Chapter 3

Approach to EIA

Contents

Glossary

Term	Definition
Environmental Impact Assessment (EIA)	EIA is a means of carrying out, in a systematic way, an assessment of the likely significant environmental effects from a development.
Environmental Statement (ES)	A document reporting the findings of the EIA and produced in accordance with the EIA Regulations
The proposed development	Y Bryn Wind Farm development
Y Bryn site boundary	The area within which the proposed development will be located.

List of Abbreviations

Abbreviation	Description
EIA	Environmental Impact Assessment
EIA Regulations	The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017
ES	Environmental Statement

3.1 INTRODUCTION

3.1.1 The Environmental Impact Assessment (EIA) process uses a systematic, evidence-based approach in order to evaluate and interpret the likely impacts and subsequent effects of the proposed development upon physical, biological and human receptors. This Environmental Statement (ES) has been prepared in accordance with The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (EIA Regulations).

3.1.2 This chapter describes the principles of the EIA process and the approach that has been taken to identify and evaluate the likely impacts and, subsequently, evaluate the significance of effects, associated with the proposed development.

3.1.3 Further details on discipline-specific methodologies are found in the relevant ES chapters.

3.2 EIA METHODOLOGY

Approach to the EIA

3.2.1 The EIA is a statutory procedure which draws together in a systematic way an assessment of the likely significant environmental effects arising from a proposed development.

3.2.2 As the process has numerous steps, it allows users to 'design out' adverse environmental effects at an early stage through the design of the proposed development. This of course is generally preferable to mitigation or remedy at a later stage.

3.2.3 An iterative design approach has been used throughout the EIA process, which has allowed the proposed development to adopt a design that works well for both the local environment and environmental resources within the area, as well as being an economically viable scheme with the ability to deliver on Welsh, UK and international renewable energy targets.

3.2.4 The steps taken for informing and developing the EIA process are identified in Figure 3.2.1.

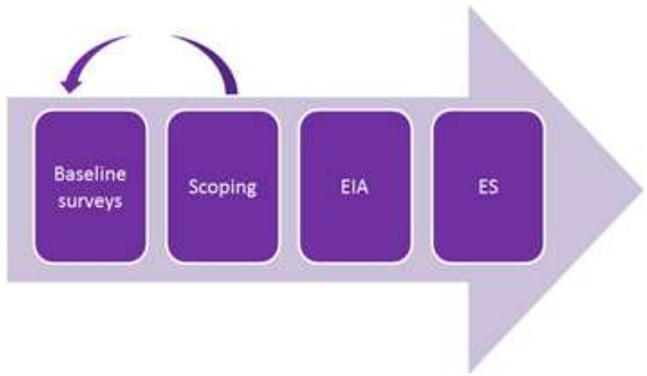

Figure 3.2.1: EIA Process Flow Diagram

3.2.5 Baseline data was gathered and conditions established through desk-based assessments, consultation with statutory and non-statutory consultees, and field surveys and monitoring.

3.2.6 A scoping report (see Appendix 3.1 in Volume 3 of the ES) was prepared and submitted in January 2021 to the Planning Inspectorate Wales. The purpose of the scoping report was to identify the likely significant environmental effects of the proposed development to be assessed in detail in the EIA and reported within the ES, ensuring that it is proportionate and focusses on receptors that may experience significant effects. The scoping report also presented the proposed scope of the assessment, with the aim of seeking agreement with consultees on scope of the ES. A scoping direction was received from the Planning Inspectorate Wales on 8 March 2021.

3.2.7 The EIA determines what the likely effect on those receptors, either direct or indirect, will be from the proposed development. This is done by comparing the baseline conditions with the conditions that would prevail should the proposed development be constructed, operated (and decommissioned). The environmental effects of the proposed development have been predicted in relation to environmental receptors, built resources and natural resources.

What the EIA has Assessed

3.2.8 The EIA has assessed the construction phase of the wind farm, the operational phase which would last up to 50 years, and the decommissioning phase.

3.2.9 The geographical coverage of the EIA has taken account of the following:

- The physical extent of the proposed works;
- The nature of the baseline environment and the manner in which effects are propagated; and
- The national and local planning and policy context for the proposed development.

Gathering Baseline Information

3.2.10 The assessment team has ensured that sufficient data has been obtained to enable a robust assessment appropriate to the nature of the proposed works.

3.2.11 The extent of the baseline assessment has been determined using both professional judgement and industry best practice and agreed with consultees as part of the scoping process. The EIA has also identified areas where the baseline may change prior to the construction and operational phases of the proposed development from current conditions (for example, maturation of landscape). However, the EIA assumes continued ongoing forestry operations to be the future baseline for the majority of Y Bryn site boundary.

3.2.12 Baseline data has been collected through desk study (including the use of data gathered for other developments in the area), consultation, field survey and monitoring, and is clearly reported in the subsequent sections of the ES. In line with the regulations, the ES also states where any difficulties were encountered in compiling environmental baseline conditions.

Prediction and Evaluation of Impacts and Effects

3.2.13 A distinction is made in the assessments between impacts and effects, where:

- Impacts are defined as the predicted change to the baseline environment attributable to the scheme; and
- Effects are the consequence of impacts on environmental resources or receptors.

3.2.14 The prediction of impacts examines the change to the baseline environment that could result from the construction, operation and decommissioning of the proposed development.

3.2.15 The effects are classified into one or more of the following:

- Positive effects that have a beneficial influence;
- Negative effects that have an adverse influence;
- Temporary effects that persist for a limited period only (whether for the short, medium or long-term);
- Permanent effects that result from an irreversible change to the baseline environment;
- Direct effects that arise from activities that form an integral part of the proposed development;
- Indirect/secondary effects that arise from activities not explicitly forming part of the proposed development;

- Cumulative effects that arise from the combination of different impacts at a specific location, the recurrence of impacts of the same type at different locations, the interaction of different impacts over time, or the interaction of impacts arising from the scheme in conjunction with other development projects; and
- Synergistic effects are when several individual impact factors combine to have an effect on a receptor which is greater than the sum of the individual impacts.

3.2.16 There is no statutory definition of what constitutes a significant effect. A significant effect may be broadly defined as an effect which, either in isolation or combination with others, should be taken into account in the decision-making process. This general definition has been used as the basis against which the significance criteria for environmental disciplines has been developed. The threshold of significance for predicted effects tends to vary between the environmental topics and therefore this is discussed in each individual chapter.

Cumulative

3.2.17 Consideration and assessment of the cumulative impact of wind farm sites within the vicinity of the proposed development has been undertaken as part of the EIA. Each discipline details the scope of their cumulative assessment in their specific chapter.

3.2.18 Additionally, the EIA has considered and assessed the cumulative impact of non-wind sites within the vicinity of the proposed development. Full details of the scope and methodology used to determine which non-wind sites are assessed by each discipline is included in Appendix 3.4.

3.2.19 Appendix 3.4 also includes the full list of wind and non-wind sites gathered for assessment within the EIA.

Mitigation, Enhancement and Monitoring of Environmental Effects

3.2.20 Mitigation measures have been considered for each significantly adverse effect. This ES includes a description of the measures envisaged to prevent, reduce and where possible remedy any significant adverse effects.

3.2.21 This ES discusses mitigation in two ways:

- In the form of embedded mitigation, i.e. measures that have been incorporated in the design as the environmental assessments developed; or
- Impact or additional mitigation i.e. for effects that are unavoidable through design, applying best practice and guidance recognised within the industry to attain environmentally acceptable levels, or those which are deemed acceptable through determination.

3.2.22 In addition, any significant positive effects arising from enhancement measures are identified. These positive effects are a result of either:

- Direct mitigating impacts arising from the wind farm development; or
- Enhancement measures that are incorporated into the scheme – but not as a direct result of mitigation for significant effects.

3.2.23 In line with the EIA Regulations, when identifying mitigation measures, the proposed development takes into account the practicability and cost effectiveness of the proposals and their efficiency in reducing environmental effects. Where practical, mitigation measures are set out as commitments to ensure they are implemented. Where the effects of the impact are significant, and where there is uncertainty in the mitigation proposed, monitoring has been proposed to ensure that the mitigation is both required and effective. Monitoring will allow for adaptation of the mitigation measures to ensure that they are fit for purpose. Monitoring will be proportionate to the level of significance experienced.

3.2.24 Residual effects are listed in Chapter 17: Residual Effects, Mitigation and Enhancement. The significance of a residual effect has been determined by correlating the magnitude of the change arising from the proposed development with the sensitivity of the particular attribute under consideration. This is described in each individual chapter along with a significance matrix. It should also be noted that while in the main the assessment considers the adverse effects, where positive effects are identified these will also be discussed.