#### **Planning and Policy** 4

#### 4.1 Introduction

PECEINED. 03/08/2025 This chapter of the Environmental Impact Assessment Report (EIAR) examines waste management, energy, climate change and planning policy, and the legislative context at European, national, regional and local levels with relevance to the Proposed Development at Moneylane, Arklow, Co. Wicklow.

The planning history most relevant to the subject site is also summarised below.

#### 4.2 Site Planning Application History

The following planning history is based on a review of the Proposed Development site and surrounding area using the Planning Authority online planning search tool.

There is no planning history on the subject site.

#### **Adjacent Sites:**

We note the following planning history for adjacent sites relevant for the subject proposal.

#### Reg. Ref.: 23/50 - Immediately South of Subject Site

Wicklow County Council (WCC hereafter) granted permission on the 28<sup>th</sup> April 2023, subject to 7 no. conditions, to erect a circular slurry storage tank, immediately south of the subject site.

The conditions related to foul effluent discharge; uncontaminated water discharge; land spreading; and construction of the over-ground circular storage tank.

Reg. Ref.: 20/731 - Machinery Shed and Portacabin Building for Office Use - Southeast of Subject Site

WCC granted permission on the 11<sup>th</sup> June 2021, subject to 5 no. conditions, for the following development:

*"(i) machinery shed (492sqm) (ii) lean to extension (283sqm.) to existing building permitted* under PRR 98/9110 and (iii) portacabin building for use as site office, all structures in connection with the applicants agricultural contracting business".

WCC issued a Further Information (FI) request on the 16<sup>th</sup> September 2020, requesting the following information:

Detail of the existing farming operation/agricultural contracting business taking place on the lands, including a management plan and justification for the need and location of the structure(s) for retention having regard to the provisions for the Rural Economy as set out in the CDP (Policies AGR1 to AGR5).

Reg. Ref.: 19/1018 – Demolition and Erect Extensions to Dwelling and Associated Development – West of Subject Site

WCC granted permission on the 17<sup>th</sup> January 2020, subject to 8 no. conditions, to "demolish conservatory and porch to front of existing dwelling and two storey flat roof section to rear elevation and permission to make alterations and erect extensions to dwelling, erect a new vehicular entrance and upgrade existing sewage facilities to current EPA standards and all associated site and ancillary works".

WCC requested FI on the 1<sup>st</sup> November 2019, requesting the following information:

• Having regard to the Site Charactersiation Form submitted and the possibility of a rising water table level on site, please submit revised proposals for a secondary effluent treatment unit with a partially raised polishing filter taking into consideration a possible high water table level of 0.4m below ground level.

#### Reg. Ref.: 18/1100 – Southeast of Subject Site – Retention Permission

WCC granted retention permission on the 11<sup>th</sup> January 2019, subject to 2 no. conditions, for the construction of a garage and car port and all ancillary site works.

#### Reg. Ref.: 18/552 - Southeast of Subject Site - Finger Post Sign

WCC refused permission (licence under section 254) on the 9<sup>th</sup> July 2018, for the erection of a finger post sign for Wicklow Calf Company.

The proposed signage was refused for the following reason:

Having regard to the existing fingerpost signage at this location which includes directional information, the provision of the Development Plan, which provides that such signage will only be considered where it supplements rather than duplicates information, and such signage should not replace the preplanning of the journey. The need for the signage has not been justified, would result in visual clutter and conflict with road safety.

#### Reg. Ref.: 16/1377 - Immediately South of Subject Site

WCC granted permission on the 21<sup>st</sup> March 2017, subject to 7 no. conditions, for a cattle shed and effluent storage facilities, concrete apron and associated site works.

The conditions of the grant related to the colour of roofing and cladding; discharge of effluent and uncontaminated water; arrangements for all liquid and solid animal wastes; and land spreading.

#### Reg. Ref.: 15/763 - Southeast of Subject Site

WCC granted permission on the 12<sup>th</sup> October 2015, subject to 14 no. conditions, for the construction of a bungalow with a garage, a new vehicular entrance, a well, effluent treatment system to current EPA standards and all ancillary works.

The conditions of the grant are summarised below:

• Pay €9,700 to the Planning Authority in respect of public infrastructure and facilities

benefiting development in the area.

- Security of condition compliance of €1,000.
- PECEIVED. Effluent disposal system developed to the specification of Wastewater Treatment and Disposal Systems Serving Single Houses, Code of Practice (EPA 2009): Photographic evidence of installations shall be submitted on completion of the system and a certificate from a Chartered Engineer, Environmental Health Officer or Hydrologist stating that the effluent system has been installed.
- All surface water run-off shall be collected and disposed of within the site to soakpits. •
- Entrance gates shall be recessed 5m from the public road carriageway. Recessed space shall be splayed with wing walls, timber fences or stone banks splayed to provide an overall width of 6-8m, not exceeding a height of 0.8m within 2.4m of the public road.
- Roadside boundary shall be set back along a line formed by joining a point measured 2.4 metres back from the road at the centre of the access driveway to 90 metres in both directions on the existing road boundary.
- Front boundary shall be a sod and stone bank between 0.8 and 1.1 metres in height, with locally growing hedges, thorn or hazel planted to the rear to form a continuous screen.
- Roof finish shall be blue/black slate.
- External walls shall have a cement rendered finish, finished with napp plaster, or painted in the white/ off-white colour range.
- Existing shrub and tree vegetation shall be retained expect for those strictly required to be removed to carry out the development.
- Submit a tree planting and landscape scheme.

#### Reg. Ref.: 14/2177 – New Dwelling – West of Subject Site

WCC granted permission on the 6<sup>th</sup> July 2015, subject to 14 no. conditions, for a "proposed new dwelling, garage, effluent disposal system to current EPA standards, bored well, new entrance, together with all ancillary site works".

#### Reg. Ref.: 12/6117 – West of Subject Site on Ballyduff South Road

WCC granted permission on the 27<sup>th</sup> November 2012, subject to 14 no. conditions, for a "detached dormer bungalow and single storey domestic garage together with an on-site waste water treatment facility and associated site works".

FI was requested on the 13<sup>th</sup> of September 2012 and the 5<sup>th</sup> April 2012 for the following:

- Revised site layout showing the existing roadside boundary accurately surveyed, and showing the roadside boundary set back to ensure X metres sight distance (calculation of X is detailed in the further information request) below of required site distance measure) to the nearside edge of the public road carriageway when measured at a point of 2.4m from the edge of the public road carriageway at the proposed entrance.
- Clarify whether the purchase of the affected lands to the west of the entrance has been finalised: If the purchase has been finalised, a revised rural place map should be submitted including the relevant field within the blue line boundary.
- Letter of consent to carry out works to the roadside boundary.
- Clarify what is proposed for the area of land between the public road edge and the fence. This is the area to the northeast of 120m sightline. It would not be adequate to erect sheep wire along the road edge in lieu of an existing hedge because it is necessary to achieve and maintain 120m sightlines. Detail what fences and groundworks are proposed. A crosssection through the proposed boundary setback showing the public road, fences and

setback area should be submitted.

#### Reg. Ref.: 09/884 - West of Subject Site on Ballyduff South Road

RECEIVED. 0304 On the same site, WCC refused permission for the same development as Reg. Ref.: 12/611above, on the 17<sup>th</sup> December 2009. The refusal states that the proposed development would be prejudicial to public health because the site inspection indicated that the site is unsuitable for an onsite effluent disposal system discharging groundwater.

#### Reg. Ref.: 08/221 – Detached Bungalow with Envirocare Treatment Plant and Percolation Area - West of Subject Site

WCC refused permission on the 30<sup>th</sup> July 2008, for a "detached bungalow with detached garage, with envirocare treatment plant and built up percolation area, using existing bored well and proposed opening of existing disused entrance".

#### Reg. Ref.: 05/2443 - South of Subject Site

WCC granted permission on the 26<sup>th</sup> April 2005, subject to 20 no. conditions, for a "dwelling & garage with services".

#### Reg. Ref.: 05/2343 - New Water Treatment Plant - Northwest of Subject Site

WCC granted permission on the 9<sup>th</sup> May 2006, for a "new water treatment plant along with all associated work to facilitate the upgrading and expansion of existing water treatment plant at Ballyduff".

#### Reg. Ref.: 99/743 - East of Subject Site

WCC granted permission on the 15<sup>th</sup> December 1999, subject to 10 no. conditions, for the demolition of the existing dwelling and the erection of a dormer bungalow.

#### Reg. Ref.: 98/9110 – Machinery Shed – Southeast of Subject Site

WCC granted permission on the 7<sup>th</sup> of January 1999, subject to 4 no. conditions, for the construction of a machinerv shed.

#### Reg. Ref.: 96/4735 - Southeast of Subject Site

WCC granted permission on the 11<sup>th</sup> November 1996, subject to 3 no. conditions, for an extension to the existing dwelling.

#### Reg. Ref.: 92/8179 - East of Subject Site

WCC granted permission on the 17<sup>th</sup> August 1992, for an extension to the existing house.

#### Reg. Ref.: 91/6655 - Southeast of Subject Site

WCC granted permission on the 25<sup>th</sup> April 1991, for an extension to the existing house, provision of a new entrance and installation of a septic tank.

#### Reg. Ref.: 91/7233 – Northwest of Subject Site - Extension to Dwelling

WCC granted permission on the 10<sup>th</sup> September 1991, subject to 2 no. conditions, for the extension to the existing dwelling.

#### Reg. Ref.: 90/6125 - South of Subject Site

WCC granted permission on the 21<sup>st</sup> January 1991, subject to 2 no. conditions, for an extension to the existing house and the provision of a front porch, vehicular access, garage and front boundary walls.

#### Reg. Ref.: 90/6087 – East of Subject Site – Extension and Additional Slurry Storage

WCC granted permission on the 7<sup>th</sup> December 1990, for the extension to the cubicle house and provision of additional slurry storage.

#### 4.2.1 Biogas Facility Related Planning Permission

#### Reg. Ref.: 09/720 – AD Unit in Grangecon – West of County Wicklow

WCC granted permission on the 28<sup>th</sup> April 2010, subject to 16 no. conditions, for the following development at Rathcon Farm, Grangecon, Co. Wicklow:

"Anaerobic digestion unit for the purpose of generating renewable energy in the form of electricity and heat. The unit will require a reception shed, a site office, a digester, 2 no digestate storage tanks, 2 no reception tanks, 1 no pasteurisation tank and a combined heat and power engine without put no greater than 360kv electricity. The development will require a waste licence for operation."

Further Information was requested by WCC on the 14<sup>th</sup> August 2009. The requested items are summarised below:

- Detailed description of the design of the treatment process in particular what emissions will/could arise and how they are to be dealt with to avoid nuisance emissions and avert health and safety risks arising from the process or storage of materials on site (Include process flow diagrams, drawings in plan cross and long section, calculations, specification and design standards).
- Details of the proposed water supply including the type of supply, location of source and • the results of chemical and bacteriological analysis.
- Details on the process of the discharging of effluent waste from the office unit into the anaerobic digestion unit. Indicate whether the process includes the grey water waste.
- Details of the design of the wheel wash and the treatment of wastewater arising from it.
- Clarify if there will be any liquid waste that will require a disposal route as it is indicated that there is a continual return of liquid waste to the AD unit.
- Full design details of the storage facilities.

The conditions of the grant are summarised below:

- In the case that a 'waste facility permit' is not granted or renewed, the proposed complex shall be decommissioned, the buildings removed, and the site reinstated within 12 months of the cessation of the operations.
- Prior to commencement: Development contribution of €19,174 in respect of public infrastructure and facilities benefitting development in the area.

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- Prior to commencement: Security of €5,000 to be lodged to ensure condition compliance.
- Facility limited to a max. intake of 10,000 tonnes per annum. The facility shall except agricultural wastes only, unless otherwise agreed.
- The digestate generated shall be disposed of by spreading on land, unless otherwise agreed. Location, rate and time or spreading and the buffer zones to be applied in accordance with the requirements of the European Communities (Good Agricultural Practice for the Protection of Waters) Regulations, 2006. Prepare a nutrient management plan and implementation report for application of the digestate on land and submit for approval each year. Only waste which has been adequately pasteurized and digested shall be spread on land.
- Each year the developer shall submit a report on the operation of the facility: Details of all associated wastes and the final disposal areas and locations; volumes of waste and the products of the digester stored on site or in its vicinity in the previous 12 months; and details on the control of emissions, maintenance of equipment and disposal of associated wastes.
- Prior to commencement: Construction Management Plan.
- Prior to commencement: Submit to the Planning Authority for agreement for an Environment Management System (EMS) which shall be employed to limit the impacts of the facility on the surrounding environment. EMS shall include measures to deal with air quality (minimising dust and odours), noise, protection of surface water and groundwater, external lighting, and shall include any necessary monitoring and reporting arrangements. A record of the materials delivered to and removed from the site shall be maintained under the EMS.
- Prior to commencement: Install and maintain standby/duty equipment for all critical components of the waste flow and AD process together with monitors and alarms. Submit a contingency plan for waste management and emission control in the event of major interruption of the water flow, pasteurisation, AD and emission control process.
- Equivalent sound levels attributable to all on-site operations shall not exceed 55 dB(A) (Leq) over a continuous one-hour period between 0800 hours and 1800 hours Monday to Friday inclusive, and 0800 hours and 1300 hours on Saturday, when measured at any noise sensitive receptor. Sound levels shall not exceed 45 dB(A) over a continuous one-hour period at any other time.
- Dust emissions shall not exceed 350 milligrams/square metre per day average over a continuous period of 30 days, measured as deposition of insoluble particulate matter, any position along the site boundary. Suitable arrangements shall be made to suppress and control dust arising from processing, handling and transportation of waste and or digestate.
- Deposition of dust on surrounding lands in excess of allowed limits, or spillage onto public roads shall be prevented at all times. Prior to commencement: details of management and monitoring arrangement to ensure compliance with this requirement shall be submitted and agreed with the Planning Authority.
- Tree planting shall be carried out along the proposed earth embankments to the north, east and south of the AD site.

### 4.3 European Policy and Legislation

#### 4.3.1 Energy and Climate

The need to recognise the impact of anthropogenic climate change and transition our way of life towards dealing with the effects of climate change is dealt with across European policy and legislation. The key energy and climate policies and legislative documents with relevance to the Proposed Development are set out in this section.

The EU has pledged to achieve climate neutrality by 2050, delivering on commitments under the Paris Agreement (COP21). Reaching this objective will require a transformation of Europe's energy supply, society, and economy. With the 2030 Climate Target Plan<sup>1</sup>, the EC proposes to raise the EU's ambition on reducing greenhouse gas (GHG) emissions to at least 55% below 1990 levels by 2030. The plan recognises the significant contribution of the agricultural sector to GHG emissions and while these emissions can never be fully eliminated under existing technology and management options, they can be significantly reduced, whilst ensuring food security is maintained in the EU. Efficient use of fertilisers, adopting precision farming, a healthier herd and the deployment of AD technologies treating organic waste to produce renewable biogas are highlighted within the plan as examples of existing technologies.

The European Green Deal package of policy initiatives was launched by the EC in 2019, which aims to set the EU on the path to a green transition, with the ultimate goal of reaching climate neutrality by 2050. The associated Fit for 55 legislative package aims to translate the ambitions of the Green Deal into law. The policy package itself underlines the need for a cross-sectoral approach in which all relevant policy areas contribute to the ultimate climate-related goal. The package includes initiatives covering the climate, the environment, energy, transport, industry, agriculture, and sustainable finance.

The Green Deal recognises that "*renewable and low-carbon gases, such as biomethane, will play a central role in achieving climate neutrality*"<sup>2</sup>. Biogas and biomethane, renewable and low carbon hydrogen have the potential to gradually replace fossil gases, including natural gas, and can be used as a fuel to reduce emissions in hard-to-abate sectors, particularly in industry and transport.

As part of the Deal, the EU Farm to Fork Strategy<sup>3</sup> was published which includes proposals to transform agriculture and position it as a key sector for climate mitigation and adaptation. The development of an agri-led biomethane industry in Ireland is strongly aligned with a number of the headline Farm to Fork goals, including:

- Ensure food production has a neutral or positive environmental impact.
- Carbon Farming Initiative implement green business models that sequester carbon.
- Promote a circular bio-based economy.
- Reduce pesticide use and excess nutrients in the environment by 2030.
- Achieve a 50% reduction in nutrient losses without reducing soil fertility leading to a 20% reduction in fertiliser use.
- Increase the proportion of organic farming to 25% by 2030.

#### 4.3.2 EU Common Rules on Renewable Gasses

The common rules for the internal markets for renewable gas, natural gas and hydrogen (recast) European Parliament legislative resolution was published on the 11<sup>th</sup> of April 2024.

#### The common rules outlined that the Commission communication of the 8<sup>th</sup> March 2022 entitled

<sup>&</sup>lt;sup>1</sup> Communication from The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions - *Stepping up Europe's 2030 climate ambition Investing in a climate-neutral future for the benefit of our people*. <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0562</u>

<sup>&</sup>lt;sup>2</sup> European Commission, Directorate-General for Communication, (2021) *Delivering the Green Deal: the role of clean gases including hydrogen.* <u>https://data.europa.eu/doi/10.2775/718801</u>

<sup>&</sup>lt;sup>3</sup> Communication from The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions - *A Farm to Fork Strategy for a fair, healthy, and environmentally friendly food system.* <u>https://ec.europa.eu/info/sites/default/files/communication-annex-farm-fork-green-deal\_en.pdf</u>

'REPowerEU: Joint European Action for more affordable, secure and sustainable energy' (REPowerEU), which was adopted after the beginning of Russia's unprovoked and unjustified military aggression against Ukraine, highlighted the importance of diversification of gas supplies to phase out the Union's dependency on Russian energy.

REPowerEU recognised that "scaling up sustainable biomethane and the roll-out of renewable hydrogen could play a decisive role" in ensuring secure and more sustainable power supply for the EU.

The common rules recognise that "Although electrification is a key element of the green transition, household natural gas consumption, including increasing volumes of renewable gas, in particular biomethane, will continue to exist in the future."

The common rules go on to state the following:

"Member States should take concrete measures to assist the wider use of sustainable biomethane, or other types of gas, that can technically and safely be injected into, and transported through, the natural gas system, the producers of which should be granted nondiscriminatory access to that system, provided that such access is compatible with the relevant technical rules and safety standards on an ongoing basis and unless otherwise provided for in this Directive"

The rules also state that Member States should seek to expedite and support the connection of biomethane producers to the natural gas network, and that Member States must ensure that transmission and distribution system operators adhere to reasonable time limits to assess requests for the injection of biomethane.

#### 4.3.3 Renewable Energy Directive

The current Renewable Energy Directive 2018/2001/EU<sup>4</sup> entered into force in December 2018 and has since been amended by Directive EU 2023/2413<sup>5</sup> (RED III). On the 12<sup>th</sup> September 2023, RED III was adopted by the Parliament. The Directive establishes a basis in policy for the production and promotion of renewable energy, setting a new binding renewable energy target for the EU for 2030 of at least 42.5%, with this target having been revised upward in 2023 from 32%.

This target is a continuation of the 20% target for 2020. In order to help EU member countries to achieve this target, the directive introduces new measures for various sectors of the economy, particularly on heating, cooling, and transport. It also includes new provisions to enable citizens to play an active role in the development of renewables by enabling renewable energy communities and self-consumption of renewable energy. It also establishes strengthened criteria to ensure bioenergy's sustainability.

The 2023 amending Directive altered the 2018 Directive to align with increased climate ambitions and recognise renewable energy as an "overriding public interest" in the Appropriate

<sup>&</sup>lt;sup>4</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources. <u>https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=uriserv:OJ.L\_.2018.328.01.0082.01.ENG</u>

<sup>&</sup>lt;sup>5</sup> Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023L2413&gid=1699364355105</u>

Assessment process.

RECEIVED. Under this revision the planning, construction and operation of renewable energy plants, their connection to the grid and the related grid itself, and energy storage assets are presumed  $t_{0}$  be in the overriding public interest and serving public health and safety when balancing legal interests for the purposes of the Birds, Habitats, and Water Framework Directives. The revisions to the Directive present further evolution of the target to accelerate the development of renewable energy developments in EU member states.

Building on the 2009 and 2018 directives, the revised directive introduces stronger measures to ensure that all possibilities for the further development and uptake of renewables are fully utilised. This will be key to achieving the EU's objective of climate neutrality by 2050 and to strengthen Europe's security of energy supply.

In addition to the new headline target to double the existing share of renewable energy sources, a strong policy framework will facilitate electrification in different sectors, with new increased sector-specific targets for renewables in heating and cooling, transport, industry, buildings, and district heating/cooling, but also with a framework promoting electric vehicles and smart recharging.

To support renewables uptake in transport and heating and cooling, the revised directive converts into EU law some of the concepts outlined in the energy system integration and hydrogen strategies, published in 2020. These concepts aim at creating an energy-efficient, circular, and renewable energy system that facilitates renewables-based electrification and promotes the use of renewable fuels, including hydrogen, in sectors like transport or industry where electrification is not vet a feasible option. For these hard-to-electrify sectors, the directive sets new binding targets for renewable fuels of non-biological origin.

As an important bottleneck to the deployment of renewables on the ground, permitting procedures will also be easier and faster both for renewable energy projects (including through shorter approval periods and the creation of 'Renewables acceleration areas') and for the necessary infrastructure projects. Under the amended Directive, member states must identify areas for the acceleration of renewables where projects will undergo a simplified and fast-track procedure.

Member States (including Ireland) must transpose RED III into national law by the 21<sup>st</sup> May 2025. However, certain provisions – including those aimed at accelerating permit-granting procedures – are required to be transposed into national law by the 1<sup>st</sup> July 2024.

### 4.3.4 REPowerEU Energy Plan

The European Commission presented the REPowerEU Energy Plan on the 18<sup>th</sup> of May 2022, which aims to tackle the climate crisis by accelerating Europe's clean energy transition and adopts a call to end European dependency on Russian fossil fuels. The Plan recognises that the uptake of biomethane involves a continued support to innovative technologies for the production of sustainable biomethane, upgrade of biogas to biomethane and its integration within the gas network.

The proposal contains a Biomethane Action Plan<sup>6</sup> to stimulate the renewable gas value chain

<sup>&</sup>lt;sup>6</sup> Biomethane Action Plan. https://eur-lex.europa.eu/legal content/EN/TXT/?uri=SWD%3A2022%3A230%3AFIN&gid=1653033922121

within EU member states and achieve production of 35 billion cubic metres (bcm) of biomethane by 2030. This plan also includes a targeted revision of the Fitfor55 energy efficiency and renewable targets, together with the necessary measures to accelerate Renewable Energy Sources (RES) permitting and recommendations to facilitate renewable gas injection.

#### 4.3.5 EU Strategy to reduce Methane Emissions

After CO<sub>2</sub>, methane is recognised as the second largest GHG contributor to climate change. Methane emissions from livestock originate from ruminant species, manure management and feed cultivation. The EU Strategy to reduce Methane Emissions<sup>7</sup>, published in 2020, acknowledges the agriculture sector as having the highest potential in overall benefits for reducing methane emissions. The Strategy points to the benefits of biogas derived from organic agricultural wastes to reduce methane emissions, generate new revenue streams for farmers and contribute to wider rural development.

The use of digestate is also identified as an organic soil improver and mechanism to displace chemical fertilisers. It is noted that sequential cropping can be used with manure as feedstock for sustainable biogas production, while contributing to sustainable farming practices. The Strategy aims to provide targeted support to accelerate the development of the EU market for biogas from sustainable sources such as livestock manure, organic waste, and residues via policy initiatives.

#### 4.3.6 Waste

The benefits of Anaerobic Digestion (AD) are recognised and promoted in European Union (EU) waste management legislation and policy. The EU Directives and policies discussed below, which set the context for the management of waste in Ireland (and which are transposed and implemented by domestic legislation), encourage the use of AD as an essential element of sustainable waste management and an efficient recycling method for organic wastes.

The Waste Framework Directive (2008/98/EC, as amended by Directive (EU) 2018/851) enshrines a key principle which aims to move waste away from landfill and towards treatment options. The separate collection of organic waste with a view to its biological treatment, through processes such as AD, is encouraged by this Directive.

The objective of landfill diversion is also a requirement of the Landfill Directive (1999/31/EC).

The foundation of EU waste management is the five-step "waste hierarchy", established in the Waste Framework Directive. It establishes an order of preference for managing and disposing of waste.

<sup>&</sup>lt;sup>7</sup> European Commission (2020) Communication from the Commission to the European Parliament, The European Council, The Council, The European Economic and Social Committee and the Committee of the Regions - on an EU strategy to reduce methane emissions



Figure 4.1: The Waste Hierarchy

On the 5<sup>th</sup> of July 2023, a targeted revision of the Waste Framework Directive<sup>8</sup> was published by the Environment Directorate General of the European Commission. The proposal aims to bring about increased circular and sustainable management of waste and aims to reduce the environmental and climate impacts of food systems associated with food waste generation.

Towards a circular economy: a zero-waste programme for Europe<sup>9</sup> was proposed in 2014 by the EC to establish a common and coherent EU framework to promote the circular economy. In December 2017, a provisional agreement was reached with representatives of the European Parliament on all four legislative proposals of the package with new targets. An obligation on EU member states to separately collect organic waste and associated ban of organic waste landfilling will come into effect as of 2024. The circular economy principles, and particularly the development of a bioeconomy can provide opportunities for agricultural residues such as those from crops, animal manures and dairy by-products, to be used to produce biobased fertiliser and renewable energy through the AD process.

### 4.4 National Planning, Climate, and Waste Policy and Legislation

### 4.4.1 National Biomethane Strategy<sup>10</sup>

The National Biomethane Strategy (NBS hereafter) was published by the Department of Environment, Climate, and Communications and the Department of Agriculture, Food and the Marine on the 28<sup>th</sup> of May 2024. The NBS sets out the necessary policy and regulatory measures and provides a roadmap to developing a biomethane industry of scale in Ireland. In all aspects, this application aligns with the aspirations set out in the NBS as described in more detail below.

A wide range of support mechanisms were assessed during the development of the NBS,

<sup>&</sup>lt;sup>8</sup> Proposal for a targeted revision of the Waste Framework Directive. <u>https://environment.ec.europa.eu/publications/proposal-targeted-revision-waste-framework-directive\_en</u>

<sup>&</sup>lt;sup>9</sup> Communication from The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions - *Towards a circular economy: a zero-waste programme for Europe*. <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52014DC0398</u>

<sup>&</sup>lt;sup>10</sup> National Biomethane Strategy (2024): <u>https://www.gov.ie/en/publication/d115e-national-biomethane-strategy/</u>

including Feed in Tariffs (FiT) and Contracts for Difference (CfD). Given the need to swiftly stimulate the industry, the Renewable Heat Obligation in conjunction with Capital Grants were the chosen method to support the delivery of a biomethane sector in Ireland. This offers budget certainty for the support programme while delivering a sector of scale.

Renewable Heat Obligation: The NBS states, "To support the need to decarbonise the heat sector, the Government has agreed to the introduction of a Renewable Heat Obligation (RHO). The RHO will support an increased use of renewable energy in the heat sector and contribute to a reduction in emissions in line with Ireland's climate ambitions. As Ireland imports most of its fossil fuels, the heating sector is a significant contributor to Ireland's high energy import dependency. The RHO will also help reduce our reliance on imported fossil fuels and strengthen our energy security due to greater diversification of our energy streams. Under current proposals, the RHO would recognise biomethane as an eligible fuel for certification, providing an important policy tool to support the development of an indigenous biomethane sector. CAP 24 commits to the publication of a high-level RHO scheme by Q3 2024".

The vision of the NBS states, "By 2030, Ireland will have developed a sustainable biomethane industry of scale, meeting ambitious targets set by the Government".

The primary objective of the NBS is to deliver on the ambitious target set by the Government as part of the agreement on the sector emission ceilings. This ambition is to scale up indigenously produced biomethane to 5.7 TWh per annum by 2030, which has been increased substantially from a previous Climate Action Plan 2019 target of 1.6 TWh by 2030.

The NBS states that "biomethane has the potential to progressively replace fossil gas supplies at a national level as we substantially reduce our use of gas over the next 15 to 20 years."

The strategy states that Ireland is recognised by the European Commission as having one of the largest potentials for biomethane production in Europe on a per capita basis due to its substantial agriculture sector. The development of a new agri-centric biomethane industry can engender cross sectoral benefits for Ireland. However, the strategy states that currently Ireland has only two operational biomethane facilities injecting biomethane into the gas grid; the volume of biomethane injected into the grid at present is small, equating to c. 75 GWh per annum (0.001% of Ireland's current gas demand).

The benefits that Ireland can realise from the development of a new agri-centric biomethane industry are summarised as follows:

- Without biomethane, Ireland is unlikely to meet its legally binding climate targets.
- Biomethane helps to reduce agriculture sector emissions.
- Diversification option for farmers.
- Opportunity to replace chemical fertiliser with a supply of biobased fertiliser.
- Helps reduce Ireland's energy emissions.
- Improves gas security and diversification of supply.
- Stimulation of the rural economy.

This application proposes to develop an AD facility to produce biomethane for injection into the national grid. This proposal is supported by the National Biomethane Strategy, and it is evident from the strategy, that this development type is crucial in order to achieve climate targets, rural and farm diversification, the replacement of chemical fertiliser with a supply of biobased

fertiliser and improve gas security and diversification of supply. The proposal will create c. 75 full time jobs (direct and indirect), stimulating the rural economy.

The Strategy also notes the importance of biomethane production for ensuring security of energy supply in Ireland. It is noted that c. 75% of Ireland's gas supply is currently imported from the UK, with biomethane (along with hydrogen in the future) playing a key role in ensuring a domestic supply of renewable gas to diversify gas supply and displace fossil gas. The Proposed Development directly contributes to this objective.

The Strategy analyses a range of policy options for the roll-out of biomethane production, with a combination of small scale and larger-scale facilities ultimately supported by Government Policy. Therefore, the scale of the plant aligns with the aspirations of the NBS.

The strategy recognises the effectiveness and maturity of carbon dioxide capture technology as part of biomethane production. This technology is an integral part of the Proposed Development, with  $CO_2$  resulting from the biogas upgrading / refining process to be captured at source. In summary, this application fully aligns with the aspirations set out in the NBS as presented above.

### 4.4.2 Large Energy Users Connection Policy - Proposed Decision Paper

On February 18<sup>th</sup>, 2025, the Commission for Regulation of Utilities (CRU) published its proposed decision on the 'Large Energy Users Connection Policy - Proposed Decision Paper.' This policy is highly supportive of the development of Ireland's biomethane sector. The executive summary refers to Ireland's target of 5.7 TWh of biomethane by 2030, in the context of broader renewables objectives and targets. The CRU's decision document extensively references biomethane and its critical role in supporting large energy user (LEU) facilities.

In particular, the CRU acknowledges biomethane's potential in decarbonising the data centre (DC) sector and the support that this could provide to the development of indigenous biomethane production.

#### 4.4.3 National Planning Framework

The National Planning Framework<sup>11</sup> (NPF hereafter) was published in 2018 and forms the top tier of Ireland's planning policy hierarchy, setting the policy context at a national level for Regional Spatial and Economic Strategies, County and City Development Plans, and Local Area Plans.

The Proposed Development aligns with the National Planning Framework, the overarching policy and planning framework for the social, economic, and cultural development of Ireland. This development specifically relates to the NPF in terms of Planning for Diverse Rural Places (Chapter 5) and Realising our Sustainable Future (Chapter 9).

National Policy Objective (NPO hereafter) 21 states the following:

"Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and

<sup>&</sup>lt;sup>11</sup> Government of Ireland (2020) National Planning Framework: <u>39baaa8c-48dc-4f24-83bd-84bbcf8ff328.pdf (www.gov.ie)</u>

sustainability."

PECEINED. The role of rural areas in providing a sustainable renewable energy supply is recognised in the NPF, which states:

"In planning Ireland's future energy landscape and in transitioning to a low carbon economy, the ability to diversify and adapt to new energy technologies is essential. Innovative and novel renewable solutions have been delivered in rural areas over the last number of years, particularly from solar, wind and biomass energy sources.

In meeting the challenge of transitioning to a low-carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas."

Furthermore, the competitive advantage of rural activities associated with the bioeconomy is highlighted in the NPF, which states:

"The transition to a more circular economy and bioeconomy, where the value of bio-based products, materials and resources is maintained in the economy for as long as possible, and the generation of waste management is minimised, will provide an essential contribution to our national goal of developing a sustainable, low-carbon, resource efficient and competitive economv.

Reference	Description
NPO 23	"Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, 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." [Emphasis added].
NPO 53	"Support the circular and bio economy including in particular through greater efficiency in land management, greater use of renewable resources and by reducing the rate of land use change from urban sprawl and new development."

We take special note of the following National Policy Objectives, which aim to:

The NPF identifies the need to reduce emissions while ensuring that Ireland has a reliable and resilient energy supply, as expressed in Section 9.2:

"Ireland's national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. The Government recognise that Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% by 2050, compared to 1990 levels, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses."

The transition of the energy sector towards low-carbon and renewable sources of energy is recognised as playing a key role in achieving a sustainable and climate-friendly future for Ireland, as expressed by the following National Policy Objectives:

Reference Description

	Receiption of the second s
NPO 54	"Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."
NPO 55	"Promote renewable energy use and generation <b>at appropriate locations</b> <b>within the built and natural environment</b> to meet national objectives towards achieving a low carbon economy by 2050." [Emphasis added].

Finally, the NPF supports circular economy principles that aim to minimise the amount of waste that goes into landfill and maximise the utilisation of waste as a resource, as expressed by the following National Policy Objective:

NPO 56: "Sustainably manage waste generation, invest in different types of waste treatment and **support circular economy principles**, prioritising prevention, reuse, recycling and recovery, to support a healthy environment, economy and society". [**Emphasis added**].

We note the recent publication of the 'Updated Draft Revised National Planning Framework'<sup>12</sup>, published on the 5<sup>th</sup> November 2024, comprising amendments to the First Revision of the NPF. The updated draft revision of the NPF includes the following statement in relation to Biomethane within Chapter 9, which deals with Climate Transition and the Environment:

"Biomethane is a carbon-neutral renewable gas made from farm and food waste through a process known as anaerobic digestion. A National Biomethane Strategy has been published which requires the development of policies with the primary objective of delivering the ambitious target of producing 5.7 TWh of indigenous biomethane by 2030.

It is estimated that over 80% of biomethane will be produced from grass silage and cattle slurry. This will require grass from 120,000ha (3% of total agricultural area) to produce the required feedstock.

To meet Ireland's target of 5.7 TWh of biomethane by 2030, a large number of anaerobic digestion facilities will need to be developed, alongside the related infrastructure necessary to support these facilities."

#### **Consistency with the National Planning Framework**

The Proposed Development is consistent with the NPF, the principles of which are reflected in the various regional and local policy documents as discussed below.

We note in particular the role that the Proposed Development can play in strengthening the economic and climate resiliency of the county and State. Furthermore, partnerships with the farming community can contribute to the reduction of emissions in the agricultural sector and the sustainable diversification of agricultural activities in response to climate change.

The energy sector must transition towards low-carbon and renewable sources to achieve the 80% reduction in emissions by 2050, as set out in the NPF. AD facilities can play an important role in this transition. Finally, the Proposed Development provides an opportunity to sustainably utilise agricultural waste as a resource, to produce biobased fertiliser and renewable energy through the AD process, allowing for the decarbonisation of the gas network.

<sup>&</sup>lt;sup>12</sup> Government of Ireland (Nov 2024) Updated Draft Revised National Planning Framework: <u>Updated Draft Revised National Planning</u> Framework – November 2024 -

The Proposed Development is strongly supported by, and a policy objectives highlighted above. The development will deliver local employment and significant economic benefits in a rural area, while producing renewable biomethane and the improve the sustainability of the agricultural sector in the vicinity.

### 4.4.4 National Development Plan 2021 – 2030

The National Development Plan<sup>13</sup> (NDP hereafter) sets out the national capital investment priorities to realise the objectives of the NPF, providing a guide for national, regional, and local planning and investment decisions during this decade. The NDP recognises that public capital investment choices over the next 10 years must not only contribute to the objective of a 51% reduction in greenhouse gas emissions by 2030 but also lay the pathway to achieve the national climate objective of net-zero greenhouse gas emissions by 2050. The Plan states that significant Exchequer investment, combined with further household, State-Owned Enterprise (SOE), and crucially private sector investment in renewable energy projects such as the Proposed Development, are critical to delivering on these climate action objectives.

The NDP sets out 10 National Strategic Outcomes (NSOs) with Strategic Investment Priorities, with a particular emphasis on Climate Action and strengthening and developing rural economies and communities. The NSOs and Strategic Investment Priorities of particular relevance to the Proposed Development are outlined below:

Reference	Description					
NSO 3 - Strengthen	This outcome recognises the importance of rural communities and					
Rural Economies	community engagement in achieving the goals of the NPF and NDP. The					
and Communities	NDP highlights the role that rural economies and communities can play in					
	reasonanding to alimete change acress sectors and communities can play in					
	responding to climate change across sectors and supports the sustainable					
	development of Ireland's agri-food sector. For example, the On-Farm					
	Capital Investment Scheme supports farmers looking to increase their					
	environmental efficiency through, inter alia, the investment in and adoption					
	of new technologies.					
NSO 8 – Transition	This outcome responds to the significant commitments by the Government					
to a Climate-neutral	to tackle the effects of climate change, reduce greenhouse gas emissions					
and Climate	by 51% by 2030 (as compared to 2018 levels), and work towards achieving					
Positiont Society	by 01% by 2000 (as compared to 2010 levels); and work towards domeving					
Resilient Society	net-zero greennouse gas emissions by 2050 in line with the Climate Action					
	and Low Carbon Development (Amendment) Act 2021 (see below). The					
	NDP recognises the special importance of the energy sector in achieving					
	these targets, and that radical changes may be needed to reduce our					
	reliance on fossil fuels:					
	"Action in the energy sector will be critical to the achievement of Ireland's					
	climate targets and the transformation to a high-renewable net-zero					
	emissions future. This will require a fundamental shift in the means by					
	ernissions luture. This will require a fundamental shift in the means by					
	willon we supply, slole, and use energy.					
	The NDP also recognises the continued need for the supply and use of gas					
	in Ireland, particular with regards to ensuring security of energy supply.					
	Underpinning this theme is a commitment to a just transition, to ensuring					
	that all people are able to participate in and benefit from the					
	decarbonisation of economy:					
	·····					

<sup>13</sup> Government of Ireland (2021) National Development Plan 2021-2030: a36dd274-736c-4d04-8879-b158e8b95029.pdf (www.gov.ie)

	"A key focus of this investment is to support the transition of the existing workforces and the creation of new enterprise and employment opportunities so that the region remains vibrant, innovative and makes the most of the opportunities that decarbonisation will bring."
NSO 9 – Sustainable Management of Water and Other Environmental Resources	This outcome highlights the need for investment in the environmental resources and infrastructure Ireland, with a particular focus on the sustainable management of waste and water. This theme is supported by the whole-of-government Circular Economy Strategy (see below) as recognises that investments in waste management is critical to achieving an environmentally and economically sustainable future:
	"While the overall focus of Government waste policy is on prevention and waste minimisation, investment in indigenous waste treatment capacity remains critical to our environmental and economic well-being." AD facilities, such as the Proposed Development, are highlighted as one investment opportunity to achieve this NSO:
	"Capacity will continue to be built in waste facilities, <b>including anaerobic</b> <b>digestion</b> , hazardous waste treatment, plastics processing, recycling, waste to energy, and landfill and landfill remediation, to meet future waste objectives." [Emphasis added].

#### Consistency with the National Development Plan

Cross-sectoral investment in agriculture, energy and waste are vital to enable the timely transition to a low-carbon, climate-resilient and environmentally sustainable economy and society by 2050.

The Proposed Development directly aligns with the objectives of the NDP to strengthen rural economies and move towards an economy based on dependable and domestically sourced renewable energy. The Proposed Development is highly integrated with the just transition of the rural and agricultural communities and Circular Economy principles, in terms of the supply of agricultural waste by local farmers to be used as a resource for the sustainable production of bio-methane gas and biobased fertiliser within a state of the art facility.

#### 4.4.5 Climate Action Plan 2024

The Climate Action Plan 2024<sup>14</sup> (CAP24 hereafter) is the third annual update to Ireland's Climate Action Plan, adopted by Government on the 21<sup>st</sup> of May 2024 following public consultation in early 2024. Under section 15 of the Climate Action and Low Carbon Development Act 2015, as amended, the Planning Authority must perform its functions in a manner which is consistent with the current Climate Action Plan, in so far as is practicable.

CAP24 builds upon last year's Plan (CAP23) by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings. The Plan provides a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero by no later than 2050, as committed to in the Climate Action and Low Carbon Development (Amendment) Act 2021.

<sup>&</sup>lt;sup>14</sup> Government of Ireland (2024) *Climate Action Plan 2024: <u>https://www.gov.ie/en/publication/79659-climate-action-plan-2024/</u>* 

The target for biomethane production under CAP24 is for 1TWh by 2025 and 5.7TWh by 2030.

Section 16 'Agriculture' of the CAP 2024 identifies a required reduction in annual agriculturate emissions (on 2018) of 25% (17.25 MtCO<sub>2</sub>eq. per annum by 2030).

CAP24 states that the agricultural sector is the largest contributor to Ireland's greenhouse gas emissions.

CAP24 reiterates the need of the "production of up to 1 TWh of Biomethane by 2025" and the "production of up to 5.7 TWh of Biomethane by 2030".

Section 14 'Built Environment' consists of a key target of *"up to 0.6 TWh of heating provided by biomethane by 2025, and up to 1.1 TWh by 2030".* 

Section 14.4.1 'Measures to Delivery Required Abatement' states that to meet the required level of emissions reduction, in regard to residential, by 2025 we will:

- "Develop the appropriate policies and safeguards, as set out in chapter 16, to supply up to 0.4 TWh of biomethane to decarbonise residential heating; and
- Supply 0.7 TWh of biomethane to decarbonise residential heating."

In regard to the Commercial/Public sector, by 2025 we will:

*"Develop the appropriate policies and safeguards to supply biomethane for use in commercial and public buildings of up to 0.4 TWh".* 

Section 15.2.1.3 'Road Haulage Strategy – Decarbonisation Programme' states that "there is a full relief from the carbon component of Mineral Oil Tax for liquid or gaseous fuels that have been produced from biomass. This means that no carbon tax applies to biofuels, such as Hydrogenated Vegetable Oil or biomethane, used in any road vehicle, private or commercial."

Section 16.6.1 'Actions for 2024' states that "there is also increasing potential for the use of biofertilisers and digestate coming from a developing biomethane industry to replace chemical nitrogen combined with more efficient use of existing animal slurries through achieving our targets for low-emission slurry spreading."

Other key measures to deliver climate adaptation in agriculture, indicated in the CAP include the following:

- RE/24/6: Increase investment in research to support agricultural and land use diversification.
- AG/24/22: Establish a Biomethane Coordination Group to oversee delivery of 5.7 TWh target and National Biomethane Strategy implementation activities.
- AG/24/21: Identify and address the research and knowledge gaps around supply of feedstocks, the role of biobased products including digestate and the sequestration potential regarding biomethane production.
- Introduce obligation in the heat sector, incentivising the production of indigenously produced biomethane.

CAP24 states that "guided by the Food Vision 2030 Strategy, Irish farmers and food producers will be supported to continue to produce world-class food whilst reducing greenhouse gas emissions and achieving high levels of sustainability". The Government will also take measures to promote diversification into less greenhouse-gas practices, such as biomethane feedstock production.

#### **Consistency with CAP24**

The Proposed Development directly contributes to the realisation of the aims and objectives of the Climate Action Plan as outlined above. The swift deployment of biomethane production in the state is a key objective of the CAP24, in order to meet the ambitious targets set for 2025 and 2030.

The Proposed Development will also assist in achieving the steep emissions reductions required if the agricultural sector is to meet its sectoral emissions targets for 2025 and 2030.

The roll-out of biomethane production is rendered all the more urgent having regard to the recently published EPA projections on Ireland's Greenhouse Gas Emissions 2023 to 2050 (published in May 2024), which warn that Ireland is currently likely to miss both its first and second carbon budget targets, in the absence of additional measures. The timely rollout of additional renewable energy generation will assist in achieving current targets, and reduce the risk of steeper emissions reductions being required in later years to achieve 2030 targets.

#### 4.4.6 Sectoral Emissions Ceilings

Following the approval of the Carbon Budgets, Ireland's Sectoral Emissions Ceilings were agreed by Government on the 28<sup>th</sup> July 2022. Section 6C of the Climate Action and Low Carbon Development Act 2015 (as amended) (the Act) provides for the preparation of Sectoral Emissions Ceilings which set out the maximum amount of greenhouse gas emissions that are permitted in different sectors of the Irish economy.

This carbon budget programme comprises three successive 5-year Carbon Budgets as follows:

- 2021-2025: 295 Mt CO 2 eq. This represents an average reduction in emissions of 4.8% per annum for the first budget period.
- 2026-2030: 200 Mt CO 2 eq. This represents an average reduction in emissions of 8.3% per annum for the second budget period.
- 2031-2035: 151 Mt CO 2 eq. This represents an average reduction in emissions of 3.5% per annum for the third provisional1 budget.

Following the process set out in the Act, the carbon budget programme proposed by the Climate Change Advisory Council was approved by the Government on 21 February 2022, and subsequently adopted by the Oireachtas on the 6<sup>th</sup> of April 2022.

For the agriculture sector, the sectoral emissions ceilings mandate a reduction in emissions of 10% over the period from 2021-2025, and a reduction of 25% from 2026-2030.

The rollout of AD and Biomethane production helps to contribute to a reduction in agricultural emissions, while also benefiting efforts to reduce carbon emissions in other hard to abate sectors which are currently reliant on natural gas.

#### 4.4.7 Climate Action and Low Carbon Development Acts 2015 and 2027

The first Climate Action and Low Carbon Development Act 2015<sup>15</sup> provided the statutory basis for the national goal of progressively pursuing a low carbon, climate resilient and environmentally sustainable economy by 2050.

In 2021 the Government passed the Climate Action and Low Carbon Development (Amendment) Act 2021<sup>16</sup> enshrining the target to achieve net zero emissions by 2050 and a 51% reduction in emissions by 2030 into law. The roll-out of an agri-led biomethane industry can help to decarbonise both industry and agriculture, contributing to the goals set out in the new Act.

The Climate Action and Low Carbon Development Act 2015 established the National Mitigation Plan (NMP) and National Adaptation Framework (NAF), both of which are designed to address the causes and consequences of climate change in Ireland.

Published in July 2017, the NMP represented an initial step in transitioning Ireland to a low carbon, climate resilient and environmentally sustainable economy by 2050. This whole-of-government Plan drew on the perspectives and responsibilities of a range of government departments and reflected the central roles of key ministers responsible for electricity generation, the built environment, transport, and agriculture.

The Plan acknowledges the role of the circular economy and particularly the bioeconomy, and opportunities for residues and agriculture residues such as from crops, animal, and dairy by-products to be used to produce biomaterials and biochemicals through biorefining or to produce heat and/or power through combustion or AD.

The NMP identifies the role that anaerobic digestion can play in contributing to the bioeconomy in particular, and the circular economy in general:

"The circular economy, or bioeconomy, provides opportunities for FBB and agriculture residues, such as animal by-products (ABP), to be used to produce heat and/or power through combustion or anaerobic digestion. In addition there is potential to reduce carbon emissions along the full life cycle of the food/processing chain through food waste reduction."

The NAF provides a framework to ensure local authorities, regions, and key sectors can assess the key risks and vulnerabilities of climate change, implement actions to build resilience to climate change, and ensure climate adaptation considerations are mainstreamed into all local, regional, and national policy.

The Climate Action and Low Carbon Development Act 2021 commits the Government to moving to a climate-resilient and climate-neutral economy by the end of 2050. It sets the commitment to achieve net zero emissions by 2050 and a 51% reduction in emissions by 2030. It introduces carbon budgets for the State, and sectoral emissions ceilings.

We note in particular Section 4 of the Climate Action and Low Carbon Development Act 2021 (as amended), which states that:

<sup>&</sup>lt;sup>15</sup> Climate Action and Low Carbon Development Acts 2015: <u>Climate Action and Low Carbon Development Act 2015</u> (irishstatutebook.ie)

<sup>&</sup>lt;sup>16</sup> Climate Action and Low Carbon Development (Amendment) Act 2021: <u>Climate Action and Low Carbon Development (Amendment)</u> Act 2021 (irishstatutebook.ie)

*"4. (8) For the purposes of performing their respective functions under this section, the Minister and the Government shall have regard to the following matters;* 

- (h) the fact that the means of achieving a climate neutral economy and other measures to enable the State to pursue the national climate objective may not yet be fully identified and may evolve over time through innovation, evolving scientific consensus and emerging technologies;
- (*n*) the special economic and social role of agriculture, including with regard to the distinct characteristics of biogenic methane."

Section 15 of the Climate Action and Low Carbon Development Act 2015, as amended, states the following:

*"(1)* A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—

- a) the most recent approved climate action plan,
- b) the most recent approved national long term climate action strategy,
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,
- d) the furtherance of the national climate objective, and
- e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State."

This places a responsibility on Planning Authorities to consider the compliance of each Proposed Development with these criteria and to make decisions which are consistent with the listed policies in so far as practicable.

The criteria are addressed in turn below to assist the Planning Authority in considering the current application and in undertaking an Environmental Impact Assessment of the Proposed Development with cognisance of the above requirement of the Act.

#### **Consistency with Climate Action Plan**

The objectives of the CAP24 (which is now the current most recent approved climate action plan) which the Proposed Development will support have been set out above.

#### Consistency with Long Term Climate Action Strategy

The Long-term Climate Action Strategy<sup>17</sup> was published on the 28<sup>th</sup> of April 2023. An update to the Strategy was published in 2024<sup>18</sup>. The Long-term Climate Action Strategy outlines the importance of (i) completing the actions in the Climate Action Plan, (ii) greater demand side

<sup>&</sup>lt;sup>17</sup> Long-term Strategy on Greenhouse Gas Emissions Reductions 2023.

https://www.gov.ie/en/publication/e4e81-long-term-strategy-on-greenhouse-gas-emissions-reductions/ <sup>18</sup> Long-term Strategy on Greenhouse Gas Emissions Reductions 2024.

https://www.gov.ie/en/publication/e4e81-long-term-strategy-on-greenhouse-gas-emissionsreductions/#:~:text=Ireland%E2%80%99s%20Longterm% 20Strategy% 20Creenhouse% 20Creenhouse

term%20Strategy%20on%20Greenhouse%20Gas%20Emissions

management, (iii) better annual forecasting for the electricity and gas systems and we security of gas supply infrastructure, particularly in the context of electricity generation.

The Long-term Climate Action Strategy recognises the role that biogas and biomethane car play in reducing carbon emissions in hard to abate sectors including the industrial sector.

The Strategy states:

"Key measures included in Climate Action Plan 2024 to reduce on-farm emissions include a significant reduction in nitrous oxide emissions by changing farm management practices in relation to nutrient use improved GHG efficiencies from breeding, feed modification and earlier finishing age for cattle, an increase in the proportion of organic farming, and with the waste sector providing feedstocks for the production of **indigenous sustainably produced biomethane**." [Emphasis added].

The Strategy also recognises at Page 47 that the production of zero-emission fuels including biomethane is a key driver of the pathway to industrial decarbonisation. The same page of the Strategy states:

"The 2030 target is a steppingstone towards the ambition of achieving climate neutrality, with a relatively clear trajectory for the sector to 2050. Achieving a fully decarbonised industry sector will require; driving material efficiency in construction to reduce embodied energy in materials; employing heat pumps for low-temperature heat and **zero emissions gas/ bioenergy** for high-temperature heat; fully switching fuel used for cement (e.g., waste, bioenergy) and alumina; and utilising CCS and innovative binders in cement." [Emphasis added].

The Proposed Development will support the achievement of the goals and objectives of the Long-term Climate Action Strategy.

## Consistency with Approved National Adaptation Framework and Approved Sectoral Adaptation Plans

The National Adaptation Framework (NAF hereafter) (DECC, 2024) has outlined several actions to help ensure a targeted approach to achieving climate resilience into the future

Section 2.2 of the NAF states, that for climate resilience, Ireland must be open to innovative climate change solutions. It must have a reduced reliance on fossil fuel, will need to transition towards sustainable agricultural practices such as agroforestry and organic farming and Irish industries must embrace circular economy principles.

The NAF provides key guiding principles for climate adaptation, grouped into high-level themes including: 'Adaptation governance, engagement and resourcing': *"Mobilise Existing and New Resources: Maximise the efficient use of existing and new resources, including financial, human, and natural resources, to achieve adaptation."* 

Section 2.6.4 of the NAF outlines the role of the private sector in enabling climate change adaptation. *"Businesses and industries, being both affected by climate change impacts and contributors to adaptation efforts, are at the forefront of developing and implementing innovative technologies and practices to enhance climate resilience.* **This entails investments in renewable energy, sustainable agriculture**, and efficient water management systems, for example. Collaborative partnerships with the government further empower businesses to fulfil

their role in climate adaptation by pooling resources and expertise, innovation, fostering green job opportunities, and collectively working towards a more sustainable and resilient future for Ireland." [Emphasis added].

Section 2.9 of the NAF outlines the future research prioritise for climate change adaptation in Ireland including the following:

- **"Ecosystem Resilience:** Understanding how ecosystems respond to climate change is crucial. Research into the adaptation of natural environments, biodiversity, and the sustainable management of natural resources will be essential."
- *"Infrastructure Adaptation:* Investigating how infrastructure, such as buildings, transportation, and energy systems, can be made more resilient to climate impacts, including retrofitting, sustainable design, and disaster preparedness."
- "Agriculture and Food Security: Given the importance of agriculture in Ireland, research into climate-resilient farming practices, crop and livestock management, and the impact of climate change on food security will be critical." [Emphasis added].

The NAF outlines the potential impacts of the electricity and gas networks sector from climate change:

- Water shortages and drought may affect the availability of cooling at conventional power plants,
- Changes in rainfall distribution could reduce hydro power generation during certain seasons, while increasing the role of hydro station flood alleviation.
- Floods may damage electricity and gas transmission systems, and coastal erosion could impact infrastructure.
- Increased wind variability may require backup generation or storage, and strong winds may lead to turbine shutdown or damage.

Climate proofing of the project was undertaken using the approaches outlined in the *Guidance* on Integrating Climate Change and Biodiversity into Environmental Impact Assessment (EC, 2013) and IEMA EIA Guide to Climate Change Resilience and Adaptation (IEMA, 2020). Both documents outline a methodology for undertaking a risk assessment where there is a potentially significant impact on the project receptors due to climate change.

#### Furtherance of the National Climate Objective

Under the Climate Action and Low Carbon Development Act 2015 (as amended by the 2021 amendment Act). The National Climate Objective is as follows:

"The State shall, so as to reduce the extent of further global warming, pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy."

The Proposed Development will reduce GHG emissions and help to decarbonise Ireland's energy system by generating renewable gas to displace fossil fuels. The digestate produced by the Proposed Development (which will be a bio-based fertiliser) will also displace chemical fertilisers, which are generally produced using fossil fuels. The development will directly further the National Climate Objective.

#### The Objective of Mitigating Greenhouse Gas Emissions and Adapting to the Effects of Climate Change in the State

The Proposed Development, which comprises a renewable energy development, directly addresses the need to mitigate greenhouse gas emissions by producing renewable energy to displace conventional natural gas in the gas grid.

The development serves to directly mitigate GHG emissions and to improve the resilience of the state to climate change by enhancing security of renewable energy supply.

### 4.4.8 Support Scheme for Renewable Heat (SSRH)

This support scheme<sup>19</sup> was developed to contribute towards Ireland's 2020 renewable energy and emission reduction targets. It focuses on support mechanism to increase the energy generated from renewable sources in the heat sector, including an on-going operation support for biomass boiler and AD heating systems. This scheme aims to incentivise the development and Biomethane Utilisation and Renewable Gas Certification

The SSRH comprises an installation grant for heat pumps and an operational support (an ongoing payment for up to 15 years) for biomass and anaerobic digestion (biogas) heating systems. The SSRH was developed to incentivise the delivery of an additional 3% of heat use in Ireland to come from renewable sources. The current National Development Plan includes an allocation of €300 million for the rollout of the SSRH for the period up to 2027.

Gas Networks has recognised that there is significant growth in demand from households and businesses looking to source sustainable fuel alternatives that have been produced in Ireland. They state that:

"Gas Networks Ireland registers and issues certificates to Irish producers that inject renewable gas into the gas network. This includes biomethane, which is a renewable gas produced by anaerobic digestion of biodegradable matter that is then upgraded to network entry specifications prior to injection. Each certificate represents our guarantee that the equivalent amount of renewable gas has been injected into the gas network."<sup>20</sup>

AD facilities must be compliant with the requirements of Gas Networks Ireland's Renewable Gas Certification for the export and utilisation of biogas. This certification system is in place to ensure that natural gas produced in Ireland is compliant with relevant legislation, and to assure customers that their gas has been generated in a sustainable manner. This is also relevant to ensure that gas produced aligns with EU policies and guidance, such as the EU Methane Strategy (2020) which estimates that by 2050, the EU's annual consumption of biogas and biomethane will increase to between 54 and 72 Mtoe (up from c.17 Mtoe in 2017).

#### 4.4.9 White Paper: Ireland's Transition to a Low Carbon Energy Future 2015– 2030

The White Paper<sup>21</sup> sets out a framework to guide policy and the actions that the Government

<sup>&</sup>lt;sup>19</sup> Department of the Environment, Climate and Communications (2019) *Support Scheme for Renewable Heat (SSRH)*: <u>gov - Support Scheme for Renewable Heat (SSRH)</u>: <u>gov - Support Scheme for Renewa</u>

<sup>&</sup>lt;sup>20</sup> Gas Networks Ireland, *Renewable Gas Certification*: <u>Renewable gas certification (gasnetworks.ie)</u>

<sup>&</sup>lt;sup>21</sup> Department of Environment, Climate and Communications (2020) *The White Paper:* <u>Department of Communications, Energy and</u> <u>Natural Resources - Ireland's Transition to a Low Carbon Energy Future - 2015-2030 - e5aa9f25-da81-43eb-804d-57309615681e.pdf</u> (www.gov.ie)

intends to take in the energy sector from 2015 up to 2030. We note in particular Section 133 on bioenergy, which sates: "Bioenergy is a versatile source of energy that can be used for heating, transport, and power concretion. The most advantageous economic benefits arise when it is used for heating. generation. The most advantageous economic benefits arise when it is used for heating. Bioenergy encompasses a range of fuels in solid, liquid, and gaseous forms, including forestbased biomass, dry agricultural residues, energy crops, organic materials including wastes, and landfill gas and other biogases. **Bioenergy can contribute to broader policy objectives** such as waste recovery and rural development, as is the case with anaerobic digestion, which not only generates energy, but also gives effect to national waste policy in terms of utilising waste as a resource. It has been highlighted in waste management plans as a technology suitable for development at a local and regional level and at varying scales. Anaerobic digestion also has the potential to improve air quality, for example through mitigation of ammonia emissions and odour by diverting slurry from land spreading. However, expanding the uptake of bioenergy involves several challenges, including the availability of sufficient sustainably-sourced biomass, competition with other land uses such as food production, and the cost of support. Consideration must be given to the most prudent uses for bioenergy." [Emphasis added].

We also note Section 136 on waste policy, which states:

"Waste Management Policy in Ireland recognises the need to develop efficient ways to extract as much value as possible from waste in accordance with the requirements of the waste hierarchy and the opportunity for waste to be used as an indigenous energy resource [34]. In this regard, three new regional waste management plans for the period 2015-2021 support the development of additional thermal recovery and biological treatment capacity within the State. The REFIT schemes, which support the generation of electricity and CHP technologies including waste-to-energy, anaerobic digestion, and landfill gas, continue to support the use of waste as a renewable energy feedstock."

#### 4.4.10 Biomethane Energy Report – Gas Networks Ireland

While not a policy or guidance document, the Biomethane Energy Report was published by GNI, who are the public body responsible for connecting customers to the gas network and for connecting developments such as the Proposed Development to the grid. The Energy Report provides a detailed insight into the potential for biomethane production in Ireland. The Gas Networks Ireland (GNI) Biomethane Report<sup>22</sup> provides a rationale for accelerating biomethane production in Ireland and states the following:

- "Domestically produced biomethane, dispersed throughout the country, boosts security of supply and can displace fossil gas from Corrib as it declines;
- Similar to the early years of the wind industry, the biomethane gate price is currently more expensive than natural gas.;
- Biomethane could rapidly reduce climate emissions across hard to abate energy demand • sectors and can create negative emissions;

<sup>&</sup>lt;sup>22</sup> Gas Networks Ireland, Biomethane Energy Report: The Biomethane Energy Report (gasnetworks.ie)

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- Biomethane production boosts employment in rural areas, promotes circular economy in agriculture, and can improve soil health. Digestate, a byproduct of biomethane production can displace fossil produced fertilizer;
- Biomethane can deliver highly valuable energy, which is dispatchable, suitable for intensive heat industries, transport and other hard to abate sectors; and
- Biomethane is produced with existing technology and can therefore be rapidly scaled up. It can also be transported, stored, and distributed through existing gas grids."

The GNI report refers to the Climate Action and Low Carbon Development (Amendment) Bill. In 2021 the Bill was *"signed into law and Ireland is now on a legally binding path to net-Zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade".* 

Section 6 of the report states that after the Russian invasion of Ukraine, *"Ireland must ensure that security of energy supply is maintained as Ireland transitions to a net-zero emissions future".* 

The report concludes by stating that *"Ireland has a real opportunity to develop a biomethane industry at scale, which will offer multiple benefits for our agricultural economy, assist in the decarbonisation of Ireland's economy more generally, enhance our security of energy supply and lead to the development of a key renewable indigenous energy resource in the build-up to 2030".* 

#### 4.4.11 Energy Security in Ireland to 2030

The Government Strategy for Energy Security in Ireland to 2030 was published in November 2023.

Energy Security in Ireland to 2030 outlines a new strategy to ensure energy security in Ireland for this decade, while ensuring a sustainable transition to a carbon neutral energy system by 2050. This report is being published as part of an Energy Security Package, containing a range of supplementary analyses, consultations, and reviews, which have informed the recommendations and actions related to energy security.

Informed by the Government's energy security policy objectives - to ensure energy is affordable, sustainable, and secure - the review considered the risks to oil, natural gas, and electricity.

The strategy states that "the National Biomethane Strategy in development sets us on a trajectory to develop a new source of renewable indigenous gas in Ireland".

The strategy is clear that Biomethane has an important role to play in supporting Ireland's energy transition, while maintaining and safeguarding security of supply through indigenous renewable gas generation.

#### 4.4.12 National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland

The National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland:

2017-2030<sup>23</sup> sets an ambitious target that from 2030 all new cars and vans sold in reland will be zero emission (or zero emission-capable) and that other technologies, perhaps still unknown, will be fueling larger vehicles, so that by 2050, the nation's car fleet, along with much of our public transport buses and rail lines, will be low/near zero emissions.

The framework highlights the importance of greater diversification of fuels in the freight sector to include a mix of natural gas, biogas/biomethane, electricity and renewable diesel or other biofuels.

### 4.4.13 Ag Climatise – National Climate & Air Roadmap for the Agriculture Sector

The National Climate & Air Roadmap for the Agriculture Sector<sup>24</sup> sets an ambitious vision for a 'climate neutral agriculture sector by 2050' and includes 29 actions with specific and targets aimed at reducing the environmental footprint and further building on the strong credentials of Irish Agriculture. Of particular relevance to the Proposed Development are the following action and targets:

Reference	Targets
Action 20	Engage with stakeholders to maximise the potential opportunities from Anaerobic Digestion for the agriculture sector.
	Work closely with DCCAE and other key stakeholders to set a target for the level of energy to be supplied by indigenous biomethane injection and consider the necessary supports including funding mechanisms.
	Work with DCCAE and other stakeholders to develop the necessary research, policies, and measures to provide policy certainty around the development of an Anaerobic Digestion industry in Ireland.

The roadmap recognises that the agriculture sector has a key role to play in the provision for bio-energy feedstocks for the production of biogas/biomethane as a key renewable energy resource for the decarbonisation of the transport and heat sectors in particular.

### 4.4.14 National Energy and Climate Plan (NECP) 2021-2030

Ireland's National Energy & Climate Plan<sup>25</sup> (NECP hereafter) 2021-2030 was submitted to the European Commission in December 2018. The Plan outlines a long-term vision for the agriculture, forest and land use sectors based on an approach to carbon neutrality in these sectors, which does not compromise the capacity for sustainable food production. This effectively means that agricultural emissions are balanced by reducing emissions of methane, nitrous oxide, and carbon dioxide in so far as the best available science allows, increasing carbon-sequestration through forests and land use and displacing fossil fuel and energy intensive materials with renewable sources.

The NECP set an indicative target of 1.6 TWh/yr (Terawatt hour per year) for the level of energy to be supplied by indigenous biomethane injection in 2030, taking account of the domestic supplies of feedstock that meet strict sustainability criteria and agreed a commitment

 <sup>&</sup>lt;sup>23</sup> Department of Environment, Climate and Communications (2017) National Policy Framework on Alternative Fuels Infrastructure for Transport in Ireland: <u>6186 NPF Alternative Fuels V5.indd - 6ce8a48a99c44e1dbf40a59a073cb06d.pdf (www.gov.ie)</u>
<sup>24</sup> Department of Agriculture, Food and the Marine (2020) A Roadmap towards Climate Neutrality: <u>7c8b812c-d857-4f39-96b9-</u>

<sup>&</sup>lt;u>1e7f134ba896.pdf (www.gov.ie)</u> <sup>25</sup> Department of Environment, Climate and Communications (2020) National Energy and Climate Plan 2021-2030:

<sup>&</sup>lt;sup>25</sup> Department of Environment, Climate and Communications (2020) *National Energy and Climate Plan 2021-2030:* <u>NECP\_DRAFT\_BRANDED - f3e50986-9fde-4d34-aa35-319af3bfac0.pdf (www.gov.ie)</u>

to consider how the supports necessary to reach this target would be funded.

The NECP stated the following:

PECENED. 03/04/20 "In the absence of certainty in relation to the mechanism by which biomethane will be supported, it is proposed to set an indicative target which will be reviewed in 2023 as part of the review process for the National Energy and Climate Plan. This review will take into account the development of supports and market development for biomethane and progress towards the indicative target. The indicative target for indigenous biomethane is therefore set at 1.6 TWh and will be reviewed in 2023."

As noted previously in this EIAR chapter, the CAP24 include the following key actions relevant to the development of a biomethane industry in Ireland, including:

- "By 2025 Production of up to 1 TWh of Biomethane by 2025; Construction of up to 20 AD • plants of scale; and
- By 2030 Production of up to 5.7 TWh of Biomethane by 2030; Construction of up to 200 • AD plants of scale."

This represents a significant uplift in the targeted level of biomethane production by 2030 vis a vis the National Energy and Climate Plan.

#### 4.4.15 The Planning and Development Act 2000 (as amended)

The Planning and Development Act 2000<sup>26</sup> (as amended) also sets out provisions for climate change within Section 10 (2) (n). This includes requirements to:

- reduce energy demand in response to the likelihood of increases in energy and other costs • due to long-term decline in non-renewable resources,
- reduce anthropogenic greenhouse gas emissions, and
- address the necessity of adaptation to climate change; in particular, having regard to • location, layout, and design of new development.

The Planning and Development Act, as amended also transposes the requirements of the EIA Directive and provides the framework within which the Planning Authority, as competent authority, will undertake EIA of the current development proposal.

#### 4.4.16 Whole of Government Circular Economy Strategy 2022 – 2023

The Whole of Government Circular Economy Strategy 2022-2023<sup>27</sup> is Ireland's first national circular economy strategy. It serves as a driver for the Irish government to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and to reach net-zero emissions by no later than 2050, as per commitments in the Programme for Government and the Climate Act 2021. The strategy was a specific commitment in the Waste Action Plan for a Circular Economy (see below).

The Strategy states:

<sup>&</sup>lt;sup>26</sup> Planning and Development Act 2000: Planning and Development Act, 2000 (irishstatutebook.ie)

<sup>&</sup>lt;sup>27</sup> Department of Environment, Climate and Communications (2021) Whole of Government Circular Economy Strategy 2022-2023: bd90130d-494e-4d32-8757-46d36c77b912.pdf (www.gov.ie)

"In Europe today, just **16% of bio-waste is recycled into something useful.** The EU has set a **target by 2035 of 65% of bio-waste to be reused or recycled.** In Ireland, the agri-food and municipal wastewater treatment sectors together produce over 100,000 tonnes of bio-waste per year. This waste is largely applied to agricultural land or disposed of as waste, thereby missing the opportunity for recycling into energy."

This strategy also discusses the role of the bioeconomy in transitioning to a carbon-neutral and circular economy. It describes the bioeconomy as:

"... the part of our economy which uses renewable resources such as crops, forestry, and fisheries to produce food, products, as well as energy, while also reducing waste. Increasing the scope of the bioeconomy will mean diminishing our reliance on fossil-based fuels and carbon intensive resources and will boost our use of renewable biological resources."

#### 4.4.17 A Waste Action Plan for a Circular Economy Strategy 2020-2025

This plan<sup>28</sup> provides a roadmap for cross-sectoral waste planning and management in Ireland. It broadly discusses the role of the Circular Economy in achieving the Sustainable Development Goals, including SDG7 'Affordable and Clean Energy'.

Among the measures outlined to achieve the optimum results of the Waste Action Plan is the following, which commits to the development of a government circular economy strategy (see above):

"One of its first tasks will be the development of a high-level all of government circular economy strategy. This will set a course for Ireland to transition across all sectors and at all levels of government toward circularity. Policy coherence across government will be key to ensuring all policy levers are set towards the same objective."

We note in particular the following:

"We want to realise the Anaerobic Digestion (AD) and composting potential of the food waste resource. AD and composting provide opportunities for regional development with benefits for communities through sales of locally generated energy and compost."

#### 4.4.18 National Policy Statement on the Bioeconomy (2018)

This national policy statement<sup>29</sup> elaborates on how the strategic development of the bioeconomy might be advanced through greater policy coherence across all relevant sectors and dealing with fundamental challenges to its commercial success and social development. It outlines Ireland's comparative advantages in developing bioeconomy and provides commitments in the form of a Policy Framework for Developing the Bioeconomy.

### 4.4.19 Common Agricultural Policy (CAP) Strategic Plan 2023 – 2027

First established in 1962, the CAP23<sup>30</sup> (as revised) consists of a Two Pillar Structure: Pillar 1

<sup>&</sup>lt;sup>28</sup> Government of Ireland (2020) A Waste Action Plan for a Circular Economy: Ireland's National Waste Policy 2020-2025: <u>dcf554a4-0fb7-4d9c-9714-0b1fbe7dbc1a.pdf (www.gov.ie)</u>

<sup>&</sup>lt;sup>29</sup> Government of Ireland (2018) National Policy Statement on the Bioeconomy: gov - National Policy Statement on the Bioeconomy (www.gov.ie)

<sup>&</sup>lt;sup>30</sup> Department of Agriculture, Food and the Marine (2020) *The CAP Strategic Plan 2023-2027*: <u>gov - The CAP Strategic Plan 2023 -</u> 2027 (www.gov.ie)

Income Support (including Basic Payment Scheme and Greening) and Pillar 2 Infrastructure, Environment and Development Support (including GLAS, EIP-AGRI and TAMS).

#### 4.4.20 European Union (Waste Directive) Regulations 2020<sup>31</sup>

.03/04/1075 This Statutory instrument sets out regulations for the mode by which waste compost and digestate is recycled into fertiliser products. We note in particular the following replacement of Regulation 38 in the Regulations of 2011 (Bio-waste):

"38 (2): The Minister shall take measures in accordance with sections 21A and 32(1) of the Act of 1996 to: (a) encourage the recycling, including composting and digestion, of bio-waste in a way that fulfils a high level of environment protection and results in output which meets relevant high-quality standards."

#### 4.4.21 Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations, 2013<sup>32</sup> and Waste Facility Permitting

All operators of an AD Facility require consent to operate under one of the following: Waste Management Act, 1996<sup>33</sup> (as amended), the Environmental Protection Agency Act, 1992<sup>34</sup>, the Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations, 2013<sup>35</sup>, S.I. No. 821 of 2007, Waste Management (Facility Permit and Registration) Regulation (as amended 2008), the Industrial Emissions Directive (2010/75/EU) which introduced a class of license that can be granted by the EPA, known as an Industrial Emissions License.

S.I. No. 821 of 2007 Waste Management (Facility Permit and Registration) Regulation (as amended)<sup>36</sup> sets out the procedures for the making of applications for waste facility permits for the purposes of section 39(4) of the Waste Management Act, 1996, and the manner by which a waste authorisation can be granted by the EPA. The Regulations also provide rules pertaining to public consultation, consideration by the local authorities of submissions in relation to permit applications, and the grant, refusal, and review of permits by local authorities. They also prescribe rules for the spreading of organic waste on land from waste facilities and other matters relative to organic waste.

#### 4.4.22 Animal By-Products Regulations

In order to build and operate a biogas plant, an operator must comply with the European Communities (Animal By-Products) Regulations 2014 (S.I. No. 187 of 2014)<sup>37</sup> and in accordance with Regulation (EC) No. 1069/2009 and Regulation (EU) No. 142/2011. If animal by-products are processed within the AD facility, certification may be required and obtained from the Department of Agriculture, Food, and the Marine.

<sup>&</sup>lt;sup>31</sup> Gov. of Ireland: European Union (Waste Directive) Regulations 2020: S.I. No. 323/2020 - European Union (Waste Directive) Regulations 2020 (irishstatutebook.ie) <sup>32</sup> Gov. Of Ireland (2013) Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013: <u>S.I. No. 137/2013 -</u>

Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013. (irishstatutebook.ie) <sup>33</sup> Waste Management Act, 1996: Waste Management Act, 1996 (irishstatutebook.ie)

<sup>&</sup>lt;sup>34</sup> Environmental Protection Agency Act, 1992: Environmental Protection Agency Act, 1992 (irishstatutebook.ie)

<sup>&</sup>lt;sup>35</sup> S.I. No. 137/2013: S.I. No. 137/2013 - Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013. (irishstatutebook.ie)

<sup>&</sup>lt;sup>36</sup> Gov. of Ireland: Waste Management (Facility Permit and Registration) Regulations 2007: S.I. No. 821/2007 - Waste Management (Facility Permit and Registration) Regulations 2007 (irishstatutebook.ie)

European Union (Animal By-Products) Regulations 2014: S.I. No. 187/2014 - European Union (Animal By-Products) Regulations 2014. (irishstatutebook.ie)

Document 'CN11 – Conditions for Approval and Operation of Biogas Plants Transforming Animal By-Products and Derived Products in Ireland' provides details on the requirements of a biogas plant such as that proposed here. These include general requirements including animal by-product feedstocks, structural and equipment requirements, plant operational requirements, requirements for microbiological testing, Plant HACCP Plans and Plant Pre-requisite Programmes (PRPs), and record keeping requirements.

#### 4.5 Regional Planning Policy

# 4.5.1 Regional Spatial and Economic Strategy for the Eastern and Midland Region

The Regional Spatial and Economic Strategy<sup>38</sup> (RSES hereafter) determines at a regional scale how best to achieve the shared goals set out in the NPF.

The vision of the RSES is "to create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all".

Section 2.2 of the RSES states that a *"key challenge facing the Region, along with all other regions, is the transition to a low carbon society. For the RSES this means five primary areas of transition which are at the core of the Strategy:* 

- sustainable development patterns which promote compact growth, reduce transport demand and encourage low carbon transport modes;
- sustainable transport systems (people and freight);
- carbon storing and sequestering land uses;
- energy efficient buildings and industry; and
- renewable energy." [Emphasis added].

The RSES acknowledges that the effects of climate change will be felt in the environment, society and economy of the Eastern and Midland Region. A key principle of the RSES is *"the need to enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this"*. Renewable energy is a primary area of transition for the region and is a at the core of the plan's strategy.

According to Section 2.2, it is a 'Key Principle' of the RSES to *"enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this".* 

We take note of the following Regional Strategic Outcomes outlined in Figure 2.4 of the RSES:

- "Support the Transition to Low Carbon and Clean Energy.
- Build Climate Resilience.
- Sustainable Management of Water, Waste and other Environmental Resources.
- A Strong Economy supported by Enterprise & Innovation."

Outlined in Section 3.2 of the RSES, it is a 'Growth Enabler for the Region' to "support rural

<sup>&</sup>lt;sup>38</sup> Eastern and Midlands Regional Assembly (2017) *RSES*: <u>Eastern & Midland Regional Assembly Regional Spatial and Economic</u> <u>Strategy (RSES) - Eastern & Midland Regional Assembly (emra.ie)</u>

OKS areas by harnessing natural resources to develop renewables". We highlight the following regional policy objectives, derived from this plan, as being of or the proposed Development: I achieve and maintain good air

- quality for all urban and rural areas in the Region and to work with local authorities and the relevant agencies to support local data collection in the development of air quality monitoring and to inform a regional air guality and greenhouse gas emissions inventory."
- **RPO 7.10 (Water Quality):** "Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and other relevant Directives, River Basin Management plans and local authority land use plans."
- RPO 7.28 (Landscape): "Work with local authorities and relevant stakeholders, to identify . areas of high value agricultural land and to ensure food security in the Region and to promote sustainable farming practices that maintain the quality of the natural environment, protect farm landscapes and support the achievement of climate targets.
- **RPO 7.34 (Climate Change):** "EMRA supports the National Policy Statement on • Bioeconomy (2018) and supports the exploration of opportunities in the circular resourceefficient economy including undertaking a bioeconomy feasibility study for the Region to identify the area of potential growth in the Region to inform investment in line with the national transition objective to a low carbon climate resilient economy."
- **RPO 7.37 (Decarbonising the Energy Sector):** "A bioeconomy plan for the Region should be developed that outlines the capacity of the Region to supply the range of bioenergy resources required for the fuel mix as well as the current and projected consumption requirements for growth in this market."
- **RPO 6.23 (Low Carbon and Circular Economy):** "Support enterprise development • agencies and LEOs on the development of industries that create and employ green technologies and take measures to accelerate the transition towards a low carbon economy and circular economy."
- **RPO 6.24 (Agriculture):** "Support the Departments of Agriculture, Food and the Marine. • and Communications, Climate Action and Environment to enhance the competitiveness of the agriculture sector with an urgent need for mitigation as well as real and effective and adaptation mechanisms for the long-term sustainability of the agri-sector."
- **RPO 6.5 (Rural Economy):** "Local authorities shall explore projects in LECPs for the • enhancement of the competitiveness of their rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and sustainability. Cross-boundary and inter-regional partnerships are encouraged and they will be supported."
- **RPO 6.7 (Rural Economy):** "Support local authorities to develop sustainable and • economically efficient rural economies through initiatives to enhance sectors such as

agricultural and food, forestry, fishing and aquaculture, energy and extractive industries, the bioeconomy, tourism, 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."

- **RPO 4.84 (Rural Areas):** "Support the rural economy and initiatives in relation to diversification, agri business, rural tourism and renewable energy so as to sustain the employment opportunities in rural areas...."
- **RPO 10.20 (Energy Infrastructure):** "Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process."

#### Statement of Consistency with the Regional Spatial and Economic Strategy

The RSES highlights the agricultural and energy sectors as key sources of emissions and recognises that there is a capacity in the region to supply the infrastructure required to reduce the carbon impact of these sectors.

AD facilities apply the principles of the bioeconomy and circular economy, by utilising biomass as a resource for the use and long-term security of renewable energy across the region. Such facilities also contribute to the competitiveness of the agricultural sector, by encouraging the use of green technologies and other mitigation / adaptation opportunities. The development will have a positive impact on the rural economy. A such, this proposal is broadly compliant with and supported by the RSES for the Eastern and Midland Region.

#### 4.6 Local Planning Policy

#### 4.6.1 Wicklow County Development Plan

The Wicklow County Development Plan<sup>39</sup> 2022-2028 (CDP hereafter) recognises the central role of land use planning in promoting a low carbon society, mitigating the impact of climate change, and progressing towards a sustainable energy future for County Wicklow. The CDP aligns with the NPF, by recognising the role that rural areas play in driving the economy, for example by attracting entrepreneurship and innovation development, particularly where low carbon outputs can be achieved. The vision for the County as stated in the CDP is:

"To guide and facilitate the sustainable growth of the County in a manner which supports a deep respect for its unique natural heritage, capitalises on the potential of our towns and villages to deliver compact growth, facilitates healthy placemaking, supports the creation of self-sustaining settlements and rural areas that are attractive places to live in, work in and visit, provides for **new job opportunities**, **embraces climate action** and **enables the transition to a low carbon, climate resilient and environmentally sustainable economy**, improves sustainable mobility and conserves our heritage." [Emphasis added].

The CDP has three strategic principles and the following relates to Climate Action: "Integrate

<sup>&</sup>lt;sup>39</sup> CDP: Adopted Plan (wicklow.ie)



climate change objectives into the County Development Plan to facilitate the sustainable growth of the County, enhance climate resilience and enable the transition to a low carbon, environmentally sustainable economy. The County Development Plan plays an important role in influencing a reduction in GHG emissions by guiding the sustainable growth of the County, encouraging more compact mixed-use development and greater use of sustainable transport options such as cycling, walking and public transport, restricting development in areas that are at risk of flooding and protecting the natural landscape and biodiversity."

Under the strategic principles mentioned above, the CDP is then guided by 10 'Strategic County Outcomes'. Strategic County Outcome 7 (Climate Resilience and the Transition to a Low Carbon Economy) states, "Support the transition to low carbon clean energy by facilitating renewable energy use and generation at appropriate locations and supporting the development of off-shore renewable energy enabling infrastructure especially at ports and harbours. Facilitate the sustainable management of waste including the circular economy. Restrict development in areas that are at risk of flooding and protect the natural landscape and biodiversity."

The Proposed Development will contribute to achieving the vision, strategic principles and strategic outcomes of the CDP by delivering renewable energy in a manner which directly benefits the local community and economy, while also helping to decarbonise the agricultural sector in the locality.

#### 4.6.1.1 Zoning and Designation Specific to the Subject Site

The Proposed Development site is located in the rural outskirts of Arklow and therefore, is not subject to any zoning. However, the site is located approximately 700m from Arklow town, which is designated as a 'Self Sustaining Growth Town' and 'Core Region' within the CDP (**Figure 4.2**). Arklow has a targeted growth rate of 25% within the period of the CDP. Table 3.3 'Wicklow Settlement Hierarchy' of the CDP states that such regions are *"Self-Sustaining Growth Towns with a moderate level of jobs and services – includes sub-county market towns and commuter towns with good transport links and capacity for continued commensurate growth to become more self-sustaining".* 



Figure 4.2: Wicklow Town Core Strategy [CDP: Chapter 3, Core Strategy Map]

The Proposed Development site is located approximately 600m outside the boundary of the Arklow Local Area Plan 2018-2024 **(Figure 4.3)**. According to the CDP map above, the site is located along the 'Eastern Economic Corridor'.



Figure 4.3: Arklow LAP Land Use Zoning Map [Land Use Zoning Objectives (Map No.: 1)]

According to the 'Wicklow Landscape Category Map' (Map No. 17.09A) in Chapter 17 of the CDP, the Proposed Development site is not located within a landscape category (**Figure 4.4**). The Proposed Development site is located between landscape defined as 'Rolling Lowlands' (to the west) and 'Urban Areas' (to the east).

County Policy Objective (CPO hereafter) 17.35, Chapter 17, states that "All development proposals shall have regard to the County landscape classification hierarchy in particular the key landscape features and characteristics identified in the Wicklow Landscape Assessment (set in Volume 3 of the 2016 County Development Plan) and the 'Key Development Considerations' set out for each landscape area set out in Section 5 of the Wicklow Landscape Assessment".

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Figure 4.4: County Wicklow Landscape Categories [Extract from Map No. 17.09A, Chapter 17, CDP]

According to the CDP map above, the site is not designated as a specific landscape category (**Figure 4.5**). We note that the site is located just east of the 'Rolling Lowlands' landscape category and just west of the Arklow 'Urban Area' landscape category.



Figure 4.5: County Wicklow Landscape Sensitivity [Figure 2.4, Appendix 6, CDP]

As evident from the CDP landscape sensitivity map above, the subject site is located in a very low environmentally sensitive area.

#### **Designated Sites**

RECEIVED. The site is not subject to any designations for protected structures, protected views or scenic routes. The site is not subject to any tree protection orders, nor does it contain any trees of special amenity value. The subject site is not located in immediate proximity to any pNHA, NHA or SAC.

There are 6 no. designated sites in proximity to the subject site:

- Arklow Town Marsh pNHA is located c. 2km northeast (site code: 001931). •
- Avoca River Valley pNHA is located c. 2.31km north (site code: 001748). •
- Arklow Rock-Askintinny pNHA is located c. 2.76km southeast (site code: 001745). •
- Arklow Sand Dunes pNHA is located c. 4.31km northeast (site code: 001746). •
- Kilpatrick Sandhills SAC and pNHA is located c. 6.14km southeast (site code: 001742). •
- Slaney River Valley SAC is located c. 10.8km southwest (site code: 000781). •

#### Sites of Archaeological Importance

Table 1: Sites of Archaeological Importance						
Structure	Identity ID (Class)	Coordinates	Location			
	(Heritage Maps)					
Ringfort – rath	WI01959 (RATH)	52.79, -6.21	c. 1.38km west			
Excavation –	WI03206 (EXMI)	52.78, -6.18	c. 801m southeast			
miscellaneous						
Fulacht fia	WI02700 (FUFI)	52.78, -6.18	c. 797m southeast			
Enclosure	WI02022 (ENCL)	52.78, -6.18	c. 855m southeast			
Burnt mound	WI02627 (BURM)	52.87, -6.18	c. 982m southeast			
Enclosure	WI02288 (ENCL)	52.80, -6.21	c. 1.6km northwest			
Enclosure	WI01808 (ENCL)	52.80, -6.21	c. 1.6km northwest			
Moated site	WI01809 (MOSI)	52.80, -6.18	c. 1.53km north			
House – 16 <sup>th</sup> /17 <sup>th</sup>	WI01810 (HOLS)	52.80, -6.18	c. 1.53km north			
century						
Battlefield	WI03362 (BATT)	52.80, -6.17	c. 1.68km northeast			
Church	WI01961 (CHUR)	52.78, -6.17	c. 1.42km southeast			

Source: Heritage Maps, The Heritage Council

#### 4.6.1.2 Chapter 9: Economic Development

#### Wicklow Local Economic & Community Plan (LECP)

The Wicklow Local Economic & Community Plan (LECP), outlined in Section 9.1.2 of the CDP, includes objectives and actions promoting and supporting economic development and the local and community development of the County. We take note of the following goals and objectives of this plan:

- **Goal 9:** Support a shift towards low carbon and climate change resilient economic activity, reducing energy dependence, promoting the sustainable use of resources and leading in the Smart Green Economy.
- Goal 10: Harness efficiently the full resources of the County and promote interagency collaboration.
- Goal 8: Capitalise on Wicklow's unique attributes and proximity to the Dublin market, excellent quality of life, human capital, tourism, landscape, marine, agricultural and forestry resources.

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- **Objective 8.4:** Support the rural economy and promote rural economic diversification.
- **Objective 9.1:** Support the development of renewable energy and a low energy future for Wicklow.
- Objective 6.1: Support inward investment and promote the creation and expansion of new and existing employment opportunities in the County to drive economic development within the County.
- **Objective 6.3:** Support the provision of high-quality infrastructure throughout the County that will facilitate and support economic expansion.
- **Objective 7.2:** Harness the County's existing assets and encourage collaborative opportunities and business engagement amongst sectors to develop new markets and initiatives, maximising opportunities for business development and employment creation.

We take note of **CPO 9.2**, which aims "To support and encourage proposals that maximise economic opportunities and strengthen the economic structure of the south and west of the County by facilitating economic diversification and new enterprise development including remote working opportunities".

The Proposed Development will deliver significant investment and additional high-quality employment in the locality, which in the south section of the County, based on the sustainable production of renewable energy on site. This employment type is not present in the area, therefore, the Proposed Development promotes economic diversity in the area.

Chapter 9, Section 9.3 of the CDP identified the bioeconomy as a sector/industry with great potential in County Wicklow. The CDP has set out particular policies to support the future growth of the bioeconomy:

- "There is significant potential to expand the bioeconomy in County Wicklow."
- "The bioeconomy has the potential to create new, sustainable opportunities for farmers and high-quality, green jobs in rural and coastal areas. It can play a significant role in meeting our climate change targets."
- "Ireland has numerous renewable biological resources with the potential for the creation of high value products. These include agricultural products and by-products, food residues and processing side streams, forestry and forestry by-products, municipal and industrial waste, waste water and marine and marine by-product resources. Our largest indigenous industry, the agri-food sector, provides significant co-processing streams in the food and beverage industries. In terms of marine resources, Ireland has rich resources in one of the largest sea beds in Europe (10 times our landmass)."

The Proposed Development comprises a bioeconomy-related development, producing biomethane from agricultural waste products, and therefore is supported by Section 9.3.

#### **Green Industry**

We take note of **CPO 9.21**, which aims "To encourage and facilitate the 'circular economy' and the development of 'green' industries, including industries relating to renewable energy and energy-efficient technologies, material / waste recycling and conservation".

#### **Rural Employment Objectives**

Section 9.6 of the CDP outlines the objectives for Wicklow's rural economy. The rural economy 'Strategic Objective' is *"To preserve the amenity, character and scenic value of rural areas, and* 

to generally require employment-generating development to locate on zoned / designated land within existing settlements. Notwithstanding this, it is the objective of the Council to enhance the competitiveness of rural areas by **supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services including those addressing climate change and sustainability** and through the development of appropriate rural based enterprises, which are not detrimental to the character, amenity, scenic value, heritage value and environmental quality of a rural area." [Emphasis added].

We take note of the following rural employment objectives:

- **CPO 9.33:** Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and sustainability.
- **CPO 9.34:** To support proposals to maximise economic opportunities and strengthen the economic structure of the south and west of the County by facilitating economic diversification and new enterprise development including remote working opportunities.
- **CPO 9.35:** To permit the development of small-scale commercial / industrial developments in rural areas that are not dependent on an existing local resource, subject to compliance with all of the following criteria:
  - The Proposed Development shall be a small-scale industrial / commercial scheme or service and the number employed shall be appropriate in scale to the location and its characteristics, including proximity to the workforce and customers.
  - the Proposed Development shall be located on the site of a redundant farm building / yard or similar agricultural brownfield site.
  - the nature and scale of the Proposed Development and the proposed process or activity to be carried out, shall be appropriate to and compatible with, the character of the rural environment of the site at which the development is proposed, and shall not be detrimental to the rural amenity of the surrounding area. In the assessment of planning applications, cognisance shall be taken of the location of the site vis-à-vis the proximity of the site to the national and regional road network.

The Proposed Development is a small-scale, rural-based form of renewable energy development, promoting rural economic diversification in the south section of County Wicklow. The wider area is not environmentally sensitive, on an underutilised agricultural site.

#### **Agriculture Objectives**

Section 9.6 of the CDP outlines the agriculture objectives for the County. It is a 'Strategic Objective' "To encourage the continued operation of farming and its associated uses where it already exists, and to facilitate the diversification of the agricultural economy through the support of appropriate alternative farm enterprise sources."

- CPO 9.37: To facilitate the development of environmentally sustainable agricultural activities, whereby watercourses, wildlife habitats, areas of ecological importance and other environmental assets are protected from the threat of pollution, and where development does not impinge on the visual amenity of the countryside. Developments shall not be detrimental to archaeological and heritage features of importance. [Emphasis added].
- CPO 9.38: To encourage and facilitate agricultural diversification into suitable agri-

businesses. Subject to all other objectives being complied with, the Council will support the **alternative use of agricultural land** for the following alternative farm enterprises:

- Specialist farming practices, e.g. organic farming, horticulture, specialised animal breeding, deer and goat farming, poultry, flower growing, forestry, equine facilities, allotments, bioenergy production of crops and forestry, organic and speciality foods; and
  - suitable rural enterprises. [Emphasis added].
- **CPO 9.40:** To ensure that agricultural developments do not cause increased pollution to watercourses. Developments will be required to adhere to the Nitrates Directive (91/676/EC), the Nitrates National Action Programme and the EC (Good Agricultural Practice for Protection of Waters) Regulations 2009 (as amended), with regard to storage facilities, concerning the protection of waters against pollution caused or induced by nitrates from agricultural sources. Developments will be required to comply with relevant measures, which operate to protect water quality from pollution by agricultural sources. The disposal and storage of agricultural waste shall comply with the standards required by Council.

The Proposed Development is an environmentally sustainable agricultural-related activity, producing bioenergy and high-quality biobased fertiliser products, to combat synthetic fertilisers contaminating waterbodies. There are no archaeological or heritage features in the close proximity to the site. The proposal will promote rural diversification in the area, being an alternative use of this agricultural land.

#### 4.6.1.3 Chapter 15: Waste and Environmental Emissions

#### **Solid Waste Management Objectives**

We take not of the following objectives in relation to solid waste management, derived from Chapter 15 of the CDP:

- **CPO 15.3:** To facilitate the development of existing and new waste prevention and recovery facilities and in particular, to facilitate the development of 'green waste' recovery sites.
- **CPO 15.4:** To facilitate the development of waste-to-energy facilities, particularly the use of landfill gas and biological waste.
- **CPO 15.5:** To have regard to the Council's duty under the 1996 Waste Management Act (as amended), to provide and operate, or arrange for the provision and operation of, such facilities as may be necessary to promote reuse or for the recovery and disposal of household waste arising within its functional area.
- **CPO 15.6:** To facilitate the development of sites, services and facilities necessary to achieve implementation of the objectives of the Regional Waste Management Plan.
- **CPO 15.1:** To require all developments likely to give rise to significant quantities of waste, either by virtue of the scale of the development or the nature of the development (e.g. one that involves demolition) to submit a construction management plan, which will outline, amongst other things, the plan to minimise waste generation and the plan to protect the environment with the safe and efficient disposal of waste from the site.
- **CPO 15.2:** To require all new developments, whether residential, community, agricultural or commercial to make provision for storage and recycling facilities (in accordance with the standards set out in Development & Design Standards of this plan).

The Proposed Development comprises a new facility utilising agricultural biological wastes to

produce renewable gas, therefore, it is supported by CDP CPO 15.3 and 15.4. **Air and Noise Pollution Objectives** We take note of the following air and noise pollution objectives from Section 15.3 of the CDP CPO

- **CPO 15.10:** To require proposals for new developments with the potential for the accidental release of chemicals or dust generation, to submit and have approved by the Local Authority construction and/or operation management plans to control such emissions.
- CPO 15.12: To implement the Wicklow County Council Noise Action Plan 2018-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annovance, due to environmental noise exposure.
- **CPO 15.13:** To enforce, where applicable, the provisions of the Environmental Protection Agency (EPA) Acts 1992 and 2003, and EPA Noise Regulations 2006.
- CPO 15.14: To regulate and control activities likely to give rise to excessive noise (other than those activities which are regulated by the EPA).
- **CPO 15.15:** To require proposals for new developments with the potential to create excessive noise to prepare a construction and/or operation management plans to control such emissions.
- CPO 15.16: To require activities likely to give rise to excessive noise to install noise mitigation measures to undertake noise monitoring and to provide an annual monitoring audit.

#### 4.6.1.4 Chapter 16: Information Communications and Energy

Section 16.2.1.4 'Bio-Energy' recognises that there is "large scale potential for biomass in Ireland. The industry is currently modest in scale; however, with Ireland's growth rate, technological advances and the deregulation of the electricity industry and in conjunction with stricter controls on waste management, an increase in the development of biomass installations is likely."

#### **General Energy Objectives**

We take note of the following CDP general energy objectives:

- CPO 16.01: To support and facilitate to the highest degree possible the development of alternative and renewable sources of energy, particularly in the generation of electricity / heating and for use as transport fuel.
- **CPO 16.02:** To support and facilitate the co-location of renewable energy developments and technologies to ensure the most efficient use of land identified as suitable for renewable energy generation.
- **CPO 16.03:** To support and promote the development of 'Sustainable Energy' Communities' and in particular to encourage and facilitate developments that are energy neutral / low emission, integrate renewable energy technology or involve local renewable energy production.

#### **Bio-Energy Objectives**

We take note of the following CDP bio-energy objectives:

- **CPO 16.13:** To **facilitate** the development of **projects that convert biomass** to gas or electricity, subject to demonstration that such projects are resource efficient having regard to carbon emissions resulting from the growth, harvesting and transport of inputs, and do not result in unsustainable climate damaging agricultural intensification.
- **CPO 16.14:** Other than biomass installations that are location specific to the rural area, biomass conversion installations / facilities shall be located on suitable zoned industrial land in settlements.

The Proposed Development will covert agricultural wastes (biomass) to renewable biogas and therefore is supported by CDP CPO 16.13.

#### Consistency with the Wicklow County Development Plan (CDP)

The Proposed Development is consistent with the policies and objectives of the CDP. The CDP recognises the potential for the production of biomass to gas and emphasises that there is significant potential to expand Wicklow's bioeconomy. The Proposed Development will covert agricultural wastes (biomass) to renewable biogas and therefore is supported by CDP CPO 16.13.

The CDP states that the bioeconomy will play an important role in meeting climate targets and can create important 'green jobs' inn rural areas. The CDP promotes: the transition to alternative energy, the sustainable use of resources; low carbon and climate change resilient economy activity; rural economic diversification; harnessing the County's existing assets; expanding the bioeconomy; a circular economy; green industries; rural competitiveness through agricultural diversification including new sectors and services that address climate change and sustainability, with bioenergy production as a specific example; and waste to energy facilities.

The Proposed Development supports all of the above promoted by the CDP.

#### 4.6.2 Arklow Local Area Plan 2018-2024<sup>40</sup>

<sup>&</sup>lt;sup>40</sup> LAP: <u>https://www.wicklow.ie/Living/Services/Planning/Development-Plans-Strategies/Local-Area-Town-Settlement-Plans/Arklow-and-Environs-Local-Area-Plan-2018-2024</u>

The Arklow Local Area Plan 2018-2024 (LAP hereafter) came into effect on the 4<sup>th</sup> March 2018. The subject site is located approximately 600m outside the boundary of the Arklow Local Area Plan 2018-2024 (**Figure 4.6**).



Figure 4.6: Arklow Land Use Zoning [LAP Land Use Zoning Objectives (Map No.: 1)]

Considering that the site is just beyond the LAP boundary, this section will briefly mention the plan's policies in regard to this development type:

- Vision 10 'Adapt to Climate Change': To address the climate change challenge, directly in the areas of flooding and renewable energy, and indirectly by integrating adaptation to climate change and sustainable development into the plan objectives.
- Vision 6: 'Employment Activity': To facilitate and encourage the growth of a broad range of employment, enterprise and economic activity in the settlement.
- **Vision 8 'Infrastructure':** To protect and improve the settlement's transport, water, waste, energy, communications and maritime infrastructure having regard to our responsibilities regarding the protection of the environment.

### 4.6.3 Wicklow County Council Climate Change Action Plan 2024-2029<sup>41</sup>

The WCC Climate Change Action Plan 2024-2029 (CCAP hereafter) was adopted in January 2024. The vision for this plan is to *"leverage the capability, operations and resources of* 

<sup>&</sup>lt;sup>41</sup> WCC CCAP: Wicklow County Council Climate Action Plan 15-01-24 Adopted.pdf

Wicklow County Council to effectively lead and coordinate climate mitigation and adaptation to develop a vibrant decarbonized future for communities with resilient and regenerative natural systems throughout County Wicklow".

The mission for the CCAP is to "delivery transformative change and measurable climate action in the operation of our services for the people of Wicklow, through leadership and example. Mobilise action on mitigation and adaptation through partnership with communities, enterprise and other stakeholders at regional and local level. Create a low carbon, climate resilient future, for the county."

The 'Strategic Goals' of relevance in this plan are listed below:

- Strategic Goal 2: Achieve carbon emissions reduction of 51% and energy efficiency improvement of 50% in our operations by 2030, creating a pathway to net zero by 2050.
- **Strategic Goal 7:** Mobilise climate action in enterprise and agriculture supporting the transition to an inclusive, net zero and circular economy.
  - Action 5 of this goal promotes the uptake of energy performance measures in the agricultural sector through the promotion of **anaerobic digestion**.
  - Action 9 aims to identify and implement the Rural Development Fund initiatives that deliver on a transition towards a climate-neutral rural economy to include the green economy and bioeconomy.

The subject site is located just beyond the boundary of the Arklow Decarbonisation Zone. In regard to district heating for this decarbonisation zone, the CDP recognises the benefit of anaerobic digestion facilities, stating that there is potential to use a proposed AD facility as an energy source for district heating.

Theme 5 'Sustainability and Resource Management', Action No. 23, states, "*Investigate opportunity to develop a micro/small scale pilot anaerobic digestion in Arklow, identifying potential feed stock whilst ensuring* [Emphasis added]:

- 1. Appropriate regard is given to planning and environmental protection constraints and considerations during any future the development planning process.
- 2. Such potential development does not cause unintended, significant, negative environmental effects in the area.
- 3. Such a potential facility operates in accordance with the provisions of the Waste Management Act."

#### Consistency with the Wicklow Climate Change Action Plan (CCAP)

The CCAP aims to investigate the opportunity to develop AD in Arklow; this development supports this LAP aim. The CCAP aims to transition towards a climate neutral rural economy and promotes the bioeconomy to support this transition. The CCAP promotes leveraging the resources of County Wicklow.

The Proposed Development consists of the construction of an AD facility, leveraging existing resources within the County, to produce biogas (renewable energy), and therefore is supported by the CCAP.

#### Wicklow County Council Climate Change Adaptation Strategy (2019)<sup>42</sup> 4.6.4

According to Chapter 2 of the CDP, in April 2019, WCC declared a "Climate and Biodiversity" Emergency". This emergency requires action on adaptation and mitigation of climate change. In response, WCC adopted the WCC Climate Change Adaptation Strategy (CCAS hereafter) which sets out the approach for Wicklow's adaptation to climate change. The plan has been drawn up in line with the National Adaptation Framework, the National Mitigation Plan and the Climate Action Plan.

We take note of the following goal in relation to Theme 2 (Infrastructure and Built Environment): "Increased capacity for climate resilient structural infrastructure is centred around the effective management of climate risk, informed investment decisions and positive contribution towards a low carbon society."

#### Climate Action Charter (2019)<sup>43</sup> 4.6.5

According to the CDP, WCC signed up to the Climate Action Charter in December 2019. This charter includes substantial targets with regard to the mitigation of climate change and increasing energy efficiency. This Charter is a key action within the national Climate Action Plan and "will ensure every local authority embeds decarbonisation, sustainable development and climate resilience into every aspect of the work they do".

#### 4.6.6 Wicklow County Council Draft Energy Plan / Energy Performance Strategy (2020)

According to the CDP, WCC Housing and Corporate Estate Department are currently working on an Energy Plan / Energy Performance Strategy which seeks to deliver the targets of the Charter with regard to Council's infrastructure / assets.

#### 4.6.7 Wicklow's Community Climate Action Programme<sup>44</sup>

The Community Climate Action Programme aims to "support and empower communities to take climate action at a local level. WCC in conjunction with the Department of the Environment, Climate and Communications will support communities to promote and assist the scale up of community climate action".

Through this programme, as supported by the Climate Action Fund, WCC will provide grants to community organisations to support citizens to step up local climate action (a total funding pot of €646,000). The objective of this programme is to "shape and build low carbon, sustainable communities in a coherent way to contribute to national climate and energy targets".

The project must be not-for-profit to be eligible for the grant, in which this development is not. Although this development is not eligible for the funding, this development supports the objectives of this programme.

#### 4.7 Summary Statement

This chapter examined and summarised the relevant planning, climate, and waste

<sup>&</sup>lt;sup>42</sup> WCC (2019) CCAS: Wicklow County Council Climate Change Adaptation Strategy

 <sup>&</sup>lt;sup>43</sup> gov - Local Authority Climate Action Charter (www.gov.ie)
<sup>44</sup> https://countywicklowppn.ie/wp-content/uploads/2023/06/WCC-CCAP-Info-Overview.pdf

management policy, and the legislative context at European, and national levels with relevance to the Proposed Development at Moneylane, Arklow, Co. Wicklow.

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The Proposed Development aims to lessen the dependence on imported fossil fuels, provide greater security in energy supply, and increase the provision of renewable energy in line with government and planning policy at the national, regional, and local level.

It is considered that the Proposed Development is supported by the Wicklow County Development Plan 2022-2028 and the local, regional and national policy discuss within this chapter.

The Proposed Development has been carefully designed so it will integrate into the local landscape, will not be prejudicial to public health, and would be acceptable in terms of traffic safety. The Proposed Development would therefore be in accordance with the proper planning and sustainable development of the area and will deliver local renewable energy generation and employment to support the economic development and prosperity of the area.

This EIAR is accompanied by a detailed Planning Report, produced by John Spain Associates.

The Planning Report is intended to supplement this chapter of the EIAR with a more extensive and detailed assessment of the consistency of the Proposed Development with the relevant national, regional, and local planning policy context. We refer the Planning Authority to the accompanying Planning Report prepared by John Spain Associates for further details.