

**Draft Brief – Dated 31<sup>st</sup> May 2024 – To University of Central Lancashire (UCLan).**

**Project Title - A collaboration of residents and business transitioning from carbon to green energy together.**

**Project Aim**

The project aim is to evaluate the community social, environmental and economic benefits of the proposed Asland Walks Energy Park to the community as a whole.

This work will utilise previously conducted community research carried out, current policies, legal documents, and other relevant information. The study will review the proposed Asland Walks Energy Park by assessing and identifying from the community, the social, environmental and economic impacts (both benefits and disbenefits) on the Bretherton community, (being all those that live, work and visit Bretherton).

This research will result in the provision of a report identifying the community impacts to Bretherton, with the project aim ultimately achieved through detailed answers to the three key objectives below;

1. To work closely with all stakeholders, (particularly Bretherton Parish Council, Bretherton Energy Working Group, Energy Local, GA and Bretherton residents) to identify/evaluate potential community benefits. Interest and the understanding on what are proposed and how it would work, this will be achieved by carrying three focus groups
2. To facilitate decision making within the community on how to manage and utilise any surplus allocated electricity. This will be achieved by working in consultation with the Bretherton Energy Working Group and residents
3. To determine the social, environmental and economic impacts of the proposed Asland Walks Energy Park to the community in line with current planning policy.

**Project Purpose**

To inform identified stakeholders on the public impacts of generating renewable electrical energy locally. Working in collaboration with GA Pet Food Partners (GA) on the development and operation of the Asland Walks Energy Park. The outcome of the study will be distributed, via the Bretherton Energy Partnership, to Bretherton residents, organisations, and businesses, as well as GA.

**Bretherton Energy Partnership.**

The proposed ways of working are defined in Appendix 1 attached, being the Declaration of Understanding agreed with Bretherton Parish Council, which briefly states:

- i) GA will own and operate Asland Walks Energy Park.
- ii) 5% of the electricity generated will be provided at no cost via a 11kW electrical supply to the existing Bretherton Electrical Network, for Bretherton Energy Partnership to sell to residents and businesses.
- iii) Any surplus electrical energy unable to be used by residents will be sold to the Grid, or at an equivalent price to GA. This provides for the default position, if the direct use by residents is not possible.

## **Introduction**

GA and Bretherton Energy Partnership require an academic research study to assess the social, environmental and economic impacts to the community that may arise from the proposed Asland Walks Energy Park.

Bretherton Energy Partnership, is a collaboration of residents and business seeking to transition from carbon-based energy to carbon free generated locally from the sun and the wind.

The Asland Walks Energy Park proposes the installation of 13 MW of solar array and a 4.2 MW wind turbine, together with on-site battery storage. This renewably sourced electrical energy would be used both by Bretherton and GA to mutually decarbonise, their electrical power consumption, and provide a cheap source of electrical power to encourage the transition away from carbon-based heat sources.

Comprehensive generation and energy demand studies have determined the size of the wind turbine and solar array that is feasible, together with 5 MWH of Battery Energy storage being sized appropriately to satisfy user demand, requiring minimal export. In other words, the generation site is designed solely to meet the needs of GA and Bretherton, and not to generate surplus for sale. This is a self-generation and self-using scheme.

The research study should include local stakeholders such as the Bretherton Energy partnership, Bretherton residents (and local community groups where possible) and the Bretherton Parish Council, and GA.

The planned research focuses on the community benefits, this is through developing relationships with stakeholders.

Conducting primary research within the local community of Bretherton, to include understanding the proposed generation, resident usage and reporting of findings, in order to fulfil the three objectives.

This research throughout the study is to be primarily focused upon the social and environmental benefits to the community. With secondary consideration made to indirect benefits from the proposed generation, storage and utilisation of the carbon free electricity. It is important that the report does not focus on personal benefits to individuals (see legal advice), as only public community benefits and renewable energy benefits should be considered.

## Scope of Research

The research will sit within the Centre for Waste Management and will be supported by staff from **the** wider university. GA and Bretherton do require the community, social and environmental aspect of the research to be prominent and therefore require a community-based team member to develop the community understanding.

The main driver for this project is the need for a local community and industry to decarbonise in order to reduce their environmental impacts. Also to secure a resilient, local and stable renewable energy source against the volatile, fossil fuel dominated and unstable energy supply. This project allows for a sustainable and secure future, reducing carbon footprints mutually, providing this for both Bretherton and GA.

## Considered Literature and outline benefits

1. Department of Levelling Up, Housing and Communities - National Planning Policy Framework
2. BEIS – Community Engagement and Benefits from Onshore Wind Developments Good Practice Guidance for England
3. Ashton Hayes work and website with various useful documents;  
<https://www.goingcarbonneutral.co.uk/>
4. 'Advice – GA Pet Food Partners\_PTKC' Paul G Tucker KC Legal document
5. 'Advice – GA Pet Food Partners\_CEB' Constanze Bell Legal document
6. GA Environmental Pledges
7. Bretherton survey results and feedback
8. Neighbourhood Plan Thematic Policies

## Project Stage One

### Community and Stakeholder Engagement Research

1. Focus on objective one; to identify community interest and understanding on what is proposed and how it would work, this being based on the proposed scheme described in the project introduction, working on a shared generation and battery usage approach.
2. Identification and collation of local stakeholders for example current energy suppliers, local community, and local businesses, building on initial survey

results in 2023. This will include Bretherton Parish Council and Energy Local, with Energy Local who operate community energy schemes across the UK.

3. Community stakeholder engagement to gain insight, options and opinions, review of previous survey results conducted, which will provide information for all four objectives.
  - a. Community stakeholder engagement, consultation and review of previous surveys
  - b. The community would wish to avoid a further questionnaire as residents have already completed three of these over the past 4 years or so, therefore these results should be used along with public consultation events through open community sessions
  - c. Comments and data to be assessed
4. To outline resident expectations and identify concerns in order for appropriate mitigation to be proposed, allowing for evaluation output to inform project stage two.

### **Project Stage Two - Research of Proposed Asland Walks project and the community benefits**

1. Understanding of proposed generation, battery storage and network distribution data provided from GA and survey result information (technical aspects on this is completed by others)
2. Independently evaluate the governance and the financial management of the proposed community scheme, working with the appropriate stakeholders and residents, with focus on how it would work, be managed and operate.
3. Working in partnership with the stakeholders (Primarily the Energy Club) to propose a number of cost model scenarios in order for residents to: (1) engage with the benefits, (2) sustain the energy partnership and (3) to maximise the carbon free energy benefits on the proposed generation and storage scheme.
  - a. This would be achieved through focus groups where the following would be determined.: Residents wants for example; lower bills, increased profits for community projects etc.
  - b. Club structure and operation which benefits the community and the scheme.
  - c. Community barriers and enablers to joining e the energy club.
4. Consideration of the social, environmental and economic impacts of the proposed Asland Walk generation and storage through the following;
  - a. Review of current planning policy and other provided documentation, as well as UCLAN own literature research of associated policy and similar UK plans and examples.

- b. Evaluate indirect community economic impacts (i.e. not the '5%') can be used within the study, however the direct benefits (i.e. the '5%') to the renewable electricity cannot be used, as this is not a material consideration within the planning process.
5. Determination and detailing of social, environmental and economic impacts, these would include but not limited to;
  - a. The access and provision of decarbonized electrical power.
  - b. The incentive to transition to decarbonised power.
  - c. Locally and economically sourced, without the need for large infrastructure
  - d. Decentralised power generation.
  - e. Residents and Business working as a community
  - f. Other researched and identified impacts, both benefits and disbenefits
6. To assess the default position, if ENWL do not authorise the use of their 11kV volt grid, (and during initial establishment of the proposal before the Bretherton electrical feed to residents can be constructed), being the sale of the surplus electrical energy to the grid or GA.

Undertake a comparative analysis to assess the impacts/benefits of the direct use of electrical power, as opposed to the default position, being sale to the grid or GA.

#### **Project Stage Four**

1. Presentation of results to stakeholders demonstrating findings of three previous stages of research.
2. Monthly meetings with GA
3. Wider stakeholder update meeting halfway through the study
4. Compilation of research and review work into one report.
5. Draft report sent for review.
6. Final report submission.

#### **Further GA comments and requirements;**

- This study is about the community benefits and disbenefits to residents and GA, and should residents work together with business or not?
- That is what the study that needs to answer, based on the proposed Asland Walks generation, storage and utilization method set out, the technical review of this is not required, but only the outline of this to share with the residents for their understanding.

- UCLan as an impartial party can provide this through sharing of what renewable, storage and usage mechanism is proposed, we want to focus on this, as technical input from others has provided this the planned scheme.
- The purpose of the report is ultimately "Do the social, environmental and indirect economic benefits of the Bretherton Energy Partnership proposal (without the direct financial community benefits i.e. 5%) outweigh, the disbenefits of the scheme".
- These above points lead to the need for this study to be socially and environmental based, with some economic requirement, and a lesser technical engineering requirement (only outlining a brief of the proposed renewable plans), therefore academic specialism needs to be selected on this basis
- Regular update meetings – monthly