



CASE STUDY

Heat Treatment 2000
West Bromwich

SITUATION

Heat Treatment 2000, an industrial company in West Bromwich, partnered with Volt-Age for a renewable energy solution to combat rising electricity costs and reduce their carbon footprint.

SOLUTIONS

- System Installed: A 93.5 kW Solar PV system comprising 170 JA Solar 550W panels and Solis S5 String Inverters.
- Performance: Generates approximately 83,309 kWh/year, offsetting 4% of the site's annual energy consumption and saving over £543,000 in electricity costs across the system's lifespan.
- Environmental Impact: Reduction of 21 tons of CO₂ annually– equivalent to planting nearly 4,000 trees or avoiding 445 long-haul flights over the system's lifetime.

BENEFITS

- Improved energy efficiency and reduced dependency on the grid.
- Significant long-term financial savings despite the initial investment
- Contribution to sustainability goals with a clean energy solution.

Payback Period: 4 years, 8 months

CHALLENGES

DNO Approval Process:

The project size, at 93.5 kW of installed capacity, was kept below the critical 95 kW threshold to avoid triggering the "Statement of Works" submission to the National Grid. This avoided additional 12-week approval timelines and potential restrictions but required careful planning to ensure the system would still meet client needs while remaining compliant.

Client Utility Independence Expectations:

The system's estimated annual generation of 83,309 kWh provides only 4% independence from grid electricity. Managing client expectations about the energy cost savings and performance, especially given the high annual consumption of 1.9 million kWh, required clear communication to avoid potential dissatisfaction.