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2. REMEDIAL EIA METHODOLOGY

2.1 INTRODUCTION

This chapter presents details on the requirements of remedial Environmental Impact Assessment (remedial EIA) for the Project as well as the temporal scope applied to the remedial EIA process. An overview of the methodology used for the identification and evaluation of impacts on the environment is also presented as well as the approach to identifying mitigation, control and monitoring measures. The approach to residual effects, cumulative effects, transboundary effects and the do-nothing scenario are also described.

This Chapter further describes the approach to EIA and identifies the competent experts that have contributed to the preparation of this Remedial Environmental Impact Assessment Report (remedial EIAR).

2.2 REQUIREMENT FOR ENVIRONMENTAL IMPACT ASSESSMENT

2.2.1 EIA Directive Context

The primary objective of the Environmental Impact Assessment Directive (*codified Directive 2011/92/EU*) as amended by *Directive 2014/52/EU* (together, referred to as the “EIA Directive”), is to ensure a high level of protection of the environment and human health. This is achieved through establishing the minimum requirements for EIA, on the assessment of the effects of certain public and private projects on the environment.

An EIA must be conducted before granting development consent for certain public and private projects expected to have significant environmental effects.

Article 1 (2) (g) of the EIA Directive 2014/52/EU provides a definition of EIA, stating that EIA means a process consisting of:

“environmental impact assessment” means a process consisting of:

- i) *the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);*
- ii) *the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7;*
- iii) *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;*
- iv) *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*
- v) *the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a’;*

The EIA Directive is transposed into Irish law through a number of statutory measures, primarily by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018. These regulations amend the Planning and Development Acts 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) (hereafter referred to as the 'Planning Regulations').

The EIA Directive (Council Directive 85/337/EEC) came into force on 27 June 1985 and was required to be transposed into Irish legislation on 3 July 1988. Consequently, there was no legal requirement to carry out an EIA or to undertake EIA Screening for any project prior to the latest date for transposition of the EIA Directive (i.e., 3 July 1988).

Figure 2-1 illustrates the EIA process described in the EPA's *Guidelines on the information to be contained in Environmental Impact Assessment Reports* published in May 2022.

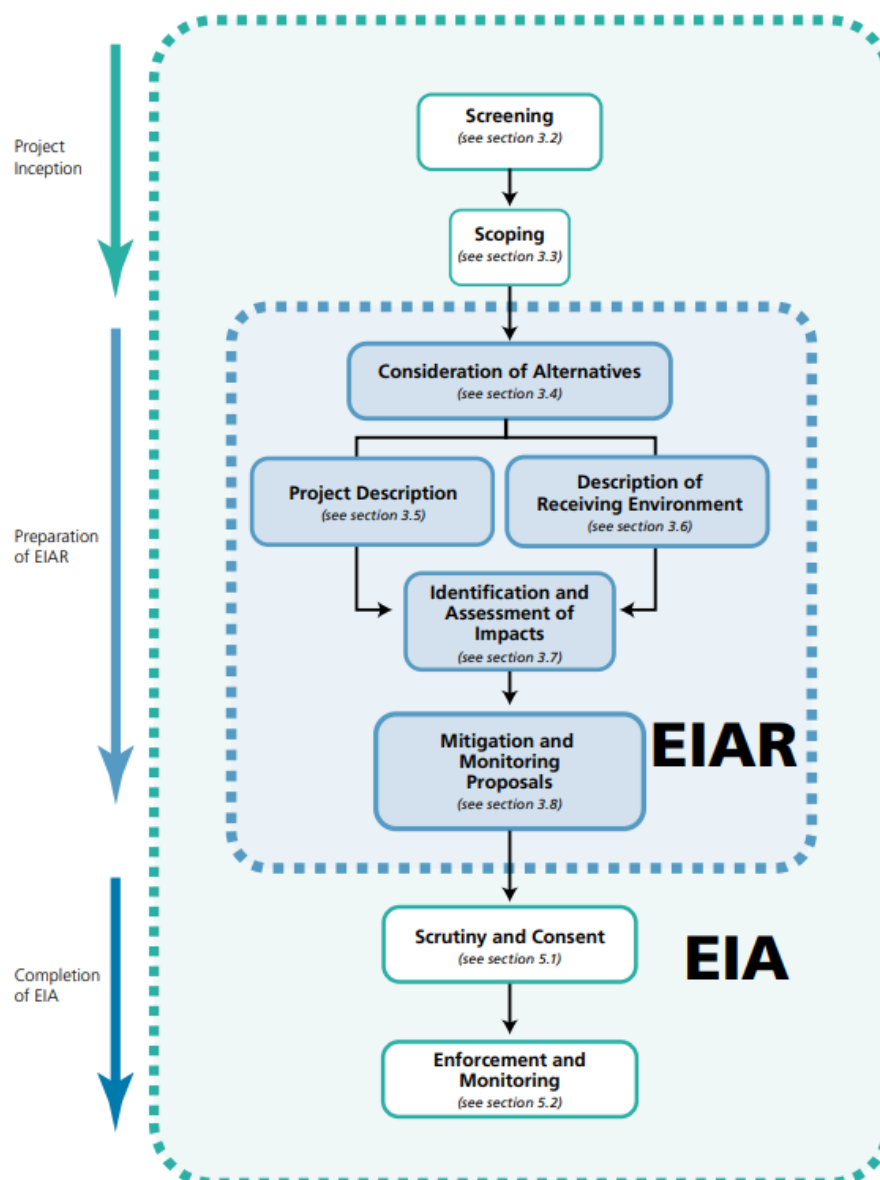


Figure 2-1: EIA Process (Source: Figure 2.1 in the EPA 2022 Guidelines)

2.2.2 EIA and Planning Legislation in Ireland

In determining whether an EIA is required, the EIA Directive and its transposing legislation in Ireland distinguish between projects that automatically require EIA and those for which EIA may be required, depending on the location and project characteristics. These projects are listed in Schedule 5, Part 1 and Part 2 of the Planning and Regulations (2001) (as amended).

Schedule 5, Part 1 Projects, are considered likely to have significant effects on the environment and therefore have a mandatory requirement for EIA.

Schedule 5, Part 2 Projects are those which the relevant planning authority must determine whether EIA is necessary. This determination is made through an EIA Screening, which assesses potential environmental effects on the basis of thresholds, criteria or a case-by-case examination.

With respect to the peat extraction activities and ancillary activities undertaken at the Application Site to which this remedial EIAR relates, no relevant class of activity is listed under Schedule 5, Part 1 of the Planning Regulations. Accordingly, EIA is not mandatory under Part 1 for the activities concerned.

The activity most accurately corresponding to the peat extraction works for which Substitute Consent is sought is listed in Schedule 5, Part 2 of the Planning Regulations:

“Class 2(a) – Peat extraction which would involve a new or extended areas of 30 hectares or more”.

This corresponds to Annex II, Class 2(a) of the original EIA Directive (Council Directive 85/337/EEC), which also captures peat extraction activities not included in Annex I.

Although this application does not involve any new or extended areas of peat extraction and is instead intended to regularise existing peat extraction activities and associated ancillary works, Bord na Móna is advised that a broad and purposive interpretation of the EIA Directive must be applied. This is consistent with evolving case law relating to the environmental assessment of peat extraction activities, including:

- Bulrush Horticulture Ltd v. an Bord Pleanála; Westland Horticulture Ltd v an Bord Pleanála [2018] IEHC 58
- Friends of the Irish Environment Ltd v. Minister for Communications, Climate Action and Environment [2019] IEHC 685
- North Westmeath Turbine Action Group v. An Bord Pleanála (High Court, 2019/297 JR)

Taking these judgments into account and having regard to the nature and scale of the activities at the Application Site, Bord na Móna considers Class 2(a) to be the most appropriate category for the purposes of this application for Substitute Consent. Accordingly, a remedial EIA has been undertaken as a precautionary measure.

This remedial EIAR has therefore been prepared to support the application for Substitute Consent for peat extraction and ancillary activities at the Application Site.

2.3 EIA GUIDANCE

Several EIA principals, regulations and guidance documents were examined and applied in the preparation of this remedial EIAR. These include:

- Environmental Protection Agency (EPA), *Guidelines on the information to be contained in Environmental Impact Assessment Reports* (May 2022);
- EPA, *Draft Advice Notes on Preparing Environmental Impact Statements* (September 2015);
- EPA, *Advice Notes on Current Practice in preparation of Environmental Impact Statements* (September 2003);
- Department of Housing, Planning and Local Government (DoHPLG), *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment* (2018);
- European Commission (EC), *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), (2017);
- European Commission (EC), *Environmental Impact Assessment of Projects Guidance on Scoping* (Directive 2011/92/EU as amended by 2014/52/EU) (2017);
- European Commission (EC), *Interpretation of Definitions of Project Categories of Annex I and II of the EIA Directive* (2024); and,
- European Commission, *Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions*, (1999).

In addition to the above general guidance and principles, further sector-specific guidance has been followed in the assessment of individual environmental factors. These documents are referenced and described within the Methodology sections of the relevant remedial EIAR Chapters.

2.4 SCOPING AND CONSULTATION

Scoping is a process of determining the information to be included in an EIAR/remedial EIAR and identifying the methods to be applied in gathering and assessing that information. Its purpose is to establish a clear framework to guide the approach of the individual specialists undertaking the assessments, ensuring that all environmental topics with the potential for significant environmental effects are appropriately considered. Scoping also provides the basis for structured consultation and outlines the intended organisation and content of the final Remedial EIAR.

Scoping for the Project at the Application Site was undertaken in accordance with the relevant EIA guidance documents outlined in Section 2.3. A scoping letter, prepared by TOBIN, setting out details of the Application Site and the Project, was issued to the relevant consultees in June 2026.

TOBIN sought comments from the prescribed bodies and other relevant consultees in relation to the Remedial EIAR process, and the recommendations received have informed both the preparation and the content of this remedial EIAR.

The EIA scoping correspondence was issued to statutory and non-statutory bodies by email, in accordance with Article 28 of the Planning and Development Regulations 2001 (as amended). Non-statutory consultees were selected based on recommendations from the specialist authors and findings from desktop studies undertaken for the Application Site.

Consultation letters were issued in June 2026 to the bodies listed in Table 2-1 below, inviting comments and recommendations for consideration in the remedial EIAR and the associated application for Substitute Consent. Table 2-1 summarises the feedback received from each round of consultation and explains how this feedback has been addressed within the remedial EIAR. Copies of the consultation letters and responses received are included in Appendix 2.1. In some cases, no response had been received at the time of preparing this Remedial EIAR.

2.4.1 Community Consultation

In 2023, a consultation letter was distributed to residents within a 1.5 km radius to the Application Site. The community consultation letter outlined the purpose of the Substitute Consent application, which seeks to regularise the planning status of historic peat extraction activities and all ancillary works carried out at the Application Site. A copy of the community consultation letter is included in Appendix 2.2.

Table 2-1: List of Consultees and Record of Consultations the Substitute Consent Application

Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
An Chomhairle Ealaíon (The Arts Council)	9/06/2026	N/A	No response received.
An Coimisiún Pleanála	10/06/2026	18/6/2026	ACP had no comment on the Project
An Taisce	9/06/2026	N/A	No response received.
Bat Conservation Ireland	9/06/2026	N/A	No response received.
Birdwatch Ireland	9/06/2026	N/A	No response received.
Butterfly Conservation Ireland	9/06/2026	N/A	No response received.
Coillte	9/06/2026	N/A	No response received.
Commission for Regulation of Utilities	9/06/2026	N/A	No response received.
Community Wetlands Forum c/o Irish Rurallink	9/06/2026	N/A	No response received.
Coras Iompair Éireann (CIE)	10/06/2026	N/A	No response received.
Department of Agriculture, Food and Marine	10/06/2026	N/A	No response received.



Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
Department of Climate, Energy and the Environment (DCEE)	10/06/2026	18/06/2026	In a response email, the department recommended using various data sets when conducting the EIAR for the Substitute Consent. The consultation response also requested that Geological Survey Ireland received a copy of reports detailing any site investigations carried out at the Application Site. The response did not include specific information relating to the Substitute Consent application.
Department of Defence	10/06/2026	N/A	No response received.
Department of Enterprise, Tourism and Employment	10/06/2026	N/A	No response received.
Department of Housing, Local Government and Heritage	10/06/2026	N/A	No response received.
Department of Rural and Community Development and the Gaeltacht	10/06/2026	N/A	No response received.
Department of Transport	10/06/2026	N/A	No response received.
Eastern and Midland Regional Assembly	10/06/2026	N/A	No response received.
Eastern River Basin District	10/06/2026	N/A	No response received.
EirGrid	10/06/2026	N/A	No response received.



Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
Environmental Protection Agency	10/06/2026	N/A	No response received.
Fáilte Ireland	10/06/2026	N/A	No response received.
Geological Survey of Ireland	10/06/2026	08/06/2026	Geological Survey Ireland issued a letter in response to the EIA Scoping request, confirming receipt of the EIA Scoping report. GSI recommended using GSI various data sets when conducting EIAR. The response did not include specific information relating to the Substitute Consent application.
Health & Safety Authority	11/06/2026	16/06/2026	In an email response dated 16/06/2026, the HAS stated that the Project is outside the scope of the COMAH Regulations.
Health Service Executive	11/06/2026	N/A	No response received.
Inland Fisheries Ireland	11/06/2026	13/06/2026	In an email dated 13/06/2026, Inland Fisheries Ireland (IFI) asked TOBIN to consider the EU Water Framework Directive (WFD) (2000/60/EC) and Article 5 of the 2009 Surface Water Regulations. The response also includes consideration of article 28(2) of the Surface Water Regulations which states that a surface water body whose status is determined to be less than good shall be restored to at least good status not later than the end of 2015 and any water body of good status should remain at least this status. The response states that the Yellow River at this site has poor status. It contains stocks of fish such as Atlantic Salmon, Brown Trout, Eel and Lamprey. A copy of Guidelines on Protection of



Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
			Fishing During Construction works in and adjacent to waters (2016) was also provided.
Inland Waterways Association of Ireland	11/06/2026	N/A	No response received.
Irish Peatlands Conservation Council	11/06/2026	N/A	No response received.
Irish Raptor Study Group	10/06/2026	N/A	No response received.
Irish Red Grouse Association	11/06/2026	N/A	No response received.
Irish Wildlife Trust	11/06/2026	N/A	No response received.
Meath County Council Heritage Office (MCCHO)	11/06/2026	13/07/2026	In an email response dated 13/07/2026 the MCCHO suggested that it was appropriate for the EIAR to also include a Decommissioning Plan to outline: • Removal of Infrastructure: Plans for the removal, decontamination, or repurposing of ancillary infrastructure (e.g., railway lines, silt ponds, site workshops, and machinery). • Pollution Control: Measures to manage runoff and protect downstream water quality during and immediately after the decommissioning process. • Site Rehabilitation Measures: Details on how the bog will be restored or re-wetted (e.g., blocking drains, raising the water table) to promote the growth of peat-forming vegetation and reduce carbon emissions.

Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
			- Long-Term Monitoring: A framework for long-term ecological and hydrological monitoring, including greenhouse gas flux, to ensure the site stabilizes as a functioning wetland or carbon sink. - Safety and Public Access: Outline areas that may be retained as undisturbed ecological refugia and other areas managed for public access that ensures safe access and egress.
Meath County Council Environment Department	11/06/2026	N/A	No response received.
Meath County Council Planning Department	10/06/2026	N/A	No response received.
Meath County Council Roads and Travel	11/06/2026	N/A	No response received.
Met Éireann	11/06/2026	N/A	No response received.
National Monuments Service	11/06/2026	N/A	No response received.
National Parks and Wildlife Services	11/06/2026	N/A	No response received.
National Transport Authority	11/06/2026	N/A	No response received.
Natural Capital Ireland	11/06/2026	N/A	No response received.



Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
Offaly County Council - Roads and Transport	11/06/2026	N/A	No response received.
Offaly County Council Environment	11/06/2026	N/A	No response received.
Offaly County Council Heritage Office	11/06/2026	N/A	No response received.
Offaly County Council Planning Department	11/06/2026	N/A	No response received.
Office of Public Works	11/06/2026	N/A	No response received.
Sports Ireland	11/06/2026	N/A	No response received.
Sustainable Energy Authority of Ireland	11/06/2026	N/A	No response received.
Tailte Éireann (Ordnance Survey Ireland)	11/06/2026	N/A	No response received.
The Heritage Council	11/06/2026	N/A	No response received.
Transport Infrastructure Ireland	11/06/2026	13/07/2026	TII noted the site's proximity to the M6 motorway and provided general guidance on the scope of the rEIAR. TII recommended that potential impacts on the national road network be assessed, including traffic, transport, road safety, noise, cumulative effects,



Consultee Name	Date Consultation Letter Issued	Date Consultation Response Received (if any)	Summary of Response Received
			haul routes and any proposed road crossings. The rEIAR should have regard to the Spatial Planning and National Roads Guidelines for Planning Authorities (2012), relevant TII Publications and environmental assessment guidance.
Uisce Éireann	11/06/2026	N/A	No response received.
Waterways Ireland	11/06/2026	N/A	No response received.
Westmeath County Council Environmental Department	11/06/2026	N/A	No response received.

2.4.2 Pre-Planning Consultation

A pre-application consultation request was submitted to An Coimisiún Pleanála in May 2026 and a case reference 324392-26 was provided.

Members of the TOBIN team and the Applicant met with representatives from An Coimisiún Pleanála (ACP) on the 2 September 2026 via an online MS Teams meeting. Those in attendance were:

- Orla Fitzpatrick (TOBIN)
- Bertha Kasonde (TOBIN)
- Louise Byrne (TOBIN)
- Saoirse Burke (TOBIN)
- Emma Cross (BnM)
- James Whatton (BnM)
- Daniel Fitzpatrick (BnM)

The Team gave an overview of the Substitute Consent application. Matters discussed included:

- The Applicant;
- Project Team;
- Application Site;
- Background/rationale;
- Application History and Current Approach;
- Approach to remedial EIAR and remedial NIS;
- Description of Nature and Scale of the Project;
- Content and structure of remedial EIAR;
- Scoping;
- Public Consultation;
- Application pack and items requiring clarification;
- AOB.

2.5 TEMPORAL SCOPE

2.5.1 Timeline Overview

Bord na Móna commenced activities at the Application Site in 1950, when clearance and drainage works to facilitate peat extraction began. Peat extraction was carried out from 1958 until June 2020.

Bord na Móna's Integrated Pollution Control (IPC) Licence for the Derrygreenagh Bog Group (EPA Ref. P0501-01) was granted to Bord na Móna Energy Limited in April 2000 and regulates Bord na Móna's activities across the entire bog group, which includes the Application Site (as shown in Chapter 1 Figure 1-1).

Section 177E of the Planning and Development Act 2000, as amended, permits an application to be made for Substitute Consent in respect of development which has been carried out where an EIA, Screening for EIA and/or Appropriate Assessment (AA) was or is required.

Neither the EIA Directive (Directive 2011/92/EU and codified by Directive 2014/52/EU) nor the Habitats Directive (Directive 92/43/EC) has retrospective effect; neither Directive imposes



legal requirements to have carried out prior assessments of projects which had already commenced or been completed. There was, therefore, no legal requirement for EIA, screening for EIA or AA in respect of any project prior to the latest dates for transposition of the Directives. In the case of the EIA Directive, the latest date for transposition was 3 July 1988. In the case of the Habitats Directive, the latest date for transposition was 10 June 1994.

Accordingly, this application for Substitute Consent assesses the development which took place after the relevant transposition dates. The baseline against which the environmental effects of the development required to be assessed has, therefore, been identified as being the position as of July 1988 (being the earlier date of the transposition dates of the relevant Directives).

The temporal scope of this remedial EIAR is dealt with in the following manner where possible:

- **Peat Extraction Phase:** peat extraction activities and all ancillary works at the Application Site from July 1988 to the cessation of peat extraction in June 2020 (July 1988 – June 2020). The Peat Extraction Phase is described in detail in Section 4.7 of Chapter 4.
- **Current Phase:** the management of the Application Site since June 2020 to present day). The Current Phase is described in detail in Section 4.8 of Chapter 4.
- **Remedial Phase:** the activities intended to be carried out at the Application Site into the future. The Remedial Phase is described in detail in Section 4.9 of Chapter 4.

The remedial EIAR will be based on publicly available information and the Bord na Móna data. Specific data sources used to inform the assessment are referred to in each technical chapter of this remedial EIAR.

2.5.2 Historical Context Pre-July 1988

As drainage works to facilitate peat extraction commenced in 1950, and peat extraction activities at the Application Site began in 1958, a description of the Application Site, the historic peat extraction operations, and ancillary works up to July 1988 is provided in Section 4.5 of Chapter 4.

Hard-copy records from Bord na Móna, along with other available archival resources, have been collated where accessible. Digital records relating to peat extraction volumes were not compiled until the 1990s. Additional information has been gathered, where possible, through personal communications with former and current Bord na Móna (BnM) employees who worked at the Application Site.

As outlined in Section 1.9 of Chapter 1, while every effort has been made to source historical baseline environmental data relevant to the Substitute Consent process, the preparation of this Remedial EIAR has been constrained by the availability, completeness, accuracy, age and accessibility of historic datasets.

2.6 REMEDIAL EIA METHODOLOGY

Section 177F (1) of the Planning Acts state that a remedial EIAR shall contain the following:

“(a) a statement of the significant effects, if any, on the environment, which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;

(b) details of - (i) any appropriate remedial measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy any significant adverse effects on the environment; (ii) the period of time within which any proposed remedial measures shall be carried out by or on behalf of the applicant.”

There are no specific guidelines available for the information to be contained within a remedial EIAR. In March 2026, ACP published guidelines on Information to be submitted with Substitute Consent and Section 37L Applications under the Planning and Development Act 2000 and the Planning and Development Regulations 2001 (as amended)¹. The guidance document is intended to assist applicant in the preparation of documents, and includes a checklist for validation

The EPA Guidelines (May 2022) listed in Section 2.3 have been used in this regard. As per these Guidelines, the main purpose of an EIAR is *‘to identify, describe and present an assessment of the likely significant effects of a project on the environment’*. The description of the likely significant effects on the environmental factors will cover the direct, indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project.

Annex III Point 3 of the EIA Directive state that the likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:

- *‘The magnitude and spatial extent of the impact (for example to geographical area and size of the population likely to be affected);*
- *The nature of the impact;*
- *The transboundary nature of the impact;*
- *The intensity and complexity of the impact;*
- *The probability of the impact;*
- *The expected onset, duration, frequency, and reversibility of the impact;*
- *The cumulation of the impact with the impact of other existing and/or approved projects; and*
- *The possibility of effectively reducing the impact.*

The classification and description of effects in this remedial EIAR follows the terms provided in Table 3.4 of the EPA (2022) Guidelines and are replicated in Table 2-2 below for reference. As per the EPA (2022) Guidelines, the terms listed in Table 2-2 can be used to provide a consistent description of specific effects, but all categories of terms do not need to be used for every effect.

The use of standardised terms for the classification of effects ensures that the remedial EIAR employs a systematic approach, which can be replicated across all disciplines covered in the remedial EIAR. The consistent application of terminology throughout the Remedial EIAR facilitates the assessment of the project on the receiving environment.

¹ [https://www.pleanala.ie/getattachment/57076a32-6bd2-4c34-9efd-c4adf1135d54/Guidelines-on-Information-to-be-submitted-with-Substitute-Consent-and-Section-37L-applications-\(1\).pdf?lang=en-IE](https://www.pleanala.ie/getattachment/57076a32-6bd2-4c34-9efd-c4adf1135d54/Guidelines-on-Information-to-be-submitted-with-Substitute-Consent-and-Section-37L-applications-(1).pdf?lang=en-IE) (Accessed on 9 September 2026)



Table 2-2: Description of Effects (Adopted from EPA Guidelines, May 2022)

Quality of Effects It is important to inform the non-specialist reader whether an effect is positive, negative or neutral.	Positive Effects A change which improves the quality of the environment (for example, by increasing species diversity; or the improving 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 'Significance' is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful (also see Determining Significance).	Imperceptible An effect capable of measurement but without significant consequences.
	Not Significant An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	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 a sensitive aspect of the environment.
	Profound Effects An effect which obliterates sensitive characteristics.
Describing the Extent and Context of Effects	Extent Describe the size of the area, the number of sites, and the proportion of a population affected by an effect.

Context can affect the perception of significance. It is important to establish if the effect is unique or, perhaps, commonly or increasingly experienced.	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 Probability of Effects Descriptions of effects should establish how likely it is that the predicted effects will occur – so that the CA can take a view of the balance of risk over advantage when making a decision.	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 not to occur because of the planned project if all mitigation measures are properly implemented.
Describing the Duration and Frequency of Effects 'Durations' is a concept that can have different meanings for different topics – in the absence of specific definitions for different topics the following definitions may be useful.	Monetary 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 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.
Describing the Types of Effects	Indirect Effects (Secondary or Off-site Effects)

	Impacts 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 significant 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).

2.6.1 Determining Significance

A core concept of the EIA Directive is 'Significance', which is project specific. When developing an EIAR, the DoHPLG Guidelines 2018 state that, *"Significance considers whether or not a project's impact can be determined to be unacceptable in its environmental and social contexts"*.

The significance of the effect is a function of both the nature of the predicted impact and the sensitivity of the receptor environment. Figure 2-2, which is reproduced from Figure 3.4 in the EPA Guidelines (May 2022), illustrates how significance is evaluated.

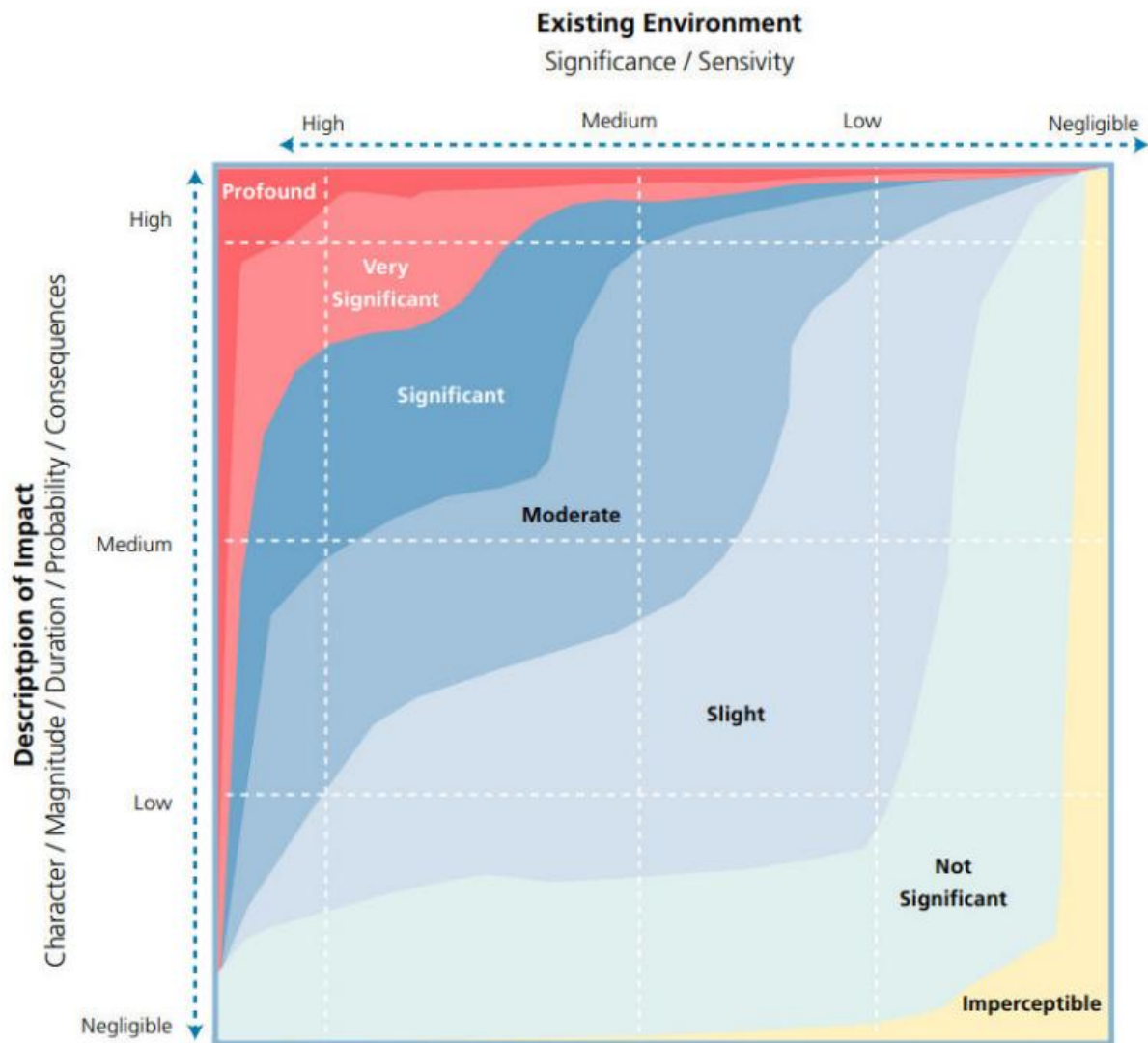


Figure 2-2: Chart showing typical classifications of the significance of impacts (Source: EPA Guidelines, May 2022)

2.7 MITIGATION, CONTROL AND MONITORING MEASURES

The impact assessment of this remedial EIAR identifies where an aspect of the Project was likely to give rise to significant environmental effects and identifies any mitigation and/or monitoring measures that were put in place in order to avoid effects or reduce them to acceptable levels where possible. The assessment also identifies the requirement for any additional control and/or monitoring measures.

Mitigation measures and monitoring that have been implemented for each environmental factor are set out in the technical chapters in the remedial EIAR and summarised in Chapter 17 (Mitigation and Monitoring Measures).

2.8 RESIDUAL EFFECTS

Any likely significant effects that have continued to exist post the implementation of mitigation and monitoring measures in the past are assessed for each environmental factor.

2.9 CUMULATIVE EFFECT ASSESSMENT

The EIA Directive states that an EIAR should contain cumulative effects, which are defined as:

'A description of the likely significant effects of the project on the environment resulting from...the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.'

The EIA Directive and associated guidance documents state that, as well as considering any indirect, secondary, transboundary, short-, medium-, and long-term, permanent and temporary, positive and negative effects of the project (all of which are considered in the various chapters of this remedial EIAR), the description of likely significant effects should include an assessment of cumulative impacts that may arise or in the case of rEIA, may have arisen. The factors to be considered in relation to cumulative effects include population and human health, biodiversity, land, soil and geology, hydrology, air, climate, noise and vibration, material assets, traffic and transport, landscape and cultural heritage as well as the interactions between these factors.

2.9.1 Methodology for the Cumulative Assessment of Projects

To gather a comprehensive view of cumulative effects on the above environmental considerations and to inform the remedial EIA process being undertaken by the consenting authority, An Coimisiún Pleanála (ACP), each relevant chapter within the remedial EIAR addresses the potential for cumulative effects to arise or may have arisen, where appropriate.

A cumulative assessment of peat extraction and all ancillary works at the Application Site was undertaken with the purpose of identifying what influence the peat extraction has had, or potentially could have, on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects and other land-uses in the vicinity of the site.

Cumulative impacts are defined as *'impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project'*². The Cumulative Impact Assessments (CIA) of projects has four principle aims:

- To establish the range and nature of existing projects within the cumulative impact study area of the Application Site.
- To summarise the relevant projects which have a potential to create cumulative impacts.
- To establish anticipated cumulative impact findings from expert opinions within each relevant field. Detailed cumulative impact assessments are included in each relevant section of the remedial EIAR.
- To identify the projects that hold the potential for cumulative interaction within the context of the development and discard projects that will neither directly nor indirectly contribute to cumulative impacts.

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the Application Site with reference to Guidance contained

² Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions, European Commission, 1999



in Section 3.7 of the Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022) and Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions (EC, 1999).

The material was gathered through a search of relevant online Planning Registers including:

- Offaly County Council planning register
- Westmeath County Council planning register
- Meath County Council planning register
- An Coimisiún Pleanála case search (which includes former An Bord Pleanála planning applications)

A review of relevant EIAR and remedial EIAR documents, technical assessments, planning application details and planning drawings was undertaken to identify past projects, their activities, environmental effects and potential impact on this Substitute Consent planning application.

The cumulative assessment study area was informed by study areas relevant to each environmental discipline.

2.9.2 Projects Considered in Cumulative Assessment

The projects considered in relation to the potential for cumulative effects, and for which all relevant data was reviewed, include permitted developments, developments subject to live planning applications, and other reasonably foreseeable projects identified up to the submission of this Substitute Consent planning application; together with any relevant historical developments within 5 km of the Application Site.

The projects assessed as part of this cumulative assessment have been grouped according to the Project phases, namely those consented during the Peat Extraction Phase (1988 to June 2020), those consented during the Current Phase (June 2020 to September 2026), and any future developments that may be constructed or continue to operate during the Rehabilitation Phase which are known to the applicant.

A review of the planning registers of Meath County Council, Westmeath County Council and Offaly County Council, together with An Coimisiún Pleanála's online planning portal, was undertaken to identify relevant developments in the vicinity of the Application Site. These developments have also been considered, where relevant, in describing the baseline environment and within the topic-specific assessments comprising this Remedial EIAR.

The principal projects considered for each phase of development are identified in Tables 2-3 and 2-4 below.

Table 2-3: Relevant projects considered for the Peat Extraction Phase (from 1988 to July 2020)

Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	18324	The filling of lands with inert waste consisting of concrete, bricks, tiles and ceramics, soil and stones for the purpose of land reclamation and all associated ancillary facilities. the application is accompanied by an Environmental Impact Assessment Report (EIAR).	Kilmurray Pre-Cast Concrete Ltd	24/10/2019	Derryarkin, Rhode, Co Offaly
Offaly County Council	19/25	Extension of existing sand and Gravel Pit to the south west, south and south east	Derryarkin Sand And Gravel Dac	20/03/2019	Derrygreenagh, Knockdrin, Garr and Carrick townlands Rhode Co Offaly
Offaly County Council	18209	Derryarkin Sand And Gravel DAC for the construction of a weighbridge (90m ²) and 2 no. control rooms subject to 5 conditions.	Derryarkin Sand And Gravel Dac	09/08/2018	Derryarkin Sand Pit, Derrygreenagh, Rhode, Co. Offaly
Offaly County Council	1849	Development consisting of a total area of 30.2 hectares comprising of the following: (a) extraction of sand and gravel from a greenfield area (area 1 = 26.0 hectares) by mechanical means and transportation to the manufacturing area (area 2) for processing and all associated facilities/works. (b) continuation of use of the existing authorised manufacturing	Kilmurray Precast Concrete Ltd	17/05/2018	Derryarkin & Bunsallagh Townlands, Rhode, Co. Offaly

Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		area (area 2 = 4.2 hectares) and existing infrastructure consisting of crushing and screening plant; offices; weighbridge; stockpiling areas; entrance; haul roads and all associated ancillary facilities/works. (c) landscaping and restoration of the site including screening berms and all associated ancillary works. (d) the applicant is seeking a 25 year permission as part of the planning application. (e) the application is accompanied by an environmental impact assessment report (EIAR).			
Offaly County Council	178	Sand And Gravel Extraction from two areas of land consisting of 30.9 hectares (area a1 consisting of 19.3 hectares and area a2 consisting of 11.6 hectares), construction of landscaping berms, restoration of areas on completion of extraction and all associated ancillary works.	Kilmurray Precast Concrete Ltd.	21/04/2017	Derryarkin & Bunsallagh Townlands, Rhode, Co. Offaly
Meath County Council	01967	The development of an Asphalt Plant & all associated infrastructure & structures	Mary Daly	24/10/2001	Killaskillen, Kinnegad, Co Meath
Offaly County Council	16246	A period of 10 years to complete the development of a solar PV energy development with a total site area of circa 96.6 hectares, to include one single storey electrical substation building and associated compound, electrical transformer	Highfield Solar Limited	27/01/2017	Clonin, Rhode, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		and inverter station modules, storage modules, solar PV panels ground mounted on support structures, access roads, fencing and associated electrical cabling, ducting, CCTV and other ancillary infrastructure,			
Offaly County Council	15141	Filling of lands with inert waste consisting of concrete, bricks, tiles and ceramics, soil and stones for the purpose of land reclamation, and all associated ancillary facilities	Kilmurray Pre-Cast Concrete Ltd.	03/05/2016	Derryarkin, Rhode, Co. Offaly
Meath County Council	Ta150677	The development will consist of an increase in the quantum of alternative fuels used from 95,000 tonnes to 105,000 tonnes per annum in the cement manufacturing process. specifically, the development proposes to include the burning of up to an additional 10,000 tonnes of liquid recovered fuels per annum.	Lagan Cement Limited	02/10/2015	Killaskillen And Coppaboggan, Kinnegad, Co. Meath
Offaly County Council	13242	Erection of a guyed wind monitoring mast, with instruments, up to 100m in height. the purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development. a natura impact statement (NIS) is included with the planning application	Bord Na Mona Energy Limited	06/02/2014	Ballybeg Bog, Derryiron, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	13122	A Concrete Batching Plant and all associated ancillary facilities	Kilmurray Pre-Cast Concrete Ltd	15/01/2014	Derryarkin Td. Rhode, Co. Offaly.
Offaly County Council	12207	The Extraction Of Sand and Gravel, and associated ancillary works at a 24.46 hectare greenfield area and the restoration of the site on completion of extraction.	Kilmurray Pre-Cast Concrete Ltd.	27/09/2013	Derryarkin, Rhode, Co. Offaly
Westmeath County Council	124018	Permission for site access works to allow for the out loading of peat. these works consist of; access works at junction with I-1113 tyrrellspass to rathgarrett road and construction of a new access road to facilitate peat out loading.	Bord Na Mona Plc	11/06/2012	Rathgarrett, Tyrrellspass, Co. Westmeath
Westmeath County Council	104078	Temporary planning permission (duration 10 years) for construction of Moto Cross Circuit consisting of repair signalling zone, waiting zone, closed park, 2 no. high jumps, 6 no. rolling wave jumps, flag marshal posts, viewing posts, car parking facilities, permission is also sought for the installation of a portable cabin (office/first aid), 3 no. portable toilet facilities all to federation internationale de motorcyclisme standards and the upgrading on the existing site entrance and the existing graveled roadway with the installation of 2 no. laybys and all associated site works	Damx Ltd	30/06/2011	Derryarkin, Rochfortbridge, Co. Westmeath

Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	10391	Temporary planning permission (duration 10 years) – application running concurrently with Westmeath County Council planning application 10/4078. planning permission is sought for permission to upgrade the Existing Site Access, Construction Of A Moto-Cross Circuit And Ancillary Infrastructure.	Damx Ltd	21/04/2011	Derrygreenagh, Rochfortbridge, Co. Offaly
Meath County Council	Ta100444	An increase in the range of alternative fuels used in the cement manufacturing process. specifically the development proposes to include the burning of up to 10,000 Tonnes of liquid recovered fuels per annum in the existing pre-heater and cement kiln.	Lagan Cement	05/10/2010	Killaskillen & Coppaboggan, Kinnegad, Co. Meath
Meath County Council	Ta900603	Demolition of existing disused agricultural buildings in Killaskillen and the demolition of an existing habitable house in toor, and the extension of the existing limestone quarry over adjoining lands to the north, east & south. the existing limestone quarry is permitted to a depth of 5 no benches (10 metres aod) and over an area of 24.8 hectares (Meath County Council Planning Reg Ref No 98/2026 And An Bord Pleanála Ref No P17.111198).	Lagan Cement	10/11/2009	Killaskillen & Toor, Kinnegad, Co. Meath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Meath County Council	Ta800654	An Increase on the quantum and range of alternative fuels used in the cement manufacturing process to 95,000 tonnes per annum and to include the burning of solid recovered fuel and waste shredded type chippings in the existing pre-heater and cement kiln. Planning permission was previously granted for the use of up to 50,000 tonnes of alternative fuels consisting of meat and bone meal (planning reg. ref. no. Ta-50145).	Lagan Cement	30/05/2008	Killaskillen & Cappaboggan, Kinnegad, Co. Meath
Meath County Council	Ta60581	A Roof Tile Plant (2694sqm); A Concrete Pavers Plant (2775sqm); A Dry Mortar Plant; A Dry Mortar Bag Store (2406sqm); An Administration Building (348sqm); A Weighbridge And Weighbridge Office (29sqm); and 2 No. Aggregate Hoppers.	Lagan Cement Ltd	05/02/2007	Killaskillen, Kinnegad, Co. Meath
Meath County Council	Ta60580	An Increase in Processing Capacity of the existing cement plant from the permitted production rate of 600,000 tonnes per annum (permitted under reg. ref. ta-40228) to 700,000 tonnes per annum and the use of alternative raw materials and renewable fuels (to those permitted in Reg. Ref. 982026 & Ta-50145)	Lagan Cement Ltd	05/02/2007	Killaskillen & Cappaboggan, Kinnegad, Co. Meath

Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	051028	Development on a site of 20.8 ha (referred to as Greenfield Area) consisting of permission for a sand and gravel pit. (please see file for full details) Derryarkin, Rochfortbridge, Co. Westmeath	Kilmurray Precast Concrete Ltd	18/05/2006	Derryarkin, Derrygreenagh, Knockdrin, Derryiron
Offaly County Council	051113	Installation Of A Fixed Processing Plant for the production of blacktop on a site of 0.875 ha at existing Sand and Gravel Quarry.	Roadstone Provinces Ltd	26/04/2006	Derrygreenagh, Rhode Co. Westmeath
Westmeath County Council	064016	Permission for the extraction of Gravels. The Development Consists of the extraction of gravels on a site of 4.7169 ha for the sole use for the construction of the proposed n6 (national primary route) dual carriageway and following extraction, the restoration of lands for continued agricultural use.	Vincent Claffey	21/03/2006	Cornaher, Tyrellpass, Co. Westmeath
Westmeath County Council	064005	Burrow Pit And Associated Site Works	Matt Conway	02/03/2006	Farthingstown, Rochfortbridge, Co Westmeath
Westmeath County Council	044064	Re-Open existing disused quarry to extract building stone and broken stone for the roads network on the proposed N6 Dual Carriageway and to erect portacabin with office/dining and toilet facilities, septic tank and percolation area and	Thomas Heeney & Desmond Geraghty	17/08/2005	Whitewell, Gaybrook, Co. Westmeath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		permission. To install access roads, access to remainder of field, weighbridge, wheel-wash, parking area, planted berm and to create temporary entrance to main road, and all associated site works and permission to restore in full to agricultural land all temporary works and quarried areas.			
Westmeath County Council	044198	Development will consist of a borrow pit for the procurement of sand and gravel for roadworks on proposed N6 Dual Carriageway.	Sugarbowl Holdings Ltd	20/10/2004	Mountrath, Garryduff, Kilbeggan, Cornaher, Tyrellpass, Co. Westmeath.
Meath County Council	Ta40228	An Increase in processing capacity of the Cementkiln From the permitted production rate of 450,000 tonnes per annum to 600,000 tonnes per annum (existing reg. ref. 98/2026. An Bord Pleanála ref: pl17.111198).	Lagan Cement Limited	16/08/2004	Lansdown, Killaskillen and Cappabog, Kinnegad, Co. Meath
Offaly County Council	011163	Concrete Batching Plant, block yard, block storage area, site office building, effluent treatment system, ESB substation & bunded fuel storage tanks	Roadstone Provinces Ltd	16/10/2002	Derrygreenagh, Rhode
Offaly County Council	02/172	Construction of an entrance to a Sand and Gravel Extraction Facility.	Bord na Mona Energy Limited	10/06/2002	Derrygreenagh, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	051113	Installation of a fixed processing plant for the production of blacktop on a site of 0.875 ha at existing sand and gravel facility.	Roadstone Provinces Ltd	10/06/2002	Derrygreenagh, Co. Offaly
Offaly County Council	01/1297	Concrete Roof tile Plant and Storage Area, Site office building, effluent treatment system, car park etc.	Roadstone Provinces Ltd	26/03/2002	Derrygreenagh, Rhode
Westmeath County Council	01/444	Extraction of Sand and Gravels at Derryarkin and Drumman in Co Offaly and Westmeath	Bord Na Mona	23/01/2002	Derryarkin & Drumman, Co. Offaly & Westmeath
Meath County Council	01967	The development of an Asphalt Plant & All Associated Infrastructure & Structures.	Lagan Cement Ltd	29/11/2001	Killaskillen, Kinnegad, Co Meath
Offaly County Council	01/365	Extraction of Sand and Gravels	Bord Na Mona Plc	30/07/2001	Derrygreenagh, Derryarkin and Knockdrin.



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Meath County Council	001524	To Build A New 110 kV overhead line loop linking the permitted 110 kV substation at Killeskillen with the existing Rhode - Rinawade 110 kV Line at Clonmore, Co Offaly	Electricity Supply Board	12/12/2000	Townland Of Killaskillen, Co Meath
Meath County Council	982026	The development of a cement works, 2 no. quarries, access road and associated activities over an area of 161.43 hectares (398.9 Acres)	Lagan Cement Limited	14/04/1999	Killaskillen and Cappaboggan, Kinnegad, Co. Meath

The projects detailed in Table 2-3 (Peat Extraction Phase), the construction and/or operation of which may overlap with the Current Phase have been considered within the cumulative assessment for the Current Phase.

Table 2-4: Relevant projects considered during the Current Phase (June 2020 to Present Day)

Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Westmeath County Council	2560344	The development of a Data Centre Facility and Decentralised Energy Resource (solar farm) within an overall development boundary area of 243 hectares. Applicant Red Admiral DC Ltd.	Red Admiral DC Limited	Decided On 02/06/2026 Subject to third party appeal	Gneevebane Oldtown Farthingstown Castlelost and Kiltotan and Collinstown, Rochfortbridge, County Westmeath
ACP	319023	Known as Derrygreenagh Power Plant: Combined Cycle Gas Turbine and Open Cycle Gas Turbine Thermal	Bord na Móna Powergen Ltd	28/04/2026	Lands Within the Townlands Knockdrin, Derrygreenagh, Derryarkin, Derryiron,



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		Power Plant, Electricity Grid Connection Including 2 No. Substations, and Associated Buildings, Plant, Site Works, Service and Ancillary Development.			Ballybeg, Coolcor, Barrysbrook, Clonin, Togher And Coole, Co. Offaly
Offaly County Council	2560511	1. An Overall Application Area of C. 19.5 Hectares; 2. Phased Extraction of Sand and Gravel (Wet Working) Over an Area of C. 11.7 Hectares with Processing that Includes Crushing and Screening and All Ancillary Works and Structures.	BD Flood Unlimited Company	Decided On: 14/04/2026 Conditional	Derryarkin Townland, Croghan, Rhode, Co. Offaly
Offaly County Council	2560189	For the erection of 4 wind turbines. a 10-year planning permission and 35 year operational life from the date of commissioning of the entire wind farm is being sought. the planning application will be accompanied by an environmental impact assessment report	Clonarrow Windfarm Limited	12/03/2026	Clonarrow Or Riverlyons, And Killoneen, Co. Offaly.
Meath County Council	2561103	Eirgrid Plc, with the consent and approval of the Electricity Supply Board (ESB), Intends to apply for permission for works to uprate the existing rinawade - dunfirth tee - kinnegad 110kv overhead line (ohl). within county meath, The Proposed Development Will Take Place Within The Following Townlands: Jarretstown,	EirGrid Plc	05/02/2026	Kinnegad - Dunfeirth - Rinawade, Co. Meath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		Walterstown, Moor Of Meath, Rathleek, Grange, Bogganstown, Cappaghgreen, Brownstown, Salestown, Affollus, Kilgraique, Harristown, Porterstown, Kilclone, Kimmins, Barrockstown, Ballymagillin, Mulhussey, Ferrestown, Rodanstown, Batterstown, Dolanstown, Calgath, Balfeaghan, Kilglin, Ferrans, Castlejordan, Gortnahorna, Killaskillen, Clongall, Knockersally Or Colehill.			
Offaly County Council	2560345	A 10-Year Planning Permission for works to the existing Derryron 110 kilovolt (kV) electricity substation	OBM Solar Limited	05/11/2025	Clonin, Rhode, Co. Offaly
Offaly County Council	2460289	Development of a 22-hectare site. The proposed development comprises (i) two (2no.) air dome structures for the storage of carbon dioxide at atmospheric pressure (each 500m x 120m x 34m high) and associated cooling, compression, pumping and power generation equipment and machinery (ii) a single-storey storage and control building, (iii) internal site access roads and connection to existing and consented roads at Rhode green energy park, (iv) underground electrical cable connection to	Rhode LDES Limited	16/09/2025	In The Townlands Of Clonin , & Coolcor , Rhode Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		derryiron 110kv substation, (v) all civil engineering works, surface water and foul water drainage, landscaping, lighting and security fencing			
Offaly County Council	2560104	1 No. Biomass Wood Pellet/Chip Store, and, Associated Intake Store. This Application Relates To A Development, Which Is For The Purposes Of An Activity Requiring An I.P.P.C Licence Under Part Iv Of The Environmental Protection Agency (Licensing) Regulations 1944 To 2013.	Kevin Kiernan	03/07/2025	Derrygawney , Carrick Castlejordan , Co. Offaly
Offaly County Council	22664	Eirgrid Plc (With the consent and approval of the Electricity Supply Board (ESB)), intends to apply for permission for development at site of approximately 1 hectare at Derryiron 110kv substation, Clonin, Rhode, Co. Offaly.	EIRGRID PLC	30/03/2023	Derryiron 110kv Substation , Clonin Rhode , Co. Offaly
Meath County Council	22958	The Installation of Solar Photovoltaic (Pv) Panels on Ground Mounted Frames/Support Structures Within Existing Field Boundaries; 2 No Electrical Transformer Stations; Electrical Control Units; 1 No. Customer Ring Main Unit; Underground Cabling And Ducting; internal site access tracks; site perimeter (stock-proof) security fencing; with new	Breedon Cement Ireland Ltd	Granted 01/02/2023	Killaskillen Townland, Kinnegad, Co. Meath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		vehicular access from L8021 serving eastern parcel; and from unnamed access road off L8021, serving western parcel; and all associated landscaping including screen planting; and site development works.			
Meath County Council	221184 (ACP Ref. 319254-24)	The Development will consist of the deepening of the north-western portion of the existing limestone quarry extraction area (as permitted by Meath County Council Planning Register Ref: Ta900603) By four extractive benches to 10m od, over an area of c. 4.	Breedon Cement Ireland Ltd.	01/11/2022	Killaskillen, Kinnegad, Co. Meath
Westmeath County Council	ACP Ref. 312783	220kv Gas Insulated Switchgear (GIS) Electrical Substation and two 220kv Underground Transmission Cables, Interface Compounds And Pylons And Associated Works	Lumcloon Energy Limited	09/09/2022	Kiltotan And Collinstown And Oldtown, Rochfortbridge, County Westmeath
Westmeath County Council	21515	The Development Comprises 275mwe Reserve Gas-Fired Generator to boost and back up the power system and will include the following elements (a) 5no. Open Cycle Gas Turbine (OCGT) Modules (Each Module Being C 1042sqm) and complete with Lube Oil Coolers, Generators, Air Intake Vents, Continuous Emissions Monitoring (CEMS) Technology,	Lumcloon Energy Ltd	11/05/2022	Kiltotan And Collinstown And Oldtown, Rochfortbridge, Co Westmeath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		Selective Catalytic Reduction (SCR) Units And C.30m High Stacks...			
Westmeath County Council	21532	The Energy Storage System (ESS) Development Will Comprise: (I) An Open Area Battery Energy Storage System (BESS) Compound (Area Of 26,317sqm) Containing 264no Battery Modules And Associated Medium Voltage Power Station (Mvps) Enclosures (12.192m Long X 2.438m Wide X 3.896m High).	Lumcloon Energy Ltd	11/05/2022	Kilotan And Collinstown And Oldtown , Rochfortbridge , Co Westmeath
Offaly County Council	21247	23-Year Permission for a 44.0-hectare extension to an existing authorised sand and gravel	Michelle Ganley & Declan Keyes	30/03/2022	Derryarkin & Bunsallagh Townlands, Rhode, Co. Offaly
Offaly County Council	21364	Solar PV panels ground mounted on support structures within a total site area of 1.73 hectares, to include fencing and associated electrical inverters and cabling, ducting and other ancillary infrastructure	Ian & Moira Munt	22/02/2022	Clonin , Rhode Co. Offaly
Offaly County Council	21488	A 10-Year permission for the construction of an extension to the permitted solar pv and battery storage development permitted at srah, greenhills and wood, Rhode, Co. Offaly permitted under planning permission reference 20/494.	OBM Solar Limited	28/01/2022	Greenhills, Rhode, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
Offaly County Council	ACP Ref. 309491	110kv Substation, Associated 110kv Underground Grid Connection, Cabling And Associated Works.	OBM Solar Limited	13/10/2021	Srah, Coolcor And Clonin, Rhode, Co. Offaly
Offaly County Council	20238	An Energy Storage Facility Designed to provide system support services to the electricity grid on a 2.7-hectare site.	Rhode Energy Storage Limited (Resl)	29/06/2021	Coolcor And Clonin, Rhode, Co. Offaly
Offaly County Council	20237	Development of a Combined Heat and Power Generating Biomass Gasification Plant With Integrated Carbon Capture And Utilisation Technology to provide renewable energy and electrical grid support services on a 2.45-hectare site.	Newleaf Energy Limited	22/06/2021	Coolcor , Rhode , Co Offaly
Offaly County Council	20494	A 10-Year Permission. the development will consist of the construction of: 1. a solar pv development on a c.132 ha site consisting of solar panels on ground-mounted frames, 27 no. single storey electrical inverter/ transformer units, security fencing...	Obm Solar Limited	15/06/2021	Srah Greenhills And Wood, Rhode, Co. Offaly
Offaly County Council	20/329	Drumman Biomass Facility. The development is for the storage and seasoning of biomass logs followed by chipping of the seasoned logs on a site area of 29.17ha.	Bord Na Mona Energy Ltd	10/06/2021	Drumman Biomass Facility, Located Within The Townlands Of Derrygreenagh & Knockdrin, Co. Offaly
ACP	309112	Retention And Continuation Of Development. Works For An Existing Biomass Facility On A	Bord Na Mona Energy Ltd	11/05/2021	Toar, Rathgarrett, Tyrellspass, County Westmeath



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		Site Of 14.34 Ha. This Site Will Be Operational Until 2030.			
Offaly County Council	20331	Croghan Biomass Facility, located within the townlands of esker beg and drumcaw or mountlucas, co. offaly at grid reference 651434, 727855 for the storage and seasoning of biomass logs followed by chipping of the seasoned logs on a site area of 5.6 ha	Bord Na Mona Energy Ltd	30/03/2021	Esker Beg And Drumcaw , Or Mountlucas , Co. Offaly
Westmeath County Council	196168 ACP Ref. 305992	A 10 year permission for the construction of a Solar Farm PV Energy Development comprising installation of Solar Photovoltaic (PV) panels on ground mounted frames/support structures within existing field boundaries;	JBM Solar Developments Ltd	25/08/2020	Clonfad Enniscoffey Or Caran , Hightown Or Ballyoughter Lowtown Or Balleigher , Pass Of Kilbride And Rattin
Offaly County Council	ACP Ref. 501316	Phased Extraction Of Sand And Gravel (Wet Working) Over An Area Of C. 11.7 Hectares With Processing That Includes Crushing And Screening And All Ancillary Works. (Eiar) And (Nis) Have Been Prepared In Respect Of This Planning Application.	BD Flood Unlimited Company	Undecided	Derryarkin Townland, Croghan Rhode, Co. Offaly
Offaly County Council	2560404	Importation Of Soil And Stone (Ewc Class 17 05 04) Not Exceeding 25,000 Tons Over A Period Of 2 Yrs For The Purpose Of Raising Existing Ground Levels Not Exceeding 1.2m In Height, Temporary Installation Of A Suitable Wheel Wash At	Tony McCabe	Undecided	Knockdrin And Derrygreenagh Townlands, Rhode, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
		The Entrance, Installation Of New Drainage Over 2.4ha And All Ancillary Site Works With Restoration To Agricultural Use On Completion. The Development Will Require A Waste Facility Permit. Retention Permission Sought For The Entrance As Constructed			
Offaly County Council	13251	And completion of 1 No. Feed/general purpose storage shed together with all ancillary structures and site works on an existing pig farm. This application relates to a development which is for the purpose of an activity requiring an integrated pollution prevention and control licence.	Skeagh Farms	26/03/2014	Derryarkin, Rhode, Co. Offaly
Offaly County Council	1476	Construction of 2 no. Pig houses and 1 no. Stormwater attenuation tank together with all ancillary structures and associated site works arising from the above proposed development. An Environmental Impact Statement (E.I.S) relating to this proposed development will be submitted with this planning application. This application relates to a development, which is for the purposes of an activity requiring an integrated pollution prevention and control license.	Skeagh Farms	31/10/2014	Derryarkin, Rhode, Co. Offaly



Consenting Authority	Planning Reference	Description Of Development	Applicant Name	Final Grant Date	Address
ACP	323980	Proposed water supply project for the eastern and midlands region	Uisce Éireann	Pending Decision	In the counties of Clare, Limerick, Tipperary, Offaly, Kildare, and Dublin.
ACP	323579	Proposed windfarm development of 7 turbines, 110kv substation and associated works.	Ballinla Wind Farm Limited	Pending Decision	Within the townlands of Leitrim, Lumville, Ballinla, Clarkeville, Ballyfore Big, Ballyfore Little, Ballyeakin and Ballykilleen, in (Coolestown By) Co. Offaly
ACP	PA0032	Yellow River Wind Farm, Although the application was consented in 2014, construction took place between 2022 and 2025 and has therefore been assessed as part of the Current Phase.	Greenwind Energy (Wexford) Ltd	03/06/2014	Rhode, Co. Offaly.

Those projects detailed in Tables 2-3 and 2-4, the construction and/or operation of which may overlap with the Remedial Phase as described below, have been considered within the cumulative assessment for this phase.

2.9.2.1 Relevant Projects Considered for the Remedial Phase (Future Phase)

BnM also intends to develop a wind and solar energy project across Derryarkin, Drumman, Derryhinch and Ballybeg Bog, currently known as Derrygreenagh Wind and Solar project. The proposed development is currently at the design phase and is likely to consist of wind turbines, solar photovoltaics and a battery energy storage system. The design of the development will align and integrate with the peatland rehabilitation measures as required under the IPC Licence P0501-01.

A third party intends to develop infrastructure at lands within the Application Site, consistent with the Government's Large Energy User Action Plan (LEAP), and which will be subject to separate planning and regulatory consent as appropriate.

Any future development within the Application Site, will be the subject of separate planning applications. Where required, such applications will be accompanied by an Environmental Impact Assessment Report (EIAR), which will assess the likely significant environmental effects associated with the construction, operation and decommissioning of the respective developments, including consideration of the rehabilitation measures being implemented at the Application Site.

2.9.2.2 Other Existing Activities Considered in the Cumulative Assessment

Third party turbary activities are known to occur along some plots on the periphery of the Application Site. The precise locations and volumes of peat extracted during the course of turbary activities are not available.

In addition, consideration was given to other existing projects within the wider area that may not have engaged with the planning system. This includes ongoing third-party peat extraction activities at Oldcroghan Bog, located approximately 2.8 km west of Ballybeg Bog. Oldcroghan Bog is not under the ownership of the Applicant or any other subsidiary of Bord na Móna plc. An EPA Site Inspection Report³ published in 2025 identified ongoing peatland activities and associated environmental management measures at Oldcroghan Bog. Given its proximity to the Application Site and the similarity of activities being undertaken, Oldcroghan Bog has been considered as an existing activity within the cumulative assessment for the Current Phase (June 2020 to present day), particularly in relation to potential cumulative effects on hydrology, water quality, biodiversity and peatland management.

All relevant potential cumulative effects have been assessed, where necessary, within the relevant environmental topic chapters of this Remedial EIAR.

³ <https://www.epa.ie/publications/compliance--enforcement/peat/>



2.10 TRANSBOUNDARY EFFECTS

The Application Site is located more than 70 km from the Northern Ireland border and is not in a location that could have transboundary effects within other countries. There is no hydrological connectivity between the bogs at the Application Site and watercourses in Northern Ireland. Past peat extraction within the Application Site has not resulted in any significant effects on the environment of another country. Transboundary effects are therefore not considered further in this remedial EIAR.

2.11 DO-NOTHING EFFECTS

The do-nothing effect is described in Chapter 3 Alternative Chapter of the Remedial EIAR.

2.12 APPROPRIATE ASSESSMENT

In addition to the preparation of this remedial EIAR in accordance with the requirements of the EIA Directive, a remedial Appropriate Assessment (remedial AA) Screening and remedial Natura Impact Statement have been carried out to inform the competent authority in its undertaking of an AA of the Project, as required under Article 6(3) of the Habitats Directive (92/43/EC).

An AA is required of the implications for the European site concerned of any plan or project not directly connected with or necessary to the management of that site but likely to have a significant effect thereon, either individually or in combination with any other plans or projects prior to its approval, and to take into account the cumulative effects which result from the combination of that plan or project with other plans or projects (in-combination effects) in view of the European site's conservation objectives.

A remedial NIS has been prepared by TOBIN and accompanies this remedial EIAR which will be submitted with the application for the Substitute Consent.

Like the temporal scope of the EIA Directive, the requirements of the Habitats Directive do not apply prior to the date the Directive came into force (June 1994). Therefore, for the purpose of the remedial AA and remedial NIS, 1996 has been identified as the baseline year for the assessment. This is described in more detail in the remedial AA and remedial NIS.

2.13 COMPETENT EXPERTS

This Remedial EIAR has been project managed, co-ordinated and produced by TOBIN and Bord na Móna (BnM). TOBIN are also responsible for preparing key technical chapters of the Remedial EIAR with support and input from external consultants for specialist topics as required. This Remedial EIAR has been prepared by competent experts. The list of competent experts and their relevant qualifications are set out in Table 2-5.

TOBIN is a multi-disciplinary consultancy with experience of undertaking complex and challenging environmental assessments and of writing EIARs for a wide range of projects. The Project Manager and principal co-ordinator of the Remedial EIAR is Bertha Kasonde.

Bord na Móna (BnM) employs several EIA and technical experts who have experience undertaking EIAR and Remedial EIAR relating to Substitute Consent planning applications to



regularise peat extraction activities, and planning applications for renewable energy and infrastructure projects.

TOBIN confirm that the contributors set out in Table 2-5 are competent experts in their respective fields, as evidenced by the relevant qualifications and experience.

Table 2-5: List of Competent Experts

Company	Competent Expert	Subject Matter	Qualifications	No. of years' experience
TOBIN	Orla Fitzpatrick	Project Director Review of all Chapters 1-17.	B.Sc. (Hons) Geophysical Science (1999), University College Dublin (UCD) M.Sc. Environmental Consultancy (2003), University of Newcastle-upon Tyne Chartered Environmentalist (2012) Kings Inn Advanced Diploma in Planning and Environmental Law (2025)	22
TOBIN	Bertha Kasonde	Project Manager Peer Review Chapter 1 (Introduction) Chapter 2- remedial EIA Methodology Chapter 3- Reasonable Alternatives Chapter 6 (Population and Human Health) Chapter 16 - Interaction of Environmental Effects Chapter 17- Schedule of Mitigations	B.Eng. Environmental Engineering (2017), The Copperbelt University (Zambia) M.Sc. Climate Change, Agriculture and Food Security (2021), University of Galway.	8
TOBIN	Daniel Nestor	Chapter 5 Planning Policy - Reviewer	B.A. (Bachelor of Arts, National University of Galway) 2015, M. Plan (Masters in Planning and Sustainable Development, University College Cork) 2018, Advanced Diploma in Planning and	8



Company	Competent Expert	Subject Matter	Qualifications	No. of years' experience
			Environmental Law (Honorable Society of King's Inns, 2023)	
TOBIN	Louise Byrne	Chapter 5 Planning- Reviewer	BA Hons International Geography and German (2004) UCD Masters in Regional and Urban Planning (MRUP) (2006), UCD Chartered Member of Royal Town Planning Institute (2010) PG Certificate GIS (2016), University of Leeds	9
TOBIN	Aaron McCormick	Chapter 7- Biodiversity	B.Sc. (hons) degree in Marine Science from the University of Galway (formerly National University of Ireland, Galway), and an M.Sc. Risk, Resilience, and Sustainability from University College Dublin.	4
TOBIN	James Forde	Chapter 7- Biodiversity Reviewer	B.Sc. (hons) and M.Sc. degrees in marine ecology, and a Ph.D. in ecology Chartered Institute of Ecology and Environmental Management (CIEEM).	20
TOBIN	Tristan Martin	Chapter 8 -Land, Soils and Geology Chapter 9- Hydrology and Hydrogeology	B.Sc. (Hons) International Field Geoscience (2021), University College Cork (UCC) and University of Montana (UMT) M.Sc. Applied Environmental Geoscience (2022), University College Cork (UCC)	3



Company	Competent Expert	Subject Matter	Qualifications	No. of years' experience
TOBIN	John Dillon	Chapter 8 Land, Soils and Geology and Chapter 9- Hydrology and Hydrogeology Reviewer	(BSc, MSc, MCIWM, Peo), an Environmental and Hydrogeological specialist MSc., Environmental Engineering- Imperial College London	19
AWN Consulting	Sarah Berry	Chapter 10 - Air Quality Peer Reviewed	B.Sc. (Hons) Physical Geography (2016), University of Leeds MIESP	9
AWN Consulting	Alex Clark	Chapter 11- Noise & Vibrations	BEng (Hons) Acoustical Engineering (2016), University of Southampton MIOA (Full Corporate Member of the Institute of Acoustics)	9
AWN Consulting	Mike Simms	Chapter 11- Noise & Vibrations Reviewer	BE (Mechanical Engineering) (1995), University College Dublin M.EngSc (Mechanical Engineering) (1997), University College Dublin	21
Macroworks	Richard Barker	Chapter 12 Peer Reviewed	PG Diploma in Forestry (1996) BA in Environmental Studies (1995) Master's Degree in Landscape Architecture (2003) Corporate Member of the Irish Landscape Institute	23
IAC	Faith Bailey	Chapter 13 Peer Reviewed	BA (hons) in Archaeology and Classics, University College Dublin Licenced eligible archaeologist Member of the Chartered Institute for Archaeologists &	27



Company	Competent Expert	Subject Matter	Qualifications	No. of years' experience
			Member of the Institute of Archaeologists of Ireland	
TOBIN	Carol Rosario	Chapter 14-Traffic and Transport	B.Eng, M.Sc. Transport Planning and Modelling, Newcastle University 2018	8
TOBIN	Maria	Chapter 14- Traffic and Transport Reviewer	Bachelor of Engineering in Civil Engineering and Master of Engineering in Roads and Transport Engineering. Chartered Engineer	10
AWN Consulting	Ciara Nolan	Chapter 15 – Climate	BSc Energy Systems Engineering (2014), University College Dublin (UCD). MSc Applied Environmental Science (2016), University College Dublin (UCD). MIEnvSc, MIAQM	9



2.14 REFERENCES

- EPA, 'Advice Notes on Current Practice in preparation of Environmental Impact Statements'(September 2003).
- Department of Housing, Planning and Local Government (DoHPLG), (2018). 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment'.
- European Commission (2013). 'Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment'.
- 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)'.
- Environmental Protection Agency (2015). 'Draft Advice Notes on Preparing Environmental Impact Statements'.
- Environmental Protection Agency (EPA), (2022). 'Guidelines on the information to be contained in Environmental Impact Assessment Reports'.
- European Commission (EC), (2024). 'Interpretation of Definitions of Project Categories of Annex I and II of the EIA Directive'.
- European Commission, (1999). 'Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions'.

