

## Public Meeting – Response to Questions

### 1. What are the feedstock figures? How much will be imported in?

The volume of feedstock under successive planning applications and permissions has increased in line with the availability of new technology and in line with stated UK Government targets to only support larger AD schemes that offer better efficiency and sustainability. The volume of feedstock that will be processed at the plant is 46,750 tonnes, as confirmed in the Section 73a planning application that has been submitted to South Norfolk Council and is in keeping with the farming currently activities undertaken at Deal Farm and The Oaks.

The approval of the AD plant at Deal Farm will have a direct impact on the types and proportions of crops grown locally. It is intended that the amount of beet grown in the area will be substantially reduced as a result of using more grass and whole-crop rye. The numbers are set out in both the Design and Access Statement and the Transport Statement which are available to view on the South Norfolk Planning Portal – we would encourage all residents to read all the documents submitted to get the fullest possible picture of the proposals and the benefits of such a scheme.

In the event that the Planning Authority accepts our proposals, we are expecting to agree conditions on the permission - similar to those in the 2015 permission - which set a limit of 5km for crops from other farms:

- **3.4** of the 2015 permission Design and Access Statement, states feedstock in addition to that produce by the Aves Farms, will be sourced from “neighbouring farms”
- **3.9.7** states that crops will be sourced from “neighbouring farms within a 5km radius”
- **Appendix 3** “Feedstock Supplier” illustrates some of those farmers proposed and the Aves’ are still expecting to work with those

We are committed to supporting local farmers and organisations to make their own operations more sustainable and to reduce their output costs for waste disposal; putting in place a limit on the distance materials can travel ensures that these local people directly benefit from the construction of the Deal Farm Biogas plant and also minimises the vehicle movements associated with the importation of materials.

In short, no feed material will be imported from outside the local area.

### 2. How much public money is Deal Farm Biogas receiving?

Deal Farm Biogas is not receiving any public money. All of the investment is by Storengy UK Ltd from its own resources. Revenues that the plant may generate will be from:

- Wholesale gas sales (for example, the same as North Sea gas producers)
- The GGSS – which comes from a fossil fuel levy on gas bills (since Bressingham is not on the gas main, they will not be paying for this)
- Certificate trading – bought by companies wishing to acquire accredited “green gas”
- RTFCs – paid for by fossil fuel producers and users as part of their renewable transport fuel obligations

### 3. How have the traffic figures been determined?

- *Who performed the assessment, and are they accredited?*

The assessment was undertaken by Plandescil Ltd, and the full document can be found within the Section 73a planning application on the South Norfolk planning portal. Plandescil Ltd is an established Civil and Structural Engineering Consultancy with a long history of supporting major planning applications throughout the UK.

○ How was the assessment done?

Plandescil Ltd calculated the vehicle movements for the AD Plant based on the maximum vehicle movements anticipated annually by each feed material type. Each 'movement' is classified as a single vehicle entering and exiting the site. Some vehicles will arrive empty and leave full; some vehicles will arrive full and leave empty; and some vehicles will arrive full and leave full of another material (defined as a backload or back-haul).

The following vehicles were assumed:

- Crops and manures: Tractor and trailer (as currently used)
- Solid Digestate: Tractor and trailer
- Liquid digestate: Tractor and tanker
- Straw: HGV and trailer (as currently used)
- CO<sub>2</sub>: HGV/Tanker

Plandescil Ltd concluded that there would be a reduction in traffic movements associated with crop and waste transportation to the Deal Farm AD plant (3,439 per year) in comparison with the traffic movements associated with standard farm activities to Deal Farm in the past 5 years (4,284 per year). This reduction in vehicle movements is associated with the:

- Avoidance of double handling when transporting crops back to stores in tractor/trailers and then on to market in HGVs
  - Avoidance of off-site pig manure movements – currently double handled **on the roads** to muck pads and then from pads to fields.
  - Transferring liquid digestate via pipeline to lagoons rather than crops to refineries.
  - Avoidance of the use of chemical fertilisers and reduction in sprays needed for food crops
- Why have vehicle movements reduced under the proposals?

We would highlight that the current transport activities see a large proportion of crops, straw and materials consolidated at harvest back to the yards at Deal Farm and The Oaks (silage clamps, grain stores, beet and manure pads, etc). This material is then sent to market in bulk loads by HGV out through the villages of Bressingham, Fersfield and Shelfhanger (for example to British Sugar and the grain mills).

The AD plant is roughly 2 kilometres away from these villages, and therefore the majority of feedstock and digestate will stay within this area, instead of being received in and going out through them. For example:

- **Deal Farm Pig Manure:** instead of being cleared out, transported to a muck pad and then transported to fields for spreading; the material will not go on the road but will instead be fed directly to the AD plant, the gas is transported by pipe and the majority of the digestate will be pumped to lagoons and spread directly to land – i.e., replacing two handling movements with, at most, one or none. It is worth noting that manures will be stored and handled on sealed and drained surfaces – an improvement on current management

- **Beet:** the farm produces roughly 5,000 tonnes of beet a year to be transported out through Bressingham to the A1066 and on to either Wissington or Bury St Edmunds. With the AD plant, an equivalent amount of land to this will instead be grown as grass, cereals or maize – spread throughout the year (harvests ranging from May to October instead of November to January) – and the harvest will stay within the locality. Therefore, reducing transportation out of the area through the villages and keeping soil fertility local (by recycling material to land).
- **Maize:** the farm currently produces around 4- 5, 000 tonnes of maize and also brings in maize from other farmers to clamp in field clamps at Deal Farm (totalling approximately 6-7,000 tonnes per year). This is then transported from clamp, out to livestock farmers and other AD Plants (the farm has fed and continues to feed several AD plants outside of the local area). It is worth noting the Plant will mean crops are now stored in sealed and drained clamps on the site rather than on “field clamps” – an improvement on current management.

In short, practically everything currently farmed (whether pig, chicken, grain, silage or straw) is largely transported out of the area through the villages to market, with chemicals imported in to replace the lost fertility. The AD plant will reverse that trend, with materials grown, processed and returned to the field locally – and the products piped (gas and digestate) to their necessary destinations, rather than transported out on lorry.

#### 4. What are the operating hours?

Operations onsite will be between 07:30 and 18:00 from Monday-Sunday. The actual feeding of the hoppers, however, will only occur for approximately 4-5 hours each day within these hours. During harvest, the plant may receive crops for ‘clamping’ between 07:00 in the morning and up to 22:00 in the evening. This is no different to the delivery times that Deal Farm currently operates when harvesting and delivering to farm stores.

The production of biogas within the tanks and injection to the gas main is 24/7, but this will not have any implications to the general public.

#### 5. How many tonnes of propane will be burnt to keep the digestate warm?

No propane will be burnt to keep the digestate warm.

#### 6. How many tonnes of propane will be injected into the methane per year to increase its calorific value?

It is not possible to calculate this figure. We are in talks with the gas network for this to be zero. However, we must have propane onsite in case the network calorific value (CV) increases or the plant decreases. Unfortunately, “gas” in the main network is not 100% consistent, and therefore provisions must be in place to overcome any potential issues with the gas mains.

#### 7. What is the frequency of flares? And what quantity of gas will be burnt off during them?

The flare is a safety feature for plant failure. It will not normally operate. However, a 30-second test will happen weekly to ensure good working order – this short test will burn 0.0025% of the biomethane produced at the site.

8. How much slurry is coming out of the plant?

Approximately 20,000m<sup>3</sup> of slurry/manure is expected to be produced each year. Of this amount, the digestate lagoons will store a total of 15,000m<sup>3</sup>, whilst the other 5,000 m<sup>3</sup> will be in utilisation by local farmers and pumped to the remote “offtake” points mentioned in the response to question 9 (below).

More information about the slurry/manure production at the facility can be found in the Transport and Design, and the Access Statement, should residents require more information.

9. Where is the slurry going? – reference to a “mystery third run off”

Since the approval of the 2015 planning application, a key piece of regulation has come into force, which has resulted in the necessity of delivering lagoons as part of the new application. The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 – also known as the Farmers Rules for Water – has reduced the ‘spreading window’ for liquids to 3-4 months of the year maximum. To meet this requirement, farmers must substantially increase their storage capacity to ensure useful materials are not wasted in the months they cannot be used.

To meet this requirement, the new Section 73a application proposes three fully enclosed and covered lagoons. The slurry/manure produced by the AD plant will be pumped directly into these three lagoons, each with a capacity of 5,000 m<sup>3</sup>, to enable the secure and safe storage of slurry/manure throughout the year. The inclusion of the three lagoons constitutes an improvement to the current slurry/manure management at the site.

As part of the 2015 planning application, seven remote “offtake” points were approved. These points intended to allow material to be collected and taken to land that is not immediately adjacent to the lagoons. These remote offtake points allow the remainder of the slurry to be utilised by farmers who do not have direct access to one of the three lagoons.

In the revised scheme, the majority of the liquid digestate will be spread directly to fields from the newly proposed lagoons without further road transport. Where fields do not adjoin the location of the lagoons, three off-take points are proposed, rather than the seven proposed in the 2015 application.

We note on review that the third point is missing from the location drawing – this will be updated and submitted as soon as possible. For clarity, it will be located in the field on the east side of Fersfield Road, roughly 100m south of the junction with Hall Lane.

10. What is the construction of the lagoons? Including dimensions, maximum depth, length and width.

There are three lagoons proposed as part of the new application. The lagoons enable the necessary, secure storage of digestate (a by-product of the AD process) and are in accordance with the Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018. This regulation states that liquid digestate must be stored for 9 months of the year.

The inclusion of the three proposed lagoons reduces the number of vehicle movements to and from the AD plant, as the liquid digestate will be pumped directly from the site to the lagoons. Ordinarily, farmers in the local area would depend on chemical fertilisers being delivered to and from their farms.

In terms of the lagoon’s construction, they will each have a capacity of 5,000 m<sup>3</sup>. A site survey is being undertaken this week, which will assess the relevant site locations and confirm the dimensions,

including depth, length and width, of the lagoons. This information will be published on the South Norfolk Planning Portal and available for public viewing as soon as possible.

11. How do you ensure that lagoons will not smell?

During the operation of the plant, there is potential for impacts to occur at sensitive locations due to odour emissions from a number of sources at the plant. An Odour Assessment was therefore undertaken by Enzygo (environmental consultants) to assess the effects within the vicinity of the site. This document can be found as part of the Section 73a planning application submitted to South Norfolk Council in December 2021.

As part of this assessment, the environmental consultants defined potential odour emissions based on the proposed plant operation and a review of literature and emissions used at similar facilities. The assessment concluded that predicted odour concentrations were below the relevant benchmark level of 3.0 ou<sub>e</sub>/m<sup>3</sup> at all highly sensitive receptors in the vicinity of the site for all modelling years.

The digestate will be post-treatment and therefore not “active”. In addition, all digestate is pasteurised after the AD process to kill weed seeds and any remaining microbes – it is the breakdown of biological material by microbes that produces odour compounds, therefore the digestate will have a minimal odour. However, to further minimise any potential odour impacts to people, the three proposed digestate lagoons will be covered, lined and sealed at all times.

12. Plans show that piping of digestate is going along ditches and above ground. How do you assure that there is no leakage?

Piping of digestate will be trenched below ground in newly dug and refilled trenches. The reason for putting the routes along the edges of fields is so as not to interfere with existing field drains NOT to make use of existing ditches.

13. When will the flood report be submitted?

The flood report is due to be submitted in the week commencing 17<sup>th</sup> January.

14. What is your plan for preventative maintenance?

It will be designed around Daily, Weekly, Monthly and Annual checks. An Asset Audit of all equipment is undertaken from the Operations and Maintenance Manuals supplied by the technology provider and the Operator’s own surveys. This creates a detailed Asset Plan/Register with each asset having a defined routine maintenance and replacement cycle. The Operator is required to follow this programme of checks, maintenance and replacement. Other specialist items of technical equipment – such as the gas upgrader and grid entry unit are contracted to specialist engineering companies to monitor and maintain. All assets are monitored both onsite and remotely via telemetry on a 24/7 basis.

15. How do you ensure the site is kept secure?

The site will be kept secure in a number of ways. There is 24-hour CCTV in operation at the site, and we intend to have motion sensor lighting and low light sensitive cameras to ensure we can capture appropriate CCTV imaging whilst minimising the impact of light on surrounding areas. All live images can be accessed on site and remotely. The facility will also be gated, and there is fencing around the entire site.

As discussed in a previous question, the three proposed lagoons will be covered and lined, with further hedging and fencing to ensure that they are secure and cannot be accessed accidentally.

16. How will light impact from the site and lightning rods be managed?

Site lighting will be by motion sensor only. No operations are envisaged at night except in the case of callouts for unexpected breakdowns. Therefore, we would expect the site to be in darkness for the majority of the time at night, apart from the rare occasion that work is necessary to be undertaken, in which case only the affected area of the site will be lit for the necessary time to resolve any issue.

During harvest we would expect a large portion of the clamp area to be lit by machinery headlights – much as usual harvest and delivery is.

In regard to the lightning rods, it has not been deemed necessary for the rods to be lit. Therefore, we have no plans to include lighting on the rods at this time.

17. Why have you made no effort to engage with local residents?

The Deal Farm Biogas AD plant has been in the pipeline for delivery since 2013. To date, there has now been a total of 3 approved planning permissions, alongside the Section 73a planning application that is currently with the planning authority for consideration. The most recent approved planning application (2015) received very little public interest, with only 11 objections recorded on the South Norfolk Planning Portal. In addition, Deal Farm submitted plans to discharge conditions 6, 8 and 15 in October 2018, which received no public comment and 3 and 4 in August 2021 which received 1 neutral public comment.

The level of public interest in the Deal Farm Biogas AD plant has increased unexpectedly and significantly in 2021. We were unaware of how much interest would be generated by the submission of the Section 73 application in September 2021 which included minor amends to the layout and positioning of elements on the site within the same boundary was agreed in 2015. These amends were submitted to the Council for validation, as they were deemed necessary to ensure the long-term viability of the site's operation.

In response to the significant increase in interest, and the subsequent increase in questions about the project and circulation of misinformation about the AD plant and the AD process in general, Deal Farm Biogas developed a project website ([www.dealfarmbiogas.co.uk](http://www.dealfarmbiogas.co.uk)) to provide the local community with the correct technical information, and to also provide a means for contacting the project team directly via a submission contact form and a community line phone number operated by the project team. We continue to encourage residents to visit the website and get in touch with their questions.

We have also sought to engage with local Councillors and Parish Councillors on the new application submission, seeking to provide necessary information and respond to any queries Councillors may have.

**ENDS.**

***For more information on the Deal Farm Biogas plant, the planning history to date, and the AD process more generally, you can visit our project website [www.dealfarmbiogas.co.uk](http://www.dealfarmbiogas.co.uk). You can also contact the project team with any additional questions via [info@dealfarmbiogas.co.uk](mailto:info@dealfarmbiogas.co.uk).***

***To view the new Section 73a planning application, and all the relevant technical reports referenced in this document, you can visit <https://info.south-norfolk.gov.uk/online-applications/> - project reference 2021/2788.***