

# WFD Compliance Assessment

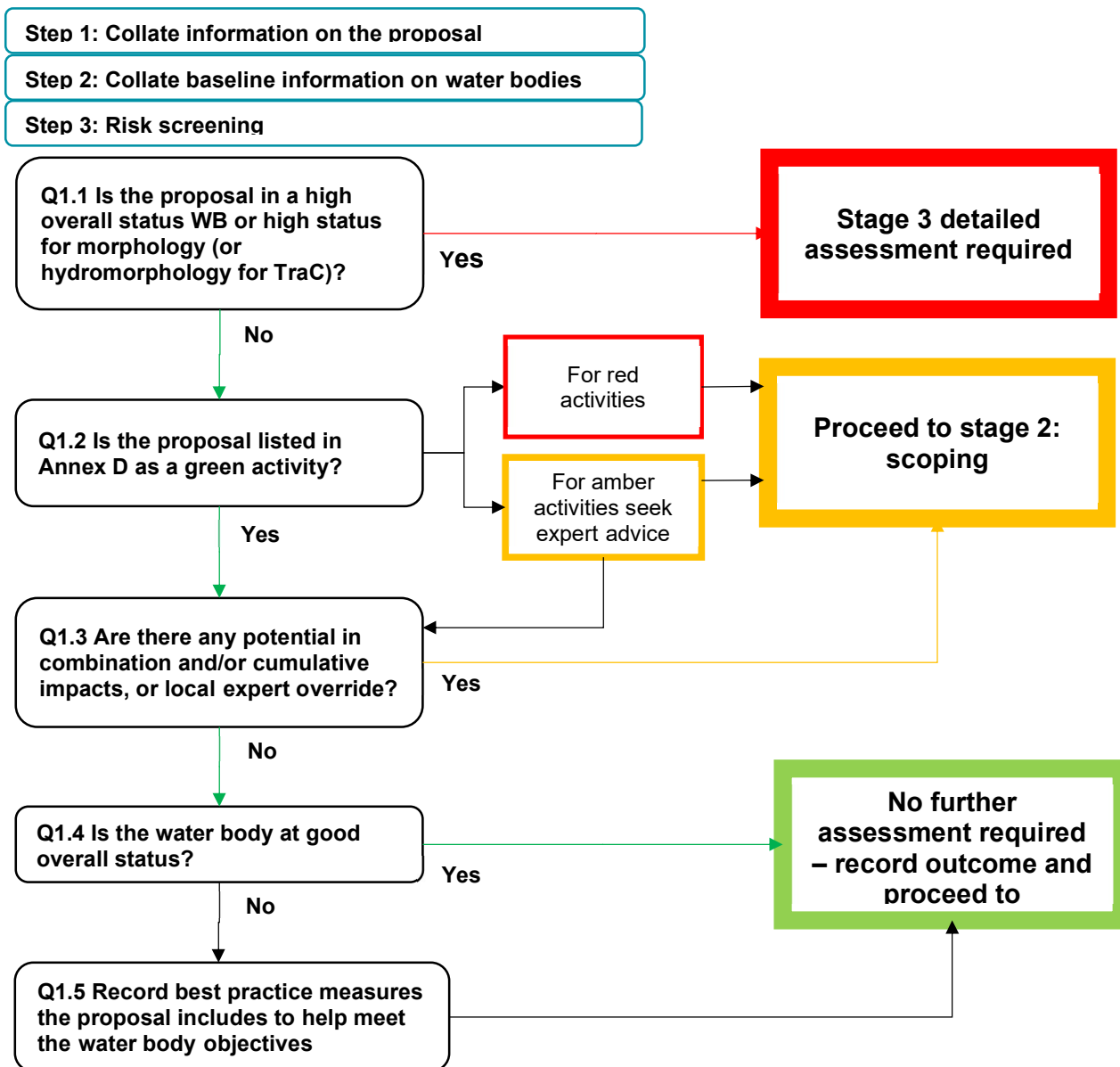
## OGN 72 Appendix 2 WFD Compliance Assessment template

- In completing this template for a WFD compliance assessment, refer to OGN72 ([link](#)) for definitions, processes and further links to useful websites.

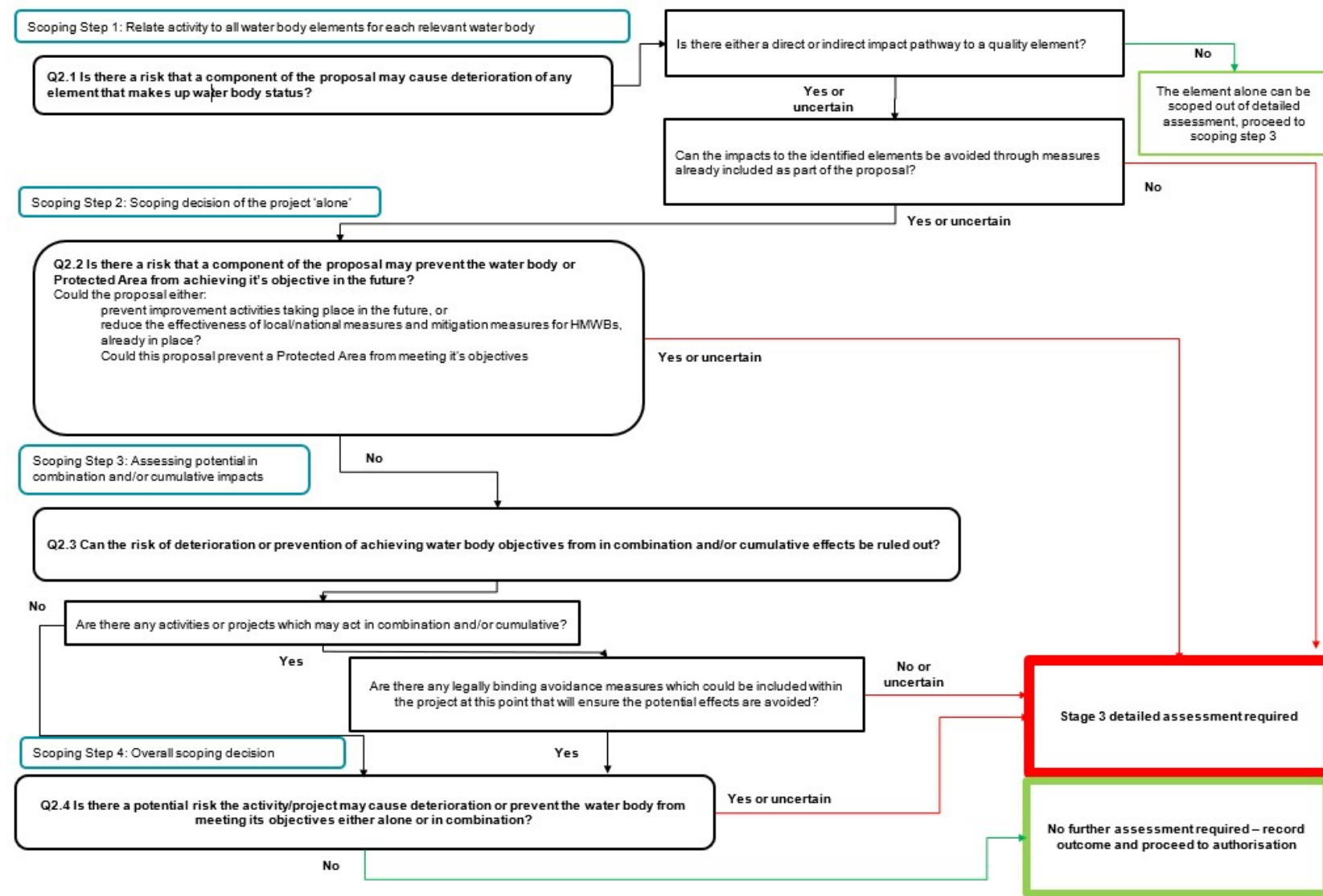
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| Version History             |                |                                          |               |
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| Document Version            | Date Published | Summary of Changes                       | Authorised by |
| 1                           | September 2020 | Document created and ready for trialling |               |
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**Figure 1: Stage 1 Screening**



**Figure 2: Stage 2 Scoping**



# WFD Compliance Assessment of Hynet Carbon Dioxide Transportation and Storage Project - Offshore

## Stage 1, step 1: Proposal details

| Project details where an <u>external party</u> has applied to NRW for any form of authorisation |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project details                                                                                 | Application reference number (if applicable) | CML2365                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                 | Date application received                    | 07/11/2023                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                 | Applicant details                            | Liverpool Bay CCS Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                 | Activity proposed                            | <p>The HyNet Carbon Dioxide Transportation and Storage Project - Offshore (hereafter the "Proposed Development") is being developed in parallel with, and as a key part of, the HyNet Northwest full-chain hydrogen and Carbon Capture and Storage (CCS) industrial decarbonisation project (the HyNet Project). The HyNet Project is designed to transform a region of the UK into the world's first low carbon industrial cluster by 2030.</p> <p>The following Marine Licensable activities will be required in Welsh Waters:</p> <ul style="list-style-type: none"> <li>• Installation of a new Douglas CCS platform jacket and topsides to replace the existing Douglas Process platform. This CCS platform will receive CO<sub>2</sub> from the onshore PoA Terminal and distribute to Hamilton Main, Hamilton North, and Lennox wellhead platforms. Installation of the new Douglas CCS platform jacket will include up to eight driven piles;</li> <li>• Repurposing of existing subsea natural gas pipelines for their change of use to transport CO<sub>2</sub>;</li> <li>• Installation of new sections of pipeline spools to connect the new Douglas CCS platform to the existing subsea natural gas pipelines, which includes some installation of concrete mattresses and external rock protection;</li> <li>• Implementation of a programme of Monitoring, Measurement and Verification activities;</li> <li>• Laying, burial, and some sidecast dredging, of two submarine 33kV armoured cables, with integrated fibre-optic cable connections (35 km from PoA Terminal onshore to the new Douglas CCS platform, including within the intertidal/foreshore area up to MHWS, within Welsh waters only);</li> <li>• Laying, and burial, of new power cables with integrated fibre-optic cable connections, one each from the new Douglas CCS platform connecting</li> </ul> |

|  |                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                                                           | <p>with the Hamilton Main, Hamilton North and Lennox platforms; and</p> <ul style="list-style-type: none"> <li>• Installation of concrete mattresses and external rock protection at cable crossing points.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|  | <b>Relevant legislation</b>                                                                                                                               | <p><i>Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy</i><br/> <i>The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|  | <b>List other permissions that may be required where known</b>                                                                                            | <p>The consents, licences, and permissions that will be sought include:</p> <ul style="list-style-type: none"> <li>• A Marine Licence(s) under the Marine and Coastal Access Act (MCAA) 2009 (administered by Natural Resources Wales Marine Licensing Team (NRW-MLT)) for licensable activities in Welsh Waters (between 0 nautical miles (nm) and 12 nm from MHWS (i.e. all licensable activities associated with installation of the new Douglas CCS platform, associated pipeline connections, new electrical and fibre optic cables, and related works within Territorial Waters); and</li> <li>• A Storage Permit from Offshore Petroleum Regulator for Environment and Decommissioning (OPRED), in accordance with the Storage of Carbon Dioxide (Licensing etc.) Regulations 2010 (SI 2010/2221) for the storage of carbon dioxide at a storage site in the licensed area.</li> </ul> |
|  | <b>Location (include map where appropriate)</b>                                                                                                           | <p>Douglas/Hamilton/Lennox gas platforms in Liverpool Bay to PoA gas terminal.</p> <p>The Co-ordinates for the Eni Development Area (Red Line Boundary) are set out in the Attachment 6(b)1, and those for the Area of Project Physical Works are set out in the Attachment 6(b)2. Easting and Northing are provided in ED50 30N, and Latitude and Longitude in WGS84.</p> <p>A map of the Project is included in Appendix A and provided in the following link: <a href="#">CML2365 - Proposed Development Location Map.pdf</a>.</p>                                                                                                                                                                                                                                                                                                                                                         |
|  | <b>Application documents</b><br><br><i>Include: Project purpose and background, site map, scaled plan, site photographs and working method statement.</i> | <ul style="list-style-type: none"> <li>• Application for a Marine Licence for Marine Works (<a href="#">CML2365 - LBA CCS Ltd - PA2211-marine-works-application-form-FINAL – signed.pdf</a>).</li> <li>• Marine Licence Application Form Attachment 6(C) – Application supporting documents (CML2365 LBA CCS Ltd-ML Application-Attachment -6(c) Supporting documentation.FIN.pdf);</li> <li>• Liverpool Bay CCS LTD HyNet Carbon Dioxide Transportation and Storage Project- Offshore. Environmental Statement - Table of Contents (<a href="#">CML2365-LBA CCS Ltd ES ToC NRW FINAL</a>);</li> </ul>                                                                                                                                                                                                                                                                                        |

- Environmental Statement. Non-Technical Summary - Liverpool Bay CCS Ltd HyNet Carbon Dioxide Transportation and Storage Project-Offshore ([CML2365-LBA CCS Ltd OFFSHORE ES NTS NRW-FINAL](#));
- Introductory Chapters: Chapter 1: Introduction; Chapter 2: Policy and Legislative Context; Chapter 3: Proposed Development Description; Chapter 4: Site Selection and Consideration of Alternatives; Chapter 5: Environmental Impact Assessment Methodology ([CML2365-LBA CCS Ltd Offshore ES CH1-5 INTRO NRW-UPDATE](#));
- Chapter 6: Physical Processes ([CML2365-LBA CCS Ltd ES CH6 PP NRW FINAL](#));
- Chapter 7: Marine Biodiversity ([CML2365-LBA CCS Ltd ES CH7 MB NRW FINAL](#));
- Chapter 14: Inter-Related Effects ([CML2365-LBA CCS Ltd ES CH14 IRE NRW FINAL](#));
- Appendix H: Physical Processes Technical Report ([CML2365-LBA CCS Ltd ES Appendix H PP TR NRW FINAL](#));
- Appendix I: Marine Biodiversity Technical Report ([CML2365-LBA CCS Ltd ES Appendix I MBTR NRW FINAL](#));
- Appendix I1: Marine Biodiversity Subtidal Survey Report ([CML2365-LBA CCS Ltd ES Appendix I1 MB ST NRW FINAL](#));
- Appendix I2: Marine Biodiversity Intertidal Survey Report ([CML2365-LBA CCS Ltd ES Appendix I2 MB IT NRW FINAL](#));
- Appendix J: Underwater Noise Technical Report ([CML2365-LBA CCS Ltd ES Appendix J UWN TR NRW FINAL](#));
- Appendix P: Habitats Regulations Assessment Stage 2 Report to Inform Appropriate Assessment ([CML2365-LBA CCS Ltd ES Appendix P RIAA NRW FINAL](#));
- Appendix R – Environmental Management Plan ([CML2365-LBA CCS Ltd OFFSHORE ES Appendix R EMP NRW FINAL](#));
- Appendix T – Invasive Non-Native Species Management Plan ([CML2365-LBA CCS Ltd OFFSHORE ES Appendix T INNS NRW FINAL](#));
- Consultation log - Further Information ([CML2365 Consultation log to applicant-Rev 2.0.26.07.2024 Further Information](#));
- Benthic - Further Information ([CML2365 MC000025 TN Benthic MBTN01\\_Rev02 Further Information](#));
- Fish - Further Information ([CML2365 MC000025 TN Fish MBTN02\\_Rev02 Further Information](#));

|                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                       | <ul style="list-style-type: none"> <li>• RIAA - Further Information (<a href="#">CML2365 MC000025_TN_RIAA_MBTN04_Rev02_Further Information</a>)</li> <li>• Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01) (CML2365 MC000025_TN_Benthic_MBTN01_Rev02_Further Information).</li> <li>• Further clarifications (<a href="#">CML2365_Further Clarification response November 2024</a>)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Environmental Statement</b>                                                        | Liverpool Bay CCS LTD HyNet Carbon Dioxide Transportation and Storage Project- Offshore. Volume 3 Appendix Q: WFD Assessment ( <a href="#">CML2365-LBA CCS Ltd ES Appendix Q WFD NRW FINAL</a> ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>List ongoing maintenance requirements.</b> All structures will require maintenance | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Timing of works</b>                                                                | Construction of the Proposed Development is anticipated to start in 2024, to enable operation to commence during 2026 and 2027. Further details are provided in <a href="#">Chapter 3 Proposed Development Description</a> of the ES. Figure 3.11 in Chapter 3 includes timetables showing the anticipated project phases.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Pre-application correspondence</b>                                                 | <p>The Applicant has been engaged in email correspondence with the NRW-MLT since inquiring in late October 2022 about the marine licencing requirements for the Hynet Carbon Dioxide Transportation and Storage Project – Offshore. Subsequent correspondence from NRW-MLT confirmed that pre application number (PA2211), and that Dr Maria Alvarez had been assigned as the Case Officer. The correspondence with NRW-MLT regarding the licensing requirements is included in Attachment 12(a) of the Marine Licence application.</p> <p>The activities in the Marine Licence application between MHWS and MLWS have also been included within a Town and Country Planning Application (TCPA) to Flintshire County Council (FUL/000246/23) for works at Eni's PoA gas terminal. A meeting was held with NRW Advisory to discuss the TCPA intertidal ecological survey approach. The findings from this survey were also used to inform the baseline and EIA reported in the ES supporting the Marine Licence application. The minutes from this meeting are included in Attachment 12(a) of the Marine Licence application. NRW commented on the TCPA application (FUL/000246/23), and the NRW letter is included within Attachment 12(a). The Applicant responded to these comments and the technical responses on Biodiversity, and on Water are included in Attachment 12(a).</p> |

|  |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                     |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |                                                                                                                                                                                                                                                         | A summary of the key consultation undertaken to date on the HRA for the Proposed Development is included in Table 1.1 of the Liverpool Bay CCS LTD HyNet Carbon Dioxide Transportation and Storage Project- Offshore. Volume 3 Appendix P: Habitats Regulations Assessment Stage 2. Report to Inform Appropriate Assessment (CML2365-LBA CCS Ltd_ES_Appendix P_RIAA_NRW_FINAL.pdf). |
|  | <b>Are the works located within a WFD waterbody? Or do they have the potential to impact upon a WFD water body? Waterbodies include surface waters (rivers, lakes, transitional waters, and coastal waters out to 1 nautical mile) and groundwaters</b> | Yes                                                                                                                                                                                                                                                                                                                                                                                 |
|  | <b>NRW team responsible for drafting this WFD Compliance Assessment report, and name of lead officer</b>                                                                                                                                                | Marine Licensing Team: Maria Alvarez (Elena San Martin – ABPmer)                                                                                                                                                                                                                                                                                                                    |
|  | <b>Date of assessment</b>                                                                                                                                                                                                                               | 14 October 2024                                                                                                                                                                                                                                                                                                                                                                     |



## Stage 1, step 2: Collate baseline information on all water bodies at risk from the proposal

Date of classification information: **2021 (Cycle 3)**

| WB ID          | Water body name | WB type      | Management catchment                             | HMWB | Overall water body status | Ecological status | Chemical status | Hydro-morphology status* | Relevance to the proposal     |
|----------------|-----------------|--------------|--------------------------------------------------|------|---------------------------|-------------------|-----------------|--------------------------|-------------------------------|
| GB641011650000 | North Wales     | Coastal      | Western Wales River Basin Management Plan (RBMP) | Yes  | Moderate                  | Moderate          | Moderate        | Not assessed             | Proposal is in the water body |
| GB531106708200 | Dee (N. Wales)  | Transitional | Dee River RBMP                                   | Yes  | Moderate                  | Good              | Moderate        | Not high                 | Proposal is in the water body |

\*\*where there is no information, or a null value then assume it is at good status for morphology (or hydromorphology for TraC water bodies)

The potential for the proposal to affect the following water bodies was also initially considered, but can be ruled out without further consideration:

NA

## Stage 1, Step 3: Risk screening

| Question number | Risk screening questions                                                                                | Name of activity | Screening decision – delete as appropriate                  |
|-----------------|---------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------|
| Q1.1            | <b>Is the proposal in a water body at high status or high status for morphology or hydromorphology?</b> | N/A              | <b>No</b> – go to Q1.2                                      |
| Q1.2            | <b>Is the activity listed in Annex D as a green activity?</b><br>Complete new row for each activity     | N/A              | <b>No – complete scoping assessment for each water body</b> |

| Question number | Risk screening questions                                                                               | Name of activity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Screening decision – delete as appropriate                   |
|-----------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Q1.3            | Are there any potential cumulative/in combination impacts? Or is there Local Expert Override*?         | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Yes – complete scoping assessment for each water body</b> |
| Q1.4            | Is the water body at Good overall status?                                                              | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>No – complete scoping assessment for each water body</b>  |
| Q1.5            | Record best practice measures that the works include to help achieve the objectives of the water body. | <p>The following embedded mitigation measures which follow best practice are proposed as part of the Proposed Development:</p> <ul style="list-style-type: none"> <li>• Material arising from drilling and/or sand wave clearance will be deposited in close proximity to the works.</li> <li>• Where practicable, any requirements for cable protection will be compliant with MGN 654.</li> </ul> <p>In addition, a number of additional mitigation measures have been proposed as part of Proposed Development to reduce the potential for impacts on marine biodiversity which will be secured through Marine Licence conditions. These are as follows:</p> <ul style="list-style-type: none"> <li>• Development and adherence to a Cable Specification and Installation Plan (CSIP) post consent which will include cable burial where possible (in accordance with the specific policies set out in the North West Inshore and North West Offshore Coast Marine Plans) and cable protection, as necessary.</li> <li>• No external cable protection in the intertidal area.</li> <li>• The Horizontal Directional Drilling (HDD) exit pit will be 3 m below seafloor.</li> <li>• Development of and adherence to an Environmental Management Plan (EMP) that will be prepared and implemented during the construction, operational and maintenance and decommissioning phases of the Project. The EMP will include appendices detailing actions to minimise Invasive Non-Native Species (INNS) (the INNSMP), and a Marine Pollution Contingency Plan (MPCP) will be developed which will include planning for accidental spills, address all potential contaminant releases and</li> </ul> |                                                              |

| Question number | Risk screening questions | Name of activity | Screening decision – delete as appropriate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------|--------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                          |                  | <p>include key emergency contact details (e.g. Environmental Protection Agency (EPA)).</p> <ul style="list-style-type: none"> <li>• Implementation of piling initiation, soft-start, and ramp-up measures within the Marine Mammal Mitigation Protocol (MMMP). An initiation stage and soft starts will be used during the installation of pin piles. This involves the implementation of an initial low hammer energy with a low number of strikes, followed by lower hammer energies at a higher strike rate at the beginning of the piling sequence before energy input is 'ramped up' (increased) over time to required higher levels.</li> <li>• Inclusion of low order techniques of all unexploded ordnance UXO clearance where possible. Low order techniques are not always possible and are dependent upon the individual situations surrounding each UXO. Given that high order detonation may be required, the MMMP will also include mitigation to reduce the risk of injury from UXO clearance.</li> <li>• Ongoing liaison with fishing fleets will be maintained via an appointed Fisheries Liaison Officer (FLO) and Fishing Industry Representative. Prior to construction, a Fisheries Liaison and Coexistence Plan (FLCP) will be developed, setting out in detail the planned approach to fisheries liaison and means of delivering any other relevant mitigation measures.</li> <li>• A dropped objects plan will be developed for reporting and recovery of dropped objects where they pose a potential hazard to other marine users.</li> <li>• Actions to minimise INNS, including a Biosecurity Plan (BP) to limit spread and introduction of INNS.</li> <li>• Development of, and adherence, to a Construction Method Statement (CMS).</li> <li>• Development of and adherence to a MMMP, based on a draft MMMP submitted alongside the ES. The MMMP will present measures for Piling UXO clearance. The MMMP will be developed on the basis of the most recent published statutory guidance and in consultation with key stakeholders.</li> <li>• Development and adherence to a Pipeline Specification and Installation Plan which will include pipeline burial where possible and pipeline protection as necessary.</li> <li>• Should the cable trenching machine be used, matting will be used. In addition, tyre pressure of working vehicles in the intertidal will be reduced.</li> </ul> |

| Question number | Risk screening questions | Name of activity | Screening decision – delete as appropriate                                                                                                                     |
|-----------------|--------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                          |                  | These measures will reduce the impact from compaction on the Annex I Mudflat and sandflats not covered by seawater at low tide feature of the Dee Estuary SAC. |

*\*Expert judgement may be required i.e. for complex or cumulative interactions; or a particularly sensitive site/activity (including target water bodies).*

## Stage 2: Scoping Assessment for: North Wales GB641011650000

Each component of the works should be included, for example: a hydropower scheme may include in-channel impoundment, creation of depleted reach, and bank reinforcement for turbine house. Include vegetation removal/management as a scheme component. Where there is a lack of confidence on whether there is potential risk to an element then these should be scoped in for further assessment.

### Stage 2, step 1: Relate activity to all water body elements for each relevant water body

#### North Wales Coastal Water Body

| Scoping table for Transitional and Coastal water bodies                                                                                                                                                       |                                                                                                                                                                                                                 |                                                                                                                                |                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water body name: North Wales Coastal<br>Water body ID: GB641011650000                                                                                                                                         |                                                                                                                                                                                                                 |                                                                                                                                |                                                                                                                                                                 |
| Elements                                                                                                                                                                                                      | Applicable                                                                                                                                                                                                      | Potential Impact (include direct and indirect potential impacts)                                                               | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided)                  |
| <b>Transitional and Coastal water bodies</b>                                                                                                                                                                  | Choose one of the following:<br><b>Direct</b> – risk of direct impact<br><b>Indirect</b> – risk of indirect impact<br><b>N/A – no impact pathway</b><br><b>N/A – other</b> – include additional text to explain | Further detail on potential impacts.<br>Where N/A is included then provide detail to explain.                                  | <b>Colour text in green if all impacts can be avoided through measures already included in the scheme. Or red for schemes which require detailed assessment</b> |
| Hydromorphology – hydromorphology constitutes both ‘hydrology’ and ‘geomorphology’ and describes the physical characteristics and processes of a water body.<br><i>Could the proposal lead to changes in:</i> |                                                                                                                                                                                                                 |                                                                                                                                |                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>morphological conditions, for example depth variation, the seabed and intertidal zone structure</li> </ul>                                                             | Direct                                                                                                                                                                                                          | The hydromorphology status of the North Wales water body has not been classified. However, as this is a heavily modified water | <b>Taken to detailed assessment</b>                                                                                                                             |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal  
Water body ID: GB641011650000

| Elements                                                                                                                                                                                                                                                                                                                                                                              | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                          | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                       |                         | body, high morphological status is not possible.<br><br>There is potential for the proposed activities to impact seabed morphology and cause secondary scour.                                             |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>tidal patterns, for example, dominant currents</li> </ul>                                                                                                                                                                                                                                                                                      | Direct                  | The proposed activities have the potential to result in changes in tidal currents.                                                                                                                        | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>freshwater flow</li> </ul>                                                                                                                                                                                                                                                                                                                     | N/A – no impact pathway | The project activities will not result in any potential changes to freshwater flow.                                                                                                                       | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>wave exposure</li> </ul>                                                                                                                                                                                                                                                                                                                       | Direct                  | The proposed activities have the potential to result in changes in waves.                                                                                                                                 | <b>Taken to detailed assessment</b>                                                                                                            |
| Is the proposal in a HMWB?                                                                                                                                                                                                                                                                                                                                                            | Yes                     | The North Wales water body has been designated as a heavily modified water body for the purpose of coastal protection use. This designation is not for the same use as the proposed activity.             | <b>Taken to detailed assessment</b>                                                                                                            |
| <b>Water quality</b><br>An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia.<br>Include water quality in the detailed assessment if the activity could affect: |                         |                                                                                                                                                                                                           |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>water clarity (turbidity or suspended particulate matter concentration)</li> </ul>                                                                                                                                                                                                                                                             | Direct                  | The proposed activities will result in the disturbance of the seabed and increase in suspended sediment concentrations (SSC) (Table 1.15 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3). | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>thermal conditions (including shading)</li> </ul>                                                                                                                                                                                                                                                                                              | Direct                  | Resistive heating of power cables and compression of CO <sub>2</sub> in pipeline have the potential to increase the temperature of the surrounding sediment. Any temperature                              | <b>No – Impact assessment not required</b>                                                                                                     |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal  
Water body ID: GB641011650000

| Elements                                                                                      | Applicable | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|-----------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                               |            | increase is expected to be minimal, and due to the natural fluctuations in temperature throughout the year, benthic subtidal and intertidal receptors are expected to be tolerant to small temperature increases. In relation to the estimated depth of the cables, cables would be buried to the desired depth of 2-3 m. Soil temperature analysis showed that the pipeline had minimal impact on the change in soil/sand temperature over a distance of approximately 1m from the top of the pipe. Therefore, when considering the depth of the pipelines close (target depth of 2-3 m) and the minimal impact on change in temperature beyond 1m from the top of the pipe, impacts on thermal conditions of the water body will be negligible. Further details are provided in the Offshore ES at Volume 2 (Chapter 7) which concluded that the impacts of changes in temperature on benthic habitats and species, and designated sites, will be negligible adverse (not significant). |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>oxygen levels – dissolved oxygen conditions</li> </ul> | Indirect   | There is the potential for increased SSC as a result of the proposed activities to affect dissolved oxygen (Table 1.15 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>nutrients - dissolved inorganic nitrogen</li> </ul>    | Indirect   | There is the potential for increased SSC as a result of the proposed activities to affect nutrients (Table 1.15 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Taken to detailed assessment</b>                                                                                                            |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal

Water body ID: GB641011650000

| Elements                                                                                                                                                                                                                                                 | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                       | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>microbial patterns</li> </ul>                                                                                                                                                                                     | Indirect                | There is the potential for increased SSC as a result of the proposed activities to affect microbial patterns (Table 1.15 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                                                                                                                                                                              | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>salinity/conductivity</li> </ul>                                                                                                                                                                                  | N/A – no impact pathway | The project activities will not result in any potential changes to salinity/conductivity.                                                                                                                                                                                                                                                                              | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>is in a water body with a phytoplankton or opportunistic macroalgae status of moderate, poor or bad</li> </ul>                                                                                                    | Yes                     | This waterbody was assigned a phytoplankton status of moderate in the most recent Classification Cycle (Cycle 3: 2021).                                                                                                                                                                                                                                                | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>is in a water body with a history of harmful algae (where there is an existing designation for the area, information should be available; however, local water quality officers will be able to help).</li> </ul> | N/A – no impact pathway | This water body does not have a history of harmful algae.                                                                                                                                                                                                                                                                                                              | <b>No – Impact assessment not required</b>                                                                                                     |
| Chemicals - A detailed assessment will also be required if the activity uses or releases chemicals, for example, through sediment disturbance or building works. This is necessary when either the:                                                      |                         |                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>chemicals are on the <a href="#">Environmental Quality Standards Directive (EQSD) list</a></li> </ul>                                                                                                             | Direct                  | There is a risk of accidental release of chemical during normal operations in advance of the application of any mitigation measures.                                                                                                                                                                                                                                   | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>activity disturbs sediment with contaminants (for estuarine and coastal above <a href="#">Cefas Action Level 1</a>).</li> </ul>                                                                                   | Direct                  | <p>Sediment sampling has been conducted throughout the Eni Development Area, including within the North Wales water body and WFD Assessment area.</p> <p>No sediment contamination by PAHs or heavy metals was observed above Cefas Action Level 1 in samples taken within the North Wales water body, within the WFD assessment area, or at any sediment sampling</p> | <b>No – Impact assessment not required</b>                                                                                                     |



### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal

Water body ID: GB641011650000

| Elements                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                           | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         | stations within 12 nm of MHWS. Similarly, THC's and PCB's were below detectable limits at all sampling stations within 12 nm of MHWS.<br><br>Full details of sediment sampling are presented in the Offshore ES at volume 3 appendix I1.                                                                                                                   |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>or, if the activity releases chemicals on the <a href="#">EQSD list</a> and has a mixing zone, like a discharge pipeline or outfall, follow the Environment Agency's <a href="#">surface water pollution risk assessment guidance</a>. <a href="#">This is part of the Environmental Permitting Regulations guidance</a>.</li> </ul>                                                                                      | N/A – no impact pathway | The activity does not include a discharge pipe or outfall, and therefore no chemicals will be released into the marine environment.                                                                                                                                                                                                                        | <b>No – Impact assessment not required</b>                                                                                                     |
| <b>Biology</b><br>Identify if the activity or project could impact on the abundance or composition of the biological elements listed below:<br>Biological elements for transitional (T) and coastal (C) waters under the directive are: <ul style="list-style-type: none"> <li>Benthic invertebrates (T, C)</li> <li>Fish (T)</li> <li>Phytoplankton (T, C)</li> <li>Macroalgae (T, C)</li> <li>Angiosperms (T, C)</li> </ul> <b>Could the proposal lead to:</b> |                         |                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>changes to the composition and abundance of aquatic flora</li> </ul>                                                                                                                                                                                                                                                                                                                                                      | Direct                  | The subtidal and intertidal habitats and species that could be affected by the proposed development through habitat loss and/or disturbance comprise subtidal sands and gravels, mud habitats in deep water, subtidal mixed muddy sediment, Ross worm <i>S. spinulosa</i> , mudflats and sandflats not covered by seawater at low water (see ES Chapter 7: | <b>Taken to detailed assessment</b>                                                                                                            |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal  
Water body ID: GB641011650000

| Elements                                                                                                                                                                           | Applicable | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                    |            | Marine Biodiversity ( <a href="#">CML2365-LBA CCS Ltd ES CH7 MB NRW FINAL</a> ). These habitats do not support macroalgae or angiosperms. However, potential impacts on aquatic flora (namely phytoplankton) have been screened in on a precautionary basis given this waterbody was assigned a phytoplankton status of moderate in the most recent Classification Cycle (Cycle 3: 2021) (see above).                                                                                                                              |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>changes to the composition and abundance of benthic invertebrate fauna</li> </ul>                                                           | Direct     | The subtidal and intertidal habitats and species that could be affected by the proposed development through habitat loss and/or disturbance comprise subtidal sands and gravels, mud habitats in deep water, subtidal mixed muddy sediment, Ross worm <i>S. spinulosa</i> , mudflats and sandflats not covered by seawater at low water (see ES Chapter 7: Marine Biodiversity ( <a href="#">CML2365-LBA CCS Ltd ES CH7 MB NRW FINAL</a> )). Impacts on benthic invertebrate fauna have been screened in on a precautionary basis. | <b>Taken to detailed assessment</b>                                                                                                            |
| For TraC water bodies - scope in if the footprint (where footprint can be direct or a plume i.e. chemical or thermal; for dredging multiply the area by 1.5x) of your activity is: |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>0.5km<sup>2</sup> or larger</li> </ul>                                                                                                      | Direct     | <p>The footprint for cable installation will be assumed to be achieved via jetting for the full 1 nm from MHWS.</p> <p>For two cables, with an anticipated disturbance width of 15 m per cable and a disturbance length of 1,852 m (i.e. 1 nm), with 1 km of</p>                                                                                                                                                                                                                                                                   | <b>No – Impact assessment not required</b>                                                                                                     |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal

Water body ID: GB641011650000

| Elements                                                                              | Applicable | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|---------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                       |            | <p>dredging across West Hoyle Spit, the footprint would be 72,060 m<sup>2</sup> (0.072 km<sup>2</sup>).</p> <p>For two cables, with an anticipated disturbance width of 15 m per cable and a disturbance length of 7,300 m (i.e. the length of the cable route within the WFD assessment area), with 1 km of dredging across West Hoyle Spit, the footprint would be 204,500 m<sup>2</sup> (0.205 km<sup>2</sup>).</p> <p>The estimated maximum footprint of the activity would not exceed 0.5 km<sup>2</sup> if measured to 1 nm or if measured to the boundary of the WFD assessment area (i.e. the boundary of the North Wales water body).</p> <p>It should be noted that the Applicant has been in negotiations with contractors for the supply and installation of the offshore electrical cables. The outcome of these negotiations is that the cables will no longer be installed across the West Hoyle Spit (worst case scenario that was assessed in the ES) and will follow the preferred option to the east. Additionally, only one cable will now be installed between the Point of Ayr and the New Douglas platform, instead of the two originally proposed.</p> |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>1% or more of the water body's area</li> </ul> | Direct     | <p>North Wales water body area = 146.25 km<sup>2</sup></p> <p>Maximum footprint (to boundary of North Wales water body) = 0.205 km<sup>2</sup> Footprint as</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>No – Impact assessment not required</b>                                                                                                     |

### Scoping table for Transitional and Coastal water bodies

Water body name: North Wales Coastal  
Water body ID: GB641011650000

| Elements                                                                                                          | Applicable | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|-------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                   |            | percentage of North Wales water body = 0.14%.<br><br>The estimated maximum footprint of the activity would not exceed 1% of the area of the North Wales water body.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>Within 500m of any higher sensitivity habitat (see table below)</li> </ul> | Direct     | There are no higher sensitivity habitats located within 500 m of the activity footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>1% or more of any lower sensitivity habitat (see table below)</li> </ul>   | Direct     | <p>The maximum footprint (0.205 km<sup>2</sup>) is estimated to be greater than the total area of 'Subtidal rocky reef' habitat within the North Wales water body (0.01 km<sup>2</sup>). However, no 'Subtidal rocky reef' is located within the WFD assessment area.</p> <ul style="list-style-type: none"> <li>For lower sensitivity habitats that may be present within the WFD assessment area:<br/>Area of 'Cobbles, gravel and shingle' = 21.71 km<sup>2</sup></li> <li>Footprint as percentage of 'Cobbles, gravel and shingle' = 0.94%</li> <li>Area of 'Subtidal soft sediments like sand and mud' = 38.62 km<sup>2</sup></li> <li>Footprint as percentage of 'Subtidal soft sediments like sand and mud' = 0.53%.</li> </ul> <p>The estimated maximum footprint of the activity would not exceed 1% of any lower sensitivity habitat.</p> | <b>No – Impact assessment not required</b>                                                                                                     |
|                                                                                                                   |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |
|                                                                                                                   |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                |

| Scoping table for Transitional and Coastal water bodies               |            |                                                                  |                                                                                                                                                |
|-----------------------------------------------------------------------|------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Water body name: North Wales Coastal<br>Water body ID: GB641011650000 |            |                                                                  |                                                                                                                                                |
| Elements                                                              | Applicable | Potential Impact (include direct and indirect potential impacts) | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|                                                                       |            |                                                                  |                                                                                                                                                |
|                                                                       |            |                                                                  |                                                                                                                                                |
|                                                                       |            |                                                                  |                                                                                                                                                |
|                                                                       |            |                                                                  |                                                                                                                                                |

#### Dee (N. Wales) Transitional Water Body

| Scoping table for Transitional and Coastal water bodies                                                                                                                                                       |                                                                                                                                                                                                                 |                                                                                               |                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water body name: Dee (N. Wales) Transitional<br>Water body ID: GB531106708200                                                                                                                                 |                                                                                                                                                                                                                 |                                                                                               |                                                                                                                                                                 |
| Elements                                                                                                                                                                                                      | Applicable                                                                                                                                                                                                      | Potential Impact (include direct and indirect potential impacts)                              | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided)                  |
| <b>Transitional and Coastal water bodies</b>                                                                                                                                                                  | Choose one of the following:<br><b>Direct</b> – risk of direct impact<br><b>Indirect</b> – risk of indirect impact<br><b>N/A – no impact pathway</b><br><b>N/A – other</b> – include additional text to explain | Further detail on potential impacts.<br>Where N/A is included then provide detail to explain. | <b>Colour text in green if all impacts can be avoided through measures already included in the scheme. Or red for schemes which require detailed assessment</b> |
| Hydromorphology – hydromorphology constitutes both ‘hydrology’ and ‘geomorphology’ and describes the physical characteristics and processes of a water body.<br><i>Could the proposal lead to changes in:</i> |                                                                                                                                                                                                                 |                                                                                               |                                                                                                                                                                 |

### Scoping table for Transitional and Coastal water bodies

Water body name: Dee (N. Wales) Transitional  
Water body ID: GB531106708200

| Elements                                                                                                                                                                                                                                                                                                                                                                              | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                      | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>morphological conditions, for example depth variation, the seabed and intertidal zone structure</li> </ul>                                                                                                                                                                                                                                     | Direct                  | <p>The hydromorphology status of the Dee water body has been classified as “Not High” (NRW, 2021).</p> <p>There is potential for the proposed activities to impact seabed morphology and cause secondary scour.</p>                                   | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>tidal patterns, for example, dominant currents</li> </ul>                                                                                                                                                                                                                                                                                      | Direct                  | The proposed activities have the potential to result in changes in tidal currents.                                                                                                                                                                    | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>freshwater flow</li> </ul>                                                                                                                                                                                                                                                                                                                     | N/A – no impact pathway | The project activities will not result in any potential changes to freshwater flow.                                                                                                                                                                   | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>wave exposure</li> </ul>                                                                                                                                                                                                                                                                                                                       | Direct                  | The proposed activities have the potential to result in changes in waves.                                                                                                                                                                             | <b>Taken to detailed assessment</b>                                                                                                            |
| Is the proposal in a HMWB?                                                                                                                                                                                                                                                                                                                                                            | Yes                     | The Dee (N. Wales) water body has been designated as a heavily modified water body for navigation, ports and harbours use. This designation is not for the same use as the proposed activity, and the activity does not overlap with this water body. | <b>Taken to detailed assessment</b>                                                                                                            |
| <b>Water quality</b><br>An activity can modify the flow of water, introduce artificial materials or remove sediment and/or vegetation. These can all affect the water quality – particularly physico-chemical aspects of water quality - such as levels of dissolved oxygen, nutrients and ammonia.<br>Include water quality in the detailed assessment if the activity could affect: |                         |                                                                                                                                                                                                                                                       |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>water clarity (turbidity or suspended particulate matter concentration)</li> </ul>                                                                                                                                                                                                                                                             | Direct                  | The proposed activities will result in the disturbance of the seabed and increase in suspended sediment concentrations (SSC) (Table 1.23 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                                             | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>thermal conditions (including shading)</li> </ul>                                                                                                                                                                                                                                                                                              | N/A – no impact pathway | Given the distance of the Dee (N. Wales) water body from the proposed activity it is not anticipated that water temperature would be                                                                                                                  | <b>No – Impact assessment not required</b>                                                                                                     |

### Scoping table for Transitional and Coastal water bodies

Water body name: Dee (N. Wales) Transitional  
Water body ID: GB531106708200

| Elements                                                                                                                                                                                                                                                 | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                         | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                          |                         | affected as a result of offshore power and FO cable installation activities.                                                                                                                             |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>oxygen levels – dissolved oxygen conditions</li> </ul>                                                                                                                                                            | Indirect                | There is the potential for increased SSC as a result of the proposed activities to affect dissolved oxygen (Table 1.23 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                  | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>nutrients - dissolved inorganic nitrogen</li> </ul>                                                                                                                                                               | Indirect                | There is the potential for increased SSC as a result of the proposed activities to affect nutrients (Table 1.23 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                         | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>microbial patterns</li> </ul>                                                                                                                                                                                     | Indirect                | There is the potential for increased SSC as a result of the proposed activities to affect microbial patterns (Table 1.23 and Section 1.8.1 of Appendix Q of the Offshore ES at volume 3).                | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>salinity/conductivity</li> </ul>                                                                                                                                                                                  | Indirect                | The project activities will not result in any potential changes to salinity/conductivity.                                                                                                                | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>is in a water body with a phytoplankton or opportunistic macroalgae status of moderate, poor or bad</li> </ul>                                                                                                    | No                      | The phytoplankton status of the Dee (N. Wales) water body is 'good' in the most recent Classification Cycle (Cycle 3: 2021) and the proposed activity does not lie within the Dee (N. Wales) water body. | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>is in a water body with a history of harmful algae (where there is an existing designation for the area, information should be available; however, local water quality officers will be able to help).</li> </ul> | N/A – no impact pathway | The Dee (N. Wales) water body does not have a history of harmful algae.                                                                                                                                  | <b>No – Impact assessment not required</b>                                                                                                     |
| Chemicals - A detailed assessment will also be required if the activity uses or releases chemicals, for example, through sediment disturbance or building works. This is necessary when either the:                                                      |                         |                                                                                                                                                                                                          |                                                                                                                                                |

| <b>Scoping table for Transitional and Coastal water bodies</b><br>Water body name: Dee (N. Wales) Transitional<br>Water body ID: GB531106708200                                                                                                                                                                          |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Elements                                                                                                                                                                                                                                                                                                                 | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
| <ul style="list-style-type: none"> <li>chemicals are on the <a href="#">Environmental Quality Standards Directive (EQSD) list</a></li> </ul>                                                                                                                                                                             | Direct                  | There is a risk of accidental release of chemical during normal operations in advance of the application of any mitigation measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Taken to detailed assessment</b>                                                                                                            |
| <ul style="list-style-type: none"> <li>activity disturbs sediment with contaminants (for estuarine and coastal above <a href="#">Cefas Action Level 1</a>).</li> </ul>                                                                                                                                                   | Direct                  | <p>Sediment sampling has not been conducted within the water body as the footprint of the activity lies entirely outside the waterbody. However, sediment sampling has been conducted throughout the Eni Development Area, including much of the WFD assessment area.</p> <p>No sediment contamination by PAHs or heavy metals was observed above Cefas Action Level 1 in samples taken within the WFD assessment area, in the neighbouring North Wales water body, or at any sediment sampling stations within 12 nm of MHWS. Similarly, THCs and PCBs were below detectable limits at all sampling stations within 12 nm of MHWS.</p> <p>Full details of sediment sampling are presented in the Offshore ES at volume 3 appendix I1.</p> | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>or, if the activity releases chemicals on the <a href="#">EQSD list</a> and has a mixing zone, like a discharge pipeline or outfall, follow the Environment Agency's <a href="#">surface water pollution risk assessment guidance</a>. <a href="#">This is part of</a></li> </ul> | N/A – no impact pathway | The activity does not include a discharge pipe or outfall, and therefore no chemicals will be released into the marine environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>No – Impact assessment not required</b>                                                                                                     |



### Scoping table for Transitional and Coastal water bodies

Water body name: Dee (N. Wales) Transitional

Water body ID: GB531106708200

| Elements                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                  | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">the Environmental Permitting Regulations guidance.</a>                                                                                                                                                                                                                                                                                                                                                                                                         |                         |                                                                                                                                                                                   |                                                                                                                                                |
| <b>Biology</b><br>Identify if the activity or project could impact on the abundance or composition of the biological elements listed below:<br>Biological elements for transitional (T) and coastal (C) waters under the directive are: <ul style="list-style-type: none"> <li>• Benthic invertebrates (T, C)</li> <li>• Fish (T)</li> <li>• Phytoplankton (T, C)</li> <li>• Macroalgae (T, C)</li> <li>• Angiosperms (T, C)</li> </ul> <b>Could the proposal lead to:</b> |                         |                                                                                                                                                                                   |                                                                                                                                                |
| • changes to the composition and abundance of aquatic flora                                                                                                                                                                                                                                                                                                                                                                                                                | N/A – no impact pathway | The proposed activity does not lie within the Dee (N. Wales) water body and aquatic flora of the Dee (N. Wales) transitional water body will not be affected.                     | <b>No – Impact assessment not required</b>                                                                                                     |
| • changes to the composition and abundance of benthic invertebrate fauna                                                                                                                                                                                                                                                                                                                                                                                                   | N/A – no impact pathway | The proposed activity does not lie within the Dee (N. Wales) water body and benthic invertebrate fauna of the Dee (N. Wales) transitional water body will not be affected.        | <b>No – Impact assessment not required</b>                                                                                                     |
| For TraC water bodies - scope in if the footprint (where footprint can be direct or a plume i.e. chemical or thermal; for dredging multiply the area by 1.5x) of your activity is:                                                                                                                                                                                                                                                                                         |                         |                                                                                                                                                                                   |                                                                                                                                                |
| • 0.5km <sup>2</sup> or larger                                                                                                                                                                                                                                                                                                                                                                                                                                             | Direct                  | The proposed activity does not lie within the Dee (N. Wales) water body, therefore its size in this context is not relevant to this assessment.                                   | <b>No – Impact assessment not required</b>                                                                                                     |
| • 1% or more of the water body's area                                                                                                                                                                                                                                                                                                                                                                                                                                      | Direct                  | The proposed activity does not lie within the Dee (N. Wales) water body, therefore its size as a percentage of the water body in this context is not relevant to this assessment. | <b>No – Impact assessment not required</b>                                                                                                     |
| • Within 500m of any higher sensitivity habitat (see table below)                                                                                                                                                                                                                                                                                                                                                                                                          | Direct                  | The proposed activity does not lie within 500 m of the Dee (N. Wales) water body, and therefore does not lie within 500 m of higher                                               | <b>No – Impact assessment not required</b>                                                                                                     |

| <b>Scoping table for Transitional and Coastal water bodies</b><br>Water body name: Dee (N. Wales) Transitional<br>Water body ID: GB531106708200                                                                          |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Elements                                                                                                                                                                                                                 | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|                                                                                                                                                                                                                          |                         | sensitivity habitat contained within this water body.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>1% or more of any lower sensitivity habitat (see table below)</li> </ul>                                                                                                          | Direct                  | The proposed activity does not lie within the Dee (N. Wales) water body, therefore its size as a percentage of lower sensitivity habitat in this context is not relevant to this assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>No – Impact assessment not required</b>                                                                                                     |
| <b>Fish fauna (Transitional water bodies only): could the proposal lead to:</b>                                                                                                                                          |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>changes to the composition, abundance and age structure of fish fauna</li> </ul>                                                                                                  | N/A – no impact pathway |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>an impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)</li> </ul> | N/A - indirect          | <p>The presence of the offshore power and FO cables beneath the seabed will not cause a change in depth or flow and will not create a physical barrier to the Dee (N. Wales) water body.</p> <p>The activity does not include a discharge pipe or outfall, and therefore no chemicals will be released into the marine environment that could cause a chemical change.</p> <p>Potential noise sources during the construction phase are related to cable installation (i.e. trenching/cutting and cable laying activities), and their related operations such as the jack-up rigs. These noise sources are non-percussive and will result in low noise levels, with recoverable injury ranges very low (a maximum of 68 m from the source of cable laying in the most sensitive fish hearing group).</p> | <b>Taken to detailed assessment</b>                                                                                                            |

### Scoping table for Transitional and Coastal water bodies

Water body name: Dee (N. Wales) Transitional  
Water body ID: GB531106708200

| Elements                                                                                                                                                                                        | Applicable              | Potential Impact (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                 |                         | <p>Given the distance to this water body, the magnitude is not likely to constitute an impact upon normal fish behaviour.</p> <p>The installation of the new Douglas CCS platform, will result on up to eight driven piles, using percussive means. The injury ranges for this activity will extend into the Dee estuary. Moreover, UXO clearance could also result in</p> <p>The assessment presented in the Offshore ES at volume 2, chapter 7 and Appendix Q WFD assessment.</p>                                    |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• entrainment or impingement of fish</li> </ul>                                                                                                          | N/A – no impact pathway | The activity does not include any mechanical systems that could cause fish to become entrained, and no surfaces or screens against which fish could become impinged.                                                                                                                                                                                                                                                                                                                                                   | <b>No – Impact assessment not required</b>                                                                                                     |
| <ul style="list-style-type: none"> <li>• refuge/predation areas</li> </ul>                                                                                                                      | N/A – no impact pathway |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>No – Impact assessment not required</b>                                                                                                     |
| Or: is the proposal in an estuary and could affect fish in the estuary; is outside the estuary but could delay or prevent fish entering it; or, could affect fish migrating through the estuary | N/A – Direct            | <p>The activity is not located within an estuary, but the Dee (N. Wales) water body is an estuary.</p> <p>The activity will could delay or prevent fish from entering or migrating through the Dee water body through disturbance of migration through noise and water clarity. The assessment presented in the Offshore ES at volume 2, chapter 7 predicted that installation or operation of the export cables would not significantly affect fish and shellfish movement, migration or spawning within this WFD</p> | <b>Taken to detailed assessment</b>                                                                                                            |

### Scoping table for Transitional and Coastal water bodies

Water body name: Dee (N. Wales) Transitional  
Water body ID: GB531106708200

| Elements | Applicable | Potential Impact (include direct and indirect potential impacts)                                                                                                                                        | Avoidance measures (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided) |
|----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|          |            | waterbody. However, noise could impact migration. Any possible impact on fish migration through changes in behaviour due to noise disturbance are assessed as part of impacts on normal fish behaviour. |                                                                                                                                                |

### Info for TraC water bodies

Extract from EA Clearing the water for All

### Higher and lower sensitivity habitats for TraC water bodies

| Higher sensitivity habitats <sup>2</sup>     | Lower sensitivity habitats <sup>3</sup>     |
|----------------------------------------------|---------------------------------------------|
| chalk reef                                   | cobbles, gravel and shingle                 |
| clam, cockle and oyster beds                 | intertidal soft sediments like sand and mud |
| intertidal seagrass                          | rocky shore                                 |
| maerl                                        | subtidal boulder fields                     |
| mussel beds, including blue and horse mussel | subtidal rocky reef                         |
| polychaete reef                              | subtidal soft sediments like sand and mud   |
| saltmarsh                                    |                                             |
| subtidal kelp beds                           |                                             |
| subtidal seagrass                            |                                             |

<sup>2</sup> Higher sensitivity habitats have a low resistance to, and recovery rate, from human pressures.

<sup>3</sup> Lower sensitivity habitats have a medium to high resistance to, and recovery rate from, human pressures.

### Invasive Non-Native Species

Refer to the [Check Clean Dry](#) campaign to help prevent the spread of invasive plants and animals in British waters. You can find out more about INNS on the [GB Non-native Species Secretariat website](#)

|                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risks of introducing or spreading INNS include: <ul style="list-style-type: none"> <li>• materials or equipment that have come from, had use in or travelled through other water bodies</li> <li>• activities that help spread existing INNS, either within the immediate water body or to other water bodies</li> </ul> |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Does the activity or project have the potential to introduce or spread INNS to a water body?</b>                                                                                                                                                                                                                      |                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Add in each relevant WB ID</b><br>Use a separate row for each WB ID                                                                                                                                                                                                                                                   | <b>Applicable</b>                                                                                                                                                                                               | <b>Potential Impact</b> (include direct and indirect potential impacts)                                                                                                                                                                                                                                                                                                                                                                                        | <b>Avoidance measures</b> (briefly describe any measure included within the project at this point that will ensure the potential effects are avoided)                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                                          | Choose one of the following:<br><b>Direct</b> – risk of direct impact<br><b>Indirect</b> – risk of indirect impact<br><b>N/A – no impact pathway</b><br><b>N/A – other</b> – include additional text to explain | Further detail on potential impacts. Where N/A is included then provide detail to explain.                                                                                                                                                                                                                                                                                                                                                                     | <b>Colour text in green if all impacts can be avoided through measures already included in the scheme. Or red for schemes which require detailed assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                  |
| North Wales coastal water body<br>GB641011650000                                                                                                                                                                                                                                                                         | Direct                                                                                                                                                                                                          | There is little evidence of adverse effects on fish and shellfish receptors resulting from colonisation of other offshore wind farms by INNS, and the risk of introduction and spread of INNS to benthic ecology receptors has been assessed as minor (the Offshore ES at volume 2, chapter 7).                                                                                                                                                                | The approval of an EMP, and an INNS Management Plan (INNSMP) and its implementation will be conditioned to manage and reduce the risk of potential introduction and spread of INNS so far as reasonably practicable. All vessels will also operate in accordance with a Biosecurity Plan (BP), prepared in accordance with NRW Biosecurity Plan template. A draft BP has been included with the Marine Licence application, which shall be finalised following appointment of the EPC contractor, and submitted to NRW for prior approval, before the commencement of any works. |
| Dee (N. Wales) transitional water body<br>GB531106708200                                                                                                                                                                                                                                                                 | Direct                                                                                                                                                                                                          | There is little evidence of adverse effects on fish and shellfish receptors resulting from colonisation of other offshore wind farms by INNS and the risk of introduction and spread of INNS to benthic ecology receptors has been assessed as minor, and (the Offshore ES at volume 2, chapter 7). The distance between the cable corridor and the Dee (N. Wales) water body will also naturally reduce the likelihood of the introduction or spread of INNS. | The approval of an EMP, and INNSMP and its implementation will be conditioned to manage and reduce the risk of potential introduction and spread of INNS so far as reasonably practicable. All vessels will also operate in accordance with a BP, prepared in accordance with NRW Biosecurity Plan template. A draft BP has been included with the Marine Licence application, which shall be finalised following appointment of the EPC contractor, and submitted to NRW for prior approval, before the commencement of any works.                                              |

## WFD Protected Areas

If the proposed activity is within, or hydrologically connected to, a WFD Protected Area. If the activity is hydrologically linked, then as a general rule those Protected Areas within 2 km of the proposed activity will be most at risk.

| Protected Areas and Critical sensitive habitats/species                                                                                                                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consider if WFD protected areas are at risk from your activity.<br>These include:                                                                                        | Applicable | How have you considered the potential impacts?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Protected Areas:</b>                                                                                                                                                  |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>SACs/SPAs/RAMSAR</li> </ul>                                                                                                       | Yes        | <p>The following protected sites are located in Welsh Waters within the zone of influence (Zol) as modelled for the physical processes assessment within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H :</p> <ul style="list-style-type: none"> <li>Liverpool Bay SPA;</li> <li>The Dee Estuary SPA and Ramsar site;</li> <li>Dee Estuary SAC.</li> </ul> <p>The potential impacts on these European/Ramsar sites and other protected sites beyond Welsh Waters have been assessed as part of the Habitat Regulation Assessment (HRA) for the project which concluded that the project would not have an adverse effect on the integrity (AEOI) of a European/Ramsar site.</p> |
| <ul style="list-style-type: none"> <li>Bathing Waters</li> </ul>                                                                                                         | Yes        | <p>The following bathing water is located within the Zol:</p> <ul style="list-style-type: none"> <li>Prestatyn bathing water.</li> </ul> <p>This bathing water has been considered in the detailed assessment section of this WFD Assessment.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>Shellfish Waters</li> </ul>                                                                                                       | Yes        | <p>The following shellfish water is located within the Zol:</p> <ul style="list-style-type: none"> <li>Dee (West) shellfish water.</li> </ul> <p>This shellfish water has been considered in the detailed assessment section of this WFD Assessment. The Zol does not extend to the Dee East shellfish protected area.</p>                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Other Protected and Priority habitats and species.</b>                                                                                                                |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>Nationally or locally protected areas e.g. SSSI, NNR etc</li> </ul>                                                               | N/A        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Section 6 Biodiversity and resilience of ecosystems duty (Environment (Wales) Act 2016) <a href="#">here</a> - other Protected and Priority habitats and species.</b> |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Protected Areas and Critical sensitive habitats/species                                                                                                                                                                                                                      |            |                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Consider if WFD protected areas are at risk from your activity.<br>These include:                                                                                                                                                                                            | Applicable | How have you considered the potential impacts?                                                                                                 |
| The S6 duty requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems.                                                           |            |                                                                                                                                                |
| Identify if there is a risk that the activity/project could impact on a water dependant priority habitat and or species which are either critical to the ecological health of the water body or sensitive to changes proposed on the water body.                             |            |                                                                                                                                                |
| <ul style="list-style-type: none"><li>Section 7 list of priority habitats e.g. wetlands</li></ul>                                                                                                                                                                            | Yes        | A number of section 7 species and habitats have been considered within the project HRA where they are also features of a European/Ramsar site. |
| <ul style="list-style-type: none"><li>Section 7 list of priority species e.g. water voles</li></ul>                                                                                                                                                                          |            |                                                                                                                                                |
| <b>Ecosystem Resilience</b><br>The Environment (Wales) Act 2016, Section 3 states that the objective of the sustainable management of natural resources is to maintain and enhance the resilience of ecosystems and the benefits they provide now and for future generations |            |                                                                                                                                                |
| Consideration of ecosystem resilience – diversity, extent, condition, connectivity.                                                                                                                                                                                          | Yes        | The impacts on marine biodiversity are assessed in Chapter 7 Marine Biodiversity in Volume 2 of the Offshore ES Main Report.                   |

## Stage 2, step 2: Scoping decision of the project 'alone'

| Scoping assessment                                                                                                                              | Scoping decisions |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Q2.1 Is there a risk that a component of the proposal may cause deterioration of any element that makes up water body status?                   | Yes               |
| Q2.2 Is there a risk that a component of the proposal may prevent the water body or Protected Area from achieving its objectives in the future? | Yes               |

### Stage 2, step 3: Assessing potential in combination and/or cumulative impacts

It is important to consider the in combination and/or cumulative effects of pressures in a water body and the combined impacts of the proposed activity.

Do not include activities which have not yet been applied for, unless the activity is well defined and there are solid reasons for believing that it will be taken forward. Consult with [technical advisors](#) as required.

**Avoidance measures** - Describe any conditions, restrictions or other measures, if any, applicable to the activity/project, and/or to the other activities giving rise to the in combination / cumulative effect, which could remove the risk of deterioration or prevent of achieving water body objectives. Include details of how such measures would be applied, and who would be responsible for applying them.

*If required, further details can be provided in separate clearly referenced documents.*

| Are there any activities or projects which may act in combination and/or cumulative?<br><i>If none, put 'N/A'</i>                                                                                                                                                                                                                                                                                                                                                                                        | Nature of the in-combination/cumulative effect (if any)                                                                                                                                                                                                                                                                                                                                                                                                    | Avoidance measures<br>Are there any legally binding avoidance measures which could be included within the project at this point that will ensure the potential effects are avoided? | Can the risk of deterioration or prevention of achieving water body objectives from in combination/ cumulative effects be ruled out?<br><b>'YES' or 'NO' or 'DON'T KNOW'</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Offshore Renewables: <ul style="list-style-type: none"> <li>Burbo Bank Extension OWF cable repair and remediation</li> <li>Awel y Môr OWF</li> <li>Removal of a meteorological mast at Gwynt y Môr OWF</li> <li>Mona OWF</li> <li>Morgan OWF Generation Assets</li> <li>Morecambe OWF Generation Assets</li> </ul> Deposits and Removal: <ul style="list-style-type: none"> <li>Burbo Bank Extension OWF Disposal Site IS153</li> <li>Mostyn Energy Park Expansion; and</li> <li>Hilbre Swash</li> </ul> | The <b>hydromorphology</b> within the North Wales coastal waterbody as a result of HyNet Project would not be significantly impacted by the proposed activity. Effects of all cable installation activities will be temporary and reversible and would be highly localised. The potential for significant cumulative effects with other projects, plans and activities is considered unlikely to result in a deterioration in status of any WFD waterbody. | N/A                                                                                                                                                                                 | Yes                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Project activities which introduce the potential for a reduction in <b>water quality</b>                                                                                                                                                                                                                                                                                                                                                                   | The approval of an EMP and its implementation during the construction, and operational and maintenance phases of the Project will be                                                | Yes                                                                                                                                                                          |



| <b>Are there any activities or projects which may act in combination and/or cumulative?</b><br><i>If none, put 'N/A'</i>                                                                   | <b>Nature of the in-combination/cumulative effect (if any)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Avoidance measures</b><br>Are there any legally binding avoidance measures which could be included within the project at this point that will ensure the potential effects are avoided?          | Can the risk of deterioration or prevention of achieving water body objectives from in combination/ cumulative effects be ruled out?<br><b>'YES' or 'NO' or 'DON'T KNOW'</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Cables and Pipelines:</p> <ul style="list-style-type: none"> <li>• Morgan and Morecambe OWF Transmission Assets</li> <li>• MaresConnect Wales – Ireland Interconnector Cable</li> </ul> | <p>are typically those which involve seabed disturbance and/ or an increase in SSC. Any in-combination effects associated with increased SSC and associated sediment deposition will be of limited spatial extent, short term duration, intermittent in nature.</p> <p>There is also the potential for accidents to occur, releasing chemicals/ substances into the marine environment.</p> <p>The risk of any in-combination effects associated with accidental pollution is very low however, should an event occur, any effects will be temporary and limited in spatial extent. All other projects/plans considered will also likely implement similar standard measures to the measures adopted as part of the HyNet Project, such as an EMP and CMS. These measures will further reduce the</p> | <p>conditioned. The EMP will include a MPCP which will include planning for accidental spills, address all potential contaminant releases and include key emergency contact details (e.g. EPA).</p> |                                                                                                                                                                              |

| <p><b>Are there any activities or projects which may act in combination and/or cumulative?</b><br/><i>If none, put 'N/A'</i></p> | <p><b>Nature of the in-combination/cumulative effect (if any)</b></p>                                                                                                                                                                                                                                                                                                                               | <p><b>Avoidance measures</b><br/>Are there any legally binding avoidance measures which could be included within the project at this point that will ensure the potential effects are avoided?</p>                                                                                                                                                                                                                                                                                                                                        | <p>Can the risk of deterioration or prevention of achieving water body objectives from in combination/ cumulative effects be ruled out?<br/><b>'YES' or 'NO' or 'DON'T KNOW'</b></p> |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                  | <p>likelihood of an accidental pollution event occurring.</p>                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                      |
|                                                                                                                                  | <p>There is a potential for the introduction and/ or spread of marine <b>INNS</b> as a result of activities associated with the HyNet Project. This includes the placement of cable protection, providing new habitat for marine INNS to colonise, and the movement of vessel transporting INNS via ballast water and attached to hulls/equipment.</p>                                              | <p>The approval of an EMP and INNSMP and its implementation will be conditioned to manage and reduce the risk of potential introduction and spread of INNS so far as reasonably practicable. All vessels will also operate in accordance with a BP, prepared in accordance with NRW Biosecurity Plan template. A draft BP has been included with the Marine Licence application, which shall be finalised following appointment of the EPC contractor, and submitted to NRW for prior approval, before the commencement of any works.</p> | <p><b>Yes</b></p>                                                                                                                                                                    |
|                                                                                                                                  | <p>Impacts to <b>benthic habitats</b> as a result of the cable installation for the HyNet Project will be localised and temporary, except for areas of cable protection. The potential for significant cumulative effects from the proposed development with other projects, plans and activities is considered unlikely to result in a deterioration in status of biological quality elements.</p> | <p>The approval of an CSIP post consent and its implementation will be conditioned which will include cable burial where possible and cable protection, as necessary. No external cable protection in the intertidal area.</p>                                                                                                                                                                                                                                                                                                            | <p><b>Yes</b></p>                                                                                                                                                                    |
| <p><b>Scoping decision of the project cumulatively or 'in combination'</b></p>                                                   |                                                                                                                                                                                                                                                                                                                                                                                                     | <p><b>Potential cumulative/in combination impacts conclusion</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                      |

| Are there any activities or projects which may act in combination and/or cumulative?<br><i>If none, put 'N/A'</i>                                      | Nature of the in-combination/cumulative effect (if any)                | Avoidance measures<br>Are there any legally binding avoidance measures which could be included within the project at this point that will ensure the potential effects are avoided? | Can the risk of deterioration or prevention of achieving water body objectives from in combination/ cumulative effects be ruled out?<br><b>'YES' or 'NO' or 'DON'T KNOW'</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Q2.3 Can the risk of deterioration or prevention of achieving water body objectives from in combination and or cumulative effects be ruled out?</b> | <b>(a) If the right-hand column is 'YES' in all cases</b>              | It <b>can</b> be concluded that potential deterioration or prevention of achieving water body objectives from in combination / cumulative effects can be ruled out                  |                                                                                                                                                                              |
|                                                                                                                                                        | <b>(b) If any row is 'NO' or 'Don't know' in the right-hand column</b> | It <b>cannot</b> be concluded that potential deterioration or prevention of achieving water body objectives from in combination / cumulative effects can be ruled out               |                                                                                                                                                                              |

## Stage 2, Step 4: Overall scoping decision

| Scoping assessment                                                                                                                                                                                                                                                                                                                                                       | Scoping decisions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overall scoping decision<br><br><b>Q2.4 Is there a potential risk that the proposal may cause deterioration or prevent a water body from meeting its objectives either alone or in combination?</b><br><i>(choose one of the following options and delete the other)</i>                                                                                                 | <p><del>There is <b>no risk</b> of deterioration or prevention of the water body achieving its objectives as a result of the proposal, either alone or in combination, and no further consideration under the Water Framework Directive/Regulations is required in order to determine the application.</del></p> <p>If this section is selected, <b>delete Q2.5 and Stage 3.</b></p> <p>There is a risk the proposal may cause deterioration or prevent the water body from meeting its objectives and therefore a detailed compliance assessment might be required if there are no mitigation measures that can be included at Q2.5.</p> <p>If this section is selected, complete Q2.5.</p> |
| <b>Q2.5 Mitigation measures</b><br><b>Are there any legally binding mitigation measures which could be included within the project at this point that will ensure the potential effects are avoided?</b><br>Describe any conditions, restrictions or other measures, if any, applicable to the activity/project, which could remove the risk of deterioration or prevent | <p><del>There is a risk the proposal may cause deterioration or prevent the water body from meeting its objectives however the following <b>legally binding avoidance measures will be included within the project at this point that will ensure the potential effects are avoided.</b></del></p> <p><del>List the legally binding avoidance measures that will be included in the consent/permit/authorisation, and who will be responsible for applying them.</del></p>                                                                                                                                                                                                                   |

| Scoping assessment                                                                                                                                                                                                                                   | Scoping decisions                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>of achieving water body objectives. Include details of how such measures would be applied, and who would be responsible for applying them.<br/> <i>If required, further details can be provided in separate clearly referenced documents.</i></p> | <p>If this section is selected, <b>delete Stage 3.</b></p>                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                      | <p>There is a risk the proposal may cause deterioration or prevent the water body from meeting its objectives and therefore a detailed compliance assessment is required. There are no mitigation measures that can be included at this stage.</p> <p>If this section is selected, <b>complete Stage 3.</b></p> |

### **Stage 3: Detailed Assessment**

The amount of information provided at this stage will vary depending on the scale and nature of the project and its potential environmental effects. The detail presented at this stage should be proportionate to the scale of the project and its potential risks. For complex cases then a separate report for detailed assessment would be appropriate. For example, if the only aspect of a project being scoped in to stage 3 is the risk of chemical spills during a construction activity and the mitigation being proposed is a Construction Environmental Management Plan to ensure adequate management of the risks are in place then this may be best presented as a simple table. On the other end of the scale, for a complex project we would expect to see the evidence presented of the underpinning assessments for all aspects of the project that had been scoped in to Stage 3. This information is likely to be drawn from modelling studies and other assessments carried out as part of the wider EIA process where relevant and this should cover the following as a minimum:

#### **Assessing for Deterioration**

Deterioration in this context refers to deterioration from one status class to a lower one, unless the element is already at bad status and then this also includes within class deterioration.

Temporary effects do not count as deterioration if the water body/ies in question would recover within a short period of time.

Consider if the effects arising from the project are:

- Direct or indirect/secondary
- Alone or in combination; cumulative
- Ensure all stages of the project have been covered in the assessment where relevant, including construction, operation and maintenance, decommissioning

If stage 3 identifies a risk of deterioration, then avoidance of the impact must be considered. If this is not practicable, mitigation should be then considered to reduce the effects as far as is possible. In this context, mitigation can only apply to the water body/ies which are at risk of deterioration, it does not include compensation in other water bodies.

#### **Protected Areas**

This stage should also consider the impact of the activity on each of the protected areas identified at the scoping stage.

If it is identified that there is a potential to impact to a SAC/SPA/RAMSAR site, then an HRA must also be carried out; this should be clearly referenced within this section if so.

#### **Assessment of Invasive and Non-native Species (INNS)**

If there is a risk of the project introducing or spreading INNS, then a Biosecurity Risk Assessment must also be carried out in association with the project and clearly referenced within this section.

### **Jeopardising Good Status**

If the water body being assessed is at less than good status, it will have the objective of achieving good status by a set date. If this is the case, it must be assessed whether the project will jeopardise the attainment of good status. This is done by assessing if the project may impact upon any improvement measures being currently carried out in the water body by conflicting with them or reducing their effectiveness. A list of water body improvement measures can be found in the RBMPs.

### **HMWBs – Jeopardising Mitigation Measures**

If the water body in question is designated as a HMWB, then there will be a set of water body mitigation measures associated with it. This stage of the assessment must also consider if the project is in conflict with the water body mitigation measures either now or in future. The list of water body mitigation measures can be found on [Water Watch Wales](#).

### **Stage 3: decision table**

| Water body name & ID                             | WFD element/s scoped in                             | Description of impacts; include a list of all evidence documents to inform the detailed assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Mitigation measures                                                                                                                         | Is there risk of the activity preventing the water body/ PA from meeting its objectives?*<br>'YES' or 'NO' | Can the risk of deterioration be ruled out?*<br>'YES' or 'NO' |
|--------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| North Wales coastal water body<br>GB641011650000 | <b>Hydromorphology:</b><br>Morphological conditions | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact seabed morphology and cause secondary scour.</p> | The design of the cable crossing protection will have tapered profiles to reduce the impacts upon physical processes and seabed morphology. | No                                                                                                         | Yes                                                           |

|                                                  |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |    |     |
|--------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                  |                                           | <p>Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to disrupt sediment transport, seabed morphology, or cause secondary scour to develop.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the North Wales waterbody with respect to hydromorphology. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Hydromorphology:</b><br>Tidal patterns | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact hydrodynamics. Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to affect tidal currents.</p> <p>As noted in the Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01), in compliance with the Maritime and Coastguard Agency (MCA) navigation guidelines, the maximum height of the shallowest cable crossing would be restricted to 5% of the water depth,</p> | N/A | No | Yes |

|                                                  |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |    |     |
|--------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                  |                                          | <p>however, given the majority of cable crossings fall within waters deeper than 25 m (CD), water depths will be changed by less than 5%. With most of the crossings falling in waters of 25 m (CD), which equates to 28 m mid tide, the introduction of 0.8 m height cable crossings represents less than a 3% change in water depth and therefore likely &lt; 3% change to tidal currents. This change is 25% of that exhibited in the natural variation between peak spring and peak neap tidal flows.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the North Wales waterbody with respect to tidal currents. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Hydromorphology:</b><br>Wave exposure | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact hydrodynamics. Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to affect the wave climate.</p>                                                                                 | N/A | No | Yes |



|                                |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                             |           |            |
|--------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------|------------|
|                                |                                 | <p>Although wave climate did not form part of the modelling presented in Volume 2: Physical Processes Technical Report, studies undertaken within the vicinity of the Eni Development Area can be drawn upon as noted in the Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01),. The physical processes modelling for the Mona Offshore Wind Project indicated that where the cable protection height was less than 15% of the water depth there was no change in wave climate (Mona Offshore Wind Ltd, 2024a; Mona Offshore Wind Ltd, 2024b). In compliance with the Maritime and Coastguard Agency (MCA) navigation guidelines, the maximum height of the shallowest cable crossing would be restricted to 5% of the water depth and therefore is likely to exhibit no change in wave climate, however, given the majority of cable crossings fall within waters deeper than 25 m (CD), water depths will be changed by less than 5%. With most of the crossings falling in waters of 25 m (CD), which equates to 28 m mid tide, the introduction of 0.8 m height cable crossings represents less than a 3% change in water depth.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the North Wales waterbody with respect to waves. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |                                                                             |           |            |
| North Wales coastal water body | <b>Hydromorphology:</b><br>HMWB | The North Wales water body has been designated as a heavily modified water body for the purpose of coastal protection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation measures are “Not Applicable - Not Required in This Water Body”. | <b>No</b> | <b>Yes</b> |

|                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                            |  |  |
|--------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|--|
| GB641011650<br>000 |  | <p>This designation is not for the same use as the proposed activity.</p> <p>Mitigation measures identified for coast protection use are as follows:</p> <ul style="list-style-type: none"> <li>• Habitat creation - 48. Indirect mitigation</li> <li>• Operations and maintenance - 21. Avoid the need to dredge</li> <li>• Operations and maintenance - 22. Dredging disposal strategy</li> <li>• Operations and maintenance - 23. Reduce impact of dredging</li> <li>• Operations and maintenance - 24. Reduce sediment resuspension</li> <li>• Operations and maintenance - 25. Retime dredging or disposal</li> <li>• Operations and maintenance - 26. Sediment management</li> <li>• Operations and maintenance - 27. Dredge disposal site selection</li> <li>• Operations and maintenance - 28. Manage disturbance</li> <li>• Operations and maintenance - 37. Retain habitats</li> <li>• Structural modification- 16. Fish passes</li> <li>• Structural modification - 19. Enhance ecology</li> <li>• Structural modification - 20. Changes to locks etc</li> <li>• Working with physical form and function - 13. Realign flood defence</li> <li>• Working with physical form and function - 2. Remove obsolete structure</li> <li>• Working with physical form and function - 4. Remove or soften hard bank</li> </ul> | All mitigation measures have not been defined or assigned. |  |  |
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|--------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                  |                                        | <ul style="list-style-type: none"> <li>Working with physical form and function - 5. Preserve or restore habitats</li> <li>Working with physical form and function - 6. In-channel morph diversity</li> <li>Working with physical form and function - 7. Bank rehabilitation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Water quality:</b><br>Water clarity | <p>The offshore power and FO cable route crosses the North Wales coastal waterbody and consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in SSC over periods greater than a spring-neap tidal cycle (approximately 14 days)</p> <p>Seabed disturbance and the resuspension of sediments into the water column would result in a short-term increase in SSC and reduction of clarity as a result of construction activities, such as cable installation and landfall works.</p> <p>A full characterisation of sediment displacement, including numerical modelling of SSC, is presented in the Offshore ES at volume 3, appendix H, and an assessment of activities affecting the surrounding water quality is presented within the Offshore ES at volume 2, chapter 6. The modelling indicated that increases in SSC will be greatest close to the site of cable installation, reducing in magnitude at a range of a few hundred metres from the cable, and falling to background levels at a range of a few kilometres. The effects of increased SSC are expected to be temporary, short term and intermittent over a 14-day spring/neap tidal cycle.</p> | N/A | No | Yes |

|                                                          |                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |    |     |
|----------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                          |                                                | <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the North Wales waterbody with respect to water quality. Increased SSC is expected to disperse rapidly at distances of hundreds of metres from cable installation works. The effects of the activity on water clarity are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p>                                                                                                                                                                                |     |    |     |
| <p>North Wales coastal water body<br/>GB641011650000</p> | <p><b>Water quality:</b><br/>Oxygen levels</p> | <p>The offshore power and FO cable route crosses the North Wales coastal waterbody and consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in dissolved oxygen (DO) over periods greater than a spring-neap tidal cycle (approximately 14 days).</p> <p>Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may result in a reduction in DO through the decomposition of organic matter. It may also cause nutrients to be released into the water column. When nutrient loading is high, phytoplankton blooms may occur, after which phytoplankton will die. Bacteria and other decomposer organisms then break down</p> | N/A | No | Yes |

|                                                  |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |    |     |
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|                                                  |                                    | <p>this organic matter and DO levels may become reduced (NRW, 2023)<sup>1</sup>.</p> <p>No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions. There are no outfalls or discharges associated with the Proposed Development so the proposed activities are not expected to cause a reduction in DO in the water column.</p> <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the North Wales waterbody with respect to water quality. Increased SSC is expected to disperse rapidly at distances of hundreds of metres from cable installation works and phytoplankton is not expected to bloom since any increase in SSC is likely to disperse rapidly. The effects of the proposed activity on DO are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Water quality:</b><br>Nutrients | The offshore power and FO cable route crosses the North Wales coastal waterbody and consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N/A | No | Yes |

<sup>1</sup> NRW (2023) Information note: Dissolved oxygen in water. Available: <https://cdn.cyfoethnaturiol.cymru/media/692076/new-information-note-dissolved-oxygen.pdf> Accessed December 2024.

|                                                  |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |    |     |
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|                                                  |                                    | <p>cause an increase in nutrients over periods greater than a spring-neap tidal cycle (approximately 14 days).</p> <p>Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may cause sediment-bound nutrients to be released into the water column. No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions.</p> <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the North Wales waterbody with respect to water quality. Increased SSC is expected to disperse rapidly at distances of hundreds of metres from cable installation works. The effects of the activity on nutrients are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Water quality:</b><br>Microbial | The offshore power and FO cable route crosses the North Wales coastal waterbody and consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in bacterial concentrations over periods greater than a spring-neap tidal cycle (approximately 14 days).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | N/A | No | Yes |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
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|  |  | <p>Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may cause nutrients to be released into the water column. When nutrient loading is high phytoplankton blooms may occur, after which phytoplankton will die. Bacteria and other decomposer organisms then break down this organic matter.</p> <p>No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions. There are no outfalls or discharges associated with the Proposed Development so the proposed activities are not expected to cause an increase in microbial activity.</p> <p>The presence of live bacteria, including <i>E.coli</i> and intestinal <i>enterococci</i>, is strongly influenced by the amount of UV light penetrating the water column. Under lower UV scenarios, as occurs when SSC is high, survival of bacterium such as <i>E. coli</i> may increase (Bashwari <i>et al.</i>, 2020)<sup>2</sup>. Since bacterial counts within the water column are a determinant of water quality at designated bathing waters, this may represent a potential impact to bathing water status at the Prestatyn bathing water. The Prestatyn bathing water is located approximately 4.2 km from the proposed route of the integrated offshore power and FO cables, and approximately 0.6 km from</p> |  |  |  |
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<sup>2</sup> Bashwari, Y.M., Robins, P., Cooper, D.M., McDonald, J.E., Jones, D.L. and Williams, A.P. (2020) Impact of Sediment Concentration on the Survival of Wastewater-Derived blaCTX-M-15-Producing *E. coli*, and the Implications for Dispersal into Estuarine Waters. International Journal of Environmental Research and Public Health 17, 7608. doi:10.3390/ijerph17207608.

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
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|  |  | <p>the Eni Development Area, and has received an annual classification of 'Excellent' between 2018 and 2023.</p> <p>Given that bathing water status is determined in part by bacterial sampling, the consistent 'Excellent' classification of the Prestatyn bathing water suggests that levels of bacteria within nearby sediments do not result in a reduction in water quality when disturbed and mobilised during storm events. Moreover, the short-term nature of any sediment plumes associated with cable installation suggests that any relative increase in bacteria would be negligible in terms of WFD compliance. No deterioration or non-compliance at the Prestatyn bathing water is anticipated to occur as a result of the Proposed Development.</p> <p>The Dee (West) shellfish water shown on Figure 1.3 of Appendix Q of the Offshore ES at volume 3 is located approximately 1 km from the Eni Development Area, and approximately 1.1 km from the proposed route of the offshore power and FO cables. The site was designated for the harvesting of mussel (<i>Mytilus</i> spp.) and cockle (<i>Cerastoderma edule</i>): two largely sedentary species, which may be more sensitive to increased SSC than more mobile species. Similarly, microbial sampling is a determinant of compliance for shellfish waters, and bacterial levels may be at risk of increase following mobilisation of sediment. As for the Prestatyn bathing water, however, disturbance of sediments during storm events does not result in a reduction in</p> |  |  |  |
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|--------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                  |                                        | water quality (NRW, 2024) <sup>3</sup> and given that the installation of the offshore power and FO cables is not proposed to overlap spatially with the Dee (West) shellfish water, no deterioration or non-compliance is anticipated to occur here as a result of the Proposed Development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |    |     |
| North Wales coastal water body<br>GB641011650000 | <b>Water quality:</b><br>Phytoplankton | <p>The offshore power and FO cable route crosses the North Wales coastal waterbody and consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to detrimentally affect the North Wales waterbody Classification Cycle 3 (2021) 'moderate' phytoplankton status. Phytoplankton is not considered to be vulnerable to the installation or operation of cables, however this has been scoped in due to the 'moderate' phytoplankton status of this waterbody.</p> <p>Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may cause nutrients to be released into the water column. When nutrient loading is high phytoplankton blooms may occur.</p> <p>The North Wales water body does not have a history of harmful phytoplankton blooms (NRW, 2021)<sup>4</sup> and no nutrients are anticipated to be released in significant concentrations from the seabed as a result of the activity, beyond those expected in typical storm conditions.</p> | N/A | No | Yes |

<sup>3</sup> NRW (2024) 2024 Bathing Water Profile for Prestatyn. Available: <https://environment.data.gov.uk/wales/bathing-waters/profiles/profile.html?site=ukl1302-40700> Accessed December 2024.

<sup>4</sup> NRW (2021) 2021 Cycle 3 Classification Data. Available: <https://cyfoethnaturiolcymru.sharefile.eu/d-sc8f1ea840a594d32a5ac24f3aa3c2350>

|                                                               |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                             |    |     |
|---------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
|                                                               |                                            | <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the North Wales waterbody with respect to water quality. Increased SSC is expected to disperse rapidly at distances of hundreds of metres from cable installation works and phytoplankton is not expected to bloom since any increase in SSC is likely to disperse rapidly. The effects of the activity on phytoplankton are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |                                                                                                                                                                                                                                                                                                                                                             |    |     |
| <p>North Wales coastal water body<br/>GB641011650<br/>000</p> | <p><b>Water quality:</b><br/>Chemicals</p> | <p>Liverpool Bay is fed by numerous rivers along the coast of north Wales and north-west England, including three large estuaries associated with urban development and industrialisation: the Dee, the Mersey and the Ribble. Alongside these inputs, the eastern Irish Sea has a history of oil and gas extraction which may have contributed to the current chemical status of Liverpool Bay (Dickson, 1987<sup>5</sup>; Cefas, 2005<sup>6</sup>).</p> <p>The Proposed Development does not involve the release of chemicals and the only substance which may be used is bentonite, during HDD within the intertidal</p>                                                                                                                                    | <p>Any potential risk of accidental release of contaminants will be minimised through the use of temporary prefabricated steel containment sumps to capture any drilling fluid emitted and implementation of an approved EMP during the construction, and operation and maintenance phases. The EMP will be secured through a Marine Licence condition.</p> | No | Yes |

<sup>5</sup> Dickson, R. R. (1987) Irish Sea status report of the Marine Pollution Management Group. Aquatic Environmental Monitoring Report, MAFF Direct. Fisheries Research Number 17: 83 pp. Available: <https://www.cefas.co.uk/publications/aquatic/aemr35.pdf>

<sup>6</sup> Cefas (2005) A Review of the Contaminant Status of the Irish Sea. Cefas contract report C2436. 90 pp. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/197289/SEA6\\_Contaminant\\_CEFAS.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/197289/SEA6_Contaminant_CEFAS.pdf)

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|                                                   |                                                                              | <p>area. Bentonite is an inert, non-toxic, natural clay mineral (&lt;63 µm particle diameter) which is not on the EQSD list (Environment Agency, 2016)<sup>7</sup>.</p> <p>Bentonite is included in the Cefas List of Notified Chemicals approved for use and discharge into the marine environment and is classified as a group E substance under the Offshore Chemical Notification Scheme (OCNS) (Cefas, 2022)<sup>8</sup>. Group E substances are the group least likely to cause environmental harm and are readily biodegradable and do not bioaccumulate.</p> <p>Bentonite is also included on the OSPAR List of Substances Used and Discharged Offshore which are Considered to Pose Little or No Risk to the Environment (PLONOR) (OSPAR, 2021)<sup>9</sup>.</p> |     |    |     |
| North Wales coastal water body<br>GB641011650 000 | <b>Biology:</b><br>Changes to the composition and abundance of aquatic flora | <p>Phytoplankton is not considered to be vulnerable to the installation or operation of cables, however this has been scoped in due to the 'moderate' phytoplankton status of this waterbody.</p> <p>Liverpool Bay is fed by numerous rivers along the coast of north Wales and north-west England, including three large estuaries associated with urban development and industrialisation: the Dee, the Mersey and the Ribble. Alongside these inputs, the eastern Irish Sea has a</p>                                                                                                                                                                                                                                                                                  | N/A | No | Yes |

<sup>7</sup> Environment Agency (2016) Environmental Quality Standards Directive (EQSD) list for WFD assessments. Available: <https://www.gov.uk/government/publications/list-of-chemicals-for-water-framework-directive-assessments/environmental-quality-standards-directive-eqsd-list-for-wfd-assessments>

<sup>8</sup> Cefas (2022) Offshore Chemical Notification Scheme (OCNS) Definitive ranked list of registered products. Available at: <https://www.cefas.co.uk/data-and-publications/ocns/>

<sup>9</sup> OSPAR (2021) OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment' Available at: <https://www.ospar.org/documents?d=32939>

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | <p>history of oil and gas extraction which may have contributed to the current chemical status of Liverpool Bay (Dickson, 1987<sup>10</sup>; Cefas, 2005<sup>11</sup>). Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may result a reduction in water quality and may cause sediment-bound contaminants and nutrients to be released into the water column. When nutrient loading is high phytoplankton blooms may occur, after which phytoplankton will die. Bacteria and other decomposer organisms then break down this organic matter and dissolved oxygen (DO) levels may become reduced (NRW, 2023)<sup>12</sup>.</p> <p>The North Wales water body does not have a history of harmful phytoplankton blooms (NRW, 2021)<sup>13</sup> and no nutrients are anticipated to be released in significant concentrations from the seabed as a result of the activity, beyond those expected in typical storm conditions. There are no outfalls or discharges associated with the Proposed Development so the proposed activities are not expected to cause a reduction in DO in the water column.</p> <p>Increased SSC is expected to disperse rapidly at distances of hundreds of metres from cable installation works and</p> |  |  |  |
|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

<sup>10</sup> Dickson, R. R. (1987) Irish Sea status report of the Marine Pollution Management Group. Aquatic Environmental Monitoring Report, MAFF Direct. Fisheries Research Number 17: 83 pp. Available: <https://www.cefas.co.uk/publications/aquatic/aemr35.pdf>

<sup>11</sup> Cefas (2005) A Review of the Contaminant Status of the Irish Sea. Cefas contract report C2436. 90 pp. Available: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/197289/SEA6\\_Contaminant\\_CEFAS.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/197289/SEA6_Contaminant_CEFAS.pdf)

<sup>12</sup> NRW (2023) Information note: Dissolved oxygen in water. Available: <https://cdn.cyfoethnaturiol.cymru/media/692076/new-information-note-dissolved-oxygen.pdf>

<sup>13</sup> NRW (2021) 2021 Cycle 3 Classification Data. Available: <https://cyfoethnaturiolcymru.sharefile.eu/d-sc8f1ea840a594d32a5ac24f3aa3c2350>

|                                                               |                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                           |    |     |
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|                                                               |                                                                                                   | <p>phytoplankton is not expected to bloom since any increase in SSC is likely to disperse rapidly. The effects of the activity are therefore expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                           |    |     |
| <p>North Wales coastal water body<br/>GB641011650<br/>000</p> | <p><b>Biology:</b><br/>Changes to the composition and abundance of benthic invertebrate fauna</p> | <p>Temporary habitat loss and/or disturbance may occur during the construction, and operation and maintenance phase of the Proposed Development, via site preparation activities, and the installation of development infrastructure, as well as the use of jack-up vessels for repair and maintenance activities. It is anticipated that the offshore cables will be installed via either ploughing, or cable trenching, or a combination of both these techniques, depending on ground conditions along the specific cable route.</p> <p>Overall, the magnitude of this impact on all subtidal habitats and species IEFs except Ross worm was deemed to be low and the sensitivity of the receptor was considered to be medium. Therefore, the effect of temporary habitat loss and/or disturbance will be of minor adverse significance, which is not significant in EIA terms.</p> <p>For the Ross worm IEF, the magnitude this impact was deemed to be negligible, and the sensitivity of the receptor was considered to be medium. This results in a 'negligible or minor' significance of effect. As there were no Ross worm reefs identified, there is unlikely to be any loss or detrimental alteration to the Ross worm IEF due to this impact. Therefore, it has been</p> | <p>Should the cable trenching machine be used, matting will be used. In addition, tyre pressure of working vehicles in the intertidal will be reduced. These measures will reduce the impact from compaction on the Annex I Mudflat and sandflats not covered by seawater at low tide feature of the Dee Estuary SAC.</p> <p>These measures will be secured through an appropriate licence condition.</p> | No | Yes |

|                                                              |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                             |    |     |
|--------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
|                                                              |                                                     | <p>concluded that the effect of temporary habitat loss and/or disturbance will be of negligible adverse significance, which is not significant in EIA terms.</p> <p>The total extent of mudflats and sandflats not covered by the seawater at low tide within the Dee Estuary SAC is 104.06 km<sup>2</sup>, as such temporary habitat loss and disturbance could potentially impact only 0.2% of the extent of this habitat within the SAC. The temporary habitat loss/disturbance associated with offshore export cable during all phases of the Proposed Development will be temporary, of short term duration and reversible. However, in advance of any mitigation, this pressure has the potential to adversely affect the mudflats and sandflats not covered by the seawater at low tide.</p> <p>Overall, no deterioration of the status of the WFD waterbody is anticipated.</p> |                                                                                                                                             |    |     |
| Dee (N. Wales) transitional water body<br>GB531106708<br>200 | <b>Hydromorphology:</b><br>Morphological conditions | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact seabed morphology and cause secondary scour. Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to</p>                                                                                                                                                                            | The design of the cable crossing protection will have tapered profiles to reduce the impacts upon physical processes and seabed morphology. | No | Yes |

|                                                              |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |    |     |
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|                                                              |                                           | <p>disrupt sediment transport, seabed morphology, or cause secondary scour to develop.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the Dee (N. Wales) waterbody with respect to hydromorphology. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |    |     |
| Dee (N. Wales) transitional water body<br>GB531106708<br>200 | <b>Hydromorphology:</b><br>Tidal patterns | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact hydrodynamics. Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to affect tidal currents.</p> <p>As noted in the Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01), in compliance with the MCA navigation guidelines, the maximum height of the shallowest cable crossing would be restricted to 5% of the water depth, however, given the majority of cable crossings fall within waters deeper than 25 m (CD), water depths will be changed by less than 5%. With most of the crossings</p> | N/A | No | Yes |

|                                                              |                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |    |     |
|--------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
|                                                              |                                          | <p>falling in waters of 25 m (CD), which equates to 28 m mid tide, the introduction of 0.8 m height cable crossings represents less than a 3% change in water depth and therefore likely &lt; 3% change to tidal currents. This change is 25% of that exhibited in the natural variation between peak spring and peak neap tidal flows.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the Dee (N. Wales) waterbody with respect to tidal currents. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p>                                                                                                                                                                                                                                                                                                 |     |    |     |
| Dee (N. Wales) transitional water body<br>GB531106708<br>200 | <b>Hydromorphology:</b><br>Wave exposure | <p>The physical processes assessment and numerical modelling presented within the Offshore ES at volume 2, chapter 6 and volume 3, appendix H, indicate that hydromorphology would not be significantly impacted by the proposed activities. Effects of all cable installation activities will be temporary and reversible and would be highly localised.</p> <p>As noted in Chapter 7 of the Offshore ES at volume 2, there is potential for cable crossing protection installed during the construction phase to impact hydrodynamics. Due to the small scale nature of any cable crossings, it is not expected that impacts from cable crossings would be sufficient to affect the wave climate.</p> <p>Although wave climate did not form part of the modelling presented in Volume 2: Physical Processes Technical Report, studies undertaken within the vicinity of the Eni Development Area can be drawn upon</p> | N/A | No | Yes |



|                                                              |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                   |           |            |
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|                                                              |                                 | <p>as noted in the Technical Note: Marine Biodiversity – Benthic Subtidal and Intertidal Ecology (MBTN_01),. The physical processes modelling for the Mona Offshore Wind Project indicated that where the cable protection height was less than 15% of the water depth there was no change in wave climate (Mona Offshore Wind Ltd, 2024a; Mona Offshore Wind Ltd, 2024b). In compliance with the Maritime and Coastguard Agency (MCA) navigation guidelines, the maximum height of the shallowest cable crossing would be restricted to 5% of the water depth and therefore is likely to exhibit no change in wave climate, however, given the majority of cable crossings fall within waters deeper than 25 m (CD), water depths will be changed by less than 5%. With most of the crossings falling in waters of 25 m (CD), which equates to 28 m mid tide, the introduction of 0.8 m height cable crossings represents less than a 3% change in water depth.</p> <p>The proposed activities are not predicted to cause a deterioration in the status of the Dee (N. Wales) waterbody with respect to waves. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> |                                                                                                                                                                                                                                   |           |            |
| Dee (N. Wales) transitional water body<br>GB531106708<br>200 | <b>Hydromorphology:</b><br>HMWB | <p>The Dee (N. Wales) water body has been designated as a heavily modified water body for navigation, ports and harbours use. This designation is not for the same use as the proposed activity.</p> <p>Mitigation measures identified for navigation, ports and harbours use are as follows:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>All mitigation measures are in place.</p> <p>The proposed activity does not overlap with this water body and will not result in a change to the existing situation. The measures that are in place can therefore continue.</p> | <b>No</b> | <b>Yes</b> |

|                                                        |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |    |     |
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|                                                        |                                        | <ul style="list-style-type: none"> <li>• Navigation – 49. Modify vessel design</li> <li>• Navigation – 50. Vessel Management</li> <li>• Operations and maintenance - 21. Avoid the need to dredge</li> <li>• Operations and maintenance - 22. Dredging disposal strategy</li> <li>• Operations and maintenance - 23. Reduce impact of dredging</li> <li>• Operations and maintenance - 24. Reduce sediment resuspension</li> <li>• Operations and maintenance - 25. Retime dredging or disposal</li> <li>• Operations and maintenance - 26. Sediment management</li> <li>• Operations and maintenance - 27. Dredge disposal site selection</li> <li>• Operations and maintenance - 28. Manage disturbance</li> <li>• Structural modification – 14. Modify structure</li> <li>• Structural modification- 15. Flow manipulation</li> <li>• Working with physical form and function – 1. Modify Channel</li> <li>• Working with physical form and function - 2. Remove obsolete structure</li> </ul> |     |    |     |
| Dee (N. Wales) transitional water body GB531106708 200 | <b>Water quality:</b><br>Water clarity | The Dee (N. Wales) water body is located approximately 2.5 km from the ENI Development Area as shown on Figure 1.2 of Appendix Q of the Offshore ES at volume 3. Consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in SSC over periods greater than a spring-neap tidal cycle (approximately 14 days)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N/A | No | Yes |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
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|  |  | <p>Seabed disturbance and the resuspension of sediments into the water column would result in a short-term increase in SSC and reduction of clarity as a result of construction activities, such as cable installation and landfall works.</p> <p>A full characterisation of sediment displacement, including numerical modelling of SSC, is presented in the Offshore ES at volume 3, appendix H, and an assessment of activities affecting the surrounding water quality is presented within the Offshore ES at volume 2, chapter 6. The modelling indicated that increases in SSC will be greatest close to the site of cable installation, reducing in magnitude at a range of a few hundred metres from the cable, and falling to background levels at a range of a few kilometres. Plumes within the water column are predicted to extend up to 15 km from the source during the construction and decommissioning phases, and therefore may extend into the Dee Estuary. However, levels of SSCs within the plume are expected to be within the range of background levels (i.e. 30 mg/l). The effects of increased SSC are expected to be temporary, short term and intermittent over a 14-day spring/neap tidal cycle.</p> <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the Dee (N. Wales) waterbody with respect to water quality. The effects of the activity on water clarity are expected to be of negligible</p> |  |  |  |
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|                                                        |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |    |     |
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|                                                        |                                        | significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |    |     |
| Dee (N. Wales) transitional water body GB531106708 200 | <b>Water quality:</b><br>Oxygen levels | <p>The Dee (N. Wales) water body is located approximately 2.5 km from the ENI Development Area as shown on Figure 1.2 of Appendix Q of the Offshore ES at volume 3. Consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in DO over periods greater than a spring-neap tidal cycle (approximately 14 days).</p> <p>No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions. There are no outfalls or discharges associated with the Proposed Development so the proposed activities are not expected to cause a reduction in DO in the water column.</p> <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the Dee (N. Wales) waterbody with respect to water quality. The effects of the proposed activity on DO are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> | N/A | No | Yes |

|                                                              |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |    |     |
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| Dee (N. Wales) transitional water body<br>GB531106708<br>200 | <b>Water quality:</b><br>Nutrients | <p>The Dee (N. Wales) water body is located approximately 2.5 km from the ENI Development Area as shown on Figure 1.2 of Appendix Q of the Offshore ES at volume 3. Consideration of the potential for a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in nutrients over periods greater than a spring-neap tidal cycle (approximately 14 days).</p> <p>Seabed disturbance and an increase in SSC associated with the installation of the offshore power and FO cable and landfall works may cause sediment-bound nutrients to be released into the water column. No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions.</p> <p>The construction, operation and maintenance and decommissioning of the offshore power and FO cables and landfall works is not predicted to cause a deterioration in the either the biological or chemical status of the Dee (N. Wales) waterbody with respect to water quality. The effects of the activity on nutrients are expected to be of negligible significance, which is not significant in EIA terms. The Proposed Development is therefore considered, in this respect, to be compliant with the requirements of the WFD.</p> | N/A | No | Yes |
| Dee (N. Wales) transitional water body                       | <b>Water quality:</b><br>Microbial | The Dee (N. Wales) water body is located approximately 2.5 km from the ENI Development Area as shown on Figure 1.2 of Appendix Q of the Offshore ES at volume 3. Consideration of the potential for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | N/A | No | Yes |

|                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|--------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| GB531106708<br>200 |  | <p>a deterioration in water quality within this waterbody is required. This includes the potential for the effects of the activity to cause an increase in bacterial concentrations over periods greater than a spring-neap tidal cycle (approximately 14 days).</p> <p>No nutrients are anticipated to be released in significant concentrations from the seabed as a result of the proposed activities, beyond those expected in typical storm conditions. There are no outfalls or discharges associated with the Proposed Development so the proposed activities are not expected to cause an increase in microbial activity.</p> <p>The Dee (West) shellfish water shown on Figure 1.3 of Appendix Q of the Offshore ES at volume 3 is located approximately 1 km from the Eni Development Area, and approximately 1.1 km from the proposed route of the offshore power and FO cables. The site was designated for the harvesting of mussel (<i>Mytilus</i> spp.) and cockle (<i>Cerastoderma edule</i>): two largely sedentary species, which may be more sensitive to increased SSC than more mobile species. Similarly, microbial sampling is a determinant of compliance for shellfish waters, and bacterial levels may be at risk of increase following mobilisation of sediment. However, as noted above for the North Wales water body, the disturbance of sediments during storm events does not result in a reduction in water quality and given that the installation of the offshore power and FO cables is not proposed to overlap spatially with the Dee (West) shellfish water, no</p> |  |  |  |
|--------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

|                                                        |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                      |    |     |
|--------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
|                                                        |                                 | deterioration or non-compliance is anticipated to occur here as a result of the Proposed Development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                      |    |     |
| Dee (N. Wales) transitional water body GB531106708 200 | <b>Water quality: Chemicals</b> | <p>This Proposed Development does not involve the release of chemicals and the only substance which may be used is bentonite, during HDD within the intertidal area. Bentonite is an inert, non-toxic, natural clay mineral (&lt;63 µm particle diameter) which is not on the EQSD list (Environment Agency, 2016b) <sup>14</sup>.</p> <p>Bentonite is included in the Cefas List of Notified Chemicals approved for use and discharge into the marine environment and is classified as a group E substance under the Offshore Chemical Notification Scheme (OCNS) (Cefas, 2022) <sup>15</sup>. Group E substances are the group least likely to cause environmental harm and are readily biodegradable and do not bioaccumulate.</p> <p>Bentonite is also included on the OSPAR List of Substances Used and Discharged Offshore which are Considered to Pose Little or No Risk to the Environment (PLONOR) (OSPAR, 2021) <sup>16</sup>.</p> <p>No deterioration of the status of the WFD waterbody is therefore anticipated, should bentonite be used during HDD operations.</p> | Any potential risk of accidental release of contaminants will be minimised through the use of temporary prefabricated steel containment sumps to capture any drilling fluid emitted and implementation of an approved EMP during the construction, and operation and maintenance phases. The EMP will be secured through a Marine Licence condition. | No | Yes |
| Dee (N. Wales)                                         | <b>Fish element:</b>            | Noise from percussive piling during Douglass platform constructions could                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Implementation of piling initiation, soft-start, and ramp-up measures                                                                                                                                                                                                                                                                                | No | Yes |

<sup>14</sup> Environment Agency (2016b) Environmental Quality Standards Directive (EQSD) list for WFD assessments. Available: <https://www.gov.uk/government/publications/list-of-chemicals-for-water-framework-directive-assessments/environmental-quality-standards-directive-eqsd-list-for-wfd-assessments>

<sup>15</sup> Cefas (2022) Offshore Chemical Notification Scheme (OCNS) Definitive ranked list of registered products. Available at: <https://www.cefas.co.uk/data-and-publications/ocns/>

<sup>16</sup> OSPAR (2021) OSPAR List of Substances Used and Discharged Offshore which Are Considered to Pose Little or No Risk to the Environment' Available at: <https://www.ospar.org/documents?d=32939>

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
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| transitional water body<br>GB531106708<br>200 | <ul style="list-style-type: none"> <li>an impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)</li> <li>Or: is the proposal in an estuary and could affect fish in the estuary; is outside the estuary but could delay or prevent fish entering it; or, could affect fish migrating through the estuary</li> </ul> | reach the water body. Noise generated during UXO clearance activities could also impact the water body. | <p>within the Marine Mammal Mitigation Protocol (MMMP). An initiation stage and soft starts will be used during the installation of pin piles. This involves the implementation of an initial low hammer energy with a low number of strikes, followed by lower hammer energies at a higher strike rate at the beginning of the piling sequence before energy input is 'ramped up' (increased) over time to required higher levels.</p> <p>A commitment to work in line with the UXO Clearance Joint Interim Position Statement and will prioritise low order detonations as the first approach for UXO clearance activities.</p> |  |  |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

\* Where there is uncertainty if the proposed activity may prevent a water body or PA from meeting its objectives or may cause deterioration then we must follow a precautionary approach, contact the Integrated Water Planning team for further advice.



## Conclusion of WFD Compliance Assessment & Authorisation

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| <p><del>WFD stage 1 screening has been completed and the activity/project have been ruled out as not requiring any further WFD assessment. Or, further assessment is not required because there is no conceivable impact pathway to any water body or Protected Area.</del></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                               |
| <p><del>WFD stage 2 scoping has been completed and the activity/project is considered as having no risk of causing deterioration or preventing any water body or WFD Protected Area from reaching its objectives and taking account of the advice from technical officers—is considered compliant with the Water Framework Directive/Regulations.</del></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                               |
| <p>In light of the conclusions of a detailed compliance assessment (Stage 3), and taking account of the advice received from technical specialist advisors, it has been established that the activity/project has no potential to cause deterioration of any water body or prevent a water body or WFD Protected Area from meeting its objectives, taking into account any conditions or restrictions as applicable, either alone or in-combination with other activities.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                               |
| <p>In light of the conclusions of the detailed compliance assessment, it has <b>not</b> been ascertained that the project has no potential to cause deterioration or prevent water bodies or WFD Protected Areas from meeting their objectives, as documented in stage 3 of this form. If the conclusion of stage 3 detailed compliance assessment identifies a risk of deterioration of one or more water bodies that cannot be mitigated or may prevent a water body or WFD Protected Area from meeting its objectives, then <b>approval for the project cannot be given unless either:</b></p> <ul style="list-style-type: none"> <li>• the project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of deterioration or prevention of achievement of objectives, and a revised compliance assessment report is prepared, or</li> <li>• the project satisfies the requirements of Article 4.7 (including 4.8 &amp; 4.9) of the Water Framework Directive, and is approved by the NRW executive team.</li> </ul> |                                               |
| Completed by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Maria Alvarez (and Elena San Martin – ABPmer) |
| Job title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lead Specialist Officer, Marine Licensing     |

|             |                 |
|-------------|-----------------|
| <b>Date</b> | 16 January 2025 |
|-------------|-----------------|

### Consultation with technical advisors/specialists

| Relevant section of the WFD compliance assessment | Date(s) of correspondence* and any meeting(s) with technical advisor(s) and include the name of the technical advisor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Description of how the comments from technical advisors have been considered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stage 2, 3                                        | <p>NRW (A) memo of 19 November 2024 and meeting of 09 December 2024:</p> <ol style="list-style-type: none"> <li>1. Water Quality - The Dee (North Wales) or the North Wales WFD water bodies require full assessment with respect to water quality (and related) quality elements</li> <li>2. Water Quality - all relevant details of assessment must be included in the compliance assessment document, or directly referenced to the relevant ES chapter(s).</li> <li>3. Other comments in memo in relation to Phytoplankton, Protected areas, Shellfish Waters and definition of “reversible”</li> <li>4. Physical processes – specific concerns on the assessment of potential impacts to Hydromorphology elements.</li> <li>5. Marine Fish – Changes to the assessment as per memo</li> </ol> | <ol style="list-style-type: none"> <li>1. Water quality section has been amended and water clarity, oxygen levels, nutrients, and microbial patterns have been taken to detailed assessment</li> <li>2. Reference to relevant chapters is included</li> <li>3. Changes have been undertaken when considered necessary</li> <li>4. Morphological conditions, tidal patterns, and wave exposure have been take through to detailed assessment showing consideration of direct and secondary impacts</li> <li>5. Marine Fish – The fish element of the North Wales Coastal has been deleted. The impacts on normal fish behaviour and fish migration have been included in the detailed assessment of the Dee Transitional water body.</li> </ol> |

\*Attach a copy of any written correspondence with the WFD assessment for the audit trail

**Please look at “CML2365 amended WFD and HRA Marine Advisory Comments” for final comments**

*Where there is a dispute on the conclusion the decision should be taken by the Leadership Team member of the team exercising the competent authority role*

## Appendix A

A map of the Project is shown below from the following link: [CML2365 - Proposed Development Location Map.pdf](#).

