

Energy Technologies

The sector encompasses technologies and services across several industries including construction, energy and advanced manufacturing.

Birmingham and Solihull

Energy Technologies

Industries include:

- Construction, structural and civil engineering
- Low carbon transport including railways
- Energy generation - hydrogen and renewables including biomethane gas
- Energy storage and battery
- Advanced manufacturing - automotive, aerospace and advanced lightweight materials

Birmingham and Solihull

Energy Technologies

The construction of HS2 (high speed railway network) and the new Tyseley Energy Park and Incubation Hub will create new opportunities for local carbon technologies to be implemented and showcased.

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

Job roles include:

- Sales manager
- Quality manager
- Maintenance technician
- Operations manager
- Waste/water engineer
- Data analyst
- Project manager
- Mechanical engineer
- Electronics engineer
- Environmental manager
- Environmental consultant
- Energy engineer
- Heating and ventilation engineer

Birmingham and Solihull

Energy Technologies

There is a growing demand for:

- renewable energy technologies
- sustainable construction technologies
- technology improvements in building performance
- energy storage and batteries
- electric and autonomous vehicles

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

The University of Birmingham
is a leader in research and
development for low carbon
technologies.

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

Many roles also require qualifications in:

- Environmental sciences, environmental management and renewable energy
- Quality management, quality assurance and control
- A wide range of engineering subjects

Birmingham and Solihull

Energy Technologies

Employers are particularly looking for:

- An interest in maths, science and technology
- Analytical approach to problem solving
- Project management and scheduling skills
- Confidence in working with numbers and budgeting skills
- Teamwork, collaboration and interpersonal skills
- Technical and practical skills
- Advanced ICT and digital skills
- Health and safety awareness

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

Research Hotspots

University of Birmingham

- Birmingham Energy Innovation Centre
- Centre for Fuel Cell and Hydrogen Research
- Birmingham Centre for Railway Research

Birmingham City University

- Magnesium Innovation Group

Aston University

- Aston Institute of Materials Research

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

Local employers include:

- Air Liquide
- Aceleron
- Adelan
- Arcadis
- Arconic
- Arup
- Balfour Beatty
- Cadent
- CNG Fuels
- Eaton
- HS2
- Hydrock Integrated Project Services
- Jacobs Engineering
- Jaguar Land Rover
- Willmott Dixon
- Rolls Royce
- Severn Trent
- Systra
- Veolia
- NPower
- Turner & Townsend
- Siemens Mobility
- University of Birmingham
- Changan (UK R&D Centre)
- Deutsche Bahn (DB) Engineering & Consulting

Birmingham and Solihull

Energy Technologies

There is a growing demand for:

- lightweight materials in automotive and rail
- IT solutions that reduce traffic congestion
- skills that support manufacturing industries in reducing their environmental impacts and their carbon footprint

Birmingham and Solihull

Energy Technologies

**National
Careers
Service®**

The low carbon and green technologies sector is expected to enable clean growth and economic prosperity to the area in the coming years.

Birmingham and Solihull