

我國發展離岸風電技術經濟分析與建置融資體系之研究

執行單位

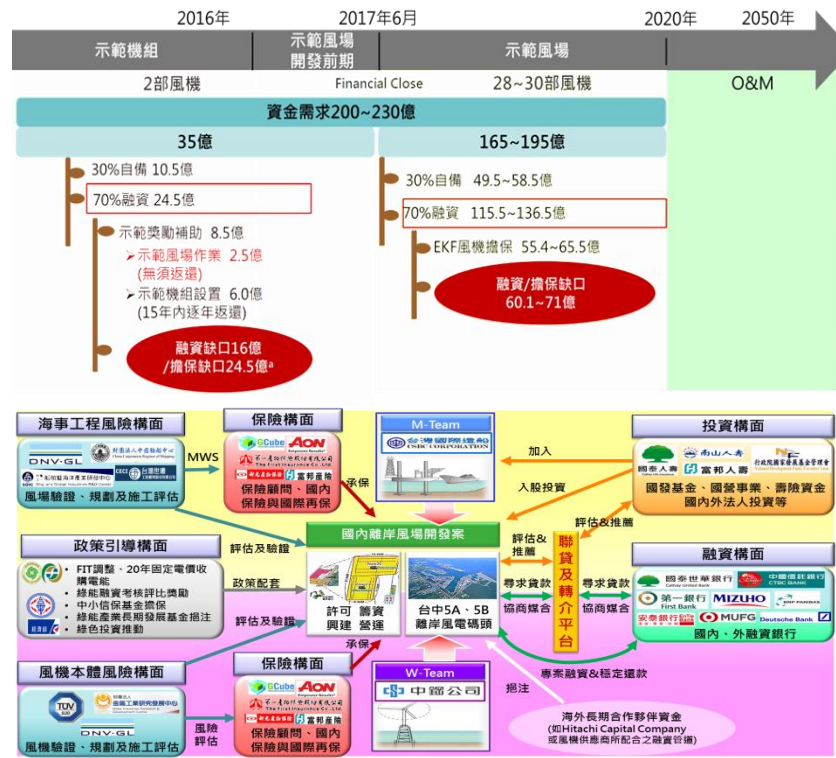
台灣經濟研究院

計畫主持人

左峻德 所長

- 建置本土化離岸風電成本參數模型，並完成國內離岸風場開發技術經濟分析，以研提國內離岸風電融資發展配套政策分析與建議，進一步建構融資及擔保困境解決可行架構與方案，協助產業降低離岸融資瓶頸。

- 國內外離岸風電產業與政策動態研析
- 國內外離岸風場開發技術經濟分析
- 躉購費率合理性評估
- 國內離岸風場開發融資及擔保可行推動方案



國內離岸風場開發資金需求

國內離岸風場開發融資可行架構應用

● 技術介紹

本研究分別從產業面、政策面、經濟面和融資面探討我國發展離岸風場之經濟分析與融資架構。

● 目前發展情形

我國離岸風機自主技術能量缺乏，風險高、投融資資金不易取得，初期風機傾向應與國際合作，可仰賴長期的合作夥伴或其所配合之融資管道的資金挹注；但在海事工程方面，國內已具備基礎能量，相較來說風險較小、產業鏈帶動效益高，因此應鼓勵國內企業如壽險基金、國營事業等可多加投資入股，並搭配國內外銀行的融資；另外，亦須完善國內的離岸風電檢測驗證能量，加強銀行融資意願及承保之依據。而整體機制架構的建立，均須有政策面的引導及長期推動配套措施來加以促成。

Economic benefits of the development of offshore wind power technology and deployment financing systems

Execution Unit

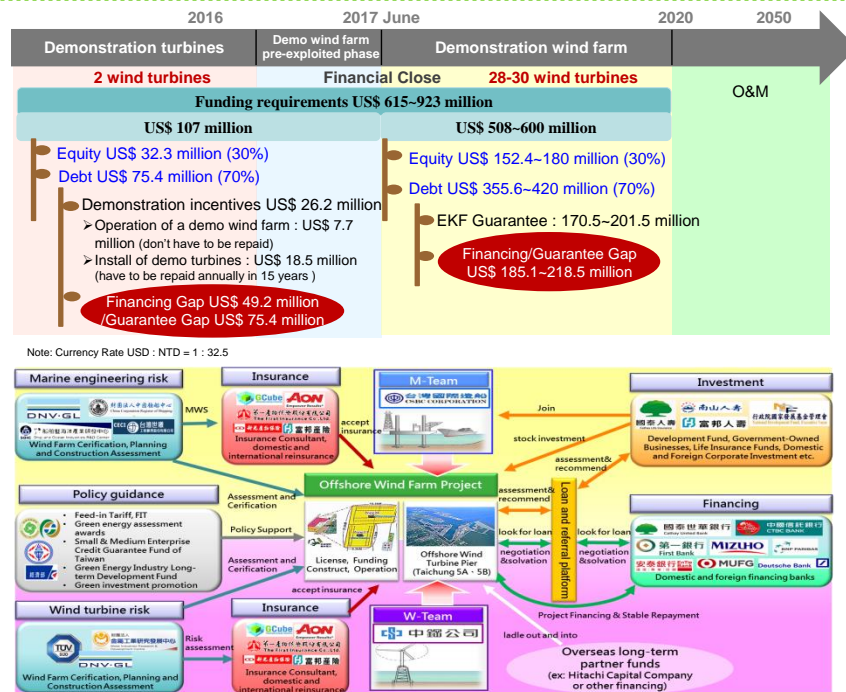
Taiwan Institute of Economic Research

Project Director

Tso, Chunto

- Build a localized offshore wind farm cost model and complete the technical and economic analysis of domestic offshore wind farm development. To support policy for offshore wind farm financing development and construct the the feasible structure and scheme to solve financing and guarantee gap, give assistance to industries in reducing project financing bottlenecks.

- Analysis of offshore wind turbine industry and domestic and foreign policy
- Technical and economic analysis of offshore wind farm development
- Evaluation of Feed-in Tariff
- Financing and guarantee feasible scheme of domestic offshore wind farm development



Funding Requirements of Taiwan Offshore Wind Farm

Domestic Offshore Wind Farm Development Financing Feasible Architecture Application

● Technology Introduction

This study explores the economic analysis and financing framework for the development of offshore wind farm from the aspects of industry, policy, economy and financing respectively.

● Current Development

Domestic offshore wind turbine lack of independent technical ability, and the risks are high. Investment and financing funds are not readily available. The initial tendencies of wind turbine should be in line with international cooperation and may rely on long-term partners or funding from their financing channels. However, in maritime engineering, because we have the basic ability. The risk is relatively small, and the industrial chain leads to high benefits. Therefore, domestic enterprises such as life insurance funds and government-owned enterprises should be encouraged to invest more shares with the financing of domestic and foreign banks. In addition, we must also improve domestic offshore wind turbine testing and certification of ability, strengthen bank financing will and to be the basis of insurance accepted. The establishment of the overall mechanism framework must be guided by the policies and long-term promotion of supporting measures.