

FERRYHILL COMMUNITY SPORT & SOCIAL CLUB CASE STUDY

PROJECT OVERVIEW

Ferryhill Community Sport & Social Club is a community sports and social club in Ferryhill, County Durham. To reduce the running costs of its club and facilities, it partnered with DES Renewable Energy to install a rooftop solar PV system with battery storage and EV charging that generates clean electricity onsite, lowers energy bills, and supports its long-term sustainability goals.

Ferryhill Community Sport & Social Club commissioned DES Renewable Energy to install a 38.61 kWp solar PV system across its roof. The installation comprised 66 x 585W Astronergy Astro N5 panels connected to a Solax X3-ULT 25kW inverter, paired with Solax HS36 battery storage and two 22kW Solax EV chargers. The project aimed to reduce electricity costs, lower carbon emissions, and enhance long-term financial sustainability.

PROJECT DETAILS

Company Name: Ferryhill Community Sport & Social Club

Location: 7 North Street, Ferryhill, DL17 8HX

Solar System Capacity: 38.61 kWp

Estimated Annual Generation: 31,787 kWh

Installation Type: Pitched (slate) and flat roof

solar panels with battery storage & EV charging

Project Timeline: Delivered 2025, from survey to commissioning



OBJECTIVES

Reduce electricity costs

Reduce electricity costs and
dependence on grid energy

Improve environmental
sustainability by reducing carbon
footprint

Achieve long-term operational
savings and financial returns

Demonstrate responsible energy
practices to members, visitors and
the local community



+44 1202 985888



www.desrenewables.com



info@desrenewables.com

BESPOKE ASSESSMENT AND DESIGN

INITIAL ASSESSMENT

DES Renewable Energy conducted a comprehensive assessment of roof space, structural considerations, sun exposure, and interlocking constraints. This ensured optimal placement and system sizing to maximise energy production and long-term reliability.

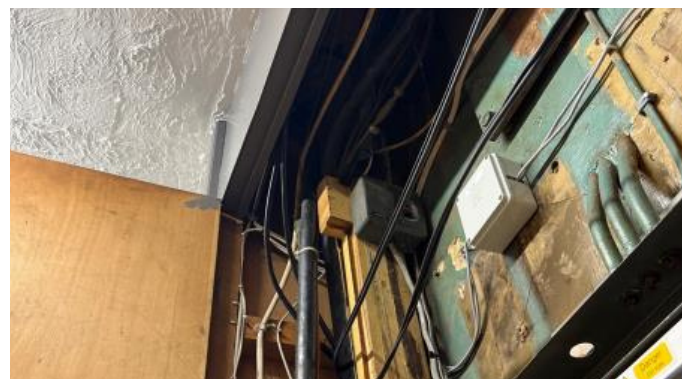
PERMITTING AND APPROVALS

DES Renewable Energy ensured compliance with building regulations, electrical standards, and industry best practices. All necessary permits and approvals were obtained to guarantee a fully compliant and safe installation.



SYSTEM DESIGN

The system was designed with 66 x 585W Astronergy Astro N5 panels across the slate and flat roof areas. Power conversion is handled by a Solax X3-ULT 25kW inverter, paired with Solax HS36 battery storage to maximise self-consumption, plus two 22kW Solax EV chargers. The system integrates with the site's existing electrical infrastructure for efficient energy management.



INSTALLATION AND COMPLETION

INSTALLATION AND COMMISSIONING

The installation was carried out with minimal disruption to the day-to-day site operations. Panels were securely mounted, connected to the inverter, and integrated with the existing electrical system. Comprehensive testing and commissioning verified the system's performance, functionality, and safety.

WHERE DES RENEWABLE ENERGY ADDS VALUE:

From initial assessment to completed commissioning, DES Renewable Energy provides a turnkey solution that ensures optimal energy generation, regulatory compliance, and sustainable operational savings.



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AT A GLANCE

- 66 x 585W Astronergy Astro N5 panels on slate and flat roofs
- 38.61 kWp total system capacity
- Solax X3-ULT 25kW inverter with Solax HS36 battery storage
- 2 x 22kW Solax EV chargers installed on site
- 31,787 kWh of clean energy generated per year
- Reduced electricity costs and carbon footprint



BENEFITS

Energy Cost Reduction: Lower electricity bills and reduced reliance on grid energy

Environmental Impact: Around 31,787 kWh of clean energy each year, saving an estimated 6.6 tonnes of CO₂ annually and supporting sustainability goals

Financial Returns: Savings on energy costs contribute to long-term financial sustainability

Public Image: Demonstrates responsible energy practices to members, visitors and the local community



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OUR ACCREDITATIONS

We are MCS Certified which guarantees that our installations have been designed, installed, and commissioned to the highest standard using only MCS certified products.

We are also NAPIT Certified which confirms that we are certified to install and self-certify all of our electrical installations. We also comply with the Renewable Energy Consumer Code (RECC).



Electrical Safety
Register