



Project Update Report

EWG 13 2021A

The Legislation Recommendation and Promotion of Multifunctional Ocean Space Usage: Combine Floating PV Installations at Offshore Wind Farms

Chinese Taipei

EGNRET 59

18 October 2023 @ Manila, Philippines

Background

- Land is a limited nature resource and became an obstacle for promoting renewable energy development.
- Maximization of both ocean space usage and electricity generation in vacant spacings below the blades of offshore wind turbines.
- “Multi-functional usage in ocean space” to sustainable energy growth by combining offshore wind turbines and floating photovoltaic (PV) panels in the open ocean surface.



Objectives

- To build the capacity of participants through workshops which supports the “multi-functional usage in ocean space”.
- To produces legislation recommendation for further developing energy security in line with the objectives of the APEC Leaders Meeting in Kuala Lumpur in 2020.
- To collaborate for affordable energy facility and energy security enhancement through the application of various technologies on sustainable economic growth.

Methodology

Feasibility study

Focus on the international regulations related to ocean space usage management, especially the United Nations Convention on Law of the Sea 1982 and other domestic regulations among APEC economies.

Workshop

- Providing legislation recommendations on ocean space management to the participants from the APEC economies through Workshop and Training Program.
- Conduct Workshops to promote the research and recommendation of ocean space management regulations.

Final Report

- Complete the final report and deliver to EGNRET and EWG representatives for review.

Expected Outcome

- **Women and female lawyers rule as essential promoters to establish domestic legislation recommendation on "multi-functional usage in ocean space".**
- **Achieving economic and electricity security and resilience, which benefits human security and welfares.**
- **Enhancing energy resilience and energy security by introducing "multi-functional usage in ocean space" solutions for ocean space usage management, promoting the human community welfares.**
- **Increase the technology innovation and facilitate the maximum of the APEC economics sustainability and profitability in industries.**

Updated Progress of Project

- Completed and submitted first Monitoring Report in April 2023.
- Completed the research and legislations among EU countries and some APEC economic entities, including Japan and Chinese Taipei.
- Completed the self-fund half day Workshop in Manila, Philippines on 16 October, 2023 for data and suggestions collection.
- Five Speakers were invited and presented at the self-fund Workshop.
 - Two of five speakers are female.
 - Reached the 40% of the gender equality target.

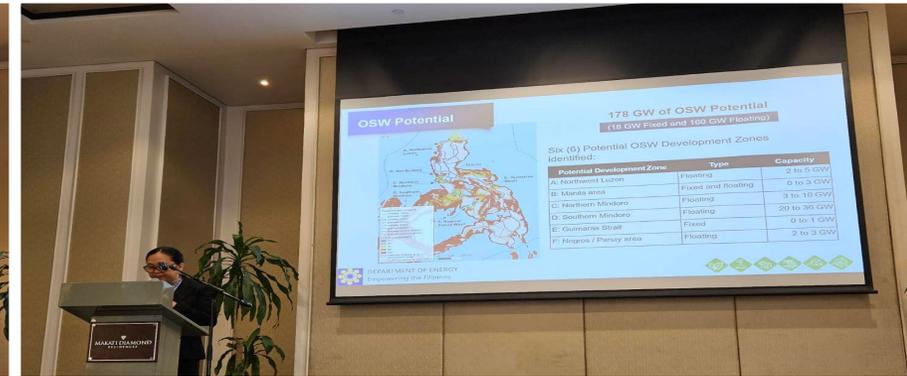
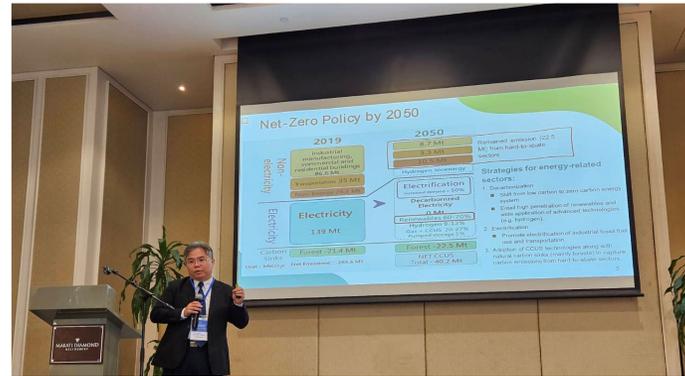
Workshop Agenda

Workshop on Promotion of Multifunctional Ocean Space Usage for Renewable Energies Combination

16 oct 2023 in Manila

Time	Topic	Speaker
08:30-09:00	Registration	
09:10-09:20	Welcome address	Dr. Chi-Wen Liao EGNRET Chair
09:20-09:30	Introduction to the Legislation Recommendation and Promotion of Multifunctional Ocean Space Usage	Dr. Keng-Tung Wu Chung Hsing University, Chinese Taipei
09:30-10:10	The Reviews of Offshore Wind Farm Project Development Status in APEC Economies	Dr. Chung-Hsien Chen Energy Administration, MOEA, Chinese Taipei
		Ms. Marissa P. Cerezo Renewable Energy Management Bureau, Philippines
10:10-10:30	The Essential Elements of The Marine Environmental Impact Access Meant	Dr. Yiyuan William Su Venna Carbon Solution Consulting Ltd., Chinese Taipei
10:30-10:50	Coffee Break	
10:50-11:10	Establishing The offshore Solar Floating System	Miss. Mei-Lin Kuo Sun Rise E&T Co., Chinese Taipei
11:10-11:30	The Space Management Elements on Establishing Offshore Wind Farm Project	Dr. Yiyuan William Su Venna Carbon Solution Consulting Ltd., Chinese Taipei
11:30-11:50	Discussion	Chinese Taipei
11:50-12:00	Closing Remark	Chinese Taipei

Workshop Activity Photos



The support by Department of Energy, Philippines is acknowledged.

Suggestions and Discussion from the Workshop

- The legal research and survey related to offshore wind farms shall expand to the APEC member economics.
- Real case study and analysis might be needed.
- The regulations cause cost to the project developer and operators. The cost evaluation on regulated permit applications could be collected and provide comparison results.
- The planning and reviewing style (Germany and Chinese Taipei adopted) could bring all bureaus to the same reviewing meeting and improve the application efficiency.

Future Project Movement

- Collecting and analyzing the survey after the self-fund Workshop.
- **Preparing the APEC-funded Workshop in February 2024 in Taichung, Chinese Taipei.**
- Preparing the speaker invitation list before end of December 2023.
 - 40% of the invited speakers shall be female.
 - At least 14 APEC economies are expected to be present at the APEC-funded workshop.
- Complete the survey of the offshore winds farm regulations from the APEC member economics before the Workshop.
- Keep preparing the draft final report.



Thank you very much for your attention.

The support by DOE, Philippines is acknowledged.