codling wind park

Environmental Impact Assessment Report

Volume 4

Appendix 25.1 Cumulative Effects Assessment


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Abbreviations

Abbreviation	Term in Full
CEA	Cumulative Effects Assessment
CWP	Codling Wind Park
CWPL	Codling Wind Park Limited
EC	European Commission
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
EU	European Union
IAQM	Institute of Air Quality Management
MAC	Maritime Area Consent
ORESS	Offshore Renewable Electricity Support Scheme
PINS	Planning Inspectorate
TII	Transport Infrastructure Ireland

Definitions

Glossary	Meaning
the Applicant	The developer, Codling Wind Park Limited (CWPL).
Codling Wind Park 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	A joint venture between Fred. Olsen Seawind (FOS) and Électricité de France (EDF) Renewables, established to develop the CWP Project.
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.
Environmental Protection Agency (EPA)	National agency responsible for protecting and improving the environment of Ireland under the Environmental Protection Agency Acts 1992 to 2011.
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.
European Commission (EC)	The executive body of the European Union responsible for proposing legislation, enforcing European law, setting objectives and priorities for action, negotiating trade agreements and managing implementing European Union policies and the budget.
European site	European sites are a European network of important ecological sites, made up of Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC), and SACs, established under the Habitats Directive (92/43/EEC). European sites are also often referred to as Natura 2000 sites.
European Union (EU)	This is the political and economic union of 27 member states primarily located in Europe.
export cables	The cables, both onshore and offshore, that connect the offshore substations with the onshore substation.
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.

limit of deviation (LoD)	Locational flexibility of permanent and temporary infrastructure is described as a LoD from a specific point or alignment.
Met Éireann	Met Éireann is the Irish National Meteorological Service, the leading provider of weather information and related services for Ireland.
offshore development area	The total footprint of the offshore infrastructure and associated temporary works including the array site and the OECC.
offshore export cables	The cables which transport electricity generated by the wind turbine generators (WTGs) from the offshore substation structures (OSSs) to the TJBs at the landfall.
offshore infrastructure	The permanent offshore infrastructure, comprising of the WTGs, IACs, OSSs, interconnector cables, offshore export cables and other associated infrastructure such as cable and scour protection.
offshore transmission infrastructure (OfTI)	The offshore transmission assets comprising the OSSs and offshore export cables. The EIAR considers both permanent and temporary works associated with the OfTI.
onshore development area	The entire footprint of the OTI and associated temporary works that will form the onshore boundary for the planning application.
onshore export cables	The cables which transport electricity generated by the WTGs from the TJBs at the landfall to the onshore substation.
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 construct the onshore substation.
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.
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.
parameters	Set of parameters by which the CWP Project is defined and which are used to form the basis of assessments.
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 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
receptor	Environmental component that may be affected, adversely or beneficially, by the project.
revetment	A facing of impact-resistant material applied to a bank or wall in order to absorb the energy of incoming water and protect it from erosion.

study area	Study areas are defined for each receptor based on the relevant characteristics of the receptor (e.g. mobility/range), some receptors may have different study areas defined at different scales (e.g. local, regional, management unit level etc.)
transition joint bay (TJB)	This is required as part of the OTI and is located at the landfall. It is an underground bay housing a joint which connects the offshore and onshore export cables.

APPENDIX 25.1 AIR QUALITY 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 air quality, which considers the residual effects presented in **Chapter 25 Air Quality** 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 25 Air Quality**. 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 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 air quality assessment is provided in **Chapter 25 Air Quality**. No feedback specific to the CEA for air quality has been received.

2.3 Identification of 'other development'

12. Stage 1 of the process involved establishing the longlist 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**, **Appendix 5.1**) 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 their 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 development approved and under construction are likely to contribute to cumulative effects, whereas other development at early phases of development (i.e. pre-planning) are 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 1** 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 1 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

17. The first step in the CEA for air quality 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 2** below.

18. Only potential impacts assessed in **Chapter 25 Air Quality** as "not significant" or above are included in the CEA (i.e. those assessed as 'imperceptible' are not taken forward as there is no potential for them to contribute to a cumulative effect).

19. In summary, **Table 2** shows that there is the potential for cumulative effects on air quality as a result of overlapping construction phases of committed developments within 500 m of the onshore transmission infrastructure for the CWP Project.

Table 2 Impacts and potential for cumulative effect

Impact	Potential for cumulative effect	Rationale
Construction		
Impact 1: Impact of construction dust from demolition, earthworks, construction and trackout in terms of dust soiling, human health and ecosystems. .	Yes	According to the Institute of Air Quality Management (IAQM) Guidance (2024), should the construction phase of the CWP Project coincide with the construction phase of any other development within 500 m of its works then there is the potential for cumulative construction impacts from demolition, earthworks, construction and trackout in terms of dust soiling, human health and ecosystems to nearby sensitive receptors.
Operation		
Operational impacts scoped out.	No	The significance of effects of the CWP Project operational impacts was determined to be imperceptible and are not taken forward, as there is no potential for them to contribute to a cumulative effect.
Decommissioning		
Impact 2: Air quality impacts due to decommissioning activities in terms of dust soiling, human health and ecosystems.	No	Decommissioning impacts are expected to be of similar or lesser magnitude to those identified during the construction phase. Potential cumulative impacts due to dust generated by decommissioning activities from the CWP Project have been scoped out, as the decommissioning phase of the CWP Project does not temporally overlap with the dust-generating phase of any other development within 500 m.

4 CEA 'other development' screening

20. The second step in the CEA for air quality 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 3** below, together with a consideration of the relevant details of each development, including the tier (see **Table 3**), proximity to the CWP Project development area and a rationale for including or excluding from the assessment.

21. The other development included in the table below are taken from the longlist of other development (presented in **Appendix 5-1**). 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.

22. In summary, the following other development will be assessed for potential cumulative effects with the CWP Project in relation to air quality.

- Irish Water - Ringsend Wastewater Treatment Plant Upgrade Project (CEA-0331);
- Dublin Port Company - Dublin Port Capital Dredging Project (CEA-0192);
- Dublin Port Company - Dublin Port Company Site Investigations (CEA-0199);
- Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0333);
- Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0206);
- Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0207);
- Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0208);
- Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0209);
- Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0210);
- Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0338);
- Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0339);
- Becbay Ltd & Fabrizia Developments Ltd - Redevelopment of former glass bottle site (CEA-0387);
- Pembroke Beach DAC - Redevelopment of former glass bottle site (CEA-1354);
- EirGrid plc - Poolbeg Generating Station / Substation (CEA-1346);
- Electricity Supply Board - Poolbeg Generating Station / Open Cycle Gas Turbine (CEA-1338);
- Electricity Supply Board - Poolbeg Generating Station / flexible thermal generation (CEA-1337);
- Electricity Supply Board - Poolbeg Generating Station / Battery Energy Storage System (BESS) (CEA-1336);
- E D & F Man Liquid Products Ireland Ltd - New Storage tank (CEA-1344);
- National Oil Reserves Agency
- - Energy infrastructure (CEA-1335);
- Dublin Port Company - MP2 Project (CEA-1323);
- Dublin Port Company - MP2 Project (CEA-1328);
- Dublin Port Company - Maintenance Dredging in Dublin Port (CEA-0191);
- Electricity Supply Board - Flexgen Poolbeg - Energy infrastructure (CEA-1326);
- Electricity Supply Board - Dublin Bay Power Station / Open Cycle Gas Turbine (CEA-1327);
- Electricity Supply Board - Dublin Bay Power Station / Flexible Thermal Generation (CEA-1342);
- Electricity Supply Board - Dublin Bay Power Station / Battery Energy Storage System (BESS) (CEA-1341);
- Kilsaran Concrete - Continuation of use of an existing concrete batching plant (CEA-1343);
- Hammond Lane Metal Company Ltd. - Construction of two-storey building and non-ferrous metals recovery facility (CEA-1340);
- Dublin Port Company - Bridge over existing cooling water channel (superseded by CWP project proposals) (CEA-1339);
- Codema - Dublin's Energy Agency - Dublin District Heating System Project (DDHS) (CEA-1347);
- Dublin Port Company - Alexandra Basin Re-development (CEA-0203);
- Dublin Port Company - 3FM Project (CEA-1348);
- EirGrid Public Limited Company - Powering Up Dublin (CEA-1371);
- Ecocem Ireland Limited – Construction of plant (CEA 3002); and
- Pembroke Beach DAC – six-storey structure (CEA-3003).

Table 3 Summary of other development screened into the CEA for air quality

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
Irish Water – Ringsend Wastewater Treatment Plant Upgrade Project (CEA-0331)	0.25	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
Dublin Port Company - Dublin Port Company Site Investigations (CEA-0199)	0.5	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0333)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0206)	0.5	1	No	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,

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
				and a low risk of shared receptors in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0207)	0.5	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0208)	0.5	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0209)	0.5	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - Dublin Port Company - dredge disposal (CEA-0210)	0.5	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0338)	0	1	No	There is no potential for a temporal overlap between the projects therefore, the project is screened out from further assessment.
Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0339)	0	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Becbay Ltd & Fabrizia Developments Ltd - Redevelopment of former Glass Bottle site (CEA-0387)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-1354)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1 1** of **Chapter 25 Air Quality**.
National Oil Reserves Agency	0.5	1	Yes	There is potential for a temporal overlap between the construction phase of this project and that of the CWP Project. If construction

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
Poolbeg Tank Farm Construction of a single storey ESB Substation & Switchroom (CEA-1335) Planning Ref: 3669/19				does overlap, concurrent construction activities within 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
ESB / EirGrid - Poolbeg Generating Station / Battery Energy Storage System (BESS), Flexible Thermal Generation, Open Cycle Gas Turbine (OCGT) (Developer: ESB) (CEA-1336, CEA-1337, & CEA-1338) and Substation (Developer: EirGrid) (CEA-1346) Planning Ref: 3625/20, 3624/20, 3137/23 and 4057/23.	0	1	Yes (CEA-1338 & CEA-1346)	• 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 for construction by October 2024. It has been assumed that these developments will be operational. There will be no spatial overlap in working areas and therefore no potential for cumulative impacts. • 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. There is potential for a temporal overlap between the construction phase of these projects and that of the CWP Project. If construction does overlap, concurrent construction activities within 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in Section 25.3.1 of Chapter 25 Air Quality .

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
E D & F Man Liquid Products Ireland Ltd – New storage tank (CEA-1344)	0.05	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - MP2 Project (CEA-1323)	0	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Dublin Port Company - MP2 Project (CEA-1328)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
Dublin Port Company - Maintenance Dredging in Dublin Port (CEA-0191)	0	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
ESB Dublin Bay Power Station / OCGT, BESS and Flexible Thermal Generation CEA-1327, CEA-1341 & CEA-1342 Planning Ref: 3074/23, 3646/20 and 3647/20	0.1	1	Yes (CEA-1327)	• CEA-1327 – No data, assumed to be in construction. 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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in Section 25.3.1 of Chapter 25 Air Quality • CEA-1341 – Assumed construction completed by 2026; • CEA-1342 – Assumed construction completed by 2026, data reviewed indicates commitment for the development to be in place for construction by October 2024. It has been assumed that these developments will be operational. There will be no spatial overlap in working areas and therefore no potential for cumulative impacts.
Kilsaran Concrete - Continuation of use of an existing concrete batching plant (CEA-1343)	0.3	1	No	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 in relation to air quality, given the scale of the project and the localised nature of the works.
Hammond Lane Metal Company Ltd. - Construction of two-storey building and non-ferrous metals recovery facility (CEA-1340)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
				from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
Dublin Port Company - Bridge over existing cooling water channel (superseded by CWP Project proposals) (CEA-1339)	0	1	No	This project refers to construction of a bridge over existing cooling water channel. Permission expires in September 2024. 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. In the event that the CWP Project proceeds, this proposed bridge development would be superseded by the CWP Project proposals. This development was not considered further.
Codema - Dublin's Energy Agency - Dublin District Heating System Project (DDHS) (CEA-1347)	0	3	No	There are insufficient details available about this project to undertake a meaningful cumulative effects assessment. Therefore, the project is screened out from further assessment.
Dublin Port Company - Alexandra Basin Re-development (CEA-0203)	0	1	No	There is no potential for a temporal overlap between the projects. Therefore, the project is screened out from further assessment.
Dublin Port Company - 3FM Project (CEA-1348)	0	1	Yes	The 3FM Project is the third and final Strategic Infrastructure Development (SID) Project needed to deliver the capacity objectives of the Dublin Port Masterplan 2040. The project is intended to provide the additional infrastructure for freight required in the unitised modes (Ro-Ro and Lo-Lo). Key components of this project will include the Southern port access road (SPAR). There is potential for a temporal overlap between the construction phase of this project and that of the CWP Project. If construction

Development	Distance from onshore development area (km)	Tier	Included in the CEA (Yes/No)	Rationale
				does overlap, concurrent construction activities within 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.
EirGrid Public Limited Company - EirGrid Programme of Works (CEA-1371)	0	1	No	There are insufficient details available about this project to undertake a meaningful cumulative effects assessment. Therefore, the project is screened out from further assessment.
Ecocem Ireland Limited – Construction of plant (CEA-3002)	0	1	No	No Environmental Report has been produced for the project and no planning decision is available at this stage, so an assessment of cumulative residual effects could not be determined. There are insufficient details available about this project to undertake a meaningful cumulative effects assessment. Therefore, the project is screened out from further assessment.
Pembroke Beach DAC – six-storey structure (CEA-3003)	0	1	Yes	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 500 m of the CWP Project onshore development area could cause cumulative air quality effects, as dust impacts are considered within a 250 m buffer from each project, as detailed in **Section 25.4.1** of **Chapter 25 Air Quality**.

5 Assessment of cumulative effects

5.1 Construction phase

5.1.1 Cumulative Impact 1: Impact of construction dust from demolition, earthworks, construction and trackout in terms of dust soiling, human health and ecosystems

23. According to the IAQM Guidance (2023), should the construction phase of a CWP Project coincide with the construction phase of any other development within 500 m, as dust impacts are considered within a 250 m buffer from each project (as detailed in **Section 25.5.1** and **Section 25.5.4** of **Chapter 25 Air Quality**), then there is the potential for cumulative construction dust impacts to nearby sensitive receptors.

24. The sensitive receptors for which there are potential cumulative construction dust impacts are as described in **Section 25.4.2**, **Figure 25.1** and **Section 25.10.1** of **Chapter 25 Air Quality.** The maximum distance a receptor may be impacted by cumulative construction dust impacts is within 250 m of the CWP Project.

25. **Section 25.10.1** of **Chapter 25 Air Quality** has determined that the residual effect, with the adoption of the additional mitigation measures, in terms of dust soiling, human health and ecology impacts from all construction activities assessed, is predicted to be **direct, localised, negative**, **short-term** and **not significant**, which is overall not significant in EIA terms.

26. A review of recent planning permissions for the area was conducted and it was found that there are 15 no. relevant sites for which cumulative impacts may occur should their construction phase and that of the CWP Project overlap. Planning application documents, such as planners' reports, environmental reports and EIA air quality chapters, were reviewed for potential construction dust impacts and mitigation measures.

27. Of these projects, the planners' reports for the following planning permissions stated that an EIA was not required, as *"there is no real likelihood of significant effects on the environment arising from the proposed development"*. No construction dust assessment was therefore required, or mitigation measures provided. However, planning permission was granted subject to the condition that *"site development works and construction works shall be carried out in such a manner as to ensure that the adjoining street(s) are kept clear of debris, soil and other material and if the need arises for cleaning works to be carried out on the adjoining public roads, the said cleaning works shall be carried out at the developers expense"*:

- Irish Water - Ringsend Wastewater Treatment Plant Upgrade Project (CEA-0331);
- National Oil Reserves Agency - Energy infrastructure (CEA-1335);
- Hammond Lane Metal Company Ltd. - Construction of two-storey building and non-ferrous metals recovery facility (CEA-1340);

28. The remaining proposed developments have undertaken construction dust assessments, in accordance with either Transport Infrastructure Ireland (TII) guidelines (TII, 2011) or the IAQM guidance (IAQM, 2024) as part of an EIA, which included a suite of best practice mitigation methods to minimise emissions of dust and fine particulate matter during construction, derived either from the IAQM (IAQM, 2024) or BRE (BRE, 2003) guidance. The developments are:

- Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-0333);
- Becbay Ltd & Fabrizia Developments Ltd - Redevelopment of former Glass Bottle site (CEA-0387);

- Pembroke Beach DAC - Redevelopment of former Glass Bottle site (CEA-1354);
- EirGrid plc - Poolbeg Generating Station / Substation (CEA-1346);
- Electricity Supply Board - Poolbeg Generating Station / Open Cycle Gas Turbine (CEA-1338);
- Dublin Port Company - MP2 Project (CEA-1328);
- Electricity Supply Board - Dublin Bay Power Station / Open Cycle Gas Turbine (CEA-1327); and
- Pembroke Beach DAC – six-storey structure (CEA-3003)

29. Additionally, each air quality assessment carried out as part of the above developments' EIA determined construction dust impacts from demolition, earthworks, construction and trackout in terms of dust soiling, human health and ecosystems to be not significant.

30. IAQM guidance (IAQM, 2024) states that, with the implementation of the recommended mitigation, impacts would be not significant. Therefore, considering the mitigation measures and significance of effects identified for the other developments, as well as the application of the dust mitigation measures for the CWP Project outlined in **Section 25.10** of **Chapter 25 Air Quality**, it is therefore not anticipated that there would be significant cumulative impacts associated with construction phase dust emissions from these other projects combined with the CWP Project.

31. DPC intends to bring forward the 3FM project (CEA-1348) for planning consent, the third and final strategic infrastructure development (SID) project needed to deliver the capacity objectives of the Dublin Port Masterplan 2040, and to provide additional infrastructure within the port. The 3FM project is concentrated on lands on the Poolbeg Peninsula with a construction programme that will span over a decade and that will coincide that of the CWP Project. Key potential construction phase interfaces with the CWP Project would be on the Shellybanks Road, the Pigeon House Road and at the onshore substation site. There is no other adequate information on this proposed development, to undertake a meaningful assessment. As such it is assumed that this development would be controlled by the assessment of the individual planning application and there would be no significant cumulative effects with the CWP Project.

32. In accordance with the EPA Guidelines (EPA, 2022), and with appropriate mitigation measures in place, the predicted cumulative impacts on air quality associated with the construction phase of the CWP Project are considered to be **short-term, direct, localised, negative** and **not significant**, which is not significant in EIA terms.

5.2 Operation and maintenance

33. O&M impacts were scoped out in **Chapter 25 Air Quality,** with impacts on air quality during this phase predicted to be **long term**, **direct**, **localised**, **neutral** and **imperceptible**. There is therefore no potential for a significant impact on air quality in combination with other permitted developments. The predicted cumulative impact on air quality during the operational phase of the CWP Project is therefore predicted to be **long-term**, **direct**, **localised**, **neutral** and **imperceptible**, which is not significant in EIA terms.

6 CEA summary

34. This CEA, which supports **Chapter 25 Air Quality** has assessed the potential cumulative effects on air quality from the construction and operation and maintenance phases of the CWP Project alongside other development.

35. In summary, the CEA for air quality does not identify any significant cumulative effects resulting from the CWP Project alongside other development.

7 References

36. BRE (2003) Controlling Particles, Vapours and Noise Pollution from Construction Sites

37. IAQM (2024) Guidance on the Assessment of Dust from Demolition and Construction

38. Transport Infrastructure Ireland (2022) Air Quality Assessment of Specified Infrastructure Projects – PE-ENV-01106