



REPORT

# Financing offshore wind in Taiwan

Key challenges and policy solutions

March 2026



## About the report

This report examines the current challenges in financing Taiwan's offshore wind sector, including structural, regulatory, and market-related barriers. Drawing on international best practices and stakeholder insights, it offers tailored recommendations to strengthen the financing environment and support the continued development of offshore wind in Taiwan.

## Who we are

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## Acknowledgments

The Carbon Trust wrote this report based on an impartial analysis of primary and secondary sources, including expert interviews.

The Carbon Trust would like to thank everyone that has contributed their time and expertise during the preparation and completion of this report.

For the avoidance of doubt, this report expresses independent views of the authors.

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## Abbreviations

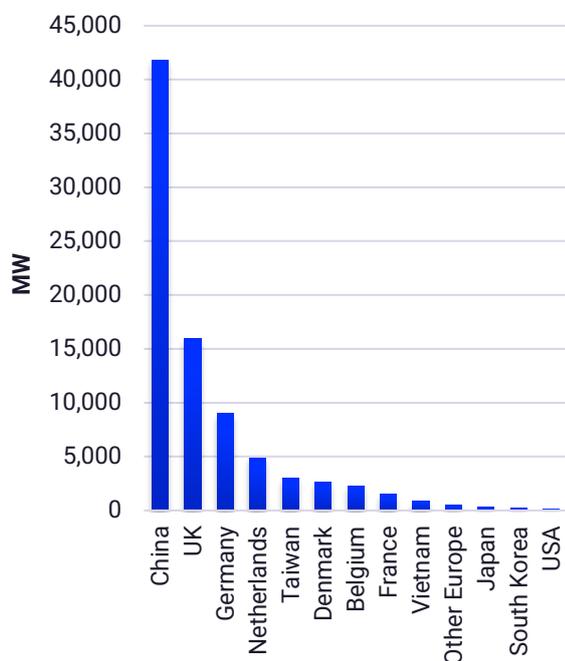
<b>ADB</b>	Asian Development Bank
<b>AR</b>	Auction Round
<b>CCRIF</b>	Caribbean Catastrophe Risk Insurance Facility
<b>Cfd</b>	Contracts for Difference
<b>CPPA</b>	Corporate power purchase agreements
<b>ECA</b>	Export Credit Agency
<b>EKF</b>	Denmark's Export Credit Agency
<b>FiT</b>	Feed in Tariff
<b>IFI</b>	International Financial Institution
<b>IFC</b>	International Finance Corporation
<b>IRR</b>	Internal Rate of Return
<b>LCCC</b>	Low Carbon Contracts Company
<b>LCOE</b>	Levelized Cost of Energy
<b>MOEA</b>	Ministry of Economic Affairs
<b>NDC</b>	Nationally Determined Contribution
<b>NEXI</b>	Nippon Export and Investment Insurance
<b>NTD</b>	New Taiwan Dollar
<b>OSW</b>	Offshore wind
<b>REC</b>	Renewable Energy Certificate
<b>RPS</b>	Renewable Portfolio Standard
<b>SME</b>	Small and medium sized enterprise
<b>TSEE</b>	Taiwan Smart Electricity & Energy Company
<b>TSMC</b>	Taiwan Semiconductor Manufacturing Company

# Executive summary

## Taiwan has a strong offshore wind market, but financing is a main constraint

Taiwan's offshore wind (OSW) industry has seen strong growth over the last decade, emerging as one of the most ambitious OSW markets in Asia, supported by early government action, international developer participation, and growing corporate demand for renewable electricity.

In 2024, Taiwan ranked fifth globally in cumulative installed offshore wind capacity and second worldwide in new offshore wind installations<sup>1 2</sup>.



**Figure 1: Total offshore wind installations in 2024 (MW)**

As of end 2025, Taiwan has completed the installation of 474 offshore wind turbines, bringing total grid-connected capacity to 4.4 GW.<sup>3</sup> As

Taiwan's economy continues to evolve, driven by advanced manufacturing, digitalisation and rapidly growing electricity demand from data centres and AI-related industries, offshore wind is increasingly important for delivering large scale and reliable low carbon power.

As the sector moves from early deployment to large scale, long-term expansion, the conditions for success are changing. Public support, predictable policy design, and investor confidence are now as important as technical capability. This report finds that financing challenges rather than lack of interest or resources now pose a significant risk to the pace, cost, and scale of offshore wind deployment in Taiwan. Unless these financing barriers are addressed, Taiwan risks slower project delivery, higher electricity costs, and missed climate and energy security targets. These risks are especially significant in light of Taiwan's updated Nationally Determined Contributions (NDC) targets to reduce emissions by 28%±2% by 2030 and 38%±2% by 2035, compared with 2005.<sup>4</sup>

## Financing challenges are largely driven by policy gaps

Stakeholder consultations and international benchmarking show that Taiwan's offshore wind financing constraints are not unique, but they are particularly acute due to a combination of factors:

- **Revenue uncertainty**, following the shift away from government-backed Feed-in Tariffs<sup>5</sup> toward reliance on corporate power purchase agreements (CPPAs)<sup>6</sup>.

Global Wind Energy Council (GWEC). 2025. *Global Wind Report 2025*. – [Link](#)

Digitimes Asia. 2025. Ørsted powers up Taiwan's first TSMC-exclusive wind farm. – [Link](#)

Ministry of Economic Affairs. 2026. *Ministry News – News & Announcements*. – [Link](#)

Yeh, E. 2025. *Taiwan sets NDC target ahead of COP*. Taipei Times. – [Link](#)

<sup>5</sup> Fixed prices guaranteed by the government

<sup>6</sup> Long-term contracts where companies buy electricity directly from wind projects

- **A narrow and concentrated CPPA market**, dominated by a small number of large, creditworthy buyers.
- **Limited domestic project finance capacity**, with local banks still cautious about offshore wind risk.
- **Implementation complexity** in earlier rounds associated with changing procurement rules, localisation requirements, and permitting processes.<sup>7</sup>

These challenges reinforce one another. Uncertain revenues make OSW projects harder for banks to finance, which raises financing costs and increases reliance on guarantees and international lenders. Policy volatility increases perceived risk, while limited local financial expertise constrains market development. Together, these dynamics threaten Taiwan’s ability to sustain offshore wind deployment at scale and at competitive cost.

### Direction setting is essential to reduce uncertainty

Taiwan’s offshore wind financing challenges cannot be solved through isolated policy adjustments. They reflect deeper questions about market structure, risk allocation, and the long-term role of government. Rather than prescribing independent solutions, this report emphasises the importance of direction setting. This means defining a long-term vision for OSW in Taiwan and then aligning financing approaches, policies and risk-sharing mechanisms with that direction. Given offshore wind’s strategic importance, this implies a shift away from one-off projects toward a mature, predictable market where risks are clearly allocated and capital can be deployed at scale.

A recurring issue in Taiwan is that system-level risks such as policy changes or revenue uncertainty are pushed onto individual projects,

increasing financing costs. A clear direction helps clarify appropriate risk allocation. Specifically:

- **Government is best placed to manage policy and revenue risk**, through stable frameworks and revenue stabilisation.
- **Financial institutions can progressively take on market and financial risk** as familiarity grows, supported early on by blended finance and co-lending.
- **Developers and insurers should manage construction and operational risk**, but benefit from government-led risk reduction where uncertainty is high.

### What success looks like for Taiwan

In a mature offshore wind market, Taiwan would see:

- Predictable and longer-term procurement planning
- Stable revenue and policy conditions that support low-cost financing
- Domestic banks and institutions taking leading roles alongside international financiers
- Corporate demand supporting system-wide deployment, not replacing it
- Standardised risk mitigation tools, reducing the need for bespoke project structures

Achieving this requires greater standardisation, larger project scale, and predictable governance that evolves as the market matures.

### Revenue certainty is a key lever to unlock financing

International experience consistently shows that long-term revenue certainty is the most effective way to unlock offshore wind financing. In the UK,

<sup>7</sup> However, the draft Round 3.3 selection is addressing previous challenges by providing clearer signals for bankability through changes to localisation, financial

capability scoring, and the introduction of a floor price mechanism.

Contracts for Difference (CfDs)<sup>8</sup> have reduced revenue risk, lowered financing costs, and enabled competitive pricing. By contrast, Taiwan is experiencing rising financing costs due to policy changes, CPPA concentration, and exposure to market volatility. Denmark’s recent failure to attract bids under a zero-subsidy model reinforces the lesson that market-based mechanisms alone are not sufficient, even in mature markets.

For Taiwan, the direction points toward system-level revenue stabilisation building on the Floor Price proposed under the draft Round 3.3 reforms, with the potential for a hybrid CPPA-CfD framework in the long term depending on observed market outcomes under strengthened CPPA arrangements. Such an approach recognises that corporate procurement should complement, rather than replace, government-backed revenue mechanisms when deployment targets are high.

**Key design elements for a credible revenue stabilisation framework include:**

- Predictable, long-term revenue support that enables non-recourse financing
- A credible counterparty to oversee the CfD that is not exposed to political cycles
- Sufficient flexibility to adjust to cost inflation and supply chain pressures
- Differentiated treatment for floating offshore wind, reflecting higher costs and risk

Within this framework:

- **The Floor Price functions as a risk-mitigation layer:** ensures minimum cash flows, operating cost coverage, and partial debt service, with clear triggers, settlement, and payment terms.
- **CPPAs complement revenue support:** enabling pricing above the floor, supporting smaller or newer projects, while avoiding over-reliance on a few buyers.

- **CfDs can be introduced for strategic capacity in the long term:** applied if CPPA volumes or market pricing even with the Floor Price, are insufficient to support system-critical capacity, particularly for higher-cost segments such as floating wind.

This approach balances market engagement with government-backed revenue security. As the market matures, CfDs may become necessary to support system-critical deployment, but careful sequencing will be essential to avoid mixed signals to industry, particularly as the Round 3.3 reforms are implemented and tested in practice.

**Corporate PPAs should be scaled, aggregated and supported**

Corporate PPAs remain an important part of Taiwan’s offshore wind market, but they must be broadened and strengthened to support large-scale financing. Aggregation models, where one large anchor buyer leads procurement on behalf of multiple companies, has already shown promise. Taiwan Semiconductor Manufacturing Company’s (TSMC) joint procurement model, for example, lowers entry barriers for smaller firms and provides long-term price certainty.

Government facilitated platforms like the Taiwan Smart Electricity & Energy Company (TSEE) further expand this approach by connecting developers, SMEs, and corporate buyers. International corporate demand also signals strong potential. Recent PPAs signed by companies such as Google show that highly creditworthy global firms are willing to engage in Taiwan’s offshore wind market.

Under the Round 3.3 draft framework, aggregated PPAs gain an additional layer of protection where if one or more corporate offtakers default, Taipower is legally mandated to purchase the electricity at the Floor Price. This improves downside cash flow and increases lender

<sup>8</sup> Contracts that guarantee a stable electricity price by paying the difference between a market price and an agreed strike price

confidence, making aggregated structures more bankable.

However, aggregated PPAs need complementary mechanisms to be bankable at scale, such as:

- Clear operational rules and communication around the Taipower Floor Price backstop, including coverage, duration, and reallocation procedures, to give lenders confidence.
- Reallocation rules if a corporate buyer exits, ensuring continuous supply and revenue for the remaining participants.
- Demand-side policies such as renewable purchasing requirements to create a reliable pipeline of buyers

Without these, CPPAs alone will struggle to deliver the long-term revenue certainty that lenders require.

### Domestic financial and insurance capacity must grow alongside market reform

Long-term success depends on enabling domestic banks to play a larger role in offshore wind financing. This will require:

- **Targeted capacity building** in project finance, risk allocation, and cash-flow modelling.
- **Blended finance and technical assistance** from development finance institutions and multilateral banks to reduce early-stage risk.
- **Co-lending structures** that pair domestic banks with experienced international lenders, allowing gradual transfer of risk and expertise.

A credible project pipeline is essential to justify investment in in-house expertise. As seen in other sectors, predictable deal flow encourages domestic institutions to build dedicated teams and reduce reliance on external advisors.

Insurance and construction risk also requires system level solutions, especially as projects move into deeper waters and harsher conditions. These include:

- **Piloting pooled or parametric catastrophe insurance** for typhoon and earthquake risk, enabling faster payouts and lower premiums.

- **Bilateral Export Credit Agency reinsurance frameworks** to strengthen construction phase coverage.
- **Investing in domestic insurance capability**, including underwriting and technical risk modelling, through public-private partnerships.

### Policy predictability and flexibility must coexist

Stakeholders consistently point to policy changes in the past across procurement rules, localisation, and grid access as a key driver of higher risk premiums. Taiwan needs:

- A clear, multi-year offshore wind roadmap that is updated regularly but not retroactively
- Transparent and standardised auction and qualification rules
- Better coordination across permitting authorities
- Localisation policies aligned with deployment timelines and financing realities

At the same time, policy flexibility is critical. Japan's experience shows that post-auction cost increases can undermine project viability unless price adjustment or schedule flexibility is built in. Taiwan should adopt similar tools to manage unforeseen cost, grid, or permitting risks without destabilising the market.

### A phased pathway forward

#### Short term (0–2 years): direction setting and quick wins

- **Formalise the Floor Price framework under Round 3.3** as the foundation of offshore wind procurement, providing downside revenue protection while preserving CPPAs for market-based price discovery.
- **Publish a 10-year offshore wind roadmap** that builds on existing capacity targets, giving developers and investors clear near term signals and longer-term guidance for planning, including the conditions under which

additional revenue stabilisation tools, such as CfDs, may be considered in future.

- **Clarify and operationalise CPPA guarantee mechanisms**, including coverage, duration, and Taipower backstop terms, to improve bankability and market confidence, especially for smaller or first-time corporate offtakers.
- **Support aggregated CPPA platforms** by expanding the pool of eligible buyers and reducing concentration risk.
- **Strengthen domestic bank capabilities** through training and co-lending.

#### Medium term (2–5 years): build capabilities and expand domestic bank participation

- **Evaluate targeted revenue stabilisation instruments**, including CfDs, based on evidence from CPPA uptake, pricing outcomes, and financing conditions for system critical capacity.
- **Initiate internal policy design and analytical work on potential CfD or hybrid models**, including assessing the likely scale of CPPA-supported demand relative to medium and long term capacity targets.
- **Expand corporate participation** through aggregation and credit enhancement, ensuring a reliable pipeline of buyers.

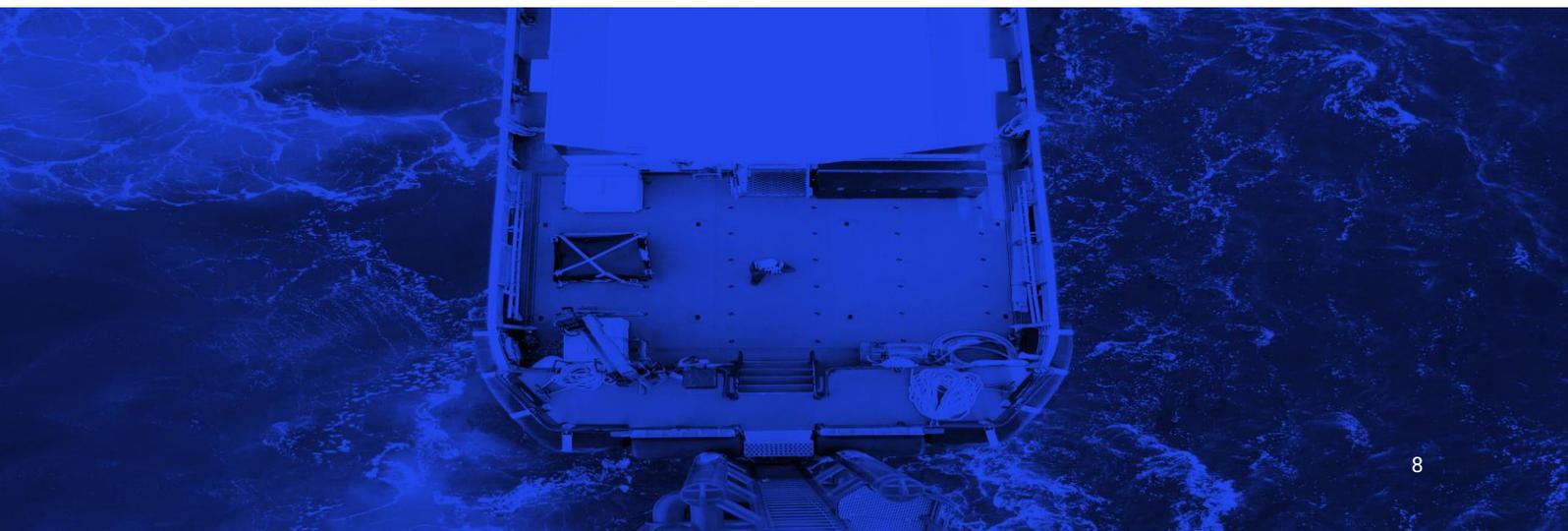
#### Long term (5+ years): strengthen risk mitigation mechanisms

- **Operate a mature hybrid procurement system** with robust CPPAs, a credible downside revenue backstop, and CfDs deployed where long-term capacity targets risk not being met through market-based mechanisms alone.
- **Establish system-level catastrophe and reinsurance mechanisms** to spread extreme weather and geological risks, complementing commercial insurance.
- **Maintain stable, predictable policy** refinement as the market matures.

#### Call to action

Taiwan has demonstrated that it can build offshore wind projects. The next challenge is ensuring they can be financed efficiently, at scale, and over the long term. This requires coordinated action:

- **Government** must provide revenue certainty, policy stability, and system-level risk mitigation.
- **Financiers** must engage in capacity building and scale project finance solutions.
- **Corporates** must broaden participation, and manage risk more consistently.



# 1. Introduction

**Taiwan has emerged as one of Asia's most ambitious offshore wind markets, entering a critical phase for advancing financing and regulatory frameworks.**

Taiwan's offshore wind (OSW) industry has seen strong growth over the last decade, emerging as one of the most ambitious OSW markets in Asia, supported by early government action, international developer participation, and growing corporate demand for clean electricity.

As Taiwan's economy continues to evolve, driven by advanced manufacturing, digitalisation and rapidly growing electricity demand from data centres and AI-related industries, offshore wind is increasingly important for delivering large scale and reliable low carbon power.

As of end 2025, Taiwan has completed the installation of 474 offshore wind turbines, bringing total grid-connected capacity to 4.4 GW, with Round 1 and Round 2 projects demonstrating the ability to achieve financial close.<sup>9</sup> In 2024, Taiwan's cumulative offshore wind installed capacity ranked fifth globally, and BloombergNEF reported that Taiwan's newly added grid-connected capacity that year ranked second worldwide<sup>10</sup>.

Looking ahead, Taiwan aims to add approximately 5.5 GW of new capacity between 2026 and 2031, supported by a projected capital allocation of NT\$1.08 trillion (US\$33.75 billion). This forms part of a broader long-term roadmap, with total funding requirements estimated to reach NT\$2 trillion (US\$62.5

billion) by 2035, as directed by Vice Premier Cheng Li-chiun in January 2026.<sup>11</sup>

Compared with global offshore wind leaders, Taiwan's market is still in a relatively earlier stage of development, though it has achieved notable progress in a short period of time. More mature markets such as the UK, Denmark, and Germany have developed over several decades, supported by long term predictable revenue frameworks and deep domestic financing capabilities that have enabled consistent cost reduction and market expansion.

Like other countries, Taiwan faces global challenges, including rising commodity and turbine prices, higher interest rates, and supply chain constraints. However, Taiwan also faces several market-specific issues, including a relatively small pool of creditworthy corporate offtakers, geographic risks from typhoons and earthquakes, and regulatory changes stemming from shifting local content and permitting requirements in the past.

International experience shows that countries facing similar cost pressures and financing constraints have strengthened revenue mechanisms such as Contracts for Difference (CfDs) or government-backed guarantees to reduce risk for investors and lower the cost of capital. Taiwan's current financing approach reflects a transition toward similar market-based instruments, with lessons to be learned from established markets about revenue stability, risk allocation, and financial sector engagement.

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<sup>9</sup> Ministry of Economic Affairs. (2026). *Ministry News – News & Announcements* – [Link](#)

<sup>10</sup> Digitimes Asia (2025). *Ørsted powers up Taiwan's first TSMC-exclusive wind farm* – [Link](#)

Executive Yuan. 2026. *Strengthening offshore wind financial support to steadily advance the net-zero transition.* – [Link](#)

**Taiwan's OSW financing has evolved from government-led support to market-based mechanisms with emerging risk mitigation measures.**

Taiwan's OSW financing approach has evolved through four broad phases, reflecting a gradual shift from government-led support toward market-based procurement, alongside growing efforts to address emerging financing constraints.



**Figure 2: Evolution of Taiwan's offshore wind financing approach**

**Phase 1: Feed-in Tariff Era (2009–2020)**

The early development of offshore wind in Taiwan relied on government backed Feed-in Tariffs (FiTs), which provided 20-year revenue certainty at administratively set rates of NT\$5.5–6.0/kWh.<sup>12 13</sup> These enabled projects such as Formosa 1 (128 MW) and Formosa 2 (376 MW) to reach final close and construction.

FiTs effectively transferred revenue risk from developers to the government, reducing financing costs and encouraging participation from both domestic and international investors.

However, by 2020, global cost reductions in offshore wind made the fixed FiT rates increasingly uncompetitive, causing the government to reconsider this procurement model.<sup>14</sup>

**Phase 2: Transition to market-based procurement through CPPAs (2021–2024)<sup>15 16 17</sup>**

In 2021, Taiwan shifted from government-backed FiTs to market-based procurement with its Round 3 Zonal Development policy, requiring developers to secure revenues through

<sup>12</sup> Gao, A. M. Z. (2021). Review of recent offshore wind power strategy in Taiwan. *Energy Strategy Reviews*, 38, 100747- [Link](#)

<sup>13</sup> Infolink Group. (2023, September). *Development of offshore wind in Taiwan: Formosa offshore wind farms* - [Link](#)

<sup>14</sup> Climate Change Administration. (2022, March). *Taiwan's pathway to net zero emissions in 2050* - [Link](#)

<sup>15</sup> Taiwan Wind Power Promotion Office. (2024). *Zonal development: Offshore wind power*. Ministry of Economic Affairs - [Link](#)

<sup>16</sup> EUROVIEW. (2025, April). *Unlocking CPPA potential in Taiwan*. European Chamber of Commerce Taiwan. - [Link](#)

<sup>17</sup> TXF News. (2023, September). *ECA collaboration in Hai Long offshore wind pays off*. *TXF News*. - [Link](#)

Corporate Power Purchase Agreements (CPPAs). This aimed to reduce government financial risk and allocate 15GW of offshore wind between 2026 and 2035.

International sustainability initiatives and domestic regulations encouraged corporate demand for CPPAs, but the market became concentrated among a few large buyers, notably Taiwan Semiconductor Manufacturing Company (TSMC), which signed several long-term deals. Smaller firms struggled with credit limitations and complex contracts, reducing overall demand and putting pressure on developers. As a result, Round 3 allocations consistently fell short of targets, highlighting challenges in relying solely on CPPAs for scaling offshore wind.

Project financing during this period relied heavily on international support, as seen with the Hai Long offshore wind project, which secured a US\$6.9 billion package from seven export credit agencies. This underscored the need for global capital and the limited capacity of local financial institutions to manage offshore wind risks independently.

### **Phase 3: Market development support and risk mitigation (2024–2026)<sup>18 19</sup>**

From 2024, the government introduced targeted measures to address CPPA market constraints and support offshore wind deployment. The establishment of Taiwan Smart Electricity & Energy Company (TSEE), a government-backed electricity aggregator, enabled a broader range of corporate buyers, including SMEs, to access offshore wind power through collective procurement.

Credit support was strengthened in late 2024, with the Ministry of Economic Affairs and National Development Council increasing the National Credit Guarantee Mechanism (NCGM)

ratio from 60% to 80% for green energy projects, mobilising up to NT\$90 billion. This supports both offshore wind projects and corporate offtakers in CPPAs, encouraging greater domestic bank participation. The mechanism includes a backstop arrangement under which Taipower commits to purchase electricity at a historical average price for a limited period, though this price remains below current cost levels. This allows state-owned banks to treat the majority of offshore wind project debt as quasi-sovereign risk, to a certain degree solving the capital adequacy bottleneck if developers can structure compliant CPPAs. In January 2026, the National Development Council reported that three offshore wind-related financing guarantee cases had been approved in 2025, with a total guaranteed amount of NT\$37.06 billion, indicating that the mechanism had begun to deliver tangible effects in practice.

Looking ahead, the government plans to further enhance the mechanism in light of rapidly growing capital needs, including studying increases in the size of dedicated guarantee funds and the applicable guarantee multiple so that the total guarantee capacity for offshore wind can be expanded to NT\$156 billion (USD 4.9 billion). In parallel, authorities are considering recognising offshore wind projects as a form of broadly defined public infrastructure, enabling the use of more diverse financial instruments and institutional support to help achieve offshore wind deployment and net-zero transition goals.

Financial regulators have also adjusted insurance-sector rules to channel more long-term capital into offshore wind and other strategic industries. Measures include reducing risk weights for indirect infrastructure investments made via private equity funds and venture investments, lowering risk weights for strategic industry investments, and, at the end

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<sup>18</sup> Ministry of Economic Affairs, Taiwan. (2024). *The National Credit Guarantee Mechanism invigorates renewable energy financing*. – [Link](#)

<sup>19</sup> EDF Power Solutions. (2025, October). *EDF power solutions signs its first CPPA in Taiwan bolstering its offshore wind project Wei Lan Hai Changhua*. – [Link](#)

of 2025, raising the upper limit on domestic project investments from 10% to 15% of insurers' funds, thereby increasing flexibility for roughly NT\$1 trillion of capital. The Financial Supervisory Commission further plans to expand the scope of recognised credit guarantee institutions for secured lending, promote the issuance of offshore wind-related financial products in securities markets, and continue optimising risk coefficients to encourage greater insurance-sector participation in offshore wind finance.

As of February 2026, TSEE signed its first offshore wind CPPA, a 30-year agreement with EDF Power Solutions for electricity from the 440 MW Wei Lan Hai Changhua project. It also has signed another CPPA with Synera Renewable Energy Group (SRE Group) for the 495MW Formosa 4 project, marking an important milestone in broadening corporate participation beyond large anchor buyers.

#### **Phase 4: The 2026 regulatory pivot with Round 3.3<sup>2021</sup>**

In January 2026, the Ministry of Economic Affairs released the draft selection rules for Zonal Development Round 3.3, marking a clear shift to address the uncertainty and financing challenges seen in earlier rounds. The framework moves away from an industrial-policy-led approach toward a more competitive model that prioritises project delivery.

Following the EU-Taiwan WTO dispute settlement in November 2024, Round 3.3 removes mandatory local content requirements as a bidding condition. The Industrial Relevance Plan now provides bonus points rather than acting as a pass-fail threshold, allowing developers to use global supply chains where local options are uncompetitive. This reduces capital costs, lowers the levelized cost of

energy (LCOE), and improves project bankability.

Round 3.3 also introduces a minimum purchase price mechanism (Floor Price) to mitigate zero-bid auction risks and CPPA counterparty defaults. If a corporate offtaker defaults, Taipower must purchase the electricity at a floor price linked to its avoided cost (around NT\$2.29/kWh). While below full generation costs, this price covers operating costs and part of debt service, providing lenders with a defined downside recovery scenario.

At the same time, selection criteria have been re-weighted to prioritise financial strength and execution capability. According to the Ministry of Economic Affairs' (MOEA) second auction draft briefing on February 26, 2026, the 100-point evaluation scale is now divided into: Developer Track Record (35 points), Financial Capability (30 points), and Project Execution Capability (35 points). Notably, the execution category specifically weights Project Implementation Progress at 15 points, ESG Planning at 15 points, and Energy Resilience at 5 points. This adjustment signals a shift toward holistic project viability and national energy security over previous weighting structures.

#### **Taiwan's early offshore wind success was driven by policy clarity, revenue certainty and strong international support.**

In its early stages, Taiwan's offshore wind market benefited from a high degree of policy clarity and revenue certainty. The FiT regime provided long-term, government-backed price guarantees that effectively transferred revenue risk away from developers and financiers. This enabled projects to reach financial close despite limited local experience with offshore wind and allowed both domestic and

<sup>20</sup> CTEE (2026). Wind power 3-3 business selection rules will be revealed, cancelling localization and 0 yuan bidding. – [Link](#)

<sup>21</sup> Ministry of Economic Affairs (2026) - [Link](#)

international lenders to participate with confidence.

Strong government commitment and clear development rounds reduced uncertainty, enabling rapid capacity growth. International developers provided expertise, while global banks and export credit agencies supplied long-term financing, establishing Taiwan as a credible offshore wind market. Risks were well defined and revenues predictable, making early financing challenges manageable.

### **Taiwan's shift to market-based procurement exposed structural weaknesses and increased financing risks.**

As Taiwan transitioned away from FiTs toward market-based procurement, several structural challenges became more apparent. The reliance on CPPAs shifted revenue risk from the government to developers and corporate offtakers, increasing exposure to price, credit, and demand risks. While this approach reduced direct fiscal pressure, it also raised financing costs and limited scalability.

The CPPA market proved too narrow to support the scale of offshore wind deployment planned under Round 3. Demand was concentrated among a small number of large corporates, while smaller firms faced significant barriers to participation. At the same time, regulatory uncertainty, particularly around localisation requirements, permitting timelines, and auction design, added to investor risk perceptions. These factors contributed to under-allocation in successive procurement rounds and increased reliance on international financial support for large projects.

Recent policy adjustments in the draft Round 3.3 framework reflect a recognition of these

constraints and an effort to rebalance risk and improve project bankability.

### **Taiwan's offshore wind future depends on creating attractive financing conditions for large-scale investment**

Meeting Taiwan's offshore wind targets will require sustained, long-term investment, with capital needs far exceeding those of the early development phase. As government-backed FiTs are no longer the primary instrument, progress now depends on financing conditions that attract both domestic and international capital, with a more balanced allocation of risk between the public and private sectors.

The recent draft reforms proposed under Round 3.3 are well placed to materially improve bankability. However, offshore wind projects in Taiwan will still remain exposed to market-based revenue risk, and continued policy stability will be essential to sustain investor confidence.

Further improvements in financing conditions would enable domestic banks to play a larger role, reduce reliance on export credit agencies, and support the development of a more resilient local financial ecosystem. Lower financing costs would also ease pressure on electricity prices and public support mechanisms, making large-scale deployment more economically and politically sustainable.

#### **In this context, this report aims to:**

- Examine key challenges and barriers affecting offshore wind financing in Taiwan;
- Draw insights from international case studies in established offshore wind markets to identify opportunities to strengthen Taiwan's financing framework;
- Propose actionable recommendations to improve offshore wind financing in Taiwan and support the next phase of market growth.

## 2. Our approach

This report assesses Taiwan's OSW financing landscape using an evidence-based approach that combines desk research with stakeholder engagement. The methodology is designed to identify key financing barriers, assess their implications for project bankability and market development, and evaluate policy and financing solutions relevant to Taiwan's context.

### Literature review

We conducted a comprehensive review of more than 25 key sources, including academic research, government policy documents, industry reports, legal analyses, and reputable news publications. Sources were reviewed in both English and Chinese and covered the period from 2018 to 2025. The literature provided insights into offshore wind financing structures, procurement and revenue frameworks, cost and risk drivers, and institutional and regulatory challenges in Taiwan and comparable markets.

### Stakeholder engagement

To complement the desk-based analysis, we conducted targeted interviews with stakeholders across Taiwan's offshore wind value chain. Interviewees included representatives from domestic and international financial institutions, offshore wind developers, industry associations and technical advisors. These discussions focused on practical financing constraints, risk perceptions, the role of policy design in shaping bankability, and the effectiveness of recent government interventions.

### Identification and assessment of barriers and solutions

Insights from the literature review and stakeholder interviews were used to identify key financing barriers facing Taiwan's OSW sector. These barriers were then categorised across themes such as revenue certainty, offtaker risk, financial sector capacity, policy stability, and technical and geographic risk. Potential solutions were assessed based on their

relevance to Taiwan's market structure, feasibility of implementation, and alignment with long-term offshore wind deployment objectives.

### Use of international case studies

International case studies were selected to illustrate how comparable challenges have been addressed in other offshore wind markets. Case studies were chosen based on:

- **Relevance to Taiwan's financing and policy challenges**, including project bankability, domestic financial participation, and risk mitigation.
- **Diversity of policy instruments and financing mechanisms**, covering revenue support schemes, risk-sharing arrangements, and capacity-building approaches.
- **Representation of markets at different stages of maturity**, from established offshore wind leaders to emerging markets facing similar structural constraints.
- **Applicability under current global conditions**, including cost inflation, supply chain pressures, and financial market volatility.

This combined approach allowed us to triangulate quantitative evidence with qualitative insights, providing a balanced view of both project-level financing issues and system-level challenges within Taiwan's offshore wind financing ecosystem.

### 3. Five key OSW financing challenges in Taiwan

Financing OSW projects in Taiwan faces significant challenges that stakeholders consistently rate as having a major impact on project development. On a scale of 1 to 10, these risks are often rated between 8 and 10, reflecting their critical influence on the overall market. Revenue-side issues, particularly around the CPPA structure and evolving institutional frameworks, are seen as more persistent than cyclical cost pressures.

Corporate offtakers generally lack international credit ratings, making it difficult for both local and foreign banks to assess bankability, which lengthens development timelines and can delay government targets. While some international developers may find workarounds, smaller developers and suppliers remain highly exposed, meaning unresolved project finance challenges could stall or even halt future OSW projects.

**Table 1: Summary of Taiwan-specific risks and common market challenges in OSW financing**

Challenges	Description	Relevance
<b>Challenge 1: Local capacity gaps in financial institutions</b>	Local banks lack project finance expertise; slow shift from collateral-based lending; OSW not a strategic priority for most banks.	<b>Generic:</b> Capacity gaps exist in other emerging OSW markets (limited in-house expertise and reliance on external advisors) but less acute in mature markets.
<b>Challenge 2: Revenue risks due to low quality of offtakers</b>	Small pool of creditworthy CPPA buyers; market concentration around TSMC; SME barriers despite aggregation initiatives.	<b>Taiwan-specific:</b> The CPPA market is underdeveloped with relatively small corporate buyer base, and the aggregator platform i.e. Taiwan Smart Electricity & Energy (TSEE) still in its early stage.
<b>Challenge 3: Evolving policy and regulatory frameworks</b>	Adjustments to auction design, localisation related requirements and permitting processes require developers and investors to adapt to new conditions	<b>Taiwan-specific:</b> Auction and localisation frameworks are tailored to domestic priorities and have been progressively updated across rounds.
<b>Challenge 4: Technical and insurance risks</b>	Typhoon and seismic exposure increase construction and insurance costs; limited local operational data; insurers reluctant to cover construction-phase risks.	<b>Taiwan-specific:</b> Typhoon exposure is a region or country-specific risk. <b>Generic:</b> Insurer reluctance to cover construction-phase risks is a common challenge.
<b>Challenge 5: Limited project bankability and high financing barriers</b>	Rare non-recourse financing; FX mismatch (NTD revenues vs foreign currency debt); uncertainty despite guarantees.	<b>Taiwan-specific:</b> Non-recourse financing uncommon; FX mismatch due to NTD revenue vs foreign currency loans; local lending caps force reliance on international lenders. <b>Generic:</b> FX risk and revenue uncertainty is a common challenge.

## Challenge 1: Local capacity gaps in financial institutions

### Limited in-house expertise slows financing and raises costs.

Financing OSW projects requires detailed technical, legal, and commercial knowledge. While Round 3.3 materially improves project bankability through clearer rules, reduced localisation constraints, and downside revenue protection, most domestic banks still lack specialised teams for infrastructure or renewable energy. Instead, they often depend on external legal and technical experts which slows down the process and raises costs.

The shortage of qualified professionals in both public and private banks leads to reliance on external financial and technical advisors, increasing transaction costs and reducing local financial leadership in syndications. Under the draft Round 3.3 framework which prioritises financial capability and execution readiness, this reliance becomes a greater constraint as projects are expected to reach financial close more efficiently and with greater lender scrutiny.

### Slow shift from collateral based lending to project finance models.

Both public and private financial institutions lack strong project finance expertise. Traditionally, infrastructure loans in Taiwan have been based on collateral and corporate

lending, not on future cash flows like non-recourse financing requires. Round 3.3 lowers several external risk factors that previously discouraged non-recourse lending such as policy uncertainty around localisation and zero bid CPPAs. The introduction of a minimum purchase price mechanism can also provide a credible base case revenue floor, allowing banks to model downside scenarios more realistically.

With the evolution of the regulatory framework, internal lending practices will also need to adjust. Many banks still see OSW as risky and less profitable compared to industries they know better, like semiconductors or real estate. Without targeted capacity building, the improved risk profile created by Round 3.3 may not fully translate into greater domestic bank leadership in project finance.

### Offshore wind is not a strategic priority for most banks.

Staff lack the motivation or support to invest time in upskilling, and banks have little commercial incentive to build in-house energy finance teams. Public-sector banks mostly joined earlier OSW projects, like Ørsted's, by providing corporate loans, rather than taking on the more active role of project financiers - who typically assess project risks in detail, structure complex loan agreements, and stay involved throughout the project's development and construction phases.



Limited offshore wind expertise in local banks increases reliance on external advisors and raises perceived project risks. This slows financing, constrains local leadership in deals, and delays OSW development in Taiwan.

## Challenge 2: Revenue risks due to low quality of offtakers

### Limited pool of creditworthy buyers increases offtake risk.

As Taiwan moved away from FITs toward CPPAs, revenue risk depends on finding reliable buyers. Only a small number of corporations meet the credit standards needed for lenders to

feel confident. Current eligibility criteria for electricity procurement which requires a short-term credit rating of at least *twA-3* or a long-term rating of *twBBB* (or equivalent), or group-level annual electricity consumption above 5 GWh, are not entirely adequate given the structure of Taiwan's industrial base. Stakeholders noted that only a limited number of corporations in Taiwan currently meet the

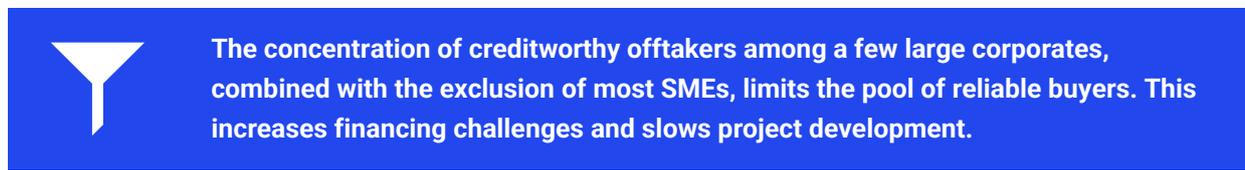
eligibility criteria to sign CPPAs, and many domestic firms lack the financial strength or capacity to commit to large scale renewable purchases over 20-30 year long-term contracts.

**Market concentration around large technology firms creates pricing pressure.**

Corporate offtakers remain primarily within the semiconductor and high-technology sectors, with Taiwan Semiconductor Manufacturing Company (TSMC) representing the dominant buyer. While agreements with TSMC show demand, this concentration can squeeze prices and limits overall market growth. Most local

enterprises are small and medium-sized (SME) manufacturers that lack the credit strength and financial resources required by lenders, effectively excluding them from participating as offtakers. SMEs also face substantial CPPA entry barriers due to limited negotiating capacity and insufficient long-term credit profiles to execute direct agreements with offshore wind developers.<sup>22</sup>

The launch of the Taiwan Smart Electricity & Energy (TSEE) platform in 2024 is a positive step. Its first CPPAs were signed in late 2025. While promising, it's too early to know if TSEE will reliably expand SME participation or reduce transaction complexity.



**Challenge 3: Keeping up with evolving policy and regulatory frameworks**

Adjustments to auction design and localisation related requirements require developers and financiers to adapt to evolving conditions. While such regulatory evolution is common in emerging markets, it does increase implementation complexity compared with more mature OSW markets with long-established frameworks.

**Localisation requirements have transitioned towards a more flexible framework**

Localisation requirements historically influenced cost and delivery timelines. Under earlier rounds, high domestic sourcing requirements increased CAPEX and implementation risk. Following the 2024 WTO

ruling<sup>23</sup> on discriminatory local content requirements, the draft Round 3.3 framework removes mandatory localisation and incentivises the use of domestic suppliers, vessels, and services through bonus points. While this improves supply chain flexibility and reduces construction risk, financiers will need to assess whether developers are choosing suppliers to score optimally rather than based on capabilities, particularly where local suppliers or vessels have limited track record at scale.

**Revenue model shifts and bankability pressures**

Taiwan's shift from long-term FiTs from NT\$5.8/kWh to lower rates has reduced internal rates of return (IRRs) by 2–3%<sup>24</sup>, and pushed some projects below bankability thresholds despite prior 20-year revenue certainty under Taipower PPAs. Revenue risk from declining

<sup>22</sup>Infolink Group. n.d. *Can aggregated PPA solve renewables energy supply shortages in Taiwan.* - [Link](#)

<sup>23</sup> Buljan, A. (2024). *EU, Taiwan settle dispute over Taiwan's offshore wind localisation measures.* OffshoreWIND.biz.- [Link](#)

<sup>24</sup> Lu, P., & Liu, K. (2023). *Why are wind farm developers leaving Taiwan?* CommonWealth Magazine. - [Link](#)

FiTs and growing corporate offtake exposure is common across global OSW markets, but Taiwan’s situation is challenging because many domestic corporates lack investment-grade ratings and the market still lacks a liquid secondary trading platform or standardised CPPA price benchmarks, making revenue forecasting more difficult.

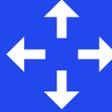
Recent measures, including the TSEE and the draft Round 3.3 floor price mechanism, capped at Taipower’s avoided cost (approximately NT\$2.29/kWh), provide partial downside protection by establishing a base-case revenue floor. While this supports lender confidence in worst-case scenarios, since it does not guarantee full revenue, financiers will continue to assess offtaker credit quality, CPPA terms and overall cash flow certainty when assessing bankability.

**Fragmented and limited de-risking frameworks**

While Taiwan has introduced several credit and guarantee mechanisms such as the Exim

Bank’s NT\$30 billion insurance fund, national credit guarantees, and Taipower-linked CPPA guarantees, the overall approach to de-risking the sector remains fragmented and not yet aligned with offshore wind project scale or risk profiles. Stakeholders generally view these tools positively (at a 7 or 8 out of a scale of 10) for boosting bank confidence, but note that this is not sufficient to manage broader policy volatility. A key concern is related to guarantee caps such as the NT\$30 billion Exim fund and Taipower’s NT\$8 billion CPPA guarantee (covering only 18 months post-default), which are considered too small or mismatched to project timelines.

While the Round 3.3 Floor Price introduces a system-level credit enhancement, it does not replace the need for long term policy signalling. Developers and financiers remain sensitive to policy volatility, particularly where changes affect auction rules, scoring criteria, or revenue assumptions after bid submission.



**Regulatory adjustments and evolving market rules may increase implementation complexity. While recent measures improve flexibility and provide partial revenue protection, uncertainties around supply chain choices, offtaker credit, and guarantee adequacy may continue to impact lender confidence.**

**Challenge 4: Technical and insurance risks**

Taiwan’s OSW projects face specific technical and environmental risks, making insurance and financing more challenging.

**Seismic and typhoon exposure raises Taiwan’s construction and insurance costs.**

Engineering designs in Taiwan must account for seismic and typhoon resilience, increasing construction and insurance costs. As a result,

insurance premiums are at least 30% higher than European due to these site-specific risks<sup>25</sup>. On average, turbine installation vessels face 2.1 days of weather-related downtime per turbine, 152% more than in Europe, due to limited weather windows around frequent typhoons.<sup>26</sup> These factors increase both schedule delays and financial risk for developers.

**Limited local data complicates risk assessment and planning.**

<sup>25</sup> Kao, S.-C. (2018). *Wind farm premiums to be 30% higher: insurers*. Taipei Times - [Link](#)

<sup>26</sup> Gelbart, Y. (2025). *A balancing act: local content and Taiwan’s renewable ambitions*. Spinergie – [Link](#)

With few projects built so far, there's limited local operational data, making it harder to assess risks. Harsh marine conditions and short weather windows also cause construction delays and planning challenges.

**Globally, insurers are reluctant to cover construction risks, restricting offshore wind financing options.**

Insurers avoid construction-phase risks which limits their role in project financing, primarily because the risks during this phase such as delays, cost overruns, and technical failures are considered too high and unpredictable. In addition, insurers are largely absent from the OSW financing ecosystem due to restrictive Export Credit Agency guarantee requirements, which limit their ability to participate.



**Taiwan's site-specific risks and current insurance market increase construction costs, limit coverage during critical OSW lifecycle phases, and increases financial risks that may slow down project implementation.**

### Challenge 5: Limited project bankability and high financing barriers

While stakeholders have noted some challenges in achieving full project bankability, these issues are currently less critical compared with other system-level constraints. Taiwan's OSW sector is still developing a track record of non-recourse financing. In addition, some projects can face foreign exchange (FX) mismatches or rely on relatively new CPPA-backed revenue streams, which can introduce additional complexity for lenders.

Looking ahead, financing demand is expected to increase significantly. Between 2026 and 2031, the sector is projected to require USD 20–25 billion in debt financing to support over 5.5 GW of projects seeking financial close.<sup>27</sup> This demand exceeds the current lending capacity of both domestic and international banks, creating crowding effects, delays in syndication, and upward pressure on financing costs.

**Non-recourse financing remains rare, driving higher costs and complexity.**

Non-recourse finance, common in global offshore wind markets, remains rare in Taiwan due to conservative banking practices and limited internal expertise. Projects often require additional guarantees, corporate backing, or coordination among multiple lenders, which adds cost and complexity.

**FX mismatch and local lending limits force heavy reliance on international capital.**

Project revenues are typically denominated in New Taiwan Dollars (NTD) while loans or financing are provided in foreign currencies. This exposure, combined with regulatory lending limits, drives reliance on international lenders and export credit agencies, especially for larger projects. For example, the NTD 118 billion (approximately US\$3.64 billion) financing for the Hai Long 2 and 3 offshore wind projects involved a consortium of 27 international and Taiwanese banks, including export credit agencies, because local financing alone was not sufficient.<sup>28</sup>



**Limited non-recourse financing and FX mismatches undermine project bankability and constrain the pool of willing lenders. This drives up financing costs, complicates deal structuring, and delays OSW development in Taiwan.**

<sup>27</sup> Cherrier, S. (2018). *Offshore wind debt capacity in Taiwan*. Green Giraffe Advisory - [Link](#)

<sup>28</sup> The Asset. (2023). *Taiwan offshore wind farm gets NT\$118 billion financing*. - [Link](#)

## 4. Global lessons for addressing Taiwan’s financing barriers

The following section presents a menu of approaches that can help address the financing and bankability challenges identified in Taiwan’s offshore wind sector. Each example targets specific barriers highlighted previously, such as revenue risk, policy uncertainty, or insurance gaps.

These options are offered for consideration based on their relevance to Taiwan, applicability across markets at different maturity levels, and responsiveness to global cost, supply chain, and geopolitical dynamics. Ultimately, a combination of these measures tailored to local conditions will be needed to create a meaningful impact in the sector.

### 4.1. Addressing Challenge 1: Local Financial Sector Capacity Gaps

#### a) Proven mechanisms

**Technical assistance builds local bank expertise for project finance.**

Technical assistance programs help address capacity gaps in local banks, which often lack experience financing complex renewable energy projects with large capital needs, long lifecycles, and policy or market dependent revenues. By providing structured knowledge transfer and mentoring from international financial institutions (IFIs) or development banks, these programs help domestic banks develop the skills needed to evaluate project risks, structure financing arrangements, and manage long-term infrastructure investments. Such programs can include workshops, joint project assessments, and secondments, gradually increasing local banks’ confidence and independence in underwriting complex projects.

**Blended finance instruments reduce early-stage risk, enable market entry, and provide practical exposure for local banks.**

Blended finance instruments integrate concessional finance, guarantees, or grants, with commercial capital, lower barriers for local lenders by absorbing early-stage risks that might otherwise deter participation. Under the Round 3.3 framework, where baseline project risks are already reduced through regulatory reforms, blended finance can be more targeted by focusing on construction period risk, tenor extension, or CPPA counterparty exposure rather than fundamental policy risk.

This risk-sharing approach enables banks to gain practical experience in complex projects, build a track record, and progressively participate in future financing on commercial terms. This not only builds expertise but also demonstrates that local banks can share financial responsibility in large-scale projects, improving market confidence.

#### b) Global Examples

**Partnerships between local banks and international financial institutions is an effective way to strengthen the technical capacity of local banks in new or emerging finance sector.**

In 2018, the International Finance Corporation (IFC) launched the Green Bond Technical Assistance Program to develop green bond markets in developing countries by providing technical assistance to financial institutions on

green bond issuances.<sup>29</sup> The programme demonstrates how technical assistance can build local capacity in financing innovative projects, and enhance the ability of banks to participate in green projects.

Similarly, the Asian Development Bank (ADB) has provided capacity building for local SME banks in Cambodia under its Energy Transition Sector Development Program. This supports local SME Banks and participating FIs to establish and operate an energy efficiency revolving fund to support the financing of energy efficiency projects, focusing on project eligibility assessment, monitoring and reporting on emission reductions.<sup>30</sup>

### **Blended finance partnerships build local banking expertise by enabling local banks to participate in complex transactions**

In 2023, ADB, Global Energy Alliance for People and Planet, and the Monetary Authority of Singapore announced a blended finance partnership to mobilise up to US \$2 billion in concessional and commercial capital to de-risk energy transition projects and crowd in private investment.<sup>31</sup> Although the partnership targets energy transition broadly, including coal phaseout and hard-to-abate sectors, its blended finance model offers a replicable approach for OSW projects in emerging markets. By mitigating early-stage risk and introducing innovative finance, this partnership allows local banks to gain experience and confidence in financing renewable energy projects.

## **c) Relevance to Taiwan**

### **Blended finance and technical assistance can catalyse Taiwan's local bank participation in OSW**

Taiwan's offshore wind market is now in a stage where policy and revenue risks are much lower, but local banks still need more experience to finance projects effectively. In this context, blended finance and technical assistance can amplify the impact of upcoming market reforms. By focusing support on the remaining risks like construction delays, bad weather, or corporate offtaker defaults, development banks can help local banks take a bigger role in financing while keeping them accountable and disciplined.

### **Clear project pipeline drives investment in expertise**

Round 3.3 prioritises financial strength, signalling that projects will go to developers and lenders who can move quickly and close financing reliably. If the government provides multi-year visibility on upcoming projects, banks can see a predictable pipeline of opportunities. This clarity will motivate Taiwanese banks to build dedicated teams for offshore wind finance. Over time, they will rely less on outside advisors, lead more deals themselves, and support Taiwan's long-term offshore wind growth.

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<sup>29</sup> IFC (n.d.) Green Bond Technical Assistance Program – [Link](#)

<sup>30</sup> ADB (2025) Technical Assistance Report. Kingdom of Cambodia: Supporting the Energy Transition Sector Development Program (Subprogram 2) – [Link](#)

<sup>31</sup> ADB (2023) ADB, GEAPP, and MAS to Establish Energy Transition Acceleration Finance Partnership in Asia – [Link](#)

## 4.2. Addressing Challenge 2: Revenue and Offtaker Risk

### a) Proven mechanisms

#### **Aggregated PPAs enable SME participation and lower transaction complexity.**

Aggregated PPAs bring together multiple buyers, enabling smaller companies to participate alongside larger ones while reducing negotiation, legal, and administrative challenges compared with individual bespoke contracts. Under the Round 3.3 draft framework, aggregated PPAs benefit from an additional layer of protection where if one or more corporate offtakers default, Taipower is legally mandated to purchase the electricity at the Floor Price. This improves downside cash flow modelling and increases lender confidence in aggregated structures.

Government facilitation can further support aggregation by standardising contracts, performing credit assessments, and coordinating pooled volumes. This is particularly important for smaller buyers, who may lack the capacity to negotiate complex long-term energy contracts independently. Without such standardisation, each PPA can become bespoke, costly, and time consuming, limiting participation and reducing overall market efficiency.

#### **Anchor buyers enhance bankability and market confidence.**

Anchor buyers, typically large corporate offtakers, can provide financial credibility and scale that increase confidence among developers and lenders, and enable smaller buyers to join shared agreements. While the draft reforms under Round 3.3 restore a minimum revenue baseline, it is not designed to

cover full LCOE. Therefore, anchor buyers will play an important role in achieving bankable CPPA pricing above the floor and reduce reliance on Taipower as the backstop.

### b) Global Examples

#### **Aggregation models in the United States: anchor buyers enable smaller participants**

In 2018, Akamai, Apple, Etsy, and Swiss Re pioneered one of the first all-corporate aggregated renewable energy purchases in the United States.<sup>32</sup> The four companies negotiated together but structured individual contracts with project developers, allocating different shares of the capacity. Collectively, they procured 290 MW of solar and wind power, with Apple acting as the anchor buyer while Akamai (9 MW in Illinois and 27 MW in Virginia) and Etsy benefitted from Apple's credit strength.

In 2019, the Corporate Renewable Aggregation Group also illustrates how midmarket companies can pool resources to overcome transaction barriers. Bloomberg, Cox Enterprises, Gap Inc., Salesforce, and Workday collectively contracted for about half of a 100 MW solar farm in North Carolina, using a uniform virtual PPA contract.<sup>33</sup> This structure allowed each company to procure smaller portions of renewable energy while sharing legal and transaction costs. The collaboration reduced individual risk exposure, improved negotiating power, and facilitated knowledge sharing that leveraged the expertise of members.

#### **Enablers of CPPA: France's guarantee mechanism and South Korea's government-mandated demand**

<sup>32</sup> Trellis (2018) Aggregation paves the way for a more diverse corporate renewables market – [Link](#)

<sup>33</sup> Trellis (2019) How Bloomberg, Cox, Gap Inc., Salesforce and Workday combined clout to buy clean power – [Link](#)

France's Garantie Électricité Renouvelable (GER), introduced in 2023, offers a more explicit form of public intervention by providing state-backed guarantees covering up to 80% of CPPA revenues in the event of offtaker default, reducing counterparty risk and improving project bankability.

In contrast, South Korea's Renewable Portfolio Standard (RPS) does not provide guarantees but instead mandates renewable energy procurement. Offshore wind projects benefit indirectly through fixed-price Renewable Energy Certificate (REC) contracts, which stabilise revenues and support development of CPPA structures.

Taiwan's proposed Round 3.3 Floor Price occupies an intermediate position between these models. It does not provide full revenue guarantees or long term price fixing, but it does establish a credible credit enhancement by ensuring recoverability in worst case scenarios. This aligns Taiwan's OSW framework more closely with international financing practices without reintroducing heavy subsidy regimes.

### c) Relevance to Taiwan

#### **Expand OSW market participation by anchoring procurement with creditworthy buyers through aggregated PPAs.**

In April 2023, TSMC signed a long-term renewable energy PPA with ARK Power, a subsidiary of ARK Solar Energy, covering 20 TWh over 20 years (1 TWh annually). Of this, 500 GWh per year is subscribed by TSMC, while the remaining 500 GWh is open for joint subscription by TSMC's local supply chains.<sup>34</sup> Participating suppliers benefit from long-term price certainty, alongside electricity evaluation and planning services, helping to reduce

procurement price and lower entry barriers for smaller firms.<sup>35</sup>

Under the Round 3.3 framework, similar structures would benefit from improved lender acceptance, as the Floor Price reduces downside exposure and mitigates the impact of individual offtaker default. If scaled through platforms such as the TSEE, aggregated CPPAs could accelerate CPPA market development and support OSW project bankability, particularly in light of high upfront capital costs and long development timelines.

#### **Complementary mechanisms are needed to provide long-term revenue certainty.**

The Minimum Purchase Price, tied to Taipower's avoided cost (approximately NT\$2.29/kWh), restores a base case revenue stream that covers operating expenditures and supports partial debt service. While this significantly improves downside risks, it may remain below full LCOE for many projects, particularly in early commercial operation years.

As such, additional measures may still be required to enhance long term revenue certainty and encourage broader CPPA participation. These could include further standardisation of CPPA contracts, or targeted credit-support mechanisms adapted to Taiwan's institutional context. Rather than replicating foreign models such as France's GER or South Korea's RPS in full, Taiwan's policy challenge lies in calibrating these tools to complement the Floor Price while preserving market flexibility and SME participation.

<sup>34</sup> TSMC (2023) TSMC Pioneers Joint Procurement of Renewable Energy to Strengthen Suppliers' Carbon Reduction Capabilities – [Link](#)

<sup>35</sup> HPC wire (2023) TSMC Signs 20,000 GWh Renewable Energy Joint Procurement Contract with ARK Power – [Link](#)

### 4.3. Addressing Challenge 3: Keeping up with evolving policy and regulatory frameworks

#### a) Proven mechanisms

##### Flexible auction design can reduce cost volatility and revenue risk.

Flexible auction and policy design can manage cost volatility and revenue uncertainty by including considerations around:

- Inflation and materials cost adjustment clauses
- Extensions to lease timelines for delayed supply chains
- Iterative, multi-year auction calendars that signal long-term commitment

##### Policy stability is essential to maintain investor confidence.

While these approaches may be effective in addressing policy and financial risks, a consistent approach is critical. Frequent changes to policy can undermine investor confidence. The clarity provided by the draft reforms under Round 3.3 represents a positive step, but maintaining consistency across future auction rounds will be critical to reducing perceived regulatory risk.

#### b) Global Examples

##### Japan adjusts auction rules to reflect rising CAPEX and market realities <sup>36 37 38</sup>

Japan has faced cost escalation in its OSW projects due to rising material costs, supply chain disruptions and high interest rates, making some projects unprofitable under the original auction and lease terms. For example,

Mitsubishi withdrew from three large offshore wind sites (in Chiba and Akita prefectures) that it had won in Japan's first major offshore wind auction (2021), citing surging costs that made the projects no longer financially viable.

The government recognised that developers were at risk of large losses between bidding and construction due to unexpected CAPEX increases (equipment, turbines, maritime works, etc.). To respond, Japanese authorities have moved to adjust the regulatory framework in several ways:

1. **Electricity price adjustment scheme in auctions:** They introduced rules to allow some adjustment of auctioned electricity prices to reflect CAPEX changes (e.g. materials, turbine costs) between the time of bidding and time of project execution. Up to ~40% of cost increases for capital-intensive components may now be adjustable.
2. **Extension of lease periods:** Under current rules, leases for wind farm sites have limits (including decommissioning requirements), which effectively reduce the number of years a project can earn revenue. Japan is proposing to extend lease terms by 10 years (from 30 to 40 years) under certain conditions, to help with cost recovery, cashflow, financing, etc.
3. **Consideration of inflation and exchange rate risks:** Through its auction subcommittees, Japan is considering mechanisms to adjust for inflation, exchange rate swings, or other cost escalations that happen after the bid but before or during construction.
4. **Higher deposit requirements:** Japan raised the amount bidders must deposit to participate, to provide stronger

<sup>36</sup> Reuters (2025) Japan to re-auction offshore wind sites dropped by Mitsubishi - [Link](#)

<sup>37</sup> Market Screener (2025) Japan revises rules for offshore wind power auctions - [Link](#)

<sup>38</sup> Reuters (2025) Japan proposes 10-year extension for offshore wind farm leases to ease cost pressures - [Link](#)

commitment and buffer against delays or project cancellation.

### **UK experience: adapting CfD design to changing cost and market conditions**

Contracts for Difference (CfDs) are used in offshore wind markets to provide price certainty, with frameworks that can be adapted to changing economic and market conditions. The UK's flexible approach demonstrates how adjusting CfD parameters helps prevent market failure when costs shift.

Recent market conditions have prompted targeted reforms. In Auction Round 5 (AR5) in 2023, no offshore wind bids were submitted<sup>39</sup>, reflecting high inflation, elevated interest rates, supply chain cost escalation, and an uncompetitive strike price cap.<sup>40 41</sup> The underlying issue was that the auction design relied on pre-2022 economic assumptions, including a continued low interest rate environment and stable supply chains. In response, AR6 significantly increased strike price caps to better reflect prevailing cost structures.

Looking ahead, from AR7 (2026), the UK will extend CfD contract lengths from 15 to 20 years for fixed-bottom and floating OSW, improving investment certainty and reducing financing costs by better aligning contract durations with the operational lifespan of renewable energy assets.<sup>42</sup> In addition, to encourage floating offshore wind, appropriate budget and parameters were set to support demonstration scale floating wind projects.

### **c) Relevance to Taiwan**

#### **Policy flexibility is key to managing post-auction cost increases.**

Unexpected post-auction cost increases from materials, supply chain issues, and regulatory delays stressed developers' financial models in Japan, which price adjustment mechanisms and extended lease durations helped mitigate. Taiwan could adopt similar measures to manage cost, grid, or permitting uncertainties and protect investors.

#### **Balanced deposit requirements can strengthen bidder commitment.**

Deposit requirements for bidders were also raised to ensure stronger commitment, though care is needed not to exclude smaller players. Taiwan faces similar challenges and could benefit from adopting balanced deposit requirements to protect developers and investors.

#### **Policy flexibility is critical to avoid market failures.**

The UK experience, where price caps were raised in Round 6 and 7 following no bids in Round 5, highlights the importance of policy flexibility and market realism. This offers a key lesson for Taiwan where policymakers should avoid forcing prices that the market cannot support. Instead, support mechanisms should allow competitive dynamics to determine prices within a framework that reflects evolving technology costs, supply chain conditions, and macroeconomic conditions.

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<sup>39</sup> UK Department for Energy Security and Net Zero Introduction (DESNZ) (2023) Contracts for Difference Allocation Round 5 results – [Link](#)

<sup>40</sup> offshoreWIND.biz (2023) Offshore Wind Developers Take a Pass on UK's Fifth CfD Round as Maximum Bid Price Was Too Low – [Link](#)

<sup>41</sup> Energy UK (2023) Energy UK Analysis: Allocation Round 5 – [Link](#)

<sup>42</sup> UK Department for Energy Security and Net Zero Introduction (DESNZ) (2025) Further reforms to the CfD scheme for AR7: government response to policy proposals – [Link](#)

## 4.4. Addressing Challenge 4: Technical and Insurance Risks

### a) Proven mechanisms

#### Insurance pools spread catastrophic risks across multiple assets.

Insurance pools and reinsurance frameworks are effective in high-risk island environments. Catastrophe risk pools spread losses across multiple assets, parametric insurance enables fast trigger-based payouts after typhoons or earthquakes, and export credit agency (ECA) backed reinsurance brings international balance sheets into small domestic markets.

### b) Global Examples

#### Japan–Denmark ECA reinsurance cooperation expands risk coverage for renewables.

The reinsurance deal between Japan’s Nippon Export and Investment Insurance (NEXI) and Denmark’s Export Credit Agency (EKF)<sup>43</sup> lets both agencies share insurance for long-term projects, such as renewable energy. EKF’s wind power experience and NEXI’s focus on green technology mean they can offer strong risk protection and financial help to Japanese and Danish businesses.

#### Caribbean Catastrophe Risk Insurance Facility (CCRIF) demonstrates the power of risk pooling.

CCRIF is a multi-country insurance pool that offers parametric insurance for hurricanes, earthquakes, and excess rainfall. While focused on sovereign disaster relief, its model of pooling risks and applying trigger-based payouts can be applicable to insuring infrastructure. This

approach allows insurers to spread risk across multiple projects or jurisdictions, lowering premiums and ensuring rapid payouts after extreme events.

### c) Relevance to Taiwan

#### Leverage ECA reinsurance to increase construction phase risk coverage.

Taiwan can encourage developers and financial institutions to tap into bilateral ECA reinsurance frameworks, similar to the NEXI-EKF model. Partnering with ECAs from countries with mature OSW experience (e.g. Denmark, Germany, Japan) can improve underwriting capacity and unlock coverage for high-risk construction phases.

#### Use pooled or parametric catastrophe insurance to manage typhoon and earthquake exposure.

Taiwan could pilot a regional catastrophe insurance pool for OSW assets, particularly for typhoon and earthquake risk. A parametric model with predefined payouts based on weather or seismic thresholds could provide timely compensation and reduce project delays. This would be especially useful for smaller or local insurers with limited balance sheet capacity.

#### Build domestic insurance capability through targeted capacity development.

In parallel, Taiwan can invest in building domestic insurance capacity and technical risk modelling, including training underwriters in offshore engineering risks. Public-private partnerships could accelerate this learning curve and reduce dependency on foreign insurers.

<sup>43</sup> NEXI (2019) Reinsurance Agreement with EKF Denmark’s Export Credit Agency – [Link](#)

## 4.5. Addressing Challenge 5: Bankability and High Financing Barriers

### a) Proven mechanisms

**Contracts for difference can provide revenue stability and policy certainty for offshore wind projects.**

A two-way Contract for Difference (CfD) guarantees a fixed price for electricity: if market prices drop below this level, the generator is paid the difference; if prices rise above it, the surplus is returned to the scheme<sup>44</sup>. This structure greatly reduces revenue uncertainty, making projects more attractive to investors and lenders, while also shielding consumers from high market prices. As a government-backed contract, it provides stability across political cycles, directly addressing risks related to revenue and policy changes.

### b) Global Examples

#### *The UK's CfD scheme*

**UK's CfD scheme delivers long-term price certainty and drives cost reduction.**

The United Kingdom has one of the most advanced offshore wind markets globally, underpinned by a stable and bankable financing framework, the CfD scheme. Introduced in 2014, the CfD mechanism was designed to incentivise investments in renewable energy projects by providing long-term price certainty.

Developers bid for UK's CfD contracts through competitive allocation rounds. Successful

bidders under the scheme enter into a private law contract with the Low Carbon Contracts Company (LCCC), a government-owned entity established specifically to manage CfD agreements<sup>45</sup>. LCCC is owned by the Department for Energy Security and Net Zero and acts as the contract counterparty. Its primary responsibilities include issuing CfD contracts, administering payments, and managing contractual compliance throughout the construction and operational phases.

The scheme has been instrumental in driving down OSW costs. Strike prices for OSW fell from £114/MWh in Allocation Round 1 (2014)<sup>46</sup> to £37.35/MWh in Allocation Round 4 (2022) under a low interest rate environment<sup>47</sup>, before rising to £58.87/MWh in Allocation Round 6 (2024) as interest rates and supply chain costs increased post-2022<sup>48</sup>.

#### *Denmark's capability based CfD*

**Denmark introduced capability based CfDs to share risk and stabilise investments.**

In December 2024, the Danish Energy Agency received no bids for three OSW sites in the North Sea.<sup>49</sup> The following month, the Danish government suspended all ongoing OSW tenders, citing that the existing zero-subsidy model was no longer viable under prevailing market conditions. Preparatory work began to retender up to 3GW of OSW capacity in 2025.

The upcoming tender will introduce a capability-based, two-way CfD, where payments are based on the project's potential production under

<sup>44</sup> Bredesen Consulting (2022) The Contracts for Difference – [Link](#)

<sup>45</sup> UK Department for Energy Security and Net Zero Introduction (DESNZ) (2024) Contracts for Difference – [Link](#)

<sup>46</sup> DECC (2015) Contracts for Difference (CFD) Allocation Round One Outcome – [Link](#)

<sup>47</sup> UK Department for Energy Security and Net Zero Introduction (DESNZ) (2022) Contracts for Difference (CfD) Allocation Round 4: results – [Link](#)

<sup>48</sup> UK Department for Energy Security and Net Zero Introduction (DESNZ) (2024) Contracts for Difference Allocation Round 6 results – [Link](#)

<sup>49</sup> offshoreWIND.biz (2025) Danish Energy Agency Running Market Dialogue Ahead of 3 GW CfD-Based Offshore Wind Tender – [Link](#)

prevailing wind conditions rather than actual output.<sup>50 51</sup>

The capability-based approach reduces market distortions by basing payments on potential rather than actual output, shifting revenue risk between developers and government and lessening market volatility.

Denmark is the first to implement capability-based CfDs for offshore wind at scale, serving as an important test case due to limited evidence on its long-term effectiveness.

### c) Relevance to Taiwan

#### **CfD-style support can provide long-term revenue certainty and support offshore wind bankability.**

In the UK, CfDs have helped reduce revenue risk, contributing to lower financing costs and competitive OSW prices. Taiwan's offshore wind sector, while still maturing, is currently facing upward pressure on financing costs due to evolving policy and market dynamics.

Taiwan could draw several lessons from the UK's CfD experience to enhance its project bankability and financing barriers. Establishing a mechanism that offers predictable, long-term revenue, whether through a CfD-type instrument or a tailored variant, would significantly enhance non-recourse financing potential. A credible counterparty, that remains stable across political cycles, could serve to administer contracts and mitigate perceived offtake risk, similar to the role of LCCC in the UK. Such a structure would provide local and international lenders with greater confidence in cash flow predictability, reducing the need for corporate guarantees and enabling broader participation by local financial institutions.

Additionally, Taiwan could consider introducing longer contract tenures and inflation-linked adjustments to enhance financing viability in a high-cost environment.

#### **Floating offshore wind requires tailored revenue support.**

As Taiwan advances toward more complex offshore wind developments, particularly floating projects in deeper waters, the government's revenue support mechanisms will need to remain flexible and responsive to evolving cost structures and technological risks. In the UK, there is a separate strike price for bottom-fixed and floating offshore wind project i.e. for Allocation Round 7, the strike price for bottom-fixed is £113/MWh while the strike price for floating wind is £271/MWh.<sup>52</sup> Ensuring that support mechanisms reflect the higher capital intensity and nascent supply chain of floating offshore wind will be crucial to maintaining investor confidence and sustaining the long-term growth of the sector.

#### **Zero-subsidy models alone are not sufficient to attract bidders.**

Denmark's experience shows that relying solely on market-based, zero-subsidy models can undermine project bankability, as evidenced by the lack of bids for offshore wind sites. This led to the adoption of capability-based CfDs to provide greater long-term revenue certainty.

Denmark's experience shows that, as Taiwan has moved beyond the feed-in tariff, a support mechanism is essential for long term revenue stability, as market-based tools like corporate PPAs alone cannot provide the certainty needed to finance offshore wind projects.

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<sup>50</sup> Ocean Energy Resources (2025) Introduction capability-based two-way CfD in Denmark – [Link](#)

<sup>51</sup> Coral Point (2025) Denmark's Offshore Wind Market: Lessons, Reforms and New Momentum – [Link](#)

<sup>52</sup> Riviera (2025) UK beefs up price it is prepared to pay for offshore wind – [Link](#)

## 5. Direction setting

Taiwan's OSW financing challenges cannot be solved by any single policy instrument. They are a result of interdependent issues ranging from revenue uncertainty, regulatory shifts, financial sector capacity constraints and geographic risks.

As of January 2026, the Ministry of Economic Affairs' (MOEA) draft selection rules for Zonal Development Round 3.3 mark a material regulatory pivot that directly addresses several challenges. In particular, the removal of mandatory localisation thresholds, the introduction of a minimum purchase price mechanism, and the reweighting of selection criteria toward financial and execution capability together signal a shift from an industrial policy driven framework toward a more competitive and bankability oriented market structure.

While these draft reforms significantly improve near term policy clarity and downside risk protection, sustained progress will still depend on how they are embedded within a coherent long term strategy. A direction setting exercise therefore remains essential. It clarifies the end state Taiwan seeks to reach, the governance and policy frameworks needed to get there, and the sequence in which reforms should be implemented. This clarity is necessary for lowering investor uncertainty, improving project bankability, and enabling domestic financial institutions to play a bigger role.

### 5.1. Defining long-term strategic objectives

**Offshore wind is a critical part of Taiwan's long-term energy and industrial strategy**

As of 2025, Taiwan's OSW capacity reached almost 4GW in total.<sup>53</sup> The government had aimed to increase OSW capacity to 5.7GW by 2025, 10.9 GW by 2030, and 18.4 GW by 2035, and 40–55 GW by 2050, as outlined in the national 2050 net-zero emissions pathway.<sup>54 55</sup> These targets position offshore wind as central to Taiwan's energy security strategy, industrial development objectives, and international climate commitments. Given Taiwan's targets and current deployment trajectory, the government's role is expected to be significant in:

- **Providing clear long-term procurement visibility**, including timelines, expected capacity, and price support mechanisms.
- **Offering revenue-stabilising instruments** that help reduce financing costs.
- **Ensuring policy clarity**, especially around localisation requirements, permitting, and grid connection.
- **Supporting capacity building within domestic financial institutions**, so they can take on a larger role in offshore wind financing.

**Round 3.3 is expected to be a turning point in procurement design and bankability**

**The scale and duration of the government's targets imply the need for financing and procurement models that are highly scalable and capable of supporting long-term investment.** The draft reforms under Round 3.3 represent an important turning point. By converting the Industrial Relevance Plan into a weighted scoring approach, the government has effectively moved away from rigid

<sup>53</sup>4C Offshore. *Taiwan's offshore wind capacity reaches nearly 4GW with latest commissioning.* – [Link](#)

<sup>54</sup> Norton Rose Fulbright. *Global offshore wind: Taiwan.* – [Link](#)

localisation thresholds. This change is expected to lower capital expenditure, reduce construction and supply chain risk, and materially improve bankability, particularly for international lenders.

**Similarly, the introduction of a minimum purchase price tied to Taipower’s avoided cost directly addresses the revenue uncertainty created by zero bid auctions and fully merchant CPPAs.** By providing a legally mandated fallback buyer in the event of CPPA default, the framework restores a base case revenue stream and enables financiers to model non zero recovery values under downside scenarios. While the floor price may not fully cover the LCOE, it significantly reduces risk and represents a form of credit enhancement that international banks have consistently requested. However, while Round 3.3 improves near term project bankability, achieving Taiwan’s longer term capacity targets will still require revenue stabilisation mechanisms that provide certainty beyond individual auction rounds.

### Structural limits of CPPAs in meeting capacity ambitions

**If Taiwan pursues a high growth trajectory consistent with its 2050 goals, system-level revenue stabilisation instruments such as CfDs would be well suited to lowering financing costs,** enabling greater domestic bank participation, and supporting long-term supply chain investment. If a more moderate growth path is pursued, an expanded CPPA market supported by credit enhancements and clear regulatory rules may be sufficient in the near term.

**Even with continued de-risking, the CPPA market is structurally constrained by the limited number of corporate offtakers** with sufficient scale and credit quality to enter long-tenor PPAs. As a result, CPPAs are likely to continue representing only a portion of Taiwan’s overall electricity demand, rather than a system-wide solution capable of absorbing the full volume implied by the government’s offshore

wind ambitions. This creates a ceiling on how far market-led procurement alone can support capacity expansion. Consequently, while CPPAs can play a growing and valuable role, particularly for near-term projects and multinational buyers, achieving Taiwan’s high-capacity trajectory will still require a parallel, government-backed revenue stabilisation mechanism. In this context, a CfD-style framework would provide the scale and long-term price certainty needed to mobilise capital across the full range of projects required to meet Taiwan’s 2030–2050 offshore wind targets.

### CfDs or hybrid models to support long-term scale up

**The reforms introduced under auction round 3.3 reflect a clear acknowledgement by the Taiwanese government that offshore wind’s strategic importance to national energy security and industrial development justifies a degree of government-backed revenue risk sharing to support continued deployment.** By accepting a greater role in mitigating downside revenue risk, the government has signalled a shift away from a purely market-led approach toward a more balanced allocation of risk between the public and private sectors.

It is likely, however, that sustaining significant long-term capacity growth consistent with Taiwan’s 2030–2050 targets will require a further rebalancing of risks, particularly through deeper derisking of project revenue streams. This points toward either a CfD-based framework or a hybrid model in which CfDs and CPPAs operate in parallel, allowing different projects and offtakers to be accommodated.

Moving toward a more flexible hybrid framework, where CfDs and CPPAs coexist and can be combined in different proportions, can enhance the bankability of projects while supporting innovation in financing structures. Importantly, such a framework does not imply that every project must adopt a hybrid structure. Rather, it expands the available options so

developers can tailor revenue strategies to project-specific needs and market conditions.

A key precedent illustrating the value of flexibility is the Moray West offshore wind farm, an 882 MW offshore wind project in the United Kingdom.<sup>56</sup> Moray West secured a CfD for approximately 33% of its capacity, complemented by long-term CPPAs with corporate buyers covering about 52% and merchant sales for the remainder. This revenue-stacking approach enabled the project to balance certainty from the CfD with the commercial opportunities of corporate offtake contracts. Developers were free to choose the level of capacity bid into the CfD auction, allowing partial CfD coverage. Similar flexibility has been exercised by other UK projects such as Seagreen Offshore Wind Farm.

**Key elements of a conceptual framework for CfD–CPPA coexistence in Taiwan could include:**

- **Allowing concurrent CfDs and CPPAs**, with developers free to choose CfD coverage levels up to 100%.
- **Avoiding rigid requirements** for minimum CfD or CPPA proportions, which could increase project risk.
- **Providing clarity on how generated electricity (in MW) is allocated across multiple offtake contracts** in practice (for example, whether volumes are allocated pro-rata to contracted capacity when the project is not operating at full output, or whether alternative allocation rules may apply).
- **Maintaining separation between CfD strike prices and CPPA floor prices**, while allowing the market to determine commercial linkages. Inevitably, some market-driven correlation between the

two price points will occur in practice, as publicly known CfD prices tend to anchor market expectations and may influence CPPA negotiations.

- **Considering targeted instruments**, such as credit guarantees, that can support CPPA bankability alongside a flexible CfD regime.

By adopting a hybrid model that emphasises optionality rather than prescriptiveness, Taiwan can create an enabling environment to support long-term capacity growth while ensuring that developers retain the flexibility needed to meet evolving market conditions and investor expectations.

## 5.2. Determining optimal allocation of risks

Direction setting requires clarity on which stakeholders are best placed to manage specific risks. Misaligned risk allocation increases the cost of capital and slows deployment. Recent draft reforms under Round 3.3 provide an example of improved risk alignment, particularly by reducing policy driven construction risk and introducing limited downside revenue protection.

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<sup>56</sup>Reuters. 2025. *Taiwan's offshore wind projects move into deeper waters, requiring more state support.*

– [Link](#)

Risk type	Responsible stakeholder	Implication for Financing Design
<b>Policy and revenue</b>	Government	Government-backed revenue stabilisation (e.g. CfDs, CPPA guarantees) provides long-term price certainty, reduce capital costs, and supports scalable deployment. Round 3.3's floor price represents a partial step in this direction. The extent of government involvement may vary depending on ambition and fiscal capacity, but system level revenue risk is generally most efficiently managed at this level.
<b>Financial and market</b>	Financial institutions, supported by government in early phases	In less mature markets, technical assistance, co-lending, and credit enhancement mechanisms are important to crowd in domestic banks and institutional investors. As market familiarity increases, financial institutions can progressively assume greater exposure without public support. As Round 3.3 favours financially robust developers, financing structures are expected to become more standardised and bank-led over time.
<b>Technology and geographical</b>	Developers/insurers, with government involvement in certain scenarios	Developers and insurers are generally best placed to manage construction, operational, and performance risks through standards, insurance, and risk pricing. However, in early market stages or high risk geographies, government-led or government-funded early site surveys, seabed mapping, and environmental assessments can reduce project-level uncertainty, lower upfront development costs, avoid duplication, and improve overall bankability.

**Government should focus on managing system level risks that constrain bankability, particularly grid access and early stage site uncertainty**

The draft Round 3.3 framework reinforces the principle that the government should focus on managing system level risks that private actors cannot efficiently manage, including policy, revenue, and certain financial risks. While financing structures have continued to evolve, access to timely and adequate grid connections is emerging as a critical system level risk that can materially undermine project bankability. International experience suggests this is a risk that private developers are poorly placed to manage. In the UK, two decades of grid regulation that discouraged anticipatory investment to avoid billpayers bearing the cost of potentially under-utilised assets has contributed to a lack of transmission capacity and rising connection delays. For Taiwan, this highlights the need for a more systematic

approach to grid planning and investment alongside improvements in financing frameworks as strong financial structures alone are insufficient if developers face unmanageable uncertainty over grid availability.

In addition, government involvement in technical/geographical risks such as funding early-stage site surveys can de-risk multiple projects and make financing more accessible. Developers and insurers can retain oversight of operational and construction risk, but benefit from government supported risk reduction measures, particularly in areas where data scarcity or technical uncertainty is high.

Overall, risk allocation should remain flexible and tailored to the local context. While developers are generally best placed to manage technology and site-specific risks, the government can play a proactive role in mitigating early-stage geotechnical and environmental uncertainty, which ultimately

reduces financing costs and supports faster scale up of offshore wind deployment.

### 5.3. Prioritising OSW procurement models

The choice of procurement model directly influences financing costs, developer incentives, and the ability to achieve long term energy security and climate goals.

**CfDs** are government-backed revenue stabilisation instruments that provide a fixed or floor price for electricity generation, protecting developers from market price volatility. By transferring revenue risk to the government, CfDs have the potential to enable large-scale deployment. It is useful to support long-term supply chain investments as well, given that it provides investors with greater certainty about returns. However, experience in markets such as the UK suggests that, while CfDs are an improvement over merchant exposure, auction-based award models may provide certainty too late in the development cycle to enable firm commitments on major manufacturing investments. This highlights the importance of CfDs being complemented by more targeted supply chain policies where governments seek to accelerate domestic industrial build out.

**CPPAs** are bilateral agreements between a developer and a corporate offtaker, where the corporate assumes revenue risk. This allows for market-driven growth, and tends to be more appropriate for smaller-scale projects or very specialised offtakers where corporates seek direct procurement. Financing costs may however be higher than CfDs, and so CPPAs may be better suited for a limited share of capacity. In addition, CPPAs expose projects to counterparty and price risk. Under earlier rounds, this risk translated directly into higher financing costs and limited lender appetite. The Round 3.3 minimum purchase price mechanism can alter this dynamic by providing a revenue floor and a legally mandated offtaker of last resort, effectively transforming CPPAs into a

hybrid instrument with partial government backing.

As a result, Taiwan is already moving toward a hybrid procurement framework in practice, even if not formally labelled as such. A possible hybrid approach could include:

- **Balancing between scale and flexibility:** CfDs can be introduced in the long term to secure large-scale deployment at the lowest possible cost, while CPPAs (potentially supported by a revenue floor if the Round 3.3 reforms are finalised) enable smaller or innovative projects without overloading government budgets. Together, they can reduce reliance on any single funding or procurement channel.
- **Efficient allocation of risk:** System-level risks associated with meeting climate goals is more efficiently managed by the government through a CfD, while project-specific risks can be absorbed by willing corporate offtakers through CPPAs. This approach aligns risk with the stakeholders best able to manage it.
- **Supportive market development:** Hybrid procurement encourages corporate engagement and facilitates development of aggregation platforms, reducing transaction costs for smaller buyers.

A hybrid model can be designed as a long term robust pathway for Taiwan, combining scalability, flexibility, and financial sustainability, provided that the interaction between CPPAs and CfDs is clearly designed and communicated.

### Sequencing and policy signalling considerations

**While CfDs or hybrid CPPA–CfD frameworks appear well suited to supporting Taiwan’s long-term offshore wind ambitions, the timing and sequencing of their introduction will be critical.** Introducing or announcing a CfD framework immediately following the Round 3.3 reforms could risk sending mixed signals to industry, particularly while stakeholders are still adapting

to recently announced changes in procurement design, localisation policy and revenue support mechanisms.

**A more effective approach may be for government to begin policy development and analytical work on CfD or hybrid models in parallel with the implementation of the Round 3.3 reforms, without immediate public deployment.** This could include assessing the likely scale and credit quality of demand that can realistically be supported through de-risked CPPAs under the revised framework, and benchmarking this against Taiwan’s medium and long term offshore wind capacity targets.

**Such analysis is likely to demonstrate that, while CPPAs can support a meaningful share of near-term deployment, they are unlikely to absorb the full volume required to meet Taiwan’s longer-term ambitions.** Undertaking this work in advance would allow the government to develop a coherent policy narrative and clear design principles for how CfDs would interact with existing CPPA arrangements, enabling a smoother and more credible transition if and when deeper revenue stabilisation mechanisms are formally introduced.

## 5.4. Proposed direction for Taiwan

**Based on the Taiwanese government’s ambitions to scale up the offshore wind market and meet its climate and energy security goals, the sector must transition beyond one-off projects towards a mature, large-scale industry where revenues are predictable, financing is readily available and risks are clearly managed.** Achieving this transition will require deliberate choices about market structure, procurement routes and the evolving role of the government over time. Recent draft reforms under Round 3.3 indicate that this transition is already underway, but further consideration will be required as deployment accelerates. The direction set out below does not prescribe individual policy instruments. Rather, it defines

a possible trajectory for Taiwan’s offshore wind market and the types of solutions that are consistent to this pathway.

### What success could look like for Taiwan’s offshore wind sector

The long term objective for Taiwan’s offshore wind sector is to build a robust pipeline of bankable projects supported by available and willing financiers, within a market framework that minimises permitting and construction delays and enables sustained capacity growth aligned with Taiwan’s national climate goals.

In the long term, Taiwan may aim for the following outcomes:

- Offshore wind development is planned with clear, multi-year visibility, rather than through irregular or one-off project rounds.
- Revenue and policy risks are stable enough to allow projects to secure low-cost financing.
- Domestic banks take a leading role in project financing, alongside international investors.
- Corporate demand for offshore wind power supports overall system wide deployment, rather than replacing it.
- Standard risk mitigation tools are widely used, reducing the need for complex, project-specific arrangements.

Reaching this point would require a shift toward greater standardisation, larger project scale, and more predictable market conditions, supported by governance frameworks that evolve as the market matures.

### Key strategic directions from the analysis

The findings of this report suggest several directional choices that can shape Taiwan’s offshore wind pathway and narrow the range of viable solutions.

## Revenue support

The overall direction points toward increased revenue certainty at the system level. The Round 3.3 floor price mechanism represents an important first step, but deeper stabilisation potentially through CfDs or expanded hybrid models will be required to support very large scale deployment.

## Role of corporate demand

Corporate procurement should continue to grow, but within a framework that limits counterparty risk and financing costs. Credit enhancement, aggregation mechanisms, and clear fallback arrangements will be critical.

## Financial sector development

A key part of Taiwan’s offshore wind future is increasing the role of domestic financial institutions. Early public sector support could be useful to build familiarity and confidence with the sector, followed by a gradual transfer of risk exposure to domestic financial institutions as projects become better understood and more standardised.

## Policy evolution

The shift from mandatory localisation to competitive scoring signals a more mature policy stance. Maintaining stable and transparent policies will enable project timelines to be highly predictable, giving developers and financiers the confidence to plan and invest with certainty.

## Risk mitigation

As offshore wind projects move into more challenging locations and face harsher weather conditions, Taiwan will need system-level approaches to manage technical and catastrophic risks. Relying only on commercial insurance may not be enough, and instead risk-sharing and reinsurance mechanisms can help spread risk more effectively and support long-term growth of the sector.



## Implications for recommendations

Considering the Round 3.3 draft rules, solutions most aligned with Taiwan’s trajectory will tend to:

- Improve downside revenue protection and financing bankability
- Strengthen and aggregate demand without over-reliance on merchant risk
- Develop domestic banks’ abilities and confidence to finance projects
- Make policies more predictable, transparent and easy to follow
- Lower costs and risks related to technical and weather-related issues

No single solution will address all challenges, and instead combining mutually reinforcing measures building on the Round 3.3 draft reforms will be required across revenue support, market development, finance and risk mitigation.

## 6. Recommendations for Taiwan

Taiwan's OSW financing challenges are due to a combination of revenue uncertainty, policy shifts, limited domestic financial sector capacity, and unique geographic risks. The draft reforms announced under Zonal Development Round 3.3 directly address several of these constraints, particularly by improving downside revenue visibility, reducing supply chain rigidity, and prioritising execution and financial capability.

As established in the direction setting chapter, no single instrument can address these challenges alone. Instead, Taiwan requires a coordinated set of mutually reinforcing measures that leverage on the reforms under Round 3.3 to improve revenue predictability above the Floor Price, expand demand, strengthen domestic financial institutions, and reduce system-level risks over time.

The recommendations below aim to translate the strategic direction into concrete actions. Each recommendation specifies **how** it can be implemented, **who** should lead or participate, and **when** it should be prioritised, consistent with Taiwan's long-term offshore wind objectives.

### 6.1. Menu of solutions addressing Taiwan's challenges

#### 6.1.1. Strengthening revenue certainty and improving project bankability

A central finding of this study is that revenue risks are a main deterrent to OSW financing in Taiwan. While the introduction of the Minimum Purchase Price (Floor Price) mechanism under Round 3.3 materially reduces downside risk, it does not on its own guarantee sufficient demand for long term bankable revenue contracts at the scale implied by Taiwan's deployment targets.

The policy challenge is therefore two-fold: (i) to stabilise revenues above the floor and ensure the mechanism is credible, durable, and predictable, and (ii) to ensure that an adequate volume of bankable offtake arrangements is available to support large scale deployment. As CPPA demand is likely to remain constrained by offtaker scale and credit capacity, additional mechanisms may be required to ensure that revenue certainty can be delivered consistently across successive auction rounds.

**One way to address this over the medium to long term could be a transition towards a hybrid procurement framework, building on the Round 3.3 reforms and informed by observed market outcomes under the de-risked CPPA model.**

- **The Floor Price should function as the risk-mitigation layer**, ensuring minimum cash flow continuity, OPEX coverage, and partial debt service. To maximise effectiveness, it should not be impacted by retroactive policy changes, be clearly defined in terms of trigger conditions, settlement procedures, and payment timelines.
- **CPPAs can continue to enable pricing above the floor and supporting corporate decarbonisation objectives, smaller projects, and newer technologies**, but with rules in place to avoid too much reliance on a small number of buyers since this increases financial risk if one buyer fails or withdraws.
- **CfDs can be considered only where market outcomes under the strengthened CPPA and Floor Price framework demonstrably fail to deliver sufficient bankable capacity for system-critical deployment.** This would be the case when auction prices fail to cover LCOE, if CPPA volumes are limited despite the Floor Price, or if strategic projects like floating wind fail to attract

offtakers. In such cases, by transferring revenue risk to the public sector, CfDs can reduce the cost of capital and support non-recourse financing. CfDs also allow longer-term debt by reducing lender risk and giving confidence in long-term debt repayment. In addition, other features can also be built into CfDs that enable:

- Adjustable strike prices (between allocation rounds) and indexation parameters reflecting inflation, interest rates, and evolving supply chain costs.
- Differentiated contract terms for fixed-bottom and floating offshore wind, recognising their distinct cost structures and risk profiles.
- Consideration of longer contract tenures, inflation-linked adjustments, and foreign exchange indexation or denomination, given the foreign-currency nature of capital expenditures.

As the market matures and capacity requirements increase, the introduction of CfDs may become necessary to support system-critical deployment. Preparing this option in advance, while allowing the Round 3.3 reforms to take effect, would enable a clearer and more credible policy narrative if deeper revenue stabilisation is later required.

### 6.1.2. Scale up corporate demand and improve offtaker quality

Corporate demand is important for Taiwan's offshore wind market, but it needs to be broader and more stable to support large-scale financing. Right now, relying on a small number of creditworthy corporate buyers increases risk and makes projects harder to finance.

**Taiwan should support the development of aggregated CPPA platforms**, such as TSEE, to pool demand from multiple corporate buyers, particularly SMEs. These platforms can:

- Simplify contract structures by offering standardised PPA templates, reducing legal and administrative burdens for smaller participants.

- Enhance creditworthiness and bankability through pooled participation, diversification of offtakers, and potential backing from anchor buyers.
- Facilitate supply chain participation by linking anchor corporates with smaller suppliers who may lack direct access to PPAs.

### **Stakeholders also strongly supported mechanisms allowing flexible reallocation of power within buyer pools if one offtaker defaults.**

In the presence of the Floor Price, such mechanisms further reduce reliance on government backstops and encourage market-led risk sharing.

### **In the short to medium term, credit enhancement tools including guarantees, reserve accounts, or anchor offtaker structures should be used to expand the pool of eligible CPPA buyers.**

For example, Taiwan should continue to refine and operationalise National Credit Guarantee Mechanism, which, following its strengthening in late 2024 has become an increasingly important component of the offshore wind financing landscape, but one whose effectiveness still depends on addressing unresolved disputes, particularly around avoided cost versus guaranteed coverage which have prevented its use, undermining lender confidence. A combination of policy clarification, legal certainty and active market engagement could resolve these issues:

- First, the government should clearly define and standardise how the guarantee mechanism works, particularly by resolving the dispute over whether compensation is based on avoided cost or full guaranteed coverage. This clarification should be set out in binding regulations or standardised guarantee contracts so that lenders can rely on it with confidence.
- The guarantee should be made legally robust and enforceable, with clear trigger events, payment timelines, and dispute resolution procedures. Removing ambiguity around when and how the guarantee is paid

would directly address lender concerns and reduce perceived risk.

- Authorities could actively reintroduce the mechanism to the market by engaging with domestic banks, developers, and corporate offtakers, using the Formosa 3 project as a reference case where the guarantee was applied effectively. Publishing guidance, case studies, and documentation would help rebuild trust and encourage uptake.
- Ensuring the guarantee is backed by sufficient capital and supported by the public sector would further strengthen credibility, signalling that the government is willing and able to stand behind CPPA-backed projects, allowing domestic bank financing to be unlocked more quickly.

This should be designed to phase down over time as market confidence and offtaker quality improve.

### 6.1.3. Build domestic financial sector capabilities

Strengthening domestic offshore wind financing capabilities will be key to long-term growth of the sector. While domestic banks have increased their participation, many remain cautious due to limited internal expertise and institutional incentives.

In addition, domestic banks face structural balance sheet constraints. Taiwan's banking sector is characterised by relatively small capital bases and is subject to single borrower exposure limits, which cap the amount of credit that can be extended to any one borrower or corporate group. As a result, the debt financing needs of a single offshore wind farm can quickly exhaust individual banks' lending limits, reinforcing the importance of well structured syndication, co-lending platforms and risk-sharing arrangements to mobilise sufficient domestic liquidity.

**Structured capacity building programmes, developed in partnership with multilateral development banks or experienced**

**international financial institutions should focus on:**

- Project finance risk allocation
- Cash-flow modelling under different revenue scenarios
- Managing technical, insurance, and financial risks

**Banks should be encouraged through regulatory guidance and commercial incentives to establish dedicated offshore wind or infrastructure finance teams**, rather than treating OSW as an extension of general corporate lending. Stakeholders compared this to Taiwan's successful development of specialised expertise in the semiconductor sector.

**To accelerate learning and confidence, co-lending platforms should be expanded**, pairing domestic banks with experienced international lenders on early projects. Over time, this allows a gradual transfer of risk exposure and leadership as domestic capabilities strengthen.

### 6.1.4. Create a more predictable policy environment

Although Round 3.3 represents a major improvement in policy clarity, in the past, stakeholders consistently identified policy shifts across procurement rules, localisation requirements and grid access as a reason for higher risk premiums facing projects. To further improve market confidence:

- **Taiwan should publish a clear, multi-year offshore wind roadmap** setting out indicative capacity, procurement timelines, and expected revenue mechanisms. This roadmap should be updated regularly but not retroactively adjusted, providing investors and lenders with confidence to plan long-term.
- **Auction and qualification rules should be transparent, standardised, and applied consistently**, with limited scope for discretionary changes. In parallel, coordination across agencies for

permitting should be strengthened, including clearer sequencing, better alignment between central and local governments, and streamlined approval processes.

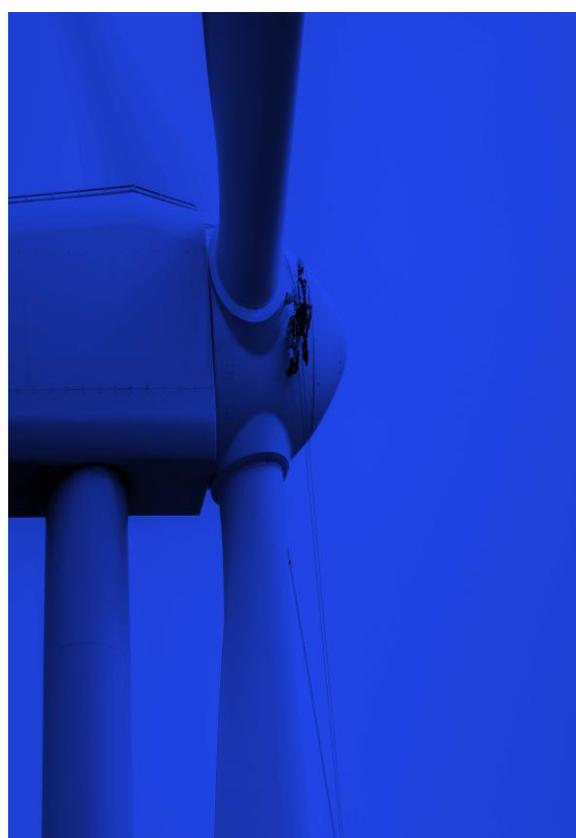
- **Localisation and supply chain policies should remain aligned with deployment timelines**, ensuring they support industrial development without unintentionally increasing project costs or reducing access to capital. The effectiveness of the new weighted scoring system proposed under the draft Round 3.3 reforms will depend on transparent, objective and clearly communicated criteria that allow developers to make investment decisions with confidence ahead of auctions. Clear assessment frameworks reduce unnecessary uncertainty and discourage strategic gaming, while poorly defined or overly subjective criteria risk deterring early investment.

### 6.1.5. Reduce insurance and technical risks

As offshore wind development moves into more challenging locations, Taiwan will increasingly face risks that are difficult for individual projects to absorb.

**To address this, Taiwan should explore the creation of a system-level offshore wind catastrophe and reinsurance mechanism**, pooling extreme weather and geological risks across projects and over time. By spreading the financial burden, no single project carries the full cost of the risks involved. The mechanism could be structured as a government-backed fund, a public-private partnership, or a mutual insurance scheme among developers, and could complement commercial insurance markets while stabilising premiums. Similar to the Caribbean Catastrophe Risk Insurance Facility (CCRIF), parametric triggers based on typhoon wind speeds or seismic activity would allow rapid payouts after extreme events, reduce project delays, and spread risk across multiple projects to lower premiums.

**Taiwan could also leverage bilateral reinsurance frameworks with Export Credit Agencies from countries with mature offshore wind experience.** Following models such as the NEXI-EKF agreement, this would bring international balance sheets into the market, strengthen underwriting capacity, and provide coverage for high-risk construction phases. Parallel effort should go into building domestic underwriting and technical risk assessment capabilities, which could be achieved via public-private partnerships to train underwriters on offshore engineering and insurance modelling.



## 6.2. Prioritising solutions

The recommendations were assessed based on urgency (how quickly they reduce uncertainty), impact (how much they lower capital costs and scale up offshore wind deployment), and feasibility (institutional and fiscal capacity to implement).

**Table 2: Prioritisation of recommendations**

<b>Recommendation</b>	<b>Urgency</b>	<b>Impact</b>	<b>Feasibility</b>	<b>Rationale</b>
<i>Hybrid procurement framework (strengthening the floor price mechanism and CPPAs, with CfDs as a conditional instrument for system-critical capacity)</i>	Medium	Very high	Medium	Critical to scale OSW deployment while supporting corporate demand. Implementation depends on institutional coordination and legal clarity.
<i>Aggregated CPPA platforms</i>	High	Medium	High	Can be deployed relatively quickly using existing platforms. Reduces offtaker concentration risk, improves bankability, and can accelerate early capacity, though the scale is generally smaller than what CfDs could mobilise.
<i>Strengthening the National Credit Guarantee Mechanism</i>	Very high	High	Medium	Resolving this mechanism can immediately unlock financing for CPPA-backed projects. Feasibility depends on inter-agency coordination but benefits are immediate.
<i>Domestic financial sector capacity building</i>	Very high	High	Medium	Developing expertise is essential for long-term sustainability. Feasible through partnerships with international lenders, but results are likely to materialise over time.
<i>Policy transparency, multi-year OSW roadmap, permitting coordination</i>	High	Medium-High	High	Provides immediate clarity and reduces perceived political risk, but its impact depends on credibility and being supported by a well-developed procurement framework. Feasible with political commitment and inter-ministerial coordination.
<i>Risk mitigation via catastrophe insurance</i>	Medium	Medium	Medium	Reduces technical and catastrophic risks. Requires coordination and funding but not urgent for near-term projects.

The table shows that the most urgent and impactful actions are those that quickly reduce uncertainty and unlock financing, like strengthening the National Credit Guarantee Mechanism, improving policy transparency, and consolidating the Floor Price and CPPA framework. Building domestic financial sector capacity should also be prioritised early, as developing local expertise is critical for sustaining long-term market growth.

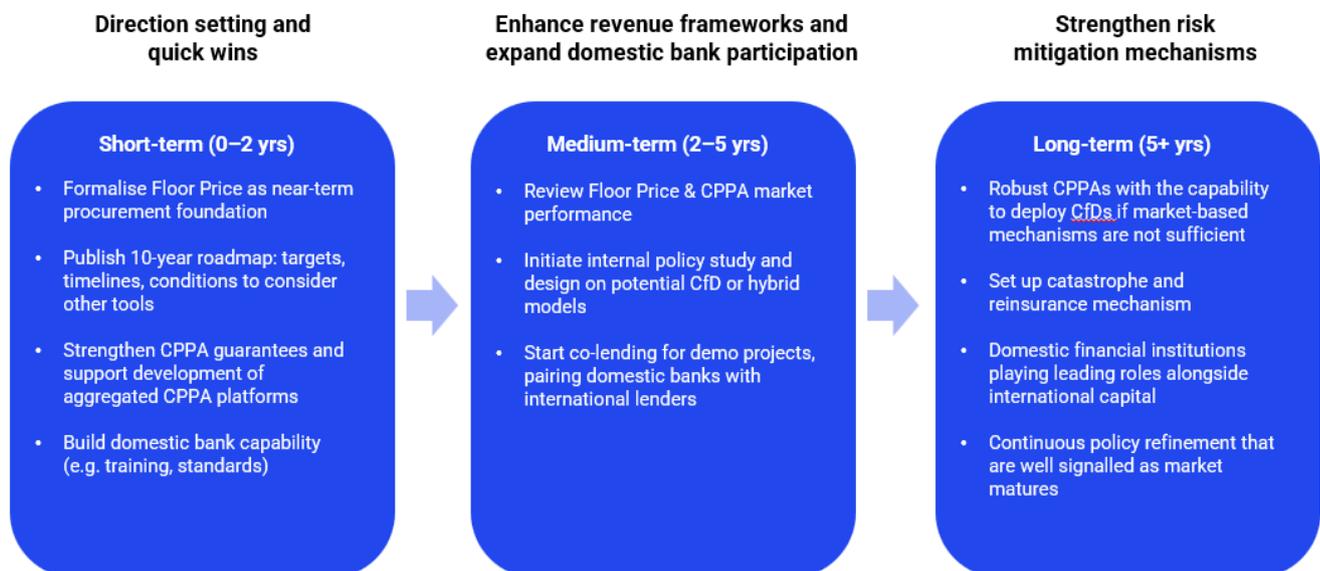
Aggregated CPPA platforms can be implemented rapidly to spread risk and accelerate early capacity, though at a smaller

scale than CfDs. Longer term measures, such as catastrophe insurance, remain important for sustainable development

CfDs may be considered as a targeted, conditional option for system-critical capacity, with policy development undertaken in parallel to near-term reforms. Formal CfD introduction however should be deferred until there is clear evidence that market-based mechanisms alone are insufficient.

## 6.3. Sequencing solutions

Based on the urgency-impact-feasibility analysis, recommendations can be sequenced into short-term, medium-term, and long-term phases:



### 6.3.1. Short term (up to 2 years) – direction setting and quick wins

The objective of this phase is to reduce uncertainty and send a strong signal to developers, financiers, and corporate offtakers. The following measures were noted as high to very high urgency and/or high feasibility, directly addressing near-term financing and investment barriers:

- **Formalise the draft Floor Price framework introduced under Round 3.3** as the near-term foundation of offshore wind procurement, clarifying its role in providing downside revenue protection while preserving market-based price discovery via CPPAs.
- **Publish a 10-year offshore wind roadmap** that builds on Taiwan’s existing capacity targets, setting out indicative procurement timelines and conditions under which additional tools like CfDs could be considered in future if market outcomes under the strengthened CPPA framework fall short of capacity targets. While uncertainty remains beyond Round 3.3, providing this roadmap gives developers and investors a credible signal of

government intent and supports long-term planning.

- **Strengthen and clarify existing CPPA guarantee mechanisms**, building on Round 3.3’s Floor Price to ensure banks and developers fully understand coverage and eligibility. Clear communication will improve near-term bankability and market confidence, particularly for projects involving smaller or first-time corporate offtakers.
- **Support the development of aggregated CPPA platforms** by expanding the eligibility and pool of corporate buyers to reduce concentration risks.
- **Build domestic financial sector capacity**, through targeted training, knowledge transfer, and standardisation of offshore wind financing structures, enabling domestic banks to increase exposure with greater confidence.

### 6.3.2. Medium term (2-5 years) – enhance revenue frameworks and expand domestic bank participation

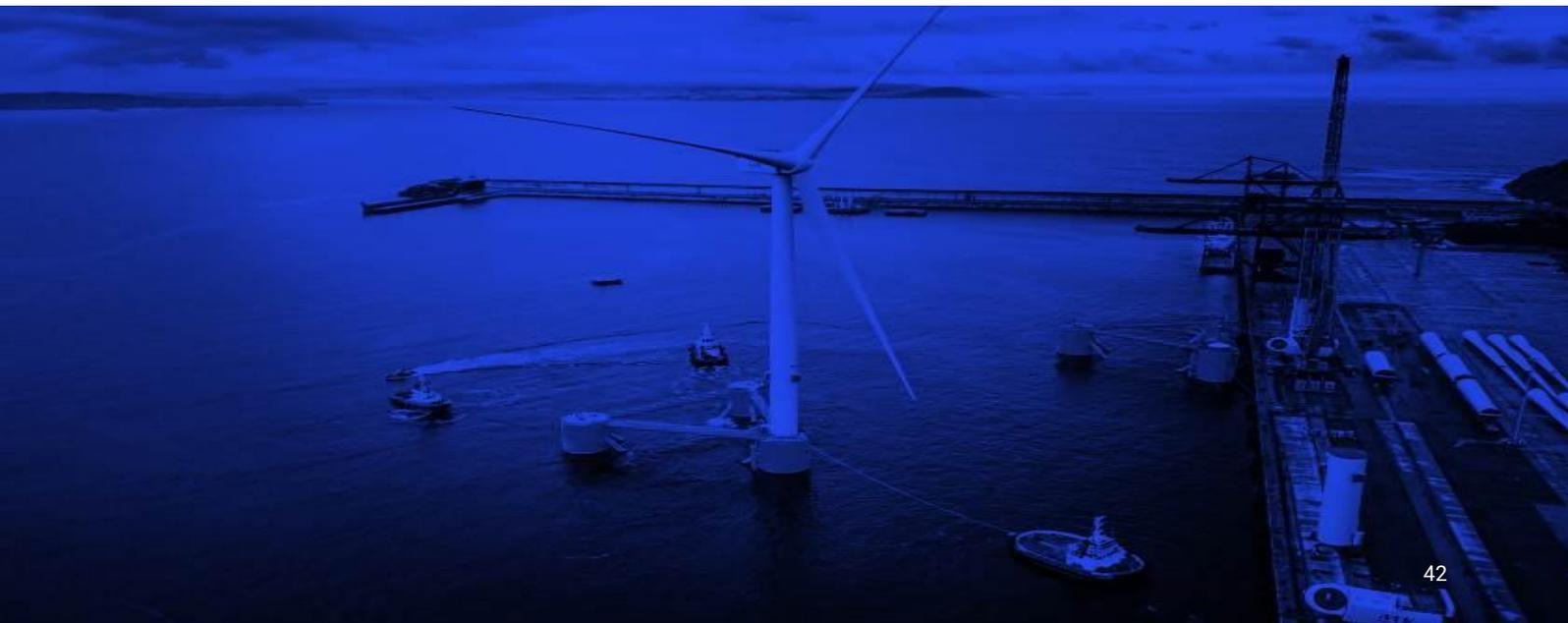
In this phase, the focus will be on increasing domestic financial sector involvement, scaling up corporate demand, and having a deeper understanding of alternative procurement (e.g. CfDs), balancing high-impact interventions with the need to build market capability.

- **Review the performance of the Floor Price and CPPA market**, and evaluate targeted revenue-stabilisation instruments, drawing on observed CPPA uptake, pricing outcomes, and financing conditions to determine whether system-level mechanisms such as CfDs are warranted.
- **Initiate internal policy design and analytical work on potential CfD or hybrid models**, including assessing the expected scale and credit quality of CPPA supported demand relative to Taiwan’s medium and long term offshore wind targets.
- **Initiate co-lending opportunities for demonstration projects**, pairing domestic banks with experienced international lenders to support a gradual transfer of risk and leadership in project financing.

### 6.3.3. Long term (5+ years) – strengthen risk mitigation mechanisms

Long-term measures ensure that OSW financing is standardised and self-sustaining, reducing the reliance on ad hoc government interventions.

- **Operate a fully mature procurement model**, with robust CPPAs and a credible downside revenue backstop, with CfDs deployed if required, where long-term offshore wind capacity targets are not on track to be met through market-based mechanisms alone.
- **Establish a system-level catastrophe and reinsurance risk mechanism**, spreading extreme weather and geological risks across projects and over time to complement commercial insurance markets.
- **Achieve a mature domestic offshore wind financing ecosystem**, with domestic banks and institutional investors playing leading roles alongside international capital, supported by stable policies and proven risk management frameworks.
- **Continuous policy refinement**, where adjustments to auction rules, the roadmap and localisation policies are only made as market maturity and technology evolution require it, and are well signalled and predictable.



## 7. Conclusion

### **Taiwan's offshore wind achievements position it as a leading market in Asia and an increasingly important global player**

Over the last decade, Taiwan has built a strong track record in OSW, commissioning multiple projects and establishing itself as one of the most advanced offshore wind markets in the Asia Pacific region. Its ability to attract experienced international developers and lenders, and to deliver projects through earlier rounds, has helped Taiwan reach a scale that places it among the world's leading offshore wind jurisdictions. This progress provides a credible foundation for the next phase of deployment, and positions Taiwan as an important contributor to regional offshore wind momentum.

### **Round 3.3 demonstrates increased ambition and introduces clearer mechanisms to improve bankability**

The draft design of Zonal Development Round 3.3 reflects a more delivery-focused and financeable approach than earlier rounds. By strengthening downside revenue protection (through the Floor Price) and introducing clearer backstop arrangements (including Taipower's mandated purchase obligation in the event of CPPA default), the framework improves lenders' ability to model downside cases and reduces uncertainty around cash flow resilience. Round 3.3 also complements these measures with supporting guarantee mechanisms and a stronger emphasis on financial capability and execution readiness in evaluation criteria, signalling a higher level of government ambition to sustain a credible OSW pipeline and crowd in capital at scale.

### **Interlinked financing and policy risks impact project deployment**

Despite this progress, several interconnected challenges slow investment. Revenue uncertainty, a still-developing corporate PPA market, limited domestic financing capacity, evolving policy frameworks, and construction and insurance risks linked to Taiwan's geography all increase project risk and financing costs. These challenges reinforce one another: unclear revenues reduce lender confidence, policy changes increase risk premiums, and limited local expertise narrows financing options. Without coordinated action, projects are likely to face higher costs, delays to financial close, and slower deployment.

### **Revenue certainty and policy clarity remain the primary levers to unlock investment**

International experience suggests that long-term revenue certainty and policy predictability are the most powerful levers for unlocking offshore wind financing. Government supported revenue stabilisation mechanisms, including the potential future use of CfDs alongside strengthened corporate PPA frameworks, can significantly reduce risk, lower the cost of capital, and enable broader use of non-recourse project finance. Clear policy frameworks covering procurement rules, permitting timelines, and grid connection responsibilities further lower uncertainty and help standardise financing structures over time.

### **Domestic financial capacity must grow alongside market reforms**

At the same time, Taiwan's offshore wind sector will need to build stronger domestic financial capacity to support sustained growth. Expanding the role of local banks through targeted project finance training, clearer risk allocation, and co-lending structures with experienced international lenders can gradually deepen the domestic capital base. System level solutions will also be needed to address

catastrophic risks such as typhoons, earthquakes, and large-scale construction risks that individual projects cannot manage efficiently on their own.

### Achieving Taiwan’s targets requires coordinated action across the ecosystem

To translate ambition into sustained delivery, Taiwan will need coordinated action across revenue, demand, finance, and system level risk management. This includes:

- **Maintaining policy predictability** through a credible multi-year procurement roadmap;
- **Strengthening revenue certainty** by scaling and standardising corporate PPAs (including aggregation models), ensuring guarantee and backstop mechanisms are clear, bankable and operational, and considering CfDs as a future tool to stabilise cash flows;
- **Building domestic banking and insurance capabilities** through targeted training, co-lending and risk-sharing structures that enable local institutions to take larger roles over time;
- **Addressing system level risks that individual projects cannot efficiently resolve**, particularly grid connection coordination and shared approaches to typhoon and seismic risk.

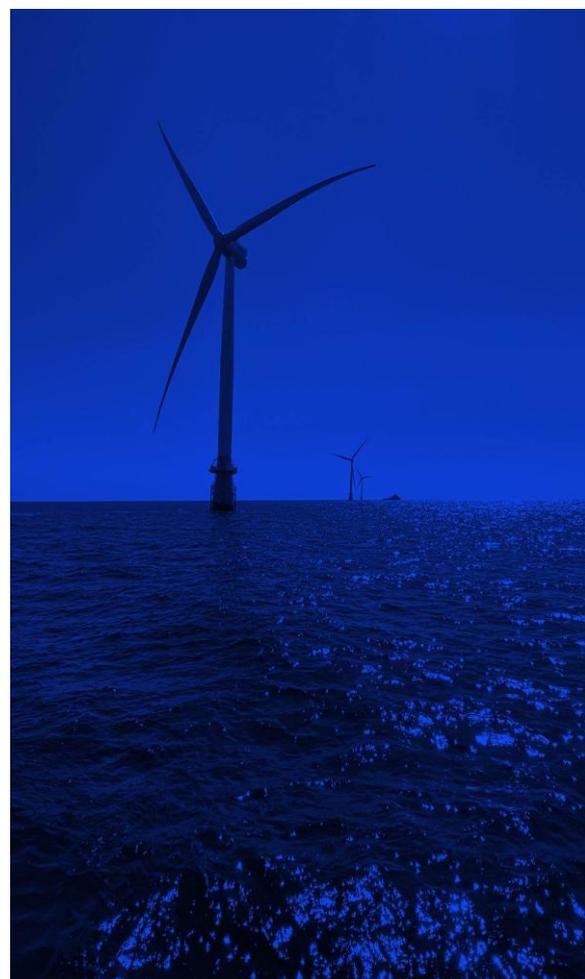
Together, these steps would lower the cost of capital, reduce delays to financial close, and support deployment at the pace required for Taiwan’s energy and climate objectives.

### Offshore wind can strengthen Taiwan’s energy security and regional leadership

By implementing these steps, Taiwan can build on its existing success and establish a more resilient and scalable offshore wind ecosystem. A larger offshore wind fleet will not only support Taiwan’s climate goals, but also strengthen energy security by diversifying the power mix and reducing reliance on imported fossil fuels.

### Call to action: alignment across stakeholders is key

Delivering this transition requires alignment across stakeholders. Government must provide clear policies, stable revenue support, and system-level risk mitigation. Financiers need to invest in skills, share expertise, and scale project finance solutions. Corporates must adopt standard structures, widen corporate participation, and manage risks more consistently. If these actions are taken together and in sequence, Taiwan can build a bankable and resilient offshore wind sector that supports climate goals and energy security.



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