



Community Action Northumberland

Request for Technical Study – Opportunities for Aggregated Energy Generation, Management and Storage for Rural Northumberland

Background

Community Action Northumberland (CAN) is delivering a report on behalf of communities across Northumberland to increase renewable energy generation and manage the energy more effectively.

CAN is now seeking a consultant to complete a study to demonstrate the challenges and opportunities for energy storage and grid management services.

This study will feed into the wider project, which is investigating the requirements for the development of a regional, community-focused, energy company. The purpose of this delivery vehicle will be to make easier the process of installing and benefitting from renewable energy generation for individual communities. In parallel, feasibility studies are being completed to assess the viability of installing renewable energy generation, management and storage on community buildings in rural locations, as well as within a village community, and across a caravan park.

The project is being funded by the Rural Community Energy Fund (RCEF), administered by the North East Local Economic Partnership. More information can be found here <https://teesvalley-ca.gov.uk/business/key-sectors/energy-and-renewable/rural-community-energy-fund/>

The project will be managed by CAN, with facilitation from the Rural Design Centre (RDC).

Community Action Northumberland (CAN) supports and sustains rural communities across Northumberland by promoting and tackling rural community issues, empowering local organisations and supporting individuals. CAN works with a wide range of partners to share resource and knowledge to achieve the best results for rural Northumberland communities. <http://www.ca-north.org.uk/>

Rural Design Centre (RDC) works with people and organisations who are passionate about the places they live and work. RDC helps to create new ideas and turn them into solutions. www.ruraldesigncentre.com

Objectives

The project requires additional information relating to existing and planned grid services and energy arbitrage. This information will feed into the wider project seeking to decarbonize the grid and provide community benefit for dispersed rural communities across Northumberland.

The project team has completed initial workshops working to define what energy storage and management solutions could look like, but we are seeking ideas, options and to learn from best practice and develop innovation. We would welcome ideas over and above the objectives and delivery requirements here and would be keen to work with you to input into the development of the project.

The project is working with the village of Beadnell (post code NE67 5AN) as a hub for renewable energy generation (among other locations).

The energy storage element is seeking to aggregate energy generated from PV installed on up to 20 domestic rooves, one community building and across a number of static caravans within the village. We need to understand what this system would look like, and how to deliver it.

Deliverable Outcomes

We anticipate this being a high-level briefing document but would welcome ideas on the best presentation of the information.

The document should cover:

- Physical infrastructure required for aggregated energy generation
- Suppliers of energy storage systems, such as 2nd life electric vehicle batteries
- Technical specifications for energy storage units
- Potential visual impacts
- Potential planning impacts
- Potential grid connectivity impacts (including assumption of different levels of energy generation)
- Physical infrastructure required for energy storage systems
- Factors affecting site selection for the system
- Factors affecting efficiency of the systems
- Analysis of energy management systems
- Key challenges to be aware of

Timeline

Procurement Advertised	10 May
Questions and Clarifications from Consultant	11-25 th May
Bid submitted to CAN	4 th June
Questions and Clarifications	4 – 9 th June
Contract Awarded	16 th June
Kick off Meeting	w/c 21 ^h June
Information Delivered	2 nd August

The project team will be available for communication throughout the project.

Budget

The budget for this project is a maximum of £1,800.



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Responses

All questions and requests for clarification should be emailed to andydean@ca-north.org.uk by 25th May.

The project team would be happy to discuss the brief in more detail before the bid is submitted. Please email andydean@ca-north.org.uk to request this.

Responses should be submitted electronically by 5pm 4th June on to andydean@ca-north.org.uk

Responses should include, but not be limited to:

- Your approach to delivering the project
- The team, including the main contact, who will deliver the project
- Examples of previous relevant work
- The budget required
- Confirmation of the timescale for delivery
- Outputs to be delivered

Evaluation Criteria

The response will be assessed by the project team and an independent energy consultant.

Understanding of the brief	10%
Quality of the approach to be taken	40%
Innovation	5%
Relevant experience	10%
Cost	35%

Questions and Contacts

All questions should be submitted by email to andydean@ca-north.org.uk