

Cutting energy costs and carbon emissions with data-driven efficiency measures



£70,730

Estimated annual saving*
(£ exc. VAT/yr)



£423,000

Estimated cost
to implement*
(£ exc. VAT)



10 Years

Estimated payback
period*



782,300 kWh

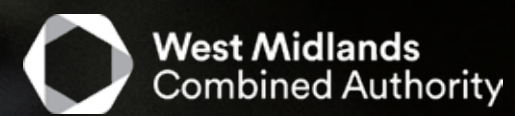
Estimated annual
energy saving
(kWh/yr)



173.9 tCO2e

Estimated annual
carbon saving
(tCO2e/yr)

BEAS/Decarbonisation Net Zero Programme



*based upon full assessment report implementation



Precision engineering with a sustainable vision

Brockmoor Foundry, based in the West Midlands, is a leading supplier of high-tolerance castings for the automotive and industrial sectors. With an annual output of 22,000 tonnes, the company has built a reputation for quality and precision. As energy costs surged, the foundry recognised the need for strategic energy management to maintain its competitive edge while committing to sustainability.



“The energy assessment confirmed our priorities and helped us implement changes that will benefit both our business and the environment. The grant application was straightforward, and the results speak for themselves. We would absolutely recommend this approach to other manufacturers looking to cut energy costs”

Steven Smith, Energy Manager, Brockmoor Foundry

Tackling rising energy costs head-on

Mounting operational costs required the business to rethink its energy consumption strategy. The challenge was clear: reduce costs, improve efficiency, and lower the company's carbon footprint without compromising production output or quality.

Seeking expert guidance, Brockmoor Foundry connected with Aston University's energy evaluation programme and collaborated with Pro Enviro for a comprehensive audit. The assessment pinpointed key inefficiencies and outlined an actionable strategy, including:

- **Smart Metering Expansion:**
Installation of over 30 energy meters to monitor real-time electricity usage across high-consumption equipment.
- **Equipment Optimisation:**
Implementation of automated shutdown processes to prevent unnecessary energy consumption outside production hours.
- **Targeted Upgrades:**
Replacement of outdated motors, compressors, and lighting with modern, energy-efficient alternatives. Installation of a new solar PV array
- **AI-Driven Efficiency:**
Partnering with universities to explore artificial intelligence applications for optimising furnace operations and energy distribution.

Forging a more efficient and sustainable future

Brockmoor Foundry is set to achieve a 15% reduction in its carbon footprint - meeting its 2026 target ahead of schedule. The improvements are projected to save over 100 tonnes of carbon emissions annually. The foundry now has a structured framework for ongoing energy management, allowing for continued efficiency gains.



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

OWMG
THE UNIVERSITY OF WARWICK