



•••

Home

NCUE Megawatt-level Energy Storage Pilot System Completed and Implemented



▲ NCUE President Kuo (fourth from right), Vice Mayor of Changhua County (second from right), President of Ørsted Asia Pacific Matthias Bausenwein

(fifth from right), Delta EISBG General Manager JJ Chang (second from left) and Legislative Councillor Hung Sun-Han (third from right), along with other guests at the launch ceremony

NCUE and global offshore wind leader Ørsted celebrated the inauguration of a megawatt (MW) energy storage pilot system on May 17 at the Bao-shan campus. The pilot system will initiate a significant amount of academic research to improve grid efficiency and stability, making an important contribution to the construction of a green energy ecosystem in Taiwan. The energy storage facility built today is the first corporate-sponsored MW energy storage pilot system and represents the successful integration of resources from industry, government, and academia: The participating parties include NCUE, the Changhua Government, and Delta Electronics. The project marks a milestone for green energy development. NCUE Megawatt-Level Energy Storage Pilot System Completed and Implemented



▲ President Kuo pointed out that Bao-shan campus will become an Internet of Things smart-grid demonstration zone. The energy storage pilot system will be used to regulate electricity use on campus and optimise energy efficiency, making NCUE a green energy research hub.

Kuo Yen-kuang, the principle of NCUE, said, 'We are very grateful to Ørsted for its generous support in the form of technology transfer, knowledge sharing, and funding during the construction of the energy storage pilot system and the Ørsted–NCUE Smart Energy Centre. This project will not only significantly improve the energy efficiency of the Bao-shan campus but will also become the basis of more than 20 extended studies spanning from smart-grid and micro-grid power electronics to strategic management of energy storage systems.' Kuo pointed out that Bao-shan campus will become an Internet of Things smart-grid demonstration zone. The energy storage pilot system will be used to regulate electricity use on campus. Monitoring equipment will be set up in each building to collect electricity data, develop prediction models, and optimise energy efficiency, thus turning NCUE into a green energy research hub.



▲ Matthias Bausenwein, the President of Ørsted Asia Pacific, addressed the public: The introduction of this energy storage pilot system will contribute to the development of Taiwan's offshore wind value chain and build a renewable energy ecosystem.

Matthias Bausenwein, the President of Ørsted Asia Pacific said, 'Ørsted's vision is to create a world that runs entirely on green energy. We applied nearly 30 years of global expertise and practice in offshore wind power to the project. We introduce this energy storage pilot system with the aim of contributing to the development of Taiwan's offshore wind value chain and building a renewable energy ecosystem.' President Bausenwein also said that electricity generation methods are continuously changing: 'Thanks to technological innovation, more electricity is being supplied from low carbon emission sources, such as the clean energy generated by offshore wind power. These changes mean that the balance and operation of the grid system will also need to be adjusted to ensure a more agile and flexible electricity supply. The development of energy storage systems will enhance grid operation efficiency and accelerate the power-demand integration of renewable power supplies, helping Taiwan to achieve its 2025 goal of generating 20% of its electricity from renewable sources.' NCUE Megawatt-Level Energy Storage Pilot System Completed and Implemented



▲ Christy Wang, the General Manager of Ørsted Taiwan, indicated that Ørsted is committed to Taiwan's green energy transformation. Industry– academia collaboration has been actively promoted since the grid allocation period of the Greater Changhua offshore wind projects.

Christy Wang, the General Manager of Ørsted Taiwan indicated that Ørsted is committed to Taiwan's green energy transformation. Industry–academia collaboration has been actively promoted since the grid allocation period of the Greater Changhua offshore wind projects, and Ørsted helped the academic communities and industries in Taiwan to take the first step in energy storage research: 'The completion and opening of this MW energy storage pilot system demonstrates that Ørsted not only wants to build offshore wind farms and provide clean energy for Taiwan, but also intends to invest in additional energy storage systems, implement local green energy technology applications, and train green energy research experts, so that Taiwan and Ørsted can stand together at the forefront of the green energy industry.'

Wang noted that Ørsted has been preparing for the pilot project since the fourth quarter of 2017, working closely with NCUE to implement the energy storage system. The pilot system, along with the energy storage research centre that Ørsted sponsored in 2018, will provide the best resources for Taiwan's academic and industrial institutions to conduct research. The collected data will help enhance Taiwan's power grid efficiency and assist the participating parties in grasping emerging energy storage opportunities in the future.



▲ President Kuo presented a souvenir to JJ Chang, the General Manager of Delta Electronics' EISBG.

JJ Chang, the General Manager of Delta Electronics' Energy Infrastructure & Industrial Solutions Business group (EISBG), said that Delta Electronics is pleased to partner with global offshore wind power leader Ørsted and participate in this project: 'We helped the NCUE engineering department to plan and build an MW energy storage system that can be developed into a micro grid, providing the academic community with the opportunity to conduct grid application research through local system integration. We look forward to further cooperation with Ørsted and other partners to contribute to Taiwan's energy transition.'



▲ President Kuo presented a souvenir to Matthias Bausenwein, the President of Ørsted Asia Pacific.

This megawatt-scale energy storage pilot system will be managed by NCUE. Ørsted will provide sponsorship for a research assistant to be employed by the NCUE College of Engineering for ten years. The research assistant will be responsible for monitoring the system and coordinating related research. In addition, Ørsted has commissioned Delta Electronics to provide a ten-year battery maintenance service to ensure optimal performance.

Our Ørsted-NCUE Smart Energy Research Centre is looking for students, faculty members, and companies who wish to participate in related research projects. Interested parties are welcome to contact Mr. Lin, Faculty of Engineering, at ext. 8004. (Faculty of Engineering)

Related links

https://www.chinatimes.com/realtimenews/20200617003144-260410? ctrack=mo_main_rtime_p05&chdtv https://udn.com/news/story/7240/4640934?from=udn-ch1_breaknews-1cate6-news https://tw.news.yahoo.com/%E6%B2%83%E6%97%AD%E7%99%BE%E8%90%AC 143437548.html

https://www.ctimes.com.tw/DispNews/tw/%E5%8F%B0%E9%81%94/200617165

NCUE Megawatt-Level Energy Storage Pilot System Completed and Implemented

https://technews.tw/2020/06/17/orsted-delta-battery-ncue/ https://money.udn.com/money/story/5612/4642945 https://udn.com/news/story/7238/4642271 https://news.ltn.com.tw/news/life/paper/1378668

View: 1888

•••

地址: 50007 彰化市進德路一號進德校 Jin-De Campus, Address: No. 1, Jin-De Road, Changhua City

品

Switchboard Number: 04-7232105

地址:50074 彰化市師大路二號寶山校

Bao-Shan Campus, Address: No. 2, Shi-Da Road, Changhua

品

City Contact us

Transport Information

Smart Campus

Privacy Policy



