Bourne Valley Associates Ltd

An Examination of Planning Benefits

In relation to

The erection of and the construction of an anaerobic digestion (AD) plant with associated facilities, including feedstock storage clamps; tanks; lagoons and wetland filtration system; and connection to the national gas grid, together with the installation of photovoltaic panels on buildings, a grain store and dryer and the construction of an upgraded vehicular access to the A417

Whitwick Manor, Lower Eggleton, Ledbury, Herefordshire, HR8 2UE

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1. Introduction

This Statement accompanies and supports planning application 222728 currently being considered by Herefordshire Council (HC). We recognise that determining planning applications is more than a consideration of the proposals against planning policy, especially when a proposal does not fall readily within the remit of any policies. In such circumstances, the decision should be made after comparing the benefits of a proposed development with the harm it would cause.

We have previously submitted a statement is in response to the Regulation 25 Request for more information received from HC on the 14th February 2023, and that included a summary of the benefits of this scheme. However, the scheme has been further modified over the course of the past year, and therefore those benefits are reappraised here. Moreover, we recognise there could be a degree of harm caused by the development, as it inevitable with a scheme of this size.

We are advised by officers at Herefordshire Council that they are minded to refuse the application for reasons associated with landscape impact; impact on heritage assets; and impact on ecology, especially through discharges from the proposed plant into the catchment of the Rivers Lugg/Wye, having weighed these collective impacts against the public benefits to be derived from the scheme.

Therefore, this document makes clear the public benefits that would be produced by the scheme. We do not seek to ignore the possible negative impacts or harm, but rather to examine them in depth through the submission of a separate document rebutting the specific comments made by officers. That document is separate from the review of comments made about the application by statutory consultees and by the public and previously submitted.

In addition, the Environmental Assessment, as now revised, provides an objective assessment of the impacts of the proposed development on those aspects of the environment, and it is therefore a material document in determining this application.

We believe our approach is consistent with Government policy at the time of writing. It is clear that the new Government elected in July 2024 is supportive of renewable energy projects.

As regards current policy, in paragraph 11 of the NPPF of December 2023, which is the latest approved iteration of that document, the then Government advised local authorities should:

"where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, (grant) permission unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

There are relevant up-to-date local plan policies that we have addressed in the Planning Statement. Further review of those policies is provided in the document rebutting the alleged harm caused.

In November 2023, the Government issued its Overarching National Policy Statement for Energy (EN-1), which was supplemented by a series of technology specific national policy statements for the energy sector covering (inter alia) the generation type associated with this development:

• renewable electricity generation (both onshore and offshore) (EN-3).

The application for the AD plant was submitted before the new policy statements were issued, as were the revised plans and documents submitted in August 2023. Therefore, this is the first opportunity to convey the degree to which the proposals accord with the policy statements. EN-1 makes clear that it applies to small schemes which fall below the threshold for Nationally Significant Infrastructure Projects, and the statements are thus material considerations in the determination of this application.

We consider, as a result of our examination of harm (adverse impacts) against benefits, that the benefits carry a greater weight. However, we accept that the balancing exercise in determining a planning application is the responsibility of the local planning authority. Therefore, although we have sought to be comprehensive in setting out both benefits and perceived harm, across the full range of documents submitted, we have intentionally not undertaken any "balancing" within this document, which addresses benefits only.

This project can only proceed if it is granted not only planning permission, but also an environmental permit. That was issued by the Environment Agency, under reference EPR/LP3325SM on 1st August 2024. The Agency is considered, under Environmental Permitting (England and Wales) Regulations 2016 the EP Regulations, to be the "competent authority" for the purposes of the Habitats Regulations when determining applications for permits, consents and licences for which it is the regulatory authority.

The issuing of the permit by the Environment Agency should give confidence to the local Planning authority that the Environment Agency has determined the EP application in line with the statutory requirements of the Habitats Regulations and determined there would be not be an adverse impact upon the integrity of designated sites and also on the wider environment caused by emissions to water or air, subject to adherence to the conditions applied to the permit.

2. Benefits of the Scheme

The concept of this scheme of development is so large and so different from that previously encountered by HC that existing planning policies would not cover it, and therefore the criteria of policies against which the application should be judged need to be examined with rigour. In such circumstances, the decision would need to be made on the basis of planning balance: whether the need for and benefits of the proposal outweigh the perceived disadvantages or disbenefits, based upon sound evidence. We strongly believe both that the application accords with policy and that the balance is in favour of the development proposal.

In both the initial submission and in the additional documents and plans submitted in response to the Regulation 25 letter, we have sought to provide comprehensive information, based upon objective evidence. Those people and organisations who have concerns have set them out fully and it is essential that the benefits of the scheme, which have been referred to in our submissions, are brought together for clarity.

We set out below the benefits of the scheme. Paragraph 8 of the NPPF explains that sustainable development should achieve three interdependent objectives, as follows:

a) *an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;*
b) *a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and*
c) *an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*

2.1. Economic Benefits

Business Rates

The site will be liable for business rates, some of which will be retained by the local authority, which, in turn, invests back into the community. The site is likely to contribute in the region of [redacted] per year in such rates.

Employment

Employment, the site will employ at least 4 full time members of staff from within the local area as stated in the planning submission, as well as supporting the local economy through the use of local contractors during construction and operation/maintenance when needed.

Boost to the local economy during construction

The build is likely to take 18 months with an estimated build cost of £[redacted]. Most of the raw construction materials will be sourced locally, with the specialist components of the AD plant coming from across Europe. Local spending will not just be from direct purchases, but also from indirect local spending. Contractors will be local people and where they are not, they are likely to require accommodation, food, beverages and fuel, all sourced from within the local community or from Herefordshire as a whole.

Sustainable Energy Production

The production of green electricity and gas, locally and within the UK will in turn reduce the UK's dependence on fossil fuels and foreign imports. Which in turn will reduce long term energy costs.

AD / biogas remains one of the most cost-effective and sustainable methods of producing home-grown green gas and electricity, and contributes to the UK's commitment of Net Zero greenhouse gas emissions by 2050.

The environmental benefits of this energy production are set out more fully in Section 3 of this document.

2.2. Social Benefits

Charity for local schools

The Applicant is proposing to set up a local charity. The charity will be for the benefit of the local schools and their pupils, including those within the parishes of Ashburton, Burley Gate, Eggleton, Yarkhill, Monkhide, Morton Jeffries, Much Cowarne, Ocle Pychard and Stretton Grandison. to enable them to appreciate the benefits of renewable energy and to help them lead sustainable lives. The wording of the scope and purpose of the charity can be open to public scrutiny, as part of public consultation on this application. We suggest it could be controlled under a legal agreement, so that it could be recognised as material to the application, and not as an inducement.

Educational site visits to Court Farm and Whitwick

The applicant has engaged with local schools and universities, including Holme Lacy College and Hartpury University. As with the charity, the scope of educational visits to the site will be for students from these and other institutions could be controlled through planning obligations. Typical site visits will include a guided tour by a staff member then use of the office for presentations and Q&A's.

2.3. Environmental Benefits

The supply of Green Gas to the National Grid

Production of "green" methane for export to the National Grid**. 90 GWh gas produced, the equivalent to heating for 7,500 homes (figures from OFGEM).** This gas, and the other generation measures from the site, described below, make a contribution towards reducing the UK's reliance on fossil fuels, and thus aligns with both Governmental and international imperatives.

The production of Green Electricity from Solar Panels

A carefully placed array of solar voltaic panels on buildings would also produce electricity. The electricity will be used to power the plant and the grain drying equipment. 2,689 solar panels, generating 400Wp, equals 1.076MWp of installed electricity. The panels will generate approximately **1021,820 kWh/y the equivalent to powering 350 homes.**

Renewable heat production

All the heat for the AD process will be generated renewably on site. Heat production from the CHP plant will be used to heat the digesters and to dry grain in the summer months when there is excess heat. The heat could be transferred efficiently to the nearby grain dryer to ensure appropriate temperatures and humidity levels are achieved to store grain safely. Optimum storage conditions can be more sustainably achieved at this site than multiple smaller sites that do not benefit from a ready supply of renewable heat and electricity. Any surplus heat could be used to heat the houses and buildings on the farm.

CO_2 savings for Grain Drying

Using renewable heat from the AD Plant to dry the grain will save on average **250 tonnes per year** of CO_2 that would otherwise be produced by the burning of fossil fuels. GHG of Propane is 230kgCO_2/MWh[1].

$C0_2$ capture from AD process

8,083 tonnes will be recovered for re-use. This is equivalent to 37.5 million medium sized car road miles. $C0_2$ will be captured and used for dry ice refrigeration and food and beverage production. Gas for this purpose is at a premium, and supplies were short during the COVID pandemic. Merchant CO_2 is normally made from fossil fuels as part of fertiliser manufacture.

Carbon Negative Development

The AD plant will become **carbon negative within 6.8 months** of commencement of full operations.

Production of Ammonium Sulphate Fertiliser

11,500 Tonnes of Ammonium Sulphate will be produced. This valuable nutrient fertiliser will be stripped from the digestate, creating a green fertiliser from the waste product of the AD process. The plant will extract Nitrogen fertiliser which in turn will offset the import of 3,000 tonnes of fossil fuel derived Ammonium Nitrate (AN) equivalent. This is enough Nitrogen fertiliser to grow approximately 51,700 tonnes of wheat on approximately 12,780 acres (5172ha) of land.

The CO_2 intensity of Ammonium Nitrate is 3.3 tonnes CO_2/tonne of AN, so there will be an additional **CO_2 saving of 9,900 tonnes CO_2 per year.**

[1] Farmingforum.co.uk state the average fuel use to dry 100 tonnes of grain is 1,000 litres of Propane gas at 13.77kWh/kg at 0.493kg/litre. GHG (Greenhouse Gas) 230kgCO2/MWh.

In terms of $C0_2$, this is the equivalent of **planting 400,000 mature trees** or 4,000 acres (1,619ha) of woodland.

Phosphate capture

The 1,600 tonnes of Phosphate captured by the process is the equivalent of the phosphate emissions generated by 1,188,000 households: several times the size of Herefordshire and the Wye catchment. It is proposed that these inputs will be sourced from the Wye catchment area, but that the process will produce fertiliser which comprises only Phosphate salts and that will be sold outside the catchment.

Reed bed creation and Management

Important not only in bioremediation of AD outputs, but also providing a **new wildlife habitat.**

Landscape and Ecological Enhancements

The proposed scheme includes the following enhancements to what is currently productive agricultural land.

- The planting and enhancement of 2.3 km of hedgerows, approximately 9,000 native plants.
- Planting of 2.85 Ha native woodland, approximately 650 native trees and 3,100 native shrubs.
- Planting of 1.3 Ha orchard, approximately 300 fruit trees.
- Planting of 4.4 Ha of Reed Beds.
- Planting of 4.45 Ha of wildflower meadows and rough grassland.

Most of the land to be occupied by the scheme is in arable use, and thus has a relatively low ecological value. We recognise that some trees and lengths of hedgerow will be lost in order to improve the existing access to the site, but such measures are necessary to ensure highway safety. However, there will not only be mitigation for the loss of these habitats, but also a degree of enhancement, too. There will also be significant enhancement of the ecological value/biodiversity of the whole site through the implementation of the landscape and ecology management plan ref P0596 Fig A-21A rev C & P0596 Fig A-21B rev A, which will create new habitats not currently present within the application area. These habitats will use species capable of adapting to climate change, and will be appropriate for the landscape character. The scale and range of the new habitats will significantly outweigh the losses associated with the access improvements.

This planning application was submitted well before the implementation of Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021), in February 2024. Therefore, it is exempt from a requirement that there should be Biodiversity Net Gain (BNG) of 10% from all but limited exceptional development types. Nonetheless, as a gauge of the degree of enhancement, we have voluntarily followed the statutory BNG metric to measure the “before” and “after” value of the site, in order to determine if the 10% threshold has been exceeded.

The spreadsheet from the metric and the associated report, both produced by UES, are submitted with these latest documents. The study concluded:

"The proposed development will result in a net gain of 31.15 habitat units (an increase of 77.55%), and a net gain of 6.81 hedgerow units (an increase of 123.33%); whilst watercourse units remain unchanged at 0 units. Onsite habitat creation and enhancement has been prioritised to maximise net gain within the proposed development site, resulting in a significant net gain, above national and local planning policy requirements."

So, there will be, after habitat retention, creation and enhancement, almost twice as much beneficial habitat compared with what is there now, and over twice the length of hedgerow.

Water Supply

There will be **no demand on water mains supplies.** Water will be sourced from an existing onsite borehole. Water supply from the borehole to local properties will ensure standards and flows will be maintained.

Water quality in catchment

Enhancement of overall water quality through positive use of poultry manure and regulation of discharges. Also control over marketing and use of phosphate-based fertilisers.

In the permit issued in August 2024, the Environment Agency wrote:

"We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

The decision was taken in accordance with our guidance."

Although the Agency states it did not consult Natural England as part of the permit process, it should be noted that Natural England made no comments on the planning application, though it was formally consulted by the local planning authority. It should also be noted that Herefordshire also consulted Natural England on its HRA report[2]. Once again, Natural England made no response, so far as we are aware, to the council.

[2] As confirmed by an email of 1st February 2024 from case officer Rebecca Jenman to Andrew Watton of Bourne Valley Associates.

Control of ammonia/air quality

The use of contained storage buildings for manure and the application of negative pressure[3] will contain ammonia, so **impacts on human and wildlife will be negligible**. Current practice chicken manures would be extracted from the production sheds and transported and stored alongside fields outside, and then spread to land. The storage and spreading creates ammonium emissions.

The Environment Agency considered the impact of ammonia as part of the permitting process. It considered the modifications to limit ammonia emissions would be beneficial, though it did recommend that emissions should be monitored. The Agency did not require ammonia modelling as part of the permit application process and therefore is content that such emissions are not so significant and/or are suitably controlled so as not to require further assessment or controls (save for those imposed via the Permit). The imposition of ongoing controls under the permit demonstrates that the responsibility for control of ammonia emissions and subsequent impacts is the responsibility of the EA, not the Local Authority.

Review of other sites

A full review of other potential sites was conducted as part of the original planning submission, so that process will not be repeated here. However, it is a reasonable argument that, by construction of a large AD plant, there would be a reduction in pressure for development of multiple AD plants across Herefordshire, including those in the AONB. In total, they would not be as efficient in energy production, and their cumulative negative impacts would be greater than those at Whitwick.

Optimum site selection and design

The preferred **location close to an A class road** but largely hidden from view reflects a thorough site selection process. Additional proposed planting and reduced grain store size, compared with the original submission, will facilitate integration with the landscape.

Careful orientation and selection of equipment will minimise noise impacts on local residents and on heritage assets, though they are distant.

Grain Storage

The grain store satisfies demand from the client and latent demand from other grain producers. **There is considerable interest from other cereal farmers** who have neither the land nor the capital to construct their own grain dryers/stores, as well as national companies such as Cargill and Frontier.

The environmental impact of a large store is less than the cumulative impact of many smaller stores. **Whitwick is located in an undesignated landscape** area capable of integrating large structures. **Directing grain traffic straight onto a major trunk road** in a safe manner will be better than the use of minor roads serving a series of small grain stores.

[3] Modifications were made to the initial plans in order to address concerns expressed by the public and some consultees during the initial consultation process.

Alignment with National Policy Statements for Energy

As explained in the Introduction, these expressions of Government policy have emerged after the submission of the application, but are now material considerations, and have been considered by Inspectors at appeal for applications submitted before their publication. This is because the overarching Policy Statement (EN-1) states:

"the Secretary of State must decide an application for energy infrastructure in accordance with the relevant NPSs except to the extent the Secretary of State is satisfied that to do so would:

• *lead to the UK being in breach of its international obligations;*

• *be in breach of any statutory duty that applies to the Secretary of State;*

• *be unlawful*

• *result in adverse impacts from the development outweighing the benefits*

• *be contrary to regulations about how its decisions are to be taken."*

There has been no suggestion by the LPA that any of these criteria might apply other than the adverse impacts (harm) outweighing the benefits. This document seeks to show the contrary is true.

EN-1 emphasises it supports previous Government statements in support of the Net Zero Strategy and the Energy Security Strategy, the latter of which has increased in importance since Russia's invasion of Ukraine. It states, at para 2.1.3:

"To produce the energy required for the UK and ensure it can be transported to where it is needed, a significant amount of infrastructure is needed at both local and national scale. High quality infrastructure is crucial for economic growth, boosting productivity and competitiveness."

The infrastructure proposed within this application exemplify that approach.

Much of the thrust of EN-1 thus focusses on decarbonising the power sector, moving away from finite sources of fuel, and so this application aligns with that approach.

EN-1 stresses that the consideration of proposals should weigh adverse impacts against benefits, taking account of:

- *"its potential benefits including its contribution to meeting the need for energy infrastructure, job creation, reduction of geographical disparities, environmental enhancements, and any long-term or wider benefits;*
- *its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy*."

This document has sought to summarise both adverse impacts and benefits, and thus accords with the general procedure set out in EN-1, as well as the proposals meeting its objectives on approaching net zero, contributing to national energy security, and corresponding to sustainable development.

An important statement in EN-1 that links it to the detailed guidance in EN-3 is set out in Section 4.2. *"Government has therefore concluded that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure*." CNP means, *"for electricity generation, and all onshore and offshore enabling electricity generation that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion and other plants that convert residual waste into energy….[4]"*

EN-3 provides more specific guidance in respect of renewable energy projects. It suggests some factors that should be taken into account when selecting sites for infrastructure development. This issue is material given criticisms by the LPA and others in respect of the Whitwick Manor site. The document makes clear *"the government does not seek to direct applicants to particular sites for renewable energy infrastructure*". It highlights the importance of national designations where *"significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the urgent need for this type of infrastructure*". The application site lies outside such designated sites. In terms of other locational factors, para 2.3.9 states: *"As most renewable energy resources can only be developed where the resource exists and where economically feasible, and because there are no limits on the need established in Part 3 of EN-1, the Secretary of State should not use a consecutive approach in the consideration of renewable energy projects (for example, by giving priority to the re-use of previously developed land for renewable technology developments)."* So, there is no requirement, as some objectors have suggested, to use urban, brownfield sites or sites previously allocated for employment development.

For the purposes of EN-3, anaerobic digestion is regarded as a type of biomass and waste energy production. The Statement sets out requirements for information that should be provided with applications for such infrastructure. The current proposal has included such detail, where relevant. EN-3 also sets out key topics for which impacts should be assessed. The scope of the EIA with this application has accorded with the scoping opinion provided by Herefordshire and covers these topics. They include Air Quality and Emissions, as guided by para 5.2 of EN-1; Biodiversity and Geological Conservation (para 5.4); Historic Environment (para 5.9) and Landscape and Visual Impacts (para 5.10). We firmly believe that comprehensive information on these topics, including assessment of the significance of their impacts, has been submitted with this application. Moreover, we consider that the mitigation measures associated with the proposal align (as appropriate) with those set out in EN-3.

At Section 2.10, EP-3 covers Solar Photovoltaic Generation. This section is relevant in that, even though the energy to be generated from the panels at the site would be used at site, and not be exported, the level of electricity produced would make a further contribution to decarbonisation and be regarded as CNP. As with anaerobic digestion, key factors, impacts and mitigation guidance are set out. Again, we consider the proposal has aligned with that guidance.

Therefore, we consider that the proposals accord with both EN-1 and EN-3 in that the development would:

- contribute to critical national priority in achieving low carbon infrastructure;

[4] As explained in the Glossary of EP-3

- contribute to national energy security;
- meet locational criteria, especially in terms of feeding into existing infrastructure;
- be developed having taken account of appropriate and comprehensive information, as advised by the LPA;
- minimise the impact on the environment.

Thus, as it would lead to a greater weight of benefits over harm (adverse impacts), it should be regarded as sustainable development and thus there should be as presumption in favour of planning permission being granted.

3. Conclusion

This document serves to emphasise that there are significant benefits to be gained from this proposed development.

In summary, the benefits are:

- The positive, creative, use of poultry manure, so reducing the risk of pollutants, especially Phosphates, entering the waters of the River Wye catchment, as happens at present through the spreading of manure on fields as a means of disposal;
- The creation, within the AD plant and screens, of discrete streams of fertilisers, very rich in Phosphates and Nitrogen salts, that will be exported out of the catchment and beneficially used elsewhere, to overcome deficiencies in soils, and thus to enhance crop production;
- The export to the National Grid of methane from renewable sources, thus reducing the nation's dependency on finite Carbon sources of power;
- The generation of heat to dry grain without calling upon finite Carbon sources of energy;
- The construction and operation of a grain store to satisfy the requirements of many farmers, with a lower environmental impact than if small stores were built by each farm business, and benefitting the nation's food security;
- The generation of electricity from solar panels to power the whole farm estate, once again reducing the dependency on finite energy sources;
- The creation and future management of a wide range of habitats within the Whitwick estate, enhancing the landscape character and, especially, the biodiversity of the area, so that significant benefits to wildlife will be achieved.