

Northumberland Solar-Powered Community Buildings Project

RCEF Stage: 2



The Story

Village halls and community buildings in rural Northumberland need to reduce their emissions and energy costs at the same time as becoming more resilient to extreme weather conditions. Alone, some buildings will be able to install renewables but collectively, much more is achievable. Stage 1 feasibility looked at the potential installation of solar panels and associated battery storage at 19 community buildings. Stage 2, due for completion in February 2023, is refining plans for these buildings and looking at an additional 10 buildings too. Stage 2 will develop a smart building management system specifically for village halls and will establish a Community Power Co-operative to raise the investment, install and manage all equipment. This will enable other community owned and managed buildings to join in the future. The project has been developed by Community Action Northumberland (CAN) in association with the Rural Design Centre Innovation Project (RDC) and the National Innovation Centre for Rural Enterprise (NICRE) with support from The National Lottery Community Fund.

Challenges & Risks

As the feasibility has progressed, energy costs have risen and power cuts caused by storms Arwen and Malik have emphasised the fragility of grid connections. This has significantly increased the number of buildings keen to join the project. The proposed Co-operative, due to launch in October 2022, will aim to provide a vehicle for many more community assets to join the project, saving carbon and money for all and retaining net income locally.

Lessons Learned

Events outside of our control have significantly increased interest in the project. It is important for projects to think in advance about how increased interest will be effectively managed and controlled. Our model has always been predicated on the ability to support additional community buildings if and when they wish to join the project. This is paying dividends.

Key Facts

19	Initial community buildings included
25	Additional community buildings wishing to participate
141,000	kWh electricity generation per annum
15	Estimated payback period in years

Key Figures

Capital cost	Estimated at £395,000
Carbon reduction	30,000 kgCO ₂ e
Battery capacity	150 kWh
No. solar panels	540
RCEF grant	Stage 1: £32,800 Stage 2: £94,060

Further Notes

LEP Area: North East

Link for further info:

[Solar-powered village halls project – call for consultants | News | Community Action Northumberland \(ca-north.org.uk\)](#)