

## **Summary Report**

**Energy Management and Renewable Energy Implementation (Year 2024)**  
**Official Translation of the Original Thai Report**

### **1. General Information**

- 1.1 Institution: Shinawatra University
- 1.2 Controlled Building(s): University Main Campus (2 buildings)
- 1.3 TSIC-ID: 85302-1010
- 1.4 Address: 99 Moo 10, Bang Toei, Sam Khok, Pathum Thani 12160
- 1.5 Building Type: Educational Institution
- 1.6 Year of Operation Commencement: 2002 (B.E. 2545)
- 1.7 Number of Staff: 150 persons
- 1.8 Floor Area in Use: 19,379 m<sup>2</sup>

### **2. Energy Consumption Overview (2023)**

- 2.1 Total Electricity Consumption: 1,750,560 kWh
- 2.2 Total Electricity Cost: 8,502,488.94 THB
- 2.3 Power Sources: Grid Electricity (100%)
- 2.4 Thermal Energy Use from Fossil Fuels: None Recorded
- 2.5 Internal Power Generation: None

### **3. Renewable Energy and Conservation Measures**

**Primary Renewable Initiative:**

- 3.1 Project: Conversion of 100 external LED lights to solar-powered LED lights
- 3.2 Annual Electricity Saved: 17,520 kWh ( $\approx$  63,072 MJ)
- 3.3 Annual Cost Savings: 87,052.15 THB
- 3.4 Investment Cost: 500,000 THB
- 3.5 Payback Period: 5.74 years
- 3.6 Status: Fully implemented in 2024

### **4. Energy Consumption Breakdown**

- 4.1 Centralized Air Conditioning: 32%
- 4.2 Split-type Air Conditioning: 8%

4.3 Lighting Systems: 17%

4.4 Others (e.g., equipment, IT systems): 43%

## 5. Organizational Implementation and Training

5.1 Energy Management Committee: Established with roles and responsibilities

5.2 Awareness Campaigns:

5.2.1 Training for staff on energy awareness (25 personnel)

5.2.2 Stickers, posters, and daily announcements

5.2.3 “Turn off AC and lights during lunch” initiative

5.3 Monitoring System: Implemented with regular evaluation of energy KPIs

## 6. Energy Efficiency Indicator (SEC)

6.1 Average Specific Energy Consumption (SEC): 27.10 MJ/m<sup>2</sup>/month

6.2 Total Energy Use (Electricity only): 6,301,920 MJ/year

## 7. Signature & Authentication

This summary report is an **official English translation** of the Thai-language Energy Management Report 2024 submitted for Shinawatra University, compiled for internal and external reporting, sustainability audits, and QS-related documentation.

Signed by:



(Mr. Jiraphat Punyakupt)

Head of Buildings and Maintenance (B&M)

Date: