



Solar Village Hall

Brief for Renewable Energy Consultants for Detailed Surveys for PV / battery Systems

Overview

Community Action Northumberland (CAN) has received funding from the Rural Community Energy Fund (RCEF) for phase two work to install PV and battery systems for village halls and community buildings across Northumberland.

The project team is now looking for experts to progress the work, to include detailed roof surveys, draw up plans ready for planning applications (where needed) to be submitted, provide costed proposals for each building, and to widen the number of community buildings included.

This Project is supported by the BEIS funded Rural Community Energy Fund which is managed by the North East Yorkshire and Humber Energy Hub and administered by Tees Valley Combined Authority.

Background

The first phase of RCEF funding, with additional project costs from NICRE, was completed in January 2022, and included:

- High level feasibility studies investigating the viability of PV and battery storage for 19 community buildings
- Individual reports for each building, including recommended technology type, potential supplier, cost of installation and maintenance, potential carbon savings and financial pay-back time
- A summary spreadsheet for all buildings, showing headline costs, carbon savings and financial pay back time
- Initial research for the process of setting up a Northumberland-wide, community benefit energy co-operative to aggregate the generation of PV from all buildings, and manage the financial, approvals and governance requirements to trade energy for maximum community benefit
- A detailed financial model, using data from the 19 buildings, to establish scope required for a viable project
- Engagement with a wider group of community buildings, interested in joining the project.

Attached to this brief is the summary spreadsheet for all buildings, an example of one report provided to a building, a summary presentation for developing the delivery vehicle, and an report on the carbon and financial savings. Also attached is a list of the buildings included in phase 1.

Requirements and Deliverables

Phase two of the project is running from May 2022 until February 2023, and will progress the project to a state ready for delivery and installation of renewable energy systems across the community buildings, as well as the set up of the energy co-operative.

The project is split into specific areas:

- Detailed roof-top surveys (this brief)
- Completion and submission of planning applications for all of the buildings
- Set up of the energy co-operative
- Development (with Newcastle and Northumbria Universities) of an energy management system to maximize the potential from the generated power.

This brief is for the completion of the detailed building surveys.

There are 19 buildings, including village halls, parish churches and sports halls, across Northumberland that have been included in phase 1 and have high level feasibility studies completed.

This phase will take those to the final stages, ready for completing and submitting planning application forms (where needed), grid connection applications (where needed) and a fully costed PV scheme provided for each building.

The reports should include, as a minimum:

- All technical drawings required
- Detail of the make, model and size of PV array to be installed
- Detail of the make, model and size of battery storage system to be installed
- Preferred suppliers and installers of the systems
- Cost of purchase (or financial details of leasing schemes), installation and on-going maintenance of the system
- Seasonal minimum and maximum expectations for energy generation for the building
- Confirmation on whether planning permission is required*
- Confirmation on whether grid connection application is required

The organisation completing this work will work alongside Newcastle University to ensure that the Energy Management System being developed will integrate seamlessly, and will be able to pull the data required. This will be facilitated by the project team via CAN.

Additionally, there are 17 further buildings who are interested in joining the project, but who have not completed the phase 1, high level feasibility study. The project would like to progress as many of these as budget allows to the same stage as the original 19 buildings.



*the process for churches is different, and Diocese approval is required, through a separate system. This still requires all technical details, drawings, impact and details of the PV array recommended.

Budget

To maximize the effective use of funds, please provide:

- a day rate to complete this work
- an estimation of the time taken per building to complete the work, including providing the final report

It is essential that a minimum of 19 buildings are progressed to a stage of readiness to procure and install renewable systems.

We would like to understand how many additional buildings can be progressed, preferably with detailed roof-top surveys etc to come in line with the original 19.

Timeline

Element	Date
Brief issued	20 April
Closing date for response to brief	18 May
Consultant appointed	23 May
Building Surveys Start	31 May
Building Surveys Complete	31 August
All reports submitted	1 September

Project Team

The project is being led by Community Action Northumberland, in conjunction with the Rural Design Centre and the National Innovation Centre for Rural Enterprise, with support from Newcastle University. The consultancies Urban Foresight and Aquatera have been integral in getting the project to this stage.

Questions and Clarifications

Please email any questions to liz.gray@ruraldesigncentre.com and andydean@ca-north.org.uk.

The project team would also be happy to arrange video call for further questions or discussions if required.

Attached Documents

- List of community buildings
- Overview of Phase 1 feasibility
- Example of individual building report
- Aquatera overview document
- Urban Foresight Summary Presentation

