



Reducing Energy Costs for Community Spaces: **The Whitlingham Solar Case Study**

Situation

At Whitlingham Country Park near Norwich, the Whitlingham Charitable Trust operates a busy visitor and community facility with year-round energy demand. There is a huge amount of energy required to run a successful café business, not to mention heating an 18th century flint barn through colder months. The client wanted to:

- Reduce long-term electricity costs
- Improve environmental performance
- Demonstrate visible commitment to sustainability
- Protect funds for community use rather than energy bills

Solution

Barrington Solar designed and installed a **48.96 kWp** solar PV system, tailored to the building's energy profile and usage patterns. The system was designed to:

- Maximise on-site energy use during the daytime
- Provide strong long-term financial returns
- Integrate seamlessly with the existing building
- Require minimal ongoing maintenance

Impact



- Annual Generation: 43,500 kWh
- CO₂ Savings: 9,000 kg per year (equivalent to planting over 400 trees)
- Payback Period: 4 years
- First-Year Savings: £15,000
- Projected ROI (IRR): 26.8%

Outcome and Feedback

Since installation, the Trust has been able to significantly reduce electricity bills. redirect savings into community and environmental initiatives, lower carbon emissions and improve sustainability credentials. Plus, they have been able to show leadership as an environmentally responsible organisation.

“Investing in a significant solar array at Whitlingham Country Park posed many challenges and the Barrington team were superb at every turn to guide the project. Our ground array was installed in a timely and professional manner, with full guidance throughout, and has been generating well even during winter. We are delighted with the overall result and it represents a major asset towards improving the park's sustainability in line with the Trust's environmental aims.” - Whitlingham Charitable Trust

