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Impressive Performance: Tamkang Commissioned by MOE to Assist Colleges and Universities in Energy Conservation

Campus focus

Following Tamkang University's receipt of the Ministry of Economic Affairs (MOEA)' Energy Benchmarking Award in 2022, the Ministry of Education (MOE) has recognized our significant achievements in energy management. Acknowledging our active participation in energy policy discussions and other related matters since March of 2024, MOE has entrusted Tamkang University with the task of leading the "2024 Subsidy Program for Improvement of Energy Saving Measures in Colleges and Universities." Our role involves assisting colleges and universities nationwide in enhancing existing energy-saving measures and establishing energy management systems. This includes the implementation of smart meters and energy management systems as primary measures, supplemented by energy-saving improvement initiatives. These efforts aim to strengthen the implementation of energy-saving measures across campuses. As of April 3, over 60 colleges and universities have submitted applications for participation. This project aims to encourage colleges and universities to purchase smart meters and establish Energy Management Systems (EMS). In addition to replacing manual meter readings and understanding electricity usage patterns on campus, an EMS can systematize, informatize, and institutionalize energy management. This helps schools establish comprehensive energy management systems and improve overall energy-saving effectiveness, reducing the burden of electricity expenses. Our school's main tasks include establishing operation and support mechanisms, providing consultation and assistance for energy management system promotion, and conducting effectiveness evaluations. Tamkang University assists MOE in establishing administrative and operational mechanisms and support models for school proposal applications, providing consultation and guidance for applying and subsidized schools, and compiling effectiveness evaluations of schools that have implemented EMS-related equipment after receiving

subsidies.

The Dean of General Affairs, Dr. Ruey-Shiang Shaw, explained that following the announcement of "Taiwan's Pathway to Net Zero Emissions in 2050" in 2022, various government agencies have been actively planning and implementing carbon reduction initiatives. In response to the trends of carbon reduction and rising electricity prices, MOE hopes to assist colleges and universities in implementing energy-saving measures to reduce carbon emissions and save costs. In 2006, Tamkang University began building an EMS with the support of then-President Flora Chia-I Chang. Through continuous expansion and optimization, and in line with our school's vision of "AI+SDGs= ∞ ," AI prediction and other features have been added since 2021. Up to now, the functions of "demand forecasting" and "power-saving" control" have been fully utilized: From 2016 to 2023, electricity consumption at the Tamsui campus decreased by 14.35%, surpassing the 10% target set by the Executive Yuan's "Government Agency and School Electricity Efficiency Management Plan. "Furthermore, our achievements have been recognized with the Energy Benchmarking Award from MOEA in 2022 and the National Sustainable Development Award in the Education category from the National Council for Sustainable Development of the Executive Yuan in 2023. At the same time, Tamkang University has obtained qualification as an industrial low-carbonization counseling unit. "With these recognitions, we believe we can assist applying schools in taking the first step towards energy conservation and carbon reduction and achieving outstanding results."

