codling wind park

Environmental Impact Assessment Report

Volume 4

Appendix 23.1 Cumulative Effects Assessment


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Abbreviations

Abbreviation	Term in Full
CEA	Cumulative effects assessment
CWP	Codling Wind Park
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
ESBN	ESB Networks
EU	European Union
GIS	Geographic Information System
GLVIA3	Guidelines for Landscape & Visual Impact Assessment, Third Edition
LVIA	Landscape and visual impact assessment
OWF	Offshore wind farm
OTI	Onshore transmission infrastructure
SDZ	Strategic Development Zone
TCA	Townscape character areas

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.
export cables	The cables, both onshore and offshore, that connect the offshore substations with the onshore substation.
Maritime Area Planning (MAP) Act 2021	An Act to regulate the maritime area, to achieve such regulation by means of a National Marine Planning Framework, maritime area consents for the occupation of the maritime area for the purposes of maritime usages that will be undertaken for undefined or relatively long periods of time (including any such usages which also require development permission under the Planning and Development Act 2000) and licences for the occupation of the maritime area for maritime usages that are minor or that will be undertaken for relatively short periods of time
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.
onshore substation	Site containing electrical equipment to enable connection to the national grid.
onshore substation site	The area within which permanent and temporary works will be undertaken to construction the onshore substation.

onshore substation site boundary	The physical boundary of the onshore substation site.
onshore substation operational site	The area within the operational site boundary within which operational activities will occur.
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	The period of time during which the CWP project will be operated and maintained.
Poolbeg 220kV substation	The ESBN substation that the ESBN network cables connect into, from the onshore substation. This substation will then transfer the electricity onwards to the national grid

APPENDIX 23.1 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) 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 the landscape and visual impact assessment (LVIA), which considers the residual effects presented in **Chapter 23 LVIA** 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 23 LVIA**. 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 in 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, which has been applied here.

9. This guidance has been applied for a number of both 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.

11. For the LVIA, the specific methodology for CEA is set out in section 3 of **Appendix 23.1 LVIA Methodology**.

2.2 Consultation

12. Stakeholder and regulator feedback received during the consultation process that is relevant to the LVIA is provided in **Chapter 23 LVIA**. No feedback specific to the CEA for LVIA has been received, although general feedback is summarised in **Table 1** Consultation responses relevant to the CEA for LVIA**.**

Table 1 Consultation responses relevant to the CEA for LVIA

Consultee	Comment	How issues have been addressed
Dublin City Council	Noted in meetings regarding CEA that the District Heating, EirGrid Powering Up Dublin and Dublin Port Company 3FM projects should be considered.	These projects have been included in the cumulative long list of other development.

2.3 Identification of 'other development'

13. Stage 1 of the process involved establishing a 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.

14. The long list of other development (presented in **Chapter 5**, **Appendix 5.1 Cumulative Effects Assessment Methodology**) was then subject to additional screening criteria to establish a short list 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.

15. 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 their current status in the planning and development process.

16. 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 development approved and under construction is 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.

17. 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 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	• 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	• Offshore projects in receipt of a Maritime Area Consent (MAC) and an Offshore Renewable Electricity Support Scheme (ORESS) contract.
Tier 2b	• 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	• 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

18. The first step in the CEA for LVIA 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.

19. Only potential impacts assessed in detail in **Chapter 23 LVIA** are included in the CEA.

20. The potential for a cumulative effect to arise in relation to the different phases of the CWP Project and as a result of cumulative impacts on different receptors is set out in **Table 3**.

21. In summary, **Table 3** shows that there is the potential for cumulative effects on visual receptors to arise during the operational phase of the CWP Project as a result of the addition of the CWP Project to a context that contains cumulative developments.

22. Other potential impacts, including impacts during construction and impacts on landscape features and landscape / townscape character, during operation of the CWP Project were screened out of the CEA.

Table 3 Potential for cumulative effects

Impact	Potential for cumulative effect	Rationale
Construction		
Impact 1: Impacts on landscape features **Impact 2**: Impacts on landscape / townscape character **Impact 3**: Impacts on visual amenity	No	Construction-phase cumulative effects are scoped out of detailed assessment. This is due to the temporary nature of these effects, and the existing presence of construction activity in the surrounding area. The OTI will likely contribute to an intensification of construction activity, which will be experienced by landscape / townscape and visual receptors within the study area. However, construction-type activity in the form of materials stockpiles, cranes, heavy plant, truck movements, hoarding etc. is already present on the Poolbeg Peninsula, is experienced by visual receptors, and forms an existing characteristic of the surrounding townscape. Construction of the OTI will create an intensification of traffic movements, transport of materials, and built development. However, this type of activity is already present in the baseline, and the construction of cumulative developments is considered likely to further contribute to this existing activity, rather than introducing new impacts. Therefore, the construction-phase effects of the OTI in the context of the cumulative developments will represent an intensification of existing and cumulative townscape characteristics and features of views, and construction of the OTI is not considered likely to give rise to significant cumulative effects.
Operation		
Impact 1: Impacts on landscape features	No	Cumulative effects on landscape features within the onshore development area are scoped out of detailed assessment. Cumulative developments are considered to have a limited influence on landscape features throughout the study area, due to the position of these developments within primarily industrial areas with limited landscape features. As such, it is considered that the cumulative effect on key landscape features as a result of the

Impact	Potential for cumulative effect	Rationale
		addition of the OTI to a context that includes cumulative development will be limited and not significant, and these effects are not considered further.
Impact 2: Impacts on landscape / townscape character	No	Cumulative effects on landscape / townscape character are scoped out of detailed assessment. Cumulative developments are considered to have a limited influence on landscape / townscape character throughout the study area. Generally, cumulative developments on the Poolbeg Peninsula are of an industrial nature, and will be in keeping with the existing industrial character of this TCA. As such, the opportunity for significant cumulative effects to arise as a result of the addition of the OTI to a cumulative context with other industrial development is considered to be limited. The cumulative effect will be not significant, and these effects are not considered further.
Impact 3: Impacts on visual amenity	Yes	The operation and maintenance of the OTI, in a context which includes cumulative development, is considered to have the potential to result in significant cumulative effects on visual amenity. Impacts on visual amenity are scoped into the detailed assessment where relevant. Table 4 below indicates which visual receptors are considered to have the potential to experience significant effects, and are considered in further detail.
Decommissioning		
Impact 1: Impacts on landscape features **Impact 2**: Impacts on landscape / townscape character **Impact 3**: Impacts on visual amenity	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 23 LVIA**. 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.	

4 CEA 'other development' screening

23. The second step in the CEA for LVIA 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 4**), proximity to the CWP Project development area, and the rationale for including or excluding from the assessment.

24. The other development included in the table below is taken from the long list 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 short list.

25. The long list was filtered to derive the list of other developments which have been considered for inclusion in the LVIA. Other developments were considered for inclusion based on the following criteria:

- Developments involving construction of buildings within 1 km of the onshore development area, due to the limited potential for significant cumulative effects to arise as a result of developments beyond this distance, due to the surrounding context of built form in the wider Dublin area;
- Developments involving construction of electricity generation infrastructure on the Poolbeg Peninsula; and
- Developments within Dublin Port involving construction of buildings, terminals or berths, and excluding developments which involve only changes to roads or alterations to existing infrastructure.

26. All other developments in the long list were excluded from further consideration in the LVIA CEA, as the OTI was considered to have limited potential to result in significant cumulative effects when considered alongside these developments.

27. In summary, the following other development will be assessed for potential cumulative effects with the CWP Project in relation to LVIA:

- Dublin Port Company 3FM Project (CEA-1348);
- Dublin Port Company MP2 Project (CEA-1323);
- Former Irish Glass Bottle Site (CEA-0333; CEA-0339; CEA-0387);
- EirGrid Poolbeg 220kV Substation (CEA-1346).

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

Development	Distance from the array site (km)	Distance from the export cable corridor	Tier	Included in the CEA (Yes/No)	Rationale
Dublin Port Company 3FM Project (CEA-1348) Planning Ref.: N/A. No planning submission.	32.6	0	3	Yes	Due to the limited information available about this development, a detailed assessment of potential cumulative effects is not possible. An overview of potential effects which may arise from the addition of the OTI to a cumulative context that includes this development are described in **Section 5** below.
Dublin Port Company MP2 Project (CEA-1323) Planning Ref: FS 006893	31.6	0	1	Yes	This development involves construction of a new jetty, redevelopment of berths and consolidation of passenger terminal buildings, with construction of parts of the development ongoing during the operational phase of the OTI. Potential cumulative effects arising from the addition of the OTI to a cumulative context that features this development are considered from Viewpoint 8: Dublin Port Ferry Terminal 1, and the footpath between Sandymount and the Great

Development	Distance from the array site (km)	Distance from the export cable corridor	Tier	Included in the CEA (Yes/No)	Rationale
					South Wall. Cumulative effects on other viewpoints / visual receptors will be not significant.
Former Irish Glass Bottle Site (CEA-0333; CEA-0339; CEA-0387) Planning Refs: PWSZD3270/19; PWSDZ3207/21; PWSDZ3406/22; PWSDZ3062/24	32.7	0	1	Yes	This development involves construction of a mixed-use, primarily residential, development. Potential cumulative effects arising from the addition of the OTI to a cumulative context that features this development are considered in relation to the views from the footpath between Sandymount and the Great South Wall, and Pigeon House Road. Cumulative effects on other viewpoints / visual receptors will be not significant.
Dublin Bay Power Station Open Cycle Gas Turbine (CEA-1327) Planning Ref: PWSDZ3074/23	30	0	1	No	These developments will be in keeping with existing character of surrounding industrial development on the Poolbeg Peninsula. There will be limited intervisibility with the OTI, partly due to the position of these developments within a site that contain existing energy generating
South Wall BESS (CEA-1341) Planning Ref: 3646/20	31	0.45	1		

Development	Distance from the array site (km)	Distance from the export cable corridor	Tier	Included in the CEA (Yes/No)	Rationale
Ringsend Flexgen (CEA-1342) Planning Ref: 3647/20	31	0.45	1		infrastructure, and that creates visual separation between the cumulative developments and the OTI. Where they are seen together, the OTI will have a limited cumulative effect due to the existing presence of extensive industrial development. These developments are not considered further.
ESB Poolbeg Open Cycle Gas Turbine (CEA-1338) Planning Ref: 3137/23	31	0.3	1	No	These developments will be in keeping with existing character of surrounding industrial development on the Poolbeg Peninsula. There will be limited intervisibility with the OTI, partly due to the position of these developments within a site that contains existing energy generating infrastructure, and that creates visual separation between the cumulative developments and the OTI. Where they are seen together, the OTI will have a limited cumulative effect due to the existing presence of extensive industrial development. These developments are not considered further.
ESB Poolbeg Generating Station BESS (CEA-1336) Planning Ref: 3625/20	30	0.36	1		
ESB Poolbeg Generating Station Flexgen (CEA-1337) Planning Ref:3624/20	30	0.22	1		

Development	Distance from the array site (km)	Distance from the export cable corridor	Tier	Included in the CEA (Yes/No)	Rationale
ESB Substation & Switchroom (CEA-1335) Planning Ref: 3669/19	X	X	1	No	Due to the scale and nature of these proposals, there will be very limited intervisibility with the OTI. Where both developments are seen, cumulative effects are not anticipated as a result of the OTI due to the existing industrial townscape context. This development is not considered further.
EirGrid Poolbeg 220kV Substation (CEA-1346) Planning Ref: 4057/23	30	0.22	1	Yes	This development involves construction of a substation, including GIS building and associated infrastructure. Potential cumulative effects arising from the addition of the OTI to a cumulative baseline that features this development are considered in views from the footpath between Sandymount and the Great South Wall, and Pigeon House Road. The potential for cumulative effects to be experienced by other receptors is considered to be limited due to limited intervisibility of the OTI and this development. Cumulative effects on other

Development	Distance from the array site (km)	Distance from the export cable corridor	Tier	Included in the CEA (Yes/No)	Rationale
					viewpoints / visual receptors will be not significant.
Ecocem Ireland Ltd. Construction of Plant (CEA-3002) Planning Ref: 3041/24	32	0.5	1	No	This development involves construction of plant within the existing Ecocem Ireland Ltd. site, as well as the retention and demolition of existing structures. There will be relatively limited visibility of this development alongside the OTI, restricted to areas around Pigeon House Road. Where both developments are seen, cumulative effects are not anticipated as a result of the OTI due to the existing industrial townscape context. This development is not considered further.

28. In summary, the following other development will be included in the assessment of potential cumulative effects that may arise through the addition of the CWP Project, in relation to LVIA.

- Former Irish Glass Bottle Site;
- EirGrid 220kV Substation; and
- Dublin Port Company MP2 Project.

29. These developments are shown in **Figure 23.6** (see LVIA **Appendix 23.3**) along with the anticipated location of the Dublin Port 3FM project.

30. Overall, consideration is given to the cumulative effects that may be experienced by the following receptors during the operation of the OTI:

- Visual receptors on the footpath between Sandymount and the Great South Wall;
- Visual receptors on Pigeon House Road; and
- Visual receptors at Viewpoint 8: Dublin Port Ferry Terminal 1.

31. The cumulative effects that may arise as a result of the operation of the OTI in a cumulative baseline featuring the following cumulative developments is described:

- Former Irish Glass Bottle Site;
- Dublin Port MP2 Project; and
- EirGrid Poolbeg 220kV Substation.

32. A planning application for the Dublin Port 3FM project has not yet been submitted, and details of the development are therefore limited. However, a high-level description of potential cumulative effects that may arise as a result of the addition of the OTI to a baseline featuring this development, based on current information available, is also provided in **Section 5** below.

33. Consideration of cumulative effects on all other receptors, as a result of the addition of the OTI to a cumulative baseline featuring all other cumulative developments, is scoped out, primarily because the cumulative developments proposed will be in keeping with the industrial nature of the surrounding context; the OTI will represent ongoing intensification of existing industrial activity, which already exists in the immediate surroundings; and limited intervisibility between the OTI and the cumulative developments due to visual separation by existing large-scale industrial development.

5 Assessment of cumulative effects

5.1 Operation and maintenance

5.1.1. Cumulative Impact 3: Impacts on visual amenity

Viewpoint 8: Dublin Port Ferry Terminal 1

Receptor Sensitivity

34. As described in **Chapter 23 LVIA**, receptors at Viewpoint 8: Dublin Port Ferry Terminal 1 are considered to be of medium-low sensitivity to changes associated with the OTI.

Cumulative Context

35. Cumulative developments that will be visible from this viewpoint comprise the Dublin Port MP2 project. None of the other cumulative projects included in the CEA will be visible. As such, the cumulative

magnitude of change and significance of effect described below consider only the Tier 1 Dublin Port MP2 project.

36. This project involves construction of a new jetty, alterations to existing berths, and consolidation of passenger terminal buildings. Construction of these elements is programmed to last beyond 2032, by which time the OTI will be operational.

37. Cumulative magnitude of change and significance of effect – Tier 1. The cumulative magnitude of change associated with the operation and maintenance of the OTI, given a cumulative baseline which features the Dublin Port MP2 project, is considered to be medium-low. The introduction of the OTI to the view will result in an intensification of industrial development in the view to the south, seen in the context of closer proximity industrial development associated with the Dublin Port MP2 Project.

38. Construction associated with the Dublin Port MP2 project (programmed to last beyond 2032) will be experienced primarily in the views to the west and east, while the operational development within the onshore substation site will be seen to the south. The OTI will therefore add to the views of existing industrial development, and in the context of construction works occurring in other sectors of the view, will lead to an intensification of this existing feature.

39. Once construction of the Dublin Port MP2 Project is complete after 2032, the cumulative magnitude of change associated with the OTI will reduce to low, given that the proposed uses associated with the Dublin Port MP2 Project are similar in nature and scale to the existing land use and development. Once this development is operational, the additional cumulative influence of the OTI will therefore be limited, and the cumulative magnitude of change will be negligible.

40. The sensitivity of receptors at Viewpoint 8: Dublin Port Ferry Terminal 1 to changes associated with the OTI is considered to be medium-low, and the cumulative magnitude of change is assessed as ranging from medium-low to negligible. Therefore, as per the matrix in Chapter 23, Table X.X), a cumulative effect ranging from minor to negligible is predicted, which is assessed as not significant. These changes will be long-term and irreversible. Where flexibility in the proposed design exists, no other scenario will lead to a higher level of effect.

Footpath between Sandymount and the Great South Wall (Great South Wall Walk)

Receptor sensitivity

41. As described in **Chapter 23 LVIA**, receptors on the footpath between Sandymount and the Great South Wall are considered to be of medium-high sensitivity to changes associated with the OTI. The location of the Great South Wall Walk is shown in **Figure 23.5**.

Cumulative context

42. Cumulative developments that will be visible from this route include the Former Irish Glass Bottle Site, the EirGrid Poolbeg 220kV Substation, and the Dublin Port MP2 Project. These cumulative developments are all classed as Tier 1, and the assessment below therefore considers only Tier 1 cumulative developments.

43. The Former Irish Glass Bottle Site comprises a mixed-use, primarily residential development, located between Sandymount and the Poolbeg Peninsula. The development will include buildings of up to 18 storeys. Construction of this development is anticipated to be completed after 2032, by which time the OTI will be operational.

44. The EirGrid Poolbeg 220kV Substation is located towards the eastern extent of the Poolbeg Peninsula, east of the Ringsend Waste Water Treatment Plant (WWTP) and Pigeon House Road. It involves construction of a 220kV GIS substation building and associated infrastructure. It is assumed that

construction of this development will be complete or substantially complete prior to completion of the CWP Project, to allow the ESBN network cables to link to the substation.

45. The Dublin Port MP2 Project involves construction of a new jetty, alterations to existing berths, and consolidation of passenger terminal buildings. Construction of these elements is programmed to last beyond 2032, by which time the OTI will be operational.

Cumulative magnitude of change and significance of effect – Tier 1

46. The cumulative magnitude of change associated with the operation and maintenance of the OTI, given a cumulative baseline that features the Former Irish Glass Bottle Site, EirGrid Poolbeg 220kV Substation, and the Dublin Port MP2 Project is considered to range from low to low-negligible.

47. The Screened Zone of Theoretical Visibility for the Onshore Substation is shown in **Figure 23.5** with the Great South Wall Walk.

48. Visibility of the operational OTI is primarily restricted to parts of the route along the Great South Wall, towards its eastern extent with some potential for glimpses of limited parts of the onshore substation shown to occur at the western end and from around the eastern end of Pigeon House Road.

49. From the Great South Wall, visibility of the Former Irish Glass Bottle Site and EirGrid Poolbeg 220kV Substation will be limited. There will be views to the north-west of ongoing construction associated with the Dublin Port MP2 Project (programmed to last beyond 2032). The OTI will add to views of existing industrial development seen to the west from this part of the route and, in the context of construction works occurring to the north-west, will lead to a further degree of intensification of development characteristics within views as illustrated by Viewpoint 2: Great South Wall.

50. Once construction of the Dublin Port MP2 Project is complete after 2032, the cumulative magnitude of change associated with the OTI will reduce to negligible, given that the proposed uses associated with the Dublin Port MP2 Project are similar in nature and scale to the existing land use and development context. Once this development is operational, the additional cumulative influence of the OTI will therefore be limited, and the additional cumulative magnitude of change will be low-negligible.

51. From the section of the route around where it meets Pigeon House Road it may be possible to see glimpsed views of the upper parts of the onshore substation over the much closer EirGrid Poolbeg 220kV Substation, the site of which runs alongside the route. The cumulative magnitude of change to views from this section of the route through the addition of the operational OTI will be low-negligible.

52. From western parts of the route, near Sandymount, in close proximity to the Former Irish Glass Bottle Site, both this development and the onshore substation might be visible. However, visibility of the onshore substation will be restricted to upper parts of the substation buildings, seen in the context of existing industrial development on the Poolbeg Peninsula, in particular the Dublin Waste to Energy Plant. The cumulative magnitude of change associated with the OTI along this part of the route will be negligible.

53. Overall, there will be an intensification of views of development along sections of this route; however, such changes are not primarily caused by the OTI, which has limited effects on views, but by the cumulative developments, and this is reflected in the findings set out below.

54. The sensitivity of receptors on the footpath between Sandymount and the Great South Wall to changes associated with the OTI is considered to be medium-high, and the cumulative magnitude of change is assessed as ranging from low to low-negligible. Therefore, as per the matrix in Appendix 23.1: LVIA Methodology), effects ranging from moderate-minor to minor are predicted, which is assessed as not significant. These changes will be long-term and irreversible. Where flexibility in the proposed design exists, no other scenario will lead to a higher level of effect.

Pigeon House Road

Receptor sensitivity

55. As described in **Chapter 23 LVIA**, receptors on Pigeon House Road are considered to be of medium-low sensitivity to changes associated with the OTI.

Cumulative context

56. Cumulative developments that will be visible from this route comprise the Former Irish Glass Bottle Site and the EirGrid Poolbeg 220kV Substation. The Dublin Port MP2 Project might also be visible, but this is considered likely to be very limited due to intervening land uses and is not considered further. The Former Irish Glass Bottle Site comprises a mixed-use, primarily residential development, located between Seán Moore Park, Sandymount, and the Poolbeg Peninsula. The development will include buildings of up to 18 storeys. Construction of this development is anticipated to be completed after 2032. The EirGrid Poolbeg 220kV Substation is located towards the eastern extent of the Poolbeg Peninsula, east of the Ringsend WWTP and Pigeon House Road. It involves construction of a 220kV GIS building and associated infrastructure. It is assumed that construction of this development will be complete prior to completion of the CWP Project, to allow the ESBN network cables to link to the substation.

Cumulative magnitude of change and significance of effect – Tier 1

57. The cumulative magnitude of change associated with the operation and maintenance of the OTI, given a cumulative baseline that features the Former Irish Glass Bottle Site and EirGrid Poolbeg 220kV Substation, is considered to be low. The onshore substation is primarily visible from parts of the route in close proximity to the onshore substation site, which comprises central parts of the route as illustrated in **Figure 23.5**. The Former Irish Glass Bottle Site will be visible from western parts of the route, and the EirGrid Poolbeg 220kV Substation will be visible from eastern parts. Therefore, parts of the route from which receptors will see the OTI in combination with cumulative developments are limited. The addition of the operational OTI to this cumulative context will result in an increase in sequential visibility of development through the addition of the onshore substation to views such as those in Viewpoint 3: Pigeon House Road. From a section of the route of approximately 200 m it will be viewed within an already developed context over the walls surrounding the Ringsend Waste Water Treatment Works and the Pigeon House Fort Remains. The cumulative magnitude of change associated with the OTI will therefore be low.

58. The sensitivity of receptors on Pigeon House Road to changes associated with the OTI is considered to be medium-low, and the cumulative magnitude of change is assessed as low. Therefore, as per the matrix in Appendix A23.1), a minor effect is predicted, which is assessed as not significant**.** These changes will be long-term and irreversible. Where flexibility in the proposed design exists, no other scenario will lead to a higher level of effect.

Dublin Port 3FM Project – Tier 3

59. A planning application for this project has not yet been submitted, and details of the proposed development are therefore limited. As such, a full assessment of the effects on individual receptors that are likely to arise as a result of the addition of the OTI to a baseline that features the Dublin Port 3FM Project has not been possible. An overview of potential cumulative effects that may arise is presented here.

60. This project extends throughout much of the Poolbeg Peninsula, within and between the three main development areas indicated in **Figure 23.6**. It involves alterations to the road network, new port terminals, a waterside turning circle, provision for utilities, and a maritime village. There are three main areas of development, including:

- Maritime village, container storage, trailer parking, and Ro-Ro terminal towards the west of the Poolbeg Peninsula;
- Lo-Lo container yard, utility area, port park, and landscaped buffer strip and active travel route on the southern edge of the Poolbeg Peninsula, to the west of the Irishtown Nature Reserve; and
- ESB jetty and Lo-Lo container terminal to the north of the Great South Wall towards the eastern extent of the Poolbeg Peninsula.

61. These uses will be broadly in keeping with the existing industrial character of the Poolbeg Peninsula, and the addition of the OTI to a baseline that features the Dublin Port 3FM Project is considered unlikely to result in significant cumulative visual effects. It will be seen in the context of the surrounding industrial development, which the Dublin Port 3FM Project will contribute to further. In this respect, the OTI will represent a further incremental intensification of existing activity, and there may be some limited effects on visual amenity, particularly experienced by receptors travelling along Pigeon House Road and from along parts of the Great South Wall Walk.

6 CEA summary

62. This CEA, which supports **Chapter 23 LVIA** has assessed the potential cumulative effects on landscape / townscape and visual receptors from the construction and operation and maintenance phases of the CWP Project alongside other development.

63. In summary, the CEA for LVIA does not identify any significant cumulative effects resulting from the addition of the CWP Project to a context containing other development.

7 References

64. Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment: Third Edition (GLVIA3). Routledge.

65. NatureScot (2021). Assessing the Cumulative Impact of Onshore Wind Energy Developments. https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments

66. The Planning Inspectorate (2019). Advice Note 17 Cumulative Effects Assessment. https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/