



Planning &
Development
Consultants

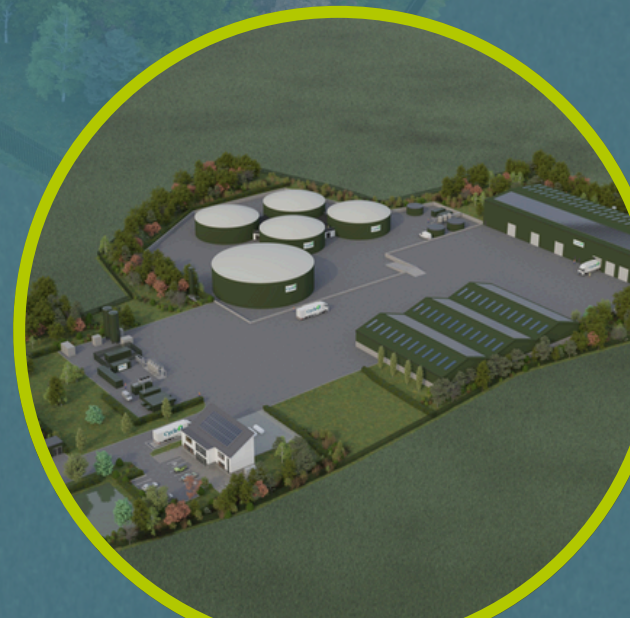
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Environmental Impact Assessment Report (EIAR)

Anaerobic Digestion Facility Ballyvass, Co. Kildare

CLIENT

CycleØ IE Limited



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1 Introduction

1.1 Introduction

CycleØ (IE) Limited (the Applicant) are pleased to submit this EIAR in support of a planning application for the construction and operation of a Renewable Biogas Facility at a site in Ballyvass, Co. Kildare.

The Proposed Development, spanning approximately 5.12 hectares, is designed to process up to 90,000 tonnes annually of locally sourced agricultural manures, slurries, dairy processing residues, and crop-based feedstocks. Its primary objective is to produce grid-quality biomethane (renewable natural gas), which will be compressed onsite and injected into the Gas Networks Ireland (GNI) distribution system via a Grid Injection Unit (GIU) that will be constructed onsite. This renewable natural gas (RNG) will directly replace conventional natural gas, contributing to the Government's target of generating 5.7 TWh of domestic biomethane annually.

The facility will also produce a nutrient-rich, biobased fertiliser, offering a sustainable alternative to conventional, fossil fuel-derived fertilisers. Additionally, the facility is designed to capture and recover biogenic carbon dioxide (CO₂).

The development will consist of the following:

- Construction of 2 no. primary digesters (with an overall height of c. 9.1m), a digestate storage tank (with a height of c. 11.3m), a pump house (with a gross floor area (GFA) of c. 362 sq.m), 2 no. post digester tanks (with an overall height of c. 9.1m), and a safety flare (c. 11.3m in height), located in the southeastern section of the site.
- Construction of 2 no. preps (c. 4.3m in height), a pasteurisation buffer tank (c. 4.3m in height), and a pasteurisation unit (with a maximum height of c. 4.2m), located to the west of the primary digesters, within the southern section of the site.
- Construction of digestate treatment and feedstock reception building and odour abatement system (with a GFA of c. 2,797 sq.m and a height of c. 12.1m and c. 16.2m to top of odour abatement stack) located within the southwestern section of the site.
- Construction of roofed silage clamps (with a GFA of 2,424 sq.m and a height of c. 8.7m) and a fuel storage tank (c. 2m in height), located within the western section of the site.
- Construction of a combined heat and power (CHP) unit (with a GFA of c. 39 sq.m and a height of c. 2.6m and c. 5.6m to top of flue), a biogas boiler (c. 2.6m in height and c. 5.6m in height to top of flue), a backup boiler (c. 2.6m in height), located within the northern section of the site.
- Construction of a gas treatment unit (c. 4.2m in height), a grid injection unit (with a GFA of c. 22 sq.m and a height of c. 2.8m), and a CO₂ liquefactor (with an overall height of c. 10.7m to top of storage vessels) a propane tank compound accommodating 2 no. propane tanks (c. 1.6m in height), and an ESB substation (with a GFA of c. 24 sq.m and a height of c. 3.4m), located within the northern section of the site.
- Construction of a two storey ancillary administration building (with a GFA of c. 327 sq.m and a height of c. 11m) within the northern section of the site, adjacent to the site entrance.
- Alterations to the adjacent local road and site access road, including junction improvement and widening and site entrance and access arrangements.
- Associated and ancillary works including parking (9 no. standard, 2 no. EV and 1 no. accessible parking spaces, and bike storage for 10 no. bikes), site entrance and gate, a weighbridge, solar PV arrays at roof level, wastewater treatment equipment, bunding and surface treatments, boundary treatments, lighting, services, lightning protection masts, drainage, landscaping and tree planting, and all associated and ancillary works.

A detailed description of the Proposed Development is provided in **Chapter 2 – Project Description** of this EIAR.

1.2 The Applicant

CycleØ (IE) Limited is an end-to-end biomethane provider delivering innovative solutions to slow the pace of global warming. CycleØ focus on capturing methane from the agri-food, industrial and municipal sectors and upgrading it to biomethane for vehicle use or grid injection. As experts in biomethane, CycleØ develop, build, own and operate plants to the benefit of farmers, the local communities and in support of local decarbonisation targets.

CycleØ are fully committed to developing four projects in Ireland to help achieve the 5.7TWh biomethane target set out in the government climate action plan 2030 and the biomethane strategy, published in 2024.

1.3 The Proposed Development Site

The Proposed Development site (herein referred to as ‘the site’) is located in the townland of Ballyvass, Co. Kildare, approximately 3.3km northwest of the town of Castledermot, Co. Kildare and approximately 11.3km northeast of Carlow town, Co. Carlow. The approximate grid reference location for the centre of the site is S 76846 88213, ITM: 676790, 688242. The site location is depicted in **Figure 1.1**.



Figure 1.1: Proposed Development Site Location

The total site area measures ca. 5.12ha. The site is currently used as agricultural pastureland and bounded to the north, south, east, and west by further agricultural pastureland.

The site's northern and eastern boundary is flanked by an unnamed local road which gives access to farmland and a quarry to the south of the site. The L8050 local road is ca. 30m north of the site and ca. 30m west of the M9 Motorway. An unmarked local road runs along the proposed site boundary to the north and east. The Proposed Development will be accessed via this road and entrance will be established to the north of the site along the unnamed local road.

Further site-specific details and existing environmental conditions relevant to each assessment topic are outlined in detail within **Chapters 5.0 to 14.0** of this EIAR.

1.4 Environmental Impact Assessment

The European Union (EU) Directive 2011/92/EU, amended by EU Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment (the 'EIA Directive'), requires Member States to ensure that a competent authority carries out an assessment of the likely significant effects of certain types of projects, as listed in Directive prior to development consent being given for the project.

EIA is a process for anticipating and predicting the effects on the environment caused by a project. It is defined in Article 1(2)(g) 4 of the amended Directive as a process consisting of:

1. The preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2).
2. The carrying out of consultations as referred to in Article 6 and, where relevant, Article 7.
3. The examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7.
4. The reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and
5. The integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a.

The 'EIA Directive' 2014/52/EU, as amended, was transposed into Irish planning legislation by the Planning and Development Acts 2000 to 2019 and the Planning and Development Regulations 2001 to 2019.

In accordance with the relevant legislation, the EIA of the Proposed Development will be undertaken by Kildare County Council as the Competent Authority.

1.5 Environmental Impact Assessment Screening

Screening is the term used to describe the process of determining whether a Proposed Development requires an EIA, by reference to mandatory legislative threshold requirements or by reference to the type and scale of the Proposed Development and the significance or the environmental sensitivity of the receiving baseline environment.

Annex I to 'EIA Directive' 2014/52/EU, as amended, requires as mandatory the preparation of an EIA for all developments listed therein. Projects listed in Annex II to the Directive are not automatically subjected to EIA, however Member States can decide to subject such developments to an assessment on a case-by-case basis or according to thresholds and/or

criteria, for example size, location and potential impact.

In Ireland, Schedule 5 (Part 1 and Part 2) of the Planning and Development Regulations 2001-2019, as amended, transposes Annex I and Annex II to the 'EIA Directive' 2014/52/EU, as amended.

In the context of the Proposed Development, the most relevant project type in Schedule 5 of the Planning and Development Regulations 2001-2019, as amended, is identified in Part 2, Class 11 (b) Other Projects:

(b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

It is therefore concluded that there is a mandatory requirement to undertake an EIA of the Proposed Development. Accordingly, an EIA of the Proposed Development is required to be conducted by the Competent Authority, Kildare County Council, prior to deciding on development consent.

1.6 Environmental Impact Assessment Scoping

The purpose of EIAR Scoping is to identify the information to be contained in an EIAR and the methodology to be used in gathering and assessing that information. It should provide focus for the EIAR, enabling the EIA to be appropriately tailored to the likely significant impacts on the environmental factors set out in Article 3(1) of amended Directive.

Article 3(1) prescribes a range of environmental factors which must be addressed. The EIAR shall identify, describe, and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors:

- a) Population and human health.
- b) Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC.
- c) Land, soil, water, air and climate.
- d) Material assets, cultural heritage and the landscape.
- e) The interaction between the factors referred to in points (a) to (d).

An EIAR scoping exercise based on the nature of the Proposed Development has been conducted to identify the key issues that may be considered likely to have a significant effect on the environment. The scoping exercise was based upon the available baseline information on the site and the feedback received during the pre-application consultation meetings held with Kildare County Council. The recommendations of consultees have further informed the scope of the assessments undertaken and the contents of the EIAR.

The following environmental topics have been identified for assessment in the context of the Proposed Development:

- Population & Human Health.
- Biodiversity.
- Lands, Soils & Geology.
- Hydrology & Hydrogeology.
- Air, Odour & Climate.
- Noise & Vibration.
- Landscape & Visual.
- Traffic & Transportation.

- Archaeology & Cultural Heritage.
- Material Assets.
- Interactions of the above.

1.7 Environmental Impact Assessment Report Methodology

This EIAR has been prepared in line with the Planning and Development Act, 2000 S.I. No. 30/2000, as amended, and associated Regulations having regard to the following guidelines.

- European Commission (EC) (2017) *Environmental Impact Assessment of Projects - Guidance on the preparation of the Environmental Impact Assessment Report* (Directive 2011/92/EU as amended by 2014/52/EU).
- EPA (2022) *Guidelines on the Information to be contained in Environmental Impact Assessment Reports*.
- EPA (2015) *Advice Notes on Current Practice (in the preparation on Environmental Impact Statements)*; and
- Department of Housing, Planning and Local Government (2018) *Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment*.

Further specific reference documents are cited within the environmental topic chapters of this EIAR, as appropriate.

1.7.1 Baseline Assessment

Annex IV(3) of the 'EIA Directive', as amended, requires 'a description of the relevant aspects of the current state of the environment, referred to as the baseline scenario, and an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge'.

The Baseline Assessment is an assessment of the current state of the environment and how this is likely to evolve without the proposed project but having regard to existing and approved projects and likely significant cumulative effects – in other words the 'do nothing' scenario.

Within each technical chapter, the standard recognised methodology used in establishing the baseline scenario is documented in detail to enable replicable monitoring in the future, so that the future assessment results can be appropriately compared.

1.7.2 Identification of Potential Receptors

A receptor is defined in the EPA Guidelines 2022 as "any element in the environment which is subject to impacts". The environmental impact will depend on the relationship between the source, the available pathway and the sensitivity of the receptor identified. Topic specific receptors have been identified in each technical chapter.

1.7.3 Identification of Likely Significant Impacts

Where appropriate, the evaluation of effects on the environment has been evaluated according to the criteria outlined in **Table 1.1** as referenced in the 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports' (EPA, 2022).

Each effect is considered in terms of its quality, significance, extent, duration and frequency, and where possible type. The use of standardised terminology for the classification of effects ensures that the EIAR employs a systematic approach to impact assessment, which is

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replicated across all environmental topics covered within the EIAR.

Table 1.1: Description of Effects (EPA, 2022)

Quality of Effects	Positive Effects A change which improves the quality of the environment (for example, by increasing species diversity, or improving the reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
	Neutral Effects No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/Adverse Effects A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem, or damaging health or property or by causing nuisance).
Describing the Significance of Effects	Imperceptible An effect capable of measurement but without significant consequences.
	Not Significant An effect which causes noticeable changes in the character of the environment but without significant consequences.
	Slight Effects An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	Moderate Effects An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
	Significant Effects An effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment.
	Very Significant An effect which, by its character, magnitude, duration or intensity, significantly alters most of the sensitive aspects of the environment.
	Profound Effects An effect which obliterates sensitive characteristics.
	Extent Describe the size of the area, the number of sites and the proportion of a population affected by an effect.
	Context Describe whether the extent, duration or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?)
Describing the Extent and Context of Effects	
Describing the Probability of Effects	Likely Effects The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
	Unlikely Effects The effects that can reasonably be expected will not occur because of the planned project, if all mitigation measures are properly implemented.
Describing Duration and Frequency of Effects	Momentary Effects Effects lasting from seconds to minutes.
	Brief Effects Effects lasting less than a day.
	Temporary Effects Effects lasting less than a year.
	Short-term Effects Effects lasting one to seven years.
	Medium-term Effects Effects lasting seven to fifteen years.
	Long-term Effects Effects lasting fifteen to sixty years.
	Permanent Effects

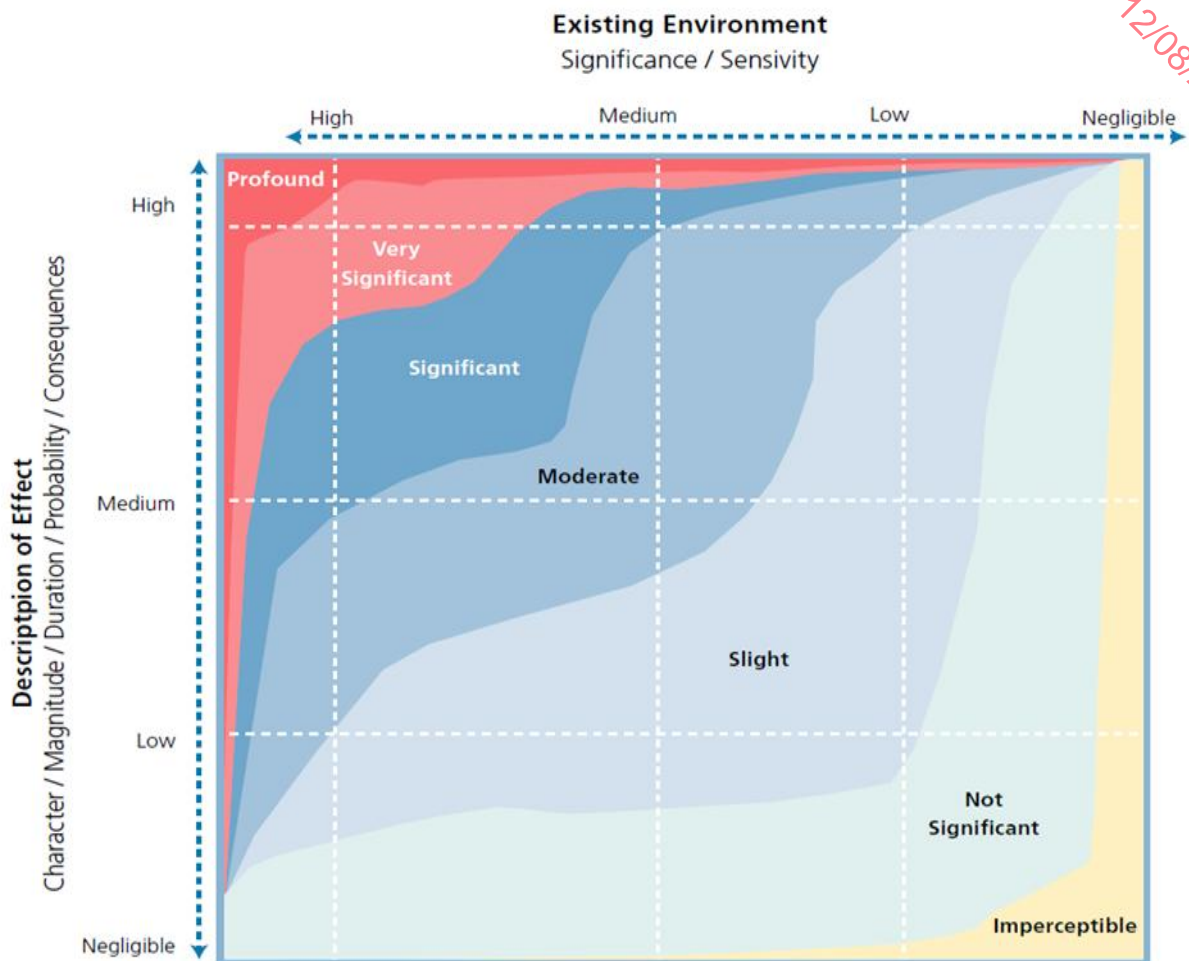
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Describing the Types of Effects	Effects lasting over sixty years.
	Reversible Effects Effects that can be undone, for example through remediation or restoration.
	Frequency of Effects Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually).
	Indirect Effects (a.k.a. Secondary or Off-Site Effects) Effects on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway.
	Cumulative Effects The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
	‘Do-nothing Effects’ The environment as it would be in the future should the subject project not be carried out.
	‘Worst-case’ Effects The effects arising from a project in the case where mitigation measures substantially fail.
	Indeterminable Effects When the full consequences of a change in the environment cannot be described.
	Irreversible Effects When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.
	Residual Effects The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
	Synergistic Effects Where the resultant effect is of greater significance than the sum of its constituents (e.g., combination of SO _x and NO _x to produce smog).

Figure 1.2 illustrates how comparing the character of the predicted effect to the sensitivity of the receiving environment can determine the significance of the effect.

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Figure 1.2: Determining Significance (Source: EPA, 2022)



1.7.4 Mitigation and Monitoring

Annex IV (7) of the EIA Directive, as amended, requires that the EIAR should include ‘a description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced, or offset, and should cover both the construction and operational phases.

Mitigation by Avoidance has been incorporated into the design of the Proposed Development, as described in **Chapter 3 – Consideration of Alternatives**. Additional mitigation by prevention and reduction, with planned monitoring measures that have been proposed for each environmental topic are set out in each technical chapter within this EIAR.

A summary schedule of all proposed mitigation and monitoring measures is included in **Chapter 16 – Schedule of Mitigation**.

1.7.5 Residual Impacts

The residual impacts are the final predicted or intended effects which occur after the proposed mitigation measures have been implemented. Residual impacts that remain once additional

mitigation has been implemented are discussed in each technical chapter within this EIAR.

1.7.6 Cumulative Effects

Cumulative effects take account of the addition of many minor or significant effects to create larger, more significant effects. As outlined in the EPA Guidelines 2022, while a single activity may itself result in a minor effect, it may, when combined with other impacts (minor or significant), result in a cumulative impact that is collectively significant. A single effect which may, on its own, have a significant effect, may also have a reduced and insignificant impact when combined with other effects. Cumulative effects are assessed and discussed within each technical chapter in this EIAR.

1.7.7 Interactions between Environmental Factors

Interactions between effects may arise from the reaction between effects of the Proposed Development on different aspects of the environment which may exacerbate the magnitude of those effects. Such interactions are assessed and are presented in **Chapter 15 - Interactions** of this EIAR.

1.8 EIAR Structure

The information to be provided by the applicant within the EIAR must, at least, address the matters detailed in Article 5(1)(a) to (f) of the 'EIA Directive', as amended, outlined below:

- a) A description of the project comprising information on the site, design, size and any other relevant features of the project.
- b) A description of the likely significant effects of the project on the environment.
- c) A description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment.
- d) A description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, considering the effects of the project on the environment.
- e) A non-technical summary of the information referred to in points (a) to (d).
- f) Any additional information specified in Annex IV of the Directive/Schedule 6 to the 2001 Regulations, as amended, relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.

The EIAR has been prepared to address the matters outlined above and structured in accordance with the following best practice guidelines:

- European Commission (EC) (2017) *Environmental Impact Assessment of Projects - Guidance on the preparation of the Environmental Impact Assessment Report* (Directive 2011/92/EU as amended by 2014/52/EU).
- EPA (2022) *Guidelines on the Information to be contained in Environmental Impact Assessment Reports*.
- EPA (2015) *Advice Notes on Current Practice (in the preparation on Environmental Impact Statements)*; and
- Department of Housing, Planning and Local Government (2018) *Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment*.

This EIAR is presented in four volumes as follows:

- Volume I: Non-Technical Summary.

- Volume II: Environmental Impact Assessment Report.
- Volume III: Appendices to the Environmental Impact Assessment Report.
- Volume IV: Drawings.

Volume II: Environmental Impact Assessment Report is presented as 16 chapters, as outlined in **Table 1.2** below.

Table 1.2: Chapter Structure

Chapter	Title	Author	Organisation
1.0	Introduction & Methodology Sets out the background to, and location of, the Proposed Development, as well as providing details on the EIA process.	Dominick Doherty	ORS Block A Marlinstown Office Park Mullingar Co. Westmeath N91 W5NN
2.0	Project Description Describes the context of the Proposed Development, the design, and physical nature of the development and its use, including operational processes.	Sarah Bergin Oisín Doherty	ORS
3.0	Consideration of Alternatives Describes the alternatives considered including site selection, design iterations and alternative technologies.	Sarah Bergin	ORS
4.0	Planning & Policy Context Summarises 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.	Luke Wymer Mark Fitzgibbon	John Spain Associates 39 Fitzwilliam Place Dublin 2 D02 ND61
5.0	Biodiversity Addresses the requirement to assess potentially significant effects on biodiversity, having particular attention to species and habitats protected under the EU Habitats Directive and the Birds Directive.	Larry Manning Neve McCann	ORS
6.0	Population & Human Health Addresses the requirement to assess potentially significant effects on population and human health.	Luke Wymer Mark Fitzgibbon Sarah Bergin	John Spain Associates ORS
7.0	Land, Soils and Geology Addresses the requirement to assess the type of land, soil, and geology in the area of the Proposed Development and identifies any potentially significant effects.	Jack Wilton	ORS
8.0	Hydrology & Hydrogeology	Bianca Severgnini	ORS

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	Addresses the requirement to assess potentially significant effects to surface and ground water quality.	Anna Quaid	
9.0	Air, Odour & Climate Addresses the requirement to assess potentially significant effects to air quality in the surrounding environment.	Andrew Evans Neil Kelly Christopher Carr	ORS Irwin Carr Consulting 7 Osborne Promenade Warrenpoint Newry BT34 3NQ
10.0	Noise & Vibration Addresses the requirement to assess potentially significant effects from noise and vibration emissions.	Gary Duffy David Courtney	Enfonic Century Business Park Unit 2A Dublin D11 T0HV
11.0	Landscape & Visual Addresses the requirement to assess potentially significant effects on landscape and visual characteristics.	Anthony Ryan Geraldine Hayes	Hayes Ryan Landscape Architects Killmead Athy Co. Kildare
12.0	Traffic & Transport Addresses the requirement to assess potentially significant effects on traffic and transport infrastructure.	Angeliki Kalatha John Igoe	ORS
13.0	Archaeology & Cultural Heritage Addresses the requirement to assess potentially significant effects on archaeological and cultural heritage.	Declan Moore	Moore Group 3 Gort na Rí Athenry Co. Galway
14.0	Material Assets Addresses the requirement to assess potentially significant effects on material assets i.e., existing utilities and infrastructure.	Dominick Doherty	ORS
15.0	Interactions Provides an assessment of the interaction between all the environmental aspects referred to in this EIAR.	Killian Smith	ORS
16.0	Summary of Mitigation Describes mitigation and monitoring measures in order to avoid, prevent, reduce, or if possible, offset any identified significant adverse effects on the environment.	Anna McQuaid	ORS

Each technical assessment chapter, i.e., **Chapters 5.0 to 14.0** adopts the following structure:

- Introduction.
- Consultation.
- Assessment Methodology & Significance Criteria.
- Description of the Receiving Environment.
- Likely Significant Effects.
- Mitigation Measures.
- Cumulative Effects.
- Residual Effects.
- Monitoring.

- Summary of Significant Effects.
- Statement of Significance.

A schedule of drawings included in **Volume IV: Drawings** is presented below.

Table 1.3: Schedule of Drawings

Name	Scale	Drawing number
SITE LOCATION MAP	1:2500	231239-ORS-ZZ-00-DR-AR-100
RECORD PLACE MAP	1:10560	231239-ORS-ZZ-00-DR-AR-101
EXISTING SITE SURVEY	1:500	231239-ORS-ZZ-00-DR-AR-102
PROPOSED SITE LAYOUT	1:500	231239-ORS-ZZ-00-DR-AR-200
PROPOSED STRUCTURES 01, 03, 04, 05 & 55	1:100	231239-ORS-ZZ-ZZ-DR-AR-210
PROPOSED STRUCTURES 06 & 07	1:100 & 1:200	231239-ORS-ZZ-ZZ-DR-AR-211
PROPOSED STRUCTURES 08, 09, 10 & 11	1:200	231239-ORS-ZZ-ZZ-DR-AR-212
PROPOSED STRUCTURES 12, 13, 14, 15, 16 & 17	1:200	231239-ORS-ZZ-ZZ-DR-AR-213
PROPOSED STRUCTURES 18, 19, 20, 21, 22 & 23	1:100 & 1:200	231239-ORS-ZZ-ZZ-DR-AR-214
PROPOSED STRUCTURES 24, 25 & 26	1:100	231239-ORS-ZZ-ZZ-DR-AR-215
PROPOSED STRUCTURE 27 & CONTINGUOUS ELEVATION	1:100 & 1:200	231239-ORS-ZZ-ZZ-DR-AR-216
PROPOSED CONTINGUOUS ELEVATIONS	1:200	231239-ORS-ZZ-ZZ-DR-AR-217
TOPOGRAPHICAL SURVEY SHEET 1	1:500	231239-ORS-ZZ-00-DR-TII-001
TOPOGRAPHICAL SURVEY SHEET 2	1:500	231239-ORS-ZZ-00-DR-TII-002
HGV SWEPT PATH ANALYSIS	1:250	231239-ORS-ZZ-00-DR-TII-003
TRAFFIC SIGNS AND ROAD MARKINGS LAYOUT	1:500	231239-ORS-ZZ-00-DR-TII-004
SIGHTLINES LAYOUT	1:500	231239-ORS-ZZ-00-DR-TII-005
PROPOSED DRAINAGE LAYOUT	1:500	231239-ORS-ZZ-00-DR-CE-400
PROPOSED SILAGE RECLAIM LAYOUT	1:500	231239-ORS-ZZ-00-DR-CE-401
PROPOSED WATERMAIN AND PUMPED WATER LAYOUT	1:500	231239-ORS-ZZ-00-DR-CE-402
CUT AND FILL ANALYSIS	1:500	231239-ORS-ZZ-00-DR-CE-490
TYPICAL MANHOLE DETAILS	1:20, 1:10	231239-ORS-ZZ-XX-DR-CE-420
RAINWATER TANK DETAIL	1:50	231239-ORS-ZZ-XX-DR-CE-421
LANDSCAPE PLAN	Scale 1:375 @ A0 / 1:528 @A1	25/C0/ORS/BKPL/001R ev B

1.9 Statement of Competency

Article 5(3)(a) of the EIA Directive, as amended, requires that “the developer/applicant shall ensure that the environmental impact assessment report is prepared by competent experts”

This EIAR has been prepared and managed by ORS on behalf of the applicant. The range of expertise required within the EIAR project team has been identified during the scoping exercise, considering the significance, complexity, and range of effects to be assessed.

The EIAR project team outlined below possesses an appropriate combination of experience, expertise, and knowledge to ensure that the information provided by the applicant for the purpose of its examination by the competent authority is complete and of a high standard.

1.9.1 ORS

Oisín Doherty – Associate Director, Environmental Lead

Oisín Doherty holds a BSc. (Hons.) in Geography with Environmental Science from Ulster University, 2009, and a MSc. in Environmental Management from Queens University, 2011. Oisín has 14 years’ experience in Anaerobic Digestion, Environmental Impact Assessment, Environmental Monitoring and Assessment, Environmental Licence Compliance and Waste Management.

Prior to joining ORS, Oisín spent 5 years as Environmental Manager and Plant Manager of two large-scale Biogas facilities operating under EPA and DAFM license conditions, gaining in-depth knowledge of Anaerobic Digestion, Biomethane and Biogenic CO₂ production, Organic Waste Management, Environmental Licence Compliance and ISO14001 Environmental Management Systems.

Oisín is a Full Member of the Institute of Environmental Sciences (MIEnvSc) and a Chartered Environmentalist (CEnv).

Larry Manning – Senior Ecologist

Larry Manning holds a B.Sc. (Hons) in Applied Freshwater and Marine Biology, GMIT (Now Atlantic Technical University), 2011. Larry is a member of the Irish Whale and Dolphin Group, Birdwatch Ireland, Irish Wildlife Trust, Bat Conservation Ireland and the Marine Institute.

Larry has 13 years’ experience in ecological assessment in terrestrial, freshwater and marine habitat. Larry’s specialisations also include Ornithology monitoring and surveys at sea using the ESAS methodology, and on land using various methods. Larry has extensive experience in the delivery of Ecological Impact Assessment (EclA), Appropriate Assessment screening and Natura Impact Assessment.

Neve McCann- Ecology Consultant

Neve holds an honors degree in B(Sc) Zoology and a M(Sc) in Applied Marine Conservation, equipping her with a robust understanding of ecology, ecological assessments, and environmental conservation. She has advanced skills in data analysis and GIS tools, excelling in habitat mapping, biodiversity monitoring, and environmental assessments.

Neve has played a key role in seafloor integrity and food webs assessments for Ireland’s most recent Marine Strategy Framework Directive cycle, contributing to the most recent knowledge on the health of Irish waters. In her current role as an ecologist, Neve collaborates with

multidisciplinary teams to deliver high-quality environmental solutions, ensuring compliance with current environmental legislation and standards.

Neil Kelly - Senior Environmental Consultant

Neil Kelly holds a B.A. (Hons) in Environmental Science and Health from Dublin City University, 2015.

Neil has 10 years' experience in the assessment of air quality a for a wide range of projects. Neil is an MCERTS Air and Emission certified Team Leader. Neil specialises in the fields of air dispersion modelling, stack emissions, air quality monitoring and Industrial Emissions Licence requirements.

Dominick Doherty - Senior Environmental Consultant

Dominick Doherty holds a BSc. (Hons.) in Geography with Environmental Science from Ulster University, 2008, and an MSc. Sustainable Energy and Green Technology from University College Dublin, 2011. Dominick has 12 years' experience in environmental science and renewable technologies.

Alex Nascimento - Senior Environmental Consultant

Alex Nascimento holds a BEng. (Hons.) in Environmental Engineering from Federal University of Mato Grosso do Sul (Brazil), 2011. Alex has 13 years' experience as an environmental consultant.

Sarah Bergin- Senior Environmental Consultant

Sarah holds a BSc in Chemistry (2009) and PhD in engineering photonics (2015). Sarah has over 7 years' experience working in consultancy, providing chemical and hazard management to both industry and emergency services, designing and implementing large scale experimental projects around health and safety consequences in industry. Sarah has direct experience of working on an operational biogas plant, supporting across all functions of compliance including, explosive atmosphere zoning, pressure systems, digestate management and environmental testing.

Andrew Evans- Environmental Consultant

Andrew Evans holds a M.Sc. in Sustainable Energy and Green Technology from UCD, 2019. Andrew has experience in air monitoring, Geographic Information Systems and the renewable energy sector. Andrew specialises in environmental assessments and environmental compliance.

Bianca Severgnini- Environmental Consultant

Bianca holds a B.Eng. (Hons) in Environmental Engineer with the University of Caxias do Sul, Brazil, 2020. Bianca has 3 years' experience in hydrogeology, sustainable resource management, and environmental impact assessments. Her skill set includes Geographic Information Systems (GIS), data modelling, and technical reporting.

Anna Quaid - Environmental Consultant

Anna Quaid holds a B.Sc. (Hons) in Environmental Science from Munster Technological University, 2021, and a MSc. in Applied Environmental Science from University College Dublin, 2022.

Anna has 4 years' experience in the assessment of hydrogeology for a wide range of projects. Anna has completed training in site suitability assessments for domestic on-site wastewater treatment (QQI). Anna specialises in the fields of hydrogeological analysis, pollutant fate modelling and contaminated land.

Killian Smith - Environmental Consultant

Killian Smith holds a B.Agr.Sc in Agri-Environmental Science from UCD, 2017. With a strong foundation in environmental science, Killian specialises in environmental assessments, auditing and compliance related to both environmental and agricultural sectors. Killian possesses experience in data analysis and interpretation with a focus on environmental impact.

Angeliki Kalatha – Senior Transport Engineer

Angeliki holds an MSc in Civil Engineering from Aristotle University of Thessaloniki (A.U.Th.), 2014, and an MSc in Engineering Project Management from A.U.Th., 2016. She is a member of Engineers Ireland and the Technical Chamber of Greece.

Angeliki is a Senior Transportation Engineer with ORS, bringing eight years of professional experience in transportation and infrastructure development. She has contributed to various transportation projects, including traffic analysis, Traffic and Transport Assessments, and initiatives promoting active travel and sustainable mobility. She is skilled in using TRL Junctions 11 and TRANSYT software for modelling and analysing roundabouts, priority junctions and signalised junctions.

John Igoe -Traffic and Transport Engineer

John Igoe holds a BEng (Hons) and MEng in Civil Engineering from the University of Galway (2019–2024). With a foundation in civil engineering, John specialises in infrastructure reports, auditing, and design.

Rory Moynihan - Infrastructure Engineer

Rory holds an MEng in Civil and Structural Engineering from the University of Leeds, graduating in 2015, and is a Chartered Engineer with Engineers Ireland. Rory has built upon his Civil Engineering fundamentals with experience across a broad range of projects ranging from high density housing developments to industrial plant infrastructure design. Rory has experience in surface water infrastructure, specialising in SuDS feature design, foul and potable water infrastructure design and pavement design across a broad range of applications.

1.9.2 Enfonic

Gary Duffy - Principal Consultant

Gary Duffy, BEng, MIOA is the managing director of Enfonic with over 25 years' experience as an acoustic engineer and consultant. He has extensive knowledge in the field of noise measurement, prediction, and impact assessment. He co-wrote the EPA's original guidance note on noise and represented the IOA on the technical advisory committee of the Department of the Environment's revision of Part E (Sound Insulation) of the Building Regulations. He is a founder member of the Irish branch of the Institute of Acoustics and a sitting member of the current committee.

David Courtney - Consultant & Technical Manager

David Courtney, BEng, MIOA (Consultant & Technical Manager) studied Mechatronic Engineering in DCU and qualified with IOA Diploma in Acoustics and Noise Control (2019) & Certificate in Environmental Noise Measurements (2017). He undertakes all types of noise and vibration surveys in relation to wind turbines planning and compliance, IPPC & IE compliance, BS4142, BS5228 and BS8233 assessments, traffic noise, construction, building acoustics and occupational assessments.

1.9.3 Hayes Ryan Landscape Architects

Assessment for this LVIA is being conducted by Geraldine Hayes and Anthony Ryan of Hayes Ryan Landscape Architects. Hayes Ryan are experienced landscape architects and landscape consultants with a wide array of experience in landscape design, management and landscape and visual impact assessment on public and private projects in both urban and rural environments. The partners competency ranges from standalone nationwide landscape architect, led projects to collaboration as part of multidisciplinary teams over a period of 25 years.

Geraldine Hayes - Partner - Landscape Architect

Geraldine Hayes holds a B.Agr.Sc. (Honours) in Landscape and Horticulture, and a MSc. in Landscape Architecture. Geraldine has 25 years' experience in Landscape Architecture, Horticulture, Irish cultural landscapes, LVIA studies, Community Development, Historic Landscapes, Landscape Design, Landscape Ecology and Planning.

Anthony Ryan Partner - Landscape Architect

Anthony Ryan also holds a B.Agr.Sc. (Honours) in Landscape and Horticulture, and a MSc. in Landscape Architecture. Anthony has 25 years' experience in Landscape Architecture, Horticulture, Detailed Site Design, Large Scale Residential Developments, Theme Park Design, Healthcare and Hospitality Projects.

1.9.4 Moore Group

Declan Moore - Managing Director

Declan Moore studied Archaeology and English at University College Galway, graduating in 1991. He obtained a Certificate in Management Studies in 1994 and became a Licence eligible archaeologist in 1999. Since graduating he has gained over 30 years' experience as a field archaeologist and consultant. Declan is a Member of the Institute of Archaeologists of Ireland and the European Association of Archaeologists. As Managing Director of Moore Group Declan has managed large-scale excavations as well as the cultural heritage elements of numerous urban and rural housing and industrial developments. He has project managed the cultural heritage sections of EIAR's for over 300km of powerlines throughout Ireland, including the 400kV North South Interconnector, the Grid West scheme, the North Kerry Transmission Line Project the Eirgrid North Connacht project, the Cloon – Lanesboro scheme and the Great Island to Kilkenny upgrade scheme.

Most recently he has overseen the cultural heritage assessments of data centres as well as housing developments in Galway, Dublin and Mayo and water schemes and gas pipeline schemes nationwide. He has also recently completed project management of the N52 Grange to Clontail Scheme Route Assessment report and is currently overseeing archaeological work on the N5 Westport to Turlough road as well as consultation for the proposed Kings Island Flood Relief Scheme in Limerick City.

1.9.5 Irwin Carr Consulting

Shane Carr - Director

Shane has over 25 years' experience working in both the Public and Private sectors, with expertise in the areas of environmental noise, modelling as well as staff and project management. Shane has been working as a consultant since 2007, joining Marshall Day in 2010 and subsequently becoming a Director in Irwin Carr in 2016. In this time, he has carried out noise modelling projects throughout Ireland and the UK and is currently the SoundPLAN distributor for Irwin Carr in Ireland.

Shane has a broad range of experience in all aspects of noise including environmental noise assessment and control. He has presented expert evidence on several occasions for a range of planning issues and environmental noise assessments.

Christopher Carr – Consultant

Christopher graduated from the University of Ulster at Jordanstown with a BSc (Hons) degree in Environmental Health and has recently completed a post graduate Diploma in Acoustics and Noise Control at Trinity College Dublin.

Christy has carried out an extensive number of noise impact assessments for renewable energy developments. This process has involved the setting up of monitoring equipment for background noise surveys, liaising with local authorities, acoustic modelling using the SoundPLAN software package, as well as assessment in line with both ETSU-R-97 and the Institute of Acoustics Good Practice Guidance.

1.10 Appropriate Assessment and Natura Impact Statement

Kildare County Council (as the Competent Authority) are required to assess in view of best scientific knowledge, if the Proposed Development, individually or in combination with another plan or project is likely to have a significant effect on the European (or Natura 2000) site. To facilitate this requirement, an AA Screening Report and Natura Impact Statement (Document Ref: **231239-ORS-XX-XX-RP-EN-13d-004**) has been submitted to the Council for assessment.

1.11 Consultation and Engagement

In accordance with the best practice guidelines, this EIAR included stakeholder consultation throughout the project design, EIA screening and EIAR scoping stages. A summary of consultation and engagement with relevant local stakeholders, organisations and statutory bodies on the Proposed Development is presented in **Table 1.4** below.

Table 1.4: Consultation and Engagement

Date	Consultation Group	Topic	Consultation Team
January 2024 and ongoing	Local Agricultural Operators	Consultation and discussion around Feedstock supply	CycleØ
January 2024 and ongoing	Regional Industries	Consultation and discussion around Feedstock supply	CycleØ
February - May 2025	Local Stakeholders	Online Local Stakeholder Consultation and presentation of proposals	CycleØ
22/11/2023	Kildare County Council	Pre-planning meeting (Ref: PP5728)	CycleØ, ORS, John Spain Associates

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08/10/2023	Gas Networks Ireland (GNI)	Consultation on Gas Grid Connection Strategy	CycleØ
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CycleØ made efforts to engage with the local stakeholders regarding the proposed development at Ballyvass, Co. Kildare through the organisation of two in-person public information events, scheduled for 19th February and 5th March 2025. These events were planned to take place in local hotels and were designed to be informal drop-in sessions, open over a five-hour period in the afternoon and early evening.

The events were intended to provide the public with:

- An overview of the proposed development.
- Direct access to the CycleØ project team and technical experts.
- A presentation on the planned development.
- A demonstration of the proposed odour abatement technology.

Despite careful planning, both venues ultimately cancelled the events at short notice, citing threats of disruption made directly to the venues.

Considering these challenges, and in a continued effort to engage openly with the community, CycleØ offered individual conversations to any interested parties. These discussions were conducted via phone or online (Microsoft Teams) and allowed stakeholders to ask questions, raise concerns, and receive detailed information about the project on a one-to-one basis.

1.12 Limitations encountered during preparation of EIAR.

There were no limitations encountered in compiling the information within the EIAR.

1.13 Viewing of EIAR

The EIAR will be available to view online via the Department of Planning, Housing and Local Government's EIA Portal, which will provide a link to the planning authority's website on which the application details are contained.

The EIAR and all associated planning documentation will also be available for viewing at the offices of Kildare County Council. The EIAR may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy during normal office hours at the following address:

- Kildare County Council, Planning Department, Head Office Áras Chill Dara, Devoy Park, Naas, Co Kildare W91 X77F.
- Kildare County Council Planning Department Opening Hours: Monday to Friday 09.30 - Last Appointment 14.45.