Annual Report

on SDG 7 Affordable and Clean Energy

7.4 Energy and the community

7.4.3 Does your university as a body provide direct services to local industry aimed at improving energy efficiency and clean energy (energy efficiency assessments, workshops, research renewable energy options)

Thaksin University (TSU) provides renewable-energy workshops open to external participants, clean-energy in Thaksin University Demonstration secondary school, and electric vehicle (EV) workforce training for industry, all under a formal Green University Policy.

Thaksin University, through its Faculty of Engineering (Phatthalung Campus) and its Academic Service Promotion Institute, provides direct services that help local industry, agencies and communities in southern Thailand adopt clean energy and use energy more efficiently.

The Faculty of Engineering runs a fee-based workshop series open to external participants on renewable energy options: grid-connected solar PV design with PVsyst (rooftop, solar farm, floating PV and PV with battery storage), wind resource and energy-yield modelling with WindSim, and a one-day course on solar rooftop and solar water pumping that also teaches how to prepare proposals to the Energy Conservation Promotion Fund. Participants receive certificates after pre- and post-tests.

The Faculty's EV Training center, set up with the National Innovation Agency (NIA) and King Mongkut's University of Technology North Bangkok, delivers up-skill and re-skill courses for Thailand's electric vehicle industry, including a 30-hour EV battery assembly and maintenance course run off campus. The university also installed a solar power system in Phatthalung as a local model for extending renewable energy to surrounding communities and agencies. These services rest on the university's Green University Policy and its Energy and Environmental Conservation Guidelines.

Policy foundation

Two university announcements commit TSU to energy conservation and clean energy and frame its outreach.

- Thaksin University Announcement: Green University Policy, issued 8 November 2023.
- Thaksin University Announcement: Guidelines for Energy and Environmental Conservation, issued 15 June 2022

Clean energy Assessment for Local Business

TSU assessed a 10 MW wind farm (4 × GW-121 2.5 MW turbines) in Tha Phaya Subdistrict, Pak Phanang District, Nakhon Si Thammarat. The report, dated 25 November 2025 (B.E. 2568), was prepared for ALS Laboratory Group (Thailand) Co., Ltd.

- **Study area:** 3 km radius, 34.3 km², mostly rice paddy (62.2%) and villages (9.0%).
- **Wind resource:** mean wind speed 7.34 m/s at 90 m hub height (range 4.50–9.73 m/s), from MERRA-2 data and CFD modelling.
- **Community sites assessed (5):** Ban Bang Raet Sub-district Health Promoting Hospital, Ban Bang Raet School, a local repair shop, Aphisit Farm and a household, all in Moo 1, Ban Phoeng Subdistrict.

รายงานการประเมินเงากระพริบของ บริษัท บีซีพีจี วินด์ (ลิกอร์) จำกัด



จัดทำโดย รองศาสตราจารย์ ดร.จอมภพ แววศักดิ์

ดร.ชนะ จันทร์ฉ่ำ และ นายสมพล ชีวมงคลกานต์

ศูนย์วิจัยพลังงานและสิ่งแวดล้อม มหาวิทยาลัยทักษิณ (วิทยาเขตพัทลุง)

เสนอ บริษัท เอแอลเอส แลบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

วันที่ 25 พฤศจิกายน พ.ศ. 2568

Clean energy demonstration in Phatthalung

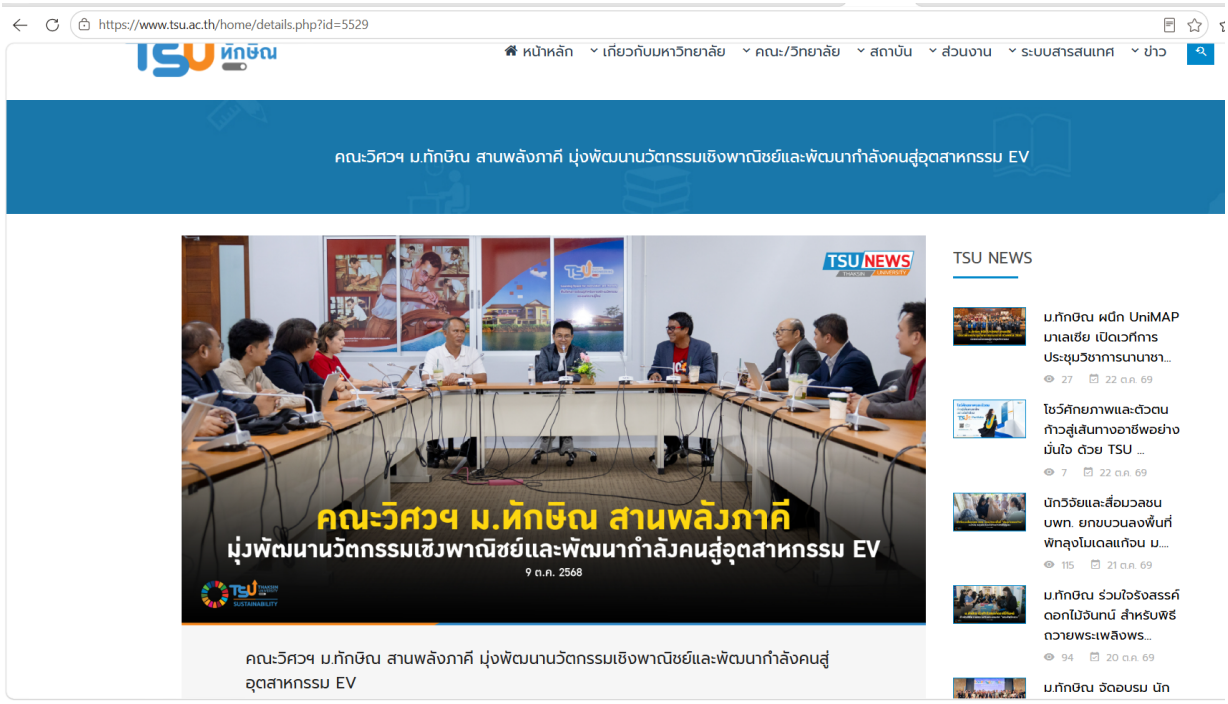
In May 2025 TSU supported a solar power generation system at its Academic Service Promotion Institute (สสช.), Phanang Tung, Khuan Khanun District, Phatthalung.

The university presents the system as a local model of clean technology, intended to extend renewable energy use to surrounding communities and raise awareness among residents and local agencies in Phatthalung.

EV workforce training and industry partnerships

TSU's EV Training centre moved from planning in October 2025 to delivering courses off campus in September 2026.

- **Partnership (October 2025).** The Faculty of Engineering met the National Innovation Agency (NIA) and the KMUTNB high-skill EV workforce team to commercialize research and prepare an EV Training unit offering up-skill and re-skill courses for Thailand's EV industry. The talks also set up an Innovation-driven Enterprise (IDE) support mechanism and a University Innovation Hub linking the university with public and private sectors in the lower south.



Carbon neutrality engagement

TSU was selected as one of the three top-performing higher education institutions in the 2024 ECOLIFE in U program (August 2024 to May 2025), run by the Ministry of Higher Education, Science, Research and Innovation with KidKid Co., Ltd.

The university records waste and energy data in the ECOLIFE Fill in system to analyze greenhouse gas reductions. This is supporting context for 7.4.3; it mainly evidences campus engagement rather than services to industry.

https://www.tsu.ac.th/home/details.php?id=5239