

Energy Sector



Energy Sector Overview

The **Energy Sector** relates to the production and supply of energy. **Renewable energy** is generally defined as energy that comes from resources which are naturally replenished on a human timescale such as sunlight, wind, rain, tides, and waves. Renewable energy replaces conventional fuels in four distinct areas, electricity generation, air and water heating/cooling, motor fuels, and rural (off-grid) energy services.

The Energy Sector is very closely linked with engineering, manufacturing and ports & logistic sectors.

5.1% of employment in the Humber is in the energy sector

Examples of Key Employers in the Humber

SIEMENS

vivergofuels

SPENCER
British Engineering

able
www.ableuk.com

ecotricity

SMart
Wind

DONG
energy

Useful subjects

- Maths
- Engineering
- Science
- Technology

Did you know?

- The Humber is leading the UK renewables sector with over £700million being invested through Siemens, Able, ABP and the development of Greenport Hull
- Our regions 20+ onshore wind farms provide power for 200,000 UK homes
- 3 of the world's largest wind farms are on our doorstep and form some of the largest engineering projects in the world
- The Humber is No 1 in the UK for biofuel production
- The scale of our energy industry means demand is high for engineering support and top talent
- Building wind farms will constitute some of the largest construction projects in the world
- Turbines made in the Humber means a wider supply chain of manufacturers; repair and maintenance contractors will be located in the area which will lead to a cluster of renewable companies in the Humber
- The Humber region is home to innovative tidal and wave technology

Will there be opportunities available?

- Renewable energy is a relatively new and rapidly changing sector, generating considerable ongoing investment and development, and the current labour market is starting to reflect this
- By 2020 Yorkshire and the Humber will have 11,500 offshore wind jobs, 750 onshore wind jobs and 250 wave & tidal power jobs
- The worlds biggest offshore wind farm will be built in the Humber Region creating 4,750 jobs
- The renewable energy sector will be the single biggest influence on the local economy for generations, creating thousands of new jobs along with a wealth of opportunity for local people and businesses

For further information visit:

- National Careers Service
- www.lmihumber.co.uk
- www.careersyandh.co.uk
- www.bridgingthegaphumber.co.uk
- www.gov.uk/apply-apprenticeship
- www.allaboutcareers.com
- www.euskills.co.uk
- www.greenporthull.co.uk
- www.deliveringyourfuture.co.uk
- Look in your local newspapers
- Pop in to you local Job Centre
- Check out Social Media
- And talk to family and friends

EAST RIDING
OF YORKSHIRE COUNCIL

greenporthull

Skills Funding Agency

Humber

Hull
City Council

European Union
European Structural and Investment Funds

LMi
HUMBER

InspireMe

Supported by the
Regional Growth Fund

"This investment forms part of the Humber LEP's European Structural and Investment Funds (ESIF) allocation"

Planning ahead...

Entry Level

Involves building basic knowledge and skills and is not geared towards specific occupations

Traineeship
Study Programme
Entry level certificate
Entry level Skills for Life
Entry level Award, Certificate and Diploma
Entry level Functional Skills
Entry level Foundation Learning
English for speakers of other languages (ESOL)

Level 1

Involves activities which mostly relate to everyday situations and may be linked to job competence

GCSE (grades D-G or 1-3)
Traineeship
Study Programme
Key Skills
NVQ
Skills for Life
Foundation Diploma
BTEC Award, Certificate and Diploma
Foundation Learning
Functional Skills
OCR National

Level 2

Involves building knowledge and or skills in relation to an area of work or subject area appropriate for many job roles

GCSE (grades A*-C or 4-9)
Intermediate Apprenticeship
Key Skills
NVQ
Skills for Life
Higher Diploma
BTEC award, Certificate and Diploma
Functional Skills

Level 3

Involves obtaining detailed knowledge and skills. It is appropriate for people wishing to go to university, working on their own or in some areas, supervising others in their field of work

AS and A level
Advanced Apprenticeship
Advanced Extension Award
Cambridge International Award
International Baccalaureate
Key Skills
NVQ
Advanced Diploma
Progression Diploma
BTEC award, Certificate and Diploma
BTEC National
OCR National
Cambridge National

Level 4

Appropriate for people working in technical and professional jobs, and/or managing and developing others

HNC
Higher Level Apprenticeship
Key Skills
NVQ
BTEC Professional Award, Certificate and Diploma
Certificate of higher Education

Level 5

Appropriate for people working as higher grade technicians, professionals or managers

HND
NVQ
Higher Level Apprenticeship
Higher Diploma
BTEC Professional Award, Certificate and Diploma
HNC
Diploma of Higher Education (DipHE)
Diploma of Further Education
Foundation Degree

Level 6

Involves the achievement of high level professional knowledge and is appropriate for people working as knowledge based professionals or in professional management positions

NVQ
Higher Level Apprenticeship
BTEC Advanced Professional Award, Certificate and Diploma
Degree with Honours (BA Hons, BSc Hons)
Graduate Certificate
Graduate Diploma

Level 7

Involves the achievement of high level of professional knowledge and is appropriate for people working as knowledge based professionals or in professional management positions

BTEC Advanced Professional Award, Certificate and Diploma
Fellowship and Fellowship Diploma
Postgraduate Certificate
Postgraduate Diploma
NVQ
Degree Level Apprenticeship
BTEC Advanced Professional Award, Certificate and Diploma
Master's degree

Level 8

Involves the achievement of high level professional knowledge and is appropriate for people working as knowledge based professional management positions

NVQs
Vocational qualifications
Doctorate
Degree Level Apprenticeship
Postgraduate Certificate

Warehouse Operative

Assembly Operative

Finishing Operative

Technician

Driver

Installer

Packing Operative

Cable Jointer

Scaffolder

Wind Turbine Engineer Apprentice

Service Operative

Crane Operator

Electrician

Heat Pump Installer

Fabrication Engineer

Mechanical Engineer

Welder

CNC Machinist

Sales Manager

Marine Coordinator

Maintenance Technician

Electrical/Instrumentation Technician

Pipe Fitter

Solar Technician

Health & Safety Adviser

Production Engineer

Graphic Design Assistant

Account Manager

Rigger

Fire Safety Technician

Industrial Engineer

Operations Manager

Project Manager

Hydrologist

Marine Engineer

Civil Engineer

Renewable Energy Designer

Good to know:

Emerging roles within this sector offer exciting jobs with good salary packages. Many require a science, technology, engineering or maths base.