Island Resilience Institute
島嶼韌性研究中心

Taiwan's offshore wind: lessons from the first decade

台湾の洋上風力：最初の10年の教訓

Milan Chen, Director

Sequencing and corporate demand built 4.9 GW in a decade

段階的な制度設計と企業の電力需要が、約10年で4.9GWの導入を実現した

4.9 GW

installed: 508 turbines across eight farms

導入量4.9GW（風車508基）

5th

in the world for cumulative offshore wind capacity

累積導入量で世界5位

2.9 GW

sourced for TSMC through 20-30 years of CPPA

企業PPAが電力の受け皿になった

NT$639 bn

(US$20 bn) in bank project-finance commitments, Mar 2026

銀行によるプロジェクト融資約200億ドル

Two bids in Round 3.3: six problems behind a thinning pipeline

3-3期の応札は2社のみ：案件減少の背景にある6つの課題

MARKET AND POLICY　市場と制度

1 **Developers leaving, pipeline thinning**　事業者の撤退と案件の減少
Only CIP and Ørsted bid for 3.6 GW

2 **Financing costs and a thin offtake market**　資金調達コストと買い手市場の薄さ
Rounds 3.1–3.2 were awarded at zero price, leaving revenue to corporate PPAs.

3 **Policy uncertainty**　制度の予見可能性の低さ
Rounds every two years until July 2026; localisation mandatory → removed; floating demo slipped to 2032–33.

DELIVERY CAPACITY　実行能力

4 **Ports and installation vessels**　港湾と作業船の不足
Ports lack floating arrangements.

5 **Supply chain and skilled workers**　サプライチェーンと人材の不足
Domestic supply-chain depth and skilled workers are named constraints as build-out scales up.

6 **Sea space**　海域空間の制約
Industry estimates under 2 GW of fixed-bottom space unless shipping lanes are adjusted

Five lessons from Taiwan's first decade

台湾の最初の10年から得た5つの教訓

1 **Award for deliverability, not just price** 価格だけでなく実現可能性で選定する

Zero-price awards left only 4 of 10 farms clearly progressing

2 **Keep rules stable and volumes visible** ルールを安定させ、導入量を見える化する

8 GW every four years now gives suppliers time to plan.

3 **Build a deep corporate buyer market** 厚みのある企業PPA市場をつくる

TSMC takes all 2.9GW for 20-30 years; smaller buyers still need state credit guarantees.

4 **Coordinate ports, vessels and supply chains regionally** 港湾・作業船・供給網を地域で調整する

Suppliers cut costs when volumes are visible years ahead; JP, KR, TW three markets compete for the same vessels and resources.

5 **Plan sea space and engage fishers before sites are fixed** 海域計画と漁業者との対話を海域確定前に

Fixed-bottom space is running short.

Thank you!

Dr. Milan Chen
milan.chen@island-resilience.org