Across Sheffield City Region, the low carbon and renewable sector comprises 326 companies, employing approximately 12,240 people and contributing £570 million in GVA.

Potential in this area is enhanced by expertise in advanced manufacturing where there are specific opportunities to develop new products that form part of the supply chains for sub-sectors like nuclear, wind, solar, geo-thermal and tidal power.

The total market value of the low carbon environmental goods and services sector for Sheffield City Region is estimated at £1,620 million.

Independent research published by the Centre for Low Carbon Futures suggests that Sheffield City Region, an area with a population of 1.8 million and an economy worth £26 billion a year with an energy bill of £3.4 billion a year has significant opportunities to reduce costs and create jobs and wealth.

The report calculates that the levels of investment required to realise these reductions in energy bills and carbon footprints could have wider economic benefits within the Sheffield City Region predicting that the levels of investment needed to exploit all of the cost effective and cost neutral measures with employment generating capacity would lead to the generation of 6,189 jobs over the next ten years and to GVA growth of £293 million per year.

£570 million GVA

KEY STRENGTHS

- Distinctive sub-sectors, including nuclear new build, energy management, air pollution control, recovery and recycling, waste management, carbon capture and storage, additional energy sources, alternative fuels
- Award winning Sheffield city centre district heating system
- Infrastructure for growth
- Globally renowned reputation for specialist, precision applications for steel
- Two universities with complementary roles
- Strong relationship between industry, universities and City Council
- Good local provision of vocational training courses for construction and semi/lower skilled engineering
- Advanced materials research and development
- Relationships across the city region with world-leading companies including Rolls Royce, BAE, Siemens
- Availability of incubator space
- Links to ports

TECHNOLOGY

The region is home to world class research institutions operating in the sector.

The Siemens Wind Research Centre specialises in providing the overall technology, architecture and design of onshore and offshore wind turbine generators, which provide electrical energy from wind power.

John Stewart, Site Director, SIEMENS VAI

“The support received from Creative Sheffield has been of great benefit to individuals, their families and the Siemens operation as a whole.”

COMPOSITES

The region’s Advance Manufacturing Research Centre’s (AMRC) Composite Centre is meeting the manufacturing challenges of the new generation of carbon fibre composite materials increasingly used in high-value industries for their combination of lightweight and high strength.

Research at the AMRC focuses on the production and machining of composite components, including hybrid parts which combine high performance metals and composites in a single structure. It includes core areas of research; automated production of composites, and the machining of composite and metal-composite hybrid materials.
SUPPLY CHAIN INITIATIVE ENVIRONMENTAL ANALYSIS TOOL. DESIGNED IN SHEFFIELD, USED BY INDUSTRY LEADERS.

EXPERTISE

The University of Sheffield has world leading strengths in Advanced Manufacturing Research Centre (AMRC) with Boeing, Nuclear AMRC, Logistics and Supply Chain Management (LSCM) Research Centre, Centre for Energy, Environment and Sustainability (CEES), Project Sunshine, Siemens Wind Research Centre, Sheffield Solar Farm, and Carbon Capture and Storage/Utilisation.

The University has forged many new methods, processes, techniques, models, materials, technologies and tools which are used by industry, government and society; and have proven track record in generating high impact research for societal benefit in tackling world challenges, uncertainties and efficiencies for world safety and security.

PULSE TIDAL

Pulse Tidal has taken major strides towards the development of new wave and tidal power technology. By using hydrofoils which act just like a fish or a whale tail, Pulse is able to take energy from rivers and the tides with the same efficiency.

NET COMPOSITES

Chesterfield based NetComposites is a commercial high-tech company that develops the next generation of high-strength composite materials with low environmental impact, for a range of applications including wind energy.

ITM POWER

ITM Power is working towards the development of low-cost and more efficient hydrogen fuel cells and electrolysers.

Dr Graham Cooley, CEO

"Energy storage will be critical in future energy systems and ITM Power is at the centre of this technological approach. Technical ability is key. Sheffield City Region is the engineering and manufacturing Capital of the UK; we wouldn't want to be anywhere else."

Professor Graham Honeyman, Chief Executive, SHEFFIELD FORGEMASTERS

"Sheffield has a strong history, a strong work ethic and strong global connections at its very core. Manufacturing is the region’s greatest strength and our heritage as well as breakthroughs in new markets and new technologies in advanced manufacturing differentiates the area from the rest of the world.

“The low carbon sector is of critical importance to us, both as a consumer of our products and as a means to improve our performance as responsible manufacturers. The developments being made are being supported by a skilled workforce with a wealth of expertise alongside two world leading universities and state of the art colleges.

“This educational prowess is helping to create expertise in new sectors and develop world leading techniques and processes."

Nick Tovey, Chair of Sheffield City Region LOW CARBON SECTOR group, Director WAREDELL ARMSTRONG

“Taking the lead in Sheffield City Region’s green development is the low carbon sector group (LCSG) of the Local Enterprise Partnership Board.

“The main local players in the low carbon industry – big names in their own right including DLA Piper, Sheffield Forgemasters, Tata, Veolia and E.ON – have come together with universities, consultants, legal experts and SMEs to collaborate, share knowledge, generate new initiatives and raise the profile of the low carbon economy.”
INVESTOR SUPPORT

Sheffield City Region Inward Investment team enables you to get the information to make the best decisions. Free services include:

• High quality property search, impartial and free
• Support with routes to finance
• Recruitment support, free vacancy advertising, job fair organisation, skills matching service, links to job centres, funded training, public transport liaison
• After-care support to access supply chains, the knowledge base and networks

Contact Sheffield City Region’s dedicated team on:

E: enquiries@SCRinvest.com
T: +44 (0) 114 254 1313

For the latest news and information please visit

www.SCRinvest.com

Or follow us on twitter on @SCRinvest

ENTERPRISE ZONE

The Financial Times fDi magazine rates Sheffield City Region’s Enterprise Zone the number 1 in the UK aimed at modern manufacturers. Incentives include:

• 100% Enhanced Capital Allowances up to £100 million for sites suitable for major capital investment for plant and machinery on selected sites
• Business Rate Relief on selected sites
• Simplified fast track planning
• Super-fast Broadband

DEARNE VALLEY ECO VISION

The Dearne Valley, in the heart of the region, was at one point the most polluted place in Western Europe. However, since the late 1990s, through projects like the Dearne Valley Eco Vision, we’ve worked hard to transform the Dearne Valley into one of the UK’s leading low carbon communities.

John Healey, Member of Parliament: ‘Our long term commitment to growing the low carbon economy in the Dearne makes this one of the Country’s most forward thinking business environments, and a unique place to grow your business.’