

# BRESSINGHAM AND FERSFIELD PARISH COUNCIL

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| <b>Subject</b>          | <b>Planning Application No. 2022/1108</b>   |
| <b>Title</b>            | “Application for the construction of an Anaerobic Digestion facility, comprising: 1 no. digester tank and 1 no. secondary digester/digestate storage tank, silage clamps; liquid and dry feed system; digestate separation, handling and pasteurization; biogas upgrading and mains gas- grid connection; carbon capture; CHP; agricultural building; office buildings; weighbridge; 3 no. covered digestate storage lagoons; and associated plant, vehicular accesses, roads and landscaping (including earth bunds).” |
| <b>Applicant</b>        | <b>Deal Farm Biogas Limited</b>   |
| <b>Date of Response</b> | <b>19th July 2022</b>   |

## Planning Consultee Response

Bressingham and Fersfield’s parishioners have made absolutely clear their opposition to grant of planning consent to Deal Farm Biogas Limited for Construction of an Anaerobic Digestion Facility, in their response to planning application number 2021/2788 earlier this year and now in response to application number 2022/1108, which is, effectively, identical.

This Planning Consultee Response is to **Application no 2022/1108**.

**Bressingham and Fersfield Parish Council recommends that it be refused, on the grounds of:**

- **Potential breach of duty of care.**
- **Breach of the three key principles for the UK’s biomass priority use framework.**
- **Contrary to Policies DM3.8 and DM4.5 of the Local Plan.**
- **Undermining residents’ living conditions and safety.**
- **Damage to Quality of Life and Environment.**
- **Increasing the Risk of Flooding locally.**

The proposed facility, if it were to be allowed, would be a **large-scale industrial gas-production plant with the capacity to process 50,000 - 60,000 tonnes of feedstock per year**, totally unsuitable for its proposed location, damaging to the environment and carbon positive overall:

- **900 hectares of arable land will be turned over to growing feedstock instead of food stock.**
- **A minimum of 5745 additional vehicles movements per year will be needed to deliver feedstocks and remove outputs.**
- **535 tonnes of CO2 per year will be emitted due to its activities.**

## **There is a Duty of Care to Bressingham and Fersfield Parishioners to refuse application no 2022/1108.**

South Norfolk Council cannot realistically expect to monitor or enforce the traffic movements and mass of feedstocks stated in application 2022/1108, if it were to approve the application, even if Conditions were to be applied to the approval.

Therefore, **there is a duty of care to reject application 2022/1108 on the grounds that what might happen as a result of it being granted is neither enforceable nor controllable.**

- The applicants told us in Application no 2021/2788 that the facility specified and described therein had the capacity to process 46,750 tonnes of feedstock per annum.
- Application no. 2022/1108 describes and specifies the same facility to that described in Application no 2021/2788: i.e. **the facility described in 2022/1108 is identical in size and capacity to that described in Application no 2021/2788 and therefore is capable of the same scale of production and volume of outputs.**
- **The reduction in number of plant access driveways, number of storage lagoons, pipelines and output draw-off points in Application no. 2022/1108 compared to 2021/2788 do not control the facility's production capacity or throughput and are, therefore, irrelevant and meaningless to the capacity of the plant.**

### **In addition, the proposed development:**

#### **1. BREACHES THE THREE KEY PRINCIPLES FOR THE UK'S BIOMASS PRIORITY USE FRAMEWORK** defined in HM Government BEIS Biomass Policy Statement, November 2021<sup>1</sup>, which are:

- (1) compliance with sustainability criteria and waste hierarchy principles.
- (2) contribution to carbon budgets and net zero considering feedstock availability, life-cycle greenhouse gas emissions, and cost-benefits and
- (3) biomass to be used with carbon capture utilisation or storage where feasible, otherwise used only in hard-to-decarbonise sectors with limited or no low carbon alternatives.

In detail:

- (1) It does not comply with waste hierarchy principles, which aim to minimise waste, maximise value of waste as a resource and **minimise environmental impact of waste management.** It ignores the requirement that other non-energy use of these resources should be prioritised e.g. straw could also be used in animal feed, bedding **and to improve soil quality to prevent land being diverted from food to fuel production on a large scale.**
- (2) It can make no consideration of feedstock availability in its proposed contribution to carbon budgets. In contrast, profitable operation of an industrial AD plant requires that land must be diverted to production of crops which will produce the highest output of biomethane possible.
- (3) It will not operate in a hard-to-decarbonise sector and does not use carbon capture or storage. Production of methane is not considered to be a hard-to-decarbonise sector, as there are alternative sources of green energy.

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<sup>1</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1031057/biomass-policy-statement.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031057/biomass-policy-statement.pdf)

It should also be noted that the UK government intends to move away from its support of AD by 2025.

## **2. IS CONTRARY TO POLICIES DM3.8 AND DM4.5 OF THE LOCAL PLAN.**

The proposed development is a large-scale industrial gas-production plant that, if allowed, will continue to be detrimental to the rural character of the surroundings that it has already damaged.

- Its introduction into the rural landscape, without planning consent, has changed the landscape, destroyed views across farmland and open countryside and has already been detrimental to its character through the erosion of its open nature, therefore contrary to policies DM3.8 and DM4.5 of the Local Plan.
- The proposed development does not respect, conserve or enhance the landscape character of the immediate environment as required by Policy DM4.5.
- It does not achieve a positive improvement (Policy DM3.8(1)).
- It does not respect the local landscape and does not integrate into the surroundings (Policy DM3.8(4)).

## **3. UNDERMINES RESIDENTS' LIVING CONDITIONS AND SAFETY.**

It has not been demonstrated that road safety will be maintained. This, alone, is sufficient for the application to be refused.

Our Parishioners have told us about being intimidated and too afraid to walk on the narrow lanes around Deal Farm, due to farm and transport vehicles and previously due to construction traffic used to build the AD plant without planning consent.

Bearing in mind that grant of this application would lead directly to the proposed AD plant being used at full capacity:

### **IMPACT OF INCREASE IN HEAVY VEHICLE MOVEMENTS**

#### **(a) AVES AND PARTNERS TRAFFIC**

The volume of Aves and Partners farm traffic associated with crops will not be affected by AD Plant traffic movements, of course.

**There is no formal commitment between Deal Farm Biogas or Storengy UK with Aves and Partners therefore it is appropriate, for the purpose of consideration of the AD Plant Planning Application, to assume that the volume of Aves and Partners' traffic will not be reduced.**

#### **FEEDSTOCKS FROM FARMS TO AD SITE**

1 tractor load carries approximately 16 tonnes of feedstock/ 1 lorry load carries approximately 28 tonnes.

**Movement of 37,400 tonnes of feedstock crops takes 1336 - 2337 return journeys.**

#### **CARBON DIOXIDE FROM SITE TO FACTORY**

Storengy told us that CO2 will be collected from site, requiring 1 return tanker journey per day.

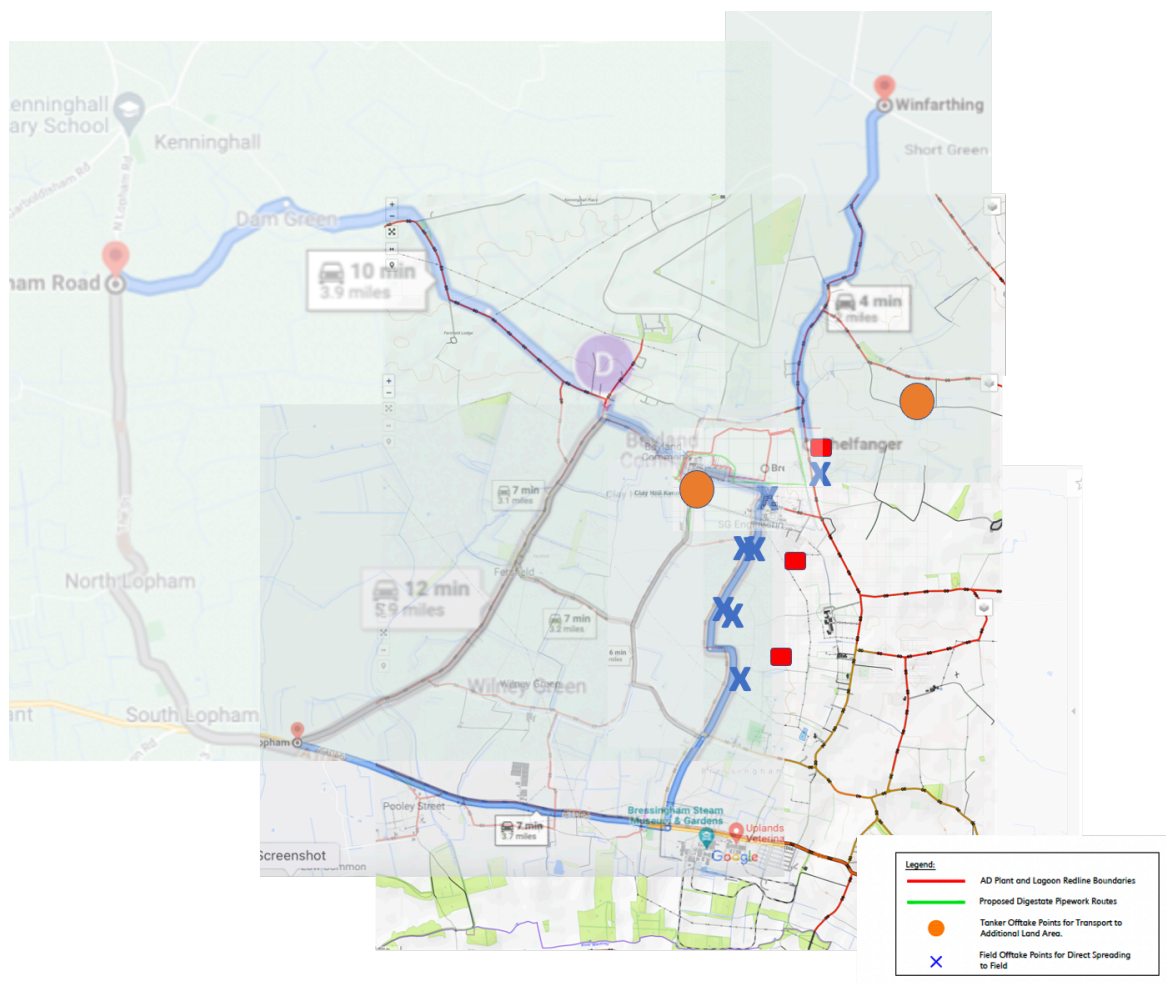
TOTAL: **Up to 5475 additional vehicle movements per year i.e. 15 movements per day** over single track, low quality, country and village lanes that are unfit for the purpose: Dog Lane, Common Road, Kenninghall Road, Wood Lane, The Street, Fersfield Common.

These roads already do not allow the “hierarchy of users” that HM Government’s Highway Code mandates<sup>2</sup>; they are not fit for the volume of traffic using them currently, let alone the additional and significant heavy traffic that would feed the proposed AD plant.

The applicants have not provided a plan of site and transport routes mapped onto the roads, we provide it here (**Error! Reference source not found.**) showing, clearly, its impact on our Parish and our entire community.

The routes consist mainly of single track or 1.5 track lanes, with soft verges and no facility for two vehicles to pass by each other: **clearly not a suitable infrastructure for an industrial plant that relies on bringing materials in and out by road.**

Figure 1



<sup>2</sup> <https://www.gov.uk> › ... › Cycling and walking

#### **(b) ADDITIONAL FEEDSTOCK SUPPLIERS**

The map entitled "Feedstock Additional Fields" in the Transport Statement Addendum does indeed highlight fields within a radius of approximately 5km of the proposed AD plant.

However, the route from field to proposed plant is not a radius of a circle. The reality is that, if any of these fields did become the source of feedstocks, the route from field to proposed plant will follow local lanes.

Hence the distance that the feedstocks would have to be carried is significantly more than 5km and the claims made in Transport Statement and its Addendum are flawed.

#### **4. IS DAMAGING TO QUALITY OF LIFE AND ENVIRONMENT**

There is a clear public interest in enforcing planning law and regulation to refuse this application on the grounds of its significant negative impact on quality of life and our environment.

South Norfolk Planning Department's Planning Enforcement Strategy states that development should not:

- (a) affect the amenity of nearby residents and
- (b) cause serious and irreversible harm to the environment.

However,

- (a) Our Parishioners health, well-being and livelihoods have suffered already as a direct result of this illegal development and will continue to suffer if the planning application is granted.
- (b) The proposed AD plant site, including storage lagoons, is within the protected zone of Shelfanger Meadows, an SSSI. English Nature identifies the issues that could put the site at risk as including:
  - a. The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
  - b. Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
- (c) **The risks of odours and leakage from the proposed storage lagoons have not been addressed satisfactorily.** That these risks become realities is evidenced by the experiences of other communities who have suffered the consequences of an AD Plant being built in their midst.

Reference: <https://flood-warning-information.service.gov.uk>



UK Government's Flood Warning Information Service shows the current extent of flooding to and around the proposed development site (**Error! Reference source not found.**).

Allowing hard standing, constructed without planning consent, to remain will increase the flooding still further.

**References to “the Farmer” and “his crops” in the application are irrelevant and must be discounted.**

Despite the repeated reference to “the Farmer” throughout the Design Statement submitted as part of the application, no farmer plays any part in the applicant’s business and the applicant has not committed to purchase feedstocks from any source.

The application is in support of a commercial, for-profit venture, primarily for production of biomethane to the highest possible yield, in order to maximise profits and minimise costs. The feedstock used dictates the proportion of biomethane produced<sup>3</sup> so:

- Feedstocks must be selected and mixed to maximise biomethane output.
- In addition, the Green Gas Support Scheme (launched Autumn 2021) includes a minimum requirement that 50% of biogas or biomethane (by energy content) must be produced using waste or residue feedstocks.

These requirements make it commercially and practically impossible to commit to source feedstocks from any provider, including “the Farmer” - R. G. Aves and Partners or its connected companies.

**This being the case, the claims that any additional traffic generated by the proposed AD plant will be balanced out by a reduction in agricultural traffic currently generated by R.G. Aves and Partners is fundamentally flawed and without basis and so must be discounted.**

#### **(a) ESTIMATE OF FEEDSTOCK REQUIRED**

Storengy UK state that Deal Farm Biogas will produce over 5M cubic metres of biomethane per year.<sup>4</sup>

Biogas produced from an AD plant consists of methane and carbon dioxide plus small amounts of other contaminants. The methane content is approximately 60% of total content so the aim must be to produce 8.3M cubic metres of biogas per year.

Based on the feedstocks to be used, as stated in the application, and using one of the many calculators available publicly (NNFCC), the estimated feedstock required is 50K to 60K tonnes per year, depending on plant running conditions and type of feedstock used (see 4, above).

The applicants claim that the plant would require a total of 46,750 tonnes of feedstock per annum, which is consistent with these estimates.

It is well known, and can be calculated (e.g. NNFCC calculator noted above) that energy crops must form the majority of feedstock used, in order to maximise biomethane production efficiency, with a small proportion of animal waste being added to stabilise biogas production level.

Therefore, the applicant’s suggested feedstock composition, of 26,250 tonnes of crops based non-waste and 20,500 tonnes of manure is unfounded.

Based on the more realistic and therefore reasonable assumption that 70-80% of feedstocks will be crops and calculating yield per hectare for each feedstock crop in the Transport Statement Table 4.1, it is estimated that:

**37,400 tonnes of crop-based feedstock will be required per year and 900 hectares of arable land will be required to grow them.**

Application 2021/2788 Design and Access Statements states that RG Aves & Partners have only 436 hectares of arable land available to them.

The application implies that Aves and Partners will cease their existing farming operations to completely to supply the proposed AD Plant instead.

However, Point 4, above, shows that this cannot and will not be the case.

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<sup>3</sup> E.g. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.470.1914&rep=rep1&type=pdf>

<sup>4</sup> <https://www.storengy.co.uk/medias/news/deal-farm-acquisition-put-storengy-uk-biogas-map>

Based on the calculation, (a) above, that the proposed AD Plant will take crop feedstock from 900 hectares of arable land and using the assumption that Aves and Partners would devote 50% of their land (218 hectares) to growing AD plant feedstocks, crops from the other 682 hectares of land would have to be brought in from other farms.

**It is practically and so commercially impossible to commit to sourcing feedstocks from any provider, due to the commercial requirement to maximise biomethane production and the uncertainty of any supplier growing defined volumes of crops of suitable quality.**

Furthermore, it would not be prudent for the Applicant to enter into contractual agreements with potential suppliers at this stage, given that the proposed AD plant is not operational. Therefore, these "Agreements" are non-binding.

Hence, for the purpose of providing assurance of sourcing feedstocks locally to the proposed AD Plant site, the **statement that Agreements have been made with local farmers for supply of feedstock is meaningless.**

#### **(b) CONFLICT WITH UK ENVIRONMENTAL GOALS**

The UK is committed to **reduce** emissions in 2030 by at least 68% compared to 1990 levels and 78% reduction by 2035.<sup>5</sup>

**There will be an increase in CO<sub>2</sub> emissions from vehicles up to 535 tonnes CO<sub>2</sub> per year** as a direct result of granting this planning application.

Assumptions:

- Average CO<sub>2</sub> emission from transporting 1 tonne of material: 0.4 kg/mile.
- Average distance for crop delivery is 15 miles (feasible, given the feedstock required).
- Estimated distance for CO<sub>2</sub> tanker delivery, 30 miles (Ipswich for further processing).

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<sup>5</sup> <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>