



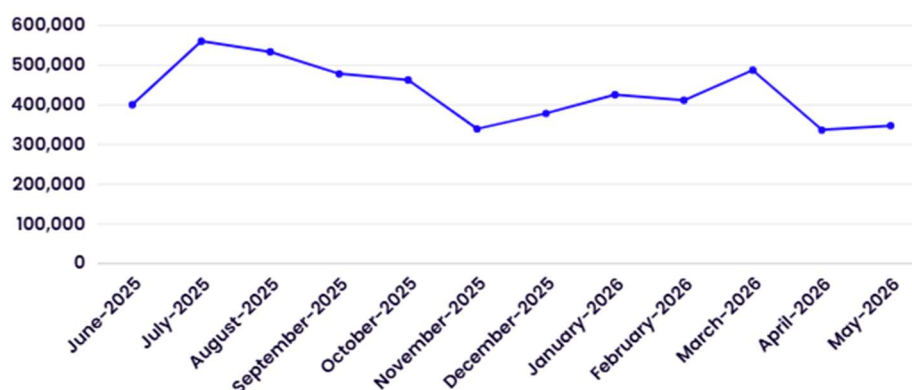
UI GreenMetric Questionnaire

University : SONGKHLA RAJABHAT UNIVERSITY
Country : Thailand
Web Address : www.skru.ac.th

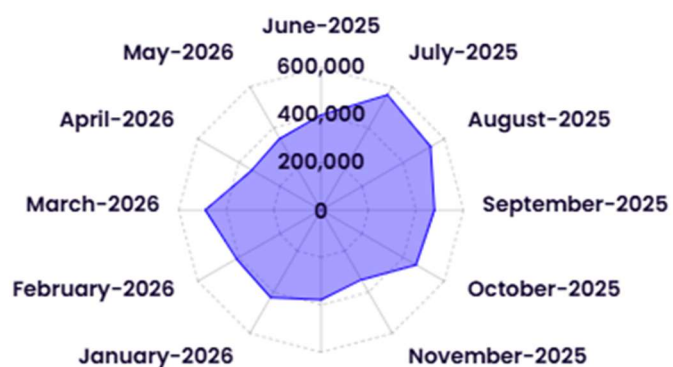
[2] Energy and Climate Change (EC)

[2.6] Electricity Usage per Year (in Kilowatt hour) (EC.4)

Electricity Usage per Year (kWh)



Electricity Usage per Year (kWh)



Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26
400,541	560,708	533,820	478,514	462,885	339,699	378,951	425,776	411,725	487,570	337,031	347,842
.43	.46	.85	.43	.75	.38	.76	.00	.00	.00	.58	.28

The graph shows the annual electricity consumption and electricity rates for the past 12 months.



Description:

An analysis of the 12-month historical data indicates that electricity consumption at Songkhla Rajabhat University fluctuates significantly in correlation with two primary drivers: Climatic Variations (Temperature) and the Academic Calendar Cycle (Campus Activity). The analytical breakdown is detailed below:

Peak Consumption (July 2025): Electricity usage reached its annual maximum at 560,708.46 kWh. This peak directly corresponds to the commencement of the First Semester (Regular Program). During this period, classrooms, laboratories, and facilities operated at full capacity with maximum student and staff density, combined with high humidity and ambient temperatures.

Minimum Consumption (November 2025): Power demand steadily declined to its lowest baseline at 339,699.38 kWh. This drop is a dual result of cooler temperatures during the peak southern rainy season and the inter-semester break (transition after Semester 1). This indicates that the university's infrastructure successfully achieved energy load reduction when formal classes were not in session.

Recovery and Surge (December 2025 – March 2026): Energy consumption began to rebound in December due to the commencement of the Second Semester and experienced an exponential surge in March 2026, reaching 487,570.00 kWh. Although March marks the final weeks of Semester 2 classes, the official onset of the summer season drastically escalated the cooling load on air conditioning systems across administrative and shared zones.

Extended Projections and Analysis (April – May 2026):

April: Although this period aligns with the Semester 2 break and long public holidays (Songkran)—which reduces active classroom load—overall energy consumption is anticipated to remain relatively high. This is driven by extreme outdoor temperatures forcing administrative and support offices to draw substantial power to maintain cooling thresholds.

May: This period covers the Summer Session (Special Term) and preparatory operations for the upcoming academic year. Electricity consumption is expected to remain high due to ongoing summer heat and the reactivation of lecture rooms for summer classes, freshman orientation preparations, and institutional events. 2025: 5,079,108 kWh.

Electricity consumption per capita within Songkhla Rajabhat University (kWh/person/year)

$$\begin{aligned} &= \frac{\text{Total Annual Electricity Consumption (kWh)}}{\text{Total Campus Population (Students + staff)}} \\ &= \frac{5,165,066.92}{12462+771} \\ &= 390.31 \quad \text{kWh/person/year} \end{aligned}$$