Offshore Wind Development in Chinese Taipei

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Agenda

01 Energy Policy

02 Marine Spatial Planning (MSP)

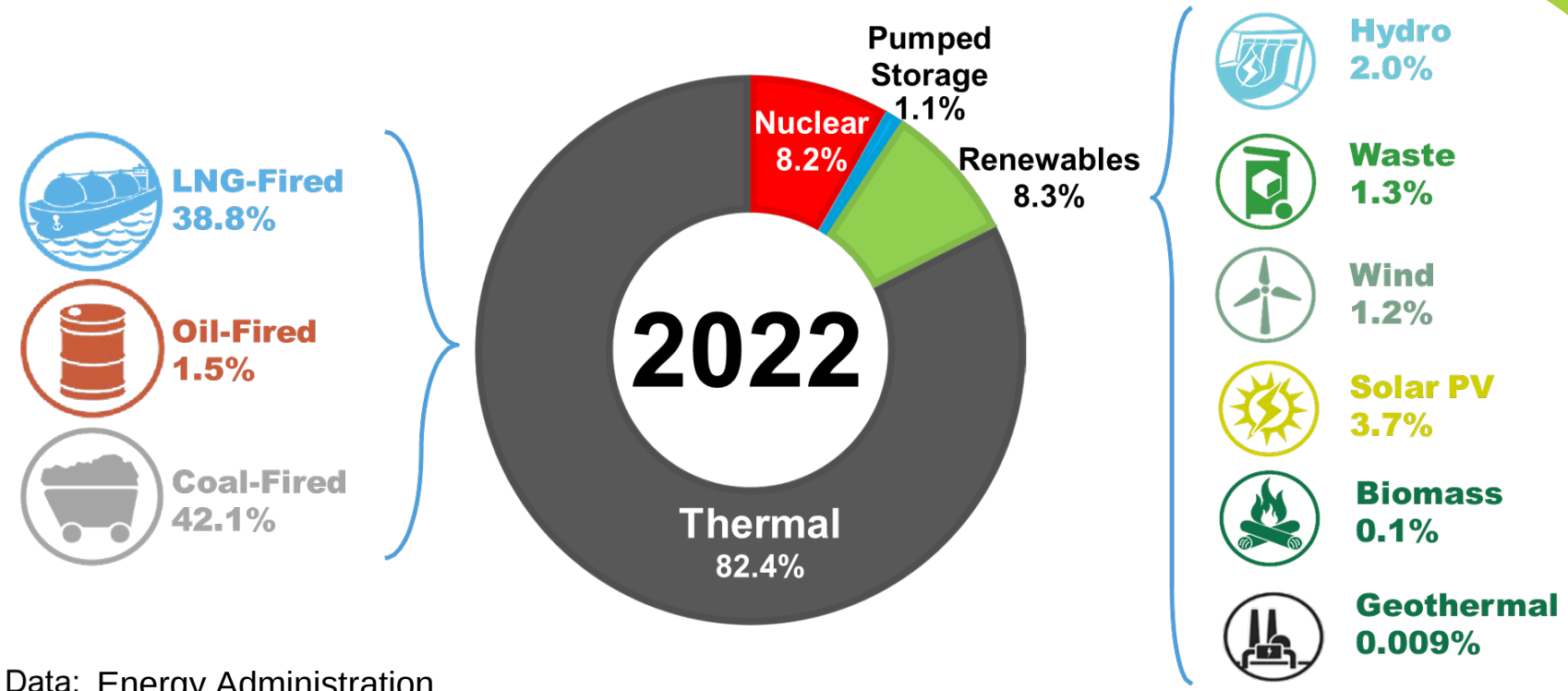
03 Offshore Wind Development in Chinese Taipei

04 Emerging Floating Technologies

05 Conclusion

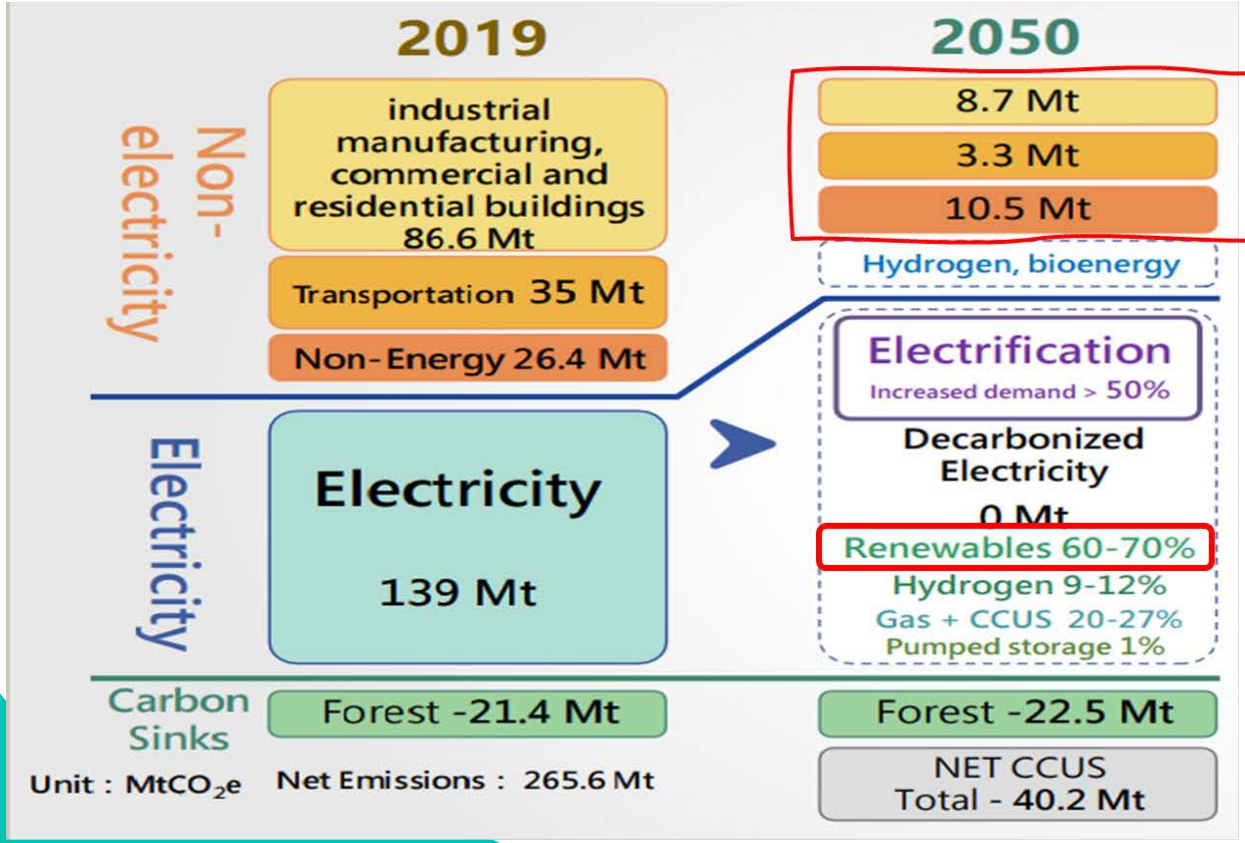
01 Energy Policy

Energy Situation - Share of Energy Sources in Power Production



Data: Energy Administration

Net-Zero Policy by 2050

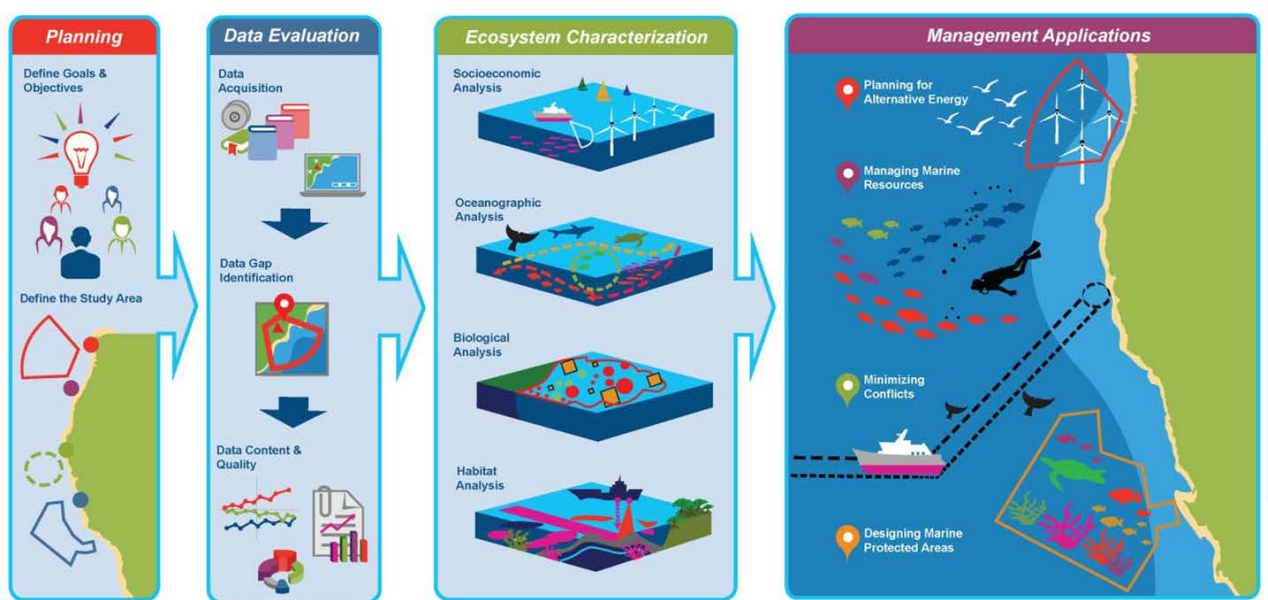


Remained emission (22.5 Mt) from hard-to-abate sectors

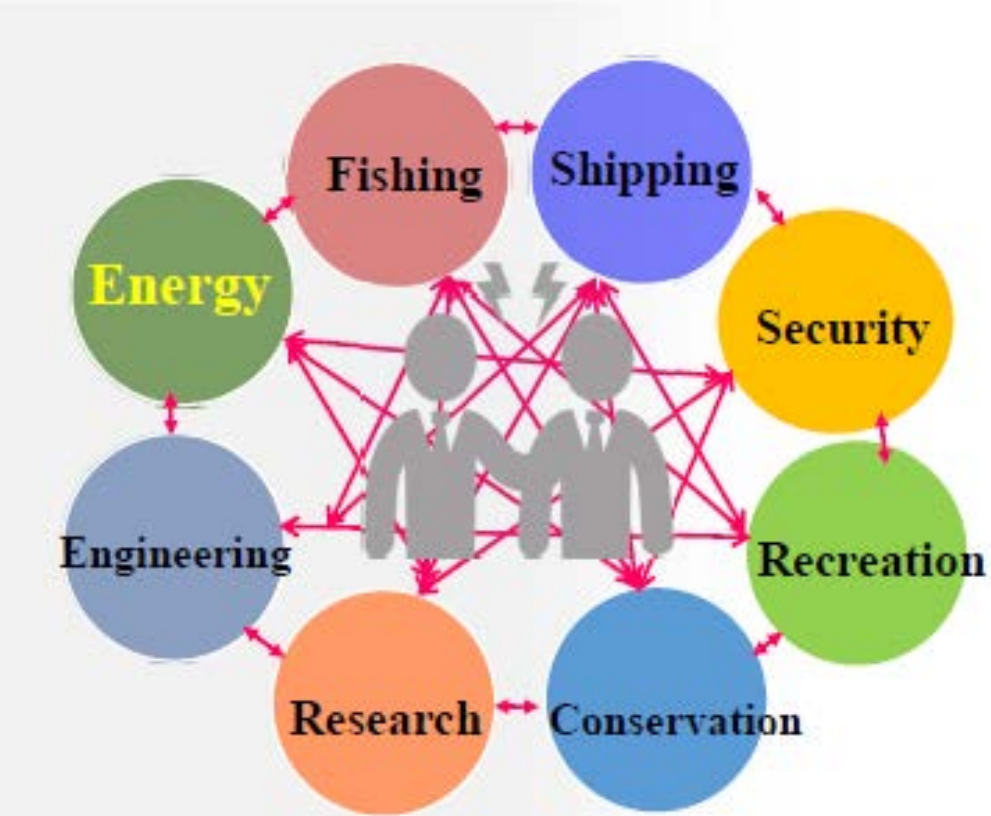
Strategies for energy-related sectors:

1. Decarbonization
   - Shift from low carbon to zero carbon energy system
   - Entail high penetration of renewables and wide application of advanced technologies (e.g. hydrogen).
2. Electrification
   - Promote electrification of industrial fossil fuel use and transportation.
3. Adoption of CCUS technologies along with natural carbon sinks (mainly forests) to capture carbon emissions from hard-to-abate sectors.

02 Marine Spatial Planning(MSP)

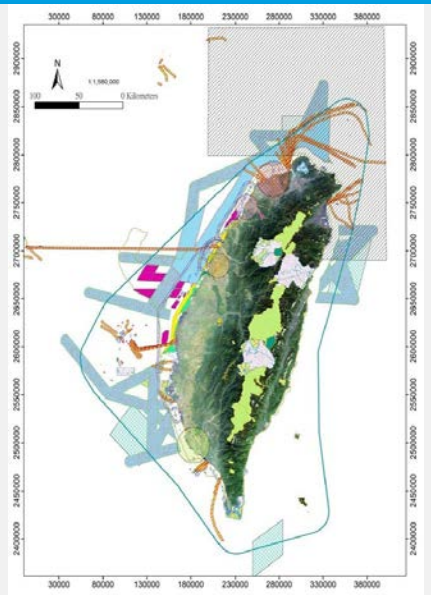


Marine Spatial Planning (MSP)

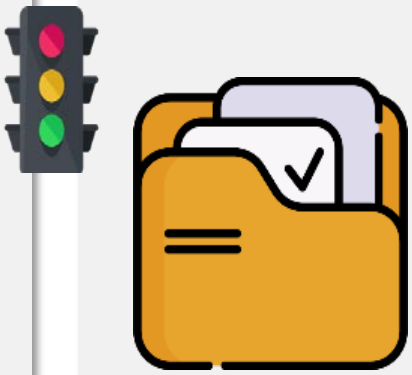


Mechanism of Application and Joint Review

“Sensitive Sea Areas” and guidance of site planning areas



Developers submit applications for BOE’s preliminary review



MOEA holds joint review mechanism

Agree

Application Accepted

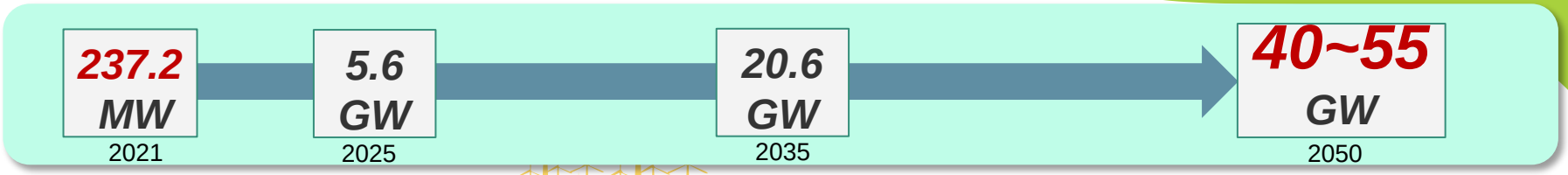
Disagree

Application Rejected

03

Offshore Wind Development in Chinese Taipei

Policy for Offshore Wind Development



Phase 3
Zonal Development

- 2026 - 2035 (15 GW to be released per year)
  - 2021：Selection mechanism was announced
  - 2022：Round 1selection, 3 GW for 2026-2027.
  - 2023：5 wind farms have applied for the contracts.

Phase 2
Zones of Potential

- 2018: Completed capacity allocation
  - By Selection: 3.836GW (10 projects/7 developers)
  - By Auction: 1.664 GW (4 projects/ 2 developers)
- 2025: 5.5 GW will be in commercial operation.

Phase 1
Demonstration Incentive Program (DIP)

- 2017 ：2* Demo Turbines (8 MW) @Miaoli
- 2021 ：2* DIP Wind Farms (237.2 MW, included 2*Demo WT)
  - Formosa 1@Miaoli(128 MW /2019.12 commissioned)
  - Taipower 1@Changhua(109.2 MW/ 2021.12 commissioned)

Achievements of Fix-Bottom OFW

3 offshore wind farms, including Formosa 1 and Taipower 1 offshore wind farms from Phase 1, and Formosa 2 offshore wind farm from Phase 2

Data up to the end of August 2023

Installed turbines
245 (19 GW)

Total turbines to be installed
565 (5.6 GW by 2025)

Co-prosperity of Offshore Wind Power and Fisheries

Focusing on Local Affairs

Central and local governments collaborate hand in hand, taking full consideration of regional characteristics and local issues.

Protecting the rights and interests of fishermen

Moderately open fishing, and reasonably guarantee the livelihood of fishermen.

Promoting offshore wind power

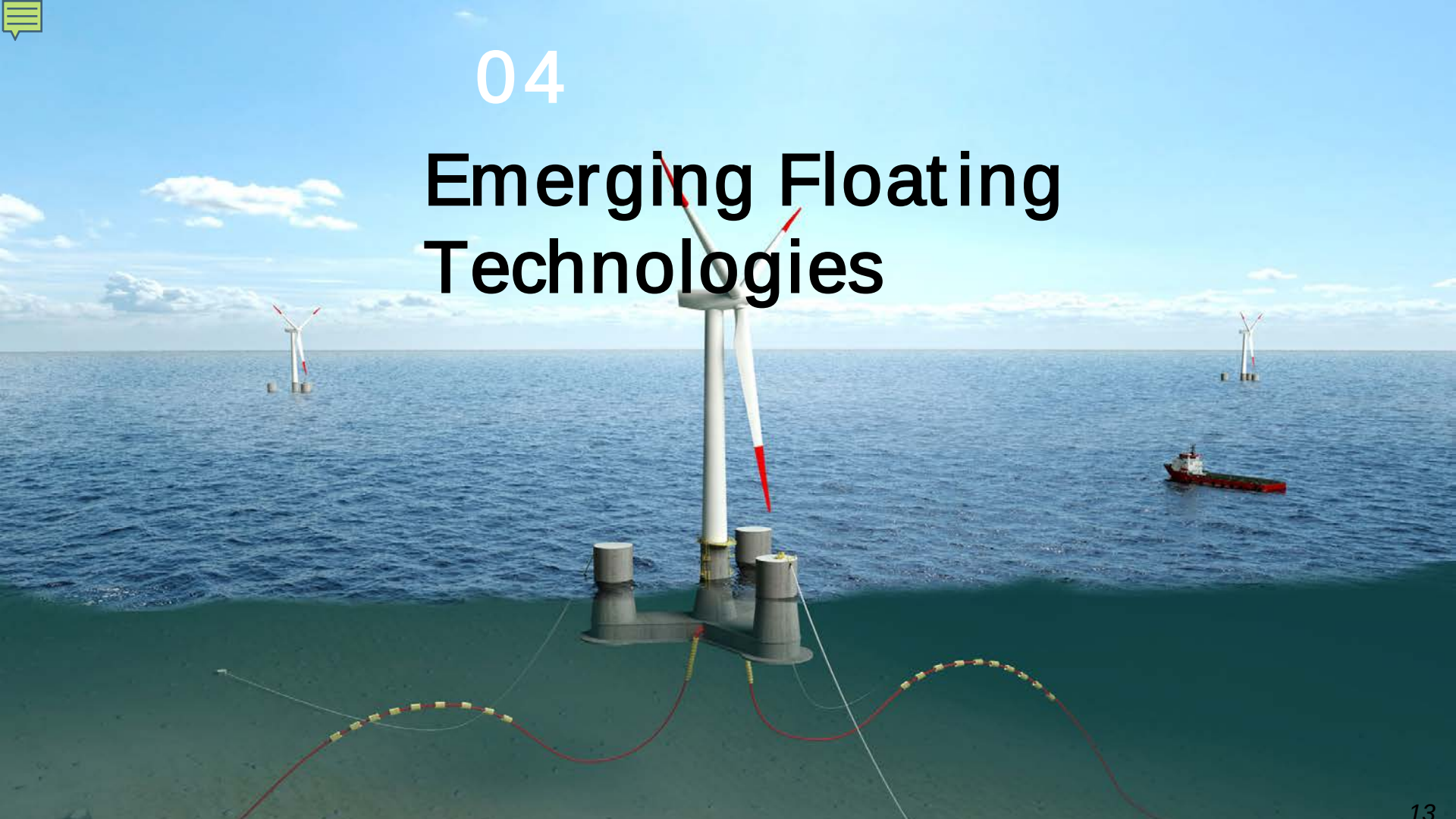
In line with the energy transition policy, develop offshore areas into offshore wind farms.

Conservation of the environment and ecology

Emphasizing ecological conservation and sustainable development issues to preserve marine environments.

04

Emerging Floating Technologies

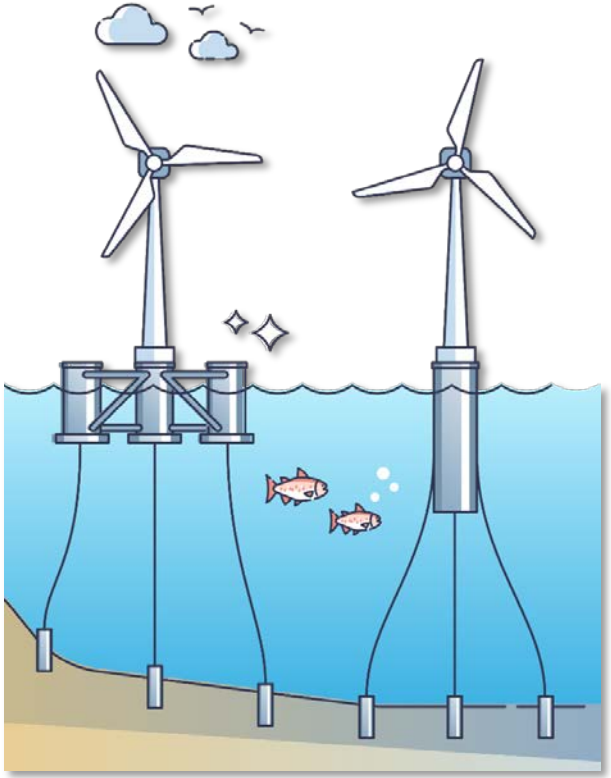


Floating Offshore Wind Demo. Program (Draft) (2/2)

Selection Mechanism Announced — **2024**

Commissioned — **2028**

- **Scale:** **6-12 floaters** for a single application.
- **Number of cases:** **2 cases** as principle, subject to **1 additional case** as appropriate.
- **Qualifications:** **No overlap** with **sensitive sea areas; Environmental Impact Assessment** (EIA) **preliminary approval**.
- **Review items:** Technical capability, financial capability and domestic collaboration.



05 Conclusion

Conclusion

- **Green energy is the core of energy transition.**
- **The target of offshore wind is to achieve 5.6 GW by 2025, 20.6 GW by 2035, and 40~55 GW by 2050.**
- **The first demonstration wind farm commercialized, leading to a new milestone.**
- **At least 1.5 GW released annually from 2026, to increase self-generated energy and reduce imported energy expenditure.**

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Energy Administration,
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Thank you for your attention

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Source: Formosa