2007.

	Lon-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	9%	5%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	5%	1%	8%	3%
Proportion of firms reporting a skills shortage vacancy	3%	1%	6%	2%
Proportion of firms reporting internal skills gaps	12%	23%	16%	19%
Proportion of firms providing training (last 12 months)	62%	67%	67%	67%
Proportion of workforce trained (last 12 months)	74%	45%	68%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	83%	60%
Petroleum	71%	53%
Chemicals	54%	9%
Pharmaceuticals	76%	26%
Polymer	52%	35%
<b>London- Cogent</b>	<b>67%</b>	<b>45%</b>
<b>London- Region</b>	<b>65%</b>	<b>54%</b>

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

## Cogent in the Region

- The Cogent industries are strategically important to the East of England region and collectively employ **8% of employees and 11% of employers in their sector**.
- The East of England **manufacturing sector** is the **second most important** contributor to regional economy.
- The Cogent workforce accounts for **16% of the manufacturing workforce** and **12% of manufacturing employers** in the region.

### The region has a dominant cluster of Cogent industries:

There are clusters of pharmaceutical and bioscience companies in the Cambridgeshire area and a significant number of polymer companies across the region including composites. The East is a significant centre for the offshore Oil and Gas industry. Activity is focused around Norfolk – a major landfall site for North Sea Gas production. Lowestoft & Great Yarmouth provide the onshore support base for the Southern North Sea gas fields. There is a refinery and petrochemical facility in the region with numerous marketing operations. Sizewell and Bradwell Power Stations employ people in the nuclear industry. Cogent also plays a strategic role in the East of England Manufacturing Alliance working with other SSC's.



## Economic and Employment Update <sup>1,4,5,6</sup>

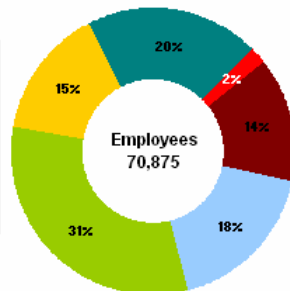
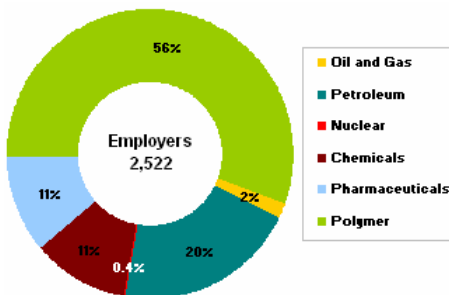
Industry	Weekly Pay-Gross <sup>4</sup>	Employers	EE % of UK Total	Employees	EE % of UK Total
	Median/£				
Oil and Gas	*	45	7%	10,400	4%
Petroleum	567	513	9%	14,095	10%
Nuclear	*	10	5%	1,373	2%
Chemicals	506	270	9%	9,975	7%
Pharmaceuticals	661	279	18%	12,572	17%
Polymer	405	1,405	11%	22,459	10%
<b>EE- Cogent</b>	<b>535</b>	<b>2,522</b>	<b>11%</b>	<b>70,875</b>	<b>8%</b>
<b>EE- Region</b>	<b>385</b>	<b>248,192</b>	<b>10%</b>	<b>2,392,719</b>	<b>9%</b>

## Cogent - UK Headlines

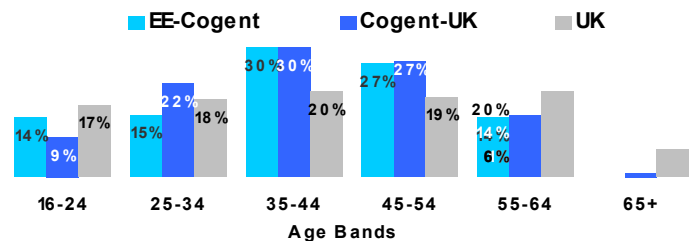
- £ 201bn Turnover
- £ 65.5bn GVA
- 7.1% of UK GVA
- 900,000 employees
- 23,000 employers
- 14% of UK manufacturing workforce
- 12% of UK manufacturing enterprises

## The Workforce

### Employers and Employees <sup>5,6</sup>(direct and indirect)



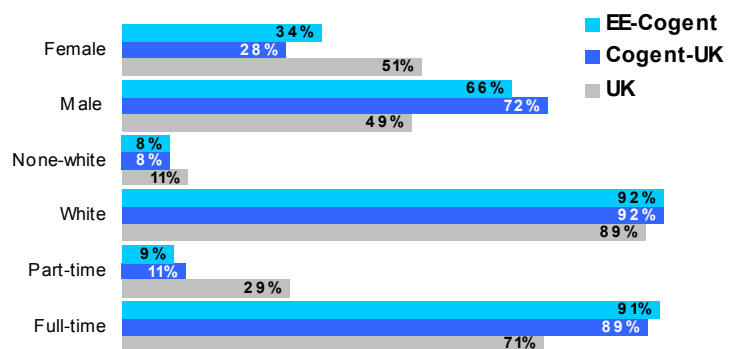
### Age Profile <sup>3</sup>



### Employers by Sizeband <sup>1</sup>

	Employees			
	1-10	11-49	50-199	200+
<b>EE-Cogent</b>	70%	24%	5%	1%
<b>Cogent-Great Britain</b>	68%	23%	7%	2%
<b>EE-Region</b>	86%	11%	3%	1%

### Workforce Distribution– Gender<sup>1</sup>, Ethnicity<sup>3</sup> and Employment Profile<sup>3</sup>



1. Annual Business Enquiry (ABI) 2008-data released June 2010, Office of National Statistics (ONS) 2010

2. National Employers Skills Survey (NESS) 2009

3. Labour Force Survey (LFS) 2009, ESDS 2010

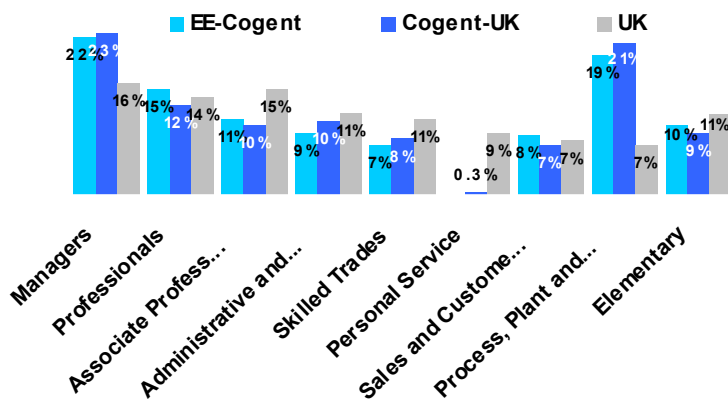
4. Annual Survey of Hours and Earnings 2009

\* Data suppressed– ONS 2010

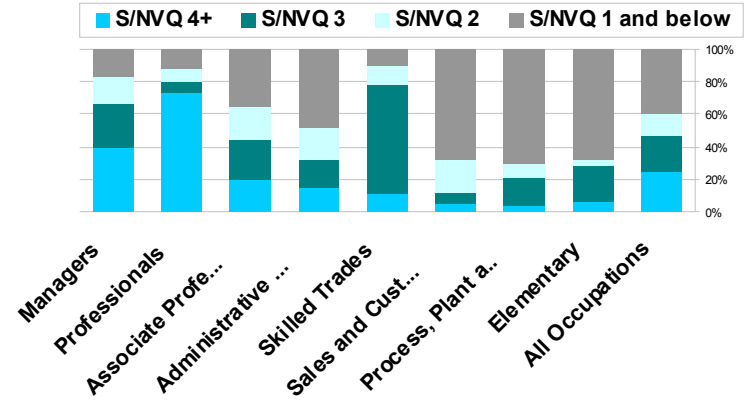
\*\* GVA - Gross value added (GVA) represents the amount that individual businesses, industries or sectors contribute to the economy.

# Occupational Distribution, Skill Level and Skills Needs

## Occupational Distribution<sup>3</sup>



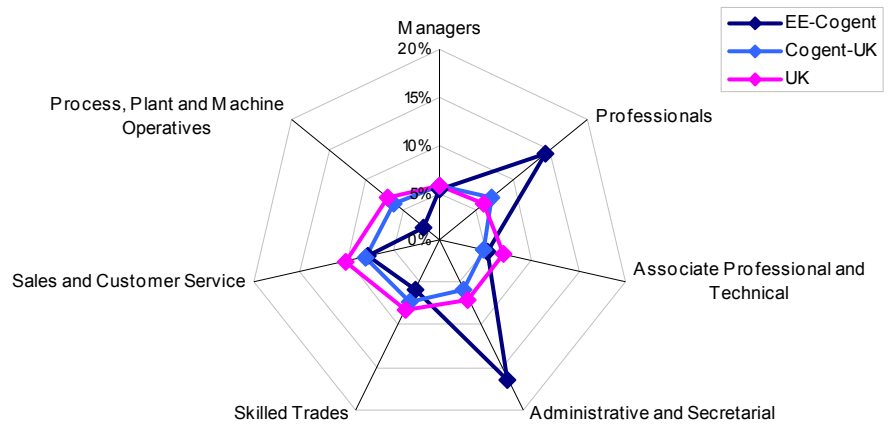
## Skill Level by Occupation<sup>3</sup>



## Skills Gaps<sup>2</sup>

	% of firms reporting skills gaps	% of staff with skills gap
Oil and Gas	24%	9%
Petroleum	20%	7%
Chemicals	19%	23%
Pharmaceuticals	18%	1%
Polymer	9%	5%
EE- Cogent	16%	7%
EE- Region	17%	6%

## Skills Gap by Occupation<sup>2</sup>



## Skills Demand and Training<sup>2</sup>

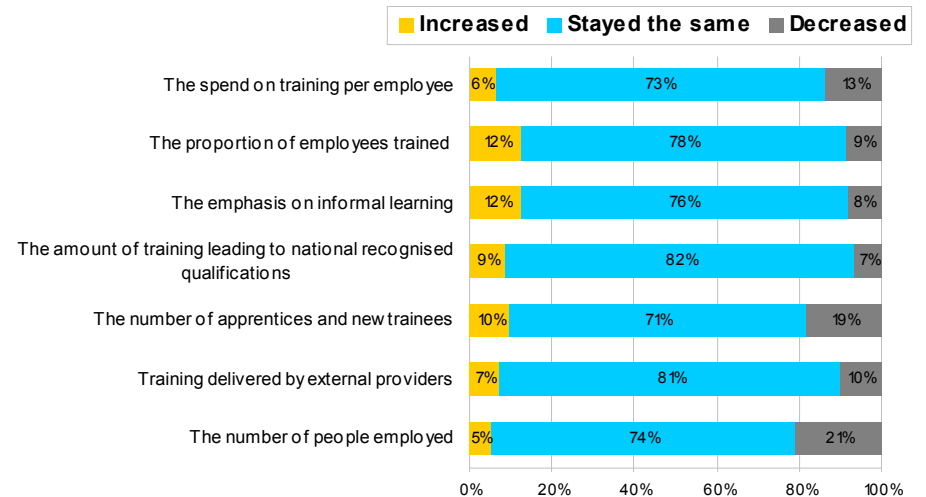
- The proportion of companies reporting vacancies fell by 14%, 'hard-to-fill' vacancies down by 3% and skills shortage vacancies decreased by 3% from 2007 to 2009.
- The proportion of employers reporting internal skills gaps is lower than the national average by 3%.
- The proportion of employers providing training decreased by 11% in 2009 from 2007.

	EE-Cogent		England	
	2007	2009	2007	2009
Proportion of firms reporting vacancies	20%	6%	18%	12%
Proportion of firms reporting 'hard-to-fill' vacancies	6%	3%	8%	3%
Proportion of firms reporting a skills shortage vacancy	5%	2%	6%	2%
Proportion of firms reporting internal skills gaps	13%	16%	16%	19%
Proportion of firms providing training (last 12 months)	80%	66%	67%	67%
Proportion of workforce trained (last 12 months)	56%	47%	63%	56%

## Training by Industry<sup>2</sup> (last 12 months)

	% of firms provided training	% of staff trained
Oil and Gas	78%	64%
Petroleum	69%	59%
Chemicals	84%	29%
Pharmaceuticals	80%	90%
Polymer	52%	29%
EE- Cogent	66%	47%
EE- Region	65%	52%

## Impact of Recession<sup>2</sup>



5. Cogent Industry Estimate- (estimated from national data, ABI, LFS, NESS, BIS..etc)  
 6. Power People: Civil Nuclear Workforce 2009-2025, Cogent Standard Industrial Classification (SIC 07 code), ONS 2010

More information on Regional and Industry Research can be found at:  
[www.cogent-ssc.com/research](http://www.cogent-ssc.com/research)