



LLYR

LLYR FLOATING OFFSHORE WIND PROJECT

Llŷr 1 Floating Offshore Wind Farm

Environmental Statement

**Volume 6: Appendix 4C - Post Consent Environmental
Management Plan Log**

August 2024



Document Status

Version	Authored by	Reviewed by	Approved by	Date
FINAL	AECOM	AECOM	AECOM	August 2024

Approval for Issue

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Acronyms and abbreviations

Acronym or Abbreviation	Definition	Acronym or Abbreviation	Definition
AMP	Archaeological Management Plan	NRW	Natural Resources Wales
BMP	Biodiversity Management Plan	PEMP	Project Environmental Management Plan
CEMP	Construction Environmental Management Plan	PPMP	Pollution Prevention Management Plan
CNMP	Construction Noise Management Plan	SMP	Soils Management Plan
CSIP	Cable Specification and Installation Plan	SOPEP	Shipboard Oil Pollution Emergency Plans
EMMP	Excavated Materials Management Plan	SWMP	Site Waste Management Plan
FLCP	Fisheries Liaison and Co-existence Plan	TMP	Traffic Management Plan
MGN 645	Marine Guidance Note 645	VMP	Vessel Management Plan
MMMP	Marine Mammal Mitigation Plan	WSI	Written Scheme of Investigation
MPCP	Marine Pollution Contingency Plan		

Glossary of project terms

Term	Definition
The Applicant	The developer of the Project, Llŷr Floating Wind Limited
Array	All wind turbine generators, inter array cables, mooring lines, floating sub-structures and supporting subsea infrastructure within the Array Area, as defined, when considered collectively, excluding the offshore export cable(s).
Array Area	The area within which the wind turbine generators, inter array cables, mooring lines, floating sub-structures and supporting subsea infrastructure will be located
Floventis Energy	A joint venture company between Cierco Ltd and SBM Offshore Ltd of which Llŷr Floating Wind Ltd is a wholly owned subsidiary
Landfall	The location where the offshore export cable(s) from the Array Area, as defined, are brought onshore and connected to the onshore export cables (as defined) via the transition joint bays (TJB).
Llŷr 1	The proposed Project, for which the Applicant is applying for Section 36 and Marine Licence consents. Including all offshore and onshore infrastructure and activities, and all project phases.
Marine Licence	A licence required under the Marine and Coastal Access Act 2009 for marine works which is administered by Natural Resources Wales (NRW) Marine Licensing Team (MLT) on behalf of the Welsh Ministers.
Offshore Development Area	The footprint of the offshore infrastructure and associated temporary works, comprised of the Array Area and the Offshore Export Cable



Term	Definition
	Corridor, as defined, that forms the offshore boundary for the S36 Consent and Marine Licence application
Offshore Export Cable	The cable(s) that transmit electricity produced by the WTGs to landfall.
Offshore Export Cable Corridor (OfECC)	The area within which the offshore export cable circuit(s) will be located, from the Array Area to the Landfall.
Onshore Development Area	The footprint of the onshore infrastructure and associated temporary works, comprised of the Onshore Export Cable Corridor and the Onshore Substation, as defined, and including new access routes and visibility splays, that forms the onshore boundary for the planning application.
Onshore Export Cable(s)	The cable(s) that transmit electricity from the landfall to the onshore substation
Onshore Export Cable Corridor (OnECC)	The area within which the onshore export cable circuit(s) will be located.
proposed Project	All aspects of the Llŷr 1 development (i.e. the onshore and offshore components).
Onshore Substation	Located within the Onshore Development Area, converts high voltage generated electricity into low voltage electricity that can be used for the grid and domestic consumption.
Section 36 consent	Consent to construct and operate an offshore generating station, under Section 36 (S.36) of the Electricity Act 1989. This includes deemed planning permission for onshore works.



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4-C – POST CONSENT ENVIRONMENTAL MANAGEMENT PLANS

Table 4C-1 Post Consent Environmental Management Plans

Name	Description	Chapter referred in
Construction Environmental Management Plan (CEMP)	Specifies the overarching principles and detailed measures to minimise and mitigate the effects of the installation activities associated with the proposed Project on the surrounding environment.	All terrestrial chapters. Chapter 18: Marine Water and Sediment Quality; Chapter 19: Benthic Ecology, Chapter 20: Fish and Shellfish Ecology; Chapter 21: Marine Mammals; Chapter 22: Ornithology; Chapter 27: Aviation and Radar; and Chapter 28: Other Sea Users.
Terrestrial		
Construction Method Statement (CMS)	The CMS details how construction works relating to the proposed Project will be undertaken and how potentially harmful impacts will be mitigated against.	All terrestrial chapters.
Pollution Prevention Management Plan (including Emergency Incident Response Plan) (PPMP)	Sets out measures to avoid and control pollution. Outlines the recording and response measures to be used in the event of an incident. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 8: Ecology and Biodiversity; Chapter 10: Water Environment; Chapter 15: Noise and Vibration; and Chapter 11: Geology and Hydrogeology.
Construction Noise Management Plan (CNMP)	Sets out noise threshold limits, mitigation measures to control noise and nighttime working requirements relating to noise. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 15: Noise and Vibration.
Construction Dust and Air Quality Management Plan	Aims to ensure that the construction of the proposed Project is carried out such that emissions of dust and other pollutants, including odour, are limited. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 14: Air Quality.
Site Waste Management Plan (SWMP)	Sets out approach to waste including controlling and minimising levels of construction waste to be disposed of. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 4: Project Description



Name	Description	Chapter referred in
Materials Management Plan (MMP)	Sets out the approach for proper disposal and reuse of contaminated or uncontaminated soil. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 11: Geology and Hydrogeology.
Water Management Plan	Sets out measures to avoid pollution to water bodies. Outlines the recording and response measures to be used in the event of an incident. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 10: Water Environment; and Chapter 18: Marine Water Quality
Biodiversity Management Plan (BMP)	Outlines strategies for preserving biodiversity during construction. It includes measures to mitigate environmental impacts, protect sensitive habitats and species, and prevent the spread of invasive plants. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 8: Ecology and Biodiversity.
Construction Traffic Management Plan (TMP)	Describes the approach that will be used to minimise disruption related to construction traffic. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 13: Traffic and Transport.
Public Rights of Way (PRoW) PRoW Management Plan	The PRoW Management Plan outlines the approach used to minimise disruption related to PRoW closures or temporary diversions.	Chapter 13: Traffic and Transport.
Archaeological Management Plan (AMP)	Sets out the standard mitigation measures which will be implemented to minimise potential impacts on Historic Environment. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 9: Historic Environment.
Soil Management Plan (SMP)	Sets out the approach to ensuring quality of soil conditions and allow for restoring it. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Chapter 12: Agriculture and Soils.
Detailed Drainage Management Strategy (DMS)	Sets out the approach to dispersing and discharging water associated with the proposed Project. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.3.4.	Appendix 10A, Annex 10A: Detailed Drainage Management Strategy
Landscape and Ecological Management Plan (LEMP)	Details the immediate and long-term commitments to manage the planting, protection and enhancement of biodiversity in and around the proposed Project.	Chapter 07: Landscape and Visual Assessment; and Chapter 08: Ecology and Biodiversity
Operational Environmental Management Plan (OEMP)	Details the methods to avoid, minimise and mitigate potential environmental effects during the operational stage of the proposed Project.	Chapter 04: Description of the proposed Project



Name	Description	Chapter referred in
Decommissioning Environmental Management Plan (DEMP)	Details the methods to avoid, minimise and mitigate potential environmental effects during the decommissioning stage of the proposed Project.	Chapter 04: Description of the proposed Project
Marine		
Project Environmental Management Plan (PEMP)	An overarching document which includes all Project considerations and method statements in accordance with those assessed within the Environmental Statement. Details the methods to avoid, minimise and mitigate potential environmental effects during the operational stage of the proposed Project.	Chapter 04: Description of the proposed Project
Emergency Response Cooperation Plan (ERCoP)	Details the emergency response planning for the proposed Project. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.4.3.	Chapter 25: Shipping and Navigation
Marine Mammal Mitigation Plan (MMMP)	Sets out the appropriate mitigation measures to be used during marine activities which are likely to cause injury or potential disturbance to marine mammals. It should be noted that the MMMP will include consideration for piling noise, Unexploded Ordinance (UXO) and other activity.	Chapter 21: Marine Mammals.
Invasive Non-Native Species (INNS) Management Plan	Enables marine operators and contractors to understand and minimise the risks posed by activities which could introduce and spread of marine INNS.	Chapter 19: Benthic Ecology
Vessel Management Plan (VMP)	The VMP will be prepared to address specific requirements of relevant conditions attached to the s36 consent. The VMP covers industry standards and good practice. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.4.3.	Chapter 21: Marine Mammals; Chapter 22: Marine Ornithology.
Decommissioning Environmental Management Plan (DEMP)	Plan to retire the facilities of the proposed Project agreed with Natural Resources Wales (NRW) at the relevant time prior to the start of offshore decommissioning.	Chapters 18: Marine Water and Sediment Quality; Chapter 21: Marine Mammals; Chapter 22: Ornithology; Chapter 25: Shipping and Navigation; Chapter 26: Commercial Fisheries; and Chapter 28: Other Sea Users.



Name	Description	Chapter referred in
Lighting and Marking Management Plan	Sets out appropriate measures to mitigate the potential impacts of stray and obtrusive light generated from the turbines as well as requirements for aviation and safety provisions. Outlines compliance with the Trinity House, Maritime and Coastguard Agency (MCA) and Ministry of Defence (MoD) requirements for aviation and safety provisions.	Chapter 22: Marine Ornithology; Chapter 23: SLVIA; Chapter 25: Shipping and Navigation; Chapter 26: Commercial Fisheries Chapter 27: Aviation and Radar; and Chapter 28: Other Sea Users.
Cable Specification and Installation Plan (CSIP)	Sets out measures relating to the cable installation process including: site preparation; cable burial and deployment of cable protection measures. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.4.3.	Chapter 17: Physical Environment; Chapter 19: Benthic Ecology; and Chapter 20: Fish and Shellfish Ecology.
Cable Burial Risk Assessment (CBRA)	Provides a standardised methodology to improve risk management of offshore wind farms.	Chapter 17: Physical Environment; Chapter 19: Benthic Ecology; and Chapter 20: Fish and Shellfish Ecology.
Shipboard Oil Pollution Emergency Plans (SOPEP)	A plan consisting of procedures and descriptions of actions to be taken in the event of an oil pollution incident. According to MARPOL 73/78, Annex I, reg. 26, every oil tanker of 150 tons gross tonnage and above and every ship other than an oil tanker of 400 tons gross tonnage and above shall carry on board a Shipboard Oil Pollution Emergency Plan approved by Administration. The purpose of the SOPEP is to provide guidance to the Master and officers on board the ship with respect to the steps to be taken when an oil pollution incident has occurred or is likely to occur. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.4.3.	Chapter 19: Benthic Ecology, Chapter 20: Fish and Shellfish, Chapter 21: Marine Mammals; Chapter 22: Ornithology; Chapter 25: Shipping and Navigation.
Marine archaeological Written Scheme of Investigation (WSI) Protocols for Archaeological Discoveries (PAD)	Sets out framework for the delivery of marine archaeological investigation and mitigation prior to and during construction of the proposed Project.	Chapter 24: Marine Archaeology.
Project (Array) Layout Plan	Sets out the layout of the Array Area so it is compliant with Marine Guidance Note (MGN) 645.	Chapter 25: Shipping and Navigation.
Marine Pollution Contingency Plan (MPCP)	Outlines procedure to protect personnel working on the proposed Project and to safeguard the marine environment. Further details have been provided the Outline CEMP, Volume 6, Appendix 4A, Section 4.4.3.	Chapter 18: Marine Water Quality; and Chapter 25: Shipping and Navigation.
Water Quality and Pollution Prevention Management Plan (including Emergency Incident Response Plan)	Sets out measures to avoid pollution to water bodies. Outlines the recording and response measures to be used in the event of an incident.	Chapter 10: Water Environment; and Chapter 18: Marine Water Quality



Name	Description	Chapter referred in
Fisheries Liaison and Co-existence Plan (FLCP)	Sets out the planned approach to fisheries liaison and means of delivering any other mitigation measures relevant to commercial fishing activity.	Chapter 26: Commercial Fisheries.

