



Asland Walks Energy Park Community Research Project

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School of Engineering and Computing
University of Central Lancashire

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Foreword

The current UK energy climate has a high dependency on fossil fuels for energy production. We are now at a turning point when we will start to see the role fossil fuels play start to diminish. We are entering a period of time where UK wind, solar and hydropower account for 37% of total energy generation and often surpasses fossil fuels at 35% of the UK's overall energy generation. The current government has set a target for a UK clean power system to be in place by 2030. They have actioned changes to support this push for more green energy.

As communities around the world seek sustainable and resilient energy solutions, partnerships between local stakeholders and businesses are key for change. This report reviews the development and impact of a landmark collaboration between Bretherton Village Community and GAPFs. To establish a commercial wind and solar farm which has direct community benefits. It has the potential once built to act as a testament to what is possible when shared values of: (i) sustainability, (ii) innovation, and (iii) community benefit combine to support collective action on climate change. This local project improves energy security by providing a model for local energy independence. By generating clean, renewable energy it will not only supports the power needs of the business's operations but also allowing to benefit from local renewable energy and ensuring a greener future. Beyond the environmental benefits of generating green energy there is the opportunity to deliver significant community and socio-economic benefits.

This report captures the community engagement in terms of their thoughts and ideas on what this opportunity offers to the locals. It looks at how other local groups have developed their system and what role each of the shareholders will play. It also provides a roadmap for other communities and businesses interested in pursuing similar initiatives. It is inevitable that community energy schemes like the Asland Walks Energy Park will continue to grow in number across the UK, funded by both private enterprises and community interests.

We hope that this story inspires everyone involved to see the potential in business-community partnerships to create a more sustainable and green future.



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Contents page

Foreword	3
Contents page	5
Table of Figures.....	6
Abbreviations.....	7
Executive Summary	8
Introduction.....	15
Section One: Background and Key Stakeholder Engagement	16
i. 6.1 Questionnaire Review	16
ii. 6.2 Methodology	16
iii. 6.3 Documentation Review	17
iv. 6.4 Methodology	17
v. 6.5 Interviews with Stakeholders.....	17
6.5.1 Methodology.....	18
vi. 6.6 Results	18
6.6.1 Questionnaire	18
6.6.2 Literature and Document Review.....	18
6.6.3 County Planning Documentation.....	21
6.6.4 Central Lancashire Local Plan 2023 – 2041.....	22
6.6.5 Central Lancashire Local Plan December 2022 Regulation 18 Consultation ...	23
6.6.6 Stakeholder Engagement Interviews: Section One	25
6.6.7 Energy Local – 4 December 2024	26
6.6.8 Electricity North-West – 10 January 2025.....	26
6.6.9 Bretherton Parish Council – 3 February 2025	27
6.6.10 Chorley Borough Council – 12 February 2025	28
6.6.11 GAPF – 11 March 2025	28
6.6.12 Bretherton Energy Group (BEG) – 11 March 2025	29
Section Two: Engagement and Focus Groups.....	31
7.1.1 Focus Groups.....	31
7.1.2 Methodology and Focus Group Design	32
vii. 7.2 Results of Focus Groups.....	34
7.2.1 Focus Group One: 4 November 2024	35
7.2.2 Focus Group Two 22 January 2025.....	39

7.2.3	Focus Group 3 15th March 2025.....	47
	Section Three: Overview of Community Benefits and Impacts	54
	Recommendations	61
viii.	8.1 Potential Community Energy Scenarios for AWEP	62
8.1.1	Scenario 1 – Direct Renewable Energy Provided and Financial Support.....	63
8.1.2	Scenario 2 – Finance Support Only	63
8.1.3	Scenario 3 – Subsidized Energy Scheme	64
	Potential Community Energy if Scheme’s Planning is Rejected	64
9.1.1	Explore Alternative Options:.....	64
9.1.2	Re-Engage with Local Authorities and Stakeholders:.....	65
	Likely Outcome.....	66

1 Table of Figures

Figure 1: The Parish of Bretherton 2025 Showing GAPF on the left of the image.....	8
Figure 2: Proposed location of AWEP.....	9
Figure 3 2025 layout of AWEP.	11
Figure 4: Word cloud of Focus Group 1 Comments	36
Figure 5: Focus Group One Question One Comments.....	37
Figure 6: Focus Group One Question Two Comments	38
Figure 7: Focus Group One Question Three Comments	39
Figure 8: Prof. Karl Williams facilitating the focus group with Bretherton Residents (November 2024)	40
Figure 9: Focus Group 2 Word cloud of comments.....	41
Figure 10: Focus Group Two Question One Comments.....	42
Figure 11: Focus Group Two Question Two Comments	44
Figure 12: Focus Group Two Question Three Comments	45
Figure 13: Focus Group Two Question Four Comments	46
Figure 14: Focus Group 3 Word cloud of comments.....	47
Figure 15: Focus Group Three Question One Comments	48
Figure 16: Focus Group Three Question Two Comments	49
Figure 17: Focus Group Three Question Three Comments.....	50
Figure 18: Focus Group Three Question Four Comments.....	51
Figure 19: Focus Group Three Question Five Comments	52
Figure 20: Focus group Three Question Six Comments	53
Figure 22: Prof. Karl Williams facilitating the focus group with Bretherton Residents (January 2025)	54
Figure 23: Prof. Karl Williams talking to Bretherton Residents January 2024	54
Figure 24: Prof. Karl Williams talking to Bretherton Residents January 2024	54
Figure 25: Prof. Karl Williams talking to Bretherton Residents January 2024	54

2 Table of Tables

Table 1: Hierarchy of AWEPP Stakeholders	26
Table 2: Perceived Benefits/Disbenefits of AWEPP	58

3 Abbreviations

AWEPP –	Asland Walks Energy Park
BEG –	Named the Bretherton Energy Working Group (From 5/25 renamed the Bretherton Energy Co-operative 7/25)
BPC -	Bretherton Parish Council
CSR -	Corporate Social Responsibility
CWRM –	Centre for Waste and Resource Management
DBEIS –	Department  Business, Energy, and Industrial Strategy
ESG-	Environment Social and Governance
ENWL –	Electricity North-West Ltd
GAPF –	GA Petfood Partners
NPPF –	National Planning Policy Framework
NSIPS -	Nationally Significant Infrastructure Projects
Ofgem -	The Office of Gas and Electricity Markets
UCLan -	University of Central Lancashire

4 Executive Summary

This report sets out the findings of research conducted within the village of Bretherton in Lancashire.

The research commission was initiated through a collaboration between GA Petfood Partners Limited (GAPF), the Centre for Waste and Resource Management (CWRM) at the University of Central Lancashire, and GAPF's strategic partners. The objective was to conduct an in-depth study into the feasibility and impact of a privately funded solar farm and wind turbine designed to make a major employer energy self-sufficient while supplying free electricity to a nearby village. The study was completed in 2025.

The Parish of Bretherton covers an area of just over eight hundred hectares and is bordered by the river Lostock and the river Asland, in the local borough of Chorley (see Figure 1). The most recent census result from 2021 has the population at 669. These are divided across 280 residences across the parish.



Figure 1: The Parish of Bretherton 2025 Showing GAPF on the left of the image.

GAPF is located on the edge of the parish of Bretherton. They have partnered with their local community of Bretherton to provide them with a decarbonised energy supply. This renewably sourced electrical energy would be used by both GAPF and the Bretherton community. This would mutually decarbonise both their electrical power consumption, and at the same time provide a cheaper source of electrical power. Thereby, supporting the transition away from carbon-based energy sources and at the same time supporting the UK's carbon target.

From previous reports commissioned by GAPF to assess their energy demand a wind turbine and solar array were sized to maximise self-sufficiency and minimize export. The system would provide 65% of GAPF's current energy requirements. From this, 5% of the generated would be given to the Bretherton community, and any unused

energy by the community would be sold back to the National Grid or GAPF at a set export amount, this is estimated to be 5p per kWh (2025 rate).

The scheme sets out to “provide” 5% of the actual generated electricity to the community, which is defined as the community benefit of the scheme. The community has established a “Local Energy Club” Bretherton Energy Group (BEG) to administer the provision of energy to the residents of Bretherton. The proposed amount of 5% of generated electricity has been calculated to exceed the total energy requirements of the village of Bretherton. The group was initially called the Bretherton Energy Group (BEG) but was renamed the Bretherton Energy Working group (BEWG) in May 2025 and finally the Bretherton Energy Cooperative (BEC) in July 2025. The scheme will therefore provide an excess of power, which will generate an additional financial benefit For the community on top of the energy being supplied

The proposed location of the Asland Walk Energy Park (AWEP) is expected to be based on approximately 40.5 hectares (one hundred acres) of arable land between the River Asland and Leeds Liverpool Canal. The site is expected to offset around seven thousand tonnes of carbon emissions annually, an equivalent of taking over five hundred petrol cars off the road for a year (which represents the number of cars in Bretherton). The arable land has been developed with a mowed pathway providing a circular walk, benches installed, and knowledge boards to be installed, which will show information on local heritage/history, ecology, and live generation feeds from renewables.



Figure 2: Proposed location of AWEP.

Figure 2 shows the position of the AWEP in relation to Plocks Farm (GAPF Manufacturing Site) and the village of Bretherton. This will comprise a 12 MW solar field, 4.2 MW wind turbine and 5 MWH battery storage system. The site will be oriented east to west to capture the maximum amount of solar energy available. Figure 3 shows the proposed setup of solar panels and a turbine. The ground mounted solar panels, east to west PV panels were selected over south facing panels to minimise the peak generation at midday, as east to west panels although generating around 8%

less energy would generate energy for a longer duration throughout the day, meaning GA Petfood Partners Ltd are able to better use this energy, not wasting and exporting to grid. Additionally, the E/W panel significantly minimises footprint in comparison to south-facing PV panels.

This green energy project will be funded solely by GAPF and completed in stages over several years.

GAPF have committed a considerable amount of time, effort, and finances into researching the viability of this green energy project. This included:

- a) Legal studies with two legal firms.
- b) An archaeological desk-based assessment.
- c) An aviation risk assessment.
- d) An agricultural land classification.
- e) A flood risk assessment,
- f) Battery storage report
- g) Several community engagement surveys.
- h) Telecommunications Survey
- i) Safety Survey
- j) Shadow flicker
- k) Glint and glare report.
- l) Noise report
- m) Ecology Impact report
- n) Arboriculture report
- o) Landscape and visual impact report.
- p) Heritage impact report
- q) Geological report
- r) Transport report
- s) Economic report
- t) Artist's impressions created to highlight the visual impact the turbine will have on the village of Bretherton.

These documents are publicly available at: www.brethertonenergy.co.uk

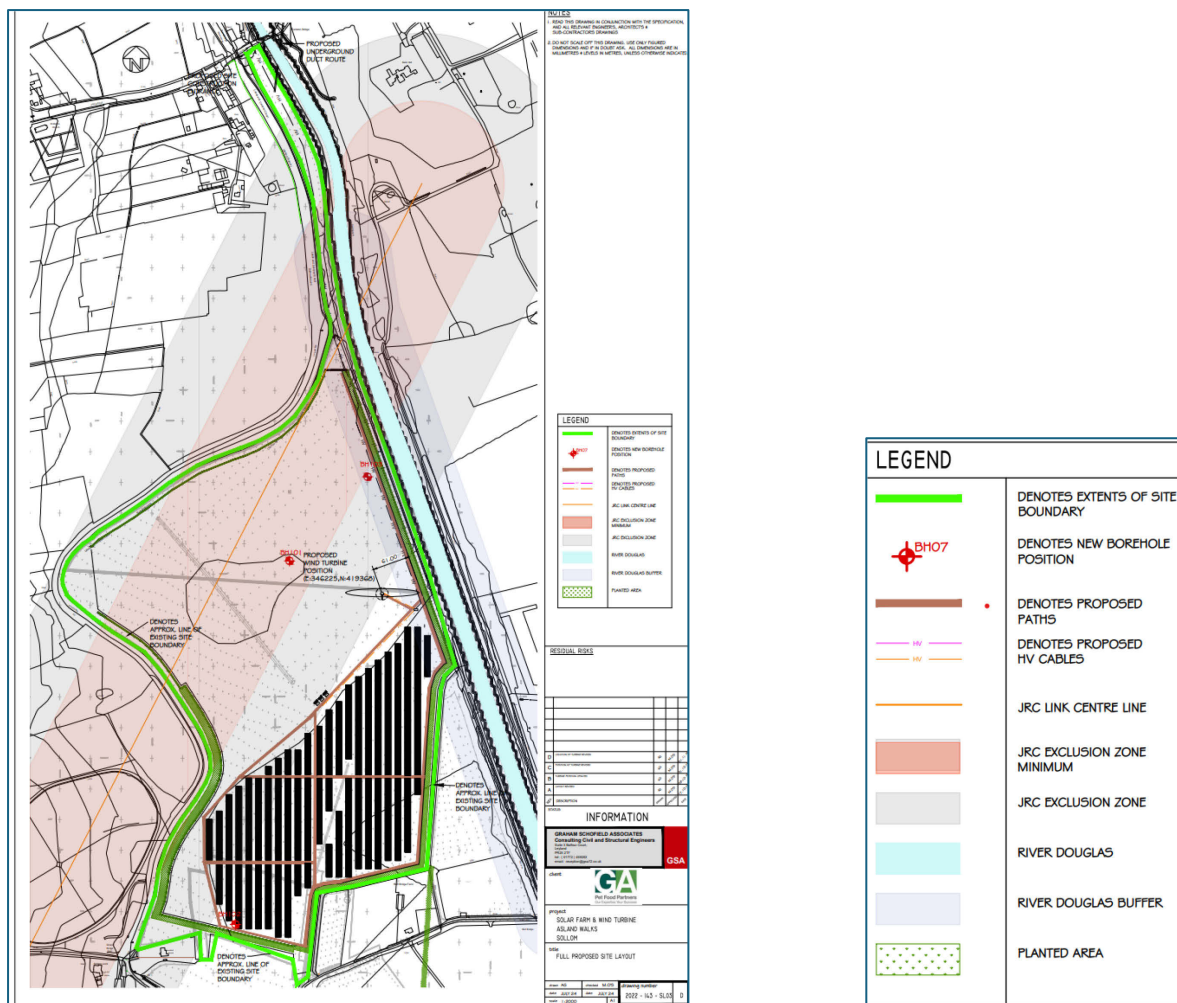


Figure 3 2025 layout of AWEF.

The research undertaken by the CWRM was designed to give an independent overview of the secondary economic impacts and community benefits. CWRM conducted research on the views of the AWEF within the Bretherton Community and local stakeholder groups. The research was conducted at a predetermined agreed time scale of eight months divided into three distinct stages each with a one-month float (in recognition of the challenges of arranging activities and interviews. The project activities focused on the impacts and potential benefits/disbenefits to the local Bretherton community of the scheme. The original work was to include a technology review and recommendation of the options for energy creation, storage, and delivery methods. However, this was subsequently removed from the remit by GAPF and is not included in this report.

The impacts being the benefits or disbenefits of the AWEF scheme were informed by direct engagement with identified key stakeholders. The stakeholders identified to be part of the research have been set out below:

- Bretherton Energy Group (BEG)
- Energy Local
- Energy Northwest Limited (ENWL)

- GAPF (GA Petfood Partners Ltd)
- Bretherton Residents
- Bretherton Parish Council (BPC)
- Chorley Borough Council (CBC)

The energy consumption by the 280 Bretherton households was calculated from the Ofgem figures. The estimated values were 756,000 kWh of electricity and 2.5 million kWh of gas per year (It has been noted that 20% of the homes do not have a gas supply and are using alternatives such as oil, wood/coal, and LPG). Bretherton residents spend around £500,000 on electricity and heating per year (before the energy crisis). This gives an average of £1,785 per household. In October 2022, the rates were capped by the Government. Data suggests that Bretherton residents' energy consumption is above the national average (April 2025). This would put them £600 above the average and therefore, up to £2,500 per year. The proposed AWEF would offset this by providing energy to the community of Bretherton free of charge at the point of generation.

The key objective of this work was to inform GAPF about the environmental, socio-economic, and societal benefits of the AWEF scheme. It would support the decision-making of the administration body set up by the community of Bretherton and its corresponding stakeholders. The secondary objectives were to engage with any stakeholders who had not interacted with earlier elements of research already conducted by GAPF. The methodology adopted was designed to gather an impartial view from stakeholders on their views and opinions of the proposed AWEF.

The research reveals that residents are generally supportive of the scheme, but they require more specific information regarding its management structures and potential economic benefits and advantages for both individuals and the community. A key area of interest was how the community would participate in any future energy club. Significantly, the discourse often prioritised community benefit over personal gain, with residents consistently expressing a positive outlook on the scheme. The success of various proposed capital investments and educational programmes were largely contingent on the scheme's ultimate financial contribution. The main findings from the research were as follows:

- (i) The community impact was seen as positive (amongst people who engaged with the research).
 - (ii) The research indicates that the community impact is seen as positive among people who engaged with this process.
 - (iii) More detailed clarification was required on the whole AWEF scheme.
 - (iv) Previous environmental reservations from earlier research appear to have been resolved.
1. Bretherton residents were supportive of the proposed scheme.
 2. They required more details on the finance and governance.

- a. Cost per unit of energy – As raised in focus group sessions, community members needed to be clear of the unit cost compared to current providers such as Octopus Energy.
 - b. Cost of membership – Early figure of £4 proposed (Discussions with BEG yet to decide on this element until the project and suppliers are in place to have confirmed rates and costs)
- 3. Highlighted the need for socio-economic benefits to be further identified once costs and a potential monetary benefit was identified.
- 4. How the co-op would work
 - a. Membership – “one member one vote” would be a preference.
 - b. Governance – The Election process and development of the Cooperative is yet to be defined.
 - c. Elections – Low appetite for involvement in the decision-making structure was highlighted by the third focus group attendees.
 - d. When decisions of where funds should go, it was seen as a “one member one vote” to decide this.
- 5. Environmental initiatives
 - a. How much funding – The Scale of the village environmental developments depends on the amount of funding secured from the 5% of energy generated. Suggested ideas of schemes varied in scale hugely without the knowledge of a budget.
 - b. Long-term support for initiatives was seen as a potential issue, with a lack of younger members of the community engaged with the project so far.
 - c. What land is available to conduct any activity, there is a lack of land owned by the community which could hamper future developments of community benefit schemes.
- 6. Social benefits
 - a. Community Empowerment & Local Benefits
 - b. Increased Autonomy and Resilience: By generating their own power, communities gain more local control over their energy systems and finances, enhancing their long-term resilience and reducing dependence on external energy providers.
 - c. Reduced Energy Poverty: These schemes often provide cheaper or free electricity to local residents, especially vulnerable households, and offer energy efficiency advice and support to help lower bills.
 - d. Job Creation and Local Economy: Community energy projects create local employment and often spend a significant portion of their expenditure within the local economy, supporting local businesses and keeping wealth within the community.
 - e. Environmental & Social Engagement: Improved awareness of environmental challenges and how engaging with environmental schemes to improve both the environment and society.

- f. Enhanced Energy Literacy and Awareness: Community projects act as catalysts for public engagement, increasing awareness and understanding of energy issues and climate change, which encourages positive behaviour change.
- g. Increased Social Acceptance of Renewables: By involving local people in the planning and implementation of projects, community energy schemes significantly boost social acceptance and support for renewable energy initiatives.
- h. Education and Skill-Building: Projects, especially those involving schools, provide valuable educational opportunities and can lead to the development of new skills within the community.
- i. Social Cohesion & Trust
- j. Strengthened Social Cohesion: Working together on shared energy goals enhances dialogue, interaction, and trust among community members, leading to a stronger collective identity and greater social cohesion.

5 Introduction

GAPF are based at a 27-hectare (67-acre) site which is 1.3 miles from the centre of Bretherton Village. GAPF's commitment to their CSR, ECG, and net-zero journey commitments has seen them propose the building of an energy park. This will not only reduce their electricity bills but also lower their overall carbon emissions. In addition, it will also provide green energy to the local community of Bretherton. They intend to donate 5% of the overall generated power to the community of Bretherton free of charge.

AWEF is a combination of a single wind turbine and solar panel array, the turbine and solar array will provide 65% of the total energy needs of GAPF. Community engagement has been seen as a pivotal part of this AWEF. The key local stakeholder, BEG, was identified as critical to the success of the project and has been an integral part of this research project.

With the private sector funder of the project secured and efforts made to engage the community, this research was commissioned. The community research undertaken in this report allowed a greater level of scrutiny of the benefits and perceived disbenefits of the proposed scheme. Academic evaluation of previous activities undertaken by GAPF and BEG. Analysis of the data obtained from questionnaires distributed to the Bretherton Community informed the research undertaken in this study. It was decided by GAPF and BEG that further questionnaires were not appropriate, and the data collected so far was of limited value. The approach adopted in this study would use several focus groups which would build upon each other.

Adopting the use of focus groups was considered superior to questionnaires for gauging community opinion allowing for a richer, more nuanced insight. Focus groups would allow the participants to express opinions in their own words, elaborate on ideas, and provide context behind their views. The resulting focus groups were designed to allow an open and frank discussion about a potentially contentious community energy project. Encouraging interactions among participants, which could reveal group norms, shared values, or conflicts that individual responses would be unable to uncover. They would facilitate the community itself being able to identify the benefits and disbenefits of a scheme like the AWEF.

The research project was split into three distinct stages as follows: Stage 1: Community and Stakeholder Engagement Research Stage 2 Research of Proposed Asland Walks project and the community benefits and Stage: 3 Reporting: Of the Community Impacts. These have been reported across the following sections of the report.

6 Section One: Background and Key Stakeholder Engagement

As detailed in the original delivery agreement, this section has incorporated the GAPF's specified objective of:

"To identify and work closely with all stakeholders, particularly Bretherton Parish Council, Bretherton Energy Partnership, local energy providers, CBC, and Bretherton to identify if the proposed structure is workable."

To determine all key stakeholders, CWRM followed a strategic based plan of working closely with GAPF to identify organisations. This included those that were not yet engaged and those who were already engaged with GAPF within the last two years.

6.1 Questionnaire Review

A systematic review of likely stakeholders across all aspects of the project was compiled. This data came from a range of sources, as well as additional ones provided by GAPF and BEG. Once a potential stakeholder had been identified, they were assessed for their role in the project and influence or impact.

6.2 Methodology

A review of previous questions was undertaken to evaluate the design, content, and effectiveness of the questionnaire in order to assess its suitability for capturing valid and reliable data related to AWEF community opinion. The data from the questionnaires distributed by GAPF and BEG were and evaluated using the following review criteria:

1. Clarity of Purpose:
 - a. Does the questionnaire align with its stated goals or objectives?
2. Question Design:
 - a. Are the questions clear, concise, and unambiguous?
 - b. Are they leading, biased, or open to personal interpretation?
 - c. Are questions appropriately open-ended or closed-ended based on the information needed?
3. Structure and Flow:
 - a. Is the questionnaire logically organised?
 - b. Are question groupings and transitions smooth and coherent?
4. Response Formats:
 - a. Are response options balanced and exhaustive?
 - b. Are rating scales used appropriately (e.g., Likert, frequency, satisfaction)?
5. Length and Engagement:
 - a. Is the questionnaire an appropriate length for the target population?
 - b. Is it likely to maintain respondent engagement throughout?
6. Cultural and Language Sensitivity:
 - a. Is the language inclusive and appropriate for the target audience?
 - b. Are any terms potentially confusing or culturally insensitive?
7. Reliability and Validity:

- A. Are there indicators that the questionnaire was tested for reliability or piloted?
- B. Are the questions measuring what they intend to measure?

Assessment and feedback were proposed as part of “Stage One” of the research. This feedback has been provided in parts at monthly agreed-upon intervals. A complete evaluation will be conducted as part of “Stage Three” of this research, as outlined in the final report process.

6.3 Documentation Review

A literature review was undertaken to critically assess both sources from the project searches and those provided in the documentation by GAPF. This was to inform the research and to determine their adequacy, transparency, and usefulness for the research project. The review identified strengths, limitations, and information to support the work being conducted.

6.4 Methodology

The documents were reviewed under the following criteria:

1. Content Quality
 - a. Accuracy: Are facts, figures, and claims correct and evidence-based?
 - b. Completeness: Are key issues, processes, and assumptions fully covered?
 - c. Consistency: Is the information consistent across documents or with other known data?
2. Relevance
 - a. Does the documentation relate to the research questions or area of inquiry?
 - b. Is the level of detail appropriate for academic or applied research analysis?

The critical reviews of documentation provided by GAPF was conducted using the “Bretherton Energy Park – Contract Matrix” (Feb 2023) as the baseline source. (provided to the research team by GAPF). Burges Salmon produced this report, and it identified eleven different stakeholders (See Appendix 2). This stakeholder ecosystem included several organisations in the AWEPP supply chain, including technology providers and landowners (Tarleton Estates). It is important to note that the relevance of stakeholders was dependent on the final model of energy delivery and community setup. The assessment in this report is based on the proposed set-up provided by GAPF and BEG in December 2024 (relevance and impact are identified in Table 1).

6.5 Interviews with Stakeholders

A series of interviews to critically evaluate their role, influence and understanding of the AWEPP. This information was used to inform focus group discussions.

6.5.1 Methodology

Contact was made with each of the identified stakeholders (See Table 1). The route for contact was through an initial telephone call or by direct email. A face-to-face interview was then scheduled, during which initial, pre-formed questions were presented. These questions provided an initial starting point for the discussion. The interviews were recorded through the process of written notes—all consent and procedure following the university's code of ethics and conduct.

All interviews and engagements have been compiled by the CWRM and collated using the leading qualitative data analysis software, NVivo. Each interview generated a corresponding Word clouds. This highlighted the main outcomes from the discussion. A wider network of stakeholders has been detailed later in this document (Appendix 2). Part of this stakeholder engagement process was to provide suggestions of potential methods of delivery of the perceived benefits of the AWEPP scheme. These are detailed later in this report in the conclusions of this report. This sits alongside recommendations of potential next steps if planning permission for AWEPP is not achieved.

6.6 Results

6.6.1 Questionnaire

A review of the previous questionnaire surveys was undertaken by specialists within the CWRM to gauge the competence of the questions and the merit of the answers following the proscribed methodology. The outcome of the review highlighted a number of issues around the structure of questions being asked and the interpretation of the replies. Much of the data collected was not verifiable and open to conjecture consequently could not be used to directly inform this study. However, questions and answers were able to be used to provide a foundation for the development of the first focus group activity in "Stage Two" of the research (Three questionnaires have been conducted in the previous two years of developmental work conducted by GAPF)

6.6.2 Literature and Document Review

Consideration of the social, environmental, and socio-economic impacts of the proposed AWEPP generation and storage through review of the current planning policy and other provided documentation, as well as UCLan's own literature research of associated policy and similar UK plans and examples.

One of the most practical, cost-effective, and sustainable renewable energy sources is wind energy. This energy source is gaining popularity globally as many countries are investing heavily to add more clean energy to their national grid and to banish fossil fuel. However, wind energy faces challenges associated with its generation, storage, and transport. In terms of generation, wind projects may not be economically competitive in areas with high-speed variability. Additionally, ideal wind sites are often located in remote areas. There is also a potential impact on biodiversity, AWEPP is neither remote nor affecting biodiversity due to its location on arable land. However, it may still have a visual impact.

Storage issues ensue when power fluctuations arise due to the inconsistency of wind, making wind energy unsuitable as a primary source of electricity. As pointed out above, not enough wind is a generation issue, but too much wind can result in a

storage problem when excess electricity from wind turbines is lost, plants regulate down to keep the power grid stable. The current technologies that can help in energy storage include batteries, pumped hydropower, and flywheels. Researchers and innovators are working hard to address these challenges.

The current UK government is creating an enabling environment for the onshore wind projects to thrive in the country. The government demonstrated this by announcing the removal of the two policy tests set out in footnotes 57 and 58 to paragraph 163 of the National Planning Policy Framework (NPPF) for onshore wind applications on the 8th of July 2024. By this removal, the government commits to doubling onshore wind energy by 2030, and the onshore wind applications will be treated in the same way as other energy development proposals. Between 30th July and 24th September 2024, there was an extensive consultation on the NPPF and its implications on Nationally Significant Infrastructure Projects (NSIPs). The publication by the Ministry of Housing, Communities & Local Government, on the consultation outcome, revealed that the government concluded that onshore wind should be reintroduced into the NSIP regime but upheld that NSIP process is not a mechanism to override protections or concerns on the potential impacts of a proposal to the environment, landscape, or habitats. The government urges decision-makers to evaluate such issues when determining a development consent application, including investigating statutory environmental, landscape, habitat, visual, and heritage impact assessments. Furthermore, the NSIP process retains strong provisions for extensive local authority and community engagement, with room for feedback in the pre-application phase and during the project's examination.

Following the consultations, the government concluded that the threshold for eligible onshore wind projects should be set at 100 MW of power, while acknowledging that the planning system will require sufficient resourcing and skills to effectively process an increased number of onshore wind planning applications, regardless of where the threshold is set.

According to the Department for Business, Energy & Industry Strategy (DBEIS) [4], a typical onshore windfarm development process can be divided into six stages, including: (i) Scoping (ii) Project development (iii) Planning permission (iv) Construction (v) Operation, and (vi) End of project. The first three stages will take several years to complete, while the construction stage will ideally take between 6 and 12 months, depending on the size of the development. The project is expected to have a lifespan of at least 25 to 30 years. Overall, the development of the onshore wind project requires community engagement and the agreement and realisation of community benefits.

Community engagement gives people a chance to understand what is proposed, weigh the benefits and disbenefits of the development, and identify what works best within the local context. Share their views and help shape solutions. A promising approach to community engagement includes:

Adequate planning, identifying the community, involving the whole community, feeding back, and following up with the community, continuing engagement, and repowering, decommissioning, and life extensions.

Based on the available information, the first six approaches to community engagement discussed above have been extensively covered in the case of the proposed AWEPP project in Bretherton. The results of the survey conducted in February 2023 show that a larger percentage of Bretherton dwellers understand the impacts of the wind turbine, solar field, and AWEPP in the village. Notwithstanding, the following recommendations were made:

- (i) Sharing of more detailed information regarding the AWEPP
- (ii) Development of a clear business model for the Bretherton Energy Partnership
- (iii) Development of a governance structure for Bretherton Energy Partnership
- (iv) Ongoing and in-depth community engagement.

The community benefits associated with onshore wind are numerous, including, but not limited to, employment opportunities for local people, upgrades to infrastructure (e.g., faster broadband), investment opportunities, and enhanced community cohesion. However, the UK government maintains that community benefit packages should not be used to determine whether planning permission should be granted. A compensatory set of actions may be required by a planning authority in order for planning permission to be granted. For example, widening a road to enable the delivery of turbines to the site, or such actions to counteract the direct impacts on amenity or habitat, must be considered necessary to make the development acceptable in planning terms. To deliver community benefits from onshore wind projects, the government has identified five key topics of good practice as follows:

- (i) Early engagement
- (ii) Consulting on community benefits
- (iii) Community benefit funds
- (iv) In-kind benefits
- (v) Shared ownership

Undoubtedly, the benefits of onshore wind projects outweigh the disadvantages, especially in this time of climate emergency, provided the proper planning processes are followed. Therefore, the Bretherton community could follow the example of Ashton Hayes and embrace the opportunity presented by the AWEPP. Ashton Hayes is a village located in Chester, comprising of one thousand people and 350 houses. Their journey to become carbon neutral dates back to January 2006 and has since made considerable progress in reducing their CO₂ emissions. They do this by working together, sharing ideas, and through behavioural change. Currently, the village owns a renewable energy company, which is a Community Interest Company (CIC), set up to manage the energy generation for the benefit of the community. Ashton Hayes aims to build up renewable energy capacity and generate profits that can be reinvested back into projects in the bid to produce green energy and generate profits that can be reinvested in projects to foster a more sustainable and resilient community. This vision is well supported by the Parish Council, Community Shop, and the Ashton Hayes Sports and Recreation Association.

6.6.3 County Planning Documentation

As requested by GAPF, CWRM conducted a review of local planning regulations in Lancashire in relation to green energy projects.

Chorley Local Plan 2012 – 2026 (Adopted as the Local Plan 21st July 2015)

Covering 14 years the plan is to provide a joined-up approach and overarching vision for the wider Central Lancashire Area (including Preston and South Ribble. The Chorley local plan then adds detail to this wider strategic plan of local policies.

The key points look to address Homes for All (housing needs, including affordable housing). Employment and economic development (allocating sites for business and industry). Sustainable Travel (encouraging alternatives to car use). Tackling Climate Change (promoting energy efficiency and renewable energy in new developments). Protection of the natural and historic environment (e.g., Green Belt, biodiversity, heritage assets)

"*Tackling climate change*" is the most applicable part of the Chorley local plan to AWEF. When noting local sites for Renewable Generation the plan states:

"Any formal proposals received by the Council for renewable or low carbon energy schemes will be supported provided they meet the criteria set out in Policy 28 of the Core Strategy." Policy 28 of the Core Strategy covers four key policies."

Environmental Impact: The development should not have an unacceptable impact on the local environment, including landscape, biodiversity, and heritage assets. GAPF have conducted various assessments of the local area including ecological impact assessments.

Community Impact: The scheme should not adversely affect the amenity of local residents, such as through noise or visual intrusion. GAPF have conducted due diligence around intrusions and plan to minimise the impact felt by local residents as AWEF progresses. Planting schemes are planned to minimise the visual impact of the AWEF.

Infrastructure: The proposal should ensure that the local infrastructure can support the development without causing significant issues. Appropriate arable land has been sought after assessing other sights in the vicinity of GAPF Plock's Farm site. Technology has been proposed that will minimise the risk to any local grid users.

Sustainability: The scheme should contribute to reducing carbon emissions and align with sustainable development principles.

GAPF have considered all four elements of the Chorley Local Plan required as part of their "tackling climate change" aim as a local authority.

6.6.4 Central Lancashire Local Plan 2023 – 2041

The Central Lancashire Local Plan emphasises the importance of renewable and low-carbon energy to achieve net zero carbon emissions and support environmental and economic benefits within Lancashire. It supports various renewable energy projects, including co-location with energy users, decentralised production and distribution, community led initiatives, and small scale on-site generation for residential and commercial developments. All of which has been considered by GAPF for the AWEPP as of Spring 2025.

Larger-scale proposals require early community engagement. Renewable energy sources mentioned include wind, solar, anaerobic digestion, heat pumps, and energy from waste, with offshore wind being the dominant source in Lancashire. Energy storage and decentralized networks, such as Combined Heat and Power (CHP), are promoted for efficiency and reduced emissions. Community engagement has been carried out by GAPF for several years as they have developed their planning pre application.

Green Energy Proposals must assess and mitigate impacts on residential amenity, infrastructure, landscape, heritage, and ecology, and demonstrate necessary connections to the national grid unless energy is used on-site. The plan aligns with national strategies and includes policies like CC2: Renewable Energy Generation and District Heating Networks for specific guidance.

Strategic Transport Priorities: Supports transport infrastructure projects, safeguards land for transport development and seeks contributions from major developments to implement these projects. Sustainable and Active Travel: Promotes walking, cycling, and public transport by enhancing footpaths, cycleways, and public rights of way, integrating active travel with public transport, and supporting new schemes connecting urban and rural areas.

Highways and Public Transport: Ensures safe access for all users, mitigates congestion, promotes bus access into development sites, and addresses the needs of disabled individuals. Transport Assessments and Travel Plans: Requires major developments to provide assessments and plans to mitigate impacts and enhance sustainable travel infrastructure. Parking Standards: Sets flexible parking standards, encourages reduced parking in areas with good public transport, and supports provisions like electric vehicle charging points. Local Cycling and Walking Infrastructure Plans (LCWIPs): Aims to double cycling levels, increase walking by 10%, and deliver a Central Lancashire Cycle Network and improved Core Walking Zones. Public Transport Improvements: Advocates for enhanced bus and rail services with frequent and reliable connections. Strategic Development Corridors: Focuses on transport infrastructure investments to support economic growth through improved connectivity.

The AWEPP development has clearly considered all of these mentioned specifications of the Central Lancashire Plan. GAPF has invested in cycling and walking infrastructure

specifically as designated in earlier diagrams and is also highlighted in several pages of the *"Proposed Green Energy Park at Asland Walks"* dated October 2024. This development shows the field where the AWEPP scheme is to be based, with a mowed pathway providing a circular walk, benches installed, and knowledge boards to be installed which will show information on local heritage/history, ecology, and live generation feeds from renewables.

The plan integrates land use and transport planning to create accessible, sustainable, and healthy communities while reducing carbon emissions and improving air quality. The plan outlines an ambition to attain carbon neutrality by 2030, GAPF is currently a substantial emitter of carbon in the Borough of Chorley and the wider Lancashire area. The AWEPP will decarbonise one of the largest emitters of carbon in the County of Lancashire. This local 2030 net zero target feeds directly into the net zero aim of 2050 as a legally binding target of Central Government.

Although the planning documentation does not mention specific aims of Chorley as a borough beyond the 2030 net-zero target of themselves, or Preston and South Ribble Councils. They do reiterate the wider county goals of: Promotion of renewable energy, encouraging renewable energy generation, including wind, solar, and district heating networks, to support net zero ambitions. Policy alignment, development proposals for renewable energy must align with environmental quality policies and avoid adverse impacts on biodiversity, heritage assets, and local amenity. Community-Led Initiatives, supporting community-led renewable energy projects to enhance local energy resilience. Infrastructure Requirements, ensuring renewable energy developments integrate with existing infrastructure and utilities. Environmental Considerations, renewable energy projects must consider impacts on designated nature conservation sites, trees, and hedgerows.

After reviewing the planning application and subsequent community engagement work, and technical research conducted by GAPF in the Borough of Chorley. It cannot be disputed that they have fully incorporated the local aims and objectives set out by CBC and conducted their due diligence as requested by their Local Authority. As part of becoming a green and sustainable borough, AWEPP contributes towards their aim of carbon neutrality by 2030. Alongside improving local air quality and offsetting 7,000 tonnes of greenhouse gas emissions. From an enterprise and economy standpoint, AWEPP also contributes in the promotion of CBC as a green economy leader and helps them to deliver sustainable development as part of the Central Lancashire Local Plan. Securing a large investment in the local low carbon energy infrastructure and aligning with the local plan to decentralised energy generation. It also promotes healthy safe and engaged communities, promoting local resiliency and community engagement by creating a common goal through the AWEPP.

6.6.5 Central Lancashire Local Plan December 2022 Regulation 18 Consultation

Over 928 respondents provided feedback as part of this consultation of ten weeks from December 19th, 2022, and February 24th, 2023. It was conducted as part of the Local Planning England Regulations 2012. The consultation was divided into two parts with part one focusing on strategic direction and part two in summer 2023 due to

focus on the full draft of the local plan. This consultation process is seen as a key step in developing the full plan for Lancashire as detailed above relating to (Appendix 8)

As part of this research, the CWRM critically assessed the document and its purpose, a document which has been in consultation up until February 2025. This 2022 consultation process has been in development since the "issues and options" consultation which was conducted in 2019. A vital part of ensuring adequate jobs and homes for Lancashire residents. Main points for consideration were as follows:

"The purpose of this document is to gather public input on the initial draft of the Local Plan, focusing on the proposed vision, objectives, and spatial strategy for Central Lancashire's economy, communities, and environment."

The "Preferred Options" of the document outlined emerging policies, referred to as "policy directions, covering strategic and local policies", including those for housing and employment development needs and proposed site allocations.

The consultation was informed by an Integrated Assessment and Habitats Regulation Assessment, which included Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to ensure sustainable development. Alongside the Preferred Options document, a "Call for Sites 4" was undertaken, inviting individuals and organisations to submit land for consideration for future development in the emerging Local Plan

Analysis of the plan specifically related to "Renewable Energy." It was clear that this was a key part to this document and was referred to extensively. With a direct quote from policy direction twenty-nine being:

"Renewable and low-carbon energy developments will be encouraged and supported." (Chorley Local Plan 2012-2026)

"Renewable energy has a crucial role to play in reducing the reliance on fossil fuels and helping the region and the UK as a whole." (Chorley Local Plan 2012-2026)

Reference to technology was also noted several times with mention to what planners saw as suitable technology and the sizes of renewable energy schemes they would prefer to see:

"Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun (including passive solar gain) and also from biomass and deep geothermal heat." (Chorley Council Renewable and Low Carbon Energy Supplementary Planning Document 2014)

"This will have to come from micro schemes and renewable energy installations on new and existing properties, and from development of

larger scale renewable energy schemes, subject to all material considerations being fully satisfied.” (Chorley Council Renewable and Low Carbon Energy Supplementary Planning Document 2014)

Both mentions would suggest support of AWEF as a renewable energy development which mentions both “wind” and “sun” energy. As In (Appendix 8) the local plan community engagement was viewed as a critical part to the approval of any community energy scheme. Direct reference to this:

“Developers must engage with the community, local authority and other relevant authorities at an early stage prior to the formal submission of any proposals and large-scale renewable energy developments shall make provision for direct community benefits over the period of the development.” (Chorley Council Renewable and Low Carbon Energy Supplementary Planning Document 2014)

As with the wider the local plan construction was seen as necessary for any application to be approved GAPF have mitigated this part of the planning process by submitting an assessment as part of their pre application Dated September 2024. Part of this research has also highlighted a push for community education, with the plan to use Energy Local to train an individual to educate the community in low-cost energy efficiency improvement technology. This is mirrored in the plan with the comment:

“Energy reduction in new buildings will be achieved using the measures a ‘fabric first’ approach, renewable energy-generating technology including photovoltaics, solar hot water, air/ground source heat pumps, wind turbines, hydropower, and biomass boilers and low carbon technology.” (Chorley Council Renewable and Low Carbon Energy Supplementary Planning Document 2014)

Following assessment of the *“preferred options final December 2022”* it is clear that AWEF fits the criterion of what Central Lancashire and also wider Lancashire (Appendix 8) desires as a community energy project that aligns with their net zero ambitions for 2030. It also fits with community ambitions through its engagement and citizen space with usable outside space being created.

6.6.6 Stakeholder Engagement Interviews: Section One

CWRM identified the key stakeholders after an initial assessment of the energy planning and support landscape. These were: (i) Bretherton Parish Council, (ii) GAPF, (iii) Bretherton Energy Group, (iv) Energy Local, (v) Electricity Northwest, (vi) Chorley Borough Council, (vii) Bretherton residents, (viii) Bretherton Parish Council, and various energy community partnerships for comparisons, (Gower Energy. Public Power Solutions in Swindon, Barrow Offshore Wind in Barrow, SELC in Settle, and Energy Local Bethesda). Prior to the stakeholder interviews, the stakeholders were rated based on their influence on the AWEF development. After the interviews were conducted, their ratings were adjusted, if necessary, to reflect any additional information obtained that would influence this.

Stakeholder	Role In AWEF	Role in Community	Community None/Low/Med/High
Bretherton Energy Group (BEG)	Developer and administration of the scheme in the community	- Setting price caps - Distribution of any excess funding - Made up of members of the community	High
Bretherton Parish Council (BPC)	None	- Made of members of the community - Beneficiary of excess funds	High
Bretherton Residents	Contributors to community research	- Support for community projects - Potential involvement with TBC Co-Op	High
Chorley Borough Council	- LPA – Authorising of Planning permission of AWEF - Net Zero 2030 Commitments	- Identifier of local climate priorities - Developer and approver of local and neighbourhood plans	Medium
Energy Local	TBC Co-op Developer	Community Energy Provider	Low
Electricity Northwest Ltd (ENWL)	Energy Provider	Provider of electricity for Bretherton and billing provision	Medium
GAPF	Operator and owner of AWEF	Provider of 5% of generated energy	Low/None

Table 1: Hierarchy of AWEF Stakeholders

6.6.7 Energy Local – 4 December 2024

An interview was conducted with Amy Charnley-Parry, Community Engagement Executive. Feedback from Amy's interview was that Energy Local was happy to be involved in any future developments of AWEF. They had committed to training individuals in the Bretherton community to maintain a renewable energy network in the village, offering ad hoc support when required for things such as AGMs and large-scale meetings. They have also committed to assisting in the development of a community energy cooperative, if that is what the village decides to do. They would advise on surplus funding for maintenance costs once the levels are agreed. The overall assessment by the interviewee was:

"Once the creases are ironed out, this will be a good project," (Energy Local December 2024)

6.6.8 Electricity North-West – 10 January 2025

A meeting was arranged with Helen Seagrave on the 10th of January 2025, a Community Energy Manager who works for ENWL. However, this interview did not take place as GAPF requested that CWRM cancel the interview and remove them from the stakeholder engagement activity. This has been done, and there is no information

from the energy company in the report, as part of the contracted stakeholder engagement

Feedback from GAPF was offered on this stakeholder not being engaged

"GA/BEG were currently in talks to develop the mechanism and technical requirements for the LV/BESS connections to Bretherton North and South, a meeting between UCLan and ENWL would have been premature at this stage to discuss the study points, this would of also distracted and caused confusion to ENWL" –(David Colgan - GAPF June 2025).

6.6.9 Bretherton Parish Council – 3 February 2025

An interview with the Parish Council chaired by Barbara Farbon as a group, they were asked twelve different questions about their engagement with the AWEF scheme. As a group, they fully support the proposal. When discussing the principal risks and opportunities of the AWEF, the group recognised the carbon contribution.

"BPC sees this as a way for everyone in the village to reduce their carbon footprint as well as GAPF's carbon footprint reduction.

"Bretherton Parish Council feels it has a foot in both camps, residents and GAPF and have to consider both parties."

They see themselves as having an important job in communicating with the village community, with a potential future role in appointing the Bretherton Energy Club members.

"The energy park is an 'uphill battle' especially the older residents. There is some scepticism in the village with a 'What's in it for them (as in GAPF) attitude."

Bretherton Parish Council is engaged with the community on AWEF and has offered drop-ins and has addressed any potential issues the residents may have locally twice, with extra pages in the village newsletter offering information. A questionnaire regarding the neighbourhood plan was sent to everyone over sixteen in the village totalling 112 residents. (Second draft consultation is currently in progress.) The main community benefit they see as a group for the residents of Bretherton is a reduced cost paid for electricity, and money coming into the community to conduct jobs required, such as the church car park resurfacing.

"We feel a proper vehicle is needed to run BEG and have taken advice from 'Bates Wells' and 'Lux Nova' about the agreement between GAPFs and Bretherton Parish Council."

In line with the DBEIS and local report commissioned by GAPF. Community Engagement and Benefits from Onshore Wind (2021). The CWRM asked, since the governmental change and subsequent policy change on onshore wind, if they saw this as something that could change their relationship with GAPF? Their response was:

"No changes as yet, but it is too soon. There is no change in the 5% available to the village. GAPF has made a significant contribution to the neighbourhood plan."

When asked how they would like to see the usage of any surplus, they said they saw large community projects, such as purchasing the local pub, as a worthwhile and long-term project for the community to come together.

When asked about the main concerns of their parishioners in terms of Environmental, social, and socio-economic benefits or disbenefits, they said. New housing developments, and short-term leaseholds of assets such as a village hall and local pub. Additionally they worried about the availability of green space as it is all owned by the local estate.

6.6.10 Chorley Borough Council – 12 February 2025

A meeting was arranged with Katherine Greenwood, a planning officer at CBC, for an interview. However, this interview did not take place between CBC and UCLan at the request of GAPF to avoid further complications in the planning pre application process. The CBC was removed from the stakeholder engagement activity, and there is no information from the energy company in the report, as part of the contracted stakeholder engagement.

6.6.11 PF – 11 March 2025

As a stakeholder and funder of the AWEF, GAPF was asked some of the same questions as the Bretherton Parish Council. They are the sole investor currently and the driver behind the AWEF Scheme. David Colgan, Environmental and Energy Manager at GAPF, was asked twelve questions to determine the benefits GAPF envisioned for the Village of Bretherton. Also how it would engage with any future management structure of AWEF in the village and would the management of the physical aspects of any future AWEF development be addressed. When asked if recent changes to the planning law changed the way GAPF interact with the Bretherton Parish Council, and any proposed Energy Group the response was:

"No change in attitude to Bretherton and want to honour that agreement and we want local support."

The main driver for the AWEF was driven by the company's' commercial and ESG commitments:

"Environmental for Net Zero of 2050, the target is to decarbonise 50% every decade. Global crisis has accelerated the process. 75% environmental, 25% economic."

Responding to how the AWEF would affect GAPF future carbon reduction plans. AWEF was seen as a key part to GAPF's current plans.

"It Directly feeds into the plan, if it was not to go ahead, the net zero and carbon plan would need to have to change. It's sized for both GA and Bretherton."

Holding any influence on the spending of any community organisation was seen as something GAPF did not want to be involved in, with the response of.

"None. Their choice. "

When asked what GAPF see as benefits of engaging with Bretherton Energy Group, the answer was:

"Local support helps through the planning process. Helps to engage with the residents of Bretherton, to take them on the journey."

Whilst discussing AWEF and the long-term plans of repairs and ownership, GAPF saw the future as:

"Ownership is 50/50, GA paying for energy park, maintenance and repairs."

When looking at incentives to repair AWEF GAPF highlighted that:

"Switchgear is theirs and fund and maintain, battery is GA's. GA would want to fix it quickly."

Once the Bretherton Energy Cooperative, GAPF have no intention to be involved with the response to the question of would you want a seat on any community board being:

"No seat expected."

GAPF plan to communicate the energy generated by AWEF to the community of Bretherton and have:

"Plans for an app for every member showing usage. and screens on the energy park."

GAPF envisages a cash flow scenario with the community of Bretherton, which would be:

"Bretherton's responsibility. Payments not defined. 4 weekly buckets or yearly."

6.6.12 Bretherton Energy Group (BEG) – 11 March 2025

In August 2021 GAPF approached the Bretherton Parish Council to discuss the possibility of a mutual journey to net zero. At this time, GAPF had initial plans on the 4.2 MW wind turbine, solar array (27 MW), and biogas plant. Where 5% of the generated electricity would be provided to Bretherton at no cost for the village to use,

reducing energy bills and decarbonising the village. The community energy collective has since continued to develop between GAPF and Bretherton; however, it was decided by the Parish Council that, for progress on this community net-zero energy project and support to continue, the biogas plant would not be built, with concerns of increased traffic, odours, and safety.

Initial funding of £40,000 was secured, and the group grew to seven members as of 2025. On the 11th of March interview conducted by CWRM consisted of thirteen questions to ascertain their vision, proposed structure, and community engagement with Bretherton and the AWEF project thus far.

As a group, they see the benefits to the community as reduced electricity rates, along with further advice for the community on green technology, such as heat pumps. They identify the most significant risks to the project as the loss of arable land, increased demand for people moving to Bretherton, and the upkeep of the proposed energy club with local members. A direct quote from the group:

"Locals feel disempowered, people need to be involved after the lagoon for anaerobic digestion was dropped due to local opposition."

They mentioned how engagement with the community has been difficult thus far, and progress has been slow with delays to the neighbourhood plan. The group sees this as an opportunity to engage better and:

"Up our game."

They are currently taking advice on the "one person, one vote" proposed structure for any development of a cooperative.

They see many positives in the ongoing relationship with GAPF, viewing the relationship as stronger than ever following governmental planning changes that no longer require energy generators to obtain approval from local communities. They are in the process of setting up the cooperative to receive the electricity as soon as possible, allowing them to receive 5% of the generated energy in Bretherton.

When asked about their vision for AWEF they saw the potential to:

"To generate and utilise renewable energy locally."

"A Benefit to both GA Pet Foods and Bretherton."

"Electricity generated and used with no grid investment required."

"That it was a "Good" thing to do."

"Enable GAPF in their journey to Net Zero."

"Fund community advice on insulation and heat pumps and other good causes."

They see a medium to long-term aim as being:

"The Co-Operative will be the successor to the energy group, to provide one entity for the community to engage with."

When asked about the risks and opportunities of AWEPP for Bretherton they envisaged:

"Being good for Bretherton and have a good impact on biodiversity."

"Risk is more of an adverse outcome, loss of arable land"

"A risk in terms of scale. Agreement needs to be 40 years or even longer term".

Another risk highlighted was:

"Keeping the coop working with volunteers and keeping the coop viable and functioning."

And:

"The risk AWEPP could be too successful as people's electrical demand becomes larger, and less of a benefit."

With the agreed 5% of generated energy what happens when there is no generation?

"Batteries come into cover. Revert back to grid price."

7 Section Two: Engagement and Focus Groups

7.1.1 Focus Groups

This part of the study aimed to explore and understand community members' opinions, experiences, and attitudes toward the AWEPP. This part of the research built on the identification of stakeholders in the first stage of the study. Focus groups were highlighted as the best tool to gather in-depth qualitative data from residents with less of an emphasis on the structure offered by a questionnaire. When conducting community research, they are often seen as complementary to any quantitative data gathered. The focus groups identified key themes, perceived benefits, concerns, and suggestions for improvement from a community perspective. The focus groups were used to ascertain what the Bretherton Residents saw as community benefits, potential Energy Club Structure and operation, and potential Community barriers and enablers to joining any energy club.

Three focus groups were held as part of this research, one in November 2024 and two more in January and March 2025. Attendance at the three focus groups were thirty-four attendees in total. The open questions at the three focus group sessions showed

a gap in knowledge about the AWP scheme of community members. Some attendees had been involved in previous decision making and would like to be involved in current decision-making processes.

7.1.2 Methodology and Focus Group Design

a. Participant Recruitment

Target groups: A diverse cross-section of community members was sought for the sessions. The demographics of Bretherton range from young families and professionals to retirees.

b. Recruitment method

The focus group recruitment consisted of using flyers within the Parish newsletter, directly targeted flyers delivered to homes, use of the al Parish notices, social media and WhatsApp messages to local community groups and obtaining referrals from community members. The criteria for attendance was that an individual was an adult (aged 18+) and was a resident within the Parish of Bretherton.

c. Group Composition and Size

Three focus groups (with each session being run twice in a single day) were planned, each with a maximum of twenty-four participants. Thirty-four residents attended across the three focus group sessions.

d. Duration and Location

Sessions were held at the Congregational Church and lasted 90 minutes. This was an accessible, neutral community venue in the heart of Bretherton Village.

Focus Group Data Collection

a. Development of Discussion Guide

 Semi-structured discussion guide was developed, covering key themes as agreed with GAPF. This included:

- (i) Awareness and understanding of the AWP program
- (ii) Sources of information and communication about the programme from both BEG GAPF
- (iii) Perceived fairness and transparency of the offer to the community
- (iv) Trust in the commercial organisation
- (v) Suggestions from the community for environmental, socio-economic and social benefits as well as disbenefits

b. Facilitation

Sessions were led by a trained facilitator, Prof Karl S Williams, supported by various members of CWRM. They all had experience in community engagement and impartial moderation. Notetakers were assigned to each subgroup within the focus group, as well as a co-facilitator who assisted with recording the outcomes from the focus group

and non-verbal cues from the discussions. Informed consent was obtained from all participants, and confidentiality was maintained. The university's code of ethics and practice was followed.

c. Recording and Transcription

Written notes were used for the recording (with participant consent) during each focus group. Notes on tone, emotion, and group dynamics were added after each session. This was added during a debriefing session with the facilitators and note-takers, which took place at the end of the session, once all participants had left.

5. Data Analysis

Thematic analysis was applied to identify recurring patterns, key themes, and divergent views. Transcripts were coded using qualitative data analysis software NVivo. Special attention was paid to differences in opinion across demographic groups or user statuses, such as farmers and long-term residents.

6. Ethical Considerations

Informed consent and participants' anonymity were guaranteed as no personal data was recorded or any comments attributed to anyone who attended. Participants were informed they could withdraw at any time without consequence during the sessions.

7. Limitations

Findings were not statistically generalisable but provided a deep, context-rich insight into the perceived environmental, socio-economic, and social benefits to the residents of Bretherton. Group dynamics did influence individual expression (e.g., social desirability bias), which was noted during the analysis.

A limitation to this stage of the research was the inability to conduct a full scale "canvass" of residents to recruit for the focus groups, bypassing any social groups or groups of any partisan nature to target specifically the residents of Bretherton.

Stage two of the research was developed to build on the identification of stakeholders in the first stage of the research. Early in the proposal, it was identified that three focus groups would be conducted within the Bretherton community. Focus groups were highlighted as the best tool for gathering in-depth, qualitative data from residents, with less emphasis on the structure provided by a questionnaire. When conducting community research, they are often seen as complementary to any quantitative data gathered.

Focus groups were used to ascertain what the Bretherton Residents saw as community benefits, potential Energy Club Structure and operation, and potential Community barriers and enablers to joining the energy club.

Whilst independently evaluating the governance and economic management of the proposed community energy scheme. However, this process was tailored at the request of GAPF, who did not require an economic benefit assessment for the residents of Bretherton to be considered as part of the overall community benefit. The CWRM

received a cost analysis from the BEG based on what they see as an acceptable level that would be accepted by the local community, aligning with market rates per kWh of energy. This pricing is yet to be agreed as part of the development of AWEF.

The focus groups were conducted to engage with local residents who were potentially not involved in the previous research conducted by Locality on behalf of GAPF in February 2023, building upon earlier awareness-raising activities and questionnaires conducted within the community. The CWRM conducted the focus groups between November 2024 and March 2025. 

Although the CWRM did not specifically discuss the monetary benefits and disbenefits as requested by GAPF, finance was a common theme in the discussions among attendees. Along with many benefits the villagers would like to see, attendees mentioned the effects on local housing and a sense of community, with new people being attracted to the village of Bretherton, which is seen as both a benefit and a disbenefit of AWEF. Not being able to discuss the specific monetary benefits was a key limitation to the focus group process.

7.2 Results of Focus Groups

The data gathered from the focus groups enable a detailed appreciation of the community's considerations on the social, environmental, and socio-economic impacts of the proposed AWEF scheme. This provided a clearer understanding of how the community understood their role would be in the development of AWEF in light of the current planning policy, alongside UCLan's own reading and evaluation of indirect community economic impacts (excluding any potential monetary reward from the 5% of energy proposed as the offer for the community of Bretherton).

The CWRM received a cost analysis from the BEG based on what they consider an acceptable level, which aligns with local community expectations and market rates per kWh of energy. However, as the scheme is still to be fully defined, with so many unknowns and confirmation of costs and suppliers to be clarified. The cost analysis was not used, as it would be unreliable data and unfair to share with residents.

The focus groups were conducted to engage with local residents who may not have been fully involved in previous research conducted by locally by GAPF. Thus, building upon earlier awareness-raising efforts and questionnaires conducted within the community

After a brief introduction of the proposed AWEF and ground rules. In the first focus group the attendees were asked three simple questions of:

"As individuals, what do you see as the Societal Benefits/Disbenefits, what do you see as the environmental Benefits/Disbenefits, and what do you see as the community Benefits/Disbenefits of the AWEF?"

Fifteen minutes were allocated for each question. At the end of this period a short recap after each question to allow individuals to share their opinions. Designated note-takers from the CWRM worked alongside the groups, collecting the conversations in real-time without any involvement in answering or guiding the responses.

The main subjects of discussion from the three focus groups have been highlighted in a word clouds in figure 4, figure 9 and figure 14 in this report, with the words in red featuring most prominently.

As requested by GAPF, the CWRM did not discuss the monetary benefits and disbenefits of AWEF, it was noted that both the finance and economic benefits were a common theme in the discussions among attendees. Along with many benefits the villagers would like to see, attendees mentioned the effects on local housing and a sense of community.

The three focus groups were held between November 2024 and March 2025, all of the sessions participants expressed support for the AWEF project, especially the environmental and community benefits. Community benefits were consistently prioritised over personal gain from circulated energy. Areas which were highlighted as important community benefits were support for the elderly, through retirement homes as well as youth-focused infrastructure (e.g. bike paths) and transport. Environmental benefits typically mentioned Tree planting and environmental education.

Concerns and potential disbenefits included: Governance of the energy cooperative, Membership fees and energy pricing, long-term sustainability and volunteer capacity, limited community owned land for projects, but most participants saw the partnership as positive. The concept of "one member, one vote" was widely supported for decision-making. Technical questions about energy infrastructure and maintenance highlighted the need for further education and transparency moving forwards into the scheme.

7.2.1 Focus Group One: 4 November 2024

Twenty seven people registered to attend the first focus groups. The focus group was split over two sessions, one during the day and one in the evening to accommodate those who could not attend the afternoon session due to work and other commitments. Attendees were contacted to determine their preferred times and dates of attendance before being invited to the focus groups.

Two residents attended the afternoon session, and thirteen participated in the evening session. The evening session was divided into two groups. The general sense from both groups was one of positivity towards the proposed AWEF scheme, with mentions of 5- to 10-year plans and a focus on community benefits for local young people. The group were concerned about any potential manager being able to manage very differing opinions.



Figure 4: Word cloud of Focus Group 1 Comments

The word cloud in Figure 4 showed what were the points for discussion in the first focus group. This highlighted that community was the most important subject for discussion of the first focus group session. From the word cloud it can be seen that the least important areas were the structural themes; such as the community paths and housing. This reinforced the earlier observations that the community benefits were a key part to the overall success of the AWEF. The following section highlights a selection of focus group comments to particular questions.

Question One: “What do you see as the Community Benefit/Disbenefits of the AWEPP?”. The focus group brought up a mixture of infrastructure ideas and softer community aims. The answers were positive, supporting both the AWEPP project as well as showing no real opposition to it. A long-term commitment to the AWEPP was an early theme in the community engagement. A direct quote from the session was:

"I'd like to see support for the local retirement home."

Several comments were made regarding support for both old and young people in the village as well.

"I'd like to see a mountain bike path built for young people to use."

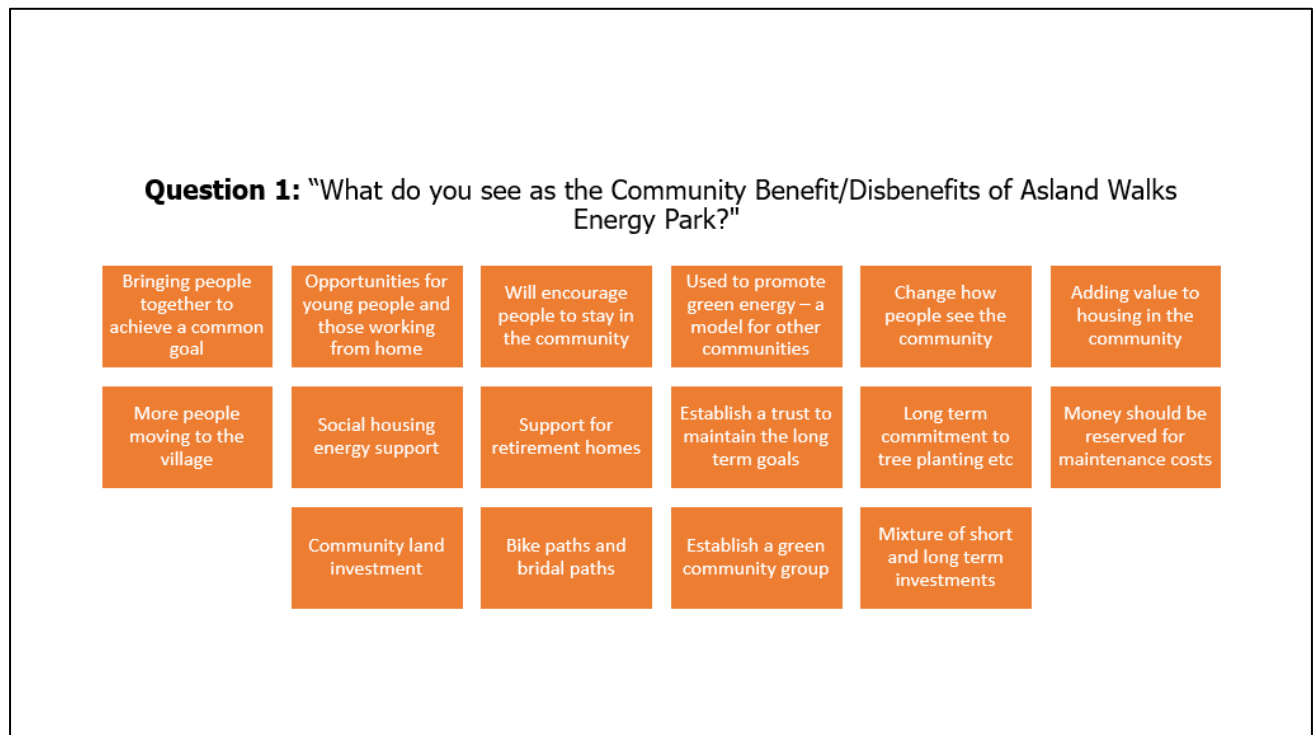


Figure 5: Focus Group One Question One Comments

Question Two: "What do you see as the Community Benefits or Disbenefits of the AWE?"

This question again highlighted both infrastructure and structural issues, along with financial benefits (such as subsidised energy) as an important consideration.

The group decided that large-scale infrastructure projects, such as improving the housing stock in the village, as too extensive to be funded from any income from the scheme. The other challenge raised was the lack of communal support to support any large projects. However, it was raised at the session that small-scale schemes, such as community planting, could be implemented. This would require minimal capital investment and work as a good community promoter for the AWE. This has proven to be an effective promotional vehicle with other community energy schemes across the UK.

Question 2: "What do you see as the Community Benefits/Disbenefits of Asland Walks Energy Park?"

EV charging points (mentioned twice)	Heat Pumps	Bike track for kids (mentioned twice by different groups)	Energy efficiency promotional work	Need to develop a structure of saving money for the community	Subsidised shop – For younger people (mentioned twice by different groups)
Outdoor activity area for children	Rewards split between spent and saved monies	Improvement of existing housing stock	Community tree planting scheme	Community fund to lobby for wider village changes	Bring more people into the community
School benefit	Money will give the community a voice	Relieve financial stress in the school	Bring to community together	Create community open space	Subsidised rate of electricity
Alleviate Church financial stress	Help to poorer members of the community	Improve housing insulation	Subsidised community transportation	Community sense of belonging being involved	Care home residents should benefit

Figure 6: Focus Group One Question Two Comments

Question Three: "What do you see as the Environmental benefits or disbenefits of AWEP?"

As with the earlier question, there were suggestions of both large-scale infrastructure investment and actionable local projects, that could make a positive impact on the local community quickly.

There were high levels of support for those activities which built greater community cohesion. Examples included litter picking and planting schemes. How activities would be funded was discussed in detail. The suggestion of a grant pot was seen as a promising idea for further developing other community projects. There were suggestions of longer-term investments such as Bank Hall and cycle paths across the village. This is exemplified by this quote:

"To help young families in the area, it would be good to provide a mountain bike track in the village to give the children something to do."

There was a general consensus in the group for more information on how any potential community benefits would be managed. This has an impact on how the attendees framed the questions they were answering.

"Would each member of the community be able to input into how the community could benefit?"

A discussion from the group that arose regarding land ownership and its management in the Parish of Bretherton: showing a planting scheme could have been implemented

by villagers previously, but it had not. A direct response from the group to this environmental benefit oriented question was:

"Chorley Council offered free trees for community schemes in the past, which weren't taken up by residents due to a lack of available space."

The structure of the group and future management of the AWEF community engagement was a thread running through the November focus groups When questioned about the societal benefits to Bretherton, a mix of responses were recorded. in the session, a direct quote was:

"I'd like to see a trust established to maintain the long-term goals for societal benefit."

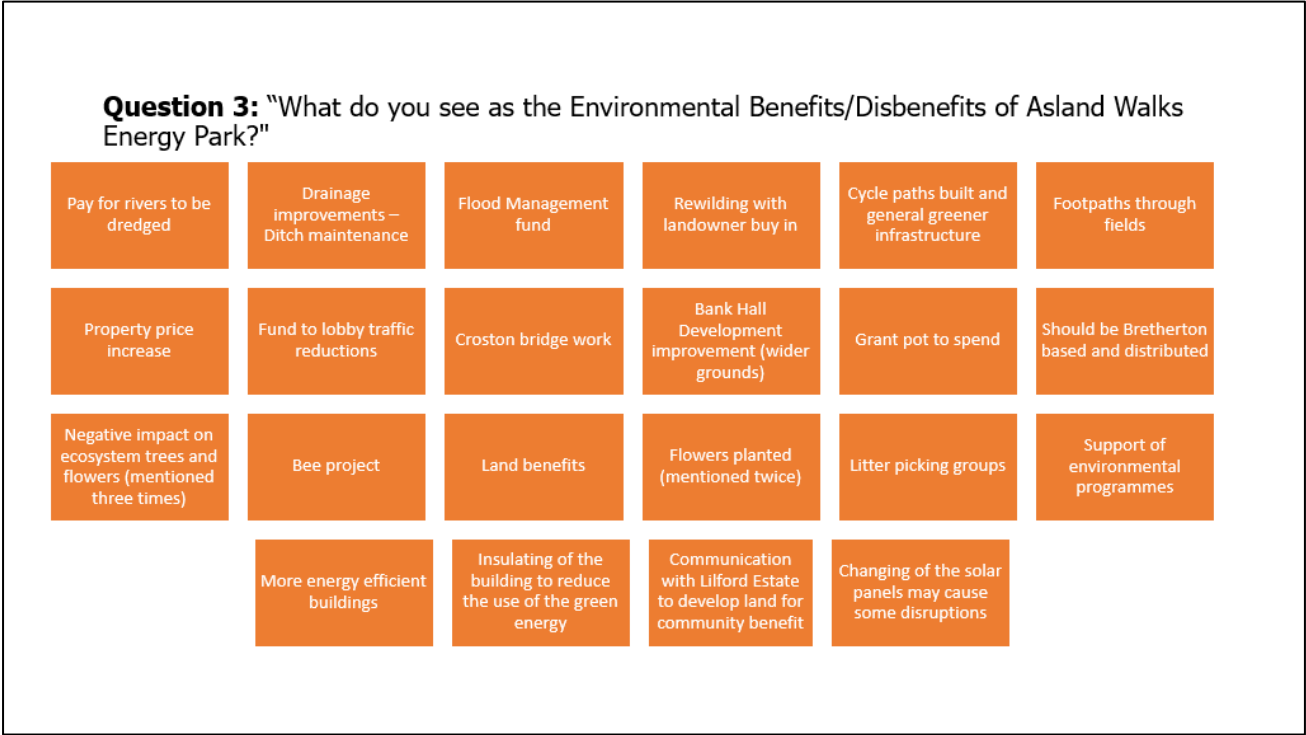


Figure 7: Focus Group One Question Three Comments

7.2.2 Focus Group Two 22 January 2025

For the second focus group, thirty individuals were directly invited by the CWRM. A total of twelve individuals attended both the morning and evening sessions. Focus Group two was designed to examine more deeply the perceived Benefits/Disbenefits of AWEF. A mixture of responses were recorded, including infrastructure investment and environmental awareness raising, as well as collaborating with the local school on climate education to long term support of any investment.



Figure 8: Prof. Karl Williams facilitating the focus group with Bretherton Residents (November 2024)

Four new questions were put forward to the group based on the outcome to the first session. To further engage the attendees in the session a different ice breaker activity was used at the start of the session.

Question One: "How would the AWEPP proposal encourage the decarbonisation of energy use. Why?"

Questions 1: How would the Asland Walks Energy park proposal encourage the decarbonisation of energy use? Why?			
Financial Incentive: Finance is the key driver and has to be tangible	Potentially helping residents to insulate their homes	Helping people to know how they can make the most of the project	Some People would have already subscribed to 100% renewable energy
With 200% of the needed electricity - change from gas to electricity	Future proof demand	Free fuel may not encourage ASHP	Hot tubs may increase electricity use if free electricity
'Why not support others - Tarleton can see the installation	People already have PV and EV Chargers	Have money instead of electricity for the community	Sell back price is minimal

People will use more electricity	Studies need updating as last where in 2022	Battery prices and efficiency's now different and not the same cost	When is the energy park ready?
Subsidised lower price	Easier to switch from gas to ASHP or GSHP	More Electric Cars	Schools could visit energy park to inspire children
Cheap electricity so return of investment	Community EV charge points	Subsides for retro fit of insulation	Education for young people

Figure 10: Focus Group Two Question One Comments

 **Question Two:** *"What do you see at a fair rate per kWh? (Average electricity cost if 20p per kWh, resale back to the grid is 5p per kWh, and membership fee is estimated to be around £48)"*

The focus group attendees showed a good awareness of what they would like to see from the AWEF. The rates of pence per KW mentioned aligned with earlier discussions with the BEG on what residents would likely be charged. The concern was that any charge would be:

"Less than market value"

for a kWh rate of their energy.

The groups we asked what they saw as their priority when considering at community/environmental and societal benefits. When the focus group was asked what they saw as the most important of the three

- i. Community
- ii. Environmental
- iii. Societal benefits

There was no overall consensus on which of the three had the largest impact of their engagement with AWEF. In many cases it depended on how the scheme operated and where the liabilities sat. Concerns voiced included

"Who is paying for the switching gear?"

And:

"Who repairs power cuts?"

This highlighted the need for more awareness raising within the village on how the scheme would be operated for the residents of Bretherton. This would allow informed decisions by the community based on clear knowledge. The group considered how the scheme would charge residents in order to support the 3 aims and offer any contingencies. A similar response to the previous focus group was seen. Focus group attendees also suggested a fair price as being:

"Between 5-10p per kWh" up to as much as 20p per kWh and "50% less than what I currently pay."

Question 2: What do you see as a fair rate per kWh? (Average electricity cost is 25p per kWh, resale value back to the grid is 5p per kWh, and membership fee estimated to be £48 per year).

Single digit number because EV charger at 6p/kWh overnight	Split rate would influence the rate	Maybe 50%	Somewhere between 50% and 80% of what I currently pay	8p kWh to cover infrastructure costs
Would the cost increase? If not this could be seen as insurance against future price rises.	Who is paying for the switching gear?	Is the £48.00 a year for staff or equipment?	Who repairs power cuts?	Price between 5p - 10p per kWh
Is the switchgear price realistic?	Is there a vote on the Energy Group?	Energy group needs to be elected from villagers	How is the 5% calculated? Is it forecasted?	

Fear GA will take all the electricity generated	Is the webpage for the energy group up to date?	Higher users of electricity will get more benefit from the scheme	We can already buy green energy from energy providers	Should not be free - nothing to stop people leaving heating or lighting on
Zero pence would not benefit the community	Two tier pricing system - School and Church to get low rate	Households to pay more.	Free up to a point of consumption	£0.20p kWh
Higher price equals community benefit	Cheap or free energy for the school and low-income households	25% reduction for low-income households and 5 communities' assets	Day and Night rate	Poll villagers on their tariffs and base the discount on this

Figure 11: Focus Group Two Question Two Comments

Question Three, "From the income generated, what do you see as the more important benefit? Environmental, social, or socio-economic? Are there any disbenefits to this approach?"

This question was designed to examine how the attendees balanced a personal interest to that of the community interest. This provoked a lot of discussion around how what they received as an individual stacked up against the community benefits.

There was more awareness the limited community options within this group. Consequently, the focus was more on support which would benefit a broader group of residents. The setting up of a community pub/village shop was seen as something that would be supported across the village. This also had the added benefit of promoting the village beyond the local residents.



Figure 12: Focus Group Two Question Three Comments

Question Four, "How would you like to see community engagement working from the potential support provided by the energy club?" This question created discussions of who would facilitate the benefits locally, and in what numbers. Infrastructural support was also mentioned with individual mentioned of community facilities such as a swimming pool. With access to the funding also being raised as an issue with accountable bodies yet to be appointed.

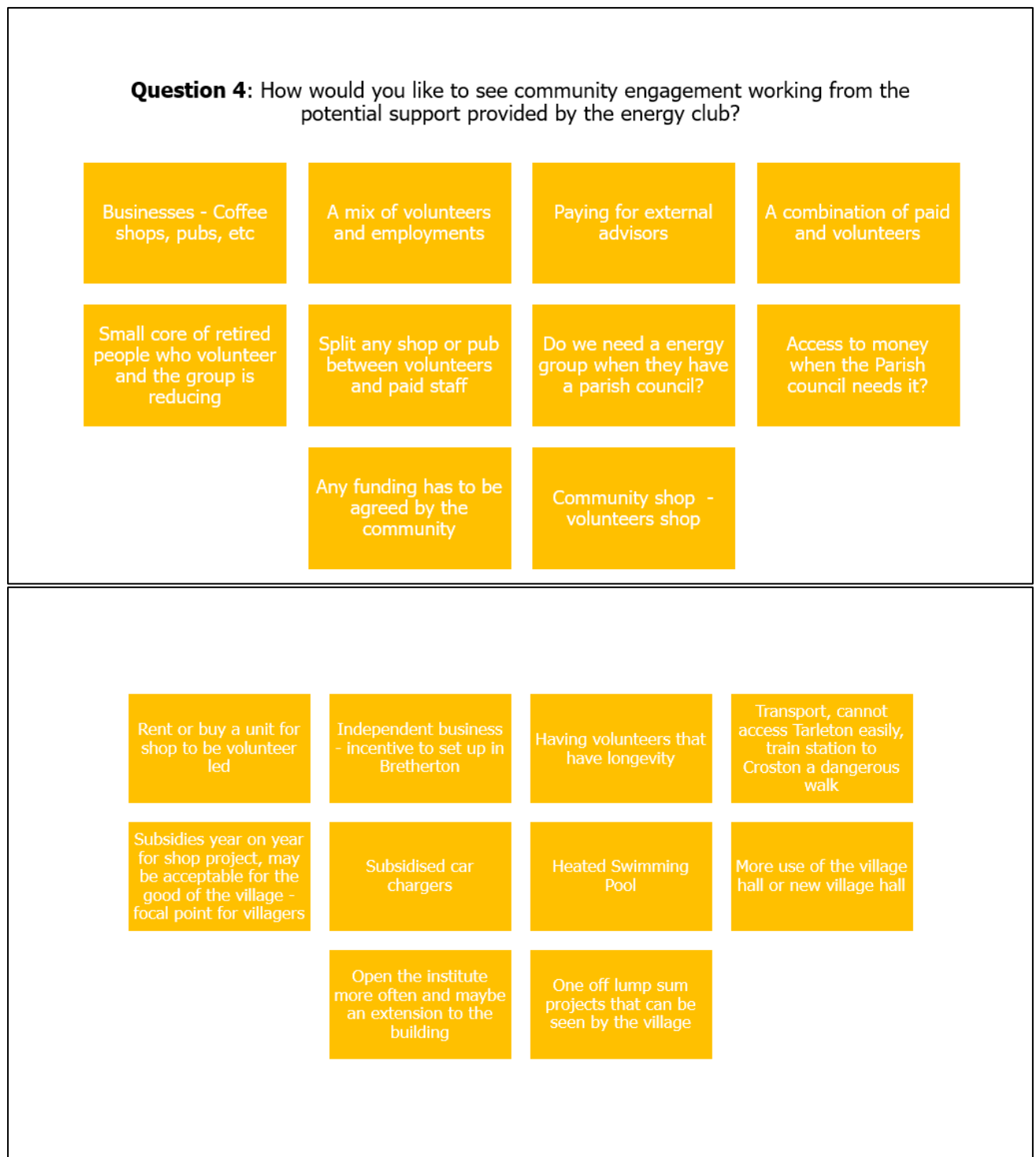


Figure 13: Focus Group Two Question Four Comments

There were ten attendees over the two sessions. The original format was built upon to allow the group to discuss their knowledge of AWEF for one minute as an icebreaker. As mentioned in the methodology, this exercise would help ensure independent thought within the group.

The third focus group was designed to build on the outcomes from the previous sessions and examine in more detail the residents thoughts on the perceived benefits and disbenefits of AWEF.

The management structure for community energy vehicles was part of the focus of the final focus group. Information was provided at the start as conveyed to the CWRM team by BEG. Attendees had the opportunity to discuss the makeup of the volunteer committee, along with the long-term management plans for supporting the social, environmental and socio-economic benefits for the community. The focus group raised a concern of the establishment of any future project was the critical role of volunteers from the Bretherton community numbers in the discourse. Discussions also highlighted that funding and business support were required for the long-term sustainability of projects, particularly considering past failures, such as Bretherton's community shops.



47

The third focus group discourse focussed on how a potential partnership would operate as well as the board structure of and who would be involved in the upkeep of the community engagement and management of the AWEF scheme. The word cloud (Figure 14) was similar to the first focus group session.

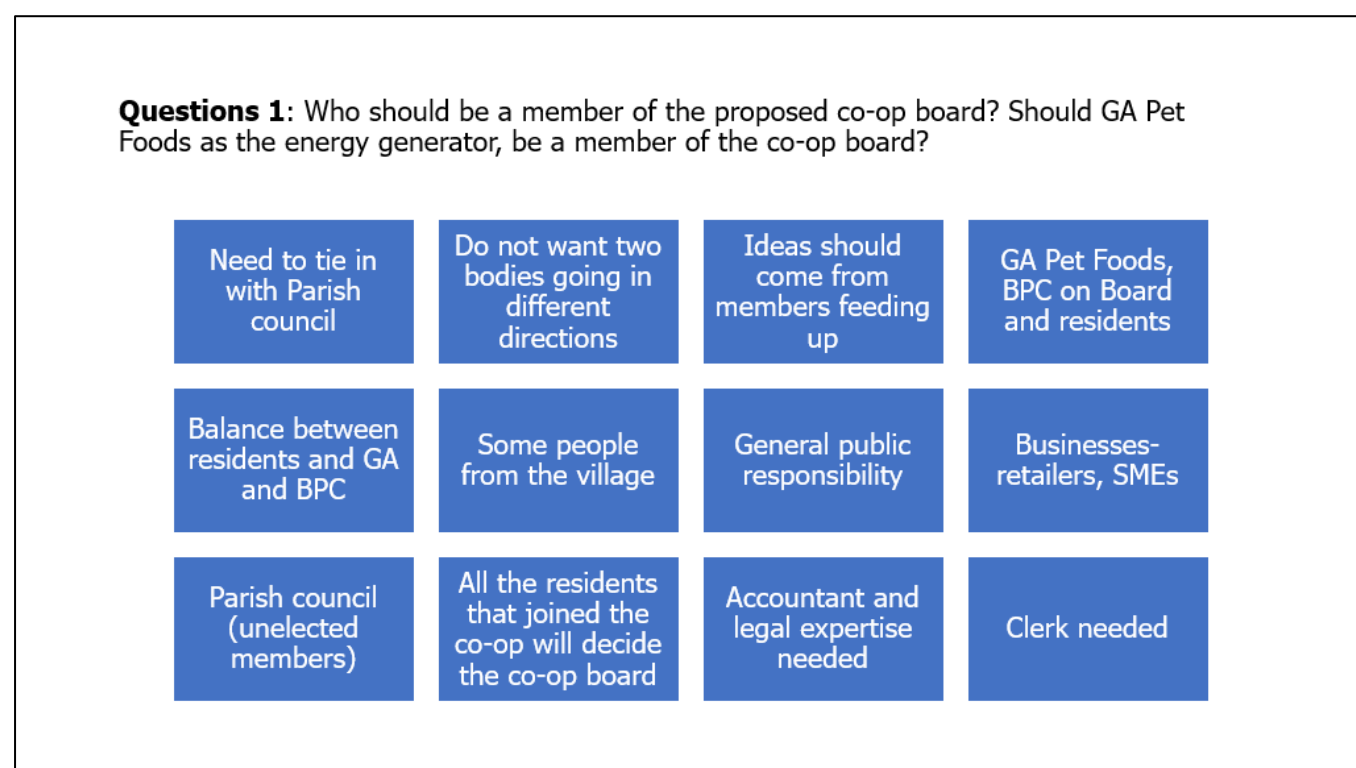


Figure 15: Focus Group Three Question One Comments

Question One, *"Who should be a member of the proposed co-op board? Should GAPF, as the energy generator, be a member of the co-op board?"*

This question provoked responses and how members of Bretherton would be able to get involved. A number of points around governance and who would be eligible to be part of the decision making. An area of debate was should the Bretherton group be independent of GAPF and would they be given a role. The lack of clarity on who would benefit from the AWEF scheme and crucial points around different tariff rates for businesses and members. It led to discussion on equitability amongst the community and energy use.

"What is the meaning of one member one vote?"

"Should GAPFs be a member?"

"Are there different tariffs for businesses and individual members?"

These discussions followed the pattern of the community interest support in the structure and funding. The lack of clear information available to the residents of Bretherton made it difficult for the attendees in some cases to fully support the scheme, with further information required regarding the structure of the proposed vehicle.

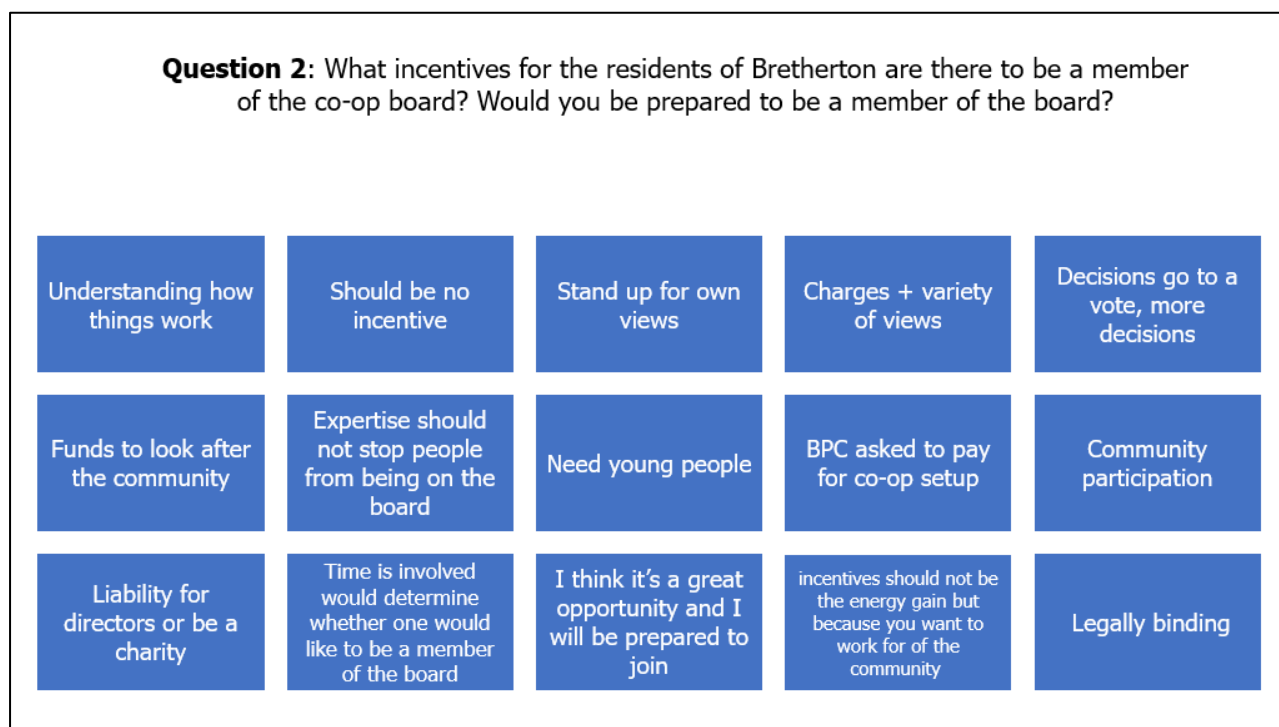


Figure 16: Focus Group Three Question Two Comments

Question Two, *"What incentives for the residents of Bretherton are there to be a member of the co-op board? Would you be prepared to be a member of the board?"*

The focus group highlighted two areas which they felt would have the greatest influence. This question assessed the appetite of any residents who may not have expressed a desire to be involved in a community cooperative to voice their feelings. Early questions and focus groups have highlighted the importance of long-term planning for any project, so naturally, people should consider members as part of that longevity. Responses Included:

"Bringing separate cash into the village."

"The incentives should not be the energy gain, but because you want to work for the progress of the community."

Attendees also expressed an interest in joining any future board that could be formed to manage any future community benefit of the AWEF.

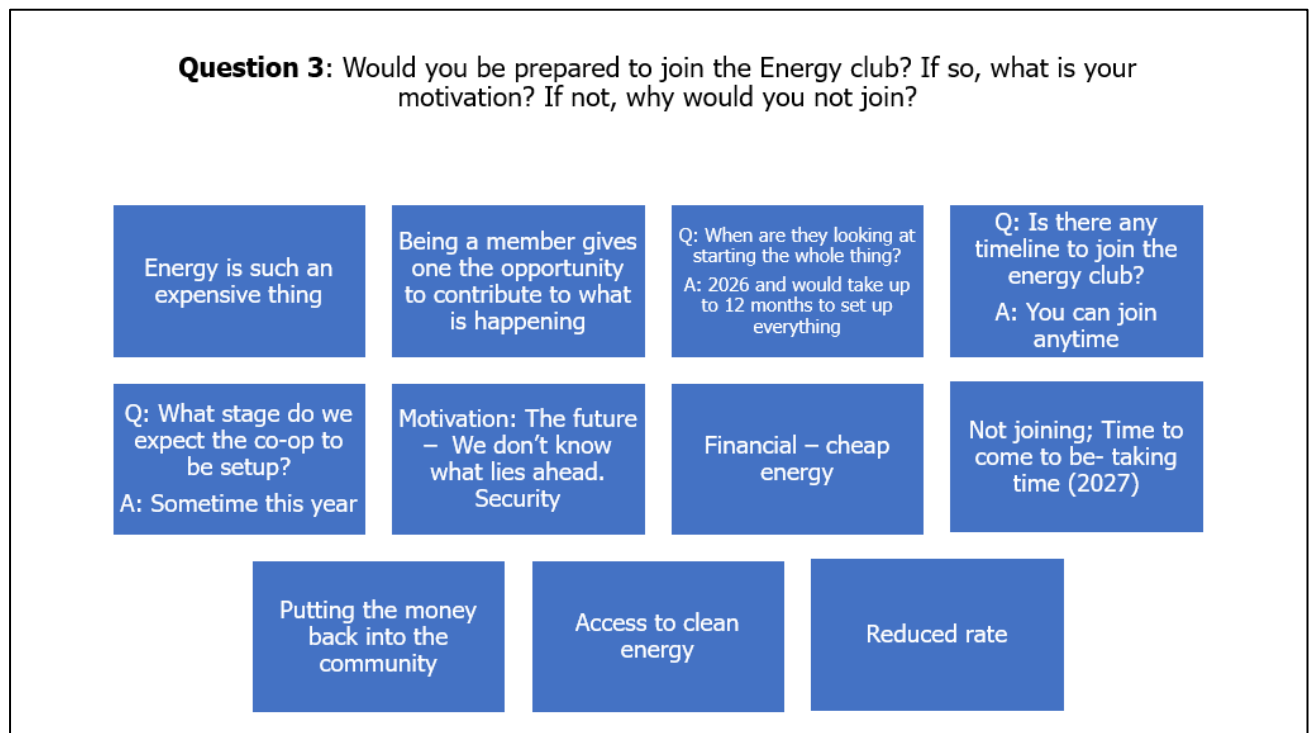


Figure 17: Focus Group Three Question Three Comments

Question three, "Would you be prepared to join the Energy club? If so, what is your Motivation? If not, why would you not join?"

Responses included: "

"Clean energy. Putting the money back into the community."

"Reduced rate. Clean energy access."

This was a closed question to the focus group, with the aim of assessing the level of engagement in the proposed scheme. This question raised the point in the group that any monetary contributions should be established before they could commit to discussing a cooperative with the community as a whole. The attendees felt that without the finance and structure it was difficult to evaluate the community benefit and if they would sign up at this point of the scheme.

The attendees raised that any scheme would have to offer at least the same benefits as their existing suppliers. Cheaper energy prices at different times of day and rewards for not using energy at peak times. Octopus energy was cited as an example.

The future security was also evident in their discussion around this question. The longevity of the organiser's commitments and investment in the long-term projects was also highlighted. Time scales were important to the focus group. The appetite to get started and get involved with AWEPP was very clear in the group but their reservations were based on poorly detailed information.

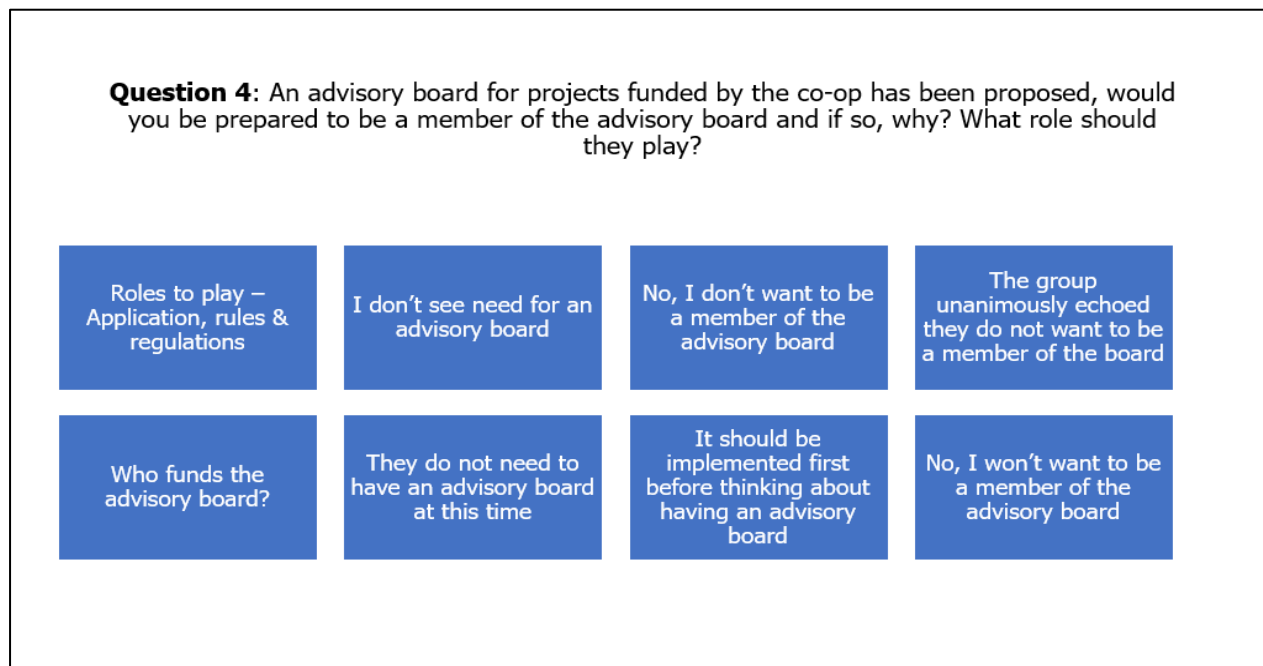


Figure 18: Focus Group Three Question Four Comments

Question four, *"An advisory board for projects funded by the co-op has been proposed. Would you be prepared to be a member of the advisory board, and if so, why?"*

Responses being recorded as:

"Who funds the advisory board?"

"They do not need to have an advisory board at this time."

"It has to be implemented first before thinking about having an advisory board."

"Funding of the advisory board raises concerns about impartiality, as participants are reluctant to participate in an advisory capacity."

The group's appetite to be involved in an advisory board was less than their appetite to see the project succeed. The group saw the setting up of an advisory board as unnecessary and adding more layers than required. An earlier part of the session where operating under a "one member, one vote" structure was seen as a "must" for the potential future cooperative. The group agreed a proficient level expertise of individuals involved would be required to ensure the best interests of the community are upheld. Therefore, some formal skills audit was needed of individuals.

Question 5: Should the residents and businesses work with GA Pet Foods on the Asland Walks project through the co-op?

Lot of mistrust of GA Pet Foods	GA are having their energy reduced	GA could have done without residents. Have reduced smells (only sometimes)	Odour reduction has worked
Local employment	Happy, but across the village	Maybe no if planning has not changed	Planning changes and power free not been realised
	Yes, since it would help in reducing their carbon which would benefit the environment	I don't see the reason why not	

Figure 19: Focus Group Three Question Five Comments

Question five, *"Should the residents and businesses work with GAPF on the Asland Walks project through the co-op?"*

Responses noted were:

"Yes, since it would help in their carbon emissions, which would benefit the environment."

The main point that emerges throughout the focus groups was, is that if it benefits the environment, it would also benefit the Bretherton community. As more information on the operation of the as the cooperative becomes available it was seen that the overall scheme would be viewed positively by local residents.

Question 6: Do you see the benefits of the Asland Walks Energy Park scheme and Energy Club outweighing the disbenefits, how would you apportion this?

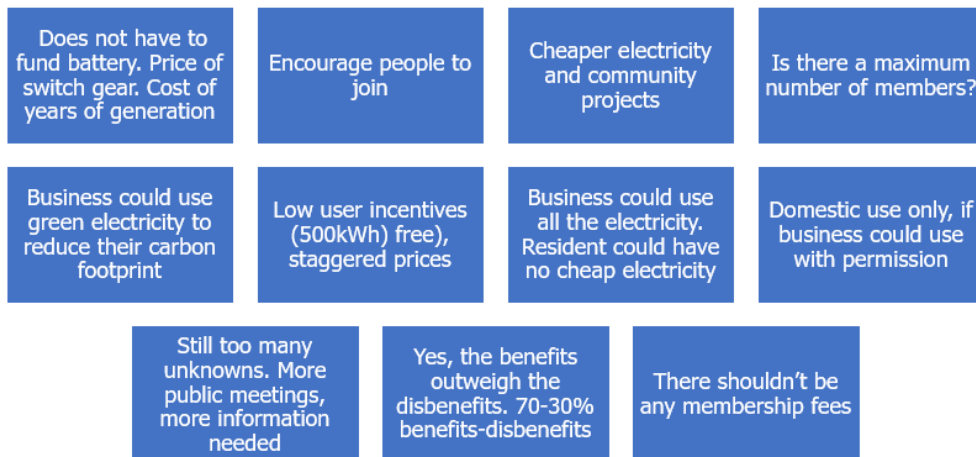


Figure 20: Focus group Three Question Six Comments

Question six, *"Do you see the benefits of the AWE scheme and Energy Club outweighing the disbenefits, how would you apportion this?"*

This question builds and adds layers to earlier questions of what people saw as the Benefits/Disbenefits of AWE. To enable the group to explore the binary choice of "good outweighing bad."

A large part of the discourse following this question centred around finance. The finance and support showing comparable correlation to the initial questionnaire evidence on page research, indicating an approval rating of around 70% among community members who have engaged with AWE so far. Technical advice was required as the project progresses. An important area was to address low electricity usage by some residents in the village, and overuse by others. This would also need to consider the differentiation of commercial rates for businesses in the village. Comments recorded were:

"Yes, the benefits outweigh the disbenefits. 70-30% benefits-disbenefits"

"There shouldn't be any membership fees."



Figure 21: Prof. Karl Williams facilitating the focus group with Bretherton Residents (January 2025)

Section Three: Overview of Community Benefits and Impacts

Monthly meetings were held with GAPF and BEG throughout the first two stages of this research, with progress reports on ongoing results provided by the CWRM as the research was conducted.

The timeline was divided into three stages, with some overlap in delivery, allowing for a one-month tolerance for each stage. This was crucial when engaging with stakeholders and maximising their time to participate in this research, as well as when engaging with the community to give them the maximum opportunity to engage with the process at a convenient time for them.

The research commenced in September 2024. Informal meetings were held with Bretherton community members and GAPF over the summer period, from June to August, to ascertain the scope of the research initially. With the CWRM team attending the 2024 Bretherton Village Fete, which offered an opportunity to publicise the upcoming focus groups. The benefits and disbenefits have been abbreviated into a table below, incorporating both the focus groups and stakeholder interview opinions.

This stage consolidated both the focus groups and stakeholder engagements. Data analysis of information sources, as well as a broader review of community engagement

studies globally, highlighted that the Bretherton Community is not alone in its limited understanding of renewable energy generation and community engagement approaches to generation.

a. Review

A critical evaluation was undertaken in the community of the existing documents related to the AWEPP scheme. This comprised planning documents, company reports, local authority records, and policy frameworks. This was used to identify the intended benefits and disbenefits outlined in the project goals. (The documents are detailed in the appendices at the end of this report) These documents detailed the ever-changing landscape of onshore renewable energy schemes, community engagement requirements, and the planning processes.

b. Key Informant Interviews: The key individuals involved were local parish councillors, Chorley authority staff, representatives of NGOs, and GAPF representatives (to provide project insights). These interviews highlighted a desire to support the AWEPP proposal. The data was analysed in the context of the documentation, proposed structure of the community group (BEG) to link the community perceptions of the benefits and disbenefits to themselves. The community interviews revealed that the BEG is committed to maintaining its local relationships with both the community and GAPF. With commitments to building an established facility to manage the future benefits and potential disbenefits that may arise This was underpinned by an already established community partnership in Bretherton.

c. Focus Groups

The opportunity was taken with the attendees to gauge the level of awareness of the scheme and assess its impact on their daily lives. This gathered detailed qualitative insights and subjective experiences on previous projects and future projects going forward. The questions and answers from the focus group interactions highlighted the varying levels of engagement and knowledge within the Bretherton community. The sessions highlighted the requirement for clearer development in terms of the finance and structural management of any Bretherton cooperative organisation. Community members were keen to see AWEPP succeed but were less interested in being involved structurally with the board and any potential future decision-making processes for the community.

d. Observational Data

Site visits were conducted by the CWRM research team to the GAPF site at Plock's Farm and also to the village of Bretherton, use was made of website data, data provided directly by GAPF and BEG, as well as informal observations to verify AWEPP outputs and future operations. It should be noted that throughout the study, information on generation, intended financial benefits, and the setup of the community body to administer the project repeatedly changed. This included the decision to operate different community models before finally deciding upon some form of a community cooperative. This would be the body to distribute any proceeds from AWEPP

and oversee the supply of energy and surplus funds. The third and final stage of the research was to be the report the community benefits and impacts of the AWEPP on the residents of Bretherton.

e. Findings From Study

The essential themes identified across the focus groups are that residents would like to see the community benefits efforts have a clear focus. There was particular emphasis on both social and structural improvements, within Bretherton. Finance was seen as the most critical issue by the village, with contributors stating that free or reduced-cost energy for villagers was the main benefit.

AWEPP Stakeholder Perceived Benefits/Disbenefits – Each Benefit/Disbenefit has been grouped into Social/Socio-economic/Environmental, as requested by GAPF the Benefits/Disbenefits.

Social covers – The impact to the Bretherton Community specifically.

Socio-economic covers discourse including the financial aspects of AWEPP and its impact on the community, GAPF and wider Lancashire area.

Environmental covers what the stakeholders see as ecological issues, both locally and wider climate change implications of carbon reduction. If a benefit benefitted more than one defined aspect it was listed as such, for example.

When gathering the stakeholder responses, it was clear that there were more perceived benefits of AWEPP with forty-one separate mentions of what were seen as benefits. Compared to disbenefits with a 41:14 mentions some of the potential individual Benefits/Disbenefits overlapped various subject benefits, hence why there are different amounts of subjects raised and numbers of Benefits/Disbenefits.

When evaluating the benefits of AWEPP for stakeholders, the results showed an identical weighing of the perceived Social and Socio-economic benefits of AWEPP, (With twenty-six mentions of the overall benefits). Environmental benefits were seen as least important eighteen mentions of what the stakeholders saw as benefits of the AWEPP. This highlights that the social benefits and socio-economic benefits are one of the main drivers for those affected by the scheme and valued equally by stakeholders.

Table 2 summarises each stakeholders opinion on the key benefits and disbenefits

Stakeholder	Perceived Benefits	Perceived Disbenefits
Bretherton Energy Group (BEG)	- Reduced rates of electricity for the community (Socio-economic) - Carbon reduction advice funded by surplus for the community of Bretherton (Social) - Ability to use this project as a vehicle for community engagement (Social) - Improved relationship with GAPF (Environmental)	- Loss of arable land (Social/Environmental) - Increased housing demand for people wanting to move to Bretherton (Social/Socio-economic/Environmental) - Local disempowerment of the project due to delays in local/neighbourhood plans (Social/Socio-economic)
Bretherton Parish Council (BPC)	- Reduced carbon footprint for everyone in the village (Environmental) - The reward of providing clear messaging for community members (Social) - Reduced cost of electricity (Socio-economic) - Surplus funding for community infrastructure projects (Socio-economic) - A proper vehicle established for the distribution of benefits (Socio-economic) 5% of energy distributed for the village (Socio-economic/Environmental) - Local Pub purchase (Environmental/Social) - More available green space (Social/Environmental) - Village hall (Social)	- Scepticism of villagers of AWEF (Social) - Lack of communication with villagers – especially older members (Social)
Chorley Council	Unable to gauge	
Community of Bretherton	- Bringing people together to achieve a common goal (Social) - Will encourage people to stay in the community (Social) - Adding value to property in the village (Socio-economic) - More People moving to the village (Social/Socio-economic) - Long-term commitment to tree planting (Environmental/Social) - EV charging points (Socio-economic) - Subsidised shop to benefit younger community (Social/Socio-economic) - Outdoor activity area for children (Social) - Improvement of existing housing stock (Social/Socio-economic) - Money to give the community a voice (Socio-economic) - Subsidised rate of electricity (Socio-economic) - Help for poorer members of the community (Social/Social-economic) - Subsidised community transportation (Social/Socio-economic/Environmental)	- More people moving to the village (Social/Socio-economic/Environmental) - Parish has minimal land to operate any surplus (Social/Socio-economic) - Pressure on community members time to manage an Energy group/co-operative (Social) - Community cost to establish an energy group/co-operative (Social/Socio-economic) - Mistrust of GAPF and could be seen as a difficult joint partnership (Social) - Expense of community funding switch gear (Socio-economic) - Businesses could use all the 5% (Socio-economic) - Cost of membership fees (Socio-economic)

	• Various Environmental projects – River dredging/Community flowers/bee project/Tree planting (Environmental) • Flood management funding (Social/Socio-economic/Environmental) • Cycle paths and green infrastructure improvement (Social/Environmental) • Housing stock improvements – Care home /Energy efficient housing (Socio-economic/Environmental) • Energy security for the community (Socio-economic/Social) • Single Digit energy per KWh – Cheap energy for the community (Socio-economic/Social) • Access to clean energy (Social/Socio-economic/Environmental) • Lower use incentives (Social/Socio-economic/Environmental)	
Energy Local	• Being involved in another community energy project (Social/Socio-economic/Environmental) • Training individuals to disseminate the technical aspects of carbon reduction (Social/Socio-economic/Environmental) • A development of a community energy Cooperative (Social/Socio-economic/Environmental)	None for them as a contracted body
Electricity North-West Ltd (ENWL)	• Unable to gauge	• No information
GAPF	• Reduced carbon emissions (Environmental) • Energy security (Socio-economic) • Company security/stability (Socio-economic) • Provision of community benefit (Social/Socio-economic/Environmental)	• Onerous process (Social/Socio-economic/Environmental)

Table 2: Perceived Benefits/Disbenefits of AWEF

The Environmental impact of adopting renewable electrical energy is a carbon reduction, with AWEF directly reducing the GHG emissions of the Borough Chorley and the village of Bretherton. This in turn would contribute to the net zero target of Chorley council (currently 2030) and government target (currently 2050). Improved air quality is also expected to be a knock-on effect of GAPF getting 65% of their energy needs from a renewable source. Land use and biodiversity is also set to be improved by bringing back in to use fallow land, including tree planting and establishment of a village nature reserve at the site of AWEF including pathways by the Leeds Liverpool Canal.

The Social Impacts will facilitate Energy Empowerment and ownership. The planned community energy scheme would empower the village of Bretherton to improved literacy around energy creation. This has been evidenced in stakeholder engagement sessions, which highlighted a number of community members already engaged with the planning process. This was also echoed with the stakeholder engagement interview conducted with Energy Local, who will be training community individuals to further reinforce the knowledge of green energy within the community of Bretherton. There is also a potential to improve equity and inclusion related to energy use. Energy poverty was raised as something to that could be tackled with the support of Energy Local to support vulnerable households within the village. The focus groups and stakeholder engagement interviews echoed this and highlighted the importance of transparent governance and fair access to ensure a positive social impact. This should provide incentives for the community to be involved in AWEF for the long term.

The socio economic impacts will enable households and businesses in Bretherton to benefit from lower electricity bills through local generation and storage. Alongside this they will establish predictable pricing models (e.g. fixed tariffs) and this in turn will offer protection for the village from volatile energy markets, with further price fixing caps due to end in 2025.

Local Economic Development would be expected for the village of Bretherton depending on the decision for how they would prefer to distribute funding between domestic and business interests within the village. Investment in local infrastructure could create jobs and supports local supply chains. Potential Revenues from community energy can be reinvested into local services or social funds. (although at the time of research Bretherton Energy Group (BEG) will not be registered as a provider of energy)

Resilience and Energy Security and decentralized power generation would support a potential future decentralized system. This would reduce dependence on national grids and improve resilience to outages or price shocks for the village. The proposed battery storage system could enhance flexibility and reliability for the village.

The incentives to transition to decarbonized power would be reduced emissions and cost savings. This would support local businesses based within the immediate locality of Bretherton. With a reduction in local emissions there would be potential improvements in local air quality.

Socio-Economic incentives, based on the 5% energy generated contribution, it is expected that a reduction in bills would provide an economic incentive for villagers. There could also be further jobs created within the community once the scheme is established in conjunction with Energy Local.

Social incentives, improved energy security should be reflected in improved energy resilience in the community. This should also provide improved community cohesion and incentivise inclusion in a local common goal. Community ownership should further compound this feeling of inclusion as shown in research of other community projects already established across Europe. Becoming a beacon for wider government energy improvements should also work as a catalyst for the local community, building on a sense of community empowerment. Stability is key as an incentive as it impacts the community, decentralized power can feed into community goals and benefits which were defined as part of the stakeholder and focus group engagement.

Other researched and identified impacts both benefits and disbenefits were based on the local energy local community energy models, an energy cooperative appears to be the preferred option. With energy local already involved in the AWEPP, it is to be presumed that the energy and benefits will be distributed through this cooperative model.

Gower Power is an example of private sector funded community energy, so successful it now provides its own seed funding. One of their investment projects, Brynwhilach involved the purchase of a 5WM solar farm in 2023 which is expected to deliver a total community benefit fund circa 2.7m. This brought together at least five large scale investors that provided a 6% annual return on their investments. This funding was raised in only 3 months after launching a community share offer. There is the potential the cooperative setup by Bretherton could in time provide these kinds of community benefits. Gower Power also operate support for purchasing of EVs, community agriculture schemes, community cafes and investment in sustainable skills.

Similar schemes are also being developed in Rossendale in Lancashire, with local authority, local third sector backing and investment looking at community heating schemes and solar power offering 6% annual returns, building on their already established wind energy.

When looking at the benefits and disbenefits of existing schemes economics is a continual obstacle to be overcome. When looking at UK government research, 72%

of 109 respondents currently involved in community energy schemes (Apr-Jun 2024) saw initial funding as the biggest disbenefit to setting up a community energy scheme. Retention of income was also noted as a potential issue with 46% of respondents saying they had issues of where any income could lie. Environmental and ecological impacts were seen as an issue for 11% of respondents. Something which was also noted within this research by a small number of individuals in the focus group sessions, that socio economic benefits were seen as a priority over environmental and ecological impacts.

A lesser number of 12% were interested in the negative impacts of their community energy schemes. The biggest two issues for them were business challenges and a lack of diversity and equality to participation. Environmental impacts did not feature as a concern as part of this governmental research.

In conclusion benefits far outweigh the disbenefits when looking at the impacts of AWEF on the local community from an aspect of key indicators.

8 Recommendations

Further meetings of the proposed Energy Group – Allowing individuals to decide on the detailed financial models and costings of the perceived benefits. This should include, in detail, any fees to be charged to members, as well as how support would be sold to any potential future members of an established energy group or cooperative. Suggested visitation to other local energy groups to compare/contrast how separate groups have managed their community energy generation and consumption.

Based on stakeholder engagement results, further internal focus group work is required to ensure any future local management teams are aligned when it comes to what they see as the benefits received by the AWEF. Funding for any cooperative within the community has been repeatedly mentioned as a potential issue for the community of Bretherton. It should be given special consideration when moving forward with the project to ensure the ongoing support and trust of the Bretherton community.

To in turn help the community of Bretherton to determine how any surplus “profit” should be managed and distributed with the consultation of local community groups and residents. This action was developed as a case of “what if” scenarios that were not discussed with the villagers, as budgets to support community schemes were based on indeterminate figures, and budgets were not defined as yet by GAPF. Further implementation would involve integrating this research with AWEF existing technical knowledge. In the focus groups, ecological improvements were discussed, and habitat and ecology reports being commissioned by GAPF. As part of the focus group introductions, the groups were reminded of the visual screening work done in

conjunction with the planning of 15,000 trees around the 100-acre site, and artists impressions of how the turbine would appear.

The focus groups were key to allowing residents to explore what they saw as benefits of the AWEF. In line with the research goal of

"Determine the social and environmental impacts of the proposed Asland Energy Park in line with the current National Planning Policy Framework."

As of the 8th of July 2024, the de facto ban on onshore wind was lifted. The de facto ban had been in place since 2015. Although the National Planning Policy framework now judges onshore wind to the same bar as other energy projects. In conjunction with this planning policy change, the government has committed to doubling its onshore wind capacity by 2030.

Some of the focus group attendees were aware of this policy change, and when discussed with stakeholders, it was hoped that there would be a continuation of the established dialogue with GAPF and community-based stakeholders.

The government has identified the energy grid infrastructure as a bottleneck in their goal of doubling green energy and recognized grid expansion as a key factor in addressing this. With the expansion of planning departments and further studies into the community benefits of green energy, a more expedient decision-making process can be enabled. Key to this part of the CWRM research was speaking with both Chorley Council, as the planning decision-makers in this process, and also Electricity North-West Ltd, which limited the exploration of how the National Planning Framework updates would affect the AWEF. Although the CWRM did not engage with some stakeholders, community feedback has been largely positive, and there is a general sense of excitement about the development of AWEF's arable land.

8.1 Potential Community Energy Scenarios for AWEF

Based on the financial model, 5% of the annual renewable generation from Asland Walks is estimated at 1,479,277 kWh/yr. The estimated annual electricity demand of Bretherton is 756,000 kWh/yr, which means a surplus of 723,277 kWh/yr, sold to the grid at £36,163 (5p/kWh export rate). Based on the current average price per kWh in the UK of 24.5 p/kWh, the grid market value of the 5% generation is £362,423. However, using estimates for future National and local grid increases in non-commodity charges, this import value increases. The matched price should enable the BEG to repay loans that will be secured for the purchase of energy delivery switchgear.

The remit of the BEG is to:

"Review the strategy for the sustainable energy provision and identify mutual benefits to both GAPF and the residents"

as defined in the AWEPP planning permission pre-application.

(All potential financial models were proposed in November 2024. The following scenarios may or may not be implemented within the Bretherton community and have not been discussed in detail with the community.)

8.1.1 Scenario 1 – Direct Renewable Energy Provided and Financial Support

Direct energy into the community of Bretherton via batteries at either end of the village. With an established Energy Cooperative, to manage this at a per-person membership "nominal fee" to be decided at the proper time. Overall, feedback received from the village, based on the focus groups and stakeholder interviews, was supportive of this scenario, provided that villagers required more information regarding the financial contributions needed, the decision-making processes, and who would be responsible for the decisions in the community's best interest.

Although solely private sector-funded community energy projects are rare, Nottinghamshire Pension Fund's £1.5m investment in Nottinghamshire Community Energy in 2016 demonstrates how a community can benefit from private sector altruistic investment.

The CWRM research showed that residents involved in Gower Power on the 19-mile-long Gower Peninsula were prepared to overpay for their energy as *"it was the right thing to do,"* as it benefited the local and broader environment. (Appendix 14)

8.1.2 Scenario 2 – Finance Support Only

"No energy provided by GAPF into the village of Bretherton." A potential situation due to ENWL not allowing the use of their power grid. – Community benefit definition as detailed in legal report 'Advice – GAPF_CEB' Constanze Bell Legal document (2024). The stakeholders' feelings were that this was not a preferred option, specifically GAPF, as the project had been based solely on their commitment to the benefit of the Bretherton community.

Research showed that Power purchase agreements with declared community benefits or a community benefit fund to promote green energy in the community could be a palatable option for Bretherton residents.

Private wires and a microgrid are a way of avoiding ENWL grid usage, something in use by Octopus Energy at four established sites across the UK. With their "Fan Club" schemes, where they offer members a 50% discount on their energy. The "world first" tariffs were made available in Caerphilly in Wales, and Market Weighton in Yorkshire (insert Reference number)

8.1.3 Scenario 3 – Subsidized Energy Scheme

Subsidised energy provided on behalf of GAPF “around £200 per person” (depending on the financial model preferred by local decision makers) through a donation as a community benefit for the energy created by GAPF. Subjects raised in the community research of disruption to the village and potential new visitors if new technology, such as vehicle charging points, were installed within the village. Scenario three could be the preference of these individuals who.

Would see cheaper bills overall as a net benefit without any disruption to the village. Octopus Energy’s “fan Club” model is a prime example of how private sector organisations can assist local communities, offering up to 50% discounts on energy bills to local users depending on local turbine generation levels.

Potential Community Energy if Scheme’s Planning is Rejected

8.1.4 Explore Alternative Options:

Explore potential smaller-scale projects: If the initial proposal was deemed as “too ambitious” for local stakeholders, GAPF could consider breaking it down into smaller, projects and reducing the total size of the project, considering whether to keep the wind turbine and drop the solar park, or vice versa, depending on where the most significant planning opposition lies. Previous research has shown that GAPF has considered multiple sites for the proposed energy park, which has become AWEF.

Utilisation of various technologies: Investigate alternative renewable energy technologies that may be more suitable for addressing the grid's limitations. This could be a potential opportunity to resubmit the biomass energy project of GAPF after addressing the previous local issues. GAPF could relocate the proposed location of its green energy project. In line with planning changes, there is a likelihood that a project could be approved elsewhere with government backing in their green energy drive. The current proposal is below the planning limits of 50MW of electricity created.

Alternative grid connection points, connecting AWEF to a different grid point with more capacity, reducing risks for ENWL and their energy grid technology. Development of a microgrid, similar to Octopus Energy's four schemes in the UK. North Farm, Northamptonshire – With the help of Energy Oasis. All three examples are signs that a microgrid could be established with further investment in development costs. GAPF has mitigated perceived risks to the local grid and proposed a Grid Gate system, which will involve two 4.5-tonne flywheels to balance and protect the regional grid, operated by ENWL. This will safeguard against surges and fluctuations that can occur with wind and solar energy.

A new mixed-use development in Colchester, known as Colchester Northern Gateway, comprises 650 homes, several offices, and a small hospital. The development is scheduled to include 4.5 MW of ground-mounted PV panels, with the capacity rising

to 8 MW after 12 months. There are also plans to install rooftop-mounted solar panels and solar carports. As part of the project, Cheesecake Energy will be installing a fleet of energy storage systems in Amphora's micro-grid. They are planning to maximise the utilisation of PV electricity, reduce energy costs, and increase the microgrid's reliability and resilience. This will help the microgrid offer balancing services to the wider electricity network. By the end of the project, Colchester Council's microgrid will have an overall energy storage capacity of 22 MWh with a duration of 10 hrs (i.e., ~ 2.25 MW discharge power).

The site is in an area of significant grid constraints, and as such, the new development is facing substantial costs for grid upgrades to connect the new load. The installation of Cheesecake Energy's systems at the Council site will reduce delays and significant costs associated with upgrading the grid connection. A project that again highlights that a green energy project can be developed under challenging circumstances, correlating with the potential issues AWEPP has experienced and may continue to experience as it progresses further into development.

Nationally, several financial and legal hurdles still stand in the way of accelerating microgrid deployment in the UK. However, with the success of projects like Colchester's Northern Gateway and the falling cost of renewables and green energy storage. The expectation is that microgrids will become more common and commercially viable shortly, as well as in greater demand. Something which GAPF could take advantage of if they decide to develop a microgrid in Lancashire.

8.1.5 Re-Engage with Local Authorities and Stakeholders:

Re-engage with Local Government by contacting Chorley Council and relevant energy agencies to discuss the AWEPP and seek their support, to determine if their positions have changed since any initial rejection. Reenergize the community and organise community meetings to explain any changes in the project and address any concerns or objections. Focus group interactions showed minimal negativity to the AWEPP proposal.

Collaborate with other community energy groups: Learn from their experiences and develop potential partnerships. Utilize the unique position of GAPF and Bretherton, which could serve as a template for private sector and community benefits in other future projects. Earlier studies conducted and engagements with Chorley Council appear to have answered potential issues raised by the Council.

Appeal the Decision and review the rejecting organisation's decision-making process to ensure that the decision was made fairly and by relevant regulations. Based on previous work done with legal advisors, GAPF appears to have contingencies in place to appeal any adverse decision on the project, should GAPF intend to move forward without a revised plan for AWEPP.

If there is a belief that the decision was unfair or discriminatory, GAPF should consider seeking legal advice. Appealing the decision to a regulatory authority, if applicable. To a higher authority, such as the energy regulator in the UK.

Consider alternative Funding and Support, GAPF has fully funded the project so far, crowdfunding, debt finance, grants, or government funding are not a consideration when funding the project or any subsequent appeals process.

Likely Outcome

AWEP should be approved under current frameworks. It meets or exceeds all relevant policy criteria; it demonstrates strong community engagement and significant environmental and socio-economic benefits. Environmental, landscape, and heritage impact assessments completed, extensive community engagement through surveys, focus groups, and stakeholder interviews. The project size is below the NSIP threshold (100 MW) and adheres to best practices. AWEP meets all local policy requirements, AWEP is a model example of sustainable development. In relation to the Regulation 18 consultation AWEP fits the “preferred option” profile. The project is well prepared and responsibly developed and represents a model for sustainable development and community-business partnership in the UK clean energy transition.

The Asland Walks Energy Park (AWEP) represents a pioneering collaboration between GA Petfood Partners and the Bretherton community to deliver locally generated, decarbonised energy. The project aims to make GAPF energy self-sufficient while donating 5% of its renewable output to the village, offering both environmental and socio-economic benefits.

Extensive research conducted by the Centre for Waste and Resource Management at UCLan revealed community support for the initiative. Residents valued the opportunity to reduce energy costs, improve sustainability, and invest in local infrastructure. Focus groups and stakeholder interviews highlighted the importance of transparent governance, fair pricing, and long-term community engagement.

From a planning perspective, AWEP aligns with national and local frameworks, including the updated National Planning Policy Framework and the Central Lancashire Local Plan. GAPF has demonstrated thorough due diligence through environmental assessments, legal reviews, and community consultations.

The project is well-positioned to contribute to the UK’s net-zero goals, enhance energy resilience, and serve as a model for private-sector-led community energy schemes. Approval of AWEP would mark a significant step forward in sustainable development and community empowerment in rural Lancashire.