

Reducing costs, increasing efficiency: Brockhouse Group's decarbonisation success

BEAS/Decarbonisation Net Zero Programme



£36,100

Estimated annual saving[†]
(£ exc. VAT/yr)



£111,900

Estimated cost
to implement*
(£ exc. VAT)



3.4 Years

Estimated payback
period*



827,600 kWh

Estimated annual
energy saving*
(kWh/yr)



156.2 tCO₂e

Estimated annual
carbon saving*
(tCO₂e/yr)

*based upon full assessment report implementation

[†]First year saving at current contract price. Price expected to increase when current contract ends in October 2025.



A legacy of strength in manufacturing

Brockhouse Group, a long-established forging manufacturer in West Bromwich, has been producing high-quality steel components since 1885. With a global customer base spanning the automotive, defence, and rail industries, the company has the capability to produce precision-engineered forgings from 0.5kg to 140kg.

Operating in an energy-intensive sector, efficiency and sustainability are crucial for long-term success. Brockhouse sought a solution that would not only cut emissions but also improve cost competitiveness against international manufacturers with lower overheads.



“Accessing expert advice and funding support made all the difference. We’ve been able to invest in new technologies that improve efficiency and cut costs, giving us an edge in a highly competitive market.”

Steve Walters, Director, Brockhouse Group

Tackling rising energy costs and inefficiencies

With energy as Brockhouse’s third-largest expense, outdated Victorian-era buildings and traditional manufacturing methods limited efficiency gains. Despite previous improvements in heating and lighting, further reductions required substantial investment.

The company joined the Decarbonisation Net Zero Programme, which provided an energy audit, independent expert guidance, and a 50% grant to implement efficiency upgrades. This support enabled Brockhouse to identify high-impact solutions, balancing sustainability goals with financial stability.

Strategic investments deliver real savings

Brockhouse implemented four key measures to cut energy use and costs. The largest forge furnace was redesigned with improved insulation, reducing gas consumption and warm-up times. A modernised energy monitoring system now tracks gas and electricity usage across all major equipment, enabling targeted efficiency improvements. Pipework modifications and isolation valves on hammer units minimised air leakage, while linking two independent air systems allowed for a more balanced compressor load, reducing unnecessary energy use. These upgrades not only delivered immediate cost reductions but also freed up capital for further efficiency improvements, strengthening Brockhouse’s competitiveness in a global market.

Strengthening competitiveness while cutting carbon

Thanks to these targeted interventions, Brockhouse has lowered its carbon footprint and significantly reduced operational energy costs. The upgrades have positioned the company to remain competitive in an industry where energy expenses are a key differentiator.



Register today for your FREE business energy assessment

decarb@aston.ac.uk bit.ly/DNZ-Register

BEAS/Decarbonisation Net Zero Programme

Funded by UK Government

West Midlands Combined Authority

Business Growth West Midlands

Aston University BIRMINGHAM UK

Black Country Industrial Cluster

Coventry City Council

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