



Summary

2nd Clean Energy Finance and Investment Consultation Workshop **“Unlocking finance and investment for clean energy in the Philippines”** **24-25 November 2022** **Bluewater Hotel, Panglao, Bohol**

Day 1: Offshore wind finance and investment

The collaboration between the Organisation for Economic Co-operation and Development (OECD) Clean Energy Finance and Investment Mobilisation Programme (CEFIM) and the Philippines Department of Energy (DOE) was launched on 13 December 2021. One of the flagship outputs of the collaboration is a Clean Energy Finance and Investment Roadmap for the Philippines (to be released in mid-2023), which will provide an action plan to accelerate clean energy finance and investment in the country, focusing on offshore wind and energy efficiency in public buildings as priority sectors. Following a successful first workshop on 31 May-01 June 2022, OECD CEFIM and DOE jointly organised a second workshop which brought together key public and private sector stakeholders to identify challenges and opportunities to scale up finance and investment for offshore wind and energy efficiency in public buildings in the Philippines.

Offshore wind discussions took place under Chatham House rules on 24 November 2022, with participants joining both in-person and virtually. 42% of the participants were government representatives, 36% were from non-governmental organisations/international development organisations/donor groups, 12% were renewable energy project developers, 3% were energy efficiency project developers, and 6% were private financial institutions. Four roundtables were held, covering the topics of policy actions to accelerate renewable energy investments, creating the enabling environment for offshore wind development, and attracting capital by addressing project developer risks, bankability, and financing models for offshore wind.

This document provides a summary of the offshore wind discussions along with key takeaways and next steps.

Measures are being taken to improve the investment climate for renewables

- The Philippines government has set renewable energy generation targets of 35% by 2030 and at least 50% by 2040. A total of 52,826 megawatts (MW) of additional renewable energy capacity (7 times the current level) is required by 2040 to achieve this target. Wind energy, including offshore wind, is expected to supply 13% of the resulting power mix in 2040, the largest share among renewables after hydropower.
- The DOE's latest National Renewable Energy Program (NREP) 2020-2040 provides a policy framework to support the transition to renewable energy. The NREP has four components: mandatory and voluntary transition pathways, measures to strengthen the enabling environment, strategies to promote off-grid renewables, and resource-specific programs to support the development of geothermal, waste-to-energy, rooftop solar, ocean, and offshore wind energy.

- Notable renewable energy policy updates include:
 - **Investment policy and promotion**
 - The 40% foreign ownership limitation on the exploration, development, and utilisation of renewable energy resources have been relaxed starting 8 December 2022.
 - The minimum Renewable Portfolio Standards (RPS) mandates for load-serving entities will be increased from 1% to annual increments of 2.52% starting in 2023.
 - The first round of the Green Energy Auction Programme (GEAP) was held in June 2022 and almost 1,866 MW was procured. The second round of auctions will be held in 2023.
 - All renewable energy sources may now avail preferential dispatch in the wholesale electricity spot market (WESM).
 - **Regulatory reforms**
 - The requirements for small-scale distributed renewable energy projects (<1 MW) to avail a Certificate of Registration have been simplified under the Omnibus guidelines. The Energy Regulatory Commission (ERC) has expanded the net metering program (NMP) and streamlined procedures to allow small-scale projects to participate and export to the grid.
 - An amendment to the Green Energy Option Program (GEOP) is currently being drafted to streamline the supplier switching process for corporate consumers and harmonise it with the Retail Competition and Open Access (RCOA) mechanism. ERC's retail aggregation rules now allow smaller consumers to aggregate demand and meet the 500kW consumption threshold to participate in the RCOA. This threshold may be reduced to harmonise with the GEOP (100kW) in future.
 - **Recent and upcoming issuances**
 - The DOE has issued an advisory on the enhancement of policies and guidelines for the development of offshore wind projects and will be holding a series of public consultations to review the administration of wind energy service contracts.
 - An operations manual providing guidelines on the utilisation of the Renewable Energy Trust Fund will be released in Q1 2023.
 - The upcoming revision to the Philippine Energy Plan in 2023 is expected to include long term resource-specific capacity or generation targets, notably for offshore wind.

Offshore wind investments are attracted by robust enabling environments

- As of October 2022, the DOE has awarded 42 wind energy service contracts (WESCs) to offshore wind developers, representing a cumulative potential capacity of 31.5 gigawatts (GW). Further, Letters of Intent (LOI) have been received since the intention to relax foreign ownership limits was announced, indicating a positive outlook for offshore wind deployment in the Philippines.
- However, the actual capacity deployed will depend on insights from site-specific data collections. WESCs allocate 5 years for pre-development stage activities (e.g., conducting studies, securing permits, etc.), during which developers are required to collect data (e.g., wind speed measurements) at their proposed plant locations and revise their capacity proposals as needed.
- DOE is also coordinating a Marine Spatial Planning (MSP) project (including transmission and port infrastructure needs assessment) at the awarded WESC locations, through the Carbon Trust's Philippine Offshore Wind Joint Industry Programme (POWJIP) with funding from the Energy Transition Partnership. Stakeholders highlighted the need to collect and publish environmental and social data under this activity to guide the location of early projects and of future WESC applications.
- Developers noted that any new and existing data (e.g., from oil and gas fields) should be made publicly available and accessible through a digital database to improve transparency and avoid duplication of efforts. Data collection and consolidation can likewise help designate offshore wind development zones in the country, which 10% of the workshop participants named as an immediate priority to create the enabling environment for offshore wind during a poll.

- A majority (71%) of the participants responding to the same poll found that simplifying the regulatory framework should be the immediate priority. It was noted that streamlining permitting and approval procedures, defining clear decision timelines on permit applications, maintaining the consistency of permitting requirements, ensuring the durability and exclusivity of permits once awarded, and facilitating coordination among public agencies and private stakeholders are key enabling factors.
 - The DOE is currently drafting an Executive Order (expected to be signed and issued by end 2022) to set up an Offshore Wind Development and Investment Council comprising 10 government agencies involved in permitting and approvals for offshore wind projects. This will serve as a one-stop shop for offshore wind development to improve interagency coordination and streamline procedures, with the eventual goal of being integrated into the Energy Virtual One Stop Shop (EVOSS) platform.
 - In addition, the DOE is being supported by international development partners to further strengthen the regulatory environment for offshore wind. The Asian Development Bank is providing technical assistance to the Energy Regulatory Commission to develop an offshore wind regulatory framework and the Carbon Trust is coordinating a study on permitting and consenting for offshore wind through POWJIP.
- Stakeholders likewise noted the importance of aligning local environmental regulations guiding the permitting of projects (both offshore wind installations and transmission upgrades) with international industry best practices. The World Bank is providing technical assistance to the DOE and the Department of Environment and Natural Resources (DENR) to review and update existing environmental regulations according to international standards. This will account for the fact that the extreme wind speeds unique to the region may necessitate environmental and social considerations without any international precedent or best practices.
- The remaining 19% of the poll respondents highlighted transmission infrastructure as the key immediate priority for enabling offshore wind investments. The National Grid Corporation of the Philippines (NGCP) has proposed plans to upgrade and expand the transmission network to accommodate offshore wind power plants proposed under awarded WESCs. However, several political and administrative factors often delay the execution of such plans (up to 10 years) thereby potentially delaying early offshore wind projects. For instance, the processing of system impact studies alone can take up to 18 months due to lack of personnel.
 - Stakeholders highlighted the importance of incorporating offshore wind into the Competitive Renewable Energy Zones (CREZ) process to ensure grid planning is done in tandem with offshore wind project development. They likewise noted the need for an interagency committee to facilitate regulatory coordination in grid planning.
 - The DOE is currently being supported by the World Bank in developing standards for transmission infrastructure and integrating them into the Philippines Grid Code.
- Developers highlighted the availability of routes to market as a key determining factor in their willingness to invest in offshore wind projects in the Philippines.
 - Kickstarting the offshore wind industry will require auctions to be frequent (e.g., yearly), technology-specific, and of sufficient volume to build investor confidence, avoid competition with other renewables, and allow scope for economies of scale. Long-term offshore wind targets too would serve to set procurement expectations and boost investor confidence.
 - They noted that ceiling prices should be based on a transparent costing methodology which appropriately balances the value of offshore wind (e.g., power system services, alternative uses like in hydrogen production, etc.) against the levelised cost of electricity (LCOE).
 - In addition, ensuring that grid access process is fair and discourages site-banking, and based on long-term horizons will be crucial for international developers to enter the market.
- Several participants underscored the importance of building social acceptance for offshore wind to avoid conflict and project delays. As offshore wind may seem to be the more expensive option in absolute upfront cost terms, strong grassroots communications efforts are needed to disseminate information about its relative benefits (e.g., supply chain development potential especially for

floating offshore wind components, local job creation, skill development, climate action, etc.). It was likewise noted that removing the fuel pass through mechanism for fossil fuels will allow consumers to compare costs fairly.

- In a live poll during the workshop asking stakeholders what they see as the best fiscal support mechanism for initial offshore wind projects in the Philippines, 41% of the stakeholders chose feed-in tariff, 30% chose tax incentives, 22% chose contracts for difference, and 4% chose feed-in premium and tradeable certificates each.

Financial institutions seek international expertise and de-risking support

- Participants reminded that (i) the Philippines has a very liquid financial market with a strong appetite for renewable energy investments, owing to Central Bank mandates requiring commercial banks to integrate sustainable finance into their lending programs. (ii) Although availability of finance is not a constraint, the willingness and ability of domestic financial institutions to lend to offshore wind projects at attractive terms is determined by their risk perception, which remains relatively high due to the novelty of offshore wind in the country. (iii) Given the highly capital-intensive nature of offshore wind projects, developers experience high exposure to cost of finance – for illustration, a 1% shift in cost of finance can impact the levelised cost of an offshore wind project by 8%.
- Developers and financial institutions noted that measures to improve the confidence of financial institutions and facilitate risk sharing (e.g., technical assistance, capacity building, de-risking arrangements) can allow financial institutions to price risks appropriately and offer lower rates and longer-term financing for initial projects.
- Stakeholders highlighted that the transfer of technical knowledge and international expertise on offshore wind project evaluation would be crucial to get domestic financial institutions to participate in early project finance. Loan syndication, consortium finance, and export credit finance were noted as possible avenues to facilitate such knowledge sharing. Likewise, international financial institutions with offshore wind experience too would appreciate the value of partnering with domestic banks, given the latter's local knowledge and expertise in evaluating the unique social, geological, and topographical risks associated with infrastructure projects.
- Export credit agencies (ECA) expressed interest in working with the Philippine banking sector to structure financing agreements for offshore wind projects with demonstrable export value.
 - ECAs provide highly rated credit guarantees covering up to 100% of the financing risks and with long risk coverage periods (up to 18 years). ECA guarantees have a positive impact on the bankability of projects by transforming project risks into ECA sovereign risks, thus broadening the availability of lenders. In fact, credit guarantees were chosen by a vast majority (81%) of the participants as the most effective de-risking instrument for initial offshore wind projects.
 - ECAs can also provide long term finance (up to 18 years) matching the lowest commercial interest rates available in the market. However, it was acknowledged that in a liquid market like the Philippines, ECAs may be best placed to provide upfront de-risking support (e.g., construction risks) rather than long term financing.
 - It was noted that ECA involvement is governed by OECD Common Approaches and the IFC Performance Standards, which require strong environmental and social considerations to be incorporated into project finance.
 - ECAs remain flexible in assessing export value. Given that offshore wind manufacturing companies are already concentrated in Northern Europe, there is great opportunity to work with ECAs from that region, even though much of the manufacturing or assembly may be done in Asia.
 - ECAs maintain flexibility and openness to financing arrangements that work best for the local context (e.g., partial deals covering only the upfront construction risks or force majeure risks due to climate risk exposure).

- In addition, there is scope for multilateral development banks (MDBs) to support early offshore wind projects in the Philippines. Although MDBs active in the region may have limited experience with offshore wind given that most of these projects have been located in Northern Europe so far, stakeholders noted the potential for additional blended finance from MDBs to help de-risk specific local risks (e.g., typhoon risks).
- The Energy Transition Mechanism (ETM) was highlighted as a potential financing avenue for offshore wind in the future. The ETM concept was originally developed by ADB as a mechanism providing multilateral concessional finance for the early retirement of coal-fired power plants and crowding-in investments for renewable energy projects by re-financing and re-leveraging assets. The world's first ETM transaction was successfully implemented in the Philippines by AC Energy without any multilateral funding, wherein they divested the shares of a 246 MW coal-fired power plant with the intention to retire it early, thereby halving its technical life and recouping funds to reinvest in renewable energy projects.
- Stakeholders highlighted that rising offshore wind ambitions in the region meant that the Philippines would likely have to compete with other markets like Vietnam, Taiwan, Japan, and Korea for capital. Given the global context of restricted capital availability, there is scope for multiple financial institutions (ECAs, MDBs, local and international commercial banks, etc.) to work together and maximise the availability of finance for offshore wind projects.

Key takeaways

- Overall, the discussions of the day highlighted the significance of site-specific data availability across indicators (e.g., resource quality, geological survey, bathymetry, infrastructure needs, environmental and social parameters, etc.) in guiding the location of early offshore wind projects. While some of this data is being collected by private investors and may be proprietary, government-driven data collection efforts (e.g., under the MSP project) as well as existing data across government departments (e.g., related to past oil and gas projects) should be consolidated and made publicly available and digitally accessible (potentially through POWJIP) to improve transparency.
- Another key message was that a simplified regulatory framework will be a key enabler of offshore wind investments in the Philippines, and the DOE's new Executive Order (expected to be signed by end 2022) setting up a one-stop shop for permitting and approvals procedures is seen as a step in the right direction. Stakeholders highlighted clear decision timelines on permit applications, maintaining the consistency of permitting requirements, ensuring the durability and exclusivity of permits once awarded, and facilitating coordination among public agencies and private stakeholders as additional considerations that should feed into the regulatory improvements currently underway.
- The timely availability of adequate transmission infrastructure is expected to be a limiting factor for offshore wind development in the country. Although expansion plans are in place, it can take up to 10 years for them to materialise given the usual political, regulatory, or capacity related delays. Further investigation is needed to determine the exact barriers and identify appropriate solutions.
- There was consensus among developers that the guaranteed availability of routes of market would also determine their willingness to invest in offshore wind projects. Transitioning to competitive auctions based on international best practices (i.e., frequent, technology-specific auctions of sufficient volume with appropriate ceiling prices and smooth grid access) as well as setting the right policy signals with long-term offshore wind capacity targets would boost investor confidence. Further investigation is needed to determine whether the provision of a fiscal support mechanism should be expected for the first few projects.
- International support is expected to play a significant role in de-risking early projects through several avenues. Export credit agencies can provide significant credit risk coverage (notably on risks related to construction, project delays, political uncertainties, etc.) but additional de-risking support

may be needed from multilateral development banks to cover geographical or climate-related risks unique to the Philippine context (such as the impact of extreme wind speeds or more frequent typhoons on offshore wind installations).

- Local financial institutions in the Philippines are well-capitalised and possess strong appetite for renewable energy projects, although they may need international support to build expertise on offshore wind project evaluation and risk assessment. Support may be in the form of knowledge transfers (e.g., through partnership arrangements) or as targeted training programmes or capacity building efforts.

Next steps

Based on the key outcomes from this workshop as summarised in this document, the OECD CEFIM team will begin drafting the Clean Energy Finance and Investment Roadmap for the Philippines. Further research and analysis may be required to gain a deeper understanding of some of the key priority areas identified during the workshop and develop recommendations accordingly, and the CEFIM team will be organising additional bilateral stakeholder consultations as needed. Finally, a third joint workshop will be organised virtually with DOE and other stakeholders in early 2023 to agree on the recommendations emerging from this process. The Roadmap is then expected to be published by mid-2023.