



Orsted Onshore Ireland Midco Limited

14: MEMORANDUM RESPONSE TO SUBMISSIONS RECEIVED

CLIMATE CHANGE

Proposed Oatfield Wind Farm Project, Co. Clare: ABP
Case No. ABP-318782-24

June 2024



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1 CLIMATE CHANGE

1.1 Introduction

The following memorandum has been prepared to address submissions received during the observations and submissions period associated with the Oatfield Wind Farm Planning Application. The planning application for the aforementioned Proposed Development was submitted to An Bord Pleanála on 22nd December 2023 (ABP Case Number: ABP-318782-24). The period for submissions and observations was 22nd December 2023 to 19th February 2024.

This is memorandum number 14 in the Oatfield Wind Farm submission response documentation, which addresses common themes identified within the discipline of Climate Change (corresponding to **Chapter 18 of the EIAR**, submitted as part of the planning application made to An Bord Pleanála).

Responses to common themes in submissions received from the general public are presented in Section 2.

1.2 Statement of authority

This memorandum was authored by Zack Clarke. Zack is a consultant within Nature Positive's Carbon and Sustainability team who specialises in greenhouse gas (GHG) assessments, and the climate change and carbon balance elements within Environmental Impact Assessments (EIA). Zack has two years' experience and has delivered eight Climate chapters for EIAs to date. Holding a Master's degree with distinction in Environmental Economics and Environmental Management, Zack has a detailed knowledge of EIA, carbon accounting, GHG assessments, climate policy, and adaptation and resilience planning.

This chapter has been reviewed by Dr. Libby Robinson. Libby is a Principal Consultant within Nature Positive's Carbon and Sustainability team and holds a PhD in Climate Science. She leads the GHG assessment and climate-risk workstreams for Environmental Impact Assessments (EIA), Environmental & Social Impact Assessments (ESIA), and a number of other compliance-related projects. Libby has nine years' experience and has delivered twenty Climate Change chapters for EIAs to date.

2 GENERAL PUBLIC

2.1 Theme 1: Climate change assessment methodology

In response to a common theme noted on the Climate discipline, this section summarises the methodology of the GHG assessment and the results thereof.

A whole life carbon assessment was carried out to assess the impact of the Proposed Development on climate change (refer to **EIAR Chapter 18 Climate Change** (hereafter referred to as **EIAR Chapter 18**)). This was done through assessing the greenhouse gas (GHG) emissions associated with the construction, operations, maintenance, and decommissioning of the Proposed Development.

The assessment of the GHG emissions caused by the Proposed Development included, but was not limited to, an assessment of:

- The embodied emissions within the required construction materials (including concrete, hardstandings, turbines, and other infrastructure);
- the emissions associated with the transportation of materials to site;
- the emissions associated with changes in land use on the site (including the impact on peat and the felling of forestry); and
- the emissions from possible back-up power generation.

These emissions were then compared against the GHG savings as a result of the Proposed Development and were reported in accordance with IEMA's Environmental Impact Assessment Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance (2022).

Taking the entire lifecycle of the Proposed Development into account, the Proposed Development is predicted to deliver total emissions savings of 1,099,942 tCO₂e over its 35-year operational lifetime against grid mix electricity generation, and 2,635,007 tCO₂e against fossil fuel mix electricity generation. This overall impact was considered to represent a significant and positive beneficial effect.

2.2 Theme 2: Impact of climate change on the Proposed Development

In response to a common theme noted on the Climate discipline, this section summarises the potential for climate change to impact on the Proposed Development.

A high-level review was carried out at the scoping stage to judge whether the long-term effects of climate change would pose a potential threat to the Proposed Development. The findings of that review are as follows: In Ireland, climate change is projected to result in warmer temperatures, decreased summer rainfall but increased winter rainfall and sea level rise. None of these trends are anticipated to impact upon the Proposed Development by virtue of its in-built resilience (with respect to temperature) and the elevated position of turbines (with respect to both rainfall and sea level rise).

A further variable with respect to the changing climate is sea level pressure which contributes towards wind. Projections relating to sea level pressure show considerable

uncertainty. As braking mechanisms on turbines allow for operation only under specific wind speeds, should severe windstorms be experienced, then the turbines would shut down.

As a result of these findings, the following conclusion was drawn within the scoping report:

“It is proposed that a climate change risk assessment, detailing the effects of future climate change on the Proposed Development (i.e., the resilience, or conversely, the vulnerability of a project to future climate changes) is scoped out of further assessment.”

2.3 Theme 3: Requirement of the Proposed Development

EIAR Chapter 4 Project Need and Alternatives provides a detailed discussion on the need for the Proposed Development.

In summary, the requirement for an increase in both renewable energy in general, and renewable energy specifically from onshore windfarms, is laid out in the Irish Government's Climate Action Plan 2023 (CAP23). This was discussed in **EIAR Chapter 18**, Section 18.4.5. Among the most critical aims of the plan is the need to increase the proportion of renewable electricity to up to 80% by 2030, including an increased target of up to 5 Gigawatts (GW) of offshore wind energy and 9GW of onshore wind energy. This ensures alignment with the Climate Action and Low Carbon Development (Amendment) Act 2021, which commits the Republic of Ireland to a legally binding target of net-zero GHG emissions no later than 2050, and a reduction of 51% of emissions by 2030 (relative to the 2018 baseline). The 2021 Act amends the 2015 Act to significantly strengthen the statutory framework for governance of climate actions to realise Ireland's national, EU and international climate goals and obligations.

2.4 Theme 4: Transboundary effects

The methodology used for the calculation of emissions relating to the production, transport, operation, and decommissioning of the turbines took into account the transboundary effects of the Proposed Development. As the study area for the climate change chapter was the global atmosphere, any emissions caused as a result of the project, regardless of their source location, were taken into account in line with IEMA guidance.