

建構台灣、新加坡與英國三方之建築節能國際合作平台

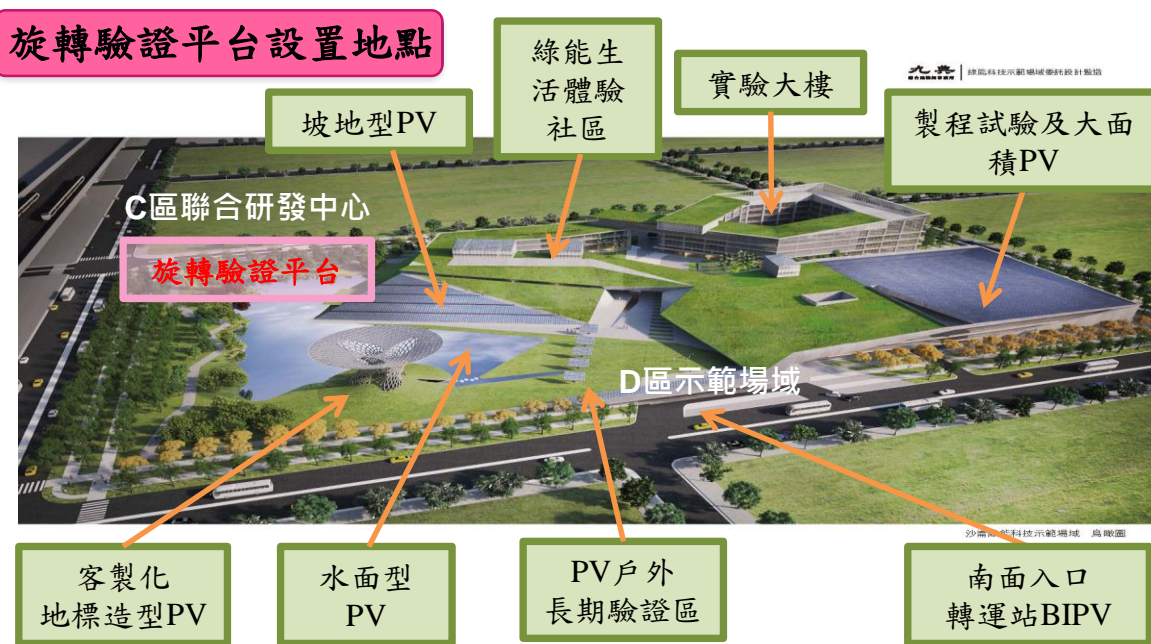
執行單位

國立成功大學

計畫主持人

陳彥仲 教授

- 推動台灣與新加坡間在建築節能技術驗證平台與綠建材標章及產業之國際合作與技術移轉。
- 引進英國與新加坡之建築節能技術，有助台灣之國家能源政策發展。
- 建立智慧綠建築於南向發展國家氣候及人文社會環境的先期測試與驗證合作場域。



- 計畫簡介：本計畫主要目的在於推動台灣與新加坡等南亞國家與英國在智慧綠建築節能技術驗證平台與綠建材標章及產業之國際合作與技術移轉。本整合型計畫執行成員為結合國內外都市計劃、建築、機械、能源與工業管理等跨領域之專家學者及產業界之跨領域研究團隊，以(1)國家級建築節能旋轉實驗屋技術輸入與交流；(2)台灣綠建材標章輸出與產業進入南亞市場之輔導；以及(3)智慧綠建築技術與智慧應用南向國家國際合作與跨域驗證。
- 目前研究情形：
 - 與新加坡BCA、美國LBNL建立國際建築節能旋轉測試平台研究聯盟，將國際旋轉測試平台之相關營運模式、檢測技術輸入至沙崙綠能科學城「亞熱帶氣候之智慧型節能建築旋轉測試驗證平台」中。
 - 橋接新加坡National Environmental Agency之綠建材研究計畫，將台灣綠建材標章制度與檢測實驗室規範輸出至新加坡。
 - 配合政府新南向政策，輔導台灣建材產業申請新加坡綠建材標章，協助台灣建築材料產業輸出至南亞市場。
 - 研究團隊與英國西敏斯特大學共同合作，媒合台灣與英國建材廠商共同申請英國KTP產學合作計畫，達到協助台灣建築材料產業輸出至英國與歐洲市場。擴大營業版圖，增加營收之目的。

Establishment of International Cooperation Platform for the Research of Energy Efficiency Buildings between Taiwan, Singapore and UK

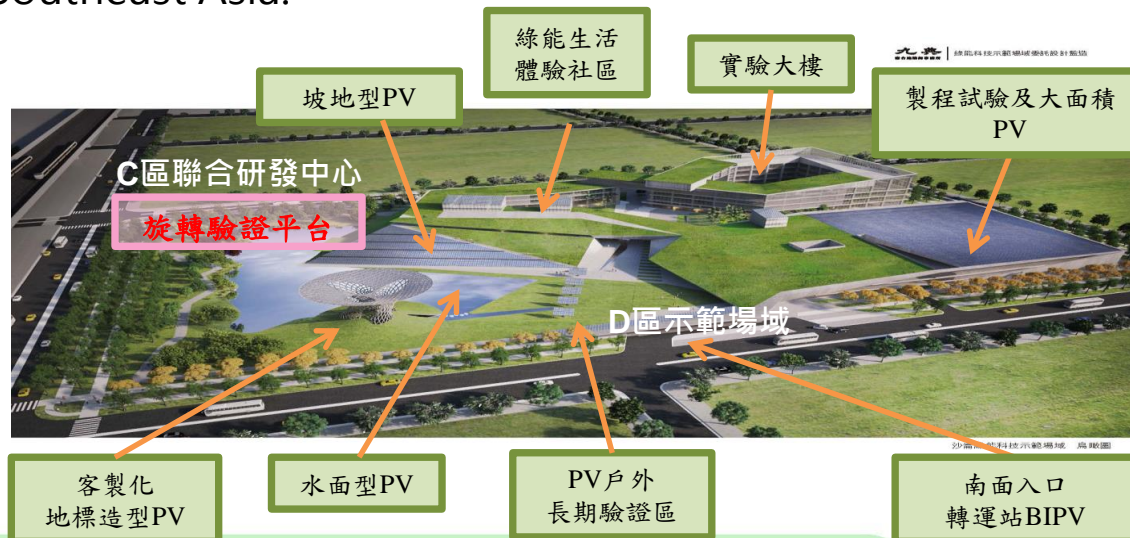
Execution Unit

National Cheng Kung University

Project Director

Dr. Y.J Chen

The main objective of this project is to set up the international cooperation platform between Taiwan, Singapore and UK to exchange the technology on intelligent green buildings among these countries as well as the cooperation between academic and industry. Accordingly, this project is divided into three sub-projects, which are (1) International collaboration in rotatable building testing facility for energy-efficiency technologies; (2) Taiwan Green Building Material Labelling System promotion and customized building material marketing service program; (3) Technologies and Smart Applications for Intelligent Green Building: International Cooperation and Cross-country Validation in Southeast Asia.



It is expected to sign two international cooperation projects with Singapore and UK before the end of this project. New and emerging technologies such as rotatable building testing facility, building airtightness testing method etc. will be introduced into Taiwan. At the same time we will promote Taiwan Green Building Material Labelling System to advertise our strength with Singapore. To help the participants for reducing the initial barriers of entry and enables enterprises to uncover new opportunities. We will also organize Taiwanese trade group to participate in International Green Building Conference & Expo 2018 in Singapore and host an International Conference in Taiwan. By offering comprehensive trade and technology transfer counseling and matchmaking services, our research team paves the way for long-term partnerships between CREATE centers and Taiwanese research teams.

- 一、以不同氣候區域代表形式，創造國際交流、合作聯盟機會
- 二、透過跨區域學、研合作，汲取先進國家經驗及需求，引導國內產業升級創新，拓展產品國際通路



Flexlab, California, USA
(Temperate zones)

Lawrence Berkeley National Laboratory
UC Berkeley



Tainan, Taiwan
(Subtropical zone)
ITRI、NCKU



BCA SkyLab, Singapore
(Torrif zone)

Nanyang Technological University (NTU)、
National University of Singapore
Singapore Institute of Technology