ENERGY TRANSITION PARTNERSHIP

Powering Prosperity and Enabling Sustainability in South East Asia

The Southeast Asian Energy Transition Partnership (ETP) is a multi-donor Forum that brings together government donors, philanthropies, and Southeast Asian governments to accelerate the energy transition in Southeast Asia.

Accelerating Offshore Wind Development in the Philippines

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The Philippines is accelerating development of offshore (OSW) wind, starting with 42 projects awarded with service contracts, with a cumulative capacity of 31.5 GW. However, the absence of marine spatial planning (MSP) and a clear permitting process for OSW projects pose barriers. ETP will address these barriers through two projects, critical steps in jumpstarting offshore wind by reducing uncertainties in project development, and thereby de-risking offshore wind power investments. The first will develop the country's MSP planning framework for the identification of viable sites. The second project will define the permitting and consenting process for OSW projects. Both projects will facilitate the diversification of the country's power generation mix and contribute to the completion of up to 31.5 GW of the first set of offshore wind projects and in attaining 50% renewables' share by 2040.

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Table of Contents

I. INTRODUCTION

1 The Southeast Asia Energy Transition Partnership (ETP) brings together governments and philanthropies to work with partner countries in the region - to contribute to the achievement of the UN's Sustainable Development Goals (SDGs) and the Paris Climate Agreement objectives. ETP supports the transition towards modern energy systems that can simultaneously ensure economic growth, energy security, and environmental sustainability. ETP's strategy is built around four inter-related pillars of strategic engagement that are squarely aligned to address the barriers to energy transition. These are (i) policy alignment with climate commitments, (ii) de-risking energy efficiency and renewable energy investments, (iii) extending smart grinds, and (iv) expanding knowledge and awareness building. See www.energytransitionpartnership.org for more about ETP.

2 The Department of Energy (DOE) raised a request through the Energy Transition Council Rapid Response Facility (RRF) for two offshore wind-related technical assistance in June 2022. The first of which is the *Development of Marine Spatial Planning System and Tool aligned with the Good International Industry Practice to facilitate build-out of the offshore wind and marine energy sector in the Philippines*. ETP responded positively to support the two projects and reflected in the two projects described here. The projects will be tendered separately.

II. PROJECT DETAILS

A. Rationale and Impact

3 The Philippines is taking active steps towards offshore wind (OSW) energy (Annex 1 Offshore Wind Development in the Philippines). However, the lack of marine planning activities or any adopted national marine spatial plan, and unclear permitting/consenting process is a considerable barrier to market development and pose risks to investments. To jumpstart OSW development in the country, ETP is extending two (2) interconnected technical assistance projects that are aligned with ETP's strategic outcome to reduce risks to investments in renewable energy:

a. Project 1 (P1). Marine Spatial Planning (MSP) for the Philippines
b. Project 2 (P2). Permitting and Consenting for OSW Energy in the Philippines

4 A marine spatial plan can provide much-needed certainty to project developers that their initial investments in the pre-planning, permitting, and consenting phases will be worthwhile, not only by identifying appropriate areas for development but also by setting standards for environmental compliance and social license. Likewise, adhering to a clear marine spatial planning process, in which all relevant stakeholders are consulted and the best available

evidence is assessed, can help reduce conflict between developers and other marine users and avoid unintended consequences (e.g. disruption to marine protected areas or critical habitats, shipping or aviation industry concerns or local resident protests).

5 Lack of a coordinated marine spatial planning process at the national level has been rated by stakeholders as the highest priority for removing obstacles for offshore wind power development. Currently, legislative functions related to foreshore activities are distributed among autonomous authorities and local government units that are charged with discretionary management of their respective 15-km municipal water.[1] Without a coordinated marine spatial planning process and an understanding of the environmental, social, and economic parameters of the marine space, setting out viable OSW development zones will be challenging. P1 will focus on developing an MSP tool for OSW projects to serve as a foundation for any future planning for other marine renewables, such as marine floating solar or ocean tidal. More background information on MSP can be found in Annex 1.

6 With no central agency overseeing the use of marine waters, the permitting and consenting processes are complex and may take up to several years. OSW developers are unsure which national, regional, or local government agencies they must liaise with throughout the permitting process. The World Bank Offshore Wind Roadmap for the Philippines has estimated that developers must prepare applications for at least 29 permits[2] from national, regional, and local governments, and recommended streamlining the permitting process to reduce requirements and letters of approval which can create risks of agency overlap and duplication.[3] The government's Energy Virtual One-Stop Shop (EVOSS), an online platform facilitating the coordination and processing of information required for energy project applications, currently does not include all permits, licenses and clearances for OSW projects.

7 Government agencies can benefit from lessons from more mature offshore wind markets and establish a benchmark against Good International Industry Practice (GIIP) for both MSP and the permitting process. Capacity building of the agencies in the Philippines can further ensure that any planning, permitting, and consenting system for offshore wind is implemented effectively and efficiently. Defining an MSP and a streamlined permitting process will encourage investments into OSW and facilitate the development of 31.5GW of projects already awarded with Wind Service Contracts by the Department of Energy.

[1] https://commons.wmu.se/cgi/viewcontent.cgi?article=2719&context=all_dissertations
[2] Annex 2 presents an indicative list of the permits, licences and registration required for OSW farm development in the country.
[3] World Bank 2022, Offshore Wind Roadmap for the Philippines

B. Objectives

8 Both technical assistance projects, P1 and P2, aim to fast-track the predevelopment stage and reduce risks to investments for OSW projects. While the focus of these two projects is on OSW, they will be the foundation for all other marine renewable energy projects. The primary objective of the two projects are

a. **Project 1 on MSP:** The aim is to establish an OSW MSP tool for the Philippines, to facilitate the development of 31.5GW OSW projects, reduce uncertainties and potential conflict during subsequent project development stages. Annex 3 MSP Terms of Reference provides other specific objectives of this project.

b. **Project 2 on OSW Permitting:** The aim is to develop an efficient permitting process for OSW in the Philippines that is in line with international best practices. Annex 4 Permitting and Consenting for OSW Projects Terms of Reference explains the specific objectives of this project.

C. Key Activities and Outputs

Figure 1. MSP Project Stages, Key Activities, and Outputs

	Stage 1: Inception and Set-up	Stage 2: Data Gathering	Stage 3: Constraints Mapping	Stage 4: MSP Tool Development	Stage 5: Outcomes and Implementation
DESCRIPTION	Analyses of relevant inputs to developing the MSP tool and marine planning methodology.	Identifying what datasets are available and establishing how these will be collected; and analyzing the implications of data gaps.	Relevant stakeholders will be consulted in setting the factors or criteria for delegating marine regions for OSW projects, and establish a marine planning methodology.	An MSP tool will be developed using available information and guided by international best practices.	Using the constraints set and the MSP tool, suitable OSW sites will be examined. Necessary training and policy issuances will be developed to ensure that MSP tool will be updated and maintained.
ACTIVITIES	➢ Analyze for existing marine management frameworks ➢ Explore existing geospatial tools and data repositories ➢ Stakeholder mapping	➢ Identify available data ➢ Understand dataset acquisition and processing ➢ Identify data gaps	Consult with stakeholders to prioritize constraints/criteria for MSP	➢ Screen datasets for quality and convert to appropriate data format ➢ Integrate datasets to mapping platform/tool	➢ Capacity building ➢ Apply MSP tool, site analysis ➢ Facilitate negotiation between DOE and OSW projects within exclusion zones ➢ Formulate necessary issuances
KEY OUTPUTS	1. MSP process workshop/consultation 2. MSP methodology document 3. Stakeholder engagement plan	1. Data briefing that summarizes available data in the Philippines and international databases	1. Constraints exploration workshop 2. Constraints mapping methodology 3. Constraints validation workshop	1. MSP tool development and data integration report 2. Compilation of relevant datasets 3. MSP tool 4. MSP tool summary report	1. OSW maps 2. MSP tool workshop 3. Issuances/agreements for long-term data sharing 4. Issuances integrating MSP in energy planning frameworks 5. Issuances/advisory and guidance for OSW overlap with exclusion zone

9 Project 1 will develop the country's MSP methodology for OSW and a functional MSP tool to analyze sites. The project stages, key activities, and outputs of P1 are summarized in Figure 1;

more details can be found in Annex 3. The MSP methodology for OSW will define the criteria[4] for suitable sites for OSW farms. MSP methodology for OSW will differ from other marine renewables because they will have different requirements in terms of seabed depth, resource types, and other factors. The MSP tool and methodology will then be used to examine potential sites alongside the 42 projects (total 31 GW) already awarded with service contracts[5]. The project will ensure that the tool and MSP will be integrated into other planning frameworks through policy issuances and agreements with other government agencies.

Figure 2. OSW Permitting Project Stages, Key Activities, and Outputs

	Stage 1: Inception and Set-up	Stage 2: Data Gathering & Processing	Stage 3: Capacity Building	Stage 4: Permitting Framework	Stage 5: Outcomes and Implementation
DESCRIPTION	Government agencies that should be involved in the OSW permitting process will be identified, and existing consenting frameworks for use of sea space analyzed.	International best practices will serve as model for establishing the OSW permitting process. Relevant agencies will be engaged and their roles established.	The recommended OSW permitting process will be presented to government agencies and finalized through workshops, ensuring an efficient flow agreed by all agencies.	A report or paper will be prepared that will serve as reference for the department circular on the OSW permitting process.	A plan will be prepared to ensure that the OSW permitting process will be integrated in the Energy Virtual One Stop Shop (EVOSS).
ACTIVITIES	➢ Stakeholder mapping ➢ Analyze legal and regulatory frameworks for permitting	➢ Collect the permitting process from each agency ➢ Workshop to clearly understand roles ➢ Explore best case models ➢ Recommend the OSW permitting process	Workshops and consultations	Documenting the permitting process, including all the relevant agencies, requirements, process flows, and other relevant information	➢ Develop a plan for integration into the EVOSS ➢ Present the plan to the EVOSS team
KEY OUTPUTS	1. Stakeholder Engagement Plan 2. OSW Permitting & Process Workshop 3. Current permitting process and gap analysis report	1. Collation of permitting guidance 2. Roles and regulations workshop 3. Three case studies 4. OSW Permitting recommendation report	1. Feedback workshop on permitting recommendations 2. Capacity building workshop to upskill government agencies on the new OSW permitting process	1. Permitting Report	1. Plan for integration to the EVOSS

10 Project 2 will develop a streamlined permitting process to guide OSW project developers. Figure 2 shows a summary of the project stages, activities, and key outputs; more details can be found in Annex 4. The project will first review the regulatory frameworks for the use of marine resources and identify the relevant government agencies to be consulted during the permitting process. Using international good practices as models and stakeholder inputs, the project will

[4] The criteria will include ecological and biological distributions, human activities, oceanographic and physical features, and jurisdictional and administrative borders.

[5] A renewable energy service contract is a service agreement between the Philippine Government and an eligible project developer, giving the developer the exclusive right to explore, develop, or use the renewable energy resources in a specific area.

develop the permitting process for OSW projects and integrate the outputs in the Energy Virtual One-Stop Shop[6] (EVOSS).

D. Project Implementation Arrangements and Timeline

11 P1 and P2 will undergo two separate tender processes and be implemented in parallel. The indicative timeline for the two projects is 13 months. While ensuring that all expected deliverables are produced at the highest quality, the implementing partners bidding for the project are encouraged to expedite project delivery to accelerate the RE deployment objective of the project. Bidders may submit a proposal for one or both projects.

12 The project will benefit from expert advice from the Philippines Offshore Wind Joint Industry Programme (POWJIP). POWJIP is a collaboration platform of public and private organizations aimed at accelerating OSW development. It is headed by the DOE, and Carbon Trust[7] acts as its secretariat. There are currently 18 members of POWJIP.

III. STAKEHOLDERS AND DONORS ACTIVITIES

13 While technically different, the two projects have the same stakeholders:

i. Government agencies: There is no central agency governing seas and oceans. This project will identify and engage with relevant national agencies. Some of the initially identified stakeholding government agencies include the DOE, the Department of Environment and Natural Resources, the Philippine Ports Authority, the Navy and Coast Guard, the Department of Agriculture, and the Maritime Industry Authority, etc.
ii. Local government units (LGUs): Municipal and city LGUs play a key role in coastal and marine management as well as the permitting process.
iii. Private sector offshore wind project developers: The information needs of project developers will be taken into consideration when developing the tool, the MSP methodology, and the permitting process.
iv. Other stakeholders: This project engages with the academia, NGOs and civil society organizations (CSOs), to incorporate their concerns into mapping of constraining factors for offshore wind development.

14 There are various development partners with activities related to OSW development including:

[6] EVOSS is an online platform developed by the government to facilitate the coordination and processing of information required for energy project applications.
[7] Carbon Trust is a non-profit company that provides expert advise to governments and organizations towards decarbonization.

i. **World Bank Offshore Wind Roadmap for the Philippines, *completed.*** Provided strategic analysis of the offshore wind potential of the Philippines. It estimated 178GW of total technical[8] potential of offshore wind resources.[9]

ii. **UK ASEAN Low Carbon Energy Programme Offshore Wind Capacity Building, *completed.*** Capacity building to support the development of policy and regulatory framework for offshore wind projects.

iii. **ETP Marine Renewable Energy Stocktake Report**, ***on-going.*** Report on marine renewable energy options for the Philippines.

iv. **US Trade and Development Agency and Aboitiz Group Pre-LIDAR[10] Assessment of the Luzon region, *ongoing.*** Analysis of the Luzon region competing users using existing atlas data.

v. **USAID Energy Secure Philippines: Offshore Wind Capacity Building, *planned.*** Capacity building for financial institutions, the Energy Regulatory Commission (ERC), and project developers on offshore wind.

vi. **ADB and Danish Government Regulatory Framework for Offshore Wind Projects, *active tender.*** Developing recommendations for the offshore wind regulatory framework that will include developing the cost methodology, and assumptions, and estimating the least cost of integration of offshore wind projects in the energy mix.

IV. RESULTS-BASED MONITORING FRAMEWORK AND RISKS

A. Results-Based Monitoring Framework

15 The outputs of the two projects will be monitored using the framework in Table 1. All reports will update the achievement of the indicators.

[8] Technical potential is an estimate of the amount of generation capacity that could be technically feasible, considering only wind speed and water depth. This is a high-level estimate and does not consider other technical, environmental, social, or economic constraints.

[9] World Bank. 2022. Offshore Wind Roadmap for the Philippines.

[10] Light Detection and Ranging - a remote sensing method to examine the Earth's surface

Table 1. Results and Monitoring Matrix of P1 and P2

ETP Results	Project Output(s)	Indicator	Target	Data Source and Means of Verification
Impact: The two projects (P1 and P2) will help diversify the power mix with offshore wind generation and help achieve the Clean Energy Scenario of 50% renewables share by 2040. The MSP tool and an efficient permitting process for OSW projects will contribute to creating an enabling environment for investments in OSW by minimizing uncertainties in the projects' pre-development phase, streamlining the permitting flow, and reducing risks to conflicts with other marine users and authorities. These outcomes will encourage more private-sector investments in OSW and support the growth of other marine renewables, such as floating solar PV and ocean tidal.				
Long-Term Outcome: Both projects will facilitate the development and hasten the completion of the first set of offshore wind power projects awarded with service contracts, with a total of 31.5 GW. An MSP tool will provide the necessary information to guide project development while the permitting guidelines will provide clarity on the licensing and consenting process. Both will contribute to shortening the time and reducing the costs and resources associated with the pre-development stages of OSW project development.				
Intermediate Outcome 1. Strengthened RE and EE policy enabling environment				
Short-Term Outcome 1.1 National RE and EE policies, regulations, standards, and energy plans reflect a clear commitment to Energy Transition agenda and integrated into sectoral plans to contribute to the achievement of Paris Agreement	Policy or agreement that relevant government agencies will provide information for MSP and agree that viable zones can be used for offshore wind development.	Indicator 1: number of policies or agreements approved	Target 1: At least 1 policy or 3 agreements (NAMRIA, Navy or Coast Guard, Department of Environment and Natural Resources (DENR) and other relevant authorities)	DOE
	Marine Spatial Planning Framework/Methodology that includes offshore wind among other uses of the country's sea space	Indicator 2: number of methodology	Target 2: 1 Marine Spatial Planning methodology document approved by DOE	Project Report
	Policy issuance/ advisory of the adoption of the recommended permitting process	Indicator 3: number of issuances or advisory	Target 3: At least 1 policy issuance or advisory adopting the OSW permitting process	DOE
	EVOSS Integration Plan	Indicator 4: number of plan/document	Target 4: 1 plan outlining how the OSW permitting process will be integrated in EVOSS	Project Report, EVOSS Plan
Intermediate Outcome 2. De-risking Investments to Renewable Energy				

Short-Term Outcome 2.2 De-risked project finance is accessible via financial institutions generating a pipeline of large-scale RE/EE projects	Marine Spatial Planning Tool	Indicator 5: number of tool	Target 5: 1 operating MSP tool that can be used to identify viable sites for offshore wind development. The MSP tool will ensure that there is no conflicting use of the area, reducing risks of conflict and opposition from other stakeholders.	MSP Tool Project report
	OSW Permitting Process	Indicator 6: number of process document	Target 6: 1 complete set of OSW permitting process for the Philippines, including process flow, requirements, indicative timelines, and other relevant guidance for project developers	Project Report, documented permitting process
Intermediate Outcome 4: Knowledge and Awareness Building				
Short-Term Outcome 4.1 Stakeholders (relevant Government entities, public sector companies, financial institutions, Private entities, Academia, and Consumers) involved in the RE/EE value chain, are knowledgeable and better informed to advance the energy transition agenda	Focus Group Discussions (FGDs) with Stakeholders	Indicator 7: number of FGDs and participants, gender-disaggregated data	Target 7: 3 FGDs with 30 participants each FGD (at least 90 participants) to enhance awareness on the MSP process and on the benefits of offshore wind energy, at least 50% females	Workshop reports, Project report
	Capacity Building on MSP for government agencies	Indicator 8: number of capacity government agencies trained on MSP	Target 8: At least 5 government agencies consulted and trained on MSP and offshore wind energy (may include DOE, Energy Regulatory Commission, NAMRIA, DENR, Navy, Coast Guard, Bureau of Fisheries and Aquatic Resources (BFAR), etc)	Workshop reports, Project report
	Case studies on international best practices on OSW project permitting and consenting process	Indicator 9: number of case studies	Target 9: 3 case studies on different jurisdictions that have an effective licensing process for OSW projects	Project report, case studies
	Workshops on the OSW Permitting Process	Indicator 10: number of workshops and participants; gender-disaggregated data	Target 10: 3 workshops with 30 participants (at least 90 participants) to upskill government personnel in evaluating and releasing permits for OSW projects; at least 50% females	Workshop reports, Project report

B. Risks and Mitigation Measures

16 Certain risks will be unique for each of the projects, these and the mitigation measures are summarised below.

Risk	Likelihood	Mitigation Measure
P1 Marine Spatial Planning		
Risk that there are substantial data gaps that may limit the ability to identify marine renewable energy zones with high confidence levels or that required data is not shared by a governmental body, such as military use of sea space. Government agencies do not sufficiently engage in the development of a marine spatial planning tool and constraints activities.	Highly likely	The constraints map, marine spatial planning tool, and recommendations delivered by the project will be driven by the data available. Other sources of data can be explored, such as international databases if data is not available from government agencies. DOE will support the implementing partner in reaching and engaging relevant agencies and bodies and supporting conflict resolution.
Opposition of stakeholders to marine development for energy because of potential adverse impacts on the environment and livelihood of coastal communities.	Likely	Relevant stakeholders will be consulted in FGDs to collect their concerns, explain any misconceptions about MSP and offshore wind development, and seek support.
Datasets cannot be embedded into the NAMRIA geoportal for MSP.	Less Likely	The implementing partner must consult with NAMRIA early on to understand how additional datasets can be added to the platform. If the geoportal cannot be used, other existing platforms should be explored.
P2 OSW Permitting		
There is a risk that without suitable laws and regulations (as the current Renewable Energy Act of 2008 does not cover any Provision related to marine and offshore wind energy), certain permitting processes could not be carried out because the existing government agencies have no legislative mandates over certain roles or functions.	Highly likely	The consultants may advise on which governmental agencies could expand and take up the additional regulatory roles and functions, supported by international case studies.

Mapping of the jurisdiction of governmental agencies in OSW permitting may highlight regulatory overreach and jurisdictional disputes that cannot be resolved in the project timelines / by the implementing partner.	Likely	It is crucial that the DOE could steer, provide feedback, and continue to support the Project with decision making as well as continued commitment. Where disputes arise, the DOE will support the implementing partner in reaching and engaging relevant regulatory bodies and supporting conflict resolution.