



Community Action Northumberland

## **Request for Technical Consultancy – Feasibility of Developing a Virtual Power Plant and Energy System for Rural Northumberland**

### **Background**

Community Action Northumberland (CAN) is delivering a report on behalf of communities across Northumberland who are seeking to install renewable energy generation and storage solutions. Technical feasibility studies are being completed to understand the potential and viability of the installation of PV on community buildings, residential properties within a rural village and a caravan park, with energy storage options.

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/>

CAN is now seeking a consultant to complete technical feasibility studies into the viability of developing a community owned integrated energy system to deliver this and future work. This delivery vehicle will enable the aggregation of assets across a wide geographic area, for maximum community benefit. It will also make it easier for more rural communities and community buildings to benefit from an integrated system and remove the barriers to installing renewable energy solutions.

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](http://www.ruraldesigncentre.com)

### **Objectives**

The project team has completed initial workshops working to define what 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 system.

The region covered is Northumberland, with all focus on rural communities. The wider RCEF feasibility study managed by CAN includes engaged communities from across the region, including a hub in Beadnell. The wider project has brought communities together who would be unable to install renewable energy technologies and energy storage solutions on their own, due to the resource constraints and complexities.

To maximize the benefits to communities, and simplify the process of moving to a clean, cost effective energy system, one regional vehicle to manage the process is desired. This would aggregate the energy generated across the whole region and distribute it in the most efficient manner, with maximum financial benefit to the communities.

The project team would like to develop a road map to establishing an integrated energy system for communities across Northumberland. This should cover the critical path to delivery, including:

- Technical requirements
- Physical infrastructure requirements
- Grid service and energy arbitrage options
- Planning and consent requirements
- Legal agreements required
- Assessment of financial management options
- Governance and on-going management of the delivery vehicle
- Assessment of the potential benefits, to individual communities and the wider region
- Case studies and analysis of existing schemes
- Stakeholder engagement requirements, including key stakeholders required for delivery
- Costs associated with the set up of the system

### **Deliverable Outcomes**

The key deliverable should be a report assessing the possible routes to delivering a virtual power plant for rural Northumberland.

This should cover all of the key challenges and take learnings from other projects looking to develop similar schemes, as well as suggesting innovative solutions.

Ideally a tool kit or “how-to” guide will be developed to provide practical steps for each challenge.

The report should be supported by a workshop style virtual presentation from the consultant to the key stakeholder team, including CAN and RDC.

The report should also assess the viability of setting up a scheme in Northumberland, and identify the key stakeholders required to deliver such as scheme.

### **Further Information**

The project team will provide the consultant with all relevant information held with regards to renewable energy generation in rural areas being investigated and know schemes that have been delivered. The team will also share outputs from completed workshops, and the case studies and research that has already been completed.

The project team has good links into the communities and would be keen to be involved in designing and developing the system with input from the community. We would be able to facilitate workshops or complete market research to support this.

## Timeline

Procurement Advertised	10 May
Questions and Clarifications from Consultant	11-25 <sup>th</sup> May
Bid submitted to CAN	4 <sup>th</sup> June
Questions and Clarifications	5– 11 <sup>th</sup> June
Contract Awarded	16 <sup>th</sup> June
Kick off Meeting	w/c 21 <sup>th</sup> June
Interim Update	w/c 19 <sup>th</sup> July
Presentation / Workshop	w/c 23 <sup>rd</sup> August
Final Report Delivered	20 <sup>th</sup> September

It is anticipated that regular update meetings will take place through the feasibility period.

## Budget

The maximum budget for this project is £18,000.

## Responses

All questions and requests for clarification should be emailed to [andydean@ca-north.org.uk](mailto:andydean@ca-north.org.uk) by 25<sup>th</sup> 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](mailto:andydean@ca-north.org.uk) to request this.

Responses should be submitted electronically by 5pm 4<sup>th</sup> 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
- A breakdown of 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	50%
Innovation	5%
Relevant experience	10%
Cost	25%



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## Questions and Contacts

All questions should be submitted by email to [andydean@ca-north.org.uk](mailto:andydean@ca-north.org.uk)