



codling
wind park



Environmental Impact Assessment Report

Volume 4

Appendix 21.1 Cumulative Effects Assessment



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Abbreviations

Abbreviation	Term in Full
CEA	Cumulative effects assessment
CEMP	Construction Environmental Management Plan
CWP	Codling Wind Park
CWPL	Codling Wind Park Limited
DCC	Dublin City Council
EC	European Commission
EU	European Union
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
ESBN	ESB Networks
EU	European Union
IFI	Inland Fisheries Ireland
INNS	Invasive non-native species
MAC	Maritime Area Consent
O&M	Operations and maintenance
OTI	Onshore transmission infrastructure
PINS	Planning Inspectorate
SIDS	Strategic Infrastructure Development

Definitions

Glossary	Meaning
the Applicant	The developer, Codling Wind Park Limited (CWPL).
Codling Wind Park (CWP) Project	The proposed development as a whole is referred to as the Codling Wind Park (CWP) Project, comprising of the offshore infrastructure, the onshore infrastructure and any associated temporary works.
Codling Wind Park Limited (CWPL)	A joint venture between Fred. Olsen Seawind (FOS) and Électricité de France (EDF) Renewables, established to develop the CWP Project.
EirGrid	State-owned electric power transmission system operator in Ireland and nominated Offshore Transmission Asset Owner
ESB Networks (ESBN)	Owner of the electricity distribution system in the Republic of Ireland, responsible for carrying out maintenance, repairs and construction on the grid.
ESBN network cables (previously the ESB grid connection)	Three onshore export cable circuits connecting the onshore substation to the proposed ESBN Poolbeg substation, which will then transfer the electricity onwards to the national grid.
environmental impact assessment (EIA)	A systematic means of assessing the likely significant effects of a proposed project, undertaken in accordance with the EIA Directive and the relevant Irish legislation.
Environmental Impact Assessment Report (EIAR)	The report prepared by the Applicant to describe the findings of the EIA for the CWP Project.
landfall	The point at which the offshore export cables are brought onshore and connected to the onshore export cables via the transition joint bays (TJB). For the CWP Project The landfall works include the installation of the offshore export cables within Dublin Bay out to approximately 4 km offshore, where water depths that are too shallow for conventional cable lay vessels to operate.
Maritime Area Consent (MAC)	A Maritime Area Consent (MAC) provides State authorisation for a prospective developer to undertake a maritime usage and occupy a specified part of the maritime area. A MAC is required to be in place before planning consent can be sought.
onshore export cables	The cables which transport electricity generated by the WTGs from the TJBs at the landfall to the onshore substation.
onshore development area	The entire footprint of the OTI and associated temporary works that will form the onshore boundary for the planning application.
onshore transmission infrastructure (OTI)	The onshore transmission assets comprising the TJBs, onshore export cables and the onshore substation. The EIAR considers both permanent and temporary works associated with the OTI.

Glossary	Meaning
onshore substation	Site containing electrical equipment to enable connection to the national grid.
operations and maintenance (O&M) activities	Activities (e.g., monitoring, inspections, reactive repairs, planned maintenance) undertaken during the O&M phase of the CWP Project.
O&M phase	This is the period of time during which the CWP project will be operated and maintained.
planning application boundary	The area subject to the application for development consent, including all permanent and temporary works for the CWP Project.
Poolbeg 220kV substation	This is the ESNB substation that the ESNB network cables connect into, from the onshore substation. This substation will then transfer the electricity onwards to the national grid

APPENDIX 21.1 CUMULATIVE EFFECTS ASSESSMENT

1 Introduction

1. Codling Wind Park Limited (hereafter 'the Applicant') is proposing to develop the Codling Wind Park (CWP) Project, a proposed offshore wind farm (OWF) which is located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow.
2. The Environmental Impact Assessment Report (EIAR) for the CWP Project provides the decision-maker, stakeholders and all interested parties with the environmental information required to develop an informed view of any likely significant effects resulting from the CWP Project, as required by the European Union (EU) Directive 2011/92/EU (as amended by Directive 2014/52/EU) (the EIA Directive). These provisions are transposed into Irish legislation in Part X of the Planning and Development Act 2000, as amended, and in Part 10 of the Planning and Development Regulations 2001, as amended.
3. A fundamental component of the EIA is to consider and assess the potential for cumulative effects of the project with other projects, plans and activities (hereafter referred to as 'other development').
4. The Environmental Protection Agency (EPA) Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022) defines cumulative effects as:

'The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.'

'While a single activity may itself result in a minor impact, it may, when combined with other impacts (minor or insignificant), result in a cumulative impact that is collectively significant. For example, effects on traffic due to an individual industrial project may be acceptable; however, it may be necessary to assess the cumulative effects taking account of traffic generated by other permitted or planned projects.'

5. This appendix presents the findings of the Cumulative Effects Assessment (CEA) for Biodiversity, which considers the residual effects presented in **Chapter 21 Biodiversity** alongside the potential effects of other proposed and reasonably foreseeable development. Cumulative effects are considered in this document across the construction and operation and maintenance (O&M) phases of the CWP Project.
6. The detail and scope of the decommissioning works for the CWP Project will be determined by the relevant legislation and guidance at the time of decommissioning. Project-alone impacts during the decommissioning phase of the CWP Project are assessed in **Chapter 21 Biodiversity**. It is anticipated that the impacts will be no greater than those identified for the construction phase, and therefore no separate assessment of cumulative impacts during the decommissioning phase is presented within this CEA.

2 CEA methodology

2.1 Guidance

7. This section summarises the approach to the assessment of cumulative effects for the CWP Project. Further details on the approach to the CEA is provided in **Appendix 5.1 Cumulative Effects Assessment Methodology**.

8. The principal guidance document that has informed the approach to the CEA is the Planning Inspectorate (PINS) for England 'Advice Note 17: Cumulative Effects Assessment' (PINS, 2019), which provides a four-stage process for the assessment of cumulative effects that has been applied here.
9. This guidance has been applied for a number of both offshore wind farm (OWF) and non-OWF projects in the UK and is considered to provide developers with a structured approach to assessing cumulative effects. The guidance is also regularly applied in Ireland for large-scale projects, noting that there is no single, industry standard approach to CEA in Ireland, which often varies between projects.
10. In developing the CEA methodology, EPA 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 (European Commission, 1999), have also been considered.

2.2 Consultation

11. Stakeholder and regulator feedback received during the consultation process that is relevant to the biodiversity assessment is provided in **Chapter 21 Biodiversity**. **Table 1** provides a summary of stakeholder and regulator feedback received during the consultation process that is relevant to the CEA for biodiversity.

Table 1 Consultation responses relevant to the CEA for Biodiversity

Consultee	Comment	How issues have been addressed
Scoping responses		
Inland Fisheries Ireland (IFI) 14 and 18 June 2021	Cumulative impacts should take cognisance of the Dublin Port Maintenance Dredging Programme and strategic infrastructure projects planned.	The Dublin Port Company (DPC) Masterplan was considered within the cumulative assessment.
Dublin City Council (Biodiversity and Parks) 31 January and 1 June 2023	Cumulative impacts should take cognisance of the DPC Masterplan and future project for consent.	The DPC Masterplan was considered within the cumulative assessment.

2.3 Identification of 'other development'

12. Stage 1 of the process involved establishing the long list of other development with the potential to result in cumulative effects with the CWP Project. This included all projects that result in a comparative effect that is not intrinsically considered as part of the existing environment and is not limited to other OWF projects.
13. The longlist of other development (presented in **Chapter 5 EIA Methodology, Appendix 5.1 Cumulative Effects Assessment Methodology**) was then subject to additional screening criteria to establish a shortlist of other development for each topic. It should be noted that the approach to the CEA attempts to incorporate an appropriate level of pragmatism. Only projects which are well described and sufficiently advanced, with sufficient detail available with which to undertake a meaningful and robust assessment, have been screened into the CEA.

14. In accordance with PINS Advice Note 17, each development considered alongside the CWP Project as part of the CEA has been assigned to a tier, reflecting its current status in the planning and development process.
15. The purpose of the tiered approach is to give consideration to the level of certainty that a cumulative project will be built and therefore contribute to cumulative effects. For example, there can be greater certainty that other developments that have been approved and are under construction are likely to contribute to cumulative effects, whereas other development at early phases of development (i.e. pre-planning) is less likely to proceed to construction and contribute to cumulative effects. Furthermore, sufficient detail about these projects is unlikely to be available with which to undertake a detailed cumulative assessment.
16. The proposed tiering structure is presented in **Table 2** and described in more detail in **Appendix 5.1 Cumulative Effects Assessment Methodology**. The tiers are listed in descending order of the level of detail likely to be available (and, correspondingly, certainty of effects arising).

Table 2 Tiered structure for other development considered for CEA (modified from PINS Advice Note 17 (PINS, 2019))

Tier	Description
Tier 1	<ul style="list-style-type: none"> • Under construction; • Permitted applications, but not yet implemented; • Offshore applications submitted six months or more in advance of the CWP Project planning application, but not yet determined; and • Onshore applications submitted six months or more in advance of the CWP Project planning application, but not yet determined.
Tier 2a	<ul style="list-style-type: none"> • Offshore projects in receipt of a Maritime Area Consent (MAC) and an Offshore Renewable Electricity Support Scheme (ORESS) contract.
Tier 2b	<ul style="list-style-type: none"> • Offshore projects in receipt of a Maritime Area Consent (MAC); • Offshore Projects in the public domain where an EIA scoping report has been issued; and • Onshore Projects in the public domain where an EIA scoping report has been issued.
Tier 3	<ul style="list-style-type: none"> • Projects in the public domain where an EIA scoping report has not been issued; and • Projects that have been identified in the relevant development plans and programmes, which set the framework for future development consents / approvals, where such development is reasonably likely to come forward.

3 CEA impact screening

17. The first step in the CEA for Biodiversity is the identification of which residual impacts assessed for the CWP Project alone have the potential for a cumulative impact with other development (described as 'impact screening'). This screening exercise is set out in **Table 3** below.
18. Potential impacts assessed in **Chapter 21 Onshore Biodiversity** where there remains, after mitigation, the potential for a continued collective effect with other developments were included in the CEA.

19. In summary, **Table 3** shows that there is the potential for cumulative effects on onshore biodiversity as a result of habitat loss, loss of foraging / commuting routes and breeding / resting sites and disturbance / displacement.
20. Other potential impacts, including habitat degradation as a result of the introduction / spread of non-native invasive plant species and habitat degradation as a result of air quality impacts (dust) were screened out of the CEA.

Table 3 Impacts and potential for cumulative effect

Impact	Potential for cumulative effect	Rationale
Construction		
Impact 1 – Permanent and temporary loss of habitat.	Yes	The development of the onshore transmission infrastructure (OTI) will result in the permanent loss of habitat. The cumulative effect of habitat loss from other projects could increase the magnitude of the effect within the receiving environment.
Impact 2 – Habitat degradation as a result of the introduction / spread of non-native invasive plant species (INNS).	No	An Onshore Invasive Species Management Plan (ISMP) has been prepared and will ensure all INNS within the onshore development area are removed. There is therefore no potential for cumulative effects with other projects.
Impact 3 – Habitat degradation as a result of air quality impacts (dust).	No	Adequate dust mitigation measures will be implemented during the duration of the construction phase which will ensure there is no potential for dust impacts. These will be implemented as part of the Construction Environmental Management Plan (CEMP) . There is therefore no potential for cumulative effects with other projects.
Impact 4 – Permanent/temporary loss of breeding / resting places or commuting and / or foraging habitat for protected terrestrial species.	Yes	The CWP Project will result in the temporary loss of foraging / commuting habitat for protected species. The cumulative effect of the loss of foraging / commuting corridors from other projects could increase the magnitude of the effect within the receiving environment.
Impact 5 Disturbance/displacement (noise, vibration and lighting) to protected terrestrial species during construction phase activities.	Yes	The construction of the OTI will result in a short-term increase in noise and disturbance. The cumulative effect of noise and disturbance from other plans or projects could increase the magnitude of the effect within the receiving environment, particularly in the event of a temporal overlap in future construction phases.

Impact	Potential for cumulative effect	Rationale
Operation		
Impact 1 – Disturbance / displacement (noise, vibration, human presence and / or lighting) to protected terrestrial species during operation and maintenance activities.	Yes	During the O&M phase the onshore substation will result in a slight increase in noise levels and artificial lighting. Due to the close proximity of other nearby projects, there is potential for an increase of cumulative noise levels.
Decommissioning		
Impact 1 – Permanent and temporary loss of habitat.	No	The detail and scope of the decommissioning works for the CWP Project will be determined by the relevant legislation and guidance at the time of decommissioning. Project alone impacts during the decommissioning phase of the CWP Project are assessed in Chapter 21 Onshore Biodiversity . It is anticipated that the impacts will be no greater than those identified for the construction phase, and therefore no separate assessment of cumulative impacts during the decommissioning phase is presented within this CEA.
Impact 2 – Habitat degradation as a result of the introduction / spread of non-native invasive plant species.		
Impact 3 – Habitat degradation as a result of air quality impacts (dust).		
Impact 4 – Permanent / temporary loss of breeding / resting places or commuting and / or foraging habitat for protected terrestrial species.		
Impact 5 Disturbance/displacement (noise, vibration and lighting) to protected terrestrial species during construction phase activities.		

4 CEA ‘other development’ screening

21. The second step in the CEA for onshore biodiversity is the identification of the other development that may result in cumulative effects for inclusion in the CEA (described as ‘project screening’). This information is set out in **Table 4** below, together with a consideration of the relevant details of each development, including the tier (see **Table 2**), proximity to the CWP Project development area and a rationale for including or excluding a development from the assessment.
22. The other developments included in the table below are taken from the longlist of other development (presented in **Appendix 5.1 Cumulative Effects Assessment Methodology**). Information gathering for the other development screened in at Stage 2 of the CEA, along with a greater understanding of the potential effects of the CWP Project, has enabled further refinement of the shortlist.

23. In summary, the following other development will be assessed for potential cumulative effects with the CWP Project in relation to onshore biodiversity:
- Dublin Port Company – MP2 Project (CEA-1323 and CEA-1328);
 - Electricity Supply Board (ESB) – Dublin Bay Power Station / Open Cycle Gas Turbine (OCGT), BESS and Flexible Thermal Generation (CEA-1327, CEA-1341 and CEA-1342);
 - ESB – Poolbeg Generating Station / Battery Energy Storage System (BESS), Flexible Thermal Generation, OCGT and Substation (CEA-1336, CEA-1337, CEA-1338 and CEA-1346);
 - Hammond Lane Metal Company Ltd – construction of two-storey building and non-ferrous metals recovery facility (CEA-1340);
 - Pembroke Beach DAC / Becbay Ltd and Fabrizia Developments Ltd – redevelopment of former glass bottle site (CEA-0333, CEA-0339, CEA-0387 and CEA-1354);
 - E D & F Man Liquid Products Ireland Ltd – new storage tank (CEA-1344);
 - Irish Water – Ringsend Wastewater Treatment Plant Upgrade Project (CEA-0331);
 - Kilsaran Concrete – continuation of use of an existing concrete batching plant (CEA-1343);
 - Dublin Port Company – bridge over existing cooling water channel (superseded by CWP project proposals) (CEA-1339);
 - Ecocem Ireland Limited – permission for the development consisting of the construction of silos, compressor rooms, cooling room, retaining walls, new fencing, new gate, revision of car park layout (CEA 3002);
 - EirGrid – Dublin City Programme of Works (CEA-1371);
 - Codema – Dublin's Energy Agency – Dublin District Heating System Project (DDHS) (CEA-1347); and
 - 3FM Dublin Port Development (CEA-1348).

Table 4 Summary of other development screened into the CEA for Biodiversity

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
Dublin Port Company MP2 Project (CEA-1323, CEA-1328) Planning Ref: FS006893	0	1	No	<p>The MP2 Project is proposed on the northern side of Poolbeg, north of the River Liffey.</p> <p>The EIAR produced for the MP2 project states that there are no significant residual impacts predicted on terrestrial flora and habitats and protected species as a result of the construction and operation of the project (RPS, 2018).</p> <p>As the MP2 Project is proposed to the north of the River Liffey, there will be no spatial overlap and a low risk of shared receptors with the CWP Project. On this basis there is no potential for significant cumulative effects with the CWP Project.</p>
ESB Dublin Bay Power Station / OCGT, Battery Energy Storage System and Flexible Thermal Generation (CEA-1327, CEA-1341 & CEA-1342)	0	1	Yes	<ul style="list-style-type: none"> CEA-1327 – assumed to be in construction; CEA-1341 – assumed construction completed by 2026; CEA-1342 – assumed construction completed by 2026, data reviewed indicates commitment for the

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
Planning Ref: 3074/23 3646/20 3647/20				<p>development to be in place by October 2024.</p> <p>There is potential for a temporal overlap between the construction phase of CEA 1327 and that of the CWP Project which could result in negative cumulative effects on ecological receptors.</p> <p>Considering the proximity and potential overlap of the construction phases, the potential for cumulative impacts could not be ruled out.</p>
<p>Pembroke Beach DAC / Becbay Ltd & Fabrizia Developments Ltd</p> <p>Redevelopment of former glass bottle site</p> <p>(CEA-0333, CEA-0339, CEA-0387, CEA-3003 and CEA-1354)</p> <p>Planning Ref: 3074/23 PWSDZ3062/24 3646/20 3647/20</p>	0	1	No	<p>Development of residential, office and mixed-use scheme at the former Irish Glass Bottle and Fabrizia sites at Poolbeg West.</p> <p>There is potential for a temporal overlap between the projects. However, a review of the available information has shown that there will be no spatial overlap in the project construction working areas, and a low risk of shared receptors.</p> <p>This development was not considered further.</p>

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
ESB Poolbeg Generating Station / BESS, Flexible Thermal Generation, OCGT and Substation (CEA-1336, CEA-1337, CEA-1338 and CEA-1346) Planning Ref: 3625/20 3624/20 3137/23 4057/23	0	1	Yes	<ul style="list-style-type: none"> CEA-1336 – assumed construction completed by 2026; CEA-1337 – assumed construction completed by 2026, data reviewed indicates commitment for the development to be in place by October 2024; CEA-1338 – assumed in construction by 2026; CEA-1346 – no data; however, assumed to be in construction by 2026, for completion prior to 2029. This is the Poolbeg 220kV substation that the CWP Project will connect into. <p>There is potential for the construction phase of the CEA 1338 and CEA 1346 to overlap with the construction phase of the OTI and landfall which could result in negative cumulative impacts and effects on ecological receptors.</p> <p>Considering the proximity and potential overlap of the construction phases, the potential for cumulative impacts could not be ruled out.</p>

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
<p>Hammond Lane Metal Company Ltd</p> <p>Construction of two-storey building and non-ferrous metals recovery facility (CEA-1340)</p> <p>Planning Ref: 2130/18</p>	0	1	No	<p>The proposed development was granted planning in 2018 and is likely to already be constructed. The Appropriate Assessment Screening report prepared for the project concluded that the project (construction and operational phases) will not result in likely significant effect on European sites (Doherty Environmental, 2018).</p> <p>There is no potential for a temporal overlap in the construction phase of this development and the CWP Project. Additionally, given the lack of operational phase impacts and the small scale (40 m x 10 m) nature of the development, there is no potential for significant cumulative effects with the CWP Project.</p>
<p>E D & F Man Liquid Products Ireland Limited</p> <p>New Storage Tank (CEA-1344)</p> <p>Planning Ref: 2804/19</p>	0	1	No	<p>No EIA or Environmental Report has been produced for the new Storage Tank project, so an assessment of cumulative residual effects could not be determined.</p> <p>Regardless, considering the small-scale nature of the proposed storage tank (13.3 m x 16.3 m) there is no</p>

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
				potential for significant cumulative impacts with the CWP Project. It is also likely that the two project timelines will not coincide as the permission for the new storage tank expires in August 2024.
Irish Water – Ringsend Wastewater Treatment Plant Upgrade Project (CEA-0331) Planning Ref: 5319/22	0.25	1	No	No EIA or Environmental Report has been produced for the project, so an assessment of cumulative residual effects could not be determined. However, considering the small-scale nature of the project (ca. 30 m ²), there is no potential for significant cumulative impacts with the CWP Project.
Kilsaran Concrete Continuation of use of an existing concrete batching plant (CEA-1343) Planning Ref: 3469/22	0.3	1	No	No EIA or Environmental Report has been produced for the project, so an assessment of cumulative residual effects could not be determined. The application is for the continuation of use of an existing concrete batching plant. As the plant is already in operation and will not change, the plant would therefore have been considered within the baseline assessment. There is therefore no potential for significant cumulative impacts with the CWP Project.

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
Dublin Port Company Bridge over existing cooling water channel (superseded by CWP project proposals) (CEA-1339) Planning Ref: 3711/18	0	1	No	<p>The installation of a bridge over the cooling water channel into the onshore substation is included as part of the OTI. The location mirrors that of this proposed bridge development.</p> <p>In the event that the CWP Project proceeds, this proposed bridge development would be superseded by the Project.</p> <p>On this basis, the proposed bridge development was not considered further in this assessment.</p>
Ecocem Ireland Limited (CEA 3002) Permission for the development consisting of the construction of silos, compressor rooms, cooling room, retaining walls, new fencing, new gate, revision of car park layout Planning Ref: 3041/24	0	1	No	<p>No Environmental Report has been produced for the project, so an assessment of cumulative residual effects could not be determined.</p> <p>The application is for minor developments within an existing operational site. As the plant is already in operation and proposed works are considered localised within an existing site boundary, it was concluded that there is no potential for significant cumulative impacts with the CWP Project.</p>
Dublin Port Company 3FM	0	3	Yes	Due for submission in late 2023. The 3FM Project is the third and final

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
				<p>Strategic Infrastructure Development (SID) Project needed to deliver the capacity objectives of the Dublin Port Masterplan 2040. Key components of this project will include: Southern port access road (SPAR).</p> <p>There is potential for a temporal overlap between the construction phase of this project and that of the CWP Project. If construction does overlap, concurrent construction activities within 50 m of the CWP Project onshore development area could cause cumulative effects.</p>
<p>Codema – Dublin's Energy Agency</p> <p>Dublin District Heating System Project (DDHS)</p> <p>CEA-1347</p> <p>Planning Ref.: N/A</p>	0	3	No	<p>The DDHS will be a thermal energy network that uses energy from waste heat and distributes it as hot water through insulated dual (supply and return) pipelines to homes and business for space heating, hot water and industrial purposes.</p> <p>It is understood that this project will be located on a site within the Poolbeg peninsula, potentially in proximity to Construction Compound A. However, this project is not yet submitted for planning consent</p>

Development	Distance from the onshore transmission infrastructure (km)	Tier	Included in the CEA (Yes / No)	Rationale
				This project is not yet submitted. There is insufficient detail available about this project to undertake a meaningful cumulative effects assessment. Therefore, the project is screened out from further assessment.
EirGrid Programme of Works CEA-1371	0 km	3	No	<p>Works are required to upgrade Dublin City's electricity infrastructure. This includes the installation of 50 km of cables across the city. This will include underground cable routes, some of which will link to the Poolbeg ESB Poolbeg Generating Station.</p> <p>Final route technologies have not yet been confirmed and this project has not yet been submitted for planning consent.</p> <p>There is insufficient detail available about this project to undertake a meaningful cumulative effects assessment. Therefore, the project is screened out from further assessment.</p>

5 Assessment of cumulative effects

5.1 Construction phase

5.1.1 Cumulative Impact 1: Permanent and temporary loss of habitat and Impact 4 – permanent / temporary loss of breeding / resting places or commuting and / or foraging habitat for protected terrestrial species

24. The CWP Project will result in the permanent loss of habitat within the onshore development area boundary which, in turn, will potentially result in the loss of breeding / resting and commuting / foraging habitat for protected terrestrial species. Approximately 13,742.50 m² of habitat and 110 m of treeline will be permanently lost to facilitate the OTI. It should be noted that the habitats which will be lost are of local importance only, there will be no loss of habitats of county, national or international importance.
25. Considering the limited availability of similar habitats within the wider surrounding area, it was determined that the areas of permanent habitat loss would result in likely significant effects on the conservation status, at a local geographical scale.
26. The CWP Project is proposing ecological enhancement measures within the onshore development boundary. The enhancement measures include the replanting of vegetation (ca 7,856 m²) at the proposed landfall site, following the completion of the construction works. The replanting of approximately 7,856 m² of new higher value vegetation (native woodland, shrubs and wildflower meadows) at the landfall site and along Shelly Banks Road and Pigeon House Road will compensate some of the permanent habitat loss, however there will be a net loss of habitat to facilitate the OTI. The replanting will, however, result in an increase of native species diversity with the area, which will benefit local biodiversity. Following the adoption of the additional mitigation, the significance of residual effect for the loss of habitat is predicted to be **not significant at a local geographical scale**.
27. The cumulative effect of habitat losses with nearby projects (listed in **Table 4** above) could however increase the magnitude of the impact. A review of ecological assessment undertaken for CEA 1346 determined that this development will result in the loss of a small area of broadleaved woodland which can't be replaced. This would include habitat clearance where temporary HDD compound 2 is proposed for the CWP Project. The CEA-1346 project, however, is implementing hedgerow planting around the perimeter of their site and potential off-site planting of native woodland.
28. In addition, the ecological assessments for CEA 1327 and 1338 both concluded no significant residual adverse effects. These developments will be controlled through individual consented planning applications. Associated planning conditions include for biodiversity proposals and compliance requirements, with measures outlined in their respective ecological assessments.
29. While the DPC 3FM project has not yet been submitted for planning, it is noted that this development is proposing new parkland and amenity areas, additional land to the Irishtown Nature Park and the creation of new wildflower meadows adjacent to a Port Park area.¹
30. Considering the replanting which will be implemented within the onshore development area as part of the CWP Project, which will result in an increase of higher value habitats and the implementation of site-specific mitigation measures / proposals by the other developments, it is considered the significance of residual effect would remain at **Not Significant at a local geographical scale**, which is not significant in EIA terms and no additional mitigation measures would be required.

¹ <https://www.dublinport.ie/wp-content/uploads/2023/10/DPC-3FM-A4-ConsultationReport-FINAL.pdf>

5.1.2 Cumulative Impact 5: Disturbance / displacement (noise, vibration and lighting) to protected terrestrial species during construction phase activities.

31. Given the proximity of the CWP Project to other nearby proposed developments (listed in Error! Reference source not found. above) and the potential for the overlap of construction phase timelines there is potential for a cumulative increase in disturbance levels to protected terrestrial species.
32. Measures to avoid or otherwise minimise disturbance to ecological receptors are included in the CEMP for the CWP Project. The CEMP outlines a series of noise abatement measures that will be adopted by the appointed contractors in accordance with British Standard BS 5228 1:2009 to reduce the level of noise during the construction phase. The CEMP also details a series of measures relating to pre-construction survey requirements and the installation of construction lighting.
33. The projects screened through from **Table 4** will be controlled by the assessment of individual planning applications. Specifically, planning conditions for CEA 1327, 1338 and 1346 detail requirements for compliance with the BS 5228 standard and the implementation of CEMPs during the construction phase. These good site practices during their construction phases will reduce noise and disturbance. Therefore, it is not considered that the disturbance contribution in addition to the CWP Project would result in significant cumulative negative effects on biodiversity.
34. It is considered the significance of residual effect would remain at **Not Significant**, which is not significant in EIA terms and no additional mitigation measures would be required.

5.2 Operation and maintenance

5.2.1 Impact 1 – Disturbance / displacement (noise, vibration, human presence and / or lighting) to protected terrestrial species during operation and maintenance activities

35. There is a minimal contribution in noise and artificial lighting levels from the onshore substation during the O&M phase was considered not significant at any geographical scale. There is potential for a cumulative increase in noise and artificial light levels with nearby projects considering their proximity to the CWP Project and the potential overlap of operational phases.
36. Following a review of the ecological assessments available for projects screened through from Table 4, it was found that no other development identified residual effects on ecological receptors from noise and lighting impacts during the operational phase.
37. A detailed environmental noise model determined that the CWP Project will operate in compliance with identified noise criteria. The onshore substation will generally be unmanned and lighting will only be required for the likes of security, access points and car parking. Considering that no residual effects were identified from the other developments, it is concluded the significance of residual effect would remain at **Not Significant at any geographical scale**, which is not significant in EIA terms and no additional mitigation measures would be required.

6 CEA summary

38. This CEA, which supports **Chapter 21 Onshore Biodiversity** has assessed the potential cumulative effects on onshore biodiversity from the construction and O&M phases of the CWP Project alongside other development.

39. In summary, the CEA for Biodiversity does not identify any significant cumulative effects resulting from the CWP Project alongside other development. It is not considered necessary that additional mitigation measures would be required.

7 References

40. Doherty Environmental (2018). Hammond Lane, Pigeon House Road Upgrade Works, Habitat Directives Assessment Screening Statement in Support of Appropriate Assessment. (Unpublished Report).
41. RPS (2018a). Dublin Port Company. Berth 47A Access Bridge & Storage Area. Environmental Report. (Unpublished Report).
42. RPS (2018b). MP2 Project, Environmental Impact Assessment Report Main Document (Part 1). IBE1429/EIAR. (Unpublished Report).