

The Energy Sector

As the economy recovers, new jobs and opportunities will emerge. The basic skills required for many of these jobs are expected to rise – it is estimated that by 2010 around 95% of all new jobs will be at Level 2 or above. These fact sheets have been designed to support people in making informed choices about future employment and / or training to make the best of these new opportunities.

The North East Energy sector

The Energy sector is made up of companies which use oil & gas, nuclear and renewable energy sources (such as wind) to provide electricity, heating and power to the public. The sector is focused on the generation of power although it also includes providing customer service. The Energy sector has very strong links to the Marine sector and the Chemicals sector. Because many Energy companies have call centres it is also linked to the Business Services sector.

Job roles within the Energy sector are varied and include civil and electrical engineers, planning and quality control, production and works maintenance, IT professionals, research and development, technicians and production operatives.

Historically, the North East was a major centre for fossil fuels, and the North Sea still has years of oil reserves.

The Government's April 2009 Budget boosted Britain's low-carbon sectors. This was good news for the North East, as not only is the Energy sector already a significant employer in the region, it is also predicted to grow over the next ten years. What is more, the North East is well placed to take a lead on the development of new energy sources and technologies – for example, offshore wind, wave and solar power and other renewables, including photovoltaic cells, heat pump technology and biomass boilers. The region is likely to attract some of the new 'Green Agenda' investment through new wind turbine manufacturing facilities planned for the north bank of the River Tyne, and the research and development capacity of Blyth's New and Renewable Energy Centre.

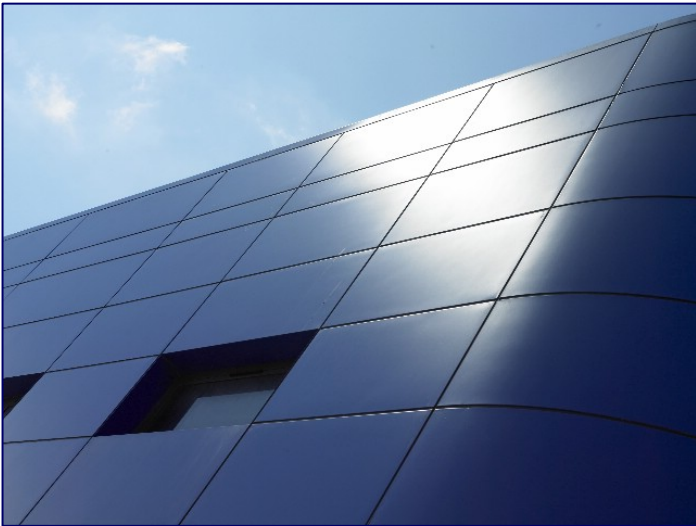


This extra investment could well lead to the creation of jobs in designing, installing and maintaining large-scale developments such as wind turbines and is therefore closely linked to construction and engineering.

As electric vehicles become available, another area of potential development is in providing the technology and infrastructure to provide clean, electric public and private transport in the region.

Skills required in the Energy sector

Generally, the skills needed in the Energy sector are technical skills and the ability to understand technical information. However, customer service skills are also important, as is knowledge of health and safety. Management skills are needed for higher level positions in the Energy sector.



Employers in the industry look for skills such as:

- Engineering and skilled crafts people
- Data analysis skills
- Team working
- Communication (including customer service) skills
- IT skills

Management skills and experience are highly sought after, especially in health and safety and in dangerous environments such as oil rigs.

Skills needed in the sector are changing in a number of ways. There is an ongoing move towards greener energy which means that there will be future opportunities for new applicants with technical skills who can understand new technology. Personal management skills – those needed to manage both self and others – are also increasingly important. And behavioural and personal leadership skills, including the ability to work well in teams is also important.

Qualifications requirements in the Energy sector are generally at NVQ level 3+ (or equivalent), depending on the specific role being undertaken. Many types of qualifications are valued including:

- BTEC/HNC , BTEC National Diploma and Certificates, BTEC Introductory Certificates and Diplomas in Engineering
- The new 14-19 Engineering Diplomas
- Apprenticeships
- Foundation degrees in engineering disciplines

Research suggests that just over half of the graduates that go into Oil and Gas and the Nuclear and Petroleum industries come from science, technology, engineering and maths subject areas. Degree-level training in the North East can be gained through the five universities in the region whilst some colleges provide NVQs in Providing Energy Efficiency Services.

For more information about the Energy sector please see the following websites:

- Energy and Utility Skills www.euskills.co.uk
- Cogent – sector skills council for chemicals, pharmaceuticals, oil & gas, petroleum and polymers www.cogent-ssc.com
- SEMTA – sector skills council for science, engineering and manufacturing www.semta.org.uk
- Lantra - the sector skills councils for environmental and land based industries www.lantra.co.uk
- Summit – sector skills council for building services engineering www.summitskills.org.uk
- Energy North East www.energynortheast.net
- The National Energy Foundation www.nef.org.uk