

Addendum Inspector's Report ABP-308942-20

Development

Development of a Biogas Plant.

Location

Townlands of Ballynamantan,

Kinincha and Glenbrack, Gort, Co.

Galway.

Planning Authority

Galway County Council

Planning Authority Reg. Ref.

19/1812

Applicant(s)

Sustainable Bio-Energy Limited.

Type of Application

Permission

Planning Authority Decision

Refuse

Type of Appeal

First Party vs. Refusal

Appellant(s)

Sustainable Bio-Energy Limited.

Observer(s)

See Appendix.

Prescribed Bodies

An Taisce

Environmental Protection Agency

Date of Site Inspection

12th November 2021

Inspector

Stephen Ward

1.0 Introduction

- 1.1. This is an Addendum Report prepared following a Board Direction dated 10th May 2022 seeking Further Information under Section 132 of the Planning and Development Act 2000 (as amended). The Board sought Further Information as follows:
 - Please provide a breakdown of the water/liquor supply sources to be utilised at the proposed development, with associated calculations which confirm the availability of water/liquor capacity to meet the stated requirement of 120,000 cubic metres of liquor per annum, as outlined in the application documentation (Appendix 7.2 Stormwater Report of Volume 3 of the Environmental Impact Assessment Report).
- 1.2. The further information response was received on 7th June 2022. This Addendum Report considers the Further Information response and any further submissions received in relation to same. This report should be read in conjunction with my original Inspector's report (3rd December 2021), which outlines all other relevant information and assessments.

2.0 Applicant Response

- 2.1. The further information consists of a letter prepared by Halston Environmental & Planning Ltd. on behalf of the applicant. It outlines that the plant will undergo a period of commissioning, during which the anaerobic digestion process will be developed on site. Part of this process will involve slowly 'seeding' primary digester vessels (usually one at a time) and growing and sustaining a suitable population of anaerobes. Feedstock will be carefully fed to the biological system and demand for mixing liquor will be relatively low until such time that a healthy and stable biological system is in place.
- 2.2. The response outlines that the plant would contain a digestate enhancement area including a separator to remove solids (fibre) from digestate. It also states that the proposed design provides multiple opportunities and sources of water / liquor required for mixing with high organic dry matter content (>34%) feedstock (e.g. spent grain and grass silage). Water / liquor which will be used for mixing and preparing a pumpable substrate include the following 5 sources:

- 1. Incoming liquid feedstock with low percentage dry matter (e.g. cow slurry stored in the large incoming receiving tank of 5,100m³).
- 2. Incoming liquid feedstock with low percentage dry matter received to the 5 no. liquid intake tanks (250m³) e.g. dairy industry liquids, fruit juice wastes.
- 3. Liquid effluents generated from processing activities on site (e.g. washing) and stored in the underground tank (488m³).
- 4. Harvested clean rainwater stored in the attenuation lagoon (2,954m³) and underground storage tank (707m³).
- 5. Digestate recirculated from secondary digester vessels i.e. digestate with low percentage dry matter.
- 2.3. The drainage strategy includes management and harvesting of water arising from impermeable clean areas (3.85ha) which will be conveyed to the attenuation pond. Based on data from the Shannon Metrological Station, it is calculated that even during the statistically direst month (April 59.2mm of rainfall), a total of 2,279m³ of water will be generated and harvested for process purposes.
- 2.4. Excluding recirculated liquor, Sources 1-4 above provide 9,500m³ of mixing liquor/water capacity. Based on a stated maximum liquor demand of 330m³ per day, sources 1-4 provide 29 days of mixing liquor supply.
- 2.5. In terms of recirculated liquor (Source 5), the EIAR (section 2.7) states that approximately 40-50% of total digestate produced could be recirculated and used as a mixing agent. Based on the stated estimate of 150,000 tonnes of whole digestate being produced annually, it is calculated that Source 5 alone would supply an annualised daily average of 205m³ of mixing liquor. And based on a maximum daily demand figure of 330m³ and the 5 liquor/water supply sources, the plant is therefore capable of operating for a period of 76 days during a prolonged drought without constraining feedstock input.
- 2.6. It is stated that due to the design and capacity of the digester vessels and digestate storage vessels, the recirculation of digestate could be relied on to solely serve mixing liquor requirements over a prolonged dry spell. It is not expected that recirculation of secondary digestate will be continuously employed across the annual

period, but rather it will manage digestate levels during the closed spreading season and assist with mixing liquor demand during dry weather conditions.

2.7. The response concludes that it has demonstrated the availability of water/liquor capacity to meet annual process input needs even during prolonged dry spells/drought. It contends that the design provides the operator with the tools and operational flexibility to handle and process feedstocks arising from the farming and agri-food sector, and that it will be designed in accordance with principles of sustainability.

3.0 Further Responses

3.1. Third Party Submissions

A further 16 no. submissions were received from 15 no. parties. The submissions raise similar concerns about the detail and clarity of the response. The issues raised can be summarised under the following headings:

Inadequate detail and calculations

- Rainfall values for Athenry should be used instead of Shannon.
- More recent rainfall records should be used to reflect reduced rainfall levels as a result of climate change.
- A 'water balance' system is not used to show the percentage time it succeeds or fails.
- Clear recirculation calculations have not been provided.
- An optimistic maximum requirement of 330m³ per day is used.
- Calculations do not address the shortfall between water input/output by as much as 30,000m³ per year.
- No clarification of feedstock dry-matter content or dilution requirements and calculations.
- No consideration of evaporation or static water in rainfall calculations.
- No clarification on the storage of spoiled waste water.
- No clarification of water supply for construction and commissioning phases.

- No clarification of water demand figures and calculations for the office and laboratory, washing of the facility and trucks, seeding, anaerobic digestion processes, and maintenance.
- The EIAR indicates that the plant will export whole digestate, with no indication of separating digestate into fibre and liquor or the volumes of same.
- The EIAR makes little reference to recirculation and only hints at possible use.
- No clarification of the quality of digestate after recirculation.
- The calculations do not account for peak period water demands and seasonal factors will have a significant impact on the supply/demand balance.
- Taking into account the dry matter content of digestate (5-8%) and the proposed annual tonnage (90,000) the water requirement would be in excess of 184,000m³ per annum and could be close to double that of the stated 120,000m³.
- It is unclear whether it is proposed to bore holes for water supply.

Appropriate Assessment / Biodiversity

- The excessive industrial demand for natural surface water has not assessed the potential impact on the normal flow of water that sustains Natura 2000 sites.
- The impact of the development on the natural water cycle may result in rivers drying up and serious adverse impacts on biodiversity.

Gort Water Supply

- The supply is extremely fragile and close to maximum capacity, and the EIAR does not consider the impact of the development.
- The original application documentation indicated that water would be supplied from the Gort River and Gort Water supply.
- The purpose for the use of the Irish Water supply is not clear. Contrary to Irish
 Water indications, the applicant indicates that it could be used for fire-fighting
 purposes and there are concerns that it would be used for the operational
 needs of the plant. This would have serious consequences for the water
 supply to residents.

 Gort has experienced a recent crisis in water supply as a result of faults at the water plant and this could be further threatened by the proposed development.

Other Issues

- The entrance to the development is on a busy thoroughfare and will pose a risk to public safety and traffic management.
- The proximity of the plant and spreading activities to water sources/courses poses the potential for environmental contamination.
- The stated grassland supply is not available and the need to draw feedstock and food waste from other sources and larger urban areas will have a devastating effect on the local environment.
- The company is well known for environmental breaches and is unlikely to change its modus operandi.
- The site is in close proximity to residential areas and the town centre.
- The plant would be an eye-sore and would give rise to unacceptable odours.
- There has been inadequate environmental assessment and may lead to an environmental catastrophe such as that experienced at Derrybrien windfarm.

3.2. Planning Authority Reports

None.

3.3. Prescribed Bodies

None.

4.0 Assessment

- 4.1. This assessment relates only to the issue of water/liquor requirements and any associated impacts. The 'other issues' raised in the third-party submissions do not relate to the further information submitted and these matters have already been addressed in my original report.
- 4.2. Much of the third-party content outlines concern that the applicant's response has not provided a comprehensive breakdown of the water/liquor supply sources to be

utilised or the associated calculations to confirm the availability of water/liquor capacity to meet the stated requirement of 120,000 cubic metres of liquor per annum. I would acknowledge that the response takes an alternative approach towards water/liquor requirements. Rather than simply outlining the annual cumulative requirement for 120,000m³, it focuses more on the ongoing daily/short-term requirements for water/liquor and the operational capacity of the plant. In doing so, the response considers a worst-case scenario of prolonged drought periods and concludes that the availability of water/liquor capacity will meet annual process input needs. I consider this to be a reasonable approach which addresses the practical operational requirements of the plant while also reflecting the iterative nature of the proposed process.

- 4.3. I note that concerns have been raised about the calculations associated with Source 4 (i.e. harvested clean rainwater). The submissions contend that the rainfall records for Athenry should have been used instead of Shannon, and that more recent rainfall records should be considered to reflect the impacts of climate change.
- 4.4. Section 7.3.6 of the EIAR outlines that the mean annual rainfall is expected to be in the region of 977.6mm/yr based on data from the Shannon Airport station, which I consider to be in reasonable proximity to the appeal site (40km). Based on this figure and a drained site area of 3.85ha, I estimate that rainwater capture on the site would be in the region of 38,000m³ per annum. I acknowledge that there is potential for some proportion of water loss, but I do not consider that it would be significant given that the embedded mitigation measures including a sealed water system.
- 4.5. Regarding the consideration of more recent rainfall records, I would highlight that Met Eireann uses Long Term Averages (LTAs) or 'normals' for comparison purposes and to put values in context. The LTA 1981-2010 series is the period currently used by Met Eireann for climate periodicals and I consider that this has been appropriately used by the applicant. Furthermore, I would highlight that the LTA (1981-2010) for Athenry (1192.9mm) is actually higher than that for Shannon (977.6mm). Therefore, I am satisfied that the applicant has not overestimated the extent of potential rainfall harvest.
- 4.6. The other water/liquor sources (i.e. Sources 1, 2, 3, and 5) generally consist of incoming liquid feedstock and liquids/digestate generated or recirculated during

processing activities. Again, the applicant's assumptions and calculations have been challenged by the third-party submissions. In this regard I would accept that the water/liquor content derived from these sources would depend on many variables including the volume, type, and dry matter content of feedstock, as well as the processes and measures employed to retain and recirculate water/liquor throughout the various processing activities.

- 4.7. The applicant's response has confidently outlined that these water/liquor sources have the capacity to meet annual process input needs even during prolonged dry spells/drought, and that the recirculation of digestate could be relied on to solely serve mixing liquor requirements over a prolonged dry spell. Having acknowledged the inherent challenges and variables in calculating water/liquor yield from these sources, I recommend that the Board should primarily consider the potential impacts of a shortfall of water/liquor supply. In my opinion, the impacts of any such shortfall would simply result in a relative reduction in the volume of feedstock input and, consequently, a lower operational plant capacity/output. I do not consider that such a reduction in the intensity of operations would result in any significant environmental impacts.
- 4.8. I consider that the main potential environmental concern would apply in the event of an over-reliance on the Gort mains water supply. This is reflected in the third-party submissions which outline significant concerns about the operational capacity of the existing supply and the potential adverse impacts of the proposed development on the supply to existing residents and other users. However, the applicant's response has not included the mains water supply as a source for water/liquor mixing requirements.
- 4.9. I acknowledge from the applicant's correspondence with Irish Water (Appendix 1.1 of EIAR) that a water supply demand of 0.042l/sec has been indicated in the preconnection enquiry submission, and that Irish Water have confirmed that a watermain connection would be available. At a flow of 0.042 l/sec, I estimate that the public water supply would amount to c. 1,300m³ per annum. However, as outlined in the applicant's response, I am satisfied that this source is not proposed as an operational mixing requirement and that it would be limited to ancillary uses such as office, laboratory requirements etc. Furthermore, consistent with the Irish Water correspondence and connection requirements, I am satisfied that this matter can be

- satisfactorily controlled by the conditions of any permission to ensure that the volume of mains water supply would not have any unacceptable impacts on the existing Gort water supply.
- 4.10. The third-party submissions have also raised concerns about the impact of the development on the hydrological/hydrogeological regime and associated impacts on biodiversity, including Natura 2000 sites. I have already addressed these matters in my original report. Given the minor size of the site relative to the overall drainage catchment, I am satisfied that there would be only negligible impacts on the hydrological/hydrogeological regime due to decreased infiltration on site associated with increased hardstanding. This would not have any unacceptable impacts on biodiversity (including Natura 2000 sites) or any other environmental factors related to the drainage system. I refer the Board to sections 8.6 (Biodiversity), 8.8 (Hydrology & Hydrogeology), and 9.0 (Appropriate Assessment) of my original report, and I am satisfied that the applicant's further information does not have any significant bearing on the conclusions outlined therein.
- 4.11. In conclusion, I would highlight that my original concerns about the clarity of water/liquor supply related to the need to protect the capacity of the public water supply. This is also the main concern outlined in the third-party submissions. However, the applicant has clarified that the water/liquor requirements will be sourced from feedstock and liquids/digestate generated or recirculated during processing activities. The efficiency of this proposal will be the responsibility of the operator and I do not consider that any shortfall of water/liquor requirements would result in any significant environmental impacts. Furthermore, I am satisfied that the impact on the public water supply will be limited to minor/ancillary uses which can be adequately controlled by the conditions of any permission.

5.0 Galway County Development Plan 2022-2028

- 5.1. The Galway County Development Plan 2022-2028 has been the new operational plan for the area since the 20th of June 2022.
- 5.2. The Core Strategy of the Plan identifies Gort as a 'Self-Sustaining Town' with high levels of population growth. However, it highlights a limited employment/service base and a requirement for targeted "catch-up" investment to become more sustaining.

The growth strategy for Gort is to consolidate the designation as a Self -Sustaining Town and continue to support expansion of the employment base. In addition, residential development will be facilitated that will support the sustainable growth of the town.

- 5.3. Chapter 4 deals with 'Rural Living and Development' and relevant policies/objectives can be summarised as follows:
 - RD 1: To facilitate the development of the rural economy through supporting a sustainable and economically efficient agriculture and food industry, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.
 - **RD 2**: To support and develop a diverse base of smart economic specialisms as dynamic drivers in our rural economy, including innovation and diversification in agriculture and sustainable energy and green agenda projects.
- 5.4. Chapter 5 outlines that 'renewable energy and low carbon future' is an important emerging employment sector/cluster. It also acknowledges the contribution that the circular and bioeconomy can make to Ireland's carbon reduction and states that this sector should be supported where appropriate.
- 5.5. The Plan includes an updated Landscape Character Assessment and outlines that the area around Gort, including the application site, has been classified as 'low' sensitivity. The Regional Road R353 to the southeast of the site is designated as the 'Slieve Aughty Scenic Route'. There are no 'protected views' within c. 5km of the appeal site.
- 5.6. Chapter 14 of the Plan deals with 'Climate Change, Energy and Renewable Resource'. Relevant policies and objectives can be summarised as follows:
 - CC1 supports the implementation of objectives for climate adaptation and mitigation, including those relating to energy.
 - CC2 supports the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, including increased renewable energy use.

EG1 supports the development of the gas network and associated generating capacity in order to sustainably support and augment renewable electrical energy generated in County Galway.

RE1 supports appropriate levels of renewable energy generation and ancillary facilities in the county to meet national, regional and county renewable energy targets, to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy.

- 5.7. The Renewable Energy Strategy recommends that Bio-Energy and Bio-Mass should be supported by policy and should be open for consideration in all areas subject to compliance with all other statutory requirements. Relevant bioenergy policy objectives can be summarised as follows:
 - **20:** To support and recognise Bioenergy development as a flexible and varied form of renewable energy development that can be implemented in a variety of settings.
 - 21: Commercial bioenergy proposals should be encouraged to be located in rural areas both close to the energy source and the point of demand, and served by public roads with sufficient capacity. All bioenergy facilities will be assessed against the ability of the receiving environment to accommodate them in accordance with the LARES and the proper planning and sustainable development of the area.
 - 22: Brownfield sites in areas zoned for industrial or commercial uses will be considered for commercial scale bioenergy development in accordance with the LARES and the proper planning and sustainable development of the area. All facilities will be assessed against the ability of the receiving environment to accommodate them in accordance with the LARES and the proper planning and sustainable development of the area.
- 5.8. I have considered the new Galway County Development Plan 2022-2028 and I am satisfied that the proposed development would be consistent with policies and objectives outlined therein. I do not consider that there have been any significant policy changes which would affect the assessment and recommendation as outlined in my original report of 3rd December 2021.

6.0 Recommendation

On the basis of the foregoing and the planning assessment, Environmental Impact Assessment and Appropriate Assessment in my original report (3rd December 2021), I recommend that, subject to the conditions outlined in section 8, permission should be granted for the proposed development in accordance with the recommended order in section 7 and the reasons and considerations contained therein.

7.0 Recommended Order

Planning and Development Acts 2000 to 2021

Planning Authority: Galway County Council

Planning Register Reference Number: 19/1812

Appeal by Sustainable Bio-Energy Limited, care of Halston Environmental & Planning Ltd. of IHUB, Westport Road, Castlebar, County Mayo, against the decision made on the 2nd day of December 2020 by Galway County Council to refuse permission for the proposed development.

Proposed Development: Development of a Biogas Plant on a 10.01 hectare (ha) site located in the townlands of Ballynamantan, Kinincha and Glenbrack. The Biogas plant will utilise anaerobic digestion technology to produce renewable energy and organic fertiliser. The plant will consist of;

- (i) Two storey office building (509 sq. m floor area) with connection to public sewer; incorporating offices / reception area, switch room, laboratory, welfare facilities, meeting room, storage room and electrical switch room;
- (ii) single store electrical substation building (14.43 sq. m. floor area) and associated bunded transformer:

- (iii) 13.4m high feedstock reception building (3,806 sq. m floor area) incorporating; airlock lobby, feedstock reception area, processing and mixing areas, pasteurisation vessels and ancillary heating technology, wash down area, feedstock quarantine area, storage areas, workshop area, hygiene facilities, digestate separation area and process wastewater tanks;
- (iv) bunded tank farm (14,805 sq. m) containing; 2 no. pump house buildings (216 sq. m) and delivery pipework serving feedstock reception building, 8 no. digester vessels (each of c.15m in height and c.5, 120m3 in capacity) and 4 no. storage vessels (each of c.15m in height and c.5,120m3) fitted with gas collection roofs/domes, stairwell towers and gantries, bunded digestate dispatch bays;
- (v) biogas purification plant on raised concrete apron including containerised electrical room and glass modules, gas scrubber and filter unit (up to 14m in height), compressors, cooler, chiller, bottling plant and loading bays;
- (vi) Carbon dioxide processing building (10.44m in height, 138 sq. m floor area) containing treatment plant and 4 no. outdoor storage tanks (each of 12m in height and 50m3 capacity) and dispatch area;
- (vii) Odour control system comprising air scrubber units, carbon adsorption bed and associated stack of up to 23m in height;
- (viii) energy centre, containing combined heat and power (CHP) plant and 2 no. standby boilers with exhaust stacks (16.4m in height);
- (ix) Biogas ground flare stack (c. 8m in height) and gas booster station;
- (x) weighbridge with secure lift barrier and all ancillary development, including perimeter fencing, internal access roads, emergency exist/entrance, planted soil berm and landscaping, car parking, surface water settlement and storage lagoons, lighting and all civil engineering works for the disposal of foul and surface water.

The development includes for construction of a new entrance to the site from the N18/R458 with associated signage and an access road (area of 1.734ha) from the new entrance to the Biogas plant.

Permission is being sought for 10 years and is a development that is for the purpose of an activity requiring an Industrial Emissions Licence from the Environmental Protection Agency (EPA). An Environmental Impact Assessment Report (EIAR) and

Natura Impact Statement (NIS) has been prepared and accompanies this planning application.

Decision:

Grant permission for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

Matters Considered

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

- (a) the policies and objectives set out in the National Planning Framework and the Regional and Spatial Economic Strategy for the Northern & Western Regional Assembly
- (b) the policies and objectives set out in the Galway County Development Plan 2022-2028 and the Gort Local Area Plan 2013-2023
- (c) the provisions of the Climate Action Plan 2021 (Government of Ireland)
- (d) the Draft Bioenergy Plan (Department of Communications, Energy and Natural Resources, 2014)
- (e) the National Policy Statement on the Bioeconomy (Government of Ireland, 2018)
- (f) the Waste Action Plan for a Circular Economy National Waste Policy 2020-2025 (Department of Environment, Climate and Communications)
- (g) the Connaught Ulster Regional Waste Management Plan 2015-2021

- (h) The Planning System and Flood Risk Management Guidelines (Department of Environment, Heritage and Local Government and The Office of Public Works, 2009)
- (i) the nature, scale and design of the proposed development
- (j) the pattern of existing and permitted development in the area
- (k) the planning history of the site and the surrounding area
- (I) the submissions and observations received, and
- (m) the report of the Inspector.

Appropriate Assessment

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the:

- Lough Coole-Garryland SAC (Site Code: 000252),
- Carrowbaun, Newhall and Ballylea Turloughs SAC (Site Code: 002293),
- Eastern Burren SAC (Site Code: 001926),
- Lough Coy SAC (Site Code: 002117),
- Caherglassaun Turlough SAC (Site Code: 000238),
- Kiltartan Cave (Coole) SAC (Site Code: 000286), and
- Termon Lough SAC (Site Code: 001321)
- Coole-Garryland SPA (Site Code: 004107)

are the European sites for which there is a likelihood of significant effects. The Board noted the decision of the Planning Authority and submissions from third parties and prescribed bodies regarding the potential for significant effects on the Lough Cutra SAC, Peterswell Turlough SAC, Galway Bay Complex SAC, and the Inner Galway Bay SPA, but agrees with the conclusion in the Inspector's report that significant effects are not likely on these sites having regard to the absence of surface water and/or groundwater pathways; the separation distance involved; and the nature/sensitivity of their qualifying interests.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for European Sites in view of the above sites' Conservation Objectives.

The Board considered that the information before it was sufficient to undertake a complete assessment of all aspects of the proposed development in relation to the sites' Conservation Objectives using the best available scientific knowledge in the field. The Board accepted the Inspector's conclusion that it is not feasible or practical to assess the impacts of feedstock supply and digestate land-spreading over a multiplicity of sources/destinations, particularly under the circumstances when these activities are already occurring and will be suitably controlled by good agricultural practice and legislation and determined that the cumulative impacts of these activities do not form part of the Appropriate Assessment of this project. In completing the assessment, the Board considered, in particular, the following:

- Site Specific Conservation Objectives for these European Sites,
- Current conservation status, threats and pressures of the qualifying interest features, likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- Submissions from observers, prescribed bodies and the reports of the Planning Authority, and
- Mitigation measures which are included as part of the current proposal.

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites. The Board identified that the main likely impacts arising from the proposed development on the European Sites would arise from operational air quality impacts on Coole-Garryland Complex SAC and Coole-Garryland SPA, surface water quality impacts on Coole-Garryland Complex SAC and Coole-Garryland SPA at construction and operational stages, groundwater impacts to European Sites within the same groundwater body during construction and operational stages, and the impacts on Lesser Horseshoe Bats of Kiltartan Cave (Coole) SAC as a result of lighting and the loss of foraging habitat and linear features. Having regard to these

potential impacts and the avoidance and mitigation measures as set out in the Natura Impact Statement, the Board concluded that the proposed development, subject to the identified mitigation measures, would not adversely affect any of the habitats or species within the relevant European sites. In the overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the European sites in view of the site's conversation objectives and there is no reasonable scientific doubt as to the absence of such effects.

Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

- (a) the nature, scale, location and extent of the proposed development,
- (b) the Environmental Impact Assessment Report and associated documentation submitted with the application, and the further particulars submitted to An Bord Pleanála on the 7th June 2022,
- (c) the reports and decision the Planning Authority, and the submissions received from third party observers and the prescribed bodies in the course of the application and the appeal, and
- (d) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation and further information submitted by the applicant, adequately identifies and describes the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the Inspector's conclusion that it is not feasible or practical to assess the potential impacts associated with the provision of feedstock, the disposal of digestate, and the connection of the gas to the national network, particularly under the circumstances when these activities/projects are already occurring and will be suitably controlled by good agricultural practice/legislation and/or separate planning processes.

Accordingly, the issue of project-splitting does not arise in this case, and it is not

reasonable or practical to assess the cumulative impacts of activities/projects associated with feedstock provision, digestate spreading or gas grid connection.

The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the planning application and the appeal. The Board considered and agreed with the Inspector's reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

- Direct positive employment impacts from the construction and operational stages, as well as indirect employment associated with haulage, services and other spin-off sectors.
- Potential risks associated with major accidents and/or disasters, which will be suitably mitigated through compliance with the relevant health and safety regulatory regimes and by limiting the quantities of dangerous substances present on site to levels below the relevant thresholds for the COMAH Regulations.
- Direct and indirect impacts on Biodiversity at the construction and operational stages due to the loss of habitat, disturbance of species due to noise and lighting, and impacts on water quality and air quality. These impacts will be addressed by embedded mitigation measures including a sealed effluent/water system and landscape/habitat creation. Construction stage impacts will be mitigated by the implementation of a Construction Environmental Management Plan including the establishment of a working corridor near treelines/hedgerows and an active approach to silt control. Operational stage impacts will be mitigated by the provision of suitable lighting and habitat creation, as well as future monitoring and remediation of habitat restoration proposals.
- Potential direct and indirect impacts on Hydrology and Hydrogeology at construction and operational stage as a result of construction materials/substance pollution, soil disturbance/removal, groundwater flood

risk, and pollution from the operational processes and materials. These potential impacts will be mitigated through a Construction and Environmental Management Plan and appropriate operational measures for the bunding design, storage and containment of potential pollutants. Surface water management, including SuDS, attenuation, and interceptors, will be employed to ensure that all potential discharges to water will be adequately contained. Further ground investigations will inform the detailed foundation design for structures and ongoing Integrity test and monitoring will apply to all potential pollution sources. Any potential cumulative water impacts have been satisfactorily addressed by the mitigation measures included in the M18 Motorway project and by the recent upgrade to the capacity of the Gort Wastewater Treatment Plant.

- Direct air and odour impacts on sensitive receptors (including designated sites and biodiversity) and populations in the site vicinity as a result of emissions during the construction and operation stages. Construction stage impacts will be suitably distanced from sensitive receptors and will be mitigated by dust suppression measures. Operational air and odour emissions will be appropriately treated (including containment, CHP combustion, and odour abatement) and dispersed at height to comply with the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) and stringent odour target values.
- Positive indirect impacts on Climate due to a reduction in carbon dioxide emissions through the production of biogas as a replacement of fossil energy sources.
- Direct Noise impacts during the construction phase which will be suitably mitigated through compliance with construction noise standards and a Construction Environmental Management Plan.
- Landscape and Visual impacts due to the scale of the project, which will be
 mitigated by embedded design measures including the proposed layout, form
 and colours, as well as the creation of additional berm screening and
 landscape planting.

 Direct and indirect traffic and transport impacts which will be mitigated by the design of the proposed entrance and the control of haulage vehicle type and routes.

The Board completed an Environmental Impact Assessment in relation to the proposed development and concluded that, subject to the implementation of the proposed mitigation measures set out in the Environmental Impact Assessment Report, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

Conclusions on Proper Planning and Sustainable Development

The Board considered that the proposed development would be in accordance with national, regional and local policy relating to energy and waste, and notwithstanding that the appeal site is not zoned for industrial use and the proposed development does not include a connection to the gas or electricity network, the Board did not consider that the proposed development was precluded at this location by any of the policies and objectives set out in the Galway County Development Plan 2022-2028 or the Gort Local Area Plan 2013-2023. Furthermore, the Board considered that, subject to compliance with the conditions set out below, the proposed development would be acceptable at this location adjoining the planned industrial expansion of Gort, would not seriously injure the residential or visual amenities of the area, and would be acceptable in terms of pedestrian and traffic safety. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

8.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application on the 21st day of November 2019, and the further particulars received by An Bord Pleanala on the 7th day of June 2022, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

 The developer shall ensure that all mitigation measures set out in the Environmental Impact Assessment Report and Natura Impact Statement submitted with the application, shall be implemented in full, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

- 3. The following limits and requirements shall be complied with in the anaerobic digestion process:
 - (a) A maximum of 90,000 tonnes per annum of raw materials shall be treated in the anaerobic digesters
 - (b) The composition of feedstock used as input into the anaerobic digestors shall be as detailed in Table 2.4 of Volume 2 of the EIAR.

Reason: In the interests of clarity

- 4. An annual report on the operation of the facility hereby permitted shall be submitted to the Planning Authority. The content of this report shall be as agreed in writing with the Planning Authority and shall include inter alia the following:
 - (a) Details of the source of all feedstock and final disposal areas of digestate,
 - (b) The volumes of raw materials treated in the anaerobic digester in the previous 12 months,
 - (c) The volume and weight of digestate produced and stored in previous 12 months, and
 - (d) The volume and weight of Biomethane and Carbon Dioxide produced/stored on site in previous 12 months.

Reason: In the interest of orderly development and to ensure compliance with the parameters set out in the application.

 Water supply and drainage arrangements, including the attenuation and disposal of surface water shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

6. The capacity and breakdown of the water/liquor supply sources to be utilised for feedstock mixing at the proposed development shall be in accordance with the further information submitted to An Bord Pleanala on the 7th day of June 2022.

Reason: In the interest of public health and to ensure a proper standard of development.

7. Prior to commencement of development, the developer shall enter into water and/or waste water connection agreements with Irish Water.

Reason: In the interest of public health

8. (a) Prior to the commencement of development, and on an annual basis post operation, the developer shall submit a mobility plan setting out the haul routes to and from the site for the agreement of the Planning Authority. The plan shall indicate the main feedstock and digestate spreading locations and demonstrate as far as is practicable how routes to and from the site to these locations are restricted to the primary routes and avoid Gort town centre and residential areas.

(b) All deliveries to and from the site shall be via Heavy Goods Vehicles and hauliers shall be contractually obliged to adhere to the haul routes agreed by condition 8 (a) above.

Reason: In the interests of traffic safety and to safeguard the amenities of the area.

 Feedstock deliveries to the site and transport of digestate and biogases from the site shall be confined to between the hours of 0700 to 1900 Monday to Friday and between the hours of 0900 to 1500 on Saturday and Sunday.

Reason: In the interest of orderly development and the residential amenity of surrounding dwellings.

10. Prior to the commencement of development, the developer shall submit details for the written agreement of the planning authority of the proposed entrance arrangements and compliance with the recommendations of the Road Safety Audit, including details of signage, lighting and road markings.

Reason: In the interest of traffic safety.

11. Permission is hereby granted on the basis that the maximum quantity of biogas and/or biomethane present on the site at one time can never exceed the relevant lower tier thresholds under the Seveso Directive. Prior to the commencement of development, the developer shall submit details for the written agreement of the Planning Authority that clearly demonstrate compliance with these limits, including details of operational controls to limit the quantities, such as, but not limited to, the monitoring of liquid levels in tanks, monitoring biogas concentrations in the vapour spaces of the tanks, and the use of flaring to manage inventory.

Reason: In the interests of clarity and to prevent the facility from becoming an establishment for the purposes of the Seveso III Regulations.

12. Following further ground investigations and prior to the commencement of development on site, the developer shall submit for the written agreement of the planning authority details of the proposed foundation and bund design. Proposals shall clearly demonstrate that mitigation measures relating to the protection of soil, geology, hydrogeology and groundwater have been appropriately incorporated, and that the bund design shall withstand the uplift pressure of groundwater.

Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

13. The existing hedgerows along the eastern site boundary shall be retained, protected from damage, and enhanced in such a manner as to ensure that its value as a commuting and foraging habitat is protected. A revised Landscape Mitigation Plan shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development, and shall clearly detail proposals in this regard including the precise extent of existing hedgerow to be retained.

Reason: To ensure the protection of a feature of importance for bats.

- 14. The developer shall facilitate the planning authority in preserving, recording, or otherwise protecting archaeological materials or features that may exist within the site. In this regard, the developer shall
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - (c) provide satisfactory arrangements for the recording and removal of any archaeological material which may be considered appropriate to remove.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site

15. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be permitted in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the residential amenities of property in the vicinity.

16. The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall incorporate all the construction stage mitigation measures outlined in the Environmental Impact Assessment Report and Natura Impact Statement, and shall provide details of intended construction practice for the development, including and not limited to:

- (a) location of the site and materials compound(s) including area(s) identified for the storage of construction refuse,
- (b) location of areas for construction site offices and staff facilities,
- (c) details of site security fencing and hoardings,
- (d) details of car parking facilities for site workers during the course of construction,
- (e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site if required,
- (f) measures to obviate queuing of construction traffic on the adjoining road network,
- (g) measures to prevent the spillage or deposit of clay, rubble, or other debris on the public road network,
- (h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road or footpath during the course of site development works,
- (i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
- (j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater.
- (k) details of construction lighting,
- (I) details of key construction management personnel to be employed in the development, and
- (m) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan and monitoring results as appropriate shall be kept for inspection by the planning authority.

Reason: In the interest of amenities, environmental protection, public health, and safety.

17. Monitoring of the construction phase shall be carried out by a suitably qualified and competent person to ensure that all mitigation measures outlined in the Environmental Impact Assessment Report and Natura Impact Statement are fully implemented. In addition, the designated member of the company's staff shall interface with the planning authority and members of the public in the event of complaints or queries in relation to environmental emissions. Details of the name and contact details, and the relationship to the operator of this person shall be available at all times to the planning authority on request whether requested in writing or by a member of staff of the planning authority at the site.

Reason: To safeguard the amenities of the area.

18. Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006.

Reason: In the interest of sustainable waste management.

19. All solid wastes arising on the site shall be recycled as far as possible.

Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility and in such a manner as is agreed with the Planning Authority. In any case no such wastes shall be stored on the site except within the confines of the buildings on site. Adequate on-site arrangements for the storage of recyclable materials prior to collection shall be made to the satisfaction of the Planning Authority.

Reason: To safeguard the amenities of the area

20. Lighting shall be provided in accordance with a scheme, details of which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. The scheme shall minimise obtrusive light outside the boundaries of the development at all times and shall comply with the mitigation measures for bats as outlined in the Natura Impact Statement.

Reason: In the interest of amenity, public safety, and the protection of bats.

21. An odour management plan, which shall include a monitoring programme, shall be put in place by the developer in respect of the construction and operation phase of the development. The nature and extent of the plan and the monitoring sites shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. The results of the programme shall be submitted to the planning authority on a monthly basis.

Reason: To protect the residential amenities of the area.

22. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission

Stephen Ward

Senior Planning Inspector

25th October 2022

Appendix: List of Observers on the Further Information response

- 1. Martin & Valerie Aherne
- 2. Mary-Anne Jacobs
- 3. Sheelagh Jacobs
- 4. Els Van Hout
- 5. Ciaran O'Donnell
- 6. Edward Conlon & Others
- 7. Elizabeth Joyce
- 8. James & Patricia Hannigan
- 9. Jennifer Joyce
- 10. Richard Joyce (x2)
- 11. Andreas Edler
- 12. Gort Biogas Concern Group
- 13. David Murray
- 14. Leo Smyth
- 15. Gráinne Ní Chonchuíe