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NTU Chairs Sustainable Development Forum











Group photo of forum guests. From left to right: Architect Rong-Yu Cheng, CEO Chi-Hsun Liao, and Brand Director Weis Shieh of Pan Jiun Architects & Associates; Ya-Hsuan Liu, Director of NTU's New Carbon Exploration Technology Research Center; Chi-Pang Liao, CEO of Dacin Construction; Tzu-Shou Chuang, Senior Vice President of TSMC; Da-Ming Wang, Secretary-General of NTU; Chih-Sheng Lin, Chairman of Mutual Construction; Chih-Chun Yao, Vice President of Mutual Construction; Wei-Han Mo, General Manager of Run Hong Precision Engineering; Rui-Bo Wei, Chairman of Dasyue Construction; and Cheng-Wei Li, Chairman of Qun Ce Engineering Consultants.

On December 27, 2024, National Taiwan University (NTU) hosted the Next-Generation Smart 3D Land Information Center Sustainable Development Forum. The event highlighted groundbreaking advancements by NTU's "Science and Technology Research Institute for DE-Carbonization" (STRIDE-C) in geothermal energy development, carbon sequestration, and land resource digitization. Discussions were also focused on strategies for achieving green energy transformation and carbon net-zero goals.

As the world faces the existential challenges of climate change, ensuring a stable green energy supply and advancing geological carbon sequestration are critical strategies for sustainable development. In response, NTU established the Science and Technology Research Institute for DE-Carbonization two years ago to drive the development and application of geothermal energy and carbon sequestration technologies. The center is also dedicated to analyzing geological data to support and facilitate Taiwan's green energy transition and net-zero objectives.



From left to right: Ya-Hsuan Liu, Director of NTU's Science and Technology Research Institute for DE-Carbonization, and Weis Shieh, Brand Director of Pan Jiun Architects & Associates, addressing the forum.

In order to meet Taiwan's 2050 Net-Zero Emissions Goal, NTU's STRIDE-C launched the Next-Generation Smart 3D Land Information Center project, with generous support from industry leaders. Donor companies themselves are actively developing green construction techniques, notably by applying low-carbon building methods to reduce carbon footprints and energy consumption. These efforts are not only in line with the global trend of carbon reduction, but they also contribute to addressing the net-zero challenges faced by the construction industry. This cutting-edge facility, to be built on NTU's Zhubei campus, will set a global benchmark for integrating subsurface geological digitization with sustainable green architecture.

Prof. Ya-Hsuan Liu, Director of the Science and Technology Research Institute for DE-Carbonization, stressed that achieving net-zero emissions by 2050 will require a significant increase in the share of green energy and the large-scale implementation of geological carbon sequestration technologies. She noted that both geothermal power generation and carbon sequestration demand a deep understanding of subsurface geology, with AI-driven digitalization and analysis playing a crucial role in advancing Taiwan's net-zero goals.

The forum showcased the importance of collaboration between academia and industry to drive innovation in green energy and sustainability. NTU remains committed to contributing to global climate action through supporting pioneering research and building strategic partnerships.



The forum attracted numerous attendees from industry as well as academia.