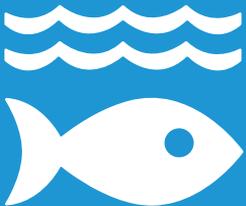




SDG REPORT 2024-2025

SUSTAINABLE DEVELOPMENT GOALS



SDG 13 CLIMATE ACTION



- 1** LOW-CARBON ENERGY TRACKING AT WU
- 2** LOCAL EDUCATION PROGRAMS ON CLIMATE CHANGE
- 3** THE COLLABORATION WITH LOCAL AUTHORITIES ON CLIMATE RISK MONITORING AND EARLY WARNING
- 4** THE COLLABORATIONS WITH NGOs ON CLIMATE ADAPTATION



13 CLIMATE ACTION



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

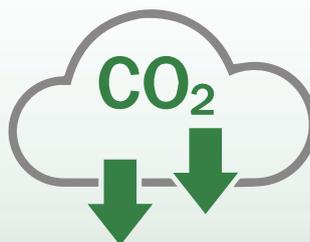
ELECTRICITY CONSUMPTION ON CAMPUS



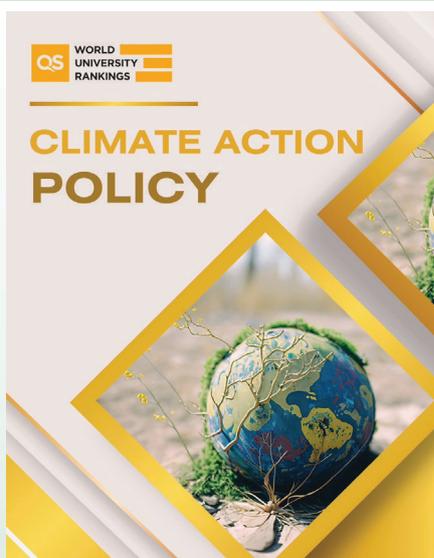
52,274 GJ

LOW-CARBON ENERGY UTILIZATION

13,596 GJ



CLIMATE ACTION POLICY



EDUCATIONAL COLLABORATION ON CLIMATE CHANGE



GOVERNMENT ORGANIZATIONS



NON-GOVERNMENTAL ORGANISATION



PRIVATE SECTORS



LOW-CARBON ENERGY TRACKING AT WU

Walailak University (WU) has long been at the forefront of sustainability, aligning its energy policies with national frameworks like the Energy Efficiency Development Plan. In 2024, WU reinforced its commitment to reducing its environmental impact by implementing its [Climate Action Policy](#), which emphasizes the measurement and adoption of low-carbon energy for whole university. By tracking energy use across the campus, the university aims to reduce its reliance on fossil fuels and promote renewable energy solutions, fostering a more sustainable future.



Assessing carbon footprint reduction through trees

In 2024, WU consumed 52,274 gigajoules of electrical energy, resulting in 12,433 tons of carbon dioxide equivalent emissions. Energy-intensive areas included:

- **Shops and campus-charged facilities (canteens, gardens):** 19.93% of total energy consumption.
- **Integrated Academic Buildings:** 13.57% of total energy consumption.

- **Student Dormitories:** 12.33% of total energy consumption.

To counteract these emissions, WU prioritized integrating low-carbon energy sources. In the same year, the university utilized 13,596 gigajoules of low-carbon energy, derived from solar power, clean biomass, combined heat and power systems, and wind energy. This accounted for 20.64% of the university's total energy consumption, a significant milestone in reducing greenhouse gas emissions.

WU's efforts to measure and integrate low-carbon energy highlight its dedication to sustainability and climate action. By actively tracking energy use and promoting renewable solutions, WU has set an example for educational institutions nationwide. As the university continues to enhance its energy efficiency and renewable energy use, it moves closer to its goal of a greener, more sustainable campus, contributing meaningfully to global efforts against climate change.



LOCAL EDUCATION PROGRAMS ON CLIMATE CHANGE

Climate change is a pressing global challenge that requires both awareness and actionable knowledge to effectively address its consequences. WU, aware of the impacts of global warming, undertook significant programs to educate local communities aimed at addressing climate change, focusing on risks, impacts, mitigation, adaptation, impact reduction, and early warning. These efforts in the year 2024 aim to empower communities to build resilience and contribute to a sustainable future.

Community Training in Environmental Management



In 2024, a dedicated team from WU team, along with engineering and technology students, collaborated with the Center for Academic Services (CAS) conducting a training session program in Ban Laem Community, Tha Sala District. The program focused on environmental management strategies to reduce greenhouse gas emissions and adapt to climate change. The training is aimed at:

1. Promoting community involvement in sustainable development, emphasizing activities that mitigate greenhouse gas emissions contributing to climate change.
2. Encouraging climate change adaptation and waste segregation at the source within Ban Laem Community.
3. Fostering community participation and risk awareness among residents and entrepreneurs regarding environmental management to reduce emissions impacting climate change.

School Meet & Greet: Carbon Sequestration Learning



CAS participated in the School Meet & Greet event organized by the School of Public Health at WU in 2024. The program targeted high school students from both local and provincial academies including Tessaban 1 School (Eng Siang Samakkhi) and Hatyaiwittayalai Somboonkulkanya School. The event featured five educational stations:

- Testing for food contaminants
- Basic life support techniques
- Industrial hygiene measurements and fire extinguishing equipment
- Forensic science applications
- Assessing carbon footprint reduction through trees



CAS led the station to evaluate carbon sequestration in trees, providing knowledge and demonstrations on assessing carbon storage. Students engaged in hands-on practice, enhancing their understanding of environmental science and its practical applications.



Ban Laem Homestay Community Waste Segregation Initiative

WU's School of Public Health, along with the CAS, visited the Ban Laem Homestay Community in Tha Sala District. They provided mesh-type waste segregation bins and conducted training program on recycling practices and data recording for the Low Emission Support Scheme (LESS) certification. The training is aimed at:

- Supporting the development of greenhouse gas reduction activities in the community for LESS certification.

- Preparing the community to develop greenhouse gas reduction projects capable of trading carbon credits.

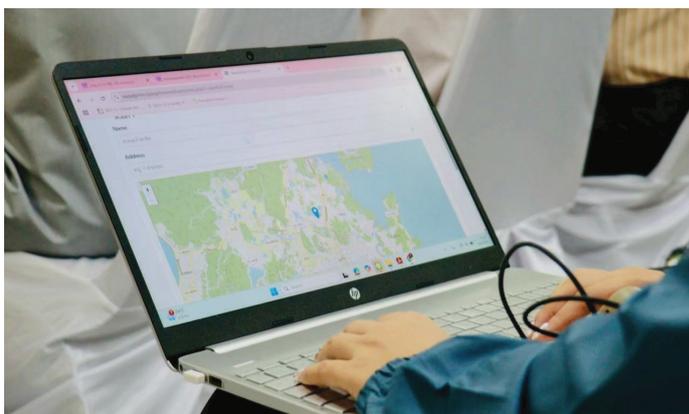


THE COLLABORATION WITH LOCAL AUTHORITIES ON CLIMATE RISK MONITORING AND EARLY WARNING

Providing information and supporting government agencies in early warning systems and climate-related disaster monitoring strengthens disaster response capabilities and reduces potential risks to communities. In 2024, WU supports local governments in climate risk monitoring and disaster preparation through the Community Water Management Platform for Agriculture. This informative platform uses mobile cloud computing to enhance water resource management and climate adaptation efforts in agricultural communities.

Key efforts included:

- **Real-Time Solutions:** Developing a web application for water demand and supply management.
- **Local Engagement:** Conducting on-site assessments with local governments to align solutions with community needs.
- **Capacity Building:** Training officials and farmers to utilize the platform effectively.



Community Water Management Platform

The platform enables real-time data collection, monitoring, and decision-making for irrigation scheduling and water allocation. By leveraging the Easy-Agri Web Application, it provides designed solutions for sustainable water management, ensuring efficient resource use and climate resilience.

Pilot Areas and Achievements

Collaboration with Local Authorities

WU partnered with the Office of the National Water Resources, Regional Office 4 (ONWR Region 4), and local administrations in Bang Chak and Don Tako Subdistricts of Nakhon Si Thammarat.

- **Bang Chak Subdistrict:** WU collaborated with the Bang Chak Administrative Organization to manage natural canals and reservoirs, optimizing irrigation for rice paddies and oil palm plantations.
- **Don Tako Subdistrict:** Partnering with the Nakhon Si Thammarat Irrigation Project, WU



developed plans for rubber, fruit orchards, and rice crops using mapped water systems.

First-year achievements included the creation of a web application, accuracy-tested

tools, and an MOU with ONWR Region 4. Goals for the second year include mobile applications for demand and supply management and broader implementation.

THE COLLABORATIONS WITH NGOs ON CLIMATE ADAPTATION

Collaboration between academic institutions and non-governmental organizations (NGOs) plays a crucial role in enhancing knowledge, raising awareness, and strengthening climate adaptation capacity, key factors in mitigating impacts and promoting community sustainability. WU, as a green university, has been the proactive force in climate adaptation and environmental education through partnerships with NGOs and local stakeholders. By fostering collaborations, WU delivers impactful programs addressing climate change risks, adaptation strategies, and sustainable development.

Trang Province Climate Change Collaboration



Led by Assoc. Prof. Dr. Warit Jawjit and the faculty, WU, collaborated with the Trang Provincial Office of Natural Resources and Environment to enhance local climate adaptation plans. WU participated in the fifth meeting of the Trang Province Climate Change Working Group and the opening ceremony of the Climate Change and Biodiversity Coordination Center at Thumrin Thana Hotel, Trang Province. This center serves as a hub for disseminating knowledge of climate change, coordinating efforts with the Save Andaman Network Foundation, Trang, and offering critical data to support provincia adaptation measures.

Promoting Low Carbon Tourism



In collaboration with the Baan Naitung Fisherfolk Association, WU implemented a Low Carbon Tourism project in Nakhon Si Thammarat coastal communities. Led by Asst. Prof. Dr. Amonsak Sawusdee and team, this initiative develops eco-friendly tourism routes, combining community-based tourism with low-carbon activities. The program promotes using solar-powered boats and bicycles while encouraging sustainable practices in local fisheries and aquaculture.

Data Collection for Climate Action in Phatthalung



WU extended the collaboration to Phatthalung Province, gathering data on climate change impacts in the Ban Chong Fuen Community and Lan Yor, Koh Mak Sub-district. Collaborated with the Pak Phayun Lake Conservation Fishermen's Association, Asst. Prof. Jenjira Kaewrat continued the project, contributing to draft provincial climate adaptation strategies. These efforts align with Thailand's commitment to Carbon Neutrality by 2050 and Net Zero Emissions by 2065, as pledged at COP26.