# **Elevate Me Slough**



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**Employment in Slough 2015** 

# **Energy & the Environment**

# **About the sector**

The energy and environment sector covers a range of different activities, including the production of oil and gas, distribution of electricity, sustainable waste management, scientific testing and analysis and environmental consultancies.

The energy sector contributes more than 3% of UK GDP, directly contributing £25 billion to the economy, with a further £71 billion in indirect contributions. The energy sector is changing fast, with new technology and the transition to a low carbon economy causing significant changes in our use and management of energy.

The energy industry is facing several challenges, with key issues revolving around the need to ensure that energy supply is secure, sustainable and affordable.

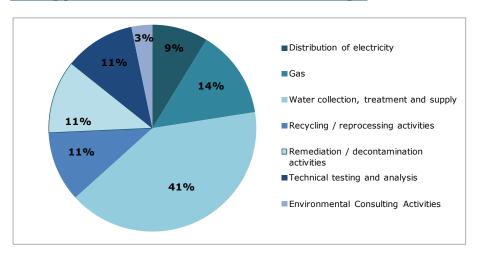
### **Employment**

The outlook for the energy and environment sector as a whole is mixed, with sub-sectors facing different challenges. The electricity sector is forecast to grow (largely driven by investment in smart metering), as is the renewables sector. However, recent falls in oil prices have caused job losses in the oil and gas sector.

In 2015, there were just under 1,000 employee jobs in the energy and environment sector in Slough, with water collection, treatment and supply being the biggest sub-sector.

Between 2015 and 2020 forecasts suggest that employment in the energy and environment sector will increase by 10% equating to the creation of 100 additional jobs.

### **Energy and Environment Jobs in Slough**

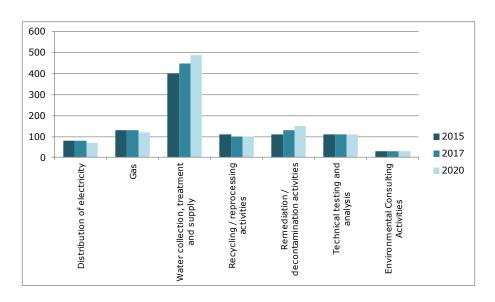


#### **Major Local Employers**

Key local energy and environment companies include:

- Corac Energy Technologies
- DNV.GL
- Johnson Controls
- UKDN Waterflow

# **Future Employment Growth**



The majority of new jobs predicted to be created in the energy and environment sector in Slough over the next five years are likely to be in the water collection, treatment and supply and remediation / decontamination activities sub-sectors.

# **Future Occupational Growth**

In addition to an increase in the overall number of jobs in the energy and environment sector, there will also be vacancies created by people retiring and leaving the labour force. A total of around 1,440 vacancies are forecast in occupations that are commonly found in the energy and environment sector as a result of retirements, and the table below provides details for a selection of these occupations.

| Occupation                              | Qual<br>Level | Jobs 2015<br>(& % growth<br>2015-2020) | Vacancies<br>created<br>through<br>retirements<br>2015 - 2020 |
|---|---------------|--|---|
| Large goods vehicle drivers             | 2             | 1,570 (5%)                             | 420   |
| Electricians / electrical fitters       | 3             | 600 (8%)                               | 150   |
| Biological scientists and biochemists   | 6             | 300 (6%)                               | 70  |
| Laboratory technicians                  | 4             | 290 (3%)                               | 60  |
| Electronic / service engineers          | 3             | 250 (4%)                               | 50  |
| Project / Installation<br>Engineers     | 6             | 230 (2%)                               | 40  |
| Engineering technicians                 | 3             | 210 (4%)                               | 40  |
| Estimators, valuers and assessors       | 3             | 140 (7%)                               | 40  |
| Refuse and salvage occupations          | 1             | 210 (0%)                               | 40  |
| Chemical scientists                     | 6             | 200 (1%)                               | 30  |
| Electrical engineers                    | 6             | 120 (6%)                               | 30  |
| Production and process engineers        | 6             | 150 (-1%)                              | 30  |
| Service technicians                     | 3             | 120 (5%)                               | 30  |
| Health and safety officers              | 6             | 110 (6%)                               | 30  |
| Chemical and related process operatives | 2             | 190 (0%)                               | 30  |

'Qual level' is an indication of the typical level of qualification required to work in each occupation. Please refer to the <u>National Careers Services</u> website for a full explanation of each qualification level.

# **Occupations / Jobs Advertised**

Between January and September 2015 there have been approximately 1,900 jobs advertised online in Slough in occupations commonly found in the energy and environment sector. It should be noted that some of these vacancies will be with employers that don't operate within the energy and environment sector, for example, many types of engineer are frequently employed in the construction sector.

| Occupation  | Qual<br>Level | Job<br>Postings* |
|---|---------------|------------------|
| Electronic / service engineers                              | 3             | 250              |
| Large goods vehicle drivers                                 | 2             | 160              |
| Project / Installation Engineers                            | 6             | 140              |
| Estimators, valuers and assessors                           | 3             | 130              |
| Service technicians   | 3             | 130              |
| Engineering technicians                                     | 3             | 120              |
| Quantity surveyors  | 6             | 100              |
| Plumbers and heating and ventilating                        | 3             | 90               |
| <u>engineers</u> <u>Electricians and electrical fitters</u> | 3             | 80               |
| Routine inspectors and testers                              | 3             | 80               |
| Biological scientists and biochemists                       | 6             | 70               |
| <u>Electrical engineers</u>                                 | 6             | 70               |
| Mechanical engineers  | 6             | 60               |
| <u>Civil engineers</u>                                      | 6             | 50               |

<sup>\*</sup> For vacancies posted online from 1st January to 1st September 2015. Please click on links for further information about these occupations from the National Careers Service website.

The high numbers of vacancies being advertised suggests that there is strong demand locally for skilled engineers, for roles requiring qualifications at degree level or higher, and also for technicians, for jobs requiring level 3 qualifications.



# **Advertised Salaries**

Based on information from local job advertisements posted online, the table below shows average full-time salaries for those occupations related to energy and environment that have been most frequently advertised online. Since the start of 2015, the majority of energy and environment-related jobs advertised offered annual salaries above £30,000.

| Occupation                                     | Average<br>Salary<br>Advertised |
|--|---------------------------------|
| Electronic / service engineers                 | £28,200                         |
| Large goods vehicle drivers                    | £27,300                         |
| Project / Installation Engineers               | £37,600                         |
| Estimators, valuers and assessors              | £36,800                         |
| Service technicians                            | £28,600                         |
| Engineering technicians                        | £31,200                         |
| Quantity surveyors                             | £47,200                         |
| Plumbers and heating and ventilating engineers | £32,600                         |
| Electricians and electrical fitters            | £32,100                         |
| Routine inspectors and testers                 | £44,000                         |
| Biological scientists and biochemists          | £37,000                         |
| Electrical engineers                           | £38,400                         |
| Mechanical engineers                           | £42,400                         |
| Civil engineers                                | £44,400                         |



# **Sector related courses**

Further Education Colleges and Universities in the Slough area offer a range of post-16 courses related to energy and environment occupations. Below is a small selection of examples:

BMS Control and Programming (HVAC) Level 2

Plumbing (Heating & Ventilation) Diploma Level 2

NVQ Level 3 in Electrotechnical Services

Gas Utilisation: Core Skills & Knowledge Diploma Level 3

Electrical & Electronic Engineering Technology Diploma Level 3

BTEC Level 3 Diploma in Mechanical Engineering

Applied Science BTEC Extended Diploma Level 3

Applied Biology HND Level 5

**BSc Environmental Science** 

BEng (Hons) Civil and Environmental Engineering

MEng Electronic Engineering

**Environmental Management MSc** 

**Environmental Pollution and Monitoring MSc** 

For further information on courses being offered in the area please use the following links:

#### **Colleges**

East Berkshire College Brooklands College Uxbridge College Bracknell and Wokingham College

# **Universities**

<u>University of Reading</u> <u>Brunel University</u> <u>University of West London</u>

# **Apprenticeships**

There are also a wide range of <u>Apprenticeships</u> relating to this sector, which offer the opportunity to combine paid work with on the job learning towards formal qualifications. Below are some examples of relevant Apprenticeship frameworks that are available to study through local providers:

Electrotechnical Technology Apprenticeship

Mechanical Engineering Apprenticeships

Electrical Installation Apprenticeship Advanced

Laboratory & Science Technician Apprenticeship Advanced

Other energy sector-related Apprenticeships (not currently offered by local colleges) include:

Gas industry apprenticeships (Intermediate & Advanced)
Power industry apprenticeships (Intermediate & Advanced)
Water industry apprenticeships (Intermediate & Advanced)



# **Skills in Demand**

Data from recently advertised jobs in energy and environment - related occupations suggests that the following skills are sought by employers in this sector. This list provides examples of the sorts of skills required to work in the sector in some of the most commonly advertised vacancies, but is no means exhaustive.

- Repair
- Inspection
- Machinery
- Electrical Engineering
- Technical Support
- Mechanical Engineering
- Procurement
- Heating, ventilation & air conditioning (HVAC)
- Electrical Work
- Hand Tools
- LINUX
- Plumbing
- Product Development
- Computer Aided Draughting/Design (CAD)
- Construction Industry Knowledge
- Wiring
- Contract Management
- Estimating
- Civil Engineering
- Engineering consultation
- Engineering Management
- Microprocessors
- Good Manufacturing Practises (GMP)
- Product Testing
- Workplace Health and Safety

#### Power Tools

- Design for Manufacturing (DFM)
- Cabling

## **Employability Skills**

Employers are increasingly looking for skills that go beyond qualifications and experience when recruiting new employees. While education may enhance your eligibility for a job, today's workplaces require a varied mix of employability skills. These skills can be applied in any job in any sector, and include:

- Communication
- Self-management
- Thinking and solving problems
- Working together
- Understanding the business
- Using numbers effectively
- Using language effectively
- Using IT effectively

#### **Data Sources**

- 1. Employment figures and forecasts have been produced using the EMSI Analyst tool which used Office for National Statistics data from the Annual Population Survey 2014 and the Business Register and Employment Survey 2013.
- 2. Real time vacancy data is sourced from Labour Insight (Burning Glass Technologies), and is based on vacancies posted online between 1st January and 1st September 2015.
- 3. Information on post-16 learning opportunities are from local providers' own websites.

Access to locally-informed and easy-to understand labour market intelligence is a key component of providing good quality careers information to young people, to assist them in making choices about what to do when they reach the end of their compulsory schooling. This series of sector-based reports brings together a range of employment and jobs data about the local economy, and is aimed at providing a resource to support all employability and careers professionals working in the Slough area.

Employment in Slough 2015 aims to help individuals by giving them locally targeted information about the likely levels of demand for different types of work, common skills requirements and sources of learning to pursue qualifications relevant to each sector. Hopefully these reports will help people make better informed choices relating to work and learning, that will enable them to secure the careers they want within a growing and diverse economy.

For further information or support, contact **Elevate Me Slough** 

Email: <u>elevate@slough.gov.uk</u>

Website: <a href="http://slough.elevateme.org.uk/contact.htm">http://slough.elevateme.org.uk/contact.htm</a>
Tel: 01753 875510 (Slough Young People's Service)

or

## **Employment & Learning Advice Service (Slough Borough Council)**

Email: ela@slough.gov.uk

Website: www.slough.gov.uk/jobs/employment-and-learning-advice.aspx

Tel: 01753 476622 or 01753 476611

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