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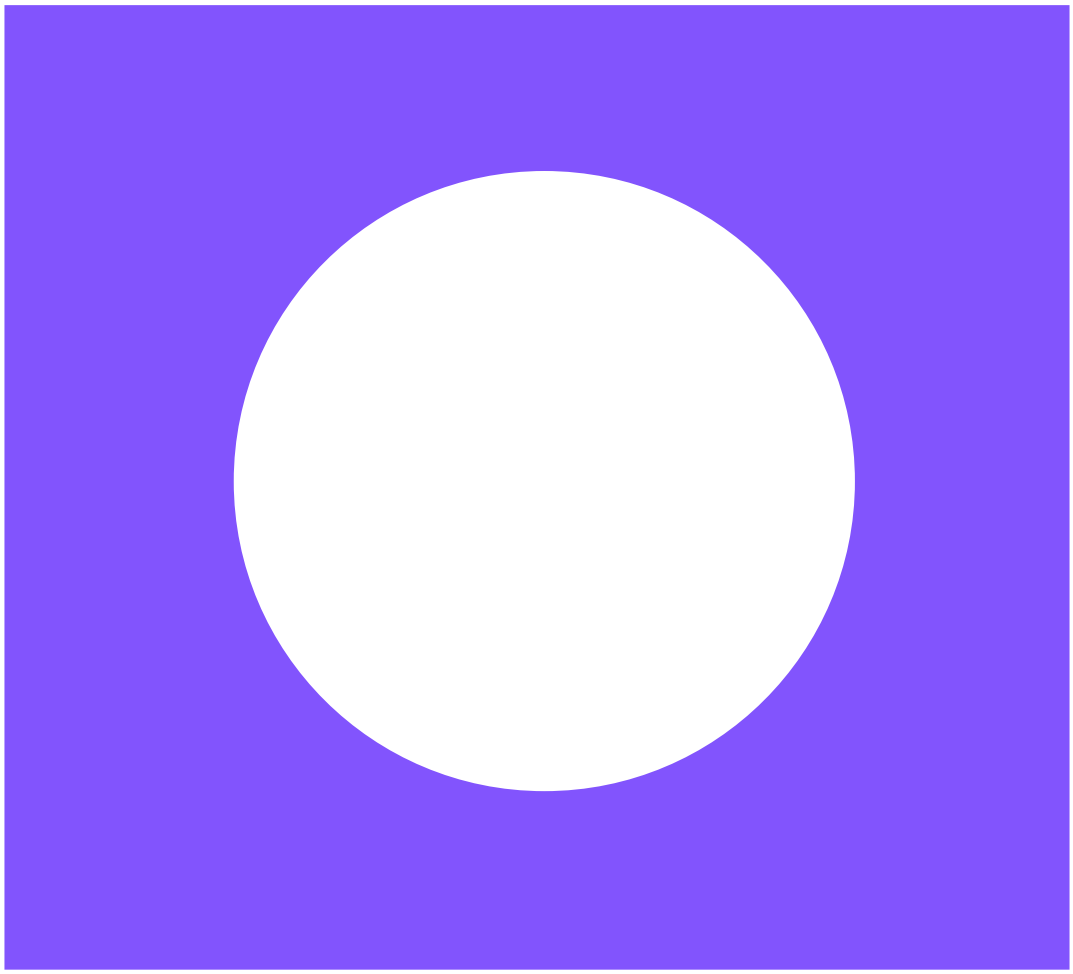

Formosa 4 Offshore Wind Farm in Taiwan

Focused Social Impact Assessment

September 2025

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	10 February 2025	H Chang B Bizarani	L Harkins-Small	B Lim	Draft FSIA submission to Client
B	6 March 2025	H Chang	L Harkins-Small	B Lim	Draft FSIA submission to LESA
C	6 May 2025	D Wu B Bizarani H Chang	L Harkins-Small	L Harkins-Small	Final FSIA (Draft 1) submission to Client
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Contents

Tables

Figures

Tables – Appendices

Executive summary

Formosa 4 International Investment Co., Ltd. and its subsidiary Formosa 4 Wind Power Co., Ltd. (herein referred to as “Project Company” or “Formosa 4”) is proposing to develop an offshore windfarm (OWF) in Taiwan (herein referred to as the “Project”). The Project is located approximately 20km offshore from Tongxiao Township (通霄鎮), Miaoli County, on the western coast of Taiwan. It is planned to consist of 35 wind turbine generators (WTGs), each of 14.142MW capacity. The total installed capacity will be 495MW.

As part of the requirements for obtaining project financing, the Project may be required to demonstrate adherence to the Equator Principles (EP). Therefore, Mott MacDonald has been commissioned by Formosa 4 to undertake a focused social impact assessment (FSIA) for the Project. This report aims to provide identification, assessment and management of potential social impacts associated with the Project and its activities.

The following social aspects were discussed within this report in terms of baseline status, impact assessment, impact significance, mitigation measures and residual impact significance:

- Human rights
- Labour and working conditions, including employment generation
- Amenity and environment, including air quality and noise
- Community health, safety and security risks, including exposure to communicable disease, workers’ influx effects and traffic
- Economic displacement and livelihoods
- Culture and sense of community

Baseline data and mitigation measures have been extracted from existing Project document suites as well as secondary data and existing Project document suites. In particular, information from the Project’s Final Human Rights Impact Assessment (Draft 2) and Final Livelihood Restoration Plan (Draft 2) are referenced, which leverage socio-economic survey data collected from March to April 2025.This Final FSIA (Draft 2) report covers primary data from 15 key informant interviews (KIIs), seven (7) focus group discussions (FGDs) and 200 household survey results.

The determination of final mitigation and management measures have been based on the main outcomes of the primary data collection and impact assessment.

1 Introduction

1.1 Overview

Formosa 4 International Investment Co., Ltd. and its subsidiary Formosa 4 Wind Power Co., Ltd. (herein referred to as “Project Company” or “Formosa 4”) is proposing to develop an offshore windfarm (OWF) in Taiwan (herein referred to as the “Project”). The Project is located approximately 20km offshore from the coast of Miaoli County, Taiwan.

The Project participated in the Energy Administration[1], Ministry of Economic Affair (EA, MoEA)’s Third Round of Offshore Wind Project Development (herein referred to as “Round 3.1”) and has been awarded a grid allocation for the Project of up to 495MW with the grid connection latest by end of 2027. MoEA announced the availability of one year extension to the grid connection deadline for R3.1 project to apply in the form of an official letter to Taiwan Offshore Wind Industry Association in April 2024. The projects expect to be granted the extension as per application to MoEA.

As part of the Project’s financing approach, the Project may be required to demonstrate adherence to the Equator Principles (EP). Therefore, Mott MacDonald have been commissioned by Formosa 4 to undertake a focused social impact assessment (FSIA), alongside other environmental and social (E&S) services.

1.2 Aims and objectives

This report aims to provide identification, assessment and management of potential social impacts associated with the Project and its activities.

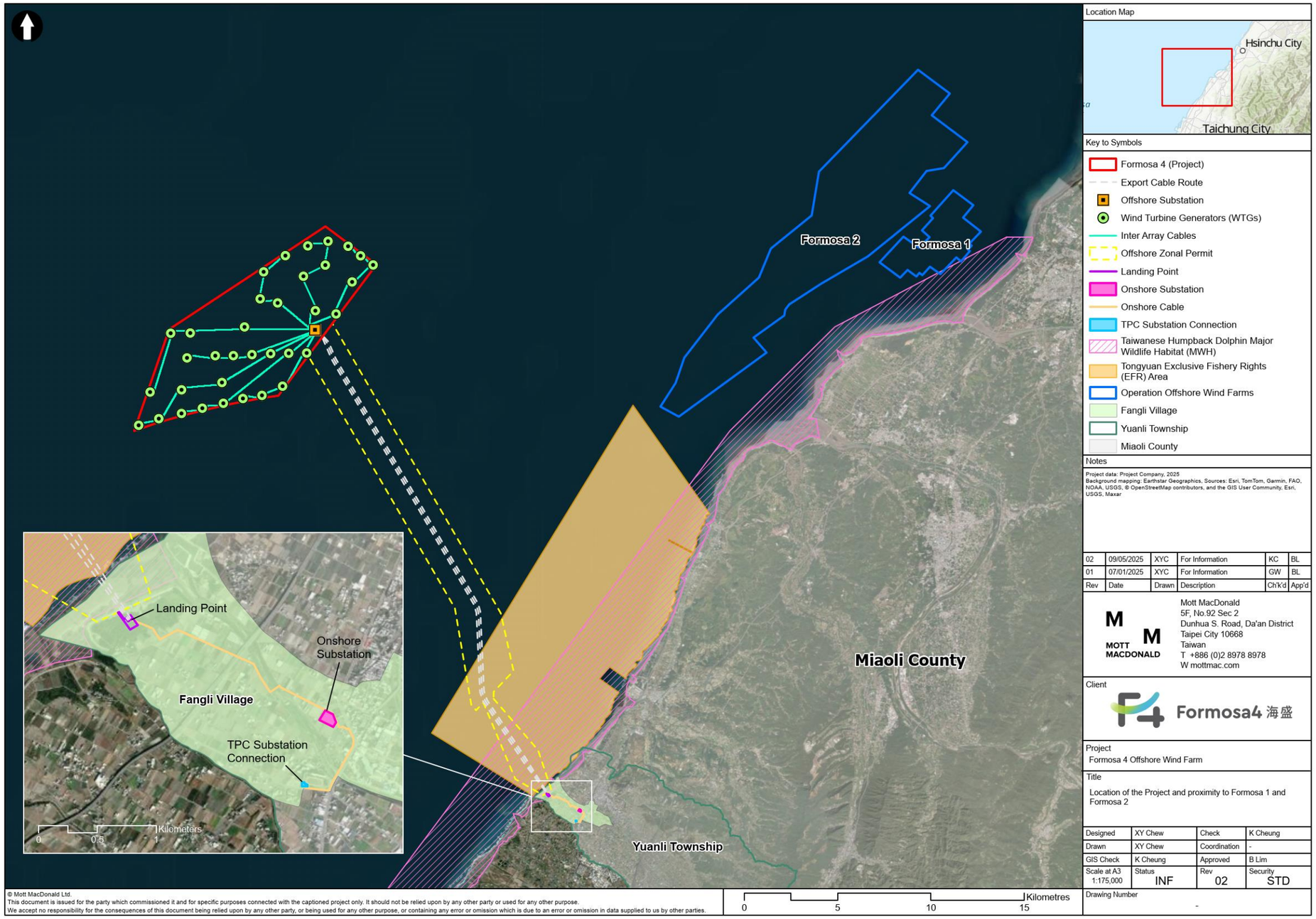
1.3 Project background and location

The Project’s offshore windfarm area will be approximately 58km^2 in size and located 20km offshore from Tongxiao Township (通霄鎮), Miaoli County, on the western coast of Taiwan (see Figure 1.1).

The Project is located further offshore of the neighbouring Formosa 1 and Formosa 2 windfarms. The Project’s location is illustrated Figure 1.1 and Figure 1.2.

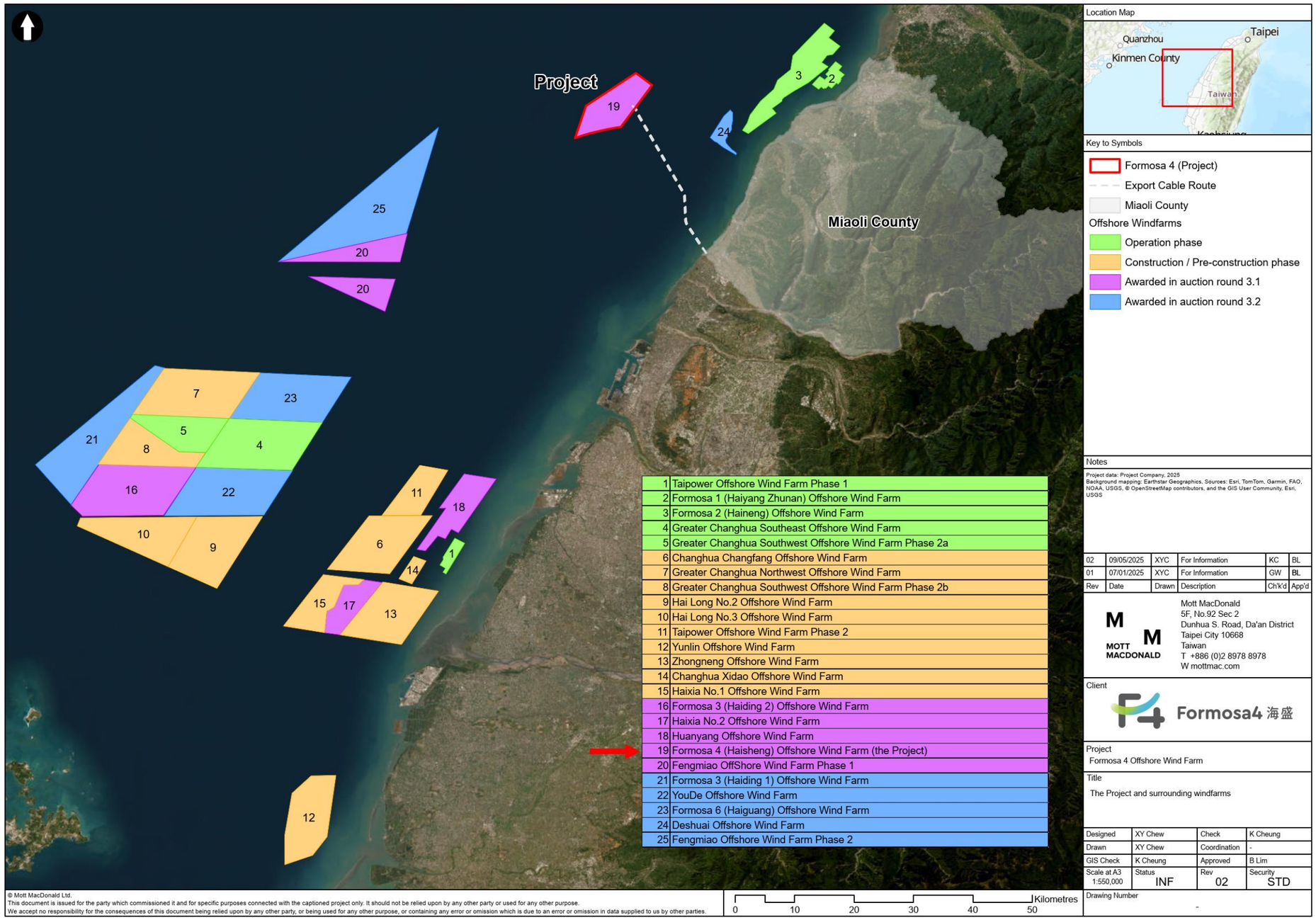
[1] Formerly known as Bureau of Energy (能源署); renamed the Energy Administration in 26 September 2023.

Figure 1.1: Project area and possible social sensitive receptors



Source: Mott MacDonald and Project Company, 2025

Figure 1.2: The Project and surrounding windfarms



Source: Mott MacDonald and Project Company, 2025

1.4 Parent company policies and procedures

Project Company's parent is Synergy Renewable Energy (SRE), which have an existing set of policies covering various aspects as relating to human resources and human rights. SRE's policies and procedures, where mentioned within this report, are considered under the context whereby SRE policies/procedures:

- Are expected to be the source material/reference for development of materially equivalent project-specific versions; or
- Could be directly adopted by the Project Company.
- Due to the above, the SRE policies/procedures as commented within the current assessment are therefore considered as being applicable to the Project.

1.5 Project components

The details of the Project is presented in Table 1.1 below.

Table 1.1: Summary of the Project's components and schedule

Aspect	Project
Project components	
Windfarm capacity	495MW
Windfarm area	58km^2
Number of WTGs (and capacity)	35 WTGs (14.142MW each)
Offshore substation (OSS)	One (1) planned OSS
Onshore substation (OnSS)	One (1) planned OnSS in Fangli village
Transmission	66kV / 161kV / 230kV
Inter-array cables (IAC)	Eight (8) 66kV IAC strings
Export cables	Two (2) 230kV export cable strings with approximate length of 27km to the landing point, sharing the same cable alignment route. Cable landing point is located at Fangli village, Yuanli Township.
Transmission line (onshore)	One (1) 161kV transmission cable with approximate length of 4km from OnSS to grid connection point
Grid connection point	Fangli (TPC), located in Yuanli Township, Miaoli County
Construction commencement	Onshore: Q2 2025 (targeted) Offshore: Q2 2026 (targeted)
Construction completion	Onshore: Q4 2027 (targeted) Offshore: Q4 2028 (targeted)
Commercial operation date (COD)	Targeting Q2 2029

Source: Project Company and Mott MacDonald, 2025

1.6 Implementation schedule

The key milestones for the Project's implementation, with current assumptions, are summarised in Table 1.2 below. The offshore construction is expected to commence in Q2 2026, with the Commercial Operation Date (COD) by Q2 2029.

Table 1.2: Project implementation schedule

Project milestone	**2025**				**2026**				**2027**				**2028**			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Onshore construction																
Offshore construction																
COD	Targeting Q2 2029															

Source: Project Company and Mott MacDonald, 2025

1.7 Summary of land acquisition and access to marine areas

The Project is expected to have one (1) onshore substation. Formosa 4 International Investment Co., Ltd. obtained ownership of the plot in Xihai Section, Yuanli Township (苑裡鎮 西海段) (which is privately owned) in August 2023 for the construction of the onshore substation. Regarding application for agricultural land use (ie to convert the land plot designated purpose) to Miaoli County Government (MCG), the Project obtained approval on 23 August 2024 in accordance with the Enforcement Rules of Urban Planning Act and relevant regulations.

Majority portions of the onshore cables are expected to obtain the right of way from MCG and Freeway Bureau, Ministry of Transportation and Communications (MoTC). A few plots which the cable routes intersect are managed by the National Property Administration (NPA), Ministry of Finance, and onshore cables in the landfall area are located in the forestry areas administered by the Forestry and Nature Conservation Agency (FCA), Ministry of Agriculture. The Project has been progressing with lease applications to the NPA and FCA. The right of way applications are expected to receive approval from MCG and Freeway Bureau before construction commences. No physical or economic displacement is expected for the onshore works.

Within the Project's signed FCCA (dated 28 March 2025), the Project requests TFA to advise all local fisher folk (whether members or not) to avoid activities and navigation that may obstruct or hinder project work, which include working vessel routes and actual activities within the project's area. This is applicable from pre-construction surveying, construction and operation phase, and up to decommissioning phase, and is currently planned to be in effect for 30 years in total. Access restrictions of offshore and onshore components for the construction and operation and maintenance (O&M) phase are summarised in Table 1.3 below.

Table 1.3: Summary of land acquisition and access to marine areas

Location	Component	Description/access restriction
Onshore components	Onshore (buried) cables	The leased area is to be state-owned land (ie largely within road alignment) and land owned by the Project Company.
	Onshore substation (OnSS)	The total site area is private-owned land, previously agricultural lands but confirmed to not have previous livelihood activities.
Offshore components	Offshore cables during construction phase	• With two (2) 230kV export cable strings with approximate length of 27km to the landing point, and assuming both strings will have typical construction exclusion zone widths of around 500m, there will be temporary access restriction on the offshore cable area. It is to note that the restriction of area will occur in only in segments (ie the working area required for each segment). • Based on the FCCA, fisher folk are requested to not hinder any construction work. However, vessels are not physically restricted from fishing or crossing the windfarm area. No fishing methods are specifically restricted within the offshore cable area.
	Offshore cables during O&M phase	Fisher folk are requested to not hinder any operation phase project work (eg maintenance). No fishing methods are specifically restricted within the offshore cable area.
	Wind farm area during construction phase, including WTGs and offshore substation	• The windfarm area is 58km^2. • Fisher folk are requested to not hinder any construction project work. However, vessels are not restricted from fishing or crossing the windfarm area. No fishing methods are specifically restricted within the offshore project area. • Warning lights will be installed at the perimeter of the wind farm to alert surrounding fishing vessels.

	Wind farm area during O&M phase, including WTGs and offshore substation	• Fisher folk are requested to not hinder any operation phase project work (eg maintenance). No fishing methods are specifically restricted within the offshore project area.

Source: Project Company and signed FCCA, dated 28 March 2025

1.8 Document Structure

This FSIA report is structed as follows:

- Section 1 (ie this section) outlines an overview of the FSIA and the Project
- Section 2 summarises the legal framework, applicable international standards and the institutional arrangements
- Section 3 describes the methodology for undertaking this FSIA, including the collection of baseline data, the scoping matrix, impact assessment method as well as uncertainties and limitations of this study
- Section 4 presents a summary of the existing socioeconomic baseline available within the existing Project document suite as well as the Project's area of influence (AoI)
- Section 5 provides a high-level assessment of the likely project impacts on socioeconomic features.
- Section 6 presents the summary of social impacts

2 Legal and institutional framework

2.1 Overview

This section identifies the national and international legislation, standards and guidelines that are relevant to the FSIA. It concludes with a brief description of the envisaged institutional arrangements.

2.2 National regulatory framework

Taiwan's EIA Act (環境影響評估法), which was promulgated on 30 December 1994, with subsequent revisions made in 1999, 2002, and 2023. This Act governs the EIA process in Taiwan which requires a project proponent to undertake an EIA when it is likely to have the potential to cause potentially significant environmental and social impacts. The administration of the EIA approval and related matters are under the purview of Taiwan's Ministry of Environment (MoENV). Detailed MoENV procedures and implementation guidelines include:

- Environmental Impact Assessment Enforcement Rules (環境影響評估法施行細則) (amended on 16 January 2025)
- Standards for Determining Specific Items and Scope of Environmental impact Assessments for Development Activities (開發行為應實施環境影響評估細目及範圍認定標準) (amended on 16 January 2025)
- Guidelines for Conducting Environmental Impact Assessment for Development Activities (開發行為環境影響評估作業準則) (amended 2 February 2021)

Under the national screening criteria cited above, in terms of development type, offshore windfarm (風力發電離岸系統) is listed as an activity which requires the preparation and submission of an EIA. The Project will comply with the requirements of the laws and regulations of Taiwan and the requirements of the approved EIA. The ecological surveys and assessment within the EIA were conducted in accordance with the below listed specifications as published by the Taiwan MoENV:

- Technical Specifications for Animal Ecology Assessment (動物生態評估技術規範)
- Technical Specifications for Plant Ecology Assessment (植物生態評估技術規範)
- Technical Specifications for Marine Ecology Assessment (海洋生態評估技術規範)

In addition to the overarching EIA Act, national legislation detailed in the EIA relevant to social aspects addressed in this FSIA include the following key laws and regulations:

- Cultural Heritage Preservation Act (文化資產保存法) (amended on 29 November 2023)
  - Classifies tangible and intangible cultural heritages which are of cultural value from the point of view of history, art or science covering monuments, historic buildings, commemorative buildings, groups of buildings, archaeological sites, historic sites, cultural landscapes, antiquities, natural landscapes and natural monuments, traditional performing arts, traditional craftsmanship, folklore, and traditional knowledge and practices

- Underwater Cultural Heritage Preservation Act (水下文化資產保存法) (amended on 30 November 2022)
  - Protect and manage underwater cultural heritage, including all submerged traces of human existence with historical, cultural or scientific value. Key provisions include regulating activities, promoting in-situ preservation, managing excavation and enhancing public education and professional training.
- Fisheries Act (漁業法) (amended on 26 December 2018)
  - Conserves and rationally utilise aquatic resources, to increase fisheries productivity, to promote sound fisheries development, to guide and assist the recreational fishery, to maintain the orderly operation of the fisheries, and to improve the livelihood of fisher folk.
- Renewable Energy Development Act (再生能源發展條例) (amended on 21 June 2023)
  - For purposes of encouraging renewable energy use, promoting energy diversification, improving energy structure, reducing emission of greenhouse gases, improving environmental quality, assisting relevant industries, and enhancing sustainable development of Taiwan.

In conjunction to national legislation detailed in the EIA, the following key Taiwanese legislation are important for Project compliance, to be reflected in the Project's relevant labour management plans (LMP), workers' contracts, and labour monitoring and reporting:

- Labour Standards Act (勞動基準法) (amended on 31 July 2024)
  - Enacted to provide minimum standards for working conditions, protect worker'' rights and interests, strengthen employee-employer relationships and promote social and economic development.
- Employment Service Act (就業服務法) (amended on 10 May 2023)
  - Enacted to promote employment of nationals with a view to enhance social and economic development.
- Collective Agreement Act (團體協約法) (amended on 1 July 2015)
  - To regulate the bargaining procedures and effect of collective agreement, stabilise labour relations, promote labour-management harmony, and protect rights and interests for the labour and the management.
- The Gender Equality in the Employment Act (性別平等工作法) (amended 16 August 2023)
  - Prohibits gender discrimination or sexual orientation regarding recruitment and termination, and for providing training, welfare measures and wages.
- The Occupational Safety and Health Act (職業安全衛生法) (amended 15 May 2019)
  - Enacted to protect workers' safety and health and to prevent occupational accidents.

2.3 Applicable international standards

The Project intends to seek financing from various international finance institutes (IFIs) and commercial banks and is thus required to meet the requirements of both the Equator Principles 4 (EP4) and IFC Performance Standards (PS). The applicable framework is a suite of documents adopted by the IFC as part of the "positive development outcomes" outlined within its policy on Social and Environmental Sustainability. These form a comprehensive set of social and environmental standards for use in project assessment, review and investment decision making processes and include:

- Equator Principles IV, July 2020

- International Finance Corporation (IFC) Performance Standards (PSs), 2012
- World Bank Group (WBG) Environmental Health and Safety (EHS) Guidelines, such as:
  - WBG General EHS Guidelines, 2007
  - WBG EHS Guidelines for Ports, Harbours and Terminals, 2007

2.4 Institutional arrangements

The Project will be developed by the Project Company with the involvement of Project appointed contractors, suppliers and government departments. The Project Company has developed the following core policy documents and systems. These policies cover topics on reasonable working conditions, migrant workers and substantially equivalent terms, workers' organisations, non-discrimination and equal opportunity, child labour, forced labour, occupational health and safety, gender, monitoring, and labour management. These policy documents include:

- F4 Environmental and Social Management Policy (2024)
- F4 Emergency Response Plan (2024)
- F4 Health and Safety Plan (2024)
- F4 Contractor Selection, Evaluation and Management Procedure (2024)
- SRE Human Rights Policy (2024)
- SRE Diversity, Equity and Inclusion (DE&I) Procedure (2024)
- SRE DE&I Concern Log (2024)
- F4 Code of Conduct for Business Partners (2024)
- F4 Contractor Document Management Procedure (2024)
- F4 Project Control and Administration Requirement (2024)
- SRE Good Business Conduct Policy (2024)
- Contractors Code of Conduct (2024)
- F4 Stakeholder Engagement Plan (2025)
- SRE Prevention, Correction, Complaint and Punishment of Sexual Harassment Instruction (2024)
- SRE Seconding Human Resources for Project Companies Management Instruction (2024)
- F4 Project Audit Procedure (2025)

Project appointed contractors will be responsible for the actual, physical construction and installation of all the project components wind turbines. This includes installation of the WTGs, OSS, array cables, export cables, jacket foundations, onshore cable, onshore substation, as well as the electrical infrastructure and grid connection. Project appointed suppliers will provide the necessary materials and equipment for the project. This includes the wind turbines themselves, as well as other necessary components like towers, foundations, and electrical equipment.

Governmental bodies act as the Competent Authority, granting permissions and overseeing the EIA process. They are responsible for ensuring that environmental considerations are taken into account before Project approval. They also enforce compliance with EIA regulations and take necessary actions in case of violations. Governmental bodies are essential in safeguarding environmental interests while balancing the developmental needs of Taiwan.

3 Methodology

3.1 Overview

The purpose of this FSIA report is to present the main aspects of the social impact assessment process and define the key management, mitigation and enhancement measures for predicted impacts. The following are the steps undertaken for this FSIA:

- Referencing and presenting the currently available socio-economic baseline data and analysis as relevant to the Project. This includes establishing the Project and its associated activities to:
  - Define the Project's area of influence (AoI)
  - Identify people within the Project's AoI who may be impacted by the Project

The approach for defining the Project's AoI and identifying receptors within the AoI is elaborated in Section 3.3.1.

- Screening and scoping and of relevant social impacts by identifying potential interactions between the Project and the affected parties within the AoI (see Section 3.3 for details).
- Evaluating and rating the type of interaction for each impact for each social aspect
- Identifying the extent that already existing or relevant assessment and mitigation/management measures within the current documentation suite have addressed the scoped social impacts/aspects
- Recommending project-specific management plans, such as the environmental and social management system (ESMS) or other instruments to be updated (if required) to capture required management actions.

Elaboration of the abovementioned steps are further provided below.

3.2 Focused social impact assessment

As described by IFC PS Guidance Note (GN) 1, a focused social impact assessment (FSIA) is an assessment with a limited scope and magnitude and focused on particular social aspects or impacts identified as significant to the Project. An FSIA is considered appropriate for this Project for the following reasons:

- Adverse social impacts are limited and/or could potentially be assessed and managed through the Project's existing instruments including:
  - Environmental impact assessment (EIA)[2] and environmental differential assessment (EDA)[3]
  - Formosa 4 E&S Gap Analysis[4]

[2] 環境影響說明書

[3] 苗栗離岸風力發電計畫三環境影響差異分析報告（定稿本）

[4] Formosa 4 Offshore Wind Farm in Taiwan E&S Gap Analysis, December 2024

- Final HRIA, forthcoming Q2 2025[5]
- Final LRP, forthcoming Q2 2025[6]

- Secondary baseline data can complement/supplement and inform assessments

Table 3.1 below further summarises the aspects of a FSIA based on IFC PS GN 1, which applies to this Project.

Table 3.1: Aspects of an FSIA

Aspect	FSIA description	Stage for FSIA completion
Projects Suitable For	Specific activities with limited adverse social impacts, such as modernisation, urban development, or social infrastructure projects.	Draft stage
Scope	A) Narrower in scope, focused on identified social impacts, determined through initial screening. B) May include specific assessments like air quality or noise studies.	A) draft stage B) If necessary, to be completed at final FSIA stage
Process Elements	A) Defined through initial screening, with systematic review of potential impacts. B) May involve modifying project plans or conducting further focused assessments based on identified impacts.	A) FSIA draft stage B) If necessary, to be fully completed at final FSIA stage
Alternatives Analysis	May involve confirmation and documentation of application of applicable standards or construction criteria.	To be fully completed at final FSIA stage
Applicability to Greenfield Developments	IFC GN 1 does not specify applicability to greenfield developments.	Not applicable
Monitoring and Implementation	IFC GN1 does not specify monitoring and implementation.	Necessary for good international industry practice and to be fully completed at final FSIA stage
Baseline data, impact analysis and mitigation plan	Limited/focused	To be fully completed at final FSIA stage

Source: IFC PS GN 1, 2021

3.3 Social impact assessment process

3.3.1 Project's area of influence

Section 4 will provide a brief analysis of the socio-economic profiles (ie economic taxonomy including fishing activities) of the administrative region within the Project's area of influence (AoI), including:

- Physical components – onshore and offshore areas and Project components (see section 1.5)
  - Onshore components include onshore cable alignments, and an onshore substation situated in Yuanli Township. The onshore components are generally expected to cause limited human right impact, whereby:
    - Land acquisition – Cable laying is primarily within roads road alignment or state-owned land, while the substation is also constructed on land owned by the Project Company (see Section 1.7)
    - Land use/livelihood – although the onshore substation's previous land use is agricultural land, based on information provided, it is understood the local

[5] Formosa 4 Offshore Wind Farm in Taiwan Final Human Rights Impact Assessment, 2025

[6] Formosa 4 Offshore Wind Farm in Taiwan Final Livelihood Restoration Plan, 2025

communities did not previously utilise these onshore land areas for livelihood, thus no livelihood impacts are expected.

- Community health and safety – The works associated with these onshore elements are considered typical construction activities for (relatively) minor construction works. These would/could be well-managed with typical construction site management measures. The location of the leased lands and road alignments are not in close proximity to populous local community/residential areas in general.

– Offshore components include offshore cables alignment, offshore substations, and wind farm area. For offshore components, additional exclusion zones are also considered part of the AoI.

- The coastal townships and fishing ports in the Miaoli County under TFA's jurisdiction where most of affected local fisher folk are located (or active) in:
  – Yuanli Township, which include Yuanli fishing port (苑裡漁港) and Yuangang fishing port (苑港漁港)
  – Tongxiao Township, which include Tongxiao fishing port (通霄漁港), Xinpu fishing port (新埔漁港) and Baishatun fishing port (白沙屯漁港)

The above coastal townships are deemed to have the most affected local fisher folk due to proximity to the Project's landing point. The Project Company had also determined this in consultation with officials and the local fishermen association, with regard to where impacts are anticipated to occur. Therefore, these townships are considered to have most of the affected fisher folk.

3.3.2 Screening

A screening exercise is typically first conducted to determine what social aspects and issues are applicable to a project. The screening was conducted through the review of publicly accessible environmental and social (E&S) assessments pertaining to OWF developments or conducted based in Taiwan. Social aspects were identified through Applicable Standards, including EP IV, 2020 and IFC PSs, 2012.

As based on the typical potential significant adverse environmental and social impacts, the Project is likely to be categorised as Category A. Project is a Category A project requiring additional E&S assessment and management documents for IFIs. IFC PS1 defines a Category A project as one for which the business activities have potential significant adverse environmental or social impacts that are diverse, irreversible or unprecedented.

Furthermore, Taiwan legislation requires all OWF developments to produce and undergo an EIA process as prescribed within the Environmental Impact Assessment Act (2023). The Project's EIA report covers baseline surveys for flora and fauna, a cultural heritage screening, meeting minutes of EIA's public consultations, environmental mitigation and monitoring plans and more. The Project had successfully obtained regulatory approval for its final environmental impact statement (EIS, 環境影響說明書) and environmental deviation report (EDR) from Ministry of Environment (MoEnv) on 11 August 2023 and 22 July 2024, respectively.

3.3.3 Scoping

The scoping process is typically used to identify the potentially significant impacts that may arise from a project. Understanding the Project, including all project components and associated activities from all phases was the first step to establishing the overall footprint and range of impacts (see Section 3.3.1 for the details on the Project's AoI).

Scoping reviewed the anticipated interactions between the Project's AoI with the identified impacted groups of people. The results which indicate whether an impact is positive, unlikely or likely are presented in the scoping matrix, Table A.2 of Appendix A. Analysis or measures already in place for each aspect are also captured within the scoping matrix.

3.3.4 Baseline data

Baseline social data relevant to the social impacts that were identified through screening and scoping is presented in Section 4. The baseline describes the socio-economic context of the Project's defined AoI, including the existing social environment, conditions, and demographic trends. The baseline further captures information relating to perceptions of the Project and preferences for livelihood restoration programme (LRP).

Primary baseline surveys have been conducted between March and April 2025 to gather socioeconomic data and firsthand feedback from potential affected households and persons. Data collected to date includes key informant interviews (KIIs) (ie 15 sessions), seven (7) relevant focus group discussions (FGDs) and socio-economic household surveys (ie 200 responses) of Project Affected Households (PAHs).

However, given the robustness of the 200 household surveys to represent the corresponding sample size of the PAHs, it is expected that changes to the assessments and thus restoration programmes will be limited.

The Project's baseline data is based on primary and secondary data captured for and reported in the Project's LRP and HRIA. Further details on the baseline data are also mentioned within Section 4.

3.3.5 Impact identification and significance attribution

The social impacts scoped in within Table A.2 have been assessed in more detail (in Section 5). This FSIA determines the significance of the impact, whether beneficial or adverse as well as direct, indirect and/or cumulative. The attribution of significance of each impact has been categorised by the degree of predicted change from a baseline condition (the magnitude of impact) and the sensitivity of the impacted group of people. The subsequent sections elaborate upon the abovementioned approach in detail.

Magnitude criteria

The magnitude of social impacts has been determined by consideration of the extent to which social receptors gain or lose access to/or control over socio-economic or cultural resources, resulting in a beneficial or adverse effect on their individual and collective wellbeing. Wellbeing is considered as the financial, physical, and emotional conditions and quality of life of people and communities.

For beneficial impacts, the extent to which local wellbeing is likely to be enhanced has been considered. This is in accordance with international trends in SIA practice towards an increased focus on enhancing long-term development benefits for a local community's sustainability, as opposed to only considering mitigation of adverse impacts. As such, the magnitude criteria include consideration of the extent to which benefits are shared with or realised by local people and communities.

The assessment of magnitude has been undertaken using professional judgment, taking into account of several factors, as presented in Table 3.2.

Table 3.2: Magnitude assessment

Factors	Indicators	Magnitude			
		Major	Moderate	Minor	Negligible
Temporal	Duration Frequency	Long-term/permanent Sustained/ persistent	Short to medium term Frequent – often	Short term Occasional/ sometimes	Once off Rarely/hardly
Spatial	Geographical scale/number of impacted people	County, national or even International/ transboundary	Village/ communities/ township	Individuals/ households	-
Degree of change	Estimation of the scale/magnitude of impact relative to the baseline condition	Large	Medium	Small/limited	Negligible
Reversibility & resilience	Resiliency /sensitivity of receptor	Requiring significant intervention to recover	Requiring moderate intervention to recover	Limited impacts perceived	No impact perceived

Table 3.3 below presents the overview of the broad criteria (ie as based on factors above) that have been used to categorise the magnitude of social impact.

Table 3.3: Receptor sensitivity criteria

Sensitivity	Definition
High	People who are already vulnerable with very little capacity and means to absorb proposed changes or with very little access to alternative similar resources, sites or services.
Medium	People who are already vulnerable with limited capacity and means to absorb proposed changes or with some access to alternative similar resources, sites or services.
Low	People who are not vulnerable with some capacity and means to absorb proposed changes and with some access to alternative similar resources, sites or services.
Negligible	People who are not vulnerable with plentiful capacity and means to absorb proposed changes and with good access to alternative similar resources, sites or services.

Source: Mott MacDonald, 2025

3.3.6 Attribution of significance to impacts

Each impact assessed has been classified as adverse or beneficial, and its impact magnitude and group sensitivity categorised. Significance attribution then combines magnitude and sensitivity criteria using the matrix presented in Table 3.4.

Table 3.4: Impact determination of significance

Sensitivity	Magnitude							
		Adverse				*Beneficial*		
		Major	Moderate	Minor	Negligible	Minor	Moderate	Major
	High	Major	Major	Moderate	Negligible	Moderate	Major	Major
	Medium	Major	Moderate	Minor	Negligible	Minor	Moderate	Major
	Low	Moderate	Minor	Negligible	Negligible	Negligible	Minor	Moderate
	Negligible	Minor	Negligible	Negligible	Negligible	Negligible	Negligible	Minor

Source: Mott MacDonald, 2025

3.3.7 Management measures identification and residual impact attribution

Adverse impacts that have been determined as being 'moderate' or 'major' from Table 3.4 above are significant. The expectation is that they will require more management resources or efforts and reduce their residual impact. Residual impacts are those that remain after mitigation and enhancement measures are applied. Impacts that are assessed as 'minor' or 'negligible' are considered 'not significant', however they may still require management measures to lessen their effect or increase their benefit. The analysis of impacts resulting from activities in the construction, operations and decommissioning phases in Section 5 present the categories of magnitude criteria, sensitivity criteria and the resulting significance attribution.

3.4 Uncertainties and limitations

There were limitations that apply to the implementation of the proposed baseline data collection methodology in relation to the availability of primary and secondary data.

Primary data currently referenced within the report included key informant interviews (KIIs) and focus group discussions (FGDs) conducted in March to April 2025, as well as 200 socio-economic household survey results of PAHs. These engagements provided additional insights to the assessment of the report. However, given the robustness of the 200 household surveys to represent the relevant sample size, the changes to the assessments and thus restoration programmes were limited.

Primary data, including stakeholder engagement activities or interviews and surveys with local community leaders, provide insight to their representing communities but can at most represent inferences of the wider affected communities or areas. Most participants selected for the Project primary data collection, including key informant interviews (KIIs), focus group discussions (FGDs) and household surveys were undertaken based on convenience sampling, where participation is based on those who were available and willing to participate. Most household survey participants were also introduced or selected through the TFA and fisher folk who knew one another.

Due to the size and sensitivity of the questionnaire, a high non-completion/refusal rate was anticipated, thus a high number of questionaries (up to 250) were circulated. Questionnaires that provided responses the following key questions were retained:

- contact details;
- a response to at least one core question relating to socioeconomic status or income;
- at least half the questions completed; and
- were verified as having involvement with the fishing industry

This resulted in a total number of 200 questionnaires being retained as valid, with individual questions having different response numbers depending on the level of completion. This overall number is significantly well above the sample size threshold required to meet 90% confidence level and 10% margin of error under Cochran's formula (ie of the total PAHs). Other than education level, all other questions, particularly core questions relating to socioeconomic status or income, received responses above the sample size threshold as well. Where data is below the same size threshold (ie only for education level), information is treated as anecdotal but not statistically conclusive.

While it was initially anticipated to use Probability Proportional to Size (PPS) sampling, a snowballing sampling strategy was used at a township level. This was due to a combination of reasons including time constraints, practicalities of getting respondents to engage with the

survey (eg willingness/availability), the sensitive nature of the data being collected and, in some instances, the hard-to-reach nature of certain groups (eg non-TFA members). TFA representatives and nominated fisher folk supported in the distribution of the survey peer-to-peer. The benefits of this approach were that a relatively high number of surveys were distributed (over 200 surveys), and relatively high response rate of the overall surveys. Notwithstanding this, there are also limitation to this approach which include potential selection and representative bias as the distribution of all surveys were informed by the physical and/or relational proximity to those supporting the distribution, It is noted that the TFA in particular has an official capacity to represent fisher folk in the region.

The above limitations are considered when interpreting survey results, particularly when assessing the varying impacts on different types of fisher folk households (eg vessel owners versus non-vessel owners).

In regard to monetary compensation, the legislated monetary compensation mechanism for offshore windfarms in the local regulatory context (ie Taiwan) is to compensate defined eligible parties within the relevant Fishermen's Association. The Project has signed a Fishery Compensation and Cooperation Agreement (FCCA) with Miaoli County's Tongyuan Fishermen Association (TFA) on 28 March 2025, which is address the compensation provisions. For other project-affected persons (PAPs) (ie not specifically covered under FCCAs' provisions), other non-monetary livelihood restoration programmes are identified to be implemented. A GM is also in place for them to raise grievances against the programmes or to claim for compensation. These reports will be handled on a case-by-case basis rather than a systematic compensation approach.

Conclusions and assumptions in this FSIA are based on evidence collected by this methodology. Hence, limitations may apply depending on the availability of the data. This impact assessment has sought to quantify potential impacts across the Project's lifecycle, as can be predicted at this point in time and with the information available. Notwithstanding this, it is expected that this information and impacts may shift and change as the Project progresses, and accordingly, the impact assessment would be revisited on a regular, ongoing basis as part of an ongoing management and monitoring programme.

4 Socioeconomic Baseline

4.1 Overview

This section provides an overview of the socio-economic baseline of the affected communities, including the primary data collection conducted in March and April 2025 (ie KIIs, FGDs, SAQs and household surveys) for this Project as well as secondary data available online.

4.2 Population and demographics

4.2.1 Population by gender and age

Miaoli County is located in the northwest region of Taiwan. As of November 2024, Miaoli County's has a population of 533,063 people, with more males than females (273,953 males and 259,110 females). The population density is approximately 293 persons/km^2[7].

Yuanli Township is the township where the Project's offshore cables connect onshore. Both Yuanli Township and Tongxiao Township are under the TFA jurisdiction.. As of November 2024, the populations of Yuanli Township and Tongxiao Township are 43,453 and 30,879, respectively. In both townships, the number of male residents are higher than female residents (Yuanli Township is 22,642 males to 20,811 females; Tongxiao Township is 16,378 males to 14,501 females)[8]. In the household surveys conducted in March 2025, out of 200 respondents, 160 were registered under TFA.

Based on the household survey result, respondents reported varying lengths of residence in the area. The results show that most respondents are fisher folk who have lived in the local area for a considerable period.

Based on KIIs though, it is understood that the fishing community is an aging population, with younger people out-migrating the communities and not choosing to engage in the fishing industry. As a result, this makes the aging fishing community inherently more challenged to potential impacts.

4.2.2 Education levels

The education system in Taiwan mandates compulsory education for twelve years since 2014. Public primary education lasts for six years, junior high for three years and senior secondary education for three years. Access to the public education system is free of charge. At the end of 2023, almost all (99.24%) of the population over the age of 15 could read and write, with a slightly lower percentage for females (98.65%) than males (99.87%)[9]. For Miaoli County, 99.61% of the county population over the age of 15 could read and write, with females (99.29%) lower than males (99.91%). In the household surveys conducted, there were approximately 40

[7] Ministry of the Interior, R.O.C. (Taiwan). Bulletin of Interior Statistics. 內政部全球資訊網-中文網-列管統計項目. Accessed 'Land area, village, number of households and current population' on 26 December 2024.

[8] Miaoli County Government Household Registration Service. Miaoli County township households and population. 苗栗縣戶政服務網 - 人口數統計. Accessed on 27 December 2024.

[9] Gender Equality Committee of the Executive Yuan (26 March 2024). National indicator - literacy rate of population over 15 years old (ey.gov.tw). Accessed 27 December 2024.

to 50 respondents. A minority portion of participants had university degrees (ie <10%), while a considerable number had high school/college education (ie approximately >30%). The largest group reported having junior high school education. Noting that this question received limited responses, the information will be treated anecdotally during assessment.

4.2.3 Disability

As of September 2024, 1,227,775 people in Taiwan were registered with a disability, with mental functions & structures of the nervous system (n. 377,649) and neuromuscular-skeletal and movement related functions and structures (n. 333,282) as the two highest disability types. The rate of disabled person of Taiwan's total population is 5.25%, with a 5.85% rate for male and 4.66% rate for female[10]. As of September 2024, Miaoli County's disabled population was 33,879 (2.8% of Taiwan's total disabled population). The highest disability type in Miaoli County is neuromuscular-skeletal and movement related functions and structures (n. 9,221), with mental functions & structures of the nervous system (n. 8,904) falling second. The rate of disabled persons to Miaoli County's total population is 6.35%, with males at a rate of 5.95% and females at a rate of 5.72%.

In the household surveys conducted, the portion of respondents identified as having a physical disability appears to be lower than the disability rate in Miaoli County.

According to the law established by Workforce Development Agency, Ministry of Labour, at least 3% and 1% of the workforce in the public and private sectors, respectively, should be persons with disabilities[11]. In 2021, 4.2% of the public sector workforce consisted of persons with disabilities, however, the private sector continued to fall short of the mandated target as it had in previous years[12]. Private companies with workforce of more than 67 employees failing to meet the target percentage face the potential to be liable for small fines. Government employees of a public company with workforce of more than 34 employees may also face small fines if failing to meet the target percentage.

4.2.4 Ethnicity & Cultural Diversity

Han Chinese (comprising diverse subgroups with mutually unintelligible languages and different customs) makes up more than 95% of the population of Taiwan whilst indigenous Malayo-Polynesian peoples comprise approximately 2.5% (n. 603,605 people by July 2024). The remaining 2.5% (over 570,000) of the population are new immigrants into the country, especially in recent years[13].

As of November 2024, Miaoli County has 12,128 indigenous residents. 4,878 are plains indigenous people (平地原住民) and 7,250 are mountain indigenous peoples (山地原住民). In Yuanli Township, there are 201 indigenous residents, 97 are from the plains and 104 are mountain. In Tongxiao Tonwship, there are 208 indigenous residents, 119 are from the plains

[10] Ministry of Health and Welfare (2 December 2024). Disability Statistics (mohw.gov.tw). Retrieved 6 February 2025 from '1.1.1 disability population by type and county'

[11] People with Disabilities Rights Protection Act (20 January 2021), People with Disabilities Rights Protection Act - Laws & Regulations Database of The Republic of China (Taiwan) (moj.gov.tw), Accessed 27 December 2024

[12] 2022 Country Reports on Human Rights Practices: Taiwan (20 March 2023). Taiwan - United States Department of State (www.state.gov), Accessed 27 December 2024

[13] Taiwan.gov.tw. PEOPLE - Taiwan.gov.tw. Accessed 27 December 2024.

and 89 are mountain[14]. Based on the Project's EIA, no indigenous communities or lands are present in the Project area. Through KIIs, it was also confirmed that there were only a few Indigenous Peoples in the community, but none were reported to participate in the fishing community and do not have cultural ties to the project areas.

There are 16 officially recognised Indigenous groups[15]: Amis, Atayal, Paiwan, Bunun, Pinuyumayan, Rukai, Cou, Saisiyat, Yami, Thao, Kavalan, Truku, Sakizaya, Sediq, Hla'alua and Kanakanavu. As of June 2024, Amis is the largest group and accounts for 37.3% of the indigenous population[16]. In addition, there are around nine (9) main Pingpu peoples groups: Kavalan, Ketagalan, Taokas, Pazeh, Papora, Babuza, Hoanya, Siraya and Makatau[17]. The Pingpu peoples groups have been petitioning to be officially recognised and categorised as Indigenous Peoples under Taiwan's legislation and Constitution so to receive the same Indigenous rights and protections.

Regarding the employment proportion of migrant workers in Taiwan or Miaoli County at the end of 2024[18], 78 migrant workers served as fishery crew in Miaoli County, accounting for 0.33% of all migrant workers in Miaoli County (23,533). Most migrant workers in Miaoli County were employed in manufacturing, with 16,145 workers. There was total 722,949 migrant workers in Taiwan, which had 9,232 serve as fishery crew, representing 1.28% of the total, as shown in Table 4.1.

Table 4.1: Employment proportion of migrant workers in fishery crew and other industries in Taiwan and Miaoli County in 2024

End of 2024	Total	Indonesia	Philippines	Thailand	Vietnam
Total	23,533	7,754	8,536	1,626	5,617
Fishery Crew	78 (0.33%)	59 (0.76%)	-	-	19 (0.34%)
Agriculture, Forestry, Animal Husbandry or Aquaculture Work	241	39	19	13	170
Outreach Agricultural Work	81	4	0	5	72
Manufacturing	16,145	2,269	8,097	1,512	4,267
Construction	482	73	0	90	319
Social Welfare Migrant Workers	6,506	5,310	420	6	770
Taiwan area Total Migrant Worker	722,949	272,028	156,755	70,615	223,550

[14] Miaoli County Government Household Registration Service. Miaoli County indigenous peoples population. 苗栗縣戶政服務網 - 原住民人口統計表. Accessed on 27 December 2024.

[15] Council of Indigenous Peoples. The Tribes in Taiwan (cip.gov.tw). Retrieved 25 July 2024.

[16] Council of Indigenous Peoples (22 July 2024). June 2024 Indigenous Peoples population statistics (cip.gov.tw). Accessed 27 December 2024.

[17] Council of Indigenous Peoples (4 June 2024). What is Pingpu Peoples? (cip.gov.tw). Retrieved 25 July 2024.

[18] Council of Indigenous Peoples (4 June 2024). What is Pingpu Peoples? (cip.gov.tw). Retrieved 25 July 2024

End of 2024	Total	Indonesia	Philippines	Thailand	Vietnam
Total Migrant Fishery Crew in Taiwan area	9,232 (1.28%)	7,524 (2.77%)	959 (0.61%)	11 (0.02%)	738 (0.33%)

4.2.5 Religion

Before the 17th century, Taiwan was inhabited by Indigenous populations, who practiced animist and natured based religious beliefs. Post arrival, European settlers introduced Christianity (ie Protestant and Roman Catholic) through evangelical missionaries. The large influx of Han Chinese in the second half of the 17th century brought Buddhist, Taoist and Confucian belief systems. During the Qing Dynasty in mainland China, the latter three religions became popular, leading to a visible increase of religious temples, monuments, and facilities built in Taiwan. Taiwan has approximately 22 religions. The main religions in Taiwan are Buddhism and Taoism, which makes up 35.3% and 33.2% of the population, accordingly[19]. As of 2022, there were 12,288 temples, 9,723 (or 79.1%) of which were for Taoism and 2,280 (or 18.6%) for Buddhism. There were also 2,877 churches[20]. Yuanli Township, where the Project's onshore components are located, has 23 temples[21].

Based on the Project's EDA report, one key intangible religious event identified in the area is Baishatun's Mazu Pilgrimage (白沙屯媽祖進香), which is based in Taoism. The Pilgrimage begins at Baishatun Gongtian Palace (白沙屯拱天宮) in Tongxiao Township, where worshippers carry the statue of Mazu on foot, south to the Chaotian Temple (朝天宮) in Beigang, Yunlin, then back to Gongtian Temple[22]. Every year's pilgrimage route and dates differ, but it is expected that the route will pass through Tongxiao and Yuanli Township of Miaoli County.

Among those who answered the religion question within the household survey, almost all the respondents were Taoist, with a minority indicating Buddhist. This is further reflected in a community leader's KII, noting that most fisher folk in the area are devoted in religious activities and festivals.

A KII participant shared that many local fisher folk are devoted believers, and Baishatun Gongtian Palace is a religious centre for them. The participant further notes that reduced income of the fisher folk reduce their time for temple activities as they need to spend more time earning income.

[19] CIA.gov. Taiwan - The World Factbook (cia.gov). Accessed 27 December 2024.

[20] Executive Yuan (29 March 2024). Religion and faith in Taiwan (ey.gov.tw). Accessed 27 December 2024.

[21] Platform for Taiwanese Religion and Folk Culture. Taiwan temples – Miaoli County – Yuanli Township. 苑裡鎮-臺灣宗教與民俗文化平臺. Accessed 3 February 2025.

[22] Baishatun Matsu Website. Baishatun Gong Tian Temple. Accessed 3 February 2025.

4.3 Economy

4.3.1 Miaoli County Economy Summary

As of the end of December 2024, Miaoli County's has a population of 532,854 people[23]. The resident population of Miaoli County in 2023 had an age distribution where the proportion of the population under 15 years old was 11.33%, the proportion aged 15 to under 65 was 69.12%, and the proportion aged 65 and above was 19.55%

Looking at employment numbers by industry sector, the Services sector accounts for the largest proportion of employment in both Taiwan (60.81%) and Miaoli County (48.87%). Wholesale & Retail Trade represents 15.74% of employment in Taiwan and 11.65% in Miaoli County. Industry ranks second, accounting for 34.94% in Taiwan and 45.86% in Miaoli County, with Manufacturing comprising the majority of industrial employment (25.82% in Taiwan, 36.84% in Miaoli County). Agriculture, Forestry, Fishing & Animal Husbandry accounts for only 4.26% (494 thousand people) of Taiwan's employment and 5.26% (14 thousand people) of Miaoli's employment, as shown in Table 4.2.

In 2020[24], the total average annual household revenue of agriculture, forestry, fishery and animal husbandry in Taiwan was 5.4 million NTD. Of which, the fishery industry contributes the highest proportion of revenue, accounting for 43%, with an average household output value of 2.3 million NTD. Miaoli County contributes an average household fishery service output of 252 thousand NTD (11% of the total fishery industry output value)[25].

Table 4.2: Employment numbers by industry in Taiwan and Miaoli in 2024

District (or Region)		Taiwan Area		Miaoli County	
Total (thousand people)		11,595		266	
Agriculture, Forestry, Fishing & Animal Husbandry		494	4.26%	14	5.26%
Industry	Industry Total	4,051	34.94%	122	45.86%
	Mining & Quarrying	4	0.03%	-	0.00%
	Manufacturing	2,994	25.82%	98	36.84%
	Electricity & Gas Supply	34	0.29%	-	0.00%
	Water Supply & Remediation Activities	87	0.75%	2	0.75%
	Construction	932	8.04%	21	7.89%
Services	Services Total	7,051	60.81%	130	48.87%
	Wholesale & Retail Trade	1,825	15.74%	31	11.65%
	Transportation & Storage	505	4.36%	9	3.38%
	Accommodation & Food Service Activities	901	7.77%	16	6.02%

[23] Miaoli County Government Household Registration Service, Miaoli County Government, (Taiwan, ROC). Population Statistics (December 2024) (mlhr.miaoli.gov.tw), Accessed on 21 March 2025. The census will be conducted monthly.

[24] National Statistics, R.O.C. (Taiwan) (June 2023). 2020 Census Report on Agriculture, Forestry, Fisheries and Animal Husbandry. 109 年農林漁牧業普查綜合報告.pdf. Accessed page 17 on 26 December 2024. The next census will be conducted in 2025.

[25] National Statistics, R.O.C. (Taiwan) (June 2023). 2020 Census Report on Agriculture, Forestry, Fisheries and Animal Husbandry – Miaoli County. 05 苗栗縣.pdf. Accessed 26 December 2024. The next census will be conducted in 2025.

District (or Region)	Taiwan Area		Miaoli County	
Information & Communication	287	2.48%	3	1.13%
Financial & Insurance Activities	435	3.75%	6	2.26%
Real Estate Activities	106	0.91%	2	0.75%
Professional, Scientific & Technical Activities	408	3.52%	6	2.26%
Support Service Activities	324	2.79%	7	2.63%
Public Administration & Defence; Compulsory Social Security	377	3.25%	10	3.76%
Education	637	5.49%	14	5.26%
Human Health & Social Work Activities	549	4.73%	10	3.76%
Arts, Entertainment & Recreation	125	1.08%	3	1.13%
Other Service Activities	572	4.93%	14	5.26%

Source: National Statistics (Taiwan, ROC), Directorate General of Budget, Accounting and Statistics, Labor Force Survey Statistics 2024 (Cross-classification Statistics for the Year, Regional Statistics). Accessed on 11 April 2025. The next census will be conducted in 2025.

4.3.2 Fisher Folk Employment Structure

The number of Miaoli fisher households account for 1.5% (600 out of 41,278 fisher households) of all fisher households in the country in 2020, ranking 14th (out of 22 counties) overall. The number of Miaoli fisher households account for 4.4% of all agriculture, forestry, fishery and animal husbandry households in Miaoli County (600 out of 13,596 total households). Forestry households are the highest proportion at 94% (12,792 out of 13,596 total households).

Over the past decade, the number of people employed in the fishing industry in Miaoli has averaged around 9,500-10,000, reaching a peak of 10,666 people in 2020. For Taiwan & Kinma area, the highest number was recorded in 2017 with 324,757 people. Comparing both regions, neither shows a clear upward or downward trend in fishing industry employment, as shown in Table 4.3 and Figure 4.1.

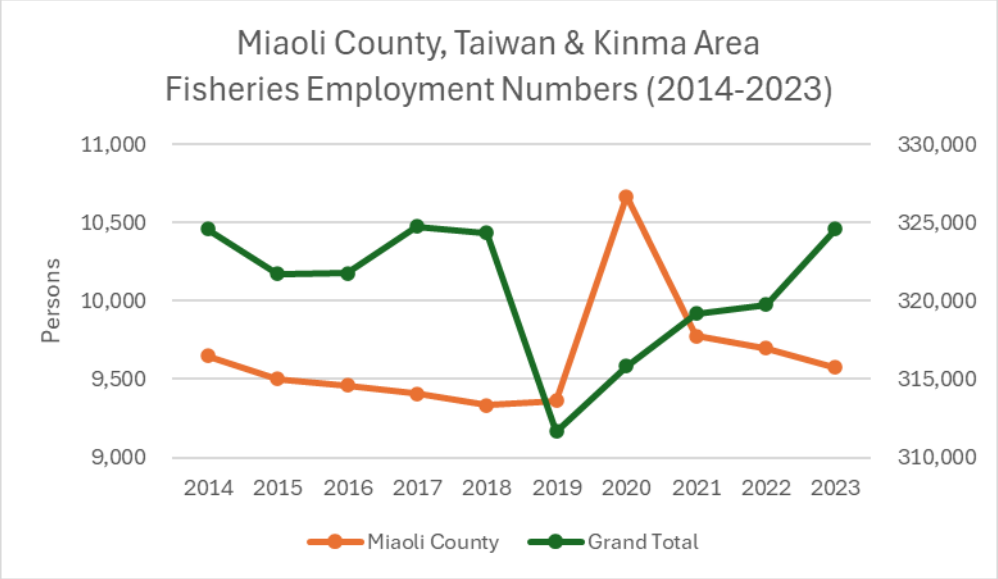
Table 4.3: Miaoli County, Taiwan & Kinma area fisheries employment numbers over a 10-year period

Year	Miaoli County	Grand Total (Taiwan & Kinma area)
2014	9,651	324,575
2015	9,503	321,733
2016	9,460	321,769
2017	9,409	324,757
2018	9,334	324,358
2019	9,363	311,676
2020	10,666	315,846
2021	9,775	319,207
2022	9,699	319,783
2023	9,574	324,584

Unit: Persons
Note: Kinma area included Kinmen County and Lianjiang County
Source: Fishery Agency[26]

[26] Fisheries Agency. Fishery Industry statistics annual reports. Accessed on 13 April 2025

Figure 4.1: Miaoli County, Taiwan & Kinma area fisheries employment numbers trend over a 10-year period



Source: Fishery Agency[27]

In the household survey, a majority of respondents (ie more than two-thirds) reported primary engagement in actual fishing works (eg catching, organising fishing gear and operation arrangements, etc). To supplement their income, a portion of these individuals (ie approximate a third) also engaged in commercial-related work or held part-time jobs or other occupations. Among those not engaged in actual fishing activities, most were primarily worked in commercial-related jobs, with a few reporting roles such as labourers, farmers, retired individuals, and unemployed individuals.

During the FGDs, some participants mentioned that income from fishing is sufficient for their families' needs. This indicates that although fishing remains a key livelihood tool in the region, as the household survey results show, households do undertake different jobs outside of fishing to support their livelihood.

According to the Fishery Annual Report (FAR) 2023, all Miaoli fisher folks (ie 9,574 people) are employed or engaged under coastal fisheries activities (ie full time and part time). None are registered under far sea fishing, offshore fishing, inland fishing, marine culture or inland culture. In the household surveys conducted, all the fisher folk are engaged under coastal fisheries activities. A few households noted their maximum distance from shore to conduct fishing activities was extending farther offshore, indicating some offshore fishing activities are conducted. The Project has confirmed that the project cable laying area is not in proximity to any oyster farm areas and plans to use export cable corridors to reach their landing point.

TFA member income variability

The variability of income distribution as well as different sources of income level are in line with the understanding of the fishing community's occupations. There are varying categories of memberships for TFA, with some who actively engage in fishing activities for over three (3) months (ie Category A), to those who are indirectly involved in fishery-related businesses (ie

[27] Fisheries Agency. Fishery Industry statistics annual reports. Accessed on 13 April 2025.

sponsoring members). The occupations of sponsoring members are highly diverse, such as TFA staff, fishing gear shop owners and seafood restaurant owners. For example, one of the household respondents was the owner of a heavy truck body manufacturing business who joined the association due to a personal interest in fishing. Another respondent, who primarily used fixed gillnets in intertidal zones and did not own a fishing vessel, was also a member. This occupational diversity among TFA members contributes to the income difference observed as well as varying income source levels.

4.3.3 Fishery Production

The latest fisheries production for Miaoli County in comparison to national levels is presented in Table 4.4 below, presented in terms of the fishing production (ie tonnes caught) and fishing value (ie value of fish catch in NTD). Coastal fishing (沿岸漁業) in Miaoli County produced the most fishing quantity and value, accounting for 908 metric tonnes (MT) of the total fishing production (ie 952 metric tonnes), with a fishing value of 117,942,000 NTD. Offshore fishing (近海漁業) accounted for more quantity, but less value as compared to inland culture (內陸養殖). In comparison to the national level, far sea fishing (遠洋漁業) accounted for the most fishing quantity and value in 2023. Coastal fishing of Miaoli County accounts for 95% of its overall fisheries production, and approximately 3% to the national coastal fishing production. Coastal fishing is the fourth-most production for Taiwan.

Table 4.4: Miaoli County fisheries production in comparison to national levels in 2023

Type of fishery	Miaoli County		Taiwan total	
	Quantity (metric tonnes)	Value (thousand NTD)	Quantity (metric tonnes)	Value (thousand NTD)
Far sea fishing	-	-	435,258	34,167,000
Offshore fishing	30	4,344	158,516	13,452,382
Coastal fishing	908	117,942	33,479	4,931,367
Inland fishing fisheries	-	-	170	25,912
Aquaculture	-	-	23,544	6,496,603
Inland culture	14	34,279	243,897	31,451,279
Total	952	156,565	894,863	90,524,543

Source: Fishery Annual Report of 2023[28]

The fisheries production over the last 10 years in Miaoli County and overall in Taiwan are presented in Table 4.5.

Table 4.5: Miaoli County and Taiwan fisheries production over a 10 year period

Year	Miaoli County		Taiwan total	
	Quantity (metric tonnes)	Value (thousand NTD)	Quantity (metric tonnes)	Value (thousand NTD)
2014	1,246	232,856	1,407,622	104,279,897
2015	986	312,094	1,299,261	92,393,328
2016	859	225,486	1,005,279	86,709,902
2017	859	245,436	1,029,723	90,656,466

[28] Fisheries Agency. 2023 Fishery industry statistics annual report (fa.gov.tw). Accessed '7. Fisheries Production Statistics' on 26 December 2024.

2018	864	239,991	1,089,382	89,267,500
2019	1,041	332,506	1,037,512	86,622,617
2020	784	203,560	885,041	71,216,052
2021	762	105,128	976,000	77,880,206
2022	626	99,121	874,696	82,206,232
2023	952	156,565	894,863	90,524,543

Source: Fishery Agency[29]

Household surveys conducted in March 2025 show that most of fisher folk surveyed feel that fish catches have decreased, a smaller portion reported that they feel that catches are unstable, and a few believed the decrease in catches is due to the development of surrounding wind farms.

4.3.4 Fishery Activities

KII results highlights the significant role of fisheries in the livelihoods of local households in the area. Fisherfolk engage in both direct fishing operations and supplementary activities to sustain their income. Catches are predominantly sold, while a portion is retained for household consumption or given as gifts. Some households further diversify their income through homemade canned goods and processed products. Additionally, part-time jobs and small-scale farming provide alternative sources of livelihood.

Fishing operations rely on local fish species and migratory fish, with yields varying seasonally. The primary fishing methods include both group based and individual techniques. Some approached required small teams to operate, while others can carried out solo. In cases of high production, surplus fish may be shipped to Fish Market for auction.

4.3.5 Socio-Economic Status

Taiwan uses a relative poverty line as a proxy to determine low-income households. Households whose income is less than 60% of the median disposable income per capita are considered to be in poverty. The poverty line of Taiwan established by the Department of Social Welfare (DOSW) is at 14,230 NTD[30] per month for year 2024 (approximately USD$585), which translates to an average cost of living per day at US$19.5[31]. For comparison purposes, the updated global poverty lines prepared by the World Bank in September 2022 is USD$2.15 per day[32].

Comparing with the household surveys results, the average annual household income for the households was within the range of 900,000 NTD to 1,000,000 NTD, with none falling below the

[29] Fisheries Agency. Fishery Industry statistics annual reports. Accessed on 20 March 2025.

[30] Minimum living expenses and real estate limits for each municipality and county (city), 113-income-limit.pdf (gov.taipei)https://service.docms.gov.taipei/attachments/113-income-limit.pdf. Accessed 27 December 2024113-income-limit.pdf (gov.taipei)https://service.docms.gov.taipei/attachments/113-income-limit.pdf. Accessed 27 December 2024.

[31] Calculated based on a 30 days per month .

[32] March 2024 global poverty update from the World Bank: first estimates of global poverty until 2022 from survey data March 2024 global poverty update from the World Bank: first estimates of global poverty until 2022 from survey data (26 March 2024). Accessed 27 December 2024.

poverty line. The average annual household income is 1,341,195 NTD (approximately US$40,642) in Miaoli County[33].

In terms of income sources, the majority of respondents from the household surveys reported that their main source of income was from fishing activities/catch revenue, contributing to the primary component of their total household income. A substantial portion also relied on temporary or seasonal work, while a smaller group earned income through agriculture, forestry and animal husbandry. This indicates that fishing remains the primary livelihood tool in the region. The average annual expenditure of respondents was approximately in the ballpark of 600,000 NTD.

Generally, the unemployment rate in Taiwan is approximately 3.36% as of November 2024[34] and the percentage of the total population living in the low-income households (ie population living below the poverty line) in 2022 was low, at 1.25% (n. 288,703)[35]. Compared to the household surveys, the average income from fishing activities/catch among the fishery household respondents was significantly higher than the poverty line.

The importance of coastal fisheries to the township's economy remains significant, delivering fresh catches directly to local restaurants and attracting gourmets. Nonetheless, a lack of systemic support, such as fishery auction markets, and the reliance on seasonal yields underline the vulnerabilities faced by fishing households. Addressing these challenges is essential for ensuring the long-term sustainability of the livelihoods of fisherfolk in the area.

4.3.6 Challenges and Economic Impact

Supporting infrastructure includes fishing ports and a warehouse for storing fishing gear. However, the absence of a fish market presents challenges for streamlining sales and distribution. Despite its contributions to the local economy, the fishery industry often receives less attention compared to agriculture or other sectors within Miaoli County.

Fisherfolk face multiple challenges, namely unstable fish catches lead to significant fluctuations in income, exacerbated by environmental factors such as ecosystem damage. This economic instability often forces younger members of fishing households to seek employment in other regions, impacting the continuity of traditional fishing practices. Additionally, the economic pressures on fishing households mean there is limited capacity to engage in broader community or cultural activities.

[33] Accounting and Statistics Department, Miaoli County Government, (Taiwan, ROC). Miaoli County Government 2023 Statistical Yearbook, 苗栗縣政府 112 年統計年報.pdf. Accessed on 21 March 2025. The next census will be conducted in September 2025.

[34] Unemployment Rate (2024), National Statistics (most recent published), National Statistics, Republic of China (Taiwan)-Unemployment RateNational Statistics, Republic of China (Taiwan)-Unemployment Rate, Accessed 27 December 2024.

[35] Statistical Yearbook of the Republic of China 2022 (September 2023), yearbook2022.pdf (dgbas.gov.tw)yearbook2022.pdf (dgbas.gov.tw), https://ws.dgbas.gov.tw/001/Upload/464/relfile/10924/232178/y033.pdfAccessed 27 December 2024https://ws.dgbas.gov.tw/001/Upload/464/relfile/10924/232178/y033.pdfAccessed 27 December 2024.

4.4 Fishing livelihoods and sense of community

In Taiwan, 129,136 households rely on fishing for their livelihoods (as of 2023[36]) of whom:

- 5,166 are engaged in far sea fishing
- 18,469 are engaged in offshore fishing
- 65,814 are engaged in coastal fishing
- 4,088 are engaged in inland fishing
- 8,186 are engaged in marine aquaculture
- 27,413 are engaged in inland aquaculture

There were 305,868 fisher folk employed in fisheries, of whom:

- 236,797 were full-time fisher folk (77.42%)
- 69,071 were part-time fisher folk (22.58%)

Table 4.6 presents the distribution of fishery households across various townships in Miaoli County at the end of 2023. Houlong Township had the highest number of fisher households (598), accounting for approximately 31.2% of the total fisher households in the county. Two AoIs of the Project, Tongxiao Township (380 households, 19.9%) and Yuanli Township (241 households, 12.6%), represented the third and fourth largest concentrations of fishery households in Miaoli County. The distribution of fishery households in Miaoli County shows a clear concentration in coastal townships.

Table 4.6: Numbers of fishing households in Miaoli County

Township	Number of Fishery Households
Houlong Township	598
Zhunan Township	476
Tongxiao Township	380
Yuanli Township	241
Toufen City	117
Miaoli City	58
Other non-coastal townships*	44
Total	1,914

Note*: Other non-coastal townships include Zaoqiao Township (13), Gongguan Township (9), Xihu Township (6), Tongluo Township (4), Touwu Township (4), Nanzhuang Township (2), Sanwan Township (2), Zhuolan Township (1), Dahu Township (1), Sanyi Township (1), and Tai'an Township (1).
Source: Accounting and Statistics Department, Miaoli County Government, (Taiwan, ROC). Miaoli County Government 2023 Statistical Yearbook, 苗栗縣政府 112 年統計年報.pdf. Accessed page 48 on 21 March 2025. The next census will be conducted in 2025

As of 2023, all 1,914 fisher folk households in Miaoli County are coastal fisher folk households, with a population of 9,574 fisher folk[37]. The number of people actively employed in different

[36] Fisheries Agency, Ministry of Agriculture. 2023 Fisheries Statistics Annual Report. 民國 112 年(2023)漁業統計年報(農業部漁業署) (fa.gov.tw).民國 112 年(2023)漁業統計年報(農業部漁業署) (fa.gov.tw). Accessed on 26 December 2024.

[37] Fisheries Agency. 2023 Fishery industry statistics annual report (fa.gov.tw). Accessed '4. Fisheries household and population' on 26 December 2024.

types of fisheries activities in Miaoli County each year from 2014 to 2023 are provided in Table 4.7.

Table 4.7: Number of people actively employed in different types of fisheries in Miaoli County

Year	Total people	Far sea fishing	Offshore fishing	Coastal fishing	Marine aquaculture	Inland fishing	Inland aquaculture
2014	9,651	-	-	9,651	-	-	-
2015	9,503	-	-	9,503	-	-	-
2016	9,460	-	-	9,460	-	-	-
2017	9,409	-	-	9,409	-	-	-
2018	9,334	-	-	9,334	-	-	-
2019	9,363	-	-	9,363	-	-	-
2020	10,666	-	-	10,666	-	-	-
2021	9,775	-	-	9,775	-	-	-
2022	9,699	-	-	9,699	-	-	-
2023	9,574	-	-	9,574	-	-	-

Source: Fisheries Agency, 2024[38]

Based on the numbers, it is not definitive to conclude that the fishery community in Miaoli County is decreasing, as historical data shows a resurgence of coastal fisher folk in 2020. However, various community leaders shared in their KIIs that there are fewer younger generations willing to fish, with the youngest fisher folk being over 40 years old. As such, Miaoli's fishing village is gradually aging and in decline.

As based on public data, there are no oyster farming households[39] present in Miaoli County. Based on information provided, the project cable laying area is not in proximity to any oyster farm areas, and that it plans to pull its offshore export cables through the state designated Fangli cable corridor (房裡廊道)[40] to reach their landing point.

Table 4.7 further shows that Miaoli County does not have any registered fisher folk households conducting far sea fishing, offshore fishing, inland fishing, marine aquaculture or inland culture. In regard to aquaculture farmers (海面養殖漁戶), based on the Fishery Annual Report (FAR) 2023[41], Miaoli County does not have any registered (offshore) aquaculture farmers (see Table 4.7), and no quantity of (offshore) aquaculture production (see Table 4.4). Thus, they are not an existing affected group within Miaoli County. Inland culture farms (內陸養殖) are found on the coasts near Tongxiao fishing port and Yuangang fishing port (see Figure 1.1). Although there are no registered inland aquaculture households (see Table 4.7), there is some inland culture fisheries production in 2023 (see Table 4.4). Based on the household surveys conducted in March 2025, it was found that a small number of households identified general aquaculture (養

[38] Fisheries Agency, Ministry of Agriculture. 漁業統計年報(農業部漁業署) 漁業從業人數 (fa.gov.tw). Accessed 9 April 2025.

[39] Fisheries Agency, Ministry of Agriculture. Aquaculture fishery stock quantity platform. 農業部漁業署-養殖漁業放養量查詢平臺. Accessed 3 December 2024. 農業部漁業署-養殖漁業放養量查詢平臺. Accessed 3 December 2024.

[40] Taiwan Power Company (9 November 2023). Offshore windfarm development common corridors 台灣電力公司-離岸風電開發相關公告-公告「離岸風力發電區塊開發共同廊道」. Accessed 15 January 2025.

[41] Fisheries Agency, Ministry of Agriculture (30 August 2024). 2023 Fisheries Statistics Annual Report. 民國 112 年(2023) 漁業統計年報(農業部漁業署). Accessed 25 March 2025.

殖) as one of their work status, in addition to fishing.. From site visit discussions with the subconsultant and KII stakeholders, as well as from household survey results, it is understood that some fisher folk do not solely work in fishing, but have other work like temporary jobs or forestry roles, to support their income. However, majority respondents identify income from fishing activities/fish catches to still be their main source of income.

For the specific purposes of this FSIA, impacts from the project on inland culture farmers are currently scoped out of the assessment for the following reasons:

1. Inland culture farms in Miaoli County are not in proximity to the Project footprint
2. Households identifying aquaculture as part of their work status are not present in Yuanli Township, where the Project's landing point and onshore footprint are located
3. Inland culture farms in Miaoli County utilise freshwater ponds, and considering the distance from the Project footprint, these farms are not expected to be impacted by offshore works

Where any scoped out stakeholders are encountered during further site surveys and stakeholder engagements conducted by the Project Company, these assumptions will be revisited.

The main fishing activities in Miaoli County's Tongyuan EFR area are:

- Long line fishing
- Pole and lines boote fishing
- Gill net fishing
- Fry fish capture

There are a total of 13 fishing ports in Miaoli County, of which five (5) fishing ports are under the TFA's jurisdiction. Table 4.8 below presents the number of registered vessels under each fishing port, maximum vessels observed and recorded utilising the ports, as well as the total inbound and outbound trips made annually. These values are found based on records over the recent five (5) years up to 2024 and had been collected and obtained from the subconsultant undertaking the Project Company's socioeconomic baseline survey groundwork.

Table 4.8: TFA fishing port statistics in the recent five years up to 2024

Fishing port	Township	Registered vessels under TFA	Maximum vessels observed	Total inbound and outbound trips
Tongxiao fishing port (通霄漁港)	Tongxiao Township	150 - 160	80 - 90	8,000 - 8500
Yuangang fishing port (苑港漁港)	Yuanli Township	70 - 80	30 - 40	2,500 – 3,000
Yuanli fishing port (苑裡漁港)	Yuanli Township	40 - 50	10 - 20	1,000 – 1,500
Baishatun fishing port (白沙屯漁港)	Tongxiao Township	80 - 90	10 - 20	500 – 1,000
Xinpu fishing port (新埔漁港)	Tongxiao Township	40 - 50	<10	<150

Source: Mott MacDonald, 2024

The fishing fleet by type, size and tonnage in Miaoli County are provided in Table 4.9 as of 2023. Fishing fleet under TFA as of 2024 are also presented in Table 4.9. Vessels CTS, CTY,

CTX, CTR are those that operate only in coastal seas. The others (ie CT0, CT1, CT2 and CT3) operate in coastal seas as well as potentially up to offshore seas area[42].

Table 4.9: Fishing fleet operating in Miaoli County by size

Fishing boat/vessels	Miaoli County Total	TFA Total
Powered sampan[43] (CTS, 動力舢舨)	117	36
Non-powered rafts (CTY, 無動力漁筏)	2	0
Non-powered sampans (CTX, 無動力舢舨)	1	1
Powered rafts (CTR, 動力漁筏)	549	366
Powered fishing crafts (動力漁船) below five tonnes (CT0)	50	3
Powered fishing crafts over five tonnes to under 10 tonnes (CT1)	4	1
Powered fishing crafts over 10 tonnes to under 20 tonnes (CT2)	7	0
Powered fishing crafts over 20 tonnes to under 50 tonnes (CT3)	2	0
Total	**732**	**407**

Source: Fisheries Agency, 2023[44] and TFA

4.5 Cultural heritage

Section 6.11 and 6.12 of the Project's EDA report presents findings of tangible and intangible cultural heritage onshore and underwater. Within a 500m radius from the Project's onshore components, four (4) tangible cultural heritages were recorded. For offshore cultural heritage, the Project's EDA identifies six underwater cultural sites near the Project's offshore site. There are no overlaps with any sunken ships as identified by the Cultural Heritage Bureau. Table 4.10 below presents the findings of these tangible cultural heritage.

Table 4.10: Tangible cultural heritage close to the Project

Heritage type	Cultural heritage name	Distance to closest Project component (m)
Onshore		
Historical architecture (歷史建築)	Yuanli Fangli Shuntian Temple (苑裡房里順天宮)	320
Historical architecture	Yuanyuan Relay Station (原苑裡中繼所)	470
County-designated historic site (縣定古蹟)	Fangli No. tsaichunsheng (房裡蔡泉盛號)	270
Archaeological site (考古遺址)	Zhentoushan archaeological site (枕頭山遺址)	500
Offshore		
Possible ship	-	506
Possible ship	-	6063
Line shape	-	484
Possible abandoned submarine cable	-	122

[42] Marine Bureau, Kaohsiung City Government. Vessel types. 海洋局-船筏種類 (kcg.gov.tw).海洋局-船筏種類 (kcg.gov.tw). Accessed 26 December 2024.

[43] A small wooden, canoe-like boat typically propelled by oars

[44] Fisheries Agency. 2023 Fishery industry statistics annual report (fa.gov.tw). Accessed '6. Fisheries Boats and Vessels Statistics' on 26 December 2024.

Covered object	-	1304
Possible fish reef	-	158

Source: Project Company's EDA, June 2024

4.6 Infrastructure – water, sanitation, and health

By the end of 2023, 95% of Taiwan's population has access to safe drinking water via the public supply system. Usage of public supply water is generally in rural areas where people may use private wells and incentive to connect to the paid-for public water supply system is low[45][46].

Traditionally, water has been cheap for consumers in Taiwan and as a result, consumption has been high. In an attempt to stem demand in the face of water scarcity which can impact businesses, prices have been increased in 2018 by the State's water utility company, Taiwan Water Corp, but usage remains high[47]. Although the country had experienced its worst drought in 2021 (or within 56 years to 2021), water consumption continued to rise in 2021. The upward trend in water consumption may be attributed to increased hand washing and sanitisation practices during the COVID-19 pandemic[48]. No other major drought has occurred since.

The healthcare system in Taiwan is based on a compulsory social insurance plan and a centralised system disburses healthcare funds. It is designed to provide equal access to healthcare for all citizens and reduce health disparities. In general, there is good accessibility to healthcare, comprehensive population coverage as well as short waiting times and low costs. However, quality of care can vary[49]. Taiwan Ministry of Health and Welfare annual reports for 2023 revealed that there were 154 practicing medical personnel (with 33 western physicians, Chinese medicine physicians or dentists) and 73.3 hospital beds per 10,000 of Taiwan's population[50]. For Miaoli County in 2023, there were 99 practicing medical personnel (17 of which are physicians or dentists) and 63.8 hospital beds per 10,000 of Miaoli County's population. Miaoli County's crude birth rate stood at a low 4.4% in 2024, with Taiwan's overall crude birth rate at 5.76% in 2024[51]. These are similar rates Hong Kong SAR (5.42%), slightly above Republic of Korea (4.66%) and slightly lower than Japan (6.07%)[52]. Miaoli County's crude death rate Taiwan's crude death rate is 10.64% in 2024, with Taiwan's overall crude

[45] Taiwan Water Corporation (5 August 2024). TAIWAN WATER CORPORATION-Message from Chairman. Accessed 3 February 2025.

[46] Stantec. Connecting Rural Taiwan to the Public Drinking Water Supply. Accessed 3 February 2025.

[47] Chang, Yen-Ming (28 December 2018). Price hikes are not the only way to save water, Taipei Times. Retrieved 23 July 2024.

[48] Huang, Pei-Chung and Kayleigh Madjar (12 March 2021). Water consumption rises despite record drought: WRA. Retrieved 23 July 2024.

[49] Wu, Tai-Yin, Azeem Majeed and Ken N. Kuo (December 2010). An overview of the healthcare system in Taiwan, London J Prim Care. Retrieved 23 July 2024.

[50] Ministry of Health and Welfare (24 December 2024). Health and Welfare Statistics (mohw.gov.tw) Retrieved 3 February 2025 from '1.6 Number of medical institutions, and number of beds' and '1.7 Number of practicing medical personnel'.

[51] Ministry of Interior (10 July 2024). List of Statistics 列管統計項目 (moi.gov.tw). Retrieved 3 February 2025 from 'Number of Rates of Birth, Death, Marriage and Divorce'.

[52] UN Data (16 October 2024). World Population Prospects: The 2024 Revision - Crude birth rate (births per 1,000 population). Retrieved 3 February 2025.

death rate at 8.63%. This is similar to other developed nations such as Switzerland (8.42%) and United States of America (8.82%)[53]. The top five (5) causes of death as of 2023 include cancer, heart diseases, cerebrovascular disease, pneumonia and diabetes[54].

In the Project's AoI, the main medical service centre is Lee General Hospital in Yuanli Township, approximately 1.5km away from OSS.

4.7 Land use

Miaoli County spans an area of 1,820km^2 and encompasses 18 townships. Tongxiao Township has an area of 107km^2 while Yuanli Township has an area of 68km^2. In 2021, Miaoli County prepared a Miaoli County Public Land Use Plan[55], outlining the trajectory of land use development within the northern, central, southern and eastern areas of Miaoli County. The Southern area townships, which encompass Tongxiao and Yuanli Township, will be developed with humanities and technology as core principles, combining technological advancement development with the area's religious and cultural activities, slow city characteristics, as well as the coastal and recreational resources and agriculture activities of the coastal townships. As such, both Tongxiao Township and Yuanli Township have urban planning areas (as seen in Figure 1.1). Section 1.5 outlines the Project's onshore components. The Project's onshore substation is located in the agricultural zone within the Yuanli Township urban planning area, for which the Project obtained the land use permit approval letter on 23 August 2024 from Miaoli County Government. The Project's landing point is situated in Fangli Village, Yuanli Township, in compliance with the Fangli corridor announced by the MoEA, which is classified as a protection and conservation forestry zone land within the Yuanli Township's non-urban area. Land leases for onshore cable routes are currently in the process of being obtained from the Forestry and Nature Conservation Agency.

The total public land area of urban and rural development areas in Miaoli County is 10,499.61 hectares, with urban planning areas making up 7,591.59 hectares (72.3%), rural areas making up 464.33 hectares (4.4%), industrial areas approximately 1,174.48 hectares (11.2%), special-purpose areas (for rural development characteristics) make up 105.86 hectares (1.0%), and non-urban development permittable areas 1,163.35 hectares (11.1%).

4.8 Human rights

As Taiwan is not a member State of the United Nations (UN), it is not featured in indices such as the gender inequality index (GII), produced annually by the UN. The GII measures gender inequalities in three important aspects of human development – reproductive health; empowerment; and economic status[56]. In 2021, Taiwan measured itself using the same criteria

[53] UN Data (16 October 2024). World Population Prospects: The 2024 Revision - Crude death rate (deaths per 1,000 population). Retrieved 3 February 2025.

[54] Ministry of Health and Welfare (22 March 2024). Health and Welfare Statistics (mohw.gov.tw) Retrieved 3 February 2025 from '3.17 Main causes of death statistics'.

[55] Miaoli County (December 2024). Miaoli County Public Land Function Zoning Report. 苗栗縣國土功能分區圖繪製說明書 (草案). Retrieved 4 February 2025.

[56] Reproductive health is measured by maternal mortality ratio and adolescent birth rates; empowerment is measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and economic status is measured by labour force participation rate of

and found that it would be ranked 7th in the world on the GII if it were included, with the number one ranking indicating the least amount of gender disparity in the country.

The unemployment rate in Taiwan is approximately 3.36% as of November 2024[57] and the percentage of the total population living in the low-income households (ie population living below the poverty line) in 2022 was low, at 1.25% (n. 288,703)[58]. According to the law established by Workforce Development Agency, Ministry of Labour, at least 3% and 1% of the workforce in the public and private sectors, respectively, should be persons with disabilities[59].

Vulnerability for children in the Project's area of influence manifests through their rights not to be subjected to slavery, servitude or forced labour, rights to adequate standard of living (eg poor healthcare and poverty) and rights to education.

The legal minimum age for employment in Taiwan is 15. An exception is made to allow children younger than 15 to work, if they have completed junior high school and appropriate authorities have determined the work will not harm the child's mental and physical health. Taiwanese law prohibits children younger than 18 from carrying out heavy or hazardous work and the maximum working hours for children is eight hours per day. Children are also not allowed to work overtime or work on night shifts[60].

Child labour is one of the potential human rights risks for supply chain of offshore windfarm, primarily through raw materials and mining of minerals. Child labour has been documented for specific forms and locations of mining activities, particularly locations with high levels of poverty in surrounding communities[61]. Child labour is confirmed in cobalt mines in Democratic Republic of Congo (DRC) with potential occurrences reported in mines in China and South Africa[62].

The U.S. State Department, in its 2024 Trafficking in Person Report, acknowledged Taiwan's dedication to fighting trafficking. This indicates that Taiwan has fully met the minimum standards outlined in the U.S. Trafficking Victims Protection Act of 2000. Taiwan's persistent efforts, such as improved inspections and the referral of suspected forced labour incidents on fishing vessels for investigation, have contributed to this recognition.

In July 2023, the government has approved an Action Plan for Fisheries and Human Rights which set out measures to improve the working and living conditions of foreign crew working on

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female and male populations aged 15 years and older. The higher the GII value (up to 1), the more disparities between females and males and the more loss to human development.

[57] Gender Equality Committee of the Executive Yuan (28 September 2022). Gender Inequality Index, GII (ey.gov.tw), retrieved 22 July 2024.

[58] Unemployment Rate (2024), National Statistics (most recent published), National Statistics, Republic of China (Taiwan)-Unemployment Rate, Accessed 27 December 2024.

[59] People with Disabilities Rights Protection Act (20 January 2021), People with Disabilities Rights Protection Act - Laws & Regulations Database of The Republic of China (Taiwan) (moj.gov.tw), Accessed 27 December 2024.

[60] American Institute in Taiwan (6 June 2024). Taiwan 2023 Human Rights Report (ait.org.tw). Accessed 27 December 2024.

[61] UNICEF (2022). Eliminating Child Labour: Essential for Human Development and Ensuring Child Well-being. Unicef - eliminating child labour (unicef.org). Accessed 27 December 2024.

[62] Actionaid (January 2018). Human rights in wind turbine supply chains: towards a truly sustainable energy transition. Final-ActionAid_Report-Human-Rights-in-Wind-Turbine-Supply-Chains.pdf (somo.nl). Accessed 27 December 2024.

Taiwan-registered fishing vessels. The plan also included measures aimed at developing coordinated government responses to preventing human trafficking.

4.9 Supply chain

The sourcing of raw materials in mineral supply chains can potentially have negative impacts. The supply chain for OWFs, which primarily consists of raw materials and minerals, may lead to impact of forced labour, child labour, and occupational health and safety issues.

Forced labour may involve using local people, unskilled workers, or trafficked migrant workers to extract the raw materials for OWF components. In locations with high poverty levels, child labour may also be used for this purpose. Additionally, mining activities, including small-scale mines, can directly impact occupational health and safety. The use of hazardous chemicals, heavy equipment, and poorly designed tunnels can potentially violate the rights of workers. Furthermore, the extraction of raw materials can lead to the contamination of water sources with salt and toxic chemicals, reducing the availability of fresh water.

While the WTG supplier for the Project has not yet been formally appointed, a preferred supplier has been selected. The Project Company will adopt the parent company's Good Business Conduct Policy and Code of Conduct for business partners for all business activities. These policies are in place to ensure that all Project's suppliers will adhere to UN Guiding Principles on Business and Human Rights. This framework provides a universally accepted framework for operational due diligence, which can be applied to identify, prevent, mitigate and remedy adverse impacts on the rights and principles expressed in the Code. The Project expect business partners to avoid and address adverse impacts on human and labour rights as listed in International Bill of Human Rights and the International Labour Organisation's declaration on Fundamental Principles and Rights at Work. Business partners are expected to adhere to the specific human right expectations as well as comply with the company's Human Rights Policy.

F4 Environmental and social management policy and SRE Human Rights Policy has been provided to show the Project's commitment to ensure contracted and supply chain parties will also adhere to IFC PS and the applicable standards, including respect for labour and human rights, environmental stewardship and anti-bribery and corruption. A project-specific LMP was developed to manage workforce-related matters and ensures alignment with corporate policies as well as other management systems. The LMP would cover aspects of monitoring and auditing of contractors, sub-contractors and supply chain workers, and will be incorporated into the Project's ESMS or ESMP as appropriate.

In addition, all contractor companies are contractually obliged to prepare their own suite of ESMP documentation, including but not limited to Human Resources Policies, and OHS plans, to be reviewed for compliance by the Project, or to contractually agree to abide by the Projects' plans and procedures this policy applies to all internal employees as well as appointed contractors in their execution of work for the Project. The Project Company requires third parties to have an environmental and social management system, and good environmental, social, and human rights practices were key criteria in procurement decisions. These are covered within the Project's Employer Requirements.

The project has established explicit obligations within its conditions of contract, requiring contractors, sub-contractors, and suppliers to adhere to the Project Company's Code of Conduct. F4 retains the right to perform inspections and audits of the contractors' systems to ensure compliance with the Code of Conduct. Non-compliance is addressed through provisions allowing the Project to terminate the contract if the contractor violates the requirements of the Code of Conduct, anti-corruption clauses, or commits prohibited acts. Contractors are also

required to warrant that adequate procedures are in place to prevent conduct leading to offenses under anti-corruption laws. These mechanisms are explicitly included as clauses within the contractual agreements. The Code of Conduct is prioritised within the hierarchy of documents in the conditions of contract and extends its provisions to subcontractors, ensuring consistent adherence and enforcement across all parties involved.

5 Impact identification, significance attribution and management measures

The scoping matrix in Table A.2 of Appendix A identified aspects affecting receptors that would lead to the impacts identified below. The sections below present the impact, indicate its significance using the methodology described in Section 3.3.5, and then identifies management measures. Management measures include mitigation and enhance measures. The mitigation hierarchy has been used to:

- Avoid and reduce impacts through design (embedded mitigation)
- Abate impacts at source or at receptors
- Repair, restore or reinstate to address temporary construction impacts
- Compensation for loss or damage

Consideration has also been given to the identification of enhancement measures. Enhancement measures are actions and processes that go beyond the mitigation hierarchy and beyond compliance requirements to:

- Create new positive impacts or benefits
- Increase the reach or amount of positive impacts or benefits
- Distribute positive impacts or benefits more equitably

The Project's identified social impacts listed here are discussed further below:

- Human rights
- Labour and working conditions
- Amenity and environment
- Community health, safety and security risks
- Economic displacement and livelihoods
- Culture and sense of community

5.1 Human rights impact

With the growth of wind energy projects within Taiwan and reduce carbon emissions, there is also a growing potential for human rights infringements upon the Project's workforce, supply chain workforce and local community and workforce. Poor working conditions, failure to consider and respect rights of affected stakeholders are all causes that may lead to human rights impacts or infringement.

The Project is currently developing a HRIA. The HRIA identifies and assesses the Project's potential human rights impacts and assists in improving the Project's social management and mitigation measures with the current available data. Measures safeguard and facilitate meaningful engagement with affected communities and workers. The most up-to-date analysis on human rights impacts and impacts will be found and presented in the Project's HRIA.

Impact analysis

The Project workforce is deemed to be those engaged directly by the Project Company, the EPC contractor and its sub-contracted workers working at the port and onshore substation sites. It also includes those working at the offshore WTG and cabling sites. Supply chain workforce

includes those engaged by primary suppliers which, on an ongoing basis, provide goods or materials essential for core business processes of the Project.

The local community include fishers, in particular registered vessel owners who have access to TFA's EFR area. The fishers' employees and family members, non-registered fishers, and those engaged in the fishing supply chain such as migrant or local deckhands are also considered as local community.

Offshore wind farm projects may pose various human rights impacts. These include potential violations related to working hours and occupational health and safety (OHS), risking injuries or fatalities without clear guidelines, proper use of PPE, and regular safety inspections. Migrant workers may face discrimination and lack awareness of their rights. To address this impact, the Project has implemented an HR policy, a business partners' code of conduct, and a contractor's code of conduct to ensure safe working conditions and safeguard workers' rights.

Additional concerns include failure to provide access to remedy for the workers and impacted community, neglecting the needs of women and vulnerable groups in consultations, infringements on privacy through data breaches, and supply chain-related human rights violations. The latter includes impacts on workers' rights, environmental health, and living standards linked to wind turbine production.

Impact significance

The magnitude of the human rights impact for the Project workers during the construction phase is considered **'major'**, due to:

- Temporal: construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years).
- Spatial: The impacts are small/limited to construction sites and their immediate surroundings, making the scope of human rights risks spatially confined. This includes impacts related to inadequate safety measures, violations of working hours, or exposure to hazardous materials specific to the workers' environment.
- Degree of change: The degree of change for workers can be major, as the construction phase may bring heightened exposure to OHS hazards, long or irregular working hours, and potential violations of labour rights, which could cause physical or psychological harm. These changes, while impactful, can be mitigated through clear policies, proper safety measures, and regular inspections.
- Reversibility: Many impacts on workers' rights can be reversible with appropriate interventions, such as providing compensation for injuries or addressing labour rights violations. However, severe impacts, such as fatalities or permanent injuries, are irreversible.

The sensitivity of the workers is considered **'medium**,' as the construction workforce will likely comprise members of the local community, with no to minimal involvement of migrant workers. However, it is possible that these workers are already vulnerable, with limited capacity and resources to adapt to changes or cope with potential disruptions to their livelihoods.

Combining '**major'** magnitude with '**medium'** sensitivity leads to a '**major'** human rights impact on workers during construction phase.

For the operational phase, the magnitude of the impact is also considered '**major'**. However, the sensitivity is regarded as **'low'**, as employees during this phase will be directly contracted

under F4. Hence, combining '**major'** magnitude with **'low'** sensitivity leads to a '**moderate'** human rights impact on workers during operational phase.

Management and enhancement measures

Table 7.1 of the Project's HRIA summarises the existing and proposed mitigation measures for all identified impacts. Below is the summary of the measures for each high severity impact:

- Impact to workers and community rights to health or life
  - Labour and management documentations, including quality health, safety and environmental (QHSE) policy, Environmental and Social Management Policy and Plan, healthy, safety and environment (HSE) management plans onshore and offshore, contractor selection, evaluation and management procedures, human rights policy, diversity, equity and inclusion procedures, prevention, correction, complaint, and punishment of sexual harassment instruction, project level business partners code of conduct, and HR policy.
  - Project specific Emergency Response Plan with first aid station, mustering areas and evacuation route
  - Marine pollution emergency response plan
  - Navigation safety plan
  - Traffic maintenance plan
  - Direct check-ins, inspections, and audits
  - Training certification verifications
  - Safety observations system to promote no-blame culture
- Livelihood:
  - The Project is currently developing a LRP in accordance with IFC PS 5. The LRP covers compensation framework to identified vessel owners as well as other restoration programmes for non-vessel owners or vulnerable groups.
  - Other mitigations are presented in the Section 5.5 'economic displacement and livelihoods'
- Impacts to access to remedy:
  - The Project has a concerns log for Project workers
  - Project's Code of Conduct for business partners requires contractors and suppliers to also have a grievance/whistle blowing mechanism and management in place
  - Project Company to appoint a community liaison officer of Project to develop relationship with local community and one or more human rights NGOs.
- Human rights within supply chain:
  - SRE Human Rights Policy
  - SRE Diversity, Equity and Inclusion Procedures
  - SRE DE&I Concerns log
  - F4 Code of Conduct for Business Partners
  - Contractors Codes of Conduct
  - SRE Good Business Conduct Policy
  - Suppliers operating in high-risk locations undergo thorough Counterparty Risk Assessments (pre-qualification evaluations, desktop analysis, assessment questionnaires, and on-site audits)

The project has established explicit obligations within its conditions of contract, requiring contractors, sub-contractors, and suppliers to adhere to the Employer's Code of Conduct. The Employer retains the right to perform inspections and audits of the contractors' systems to ensure compliance with the Code of Conduct.

Non-compliance is addressed through provisions allowing the Employer to terminate the contract if the contractor violates the requirements of the Code of Conduct, Anti-Corruption clauses, or commits Prohibited Acts. Contractors are also required to warrant that adequate procedures are in place to prevent conduct leading to offenses under Anti-Corruption Laws.

These mechanisms are explicitly included as clauses within the contractual agreements. The Code of Conduct is prioritised within the hierarchy of documents in the conditions of contract and extends its provisions to subcontractors, ensuring consistent adherence and enforcement across all parties involved.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted workers can be lowered to '**low'** and the human right residual impact significance becomes **'moderate'** during construction phase. During the operational phase, the residual impact significance becomes **'minor'**, noting that the vulnerability of affected workers cannot be overlooked.

Table 5.1: Human rights impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Major	Major	Medium	Low	Major	Moderate	Moderate	Minor

5.2 Labour and working conditions

5.2.1 Employment generation

Building an OWF farm requires a substantial workforce. According to the Project's EIA, the maximum number of construction workers at the same time is 90. These projects have the potential to create numerous jobs and stimulate economic growth. By involving local communities in the planning and development process, employment opportunities can be provided, and local businesses can thrive. Moreover, OWF projects may generate jobs not only during construction but also throughout their operational lifetime.

Impact analysis

Local employment opportunities within the Area of Influence (AoI) will be generated by the Project during both construction and operational phases. During the peak period, over 90% of the workforce will typically be working offshore. In the operational phase, the workforce is expected to consist of skilled labour or white-collar workers.

It is expected that some workers from the Area of Influence (AoI) will be employed during the peak construction period. During the onshore construction phase, which includes cable laying and the onshore substation, contractors will be utilised. Typically, local employees are required for the construction of the onshore substation. This presents potential employment opportunities for both skilled and unskilled labour from the local area. In the offshore construction phase, most of the jobs will require specialised skills. However, there will also be opportunities for

guard vessels and marine mammal observers (MMOs). In this case, the Project may appoint local fishery community members. Based on the Project's EIA, piling construction vessels will allocate three MMOs to ensure no cetaceans are in the alert zone (ie radius 750m) 30 minutes before or during the piling works. If any cetaceans are observed, this would trigger the stop-working and resumption mechanism for the piling process. The commitments were noted to be generally aligned with the provisions of Taiwanese OWF to date. Furthermore, there is a possibility for preferential employment of project affected persons (PAPs), provided that the guard vessels meet the necessary vessel specifications and certifications. During the operation and maintenance (O&M) phase, there will be job opportunities available typically requiring specialised skills.

Impact significance

The magnitude of the positive impact of employment generation is considered ‘minor’ during the construction phase and operation phase, due to:

- Temporal: Construction employment is short-term (four years), operational employment will be long term.
- Spatial: Spatial scope of impact will mostly be limited to the townships at Miaoli coastal area.
- Degree of change: Many construction jobs will be created, and fewer operational jobs will be created, with some available to local people. Operational staff with specialised skills can be expected to move and reside in the area, contributing to local skilled workforce. The employment opportunities for local workers will positively impact their families’ well-being and improve their quality of life. Additionally, the earnings of local workers being spent on local products and services will generate further socioeconomic advantages. Migrant workers often send money back to their families, which in turn benefits other regions.
- Reversibility of impact: Most of the construction jobs will end within few years so the employment benefits will soon end, however there will be operational employment which will continue and contribute to the local economy.

The sensitivity of local people who are employed is considered **‘medium’** given that most residents may lack skills and experience to capture skilled and higher paid employment opportunities. However, they can still be employed as unskilled workers during the construction phase. The sensitivity of the operational workers is **‘low’** because they have the required skills and a regular income.

Combining minor magnitude with medium sensitivity leads to a positive impact of **‘minor’** significance during construction phase. Combining minor magnitude with low sensitivity leads to **‘negligible’** impact for the operation phase.

Management and enhancement measures

It is suggested that the Project Company aims to hire locally where possible, including hiring local-based contractors to source local employees for onshore work. Although construction job opportunities will be only available during the construction phase, Project Company LRP covers training and job opportunities that transfer beyond the lifecycle of the Project. These include patrol vessel roles and training to become MMO observers (ie which develop skills that could be deploy in other OWF projects, other than just the Project).

The Project Company has described a brief decommissioning plan with the project’s final EIS. The Project Company is also committed to propose a decommissioning plan, according to

Environmental Impact Assessment Act, one year prior to the decommissioning, whereby the plan may revisit the impacts and mitigation measures of employment and labour, if required.

Appropriate safeguards need to be in place for the impact of employment generation to generate as much benefit as possible. The Project Company will adhere to the documentations as presented in Section 2.4, which sets out responsibilities and management practices associated with the management of labour during the Project's lifecycle. The Code of Conduct (CoC) for Business Partners and Contractors is also in place with associated procedures and requirements in line with Taiwanese labour laws to ensure human rights, non-discrimination, retrenchment and protection of child or forced labour safeguards are adhered to for employees, contractors and suppliers. Managing and maintaining workers' rights is essential during Project construction and operation. Further management measures relating to OHS are elaborated in Section 5.3.2 below.

Residual impact significance

In addition to the details above, more details and updates on employment mitigation measures can be found in Section 8 of the HRIA. Livelihood incomes and employment are also addressed in various sections of the LRP. Therefore, with the mitigation and enhancement measures in place, the vulnerability of the workforce decreases, correct treatment creates more resiliency, and the positive impact and benefits increase such that the residual impact significance is considered **'moderate'** for the construction phase and **'minor'** for the operation phase as presented in Table 5.2.

Table 5.2: Employment generation impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Minor	Minor	Medium	Low	Minor (positive)	Negligible	Moderate (positive)	Minor (positive)

Source: Mott MacDonald, 2025

5.2.2 Labour and working conditions

Impact analysis

Without appropriate safeguards in place, it is possible that workers' rights may be impacted during Project construction and operation. This impact extends to employees directly engaged by the Project, contractors and subcontractors, and workers located within the Project's supply chain. Migrant workers become vulnerable to impacts due to language barriers or lack of understanding of judicial processes in country that is not their own.

As mentioned in Section 5.2.1 above, local employment opportunities within the Area of Influence (AoI) will be generated by the Project during both construction and operational phases. During the peak period, over 90% of the workforce will typically be working offshore. In the operational phase, the workforce is expected to consist of skilled labour or white-collar workers.

Potential impacts that may arise due to lack of safeguards include terms and conditions of employment, discrimination and unequal opportunity, incorrect or withheld salary payments occupational health and safety, child or forced labour, prevention of participation in workers associations, and/or lack of access to a grievance mechanism.

Migrant or foreign workers are especially vulnerable to impacts related to labour and working conditions when they do not speak the language, do not understand their rights or terms of

employment or slip through the gaps. Furthermore, migrant or foreign workers may not be entitled to the same labour rights, insurance or pensions as those recruited locally, and also require housing or have accommodation needs that a local workforce may not have to consider. Within the Project's HRIA, the main human rights issues relating to labour identified for migrant workers are the sub-standard living conditions, lack of safety and sanitation provisions and mistreatment by employers and managers. According to the Project company, little to no migrant workers will be involved since the hiring process will be mostly conducted locally.

Impact significance

The magnitude of the negative impact associated with labour and working condition is considered **'moderate'**, due to:

- Temporal: construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years).
- Spatial: Worker's individual accommodations and working area.
- Degree of change: The degree of change is expected to be medium, as workers may face challenges such as long or irregular working hours, substandard living conditions in their accommodations, and risks of discrimination. These factors highlight notable impacts on workers' well-being and quality of life, although the extent of these issues may vary depending on the safeguards and support systems implemented by the project.
- Reversibility of impact: straightforward technical requirements can be made to remedy the potential impacts if identified through monitoring and/or management intervention.

The sensitivity of the impacted workers is considered **'high'** given the presence of the construction workers, who will constitute the majority of the Project workforce. These workers may not be visible and are often not regarded as the direct responsibility of the contractor or the Project.

Combining **'moderate'** magnitude with **'high'** sensitivity leads to a **'major'** negative impact on working condition during construction phase. For the operational phase, the sensitivity is anticipated to be '**medium'**, as the majority of the workforce is expected to be directly contracted by F4. This arrangement is likely to result in a '**moderate'** negative impact during the operational phase.

Management and enhancement measures

Appropriate safeguards need to be in place to reduce labour and working condition impacts whilst allowing for the impact of employment generation to generate as much benefit as possible. Managing and maintaining workers' rights is essential during Project construction and operation.

According to the Taiwanese Labour Standards Act 2020, all fixed[63] term and non-fixed[64] term labour contracts are required to adhere to regulations set out in this national legislation. This

[63] A contract in nature for temporary, short-term, seasonal or specific work may be made as a fixed term contract.

[64] A contract for continuous work, should be a non-fixed term contract.

includes individuals in the main project and upstream and downstream supply chain. Working conditions mandated under this law include rules on wages, working hours, retirement, compensation, work rules, working females, supervision and inspection, penal and supplementary provisions, as well as rules against child labour. This is largely aligned with the International Labour Organisation's (ILO) conventions and recommendations[65].

The Project Company has developed the following core policy documents and systems for managing labour rights. These policies cover topics on reasonable working conditions, migrant workers and substantially equivalent terms, workers' organisations, non-discrimination and equal opportunity, child labour, forced labour, occupational health and safety, gender, monitoring, and labour management. These policy documents include:

- SRE's Human Rights Policy
- SRE's Diversity, Equity and Inclusion Procedure
- SRE's DE&I Concerns Log
- SRE's Prevention, Correction, Complaint, and Punishment of Sexual Harassment Instruction
- F4 Health and Safety Plan
- Training certification verifications
- Safety observation system to promote no-blame culture
- Contractors Code of Conduct
- F4 Code of Conduct for Business Partners
- SRE's Good Business Conduct Policy
- F4 Project Audit Procedure
- SRE's Seconding Human Resources for Project Companies Management Instruction

The Project Company requires third parties involved in the Project to implement environmental and social management systems and adhere to strong environmental, social, and human rights practices. These criteria are essential for procurement decisions. However, there is uncertainty regarding the Project Company's internal supplier due diligence program, which is crucial for enhancing the transparency of workers' labour rights. Implementing a comprehensive due diligence program with regular audits, especially for high-risk suppliers, is recommended to identify and mitigate potential labour rights violations.

The supply chain for key products, such as turbines, may involve high-risk contexts, and immediate rectification or mitigation measures should be prescribed where applicable. Despite Taiwan's non-ratification of the ILO Convention on Forced Labour, the Project Company's commitment to prevent forced labour is evident in their Human Rights Policy, which applies to all workers, whether directly hired or recruited through brokers. Based on the SAQ results, one of the contractors noted that suppliers in high-risk locations undergo comprehensive Counterparty Risk Assessments, including pre-qualification evaluations, desktop analysis, assessment questionnaires, and on-site audits.

Additionally, the Human Rights Policy includes commitments to prohibiting child labour, respecting community health and safety, engaging in community relations, ethical hiring and procurement practices, freedom of association, and the right to collective bargaining. It also covers grievance mechanisms, fair treatment for migrant workers, non-discrimination, remuneration, security arrangements, employment terms, working hours, and workplace health and safety. These commitments should be reflected in the Project Company's management

[65] List of ILO instruments by subject and status

policies, such as HR policy, E&S policy, and code of conduct, to demonstrate a strong commitment to human rights.

Potential human rights impacts associated with OWF include violations of working hours. It's crucial to establish clear guidelines and monitoring systems to ensure compliance with legal working hours. The Code of Conduct for Business Partners requires preventing employees from working over 60 hours per week or exceeding legal limits. This helps prevent overwork and protect workers' well-being.

Migrant workers' rights also need attention. Many lack understanding of their contracts and rights, indicating the need for better communication and education. There is limited awareness of grievance mechanisms and potential discrimination based on nationality and gender. Improving awareness, ensuring non-discriminatory practices, and providing training to prevent discrimination are vital steps to protect migrant workers' rights.

Occupational health and safety (OHS) is another key area of concern. The Environmental Impact Assessment (EIA) identified weather conditions and installation faults as primary risks. Potential incidents include exposure of submarine cables, oil spills, fires, collisions, or grounding of operation vessels. The Project's Health and Safety Plan addresses these risks for all personnel, including contractors and subcontractors. Providing personal protective equipment (PPE), conducting regular safety inspections, and holding training sessions are essential measures to ensure safety.

The Project Company has developed an Emergency Response Plan to minimise casualties, mitigate damage and environmental impacts, and recover from incidents. This plan applies to all offshore and onshore sites and covers foreseeable emergency situations like fires, typhoons, earthquakes, adverse weather, and vessel-related incidents.

Workers and communities need access to effective remedies if their human rights are breached during the Project. The Project currently uses a concerns log from its parent company for this purpose. Human rights impacts in the supply chain are mostly related to mining. Although the wind turbine generator supplier has not been appointed yet, the Project Company has an overarching Human Rights Policy in place.

The Project's Environmental and Social Management Policy and Human Rights Policy demonstrate a commitment to ensuring contracted and supply chain parties adhere to IFC Performance Standards and applicable regulations, including labour and human rights, environmental stewardship, and anti-bribery and corruption. The Project had various documents (ie Human Rights Audit Checklist, F4 Project Audit Procedure and F4 Camp HSE Inspection Form) in place to audit and evaluate key labour components/elements associated with contractors, subcontractors, and supply chain workers.

Contractor companies should be contractually required to prepare their own Environmental and Social Management Plan (ESMP) documentation, including Human Resources Policies and Occupational Health and Safety (OHS) plans, to be reviewed for compliance by the Project. Alternatively, they should contractually agree to abide by the Project's plans and procedures. The Project Company requires third parties to have an environmental and social management system, and strong environmental, social, and human rights practices are key criteria in procurement decisions.

Residual impact significance

With the mitigation and enhancement measures in place, particularly audits and inspection in place as part of the procurement process, including for third party or contractors, the magnitude

of this impact for the construction and operational phase is lowered to **'minor'.** The sensitivity of the workforce (from Project workforce to supply chain workforce) can also be lowered to '**medium'** during construction phase and '**low**' during the operational phase. Hence, the negative impact decreases such that the residual impact significance is considered **'minor'** for the construction phase and **'negligible'** for the operation phase.

Table 5.3: Labour and working conditions impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	Moderate	High	Medium	Major	Moderate	Minor	Negligible

5.3 Amenity and environment

5.3.1 Air quality

Air quality is a construction nuisance that may impact the health and safety of local community and its workers. Although based on scoping and the Project's Environmental Differential Assessment (EDA) report results, potential of this impact is considered 'unlikely' (see Table A.2), given the commonality of this nuisance to local community and proximity to some communities, the impacts and relevant committed measures are presented and assessed.

Impact analysis

Onshore construction works of the Project includes earthworks and construction activities as well as associated transportation and mobilisation for the onshore cable and substation. Earthworks and construction activities are expected to generate dust and emit other air pollutants (eg SO2, CO, PMx, TSP), while the vehicles may create dust suspension when travelling. Fugitive dust and air pollutants may lead to health impacts including respiratory issues, discomfort to the eyes and nose. Limited activity is expected upon the onshore cable and substation in the O&M phase, as the substation will mostly be unmanned and only periodic maintenance will occur. As such, air quality impacts in the O&M phase are not expected.

The air quality impacts from the Project's onshore activities had been assessed within the Project's EDA report. According to the air quality modelling and assessment, all pollutants (ie TSP, PM_{10}, $PM_{2.5}$, SO_2, and NO_2), modelled from the onshore substation construction site to nearby social receptors and communities, were in compliance with relevant national and international air quality standards. No significant residual impacts are expected during both construction and operation phases if the EDA prescribed mitigations are accordingly implemented.

The onshore substation site is located near a residential community. The onshore cable between the onshore substation and grid connection point pass by some communities as well,. However, it is expected that the construction work of the cables will be segmented (around 200m per segment) and temporary. Any transportation or construction mobilisation routes for onshore construction works may also utilise some community roads which generate dust or air pollutants; however, it is also expected that these impacts are temporary and minimal.

Impact significance

The magnitude of the negative impact associated with air quality for the local communities and workers during the construction phase is considered 'minor', due to:

- Temporal: construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years). No cumulative impacts or operation phase impacts are expected.
- Spatial: The length of the onshore cables spans several km between the landing point, substation, and the grid connection point. Each segment of cable work that construction is expected to happen in segmented portion.
- Degree of change: It is expected that the amount of air pollutants or dust that may be generated during the construction work will have limited impact to the general area's daily air quality until completion of construction work. Based on the EDA report, it is also modelled that the Project's expected work will be compliant with the Taiwan local air quality regulations.
- Reversibility of impact: Little or limited impacts are perceived for reversibility of the air quality impacts, as the work is short-term in timeline, and temporary in normal working hours per day.

The sensitivity of the impacted community is considered **'medium'** given the proximity of the construction work to certain areas, where community members may have to access or use with no other alternatives (eg have to go to school although it is in proximity to the onshore cable construction areas).

Combining **'minor'** magnitude with **'medium'** sensitivity leads to a **'minor'** negative impact on air quality for local community and Project workers during construction phase.

Management and enhancement measures

Mitigation measures and quarterly monitoring as relating to air quality are as prescribed within the EDA report and will be included within the Project's ESMS and associated E&S management plans. These measures include but are not limited to:

- Dustproof coverups, sprinkling systems and pre-construction cleaning of roads, will be utilised to control fugitive dust from any construction works, transportation or materials
- Select equipment and machinery in good conditions and maintain the condition to reduce air pollutants in exhaust gas
- Offset of air pollutant emissions by subsidising replacement of old vehicles or purchasing decomposing bacteria to treat agricultural surplus materials

The Project also has in place a Health and Safety Plan as well as Emergency Response Plan which outlines the measures and plans against any occupational risks. The Project's SEP commits to communicating construction work to local communities prior to commencement. An overarching GWMP is also in place and will be communicated to workers and communities to raise any issues/concerns.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted communities or workers, as well as their tolerance for any air quality impacts, can be lowered to **'low'** and the negative residual impact significance becomes **'negligible'**.

Table 5.4: Air quality impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M

Minor	-	Medium	-	Minor	-	Negligible	-

Source: Mott MacDonald, 2025

5.3.2 Noise

Airborne is another common construction nuisance that may impact the quality of living of local community and or health of its workers. Although based on scoping and the Project's EDA report results, potential of this impact is considered 'unlikely' (see Table A.2), given the commonality of this nuisance to local community and proximity to some communities, the impacts and relevant committed measures are presented and assessed.

Impact analysis

Onshore construction works of the Project that may produce elevated noise levels also include the general earthworks and construction activities as well as associated transportation and mobilisation for the onshore cable and substation. The Project's offshore project area is around 20km away from the coastline and not expected to have noise impacts to onshore residents. Project vessels or construction work may produce their own noise, which may be heard by fisher folk or coastal communities when within proximity. However, construction safety exclusion zones are in place and guard vessels will also be mobilised by the Project to ensure non-project vessels are at a safety distance. As such, noise impacts for offshore work are expected to be minimal and manageable to community. Limited activity is expected upon the onshore cable and substation in the O&M phase, as the substation will mostly be unmanned and only periodic maintenance will occur. As such, airborne noise impacts in the O&M phase are not expected either.

Within the Project's EDA, noise level monitoring and modelling was conducted, and onshore construction noise results are expected to be in compliance with national[66] and international[67] noise standards.

The onshore substation site is located near a residential community. The onshore cable between the onshore substation and grid connection point pass by some communities as well. However, it is expected that the construction work of the cables will be segmented (around 200m per segment) and temporary. Any transportation or construction mobilisation routes for onshore construction works may also utilise some community roads which generate some elevated noise levels, however it is also expected that these impacts are temporary and minimal.

Impact significance

The magnitude of the negative impact associated with airborne noise for the local communities and workers during the construction phase is considered **'minor'**, due to:

- Temporal: construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years). General construction and transportation hours are expected to avoid early morning and night times. No cumulative impacts or operation phase impacts are expected.

[66] Taiwan Environmental Noise Standard

[67] IFC WBG Environmental, Health, and Safety (EHS) guidelines: Noise management

- Spatial: The length of the onshore cables spans several km between the landing point, substation, and the grid connection point. Each segment of cable work that construction is expected to happen in segmented portions.
- Degree of change: It is expected that elevated noise levels during the construction work will have small impact to the general area's noise level due to the construction work. Based on the EDA report, it is modelled that the Project's expected work will be compliant with the local and WBG EHS noise guidelines.
- Reversibility of impact: Little or limited impacts are perceived for reversibility of the airborne noise impacts, as the work is short-term in timeline, and temporary in normal working hours per day.

Similar to air quality, the sensitivity of the impacted community is considered **'medium'** given the proximity of the construction work to certain areas, where community members may have to access or use with no other alternatives (eg have to go to school although it is in proximity to the onshore cable construction areas).

Combining **'minor'** magnitude with **'medium'** sensitivity leads to a **'minor'** negative impact on airborne noise for local community and Project workers during construction phase.

Management and enhancement measures

Mitigation measures and quarterly monitoring as relating to airborne noise are as prescribed within the EDA report, and will be included within the Project's ESMS and associated E&S management plans. These measures include but are not limited to:

- Project vehicles are not allowed to accelerate to high speeds or use the car horn extensively in residential areas, particularly sensitive receptors like schools
- Prioritise procurement of low-noise producing construction equipment and construction techniques, and maintain the condition of equipment
- Plan construction hours to avoid early mornings or nighttime construction

The Project also has in place a Health and Safety Plan as well as Emergency Response Plan which outlines the measures and plans against any occupational risks. The Project's SEP commits to communicating construction work to local communities prior to commencement. An overarching GWMP is also in place and will be communicated to workers and communities to raise any issues/concerns.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted communities or workers, as well as their tolerance for any airborne noise impacts, can be lowered to **'low'** and the negative residual impact significance becomes **'negligible'.**

Table 5.5: Air quality impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Minor	-	Medium	-	Minor	-	Negligible	-

Source: Mott MacDonald, 2025

5.4 Community health, safety and security risks

There is a potential for risks to community health, safety, and security, both onshore and offshore, which require mitigation. For instance, offshore construction workers may typically visit

nearby towns to purchase items unavailable onboard, such as snacks, alcohol, or entertainment, leisure, or to participate in sporting and recreational activities.

5.4.1 Exposure to communicable diseases

Impact analysis

The influx of workers has the potential to introduce communicable diseases to the project area, while incoming workers may also be vulnerable to diseases for which they have limited immunity. This could impose an additional burden on local health resources. Workers dealing with issues such as substance abuse, mental health challenges, or STDs may avoid seeking help at the project's medical facility and opt for anonymous local healthcare services, thereby increasing the strain on community medical resources. Additionally, local health and rescue facilities may be overwhelmed or insufficiently equipped to address industrial accidents associated with large construction sites. Historical data indicates that in 2003, Miaoli County accounted for approximately 1% of Taiwan's reported HIV/AIDS cases. In 2024, Miaoli County recorded its first locally acquired dengue fever case, involving a resident in Zhu-nan (竹南) Township who had not travelled to high-risk areas.

The temporary influx of the Project workers during the construction phase may expose onshore communities to communicable diseases. The Project Company has indicated that the presence of incoming workers would be minimal or negligible, as the majority of the workforce is expected to be recruited locally. Significant risk of disease exposure is not expected during the Project's operation phase as the sites will mostly be unmanned. However, potential impacts and mitigation measures are still considered for this assessment.

In the Project's AoI, the main medical service centre is Lee General Hospital in Yuanli Township, approximately 1.5km away from OSS. It has 236 beds in total capacity and will be utilised by the Project for emergencies. As the largest teaching hospital in the coastal area of Miaoli, it serves as a referral hospital in the emergency medical network for the coastal region and is the preferred hospital for local residents seeking medical care. Based on the expected influx of workers, the hospital is expected to have sufficient capacity to handle potential outbreak of communicable diseases.

Impact significance

The magnitude of the negative impact associated with communicable disease is considered **'moderate'**, due to:

- Temporal: the impacts are expected to occur primarily during the construction phase, where the temporary influx of workers may lead to exposure to communicable diseases and place strain on local health resources. Construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years). No cumulative impacts or operation phase impacts are expected.
- Spatial: The spatial impact is localised within the AoI, encompassing onshore communities in proximity to the construction sites and potentially affecting nearby towns where workers may access goods, services, or medical facilities
- Degree of change: Since the majority of the workforce is expected to be recruited locally, the degree of change is considered low
- Reversibility of impact: The impacts are generally reversible, as adequate mitigation measures, such as improving access to healthcare, establishing guidelines for worker

health and safety, and implementing robust community awareness programs, can help manage and mitigate the risks effectively. Once construction is completed and the operational phase begins, these impacts are likely to diminish significantly

The sensitivity of the impacted community is considered '**medium'**, due to their economic vulnerability. If local healthcare systems become overwhelmed, delays in treatment could arise, potentially impacting the fishermen's ability to sustain their livelihoods.

Combining **'moderate'** magnitude with **'medium'** sensitivity leads to a **'moderate'** negative impact on communicable disease for local community during construction phase.

Mitigation and enhancement measures

Considering the potential risks, the following mitigation measures need to be implemented at site:

- Regular worker health check-ups provided by the Project company, Contractor and sub-contractors/suppliers to all workers who will be working on site not only prior to commencing the work, but also at least annually during the construction phase.
- To prevent occurrence of disease and accidents, contractors and their workers will undergo a briefing on safety, sanitation measures, and emergency rescue procedures, and receive regular training and toolbox talks related to task completion.
- The OHS management plan will include the awareness building and guidelines for health, wellness, disease prevention, and impact of anti-social behaviour
- The main contractors will adopt the Project's QHSE plan and adhere to the Project's LMP, ensuring these documents or other OHS-relevant documentations cover the following information:
  - occupational health and safety plan based on a risk assessment
  - an emergency preparedness and response plan in coordination with local emergency services
  - a construction environmental and social management plan with procedures for managing waste, dust, emission, water protection, noise, and other environmental effects as well as controls for vehicle and boat use and maintenance, security of people and Project property, and chance finds.
- The abovementioned plans will be monitored and audited periodically and be updated as needed during construction and operation phase.
- Workers of contractors, sub-contractors and service providers working on core business processes[68] will sign the workers' code of conduct.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted communities can be lowered to 'low' and the negative residual impact significance becomes 'minor'.

Table 5.6: Communicable disease impact significance summary

Magnitude	Sensitivity	Significance	Residual impact

[68] IFC PS2 defines core business processes as those which constitute production or service processes essential to business activity without which the business activity could not continue.

Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	-	Medium	-	Moderate	-	Minor	-

5.4.2 Worker's influx – infrastructure and services

Impact analysis

The presence of construction workers, service providers, and, in some cases, their family members can increase demand for public services such as water, electricity, medical care, transportation, education, and social support.

Yuanli Township is the township where the Project's offshore cables connect onshore. As of November 2024, the populations of Yuanli Township and Tongxiao Township are 43,453 and 30,879, respectively. During construction phase, the majority (around 90%) of the workforce will typically be working offshore, while the remaining workers will be onshore. Based on the Project's EIA, the maximum number of construction workers at the same time is 90. Thus, if the maximum expected workers for the Project are all from outside the local area (which is not to be expected), the influx represents 0.12% of the total population of the township for the construction phase. No workers' accommodations/camps are expected to be built for the Project. At this stage, it is not expected that there will be significant workers' influx due to construction mobilisation of the Project and its neighbouring wind farms since the workforce will be hire locally, according to the Project Company. As assessed in Section 5.4.1 above, Lee General Hospital, based in Yuanli where onshore construction works is to occur, is expected to have sufficient capacity to accommodate the additional expected influx of workers.

Overall, influx of onshore workers for the construction and operation phases of the various offshore projects are unlikely to overwhelm the infrastructure and services of Yuanli Township.

The Taichung Port where the Project's assembly site will be is well-serviced (eg health facilities). There have been various other OWFs that utilise the port for assembly and offshore work, and thus the nearby communities there and emergency services are familiar with and can accommodate the arrangements.

It is also understood a neighbouring windfarm, Deshuai OWF, may overlap in onshore construction period. Since the drafting of this report, Deshuai OWF has been cancelled as reported in local news articles[69]. According to the article, MoEA has issued an official letter (dated 21 May 2025) to the developer of Deshuai OWF to revoke the development rights of the OWF. However, it is noted that this letter has not been made publicly available and no official announcement has been published online from MoEA. Although the relevant development capacity has not been formally reallocated yet, it is unlikely for Deshuai OWF to proceed. Currently, reference to Deshuai OWF has not been removed from this report assessment, however, as there will now be no other projects in construction at the same time as the Project, potential cumulative impacts will be lower than what is identified in this report.

Impact significance

The magnitude of the negative impact associated with communicable disease is considered '**minor**', due to:

[69] Commercial Times news article: https://www.ctee.com.tw/news/20250525700516-430104 (Last accessed: 27 June 2025)

- Temporal: the impacts are expected to occur primarily during the construction phase, where the temporary influx of workers may lead to exposure to communicable diseases and place strain on local health resources. Construction work for onshore cables is expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years). No cumulative impacts or operation phase impacts are expected.
- Spatial: The spatial impact is localised within the AoI, encompassing onshore communities in proximity to the construction sites and potentially affecting nearby towns where workers may access goods, services, or medical facilities
- Degree of change: Since the majority of the workforce is expected to be recruited locally, the degree of change is considered low
- Reversibility of impact: The impacts are generally reversible, as adequate mitigation measures, such as improving access to basic services. Once construction is completed and the operational phase begins, these impacts are likely to diminish significantly

The sensitivity of the impacted community is considered '**medium'**, due to their economic vulnerability. If basic facilities and services become overwhelmed could potentially impacting the fishermen's ability to sustain their livelihoods.

Combining **'minor** magnitude with **'medium'** sensitivity leads to a **'minor'** negative impact on workers influx impact on community infrastructure and services during construction phase.

Mitigation and enhancement measures

The Project has in place a QHSE Plan and emergency preparedness documentation for construction work to reduce the stress or impacts on the local emergency response infrastructure and services.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted communities can be lowered to **'low'** and the negative residual impact significance becomes **'negligible'**.

Table 5.7: Worker influx impact on community infrastructure and services significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Minor	-	Medium	-	Minor	-	Negligible	-

5.4.3 Increased onshore and offshore traffic

Impact analysis

The main direct impact on health and safety for local community is likely to be the increase of traffic, both onshore and offshore during construction and operation phase. Transportation for materials and personnel for the Project's onshore and offshore components during construction phase means the Project will increase traffic both on land as well as at sea, especially during the construction phase. Onshore transportation work includes transporting turbine materials to the port for staging and assembly. Other materials to transport are for the onshore substation and cable laying work. Transportation and traffic during the operation phase will mainly be from

maintenance work, including the maintenance of onshore components (ie substation and cables) and offshore components, which are mainly the WTGs. Even though no projected number of vessels are provided for the operation phase, it is expected that vessel amount will be drastically less than the construction phase and only deployed occasionally. For onshore construction work, there will be an increase in transportation of project materials, which may lead to an increase in the risk of collision or other traffic-related incidents. Potential access restrictions could be mitigated by limiting construction traffic on main roads and arranging alternative routes in advance if necessary.

Offshore transportation and traffic include transportation of personnel through CTV, guard boats, marine mammal observer (MMO) boats as well as construction vessels to undertake various Project work including piling or assembly work. The heightened movement of vehicles and boats can pose safety risks to both workers and local residents. Accidents or collisions may occur, especially in areas with limited infrastructure to handle increased traffic.

In the Project's AoI, the main medical service centre is Lee General Hospital in Yuanli, approximately 1.5km away from OSS, which has been determined to have sufficient capacity to handle potential traffic accidents without overwhelming its service. The Taichung Port where most offshore works will originate from is also well-serviced (eg health facilities). There have been various other OWFs that utilise the port for assembly and offshore work, and thus the nearby communities there and emergency services are familiar with and can accommodate the arrangements.

Impact significance

The magnitude of the negative impact associated with communicable disease is considered '**moderate'**, due to:

- Temporal: For the construction phase, the impacts are expected to be short term (ie less than two (2) years) and constructed in segments, while the onshore substation's construction work is also expected to be short-term (ie around two (2) years). For the operational phase, the impacts are anticipated to be long-term. However, the frequency of vehicle and boat mobilisation is expected to be significantly lower compared to the construction phase.
- Spatial: The spatial impact is concentrated within the Area of Influence (AoI), specifically affecting onshore communities located near roadways and fishermen operating in areas close to the designated restricted zones, both for construction and operational phase
- Degree of change: The community can continue to use the roads along their usual routes, however, enhanced safety and planning measures will need to be implemented to ensure their well-being and avoid traffic
- Reversibility of impact: The impacts are considered generally reversible, as traffic levels are expected to decrease significantly upon the completion of the construction phase. During the operational phase, vehicle and boat mobilisation will occur at a much lower frequency compared to the construction phase.

The sensitivity of the impacted community is considered '**medium'**, due to their economic vulnerability. The restricted area could potentially impact the fishermen's ability to sustain their livelihoods.

Combining **'moderate'** magnitude with **'medium'** sensitivity leads to a **'moderate'** negative impact on increased onshore and offshore traffic during construction and operation phase.

Mitigation and enhancement measures

Measures are in place to minimise risk of vehicles and vessel collisions for both the construction and operational phases.

To address project traffic risks, these are identified in the F4 Project Health & Safety (H&S) Plan and in the contractor's Risk Assessment Method Statements (RAMS) to enforce strict safety protocols. Management, mitigation and monitoring measures to support a target of zero incidents have been set in place regarding the increased onshore and offshore/marine traffic, including:

- Marine traffic management - To prevent vessel collisions with WTGs due to poor lighting, safety measures are incorporated into construction methods and installation design, ensuring visibility and navigational awareness.
- Traffic maintenance plan – approved by MCG in May 2025
- Vessel collision assessment and navigation safety plan (under development)
- Deploying patrol boats during construction phase
- Establishing exclusion zones around the WTGs and working vessels during construction and operation phase
- Installing warning lights at the perimeter of the wind farm
- HSE Plan
- Emergency preparedness plan
  - In the event of an offshore collision incident, the Project's emergency response plan has specific procedures for such situations, with the following key steps: 1. Call the Marine Coordination Centre and Coast Guard to report the situation. 2. Detect approaching vessels and establish contact. 3. Evacuate all personnel from assets in the immediate vicinity of approaching vessels if the situation permits.
- A grievance mechanism is also in place to allow people and organisations to raise concerns or issues of the Project, including in relation to health or safety. The grievance mechanism may be used to raise concerns relating to environmental health impacts as well as concerns of interactions with project workforce or security personnel, if applicable.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted communities can be lowered to **'low'** and the negative residual impact significance becomes **'minor'**.

Table 5.8: Worker influx impact on community infrastructure and services significance summary

Magnitude		Sensitivity		Significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	Moderate	Medium	Medium	Moderate	Moderate	Minor	Minor

5.5 Economic displacement and livelihoods

During the development of OWFs, it is important to consider the potential impact on users of the Project's AoI, such as fisher folk and other vulnerable groups, and the potential implications for the livelihoods of people working in the fisheries industry. Table 5.9 presents scoping of anticipated livelihood impacts on affected persons due to project components.

Table 5.9: Materiality assessment of onshore and offshore impacts upon fisher folk livelihood to inform LRP scope

Location	Component	Description/access restriction	Likely material impact on livelihoods?	Scope in/out
Onshore components	Onshore (buried) cables	The transmission cable will be laid underground, aligning mostly along existing roads or state-owned land. It is confirmed that all lands leased or to be utilised by the Project Company do not have former land users or occupants that may cause economic displacement or physical displacement or resettlement.	No	Out
	Onshore substation (OnSS)	The substation is located on private-owned land that has been acquired by the Project Company. It is confirmed that the land was previously unused with no economic function. There were no former land users or occupants that may cause economic displacement or physical displacement or resettlement.	No	Out
Offshore components	Offshore cables during construction and O&M phase	All fisher folk in the Project's AoI are coastal fisher folk, and their active fishing zone extends 12 NM (or 22km) from the coast. Offshore submarine cables are thus expected to temporarily overlap with the coastal fisher folk's active fishing areas in segments. As such, it is expected that offshore cables will have livelihood impacts during construction phase, with limited and one-off impacts for the O&M phase during maintenance or emergency work.	Yes	In
	Wind farm area, including WTGs and offshore substation, during construction and O&M phase	The wind farm area extends approximately 20km offshore from Miaoli County's coastline, with its furthest point from coast being around 29km. Thus, the WTG area has little overlap to the coastal fisher folk's active area. On average, the furthest distance most fisher folk are active in is six (6) NM (or 11km) from the coast. From household surveys, few households are noted to conduct fishing activities furthest at or past 12 NM (or 22km). As such, discussion of impact from the wind farm area will be scoped in.	Yes	In

The main affected group identified are fisher folk households registered under Miaoli County, which include registered households from Yuanli Township and Tongxiao Township. 200 baseline surveys were conducted as a representative sample of these households. Subgroups of affected persons within these households are presented in Table 5.10 below. Total number of affected persons per subgroup are as inferred from the 200 socioeconomic household surveys conducted.

Table 5.10: Identified project affected households

Group name	Description	Indicative number of affected households
Vessel owner households registered under the fishery license for the TFA's jurisdiction	Affected households with vessels registered under the fishery license for the TFA's jurisdiction.	~300*, including ≤5 households that conduct activities past 12 NM (as extrapolated/inferred from survey responses)
Non-vessel owner households	Affected households that are not vessel owners but participate in the fishery industry as vessel support, fish catch sellers, fishing gear retailer, fishing boat materials retailer and others.	~300-350*, including ~50* households as vessel worker households (as extrapolated/inferred from survey responses)

Note: * Please note that these numbers are indicative only, with some deviation expected (e.g. +/- 10%).
*+ This is an extrapolation from a small number of respondents (n=2), extra caution should be applied to interpretation and application of this number.

Nanlong fisher folk and the Nanlong Fishermen Association (NFA) have been scoped out as key stakeholders. This is based on KIIs conducted with the community representatives and representatives of fisher folk, which confirmed that users of the Tongyuan exclusive fishing rights (EFR) area are all local residents and coastal fisher folk under the TFA's jurisdiction (ie Tongxiao Township and Yuanli Township). Hence, Nanlong fisher folk are not expected to

operate within the TFA EFR area, which is where the Project's offshore components are located and where project impact is most likely foreseen. As such, the NFA exclusive EFR area and its corresponding coastal townships (ie Zhunan Township and Houlong Township) are also scoped out of the Project's AoI as of current screening.

Aquaculture farmers (海面養殖漁戶) are also scoped out as key stakeholders. Based on the Fisheries Agency Statistical Annual Report for 2023[70], Miaoli County does not have any registered (offshore) aquaculture farmers, and no quantity of (offshore) aquaculture production. Thus, they are not an existing affected group within Miaoli County. Although there are inland culture farms (內陸養殖) found on the coast near Tongxiao fishing port and Yuangang fishing port, inland culture farmers are scoped out as stakeholders for the following reasons:

1. Inland culture farms in Miaoli County are not in proximity to the Project footprint
2. Based on household surveys conducted in March 2025, it is further confirmed that no culture farmers are presented in Yuanli Township, where the Project's landing point and onshore footprint are located
3. Inland culture farms in Miaoli County utilise freshwater ponds, and considering the distance from the Project footprint, these farms are not expected to be impacted by offshore works

Where any scoped-out stakeholders are encountered during further site surveys and stakeholder engagements conducted by the Project Company, these assumptions will be revisited.

5.5.1 Vessel owners

One main affected group identified are fisher folk households who have registered vessels under the fishery license.

As mentioned in Table 5.10, although all fisher folk households under Miaoli County are registered under coastal fishing (conducting activities within 12 NM, or 22km from the coast), a few households noted to conduct activities past 12 NM, maximum out to 15 NM (28km). As such, it is expected that all of the approximately 300 vessel owner households are impacted by segmented installation of submarine cables, and five or less households of the approximately 300 households will be minorly impacted by the project windfarm area.

Impact analysis

Impacts due to the installation of submarine cables during construction and operation phases

The installation of the submarine cables will result in fishery activities located within the submarine cable route to be temporarily affected. The submarine cable route runs from the coast of Yuanli Township to the Project's wind farm area and overlaps with the Tongyuan EFR area. It is expected that access restrictions will impact all of the approximately 300 vessel owner households, temporarily and in segments.

It is expected that majority of actual loss of access to fishing areas would be limited to the overlap area between offshore submarine cable area and the affected fisher folks' fishing grounds, including the Tongyuan EFR area during the construction phase.

[70] Fisheries Agency, Ministry of Agriculture (30 August 2024). 2023 Fisheries Statistics Annual Report. 民國 112 年(2023) 漁業統計年報(農業部漁業署). Accessed 25 March 2025.

The cable will be constructed in segments, with an expected duration of few months. The Project requests TFA through the FCCA to advise all local fisher folk (whether members or not) to avoid activities and navigation that may obstruct or hinder project work during the construction and operation phase, which include working vessel routes and actual activities within the project's area. However, no explicit access restriction areas nor restricted fishing methods were outlined within the cooperation guidelines in the FCCA. Thus, it is expected that all vessels may still be allowed to cross the cable route area during the construction phase, given they stay at least a 500m safety distance from the vessels working on the cables and not disrupt work. In accordance with the Offshore Wind Farm Construction and Operation Period Work Vessel Navigation Safety Regulations (Section 6)[71], if a wind farm guard vessel detects another vessel entering the construction area, it must also instruct it to move away for safety reasons. Similarly, in the operation phase, all fishing vessels are no longer restricted from the cable route and are just requested to not obstruct any O&M work. Access restrictions to cable routes are only apply expected to apply during maintenance or emergency work.

In terms of cumulative impact, no other neighbouring offshore windfarm projects (ie Deshuai offshore wind farm) will be utilising the Fangli cable corridor for their export cable installations during the Project's cable construction period. It is understood a proposed Yongan-Tongxiao Gas Pipeline 2 project by CPC Corporation may utilise the Fangli cable corridor to connect the pipeline onshore to Miaoli County. However, cumulative impact is also likely to be low given there is uncertainty of the project being confirmed based on publicly available information, and the likelihood of spatial and temporal overlap if the pipeline project does start construction in 2027 is low. Coordination to stagger construction between the Project and the pipeline project is also a possibility. Thus, limited cumulative impacts are expected upon PAPs for the Project's export cable installation.

Impacts due to the project windfarm area during construction and operation phases

Given few households within the household surveys indicated possibility of having fishing activity within the Project's windfarm area, for the purpose of this assessment, it is extrapolated that around five or less households out of the approximately 300 vessel owner households under the Tongyuan district may be impacted by the project's windfarm area.

Given the Project's furthest point to the coast is around 29km away from the coast, and the furthest fishing distance noted in the household surveys is 15 NM (or 28km), it is conservatively assumed that the full project area may have been fishing grounds for households that conduct fishing activities further than 12 NM from the coast. The approximate coastline distance Yuanli Township and Tongxiao Township is 16.8km, which means the general fishing grounds area for households that can conduct out to 28km is 470.4km^2. The wind farm's area is 58km^2, which is 12% of the total fishing area that these households typically conduct fishing activities. Again, it is acknowledged that fisher folk are not geographically limited to conduct fishing activities only in certain areas, and vessels that are able to travel past 12 NM into offshore waters are typically able to travel to ranges up to 200 NM, as coastal fishing is defined as fishing activity between 12 to 200 NM.

During the construction phase, fisher folk are requested to not hinder any construction project work. However, vessels are not restricted from fishing or crossing the windfarm area, and no fishing methods are specifically restricted either. Based on the Project's own Marine Coordination Requirements, a suggestive 500m safety exclusion radius around constructing WTGs and working vessels are also proposed for vessel safety. The expected construction

[71] Maritime and Port Bureau, MOTC (14 Oct 2024). Offshore Wind Farm Construction and Operation Period Work Vessel Navigation Safety Regulations.

period for the windfarm is Q2 2026 to Q4 2028, which is slightly more than two (2) years' time. In the operation phase, fishing vessels are requested to stay a 50m radius safety distance from all WTGs, and to not hinder any operation phase project work. However, in general, there are no access restrictions to vessels in the operation phase.

Of the minority number of respondents that conduct fishing activities past 12 NM, they either noted that:
(i) They were aware of the Project's sea restrictions, and as such perceived the restrictions to have impacts on their current livelihood activities.
(ii) Did not identify whether they were aware of any sea restrictions, and also did not provide response on whether they perceived the restrictions to impact their livelihood activities.

No respondents identified any actual or perceived impacts (eg long term fisheries shortage, short-term moving around to reach current fishing grounds) from the Project either. Based on the fisheries production in 2023 presented in Table 4.4, only 30 metric tonnes out of the total 952 metric tonnes of production (3%) are attributed to offshore fishing. Furthermore, only five or less households in the Tongyuan area conduct offshore fishing (ie less than 1%). As such, loss of fishing area and thus marine resources due to the develop of project's wind farm area, which is mostly located in offshore fishing waters, is expected to be minimally significant during the construction phase, and not significant during the operation phase. In terms of cumulative impact, the neighbouring OWF project (ie Deshuai OWF) overlaps with the Tongyuan EFR as well as the general coastal waters extending out from the Tongyuan EFR. Deshuai OWF's furthest point is around 10km, which is within the general active area of the affected households (ie the furthest distance most fisher folk are active in is six (6) NM (or 11km) from the coast).

Impact significance

Construction phase

The magnitude of the negative impact associated with economic displacement and livelihoods for vessel owners during the construction phase is considered **'moderate'**, due to:

- Temporal: Restriction is short-term while cable is being laid, whereby construction is expected to last around one (1) year. Restrictions to cable areas are expected to be temporary and segmented. Construction of the windfarm area is expected to last a bit more than two (2) years' time. No access restrictions are required in the windfarm area, other than the suggested 500m safety distance from construction vessels and construction work. Some cumulative temporal overlap is expected from the construction of the Deshuai OWF.
- Spatial: The area of cable laying work is expected to take up less than and segments of 3.7% of the general coastal fishing grounds area for Tongyuan EFR fisher folk. It will also overlap with 2.3% of the Tongyuan EFR area for the cable laying construction period in segments. The windfarm's area is 58km^2, if conservatively assuming the entire windfarm area may have been fishing grounds, which is 12% of the total fishing area that these households typically conduct fishing activities. Cumulatively, Deshuai OWF's area of 8km^2 would also be considered. It is expected that all approximately 300 vessel owner households will be impacted.
- Degree of change: Fisher folk are not geographically limited to conduct fishing activities only in the area of their licence registration and may travel to other coastal waters outside of the waters extending out from the Tongyuan EFR zone.
- Reversibility of impact: The fishery resources and ways of fishing might get affected during the temporary construction of the cables but is likely to return to baseline upon

completion of each segment. Restricted access to the project windfarm area is encouraged and upon construction completion, long-term wind turbines will occupy the area, thus a return to baseline is not as likely in the short-term for the project windfarm area.

O&M phase

The magnitude of the negative impact associated with economic displacement and livelihoods for vessel owners during the operation phase is considered **'minor'**, due to:

- Temporal: There are no specific access restrictions to the cable areas or wind turbines for the Project in the O&M phase, unless there are emergency or maintenance work. To which, a 500m safety distance is encouraged from the site as well as working vessels. The Project's operation phase is expected to be around 30 years. Cumulative temporal overlap is expected from the operation phase of the Deshuai OWF.
- Spatial: The windfarm's area is 58km^2, if conservatively assuming the entire windfarm area may have been fishing grounds, which is 12% of the total fishing area that these households typically conduct fishing activities. Cumulatively, Deshuai OWF's area of 8km^2 would also be considered. It is expected that around six (6) households who may conduct fishing activities around the windfarm area will be affected.
- Degree of change: Fisher folk are not geographically limited to conduct fishing activities only in the area of their licence registration and may travel to other coastal waters outside of the waters extending out from the Tongyuan EFR zone. Turbines are all constructed in areas as auctioned and identified by the government.
- Reversibility of impact: Due to the long-term (up to 30 years) turbines constructed in the project's windfarm area, the fishery resources around that area may shift (eg turbine foundations creating artificial reef effects) and vessel owners' fishing methods may also need to shift.

The sensitivity of vessel owners is considered **'medium'** given the development of offshore windfarms in this area is relatively new. Most vessel owners have also conducted fishing in the area for years with certain fishing methods, thus change in fishery resources or landscapes to fish may not be as easy to adapt to. However, it is also acknowledged that cable laying construction is temporary while only few households are actually expected to conduct activities around the project's windfarm area. These fisher folk's vessel will still have the ability to access other fishing grounds without major impacts to their travel routes and costs.

Combining **'moderate'** magnitude with '**medium'** sensitivity leads to a **'moderate'** negative impact of economic displacement and livelihood for vessel owners during the construction phase. Combining **'minor'** magnitude with '**medium'** sensitivity leads to a **'minor'** negative impact of economic displacement and livelihood for vessel owners during the O&M phase.

Management and enhancement measures

As mentioned above, a FCCA has signed on 28 March 2025, whereby compensation to be distributed by TFA to eligible persons. Compensation amounts are expected to take into account the Fisheries Compensation Benchmarks for Offshore Wind Farms (dated 2024)[72]. The

[72] Initial promulgated guideline: Document reference no. 農業委員會農漁字第 1051328879A 號, dated 30 November 2016. Updated guidelines: Document reference no. 農業部農漁字第 1130207917A 號, dated 22 March 2024. 離岸式風力發電廠漁業補償基準(農業部漁業署) (fa.gov.tw).離岸式風力發電廠漁業補償基準(農業部漁業署) (fa.gov.tw). Retrieved 4 February 2025.

benchmark does not provide the prescriptive amount to be used for compensation, rather, in practice, they provide a calculated amount which is used as a 'minimum base amount' or starting point of reference for negotiations between the wind farm developer and the fishermen association. The final agreed compensation amount documented in the FCCA will be subjected to willing negotiations (ie subsequent to the calculations via the benchmark).

In addition to the provisions outlined in the FCCA, a Final LRP (Draft 2) has been developed for the Project, which identifies PAPs who will be economically displaced. A range of livelihood restoration programmes are proposed to support the restoration of fisher folk's livelihood[73]. Restoration is considered through a few facets. Some programmes aim to address economic displacement by directly providing other job opportunities through the Project. With the understanding that more windfarms are to be developed in the region as well as less young people staying within the communities to continue the fishery industry/activities, the Project also proposes programmes (ie trainings and funding opportunities) for PAPs to transition from the fishery industry to other businesses or skills. Funds are also in place for the general development and co-prosperity of the fishing community, which would be overseen by the TFA.

The Project's Stakeholder Engagement Plan (SEP) has been developed and is to be implemented. The SEP outlines the ongoing engagement that will be carried out for the Project to help PAPs understand the impacts. The Project's grievance mechanism (GM), particularly for livelihood impacts, is also in place whereby entitled and eligible persons or PAPs may make claims for cash compensation, which will be assessed on a case-by-case basis. This is outlined within the LRP's Section 9.

Residual impact significance

With the mitigation and enhancement measures, as well as livelihood restoration programmes in place, the vulnerability of vessel owners can be lowered to **'low'.** The negative residual impact significance becomes **'minor'** during the construction phase and **'negligible'** during the construction phase.

Table 5.11: Economic displacement and livelihood impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	Minor	Medium	Medium	Moderate	Minor	Minor	Negligible

Source: Mott MacDonald, 2025

5.5.2 Non-vessel owners

Another key project affected group is fisher folk households who are not vessel owners. These are households who participate in the fishery industry as vessel support, fishery-related retailers and others. From the survey responses, it is inferred that approximately that 300 to 350 households are non-vessel owner households. As mentioned in Table 5.10, out of these non-vessel owner households, approximately 50 households are extrapolated to be vessel worker households.

Of note, based on the KIIs, FGDs and household surveys conducted in March to April 2025, it is understood that there are little to no migrant workers within the project AoI's fishing community.

[73] Specific proposed livelihood restoration programmes can be referenced in section 6 of the Project's LRP.

Most crew support are family members, hai-ka or local workers, thus migrant workers are not considered as a PAP for this assessment.

Impact analysis

The installation of submarine cables and construction of wind turbines will impact vessel owners' fishery resources and access to certain fishing grounds. Where fishery activities decrease from the vessel owners, this in turn may impact the vessel support that may get hired or retailers and sellers of equipment or fishery catches.

It is unclear how the eligible persons will use their received compensation that may benefit or trickle down to others in the fishing community. However, acknowledging fisher folk are not geographically limited to conduct fishing activities only in the area of their licence registration or only in their usual fishing grounds, there is the possibility that fisher folk may adapt to seek other fishing grounds or utilise other fishing methods. These acts in turn may increase the number of vessel support required (eg traveling further distances or utilising fishing methods that require support) and also increase the purchasing of equipment or fuel and more. A portion of non-vessel owner respondents from the household survey indicated that they were in more than one field of work. Most of these respondents worked in the fishing business while also working in agriculture or worked as a worker or part-time. The remaining relied solely on their main work status, which majority were either in fishing (eg vessel support) or as a tradesperson (eg retailer, seller).

During the FGDs with vessel workers, respondents mentioned that fisher folk facing the actual impacts at sea are a vulnerable group. The annual fishing ban in June and July has a significant impact on their livelihoods. Additionally, the socio-economic context of fishing community is marked by underdevelopment and a severe population outflow, with young people being unwilling to return to work in the fishery industry.

Differentiation was also made between community fisher folk and those within the fishermen's association. Respondents expressed that project-related decisions were communicated to community-based fisher folk only after agreements had been reached with the TFA, leaving no alternative channels for feedback from the community-based fisher folk.

The construction of the offshore export cables is targeted to commence in Q2 2026 and is expected to be constructed in two phases (onshore works to last six (6) months from Q2 2026, and offshore works and testing to last (5) months from Q2 2027)). Hence, the impact for the construction phase is temporary. The expected construction period for the windfarm is Q2 2026 to Q4 2028, which is a bit more than two (2) years' time. No explicit access restriction areas or restrictions to fishing methods are outlined in the FCCA during the construction or operation phase.

In terms of cumulative impact, there is some temporal overlap with the Deshuai OWF's construction phase and eventual operation phase, which may further influence the general fishery activities conducted in the area.

Impact significance

Construction phase

The magnitude of the negative impact associated with economic displacement and livelihoods for non-vessel owners during the construction phase is considered **'moderate'**, due to:

- Temporal: Restriction is short-term while cable is being laid, whereby construction is expected to last around one (1) year. Restrictions to cable areas are expected to be

temporary and segmented. Construction of the windfarm area is expected to last a bit more than two (2) years' time. Some cumulative temporal overlap is expected from the construction of the Deshuai OWF.

- Spatial: The decrease in fishery activities is likely to impact various non-vessel owner roles on a community to township level. This may include the actual vessel workers' households, the fishery industry retailers and sellers, and those on the receiving end like restaurants or local households or tourists that come to buy fish. 320 households are noted to be non-vessel owner households. However, it is still to be considered that some households may actually overlap as vessel-owner roles due to the phenomenon, hai-ka. So the total number of impacted households may be slightly less than 320 households.
- Degree of change: The impact or fluctuation from baseline or existing conditions is highly dependent on the fishing industry and the vessel owners' activities. Where vessel owners decrease in their activities, this may negatively impact the economic conditions for non-vessel owners, particularly crew members or retailers and sellers. On the other hand, when vessel owners aim to adapt by seeking other fishing grounds or utilising other fishing methods, these acts in turn may maintain the economic conditions or even increase opportunities for income for non-vessel owners.
- Reversibility of impact: Where fishery resources are decreasing, whether due to Project activities, existing fishing activities or natural occurrence, intervention that may be out of the scope of both the community and the Project would be required to help non-vessel owners return to their baseline or assimilate to change. Small portion of non-vessel owners may be able to rely on other workstreams (eg agriculture, part-time, worker) to sustain or return to their original income level, however majority of non-vessel owners rely unilaterally on their work in fishing or in their business.

O&M Phase

The magnitude of the negative impact associated with economic displacement and livelihoods for non-vessel owners during the O&M phase is considered **'minor'**, due to:

- Temporal: There are no specific access restrictions to the cable areas or wind turbines for the Project in the O&M phase, unless there are emergency or maintenance work. To which, a 500m safety distance is encouraged from the site as well as working vessels. The Project's operation phase is expected to be around 30 years. Cumulative temporal overlap is expected from the operation phase of the Deshuai OWF.
- Spatial: The impacts on fishery activities are likely to impact various non-vessel owner roles on a community to township level. This may include the actual vessel workers' households, the fishery industry retailers and sellers, and those on the receiving end like restaurants or local households or tourists that come to buy fish.
- Degree of change: The impact or fluctuation from baseline or existing conditions is highly dependent on the fishing industry and the vessel owners' activities. Due to no access restrictions in the O&M phase and most activities still being conducted within the coastal waters, it is not expected that fishing activities will shift drastically in the O&M phase to be unable to maintain baseline conditions.
- Reversibility of impact: Where fishery resources are decreasing, whether due to Project activities, existing fishing activities or natural occurrence, intervention that may be out of the scope of both the community and the Project would be required to help non-vessel owners return to their baseline or assimilate to change. Small portion of non-vessel owners may be able to rely on other workstreams (eg agriculture, part-time, worker) to

sustain or return to their original income level, however majority of non-vessel owners rely unilaterally on their work in fishing or in their business.

The sensitivity of individuals who are not recipients of compensation is considered **'high'** given they do not receive compensation for impacts upon their income, however the majority rely heavily on the community's fishing activities and industry for their income. FGD results also indicate non-vessel owners perceive they have less access to livelihood restoration related opportunities.

Combining **'moderate'** magnitude with '**high'** sensitivity leads to a **'major'** negative impact of economic displacement and livelihood for non-vessel owners during the construction phase. Combining **'minor'** magnitude with '**high'** sensitivity leads to a **'moderate'** negative impact of economic displacement and livelihood for non-vessel owners during the operation phase.

Management and enhancement measures

The various livelihood restoration programmes proposed within the Project's Final LRP (Draft 2) will prioritise non-vessel owners and other identified vulnerable groups.

Furthermore, various funding streams from national regulations or the FCCA are established for the Project to provide funds for the fishing community's development and prosperity.

The Project is currently in discussion with TFA to prioritise the vulnerable groups identified within the LRP, including non-vessel owners and women-headed households.

The Project's Stakeholder Engagement Plan (SEP) has been developed and is to be implemented. The SEP outlines the ongoing engagement that will be carried out for the Project to help PAPs understand the impacts. The Project's grievance mechanism (GM), particularly for livelihood impacts, is also in place whereby entitled and eligible persons or PAPs may make claims for cash compensation or raise concerns on the livelihood restoration programmes, which will be assessed on a case-by-case basis.

Residual impact significance

With the mitigation and enhancement measures, as well as livelihood restoration programmes in place (including assumptions for the final implementation of the programmes), the magnitude of impact for the construction and operation phase can be lowered to **'minor'** and **'negligible'**, respectively. Vulnerability of non-vessel owners can also be lowered to **'medium'.** The negative residual impact significance thus becomes **'minor'** for the construction phase and **'negligible'** for the operation phase.

Table 5.12: Economic displacement and livelihood impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	Minor	High	High	Major	Moderate	Minor	Negligible

Source: Mott MacDonald, 2025

5.6 Culture and sense of community

Stakeholder research highlights the need to address this community's unique characteristics. The fishing village is stable, long-established, and has a level of dependence on a single industry (fisheries). Its way of life and cohesive social networks have reported to be relatively stable. Introducing a new industry, workforce, and activities risks disrupting this status quo. As the community's first offshore wind project, it will drive significant change. Sensitive

management is essential to protect its cultural identity and socio-economic structure. A community liaison officer, regular dialogue, and livelihood restoration plans will ensure inclusive engagement and mitigate impacts.

Impact analysis

Based on primary data (KIIs, Household surveys, FGDs) and secondary data (background collection), these AoI fishing communities displayed clear community characteristics: most residents were elderly, most have lived there their entire lives, and they maintain strong social connections. Most household respondents had connections with the TFA or knew someone in the TFA.

The feedback and process of KIIs indicated that respondents feel a strong sense of belonging to their villages. As traditional fishery communities, the activities of women and children in fishing households are closely linked to fishing operations.

Although other offshore wind projects have previously been implemented around this area, the Project will directly impact the AoI's PAPs, bringing unpredictable changes to these traditionally stable fishing community. The Project is expected to bring different employment and demographic structures (eg potential Marine Mammal Observer training from the livelihood restoration programme and project-related personnel). At the same time, it can be anticipated that fishing grounds reducing and compensation payment will alter existing economic and labour structures (eg accelerating the outmigration of young people, retirement of existing fishermen).

For communities that had maintained stability over the long term, these changes will require some adjustment and adaptation efforts from local residents.

Impact significance

Construction phase

The magnitude of the negative impact associated with culture and sense of community for the impacted households during the construction phase is considered **'moderate'**, due to:

- Temporal: The construction phase is short-term (approximately four years), but the social structure changes driven by offshore wind farm development typically extend beyond this period. Based on KIIs, the construction will alter local fisher folk's operational patterns and livelihoods. These changes may lead to long-term shifts in community composition, particularly pushing young people to leave their hometowns for work in other cities. Additionally, the compensation and agreement signed with the TFA, may reshape traditional economic relationships and resource allocation. These changes will influence the structure of local fishing villages for decades.
- Spatial: For spatial perspective, the Project's impact is primarily concentrated in the coastal fishing communities of Yuanli and Tongxiao townships, with broader effects extending to surrounding coastal townships' fishing households and communities. Households survey results indicate that fisher folk's primary operational areas will likely face restrictions during construction, requiring them to seek alternative fishing grounds or livelihood sources. Although the wind turbines are located approximately 20km offshore, the laying of cables will directly affect traditional fishing grounds along the coast, which are the main operational areas for local fisher folk. These impacts extend beyond the fishing grounds themselves, affecting the entire community's social and economic structure, including fish processing, sales and related services.

- Degree of change: The project will bring varying economic structures, with a medium impact on transforming traditional fishing community structures. This includes employment opportunities provided by the project (such as guard vessel and MMO) and compensation payments, which will alter fisher folk's income structures. Restrictions area may also lead fisher folk to accept compensation and gradually decrease in fishing activities, potentially reducing community reliance on fisheries. KIIs stated that the fishery communities already face young people outmigration, the Project may accelerate the trend. One KII noted that reduced fisher folk incomes have already limited their participation in temple activities, reflecting how economic changes affect community culture and social engagement.
- Reversibility of impact: Based on primary and secondary data collection, the Project's perceived impacts are limited. The community will require time to adapt, but its adaptive capacity is expected to strengthen over time. One KII mentioned that some fishery households are seeking diversified income sources, and many are open to alternative careers. Another KII mentioned that reduced fishing activities may interrupt the transmission of fishing knowledge to the next generation. The community may form a new identity, but its fishing-related social identity will likely fade.

O&M phase

The magnitude of the negative impact associated with culture and sense of community for the impacted households during the O&M phase is considered **'minor'**, due to:

- Temporal: During the O&M phase, impacts are long-term but decrease in intensity over time. Construction disruptions will significantly reduce, with offshore activities limited to regular maintenance and inspections. This allows fisher folk to adjust their activities around maintenance schedules and return to traditional fishing grounds. Livelihood restoration plans may offer training and employment opportunities. Affected fisher folk with new skills and income sources can reduce reliance on traditional fishery activities and mitigating potential impacts during the O&M phase.
- Spatial: The O&M phase has a smaller impact area than the construction phase. Fisher folk can resume activities in traditional fishing area, except around turbine foundations, and near submarine cables. Working vessels will significantly decrease, reducing interference with fishing activities.
- Degree of change: Community changes during the O&M phase are limited. Maritime traffic from maintenance vessels is expected to be significantly lower than construction phase, allowing fisher folk to anticipate and avoid disruptions. Most compensation measures will already be in place, enabling fishery households to develop alternative income sources. Some livelihood restoration plan will provide long-term employment opportunities, enhancing community economic stability.
- Reversibility of impact: The reversibility of impacts during the O&M phase is significantly higher than construction phase, as the community will have had time to adapt to a new equilibrium. Restriction area will reopen, enabling fisher folk to resume activities and maintain the continuity of fishing culture. However, long-term cultural transmission in fishing villages may remain challenging to reverse. If younger generations have already left the community or chosen non-fishing careers, the operation phase may not reverse this trend.

The sensitivity of the impacted community is considered **'medium'** given the fishing village has a high proportion of aging population, with most residents being long-term settlers and heavily reliant on fisheries. However, some fishery households have begun diversifying income sources

(eg other commercial activities), and households surveys indicated the willingness to undertake retraining. The community is expected to possess a degree of economic adaptability

Combining moderate magnitude with medium sensitivity leads to a **'moderate'** negative impact on culture and sense of community for impacted households during construction phase. For the O&M phase, a combination of minor magnitude with medium sensitivity leads to a **'minor'** negative impact.

Management and enhancement measures

To mitigate impacts on culture and sense of community, the Project will implement management and enhancement measures to protect or mitigate the impact on cultural characteristics or socio-economic structure of local fishing villages.

The project will establish a community engagement mechanism, including a community liaison officer managed by individuals familiar with local culture. These liaisons will act as a bridge between the project and the community. Regular community discussion sessions will be held, with a focus on collecting feedback from local residents to ensure all voices are heard.

Beyond provisions outlined in the FCCA, the project has developed a Livelihood Restoration Plan to identify economically affected groups and propose livelihood restoration programmes. These aim to support fisher folk's transition to other livelihood activities.

In the long term, these measures aim not only to minimise negative impacts but, more importantly, to bring positive changes to the community, helping them preserve their unique identity and culture while adapting to a new normal. These positive impacts are expected to be further reflected in the O&M phase, as the community gradually adapts to and integrates with the new opportunities, forming a more resilient and diversified community structure.

Residual impact significance

With the mitigation and enhancement measures in place, the vulnerability of impacted households becomes **'low',** and the negative residual impact significance becomes **'minor'** in the construction phase and **'negligible'** in the O&M phase**.**

Table 5.13: Culture and sense of community impact significance summary

Magnitude		Sensitivity		Impact significance		Residual impact	
Construction	O&M	Construction	O&M	Construction	O&M	Construction	O&M
Moderate	Minor	Medium	Medium	Moderate	Minor	Minor	Negligible

Source: Mott MacDonald, 2025

6 Conclusion

This FSIA has assessed the social impacts associated with the Project. The main impacts will occur during the construction phase and then dissipate during operations. Implementation of adaptive management and recommended mitigation measures will help to minimise the extent and significance of identified impacts. Table 6.1 below provides an overall summary of the impact assessments for the social impacts identified in Section 5.

Table 6.1: Summary of social impacts and risks

Social impacts	Description	Impact significance	Mitigation measures	Residual impact significance
Human rights impact	Human right risks of high severity include livelihood, impacts to access to remedy and human rights within supply chain for the construction phase. Impact to rights to health or life are applicable to both construction and operation phase. The full impact assessment upon human rights may be found in the Project's HRIA.	Construction phase: Major Operation phase: moderate	• CoC for business Partner • Contractor's code of conduct • Good Business Conduct Policy • Human Rights Policy • HSE Plan • Emergency preparedness plan • Marine pollution emergency response plan • Traffic maintenance plan • Direct check-ins, inspections, and audits • Training certification verifications • Safety observations system to promote no-blame culture • Grievance mechanism • Diversity, Equity and Inclusion Procedure • Prevention, correction, complaint, and punishment of sexual harassment instruction • Measures presented within HRIA and LRP • Inspection & audits	Construction phase: Moderate* Operation phase: Minor* ** Human rights as an impact (within this report) encompass a range of key aspects. For more aspect-specific impact significance and mitigations, please refer to the HRIA (and LRP, as relevant).*
Employment generation	Local employment opportunities in the AoI will be generated by the Project during both construction and operation phases.	Construction phase: Minor (positive) Operation phase: Negligible	• CoC for business Partners • Grievance mechanism • Measures presented within HRIA and LRP	Operation phase: Moderate (positive) Operation phase: Minor (positive)
Labour and working conditions	Without appropriate safeguards in place, workers' rights may be impacted during Project construction and operation. This impact extends to employees directly engaged by the Project, contractors and subcontractors, and workers located within the Project's supply chain.	Construction phase: Major Operation phase: Moderate	• CoC for business Partner • Contractors code of conduct • Good Business Conduct Policy • Human Rights Policy • HSE Plan • Emergency preparedness plan • Grievance mechanism • Diversity, Equity and Inclusion Procedure • Government health and safety checks on workers living conditions • Measures presented within HRIA • SRE DE&I Concerns log • SRE's Prevention, Correction, Complaint, and Punishment of Sexual Harassment Instruction • Training certification verifications • Safety observation system to promote no-blame culture	Construction phase: Minor Operation phase: Negligible
Amenity and environment – air quality	Air quality is a construction nuisance that may impact the health and safety of local community and its workers.	Construction phase: Minor	• Mitigation measures and quarterly monitoring as relating to air quality are as prescribed within the EDA report • HSE Plan • SEP and GM	Construction phase: Negligible
Amenity and environment – Airborne noise	Airborn noise is another construction nuisance that may impact the health and safety of local community and its workers.	Construction phase: Minor	• Mitigation measures and quarterly monitoring as relating to air quality are as prescribed within the EDA report • HSE Plan • SEP and GM	Construction phase: Negligible
Economic displacement and livelihoods – vessel owners	Economic livelihood for coastal fisher folk will be temporarily affected by the installation of the submarine cable during the construction phase, while a few households will be impacted by the construction and operation of the project's windfarm area.	Construction phase for vessel owners: Moderate Operation phase for vessel owners: Minor	• LRP and compensation scheme • SEP and GM	Construction phase for vessel owners: Minor Operation phase for vessel owners: Negligible
Economic displacement and livelihoods – non-vessel owners	Non-vessel owning fisher folk households include those that work as vessel support, conduct fishery-related retailing and selling, and others. Non-vessel owners are a key project affected group that are directly and indirectly impacted by the economic impacts upon the fishing industry.	Construction phase for non-vessel owners: Major Operation phase for non-vessel owners: Moderate	• LRP and national or FCCA funding schemes • SEP and GM	Construction phase for non-vessel owners: Minor Operation phase for non-vessel owners: Negligible
Exposure to communicable disease	There is a potential for risks to community health, safety, and security, both onshore and offshore, which require mitigation. For instance, offshore construction workers may typically visit nearby towns to purchase items unavailable onboard, such as snacks, alcohol, or entertainment, leisure, or to participate in sporting and recreational activities.	Construction phase: Moderate Operation phase: -	• F4 Environmental and Social Management Plan • F4 Emergency Response Plan • SRE Human Rights Policy • Grievance mechanism	Construction phase: Minor Operation phase: -
Worker influx impact on infrastructure and services	The presence of construction workers, service providers, and, in some cases, their family members can increase demand for public services such as water, electricity, medical care, transportation, education, and social support.	Construction phase: Minor Operation phase: -		Construction phase: Negligible Operation phase: -
Increased onshore and offshore traffic	The project will create increased traffic both onshore and offshore, which may lead to collisions or other traffic-related incidents.	Construction phase: Moderate	• Marine traffic management • Traffic maintenance plan • Vessel collision assessment and navigation safety plan (under development) • Deploying patrol boats during construction phase • Establishing exclusion zones around the WTGs and working vessels during construction and operation phase • Installing warning lights at the perimeter of the wind farm	Construction phase: Minor

		Operation phase: Moderate	• HSE Plan • Emergency preparedness plan • SEP and GM	Operation phase: Minor
Culture and sense of community	The Aol's fishery communities displayed characteristics by: elderly population, lifelong residency, and robust social connectivity. The activities of fishery household were closely linked to fishing operations.	Construction phase: Moderate Operation phase: Minor	• SEP and GM	Construction phase: Minor Operation phase: Negligible

Source: Mott MacDonald, 2025

Appendices

A. Social scoping matrix

The scoping matrix assesses the potential interactions between the various activities and components of the Project, as well as the social receptors identified within the AoI at the different project phases (ie construction and operation phase). Given the uncertainty surrounding baseline conditions at the time of future decommissioning, the decommissioning phase is scoped out of this FSIA. However, the Project is required to submit its decommissioning plan one (1) year prior to the start of official decommissioning.

The scoping matrix takes into consideration findings from the Project's EIA development stage, socio-economic baseline surveys conducted in March to April 2025, relevant project documents and secondary data to arrive at scoping results.

For the classification of potential adverse impacts, each interaction has been defined as either "**Unlikely**" or "**Likely**". Table A.1 provides further definitions of these categories.

Table A.1: Definition of interactions

Interaction type	Description
Unlikely	• An interaction is not reasonably expected based upon the nature of the Project and identified receptors. • In some cases, an interaction is to be expected but the impact (if any) could potentially be considered negligible. • Where classified as unlikely, they have been eliminated from further discussion within the FSIA process unless otherwise stated in the matrix
Likely	• An interaction can reasonably be anticipated • May lead to impacts that could range from minor and major impacts • Requires more analysis in the FSIA process

Source: Mott MacDonald, 2025

The interactions between the Project and its activities and receptors within the AoI are presented in Table A.2.

Table A.2: Social scoping matrix

Social aspects	Receptors	Phase [1] (C/O)	Description of impact interaction	Interaction type	Existing assessment and existing or planned mitigation measures/plans	Scope in/out (for the FSIA)
Human rights						
Human rights	Project workforce Fisher folk as well as their employees and families Local communities Supply chain workers	C, O	There may be potential for specific human rights risks for various groups associated with and affected by the Project. These could or would include groups such as the Project workforce, fisher folk, including their employees and families, and local communities. Impacted rights risks may include inter alia rights to adequate standard of living and associated rights (health or livelihood), freedom of thought/opinion/expression, health and safety and respectful security or access to remedy, rights to non-discrimination and equal opportunities, particularly for vulnerable groups. Human rights particular to workers/working conditions are elaborated below. Potential risks may arise from employment, and also Project activities particularly for community members outside of Project's direct control. Hence, interaction of this impact to receptors is considered 'Likely'.	Likely	Detailed assessment of human rights impacts will be covered within the Project's Final HRIA, which assess human rights impacts as relating to affected people, communities and the Project's workforce. The Final HRIA covers primary data survey results conducted in March to April 2025 to inform on the impact assessments and proposed measures. Primary data results include KIIs, FGDs and 200 household survey results. The Project has in place a human rights policy, a Diversity, Equity and Inclusion (DE&I) Procedure, DE&I Concerns log, which are understood to be applicable to business partners. These documents cover general commitments to labour rights and human rights. The Project also has a stakeholder engagement plan (SEP) to communicate with relevant stakeholders, as well as a grievance/whistle-blower management process (GWMP, as mentioned in the DE&I Procedure) for internal and external stakeholders to raise issues/concerns.	In
Labour and working conditions						
Employment generation	Project workforce Supply chain workers	C, O	Employment opportunities will be generated through the Project for both the construction and operation phase. Onshore construction work includes cable laying and substation, which can offer more local skilled and unskilled labour opportunities. Offshore work will be more specialised and mostly skilled work for assembling WTGs, cable laying work and construction of the offshore substation. However, certain guard boat or marine mammal observation roles are expected to be offered. Operation phase will also offer job opportunities for mostly skilled/specialised roles like maintenance or repair work of WTGs and cables. The Project will create employment opportunities, so this impact is 'Likely'.	Likely	Detailed assessment of the employment opportunities is included in this FSIA and the related human rights impacts of employment will be covered within the Project's HRIA.	In
Working conditions for Project workers and supply chain workers	Project workforce Supply chain workers	C, O	Rights for workers, both Project workers and those within the Project's supply chain, may be impacted without proper safeguards in place. Labour and working condition risks relate to terms and conditions of employment, discrimination and unequal opportunity, occupational health and safety, child or forced labour, prevention of participation in workers associations, and lack of access to remedy. Potential risks may arise from employment. Hence, interaction of this impact to receptors is considered 'Likely'.	Likely	The Project Company are expected to have in place human resource employment documentation in line with Taiwan Labour laws (which covers all substantive aspects of IFC PS 2). These include an Employee Handbook, Work Rules and employee contracts for permanent and contracted employees. Other documents include Human Rights Policy, DE&I Procedure and localised human resources policies and procedures. This suite of documents aims to support the Project Company and its business partners (eg suppliers) to abide properly with local employment regulations, respect labour related human rights and provide a healthy and safe workplace as per local and global applicable standards and regulations. The Project's GWMP is also available for internal and external stakeholders to raise issues/concerns.	In
Construction nuisance						
Air quality – dust emissions and air pollutants	Local communities Project workforce	C	Onshore construction works of the Project includes earthworks and construction activities as well as associated transportation/mobilisation for the onshore cable and substation. Earthworks and construction activities are expected to generate dust and emit other air pollutants (eg SO_2, CO, PM_x, TSP), while the vehicles may create dust suspension when travelling. Fugitive dust and air pollutants may lead to health impacts including respiratory issues, discomfort to the eyes and nose. The air quality impacts from the Project's onshore activities had been assessed within the Project Environmental Differential Assessment (EDA) report. According to the air quality modelling and assessment within the EDA, all pollutants (ie TSP, PM_{10}, $PM_{2.5}$, SO_2, and NO_2), modelled from the onshore substation construction site to nearby social receptors and communities, were in compliance with relevant national and international air quality standards. No significant residual impacts are expected during both construction and operation phases if the EDA prescribed mitigations are accordingly implemented. The Project is required to implement the prescribed mitigation measures as outlined within its EDA, in order to achieve compliance and impact mitigation with regards to people's exposure. The localised and temporary potential of community members to any generated noise means the impact is considered 'Unlikely'.	Unlikely	Mitigation measures as relating to air quality are as prescribed within the EDA report. These measures will be included within the Project's ESMS and associated E&S management plans. The Project has in place a Health and Safety Plan as well as Emergency Response Plan which outlines the measures and plans against any occupational risks. The Project's SEP commits to communicating construction work to local communities prior to commencement. An overarching GWMP is also in place for workers and communities to raise issues/concerns. Overall, although impact is considered unlikely for both workers and community members, given the commonality of this nuisance in the local community and proximity to some communities, this social aspect is scoped into the FSIA.	In
Airborne noise	Local communities Project workforce	C	Similar to the project onshore activities as described above under 'air quality', these activities (ie construction and transportation) may generate elevated noise levels. Within the Project's EDA, noise level monitoring and modelling was conducted, and onshore construction noise results are expected to be in compliance with national[74] and international[75] noise standards. The Project is required to implement the prescribed mitigation measures as outlined within its EDA, in order to achieve compliance and impact mitigation. Offshore project vessels or construction work may produce their own noise, which may be heard by fisher folk or coastal communities when within proximity. However, construction safety exclusion zones are expected to be in place and guard vessels will also be mobilised by the	Unlikely	Mitigation measures as relating to airborne noise are as prescribed within the EDA report. These measures will be included within the Project's ESMS and associated E&S management plans. The Project has in place a Health and Safety Plan as well as Emergency Response Plan which outlines the measures and plans against any occupational risks. The Project's SEP commits to communicating construction work to local communities prior to commencement. An overarching GWMP is also in place for workers and communities to raise issues/concerns.	In

[74] Taiwan Environmental Noise Standard

[75] IFC WBG Environmental, Health, and Safety (EHS) guidelines: Noise management

			Project to ensure non-project vessels are at a safety distance. Measures are also in place to use low-noise producing construction techniques, and avoid early morning and night times for construction. As such, noise impacts for offshore work are expected to be minimal and manageable to community. Construction work is expected to meet local regulatory noise standards. The Project has mitigation measures in place as outlined within its EDA, as well as a Health and Safety Plan for the Project workforce. The localised and temporary potential of community members to any generated noise means the impact is considered 'Unlikely'.		Overall, although impact is considered unlikely for both workers and community members, given the commonality of this nuisance in the local community, this social aspect is scoped into the FSIA.	
Surface water and sea water quality	Local communities Project workforce	C, O	Onshore construction works of the Project may lead to surface runoff or additional sewage and wastewater. Polluted waters could impact water sources for local communities and workforce. Impacts to sea water quality may impact fishery resources, which in turn impacts the health of consumers as well as livelihood of fisher folk (livelihood to be discussed in the livelihood section below). The Project's EDA states that the Project is not expected to have significant residual impacts upon surface water, groundwater and domestic wastewater for both the construction and operation phases. The Project also commits to quarterly monitoring of onshore surface water at Fangli Creek. For offshore construction works, the cable laying works and foundation works would cause sediment suspension (SS). Within the EDA, sediment dispersion modelling was conducted for the possible scenarios. Impacts are considered localised and temporary, and numerical simulations are far below the background SS concentrations in the sea and intertidal zones. No significant residual impacts are expected during both construction and operation phases if the EDA prescribed mitigations are implemented accordingly. Given the above, community members and workers and not anticipated to be directly impacted and hence this impact is considered 'Unlikely'.	Unlikely	Mitigation measures as relating to water quality are as prescribed within the EDA report. These measures will be included within the Project's ESMS and associated E&S management plans. If any accidents/pollution to sea occur, Project is also expected to follow the protocols of the Marine Pollution Act. The Project has in place a Health and Safety Plan as well as Emergency Response Plan which outlines the measures and plans against any occupational risks. The Project's SEP commits to communicating construction work to local communities prior to commencement. An overarching GWMP is also in place for workers and communities to raise issues/concerns.	Out
Shadow flicker and operational noise	Local communities	O	Based on the EDA's survey of the community, 39.7% raised operational noise and vibration as a concern during the operation phase. The operational WTGs will be approximately 20km away from the coastline. At such distances, shadow flicker and operational noise effects are 'Unlikely' to impact the onshore local communities during the operational phase.	Unlikely	The Project does have in place a SEP and commitments to communicate project information to local communities. An overarching GWMP is also in place for communities to raise issues/concerns.	Out
Visual impacts	Local communities	C, O	During the construction phrase, visual impacts (ie as visible to onshore receptors) are largely limited to construction works for the cable laying and onshore substation construction. These are localised and temporary. During the operational phrase, the Project's large installation of WTGs is likely to influence the visual landscape of communities. The lighting sources on the WTGs could also cause light spills that influence nearby communities. The windfarm is located approximately 20km offshore, thus light spill impacts are expected to be minor to negligible. Within the EDA's survey to community, 21% local residents identified maintenance of visual landscape as important environmental measures to them. This item ranked 7th out of 10 environmental measures residents cared most about for the operation phase. The Project's EIA had analysed the visual impacts of the turbines at different coastal spots during and after construction. The EIA had concluded that overall due to the distance from coast, visual impacts or change to landscape would be low. Given the above, the interaction of this impact to receptors is considered 'Unlikely'.	Unlikely	The Project does have in place a SEP and commitments to communicate project information to local communities. An overarching GWMP is also in place for communities to raise issues/concerns.	Out
Community health and safety						
Exposure to communicable diseases	Local communities	C,O	Communicable diseases may increase with the influx of workers into the area, particularly those not from the local area. Communicable diseases can cause temporary to long-term impacts on health and well-being. However, for this Project most of the workers will be on offshore sites, being accommodated within the vessel's onboard accommodations which will minimise interactions with community members. Only influx of workers will come from onshore work into the Fangli Township to construction onshore components. The Project has hired Chung-Hsin Electric & Machinery Manufacturing Corporation (CHEM), a local contractor, as the engineer, procurement and construction (EPC) contractor. As such, no accommodation facilities onshore are expected as workers are expected to be hired locally. Local workers will stay reside with their families/own accommodations which should help minimise project-related exposure to communicable diseases. For any construction activities creating habitats for disease vectors (such as pooling of water) or local outbreaks of communicable diseases, management measures will be place and outbreak guidelines or regulations set out by the Ministry of Health and Welfare will be followed. Hence, the interaction with this impact is considered 'unlikely'.	Unlikely	The Project will have in a place QHSE plan to outline the health and safety procedures for project workers. The Project's Human Rights Policy also commits to healthy and safe working conditions for all its workers and business partners. A project-specific LMP is also in place to set out responsibilities and management practices associated with management of labour during the Project lifecycle. The Project does have in place a SEP and commitments to communicate project information to local communities. An overarching GWMP is also in place for communities to raise issues/concerns. Overall, although impact is considered unlikely for both workers and community members, given mitigation measures/management plans for impacts upon community are yet to be set in place, this social aspect is scoped into the FSIA.	In
Worker's influx - Infrastructure and services	Local communities	C, O	The Project aims to hire local workforce where possible. The majority of construction workers will be conducting offshore work, and offshore accommodations will be aboard vessels with some onshore accommodations via hotels or apartments. With majority of workforce being offshore, and majority of onshore workforce being local, it is expected that impact on accommodations, infrastructure, and services will be low. Yuanli Township, where the Project's onshore work will take place, has a population of 43,446 people, as of December 2024. The Project estimates that peak onshore workers will be around 40 people. It is also understood a neighbouring windfarm, Deshuai OWF, may overlap in onshore construction period. The maximum influx by the Project (ie during construction), assuming the Project and Deshuai OWF are to be developed concurrently, is 160 persons for the construction phase according to the respective EIAs. This is a small percentage (ie 0.37%) compared to the existing infrastructure and facilities available supporting the current community. Overall, influx of onshore workers for the construction and operation phase are unlikely to pose as an impact, especially for the operation phase.	Unlikely	The Project will have in a place QHSE plan to outline the health and safety procedures for project workers, as well as emergency preparedness plans for onshore and offshore operations. A project-specific LMP is also in place to set out responsibilities and management practices associated with management of labour during the Project lifecycle. The Project does have in place a SEP and commitments to communicate project information to local communities. An overarching GWMP is also in place for communities to raise issues/concerns. Overall, although impact is considered unlikely, given the mitigation measures/management plans are yet to be set in place, this social aspect is scoped into the FSIA.	In

			The Taichung Port where the Project's assembly site will be is well-serviced (eg health facilities). There have been various other OWFs that utilise the port for assembly and offshore work, and thus the nearby communities there and emergency services are familiar with and can accommodate the arrangements. The Project will have in place proper health and safety and emergency preparedness documentations upon construction work. Hence, interaction of this impact is considered 'Unlikely'.			
Increased onshore and offshore traffic	Local communities Project workforce	C, O, D	Direct impacts to surrounding communities and workforce include increased vehicular traffic both onshore and boat traffic offshore, which may lead to collisions or other traffic-related incidents resulting in minor to severe injuries. These impacts may further become cumulative when multiple windfarms overlap in their construction work phases. Impacts are not expected for operation phase as vehicle or vessel use and trips during this phase is likely to be much less frequent than the construction phase. For onshore traffic, the Project's EDA projects that with the assumption of most onshore workers (for both the Project itself and possible other concurrent OWF) utilising personal vehicles or motorcycles, the quality of traffic will remain the same. Meaning impact to traffic of the onshore component area will be minor. The Project will also avoid peak traffic hours as well as school hours to for transportation work. A significant number of construction vessels and associated supporting and emergency rescue vessels are anticipated to be travelling across the windfarm sites and the shore for this Project and other windfarm developments. From the Project and Deshuai's EDA reports, a total of 34 vessels (ie 18 for the Project and 16 for Deshuai) will be mobilised for the construction activities. It is understood that that the Project and Deshuai has committed to limited vessel speeds to help mitigate risks of collision. Construction exclusion zones and guard vessels are also in place to warn non-project vessels and reduce chance of collision. Thus, marine traffic impacts are considered minor. Although management measures for preventing and responding to onshore and offshore related traffic accidents are presented in the Project's EDA, incidents may still occur and thus this impact is listed as 'Likely'.	Likely	Mitigation measures as relating to onshore and offshore traffic and transportation are as prescribed within the EDA report. These measures will be included within the Project's ESMS and associated E&S management plans. The Project is to adhere to the local traffic and navigation and marine regulations. The Project also has in place a SEP and commitments to communicate construction work to local communities prior to commencement.	In
Cultural heritage						
Cultural heritage	Local communities	C	Cultural heritage items (eg archaeological site or relics), may be destroyed, unearthed or interfered with during construction work. Onshore works include cable laying and substation development, while offshore construction include submarine cable laying and WTG foundation work. The Project's EDA reports that the Project's onshore footprint does not overlap with any onshore cultural sites and are assessed to not impact any tangible cultural sites within a 200m radius from the onshore components. However, one key religious event (ie intangible cultural heritage) identified in the area is Baishatun's Mazu Pilgrimage (白沙屯媽祖進香). Every year's pilgrimage route differs, thus the Project is committed to confirm the route and timeline of the pilgrimage and avoid interference of the event. A KII with the Baishatun Gongtian Palace (白沙屯拱天宮) community representative was conducted on 13 March 2025. The committee member confirmed that the Project had previously held a briefing session at the Palace and does keep in communications with the Palace through the TFA. For offshore cultural heritage, the Project's EDA identifies six underwater cultural sites near the Project's offshore site. For identified underwater cultural sites, a security warning zone with a buffer of 25m will be set up to mitigate against any potential construction impacts. Furthermore, for any suspected underwater cultural sites found during construction in future, all related activities will be stopped immediately, and relevant authorities will be notified for handling. As such, it is unlikely that there would be any significant impacts on offshore cultural heritage. Given there is no direct overlap of cultural heritage sites and mitigation measures are in place for both tangible and intangible cultural heritage, impacts on this aspect is considered 'unlikely'.	Unlikely	Mitigation measures as relating to cultural heritage are as prescribed within the EDA report. These measures will be included within the Project's ESMS and associated E&S management plans. The Project is to adhere to Cultural Heritage Preservation Act and its chance find regulations. The Project does have in place a SEP and commitments to communicate project information to local communities. The SEP is also to cover commitments to confirm route and timeline of the Baishatun Mazu Pilgrimage. An overarching GWMP is also in place for communities to raise issues/concerns.	Out
Land acquisition, displacement and livelihoods						
Economic displacement and livelihoods	Local communities	C, O	The Project's offshore construction work and eventual permanent WTG infrastructure may displace fisher folk or oyster farmers from their fishing/farming grounds, causing economic displacement. The Project has confirmed that the Project's offshore to onshore footprint do not overlap with and impact oyster farmers. It is also understood that all Miaoli County fisher folks conduct coastal fishing, hence their active fishing zones extend 12 nautical miles or 22km off the coast of Miaoli County. As the Project's windfarm location is largely located outside of that expected/typical range of coastal fishing area zones (the Project's closest point to shore is 22km from the coast), it is not expected that the windfarm area will impact livelihoods for fisher folk in the construction or operation phase. The Project's cable laying work passes through the Tongyuan exclusive fishing rights (EFR) area and extends from the coast up to 27km to the wind farm area. Thus, cable laying will temporarily displace Tongyuan fisher folks from their coastal fishing grounds during the construction phase. It is acknowledged that fisher folk are not strictly geographically limited to conduct fishing activities only in the EFR area of their licence registration and may travel to other coastal waters outside of the waters extending out from the Tongyuan EFR zone. The Project will undertake compensations to the project affected persons, and livelihood restoration programmes are also under development. The assessment and quantification of impact on specific project affected persons, as well as compensation and livelihood restoration details are further elaborated in the Project's preliminary livelihood restoration plan (LRP).	Likely	A Final LRP (Draft 1) with assessment of impact and livelihood restoration measures has been developed. This Final LRP covers primary data survey results conducted in March 2025 to inform on the impact assessments and proposed livelihood restoration programmes. Primary data results include 10 KIIs and 200 household survey results. Current proposed programmes include cash compensation and training programme opportunities. Training programmes can provide people with new skillsets to partake in Project jobs. These skillsets may allow them to find employment beyond the project's lifecycle. An overarching GWMP is also in place for impacted persons to raise issues/concerns.	In

			This impact is understood to occur and thus is considered 'Likely'.			
Land acquisition and physical displacement	Local communities	C, O	The Project is planned in compliance with the "Offshore Wind Farm Site Application Regulation", stipulated by the Bureau of Energy, Ministry of Economic Affair in July 2015. Onshore project components requiring land acquisition are limited to onshore substation and onshore cables. The onshore relevant permits are to be obtained by the Project Company (including land use permits, construction permit, right-of-way, etc) prior to commencement of construction. The Project is expected to have one (1) onshore substation (OnSS), which will require land acquisition of a private-owned land parcel plot 1283 of Xihai section (西海段), in Fangli Village (房裡里), Yuanli Township (苑裡鎮). The purchase and consolidation of the land has been completed, and a green facilities land use consent has also been obtained from Miaoli County Government (MCG) on 23 August 2024. The land parcel for the OnSS used to be idle land and the Project confirms no previous user were utilising the land prior to acquisition. Onshore cables are mostly laid within existing roads or road alignment, with some crossing of state-owned forestry and agricultural zones (ie Forestry and Nature Conservation Agency, Ministry of Agriculture (MoA) and Irrigation Agency, MoA) as well as privately-owned land that is now owned by the Project Company. The lands now owned by F4 were previously used for river land purposes, but it is also confirmed that no previous land users were utilising the land or resettled due to the Project. As such, no physical or economic displacement is expected for the onshore works, and hence, is 'Unlikely' to occur.	Unlikely	To date, no known physical displacement impacts from onshore or offshore works have been identified nor is any future physical displacement anticipated. The Project is in the process of obtaining all relevant permits (eg windfarm site, submarine cable sites, Cable Laying Permits, Offshore Zonal Permit) and construction-related permits (eg construction permit and horizontal directional drilling seawall crossing permit). The Project is to follow local regulations relating to land acquisition and development of renewable facilities.	Out
Culture and sense of community						
Changing culture and sense of community	Local communities	C, O	Characteristics, culture and sense of community are aspects to consider for homogenous communities like small fishery communities or townships, particularly when their is strong reliance on a single industry (ie fisheries). As the community's first offshore wind project, it will drive significant change as new aspects like construction work, long-term establishment of windfarms bring about changes to the baseline of their routines. Based on primary data (KIIs, Household surveys, FGDs) and secondary data (background collection), the AoI's fishing communities display clear community characteristics: most residents are elderly, most have lived there their entire lives, and they maintain strong social connections. Thus, impacts on this aspect is considered 'likely'.	Likely	A Final LRP (Draft 1) presents programmes cash compensation and training programme opportunities to economically support the communities. Although cash or training of other skillsets may not directly preserve the fishery culture of the community, it is not necessarily a negative mitigation measure to provide adaptive possibilities for the local communities. The Project also has in place a SEP and a locally based community liaison officer to conduct regular communications with and better understand the community that is to be impacted.	In

Note: [1] Phase where the associated impact have potential to occur and/or materialise. C = Construction; O = Operations
Source: Mott MacDonald, 2025