



UI GREEN METRIC WORLD UNIVERSITY

SILPAKORN UNIVERSITY

UI GREEN METRIC SUSTAINABILITY REPORT 2025



SCAN ME :
[SUGREENCAMPUS.SU.AC.TH](https://sugreencampus.su.ac.th)

INTRODUCTION

SILPAKORN UNIVERSITY IS PRESENTLY UNDER THE SUPERVISION OF THE OFFICE OF THE HIGHER EDUCATION COMMISSION, THE MINISTRY OF EDUCATION AND WAS ORIGINALLY ESTABLISHED AS THE SCHOOL OF FINE ARTS UNDER THE FINE ARTS DEPARTMENT IN 1933. PRIMARILY, THE SCHOOL HAS OFFERED THE ONLY STUDYING PROGRAMS IN PAINTING AND SCULPTURE BY WAIVING TUITION FEES FOR THE GOVERNMENT OFFICERS AND THE STUDENTS. ITS INCEPTION AND DEVELOPMENT OWED MUCH TO AN ALMOST LIFETIME DEVOTION OF PROFESSOR SILPA BHIRASRI, AN ITALIAN SCULPTOR (PREVIOUSLY CALLED PROFESSOR CORRADO FEROCI) WHO WAS COMMISSIONED DURING THE REIGN OF KING RAMA VI TO WORK IN THE FINE ARTS DEPARTMENT. HE SUBSEQUENTLY ENLARGED THE CLASSES TO INCLUDE GREATER MEMBERS OF THE INTERESTED PUBLIC BEFORE TAKING HIS INITIATIVE IN SETTING UP THE SCHOOL OF FINE ARTS. THE SCHOOL GRADUALLY DEVELOPED AND WAS OFFICIALLY ACCORDED A NEW STATUS AND NAMED **SILPAKORN UNIVERSITY**, ON 12 OCTOBER 1943. IN THE EARLY PHASE OF ITS DEVELOPMENT, ITS INAUGURAL FACULTY WAS THE FACULTY OF PAINTING AND SCULPTURE (PRESENTLY IS NAMED THE FACULTY OF PAINTING SCULPTURE AND GRAPHIC ARTS). SINCE 1955, THE FACULTY OF THAI ARCHITECTURE WAS ESTABLISHED (LATER CHANGED THE NAME INTO THE FACULTY OF ARCHITECTURE) AND TWO MORE FACULTIES WERE CONSECUTIVELY ESTABLISHED TO ACCOMMODATE THE UNIVERSITY'S GROWING ACADEMIC INTERESTS, NAMELY, THE FACULTY OF ARCHAEOLOGY AND THE FACULTY OF DECORATIVE ARTS IN 1966, **SILPAKORN UNIVERSITY** ADOPTED A POLICY TO DIVERSIFY THE ACADEMIC FOCUS OF ITS FOUR FACULTIES INTO SUB-SPECIALIZATIONS TO MEET ITS EXPANDING ACADEMIC INTERESTS AND ACTIVITIES. HOWEVER, DUE TO LIMITED PHYSICAL SPACE AT THE WANG THA PHRA CAMPUS, A NEW CAMPUS WAS ESTABLISHED AT SANAM CHANDRA PALACE IN NAKHON PATHOM PROVINCE, LOCATED ON THE FORMER RESIDENTIAL GROUNDS OF KING RAMA VI. THE FIRST TWO FACULTIES AT THIS CAMPUS WERE THE FACULTY OF ARTS (1968) AND THE FACULTY OF EDUCATION (1969). THREE MORE FACULTIES WERE LATER ADDED: THE FACULTY OF SCIENCE IN 1972, THE FACULTY OF PHARMACY IN 1985, AND THE FACULTY OF ENGINEERING AND INDUSTRIAL TECHNOLOGY IN 1991 (ORIGINALLY CALLED THE FACULTY OF INDUSTRIAL TECHNOLOGY). IN 1999, THE FACULTY OF MUSIC WAS FOUNDED, FURTHER ENHANCING THE UNIVERSITY'S ACADEMIC EXCELLENCE AND SPECIALIZATION IN THE ARTS. TO EXTEND ITS EDUCATIONAL CAPACITY, **SILPAKORN UNIVERSITY** ESTABLISHED A NEW CAMPUS IN PHETCHABURI PROVINCE IN 1997 TO PROMOTE HIGHER EDUCATION IN THE WESTERN PROVINCES OF THAILAND. THIS CAMPUS WAS NAMED THE PHETCHABURI INFORMATION TECHNOLOGY CAMPUS. THE FACULTY OF ANIMAL SCIENCES AND AGRICULTURAL TECHNOLOGY AND THE FACULTY OF MANAGEMENT SCIENCE WERE ESTABLISHED IN 2001 AND 2002, RESPECTIVELY, AT THE PHETCHABURI CAMPUS. IN 2003, THE FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AND **SILPAKORN UNIVERSITY** INTERNATIONAL COLLEGE (SUIC) WERE ALSO FOUNDED TO OFFER INTERNATIONAL CURRICULA IN VARIOUS ACADEMIC FIELDS.





มหาวิทยาลัยศิลปากร วังท่าพระ

WANG THA PHRA CAMPUS

HISTORY

IN THE EARLY PHASE OF ITS DEVELOPMENT, ITS INAUGURAL FACULTY WAS THE FACULTY OF PAINTING AND SCULPTURE (PRESENTLY IS NAMED THE FACULTY OF PAINTING SCULPTURE AND GRAPHIC ARTS).

SINCE 1955,

THE FACULTY OF THAI ARCHITECTURE WAS ESTABLISHED (LATER CHANGED THE NAME INTO THE FACULTY OF ARCHITECTURE) AND TWO MORE FACULTIES WERE CONSECUTIVELY ESTABLISHED TO ACCOMMODATE THE UNIVERSITY'S GROWING ACADEMIC INTERESTS, NAMELY, THE FACULTY OF ARCHAEOLOGY AND THE FACULTY OF DECORATIVE ARTS IN THE FOLLOWING YEARS.



มหาวิทยาลัยศิลปากร พระราชวังสนามจันทร์

SANAM CHANDRA PALACE CAMPUS

HISTORY

IN 1966, **SILPAKORN UNIVERSITY** HAD AN EDUCATIONAL POLICY TO DIVERSIFY THE MAIN AREAS OF THE FOUR FACULTIES INTO SUB-SPECIALIZATIONS TO RESPOND TO THE DEVELOPMENT OF ITS MORE ACADEMIC INTERESTS AND ACTIVITIES. HOWEVER, THE UNIVERSITY UNDERWENT A LIMITED PHYSICAL EXPANSION IN WANG THA PHRA CAMPUS. HENCE, A NEW CAMPUS, SANAM CHANDRA PALACE CAMPUS, WAS LATER ESTABLISHED IN NAKORN PATHOM PROVINCE IN THE FORMER RESIDENTIAL COMPOUND OF KING RAMA VI. THE FIRST TWO FACULTIES FOUNDED ON THIS CAMPUS WERE THE FACULTY OF ARTS AND THE FACULTY OF EDUCATION



IN 1968 AND 1969, RESPECTIVELY. LATER, THREE MORE FACULTIES WERE SET UP, NAMELY, THE FACULTY OF SCIENCE IN 1972, AND THE FACULTY OF PHARMACY IN 1985, AND THE FACULTY OF ENGINEERING AND INDUSTRIAL TECHNOLOGY IN 1991 (ORIGINALLY WAS NAMED THE FACULTY OF INDUSTRIAL TECHNOLOGY). IN 1999, THE FACULTY OF MUSIC WAS ESTABLISHED COMPLETED AND BECOMES MORE ACADEMIC EXCELLENCE AND SPECIALIZATION IN ARTISTIC FIELDS

มหาวิทยาลัยศิลปากร เพชรบุรี

PHETCHABURI CAMPUS



HISTORY

SILPAKORN UNIVERSITY ALSO EXTENDS THE EDUCATIONAL CAPACITY THROUGH ESTABLISHING A NEW CAMPUS IN PHETCHABURI PROVINCE FOR PROMOTING THE HIGHER EDUCATION IN THE WESTERN PROVINCES OF THAILAND SINCE 1997 AND THE NEW CAMPUS WAS NAMED **“PHETCHABURI INFORMATION TECHNOLOGY CAMPUS”**.

IN 2001 AND 2002, THE FACULTY OF ANIMAL SCIENCES AND AGRICULTURAL TECHNOLOGY AND THE FACULTY OF MANAGEMENT SCIENCE WERE ESTABLISHED CONSECUTIVELY IN PHETCHABURI CAMPUS.

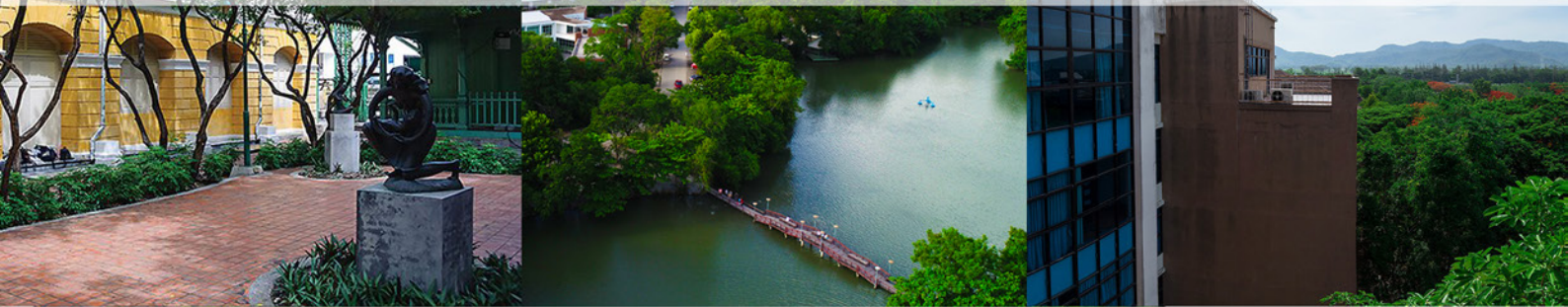
IN 2003, THE FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) WAS ESTABLISHED AS WELL AS SILPAKORN UNIVERSITY INTERNATIONAL COLLEGE (SUIC) WAS ESTABLISHED AT THE SAME PERIOD FOR PROVIDING THE INTERNATIONAL CURRICULUM IN DIFFERENT ACADEMIC FIELDS OF STUDIES.





UI GREEN METRIC SUSTAINABILITY REPORT 2025
SILPAKORN UNIVERSITY : SANAM CHANDRA PALACE | PHETCHABURI INFORMATION TECHNOLOGY
SETTING AND INFRASTRUCTURE





DESCRIPTION

SILPAKORN UNIVERSITY

IS CURRENTLY UNDER THE SUPERVISION OF THE OFFICE OF THE HIGHER EDUCATION COMMISSION, MINISTRY OF EDUCATION. IT WAS ORIGINALLY ESTABLISHED AS THE SCHOOL OF FINE ARTS UNDER THE FINE ARTS DEPARTMENT IN 1933. INITIALLY, THE SCHOOL OFFERED PROGRAMS ONLY IN PAINTING AND SCULPTURE. THE UNIVERSITY OWES MUCH OF ITS INCEPTION AND DEVELOPMENT TO THE LIFELONG DEDICATION OF PROFESSOR SILPA BHIRASRI, AN ITALIAN SCULPTOR (FORMERLY KNOWN AS PROFESSOR CORRADO FEROCI). HE WAS COMMISSIONED DURING THE REIGN OF KING RAMA VI TO WORK IN THE FINE ARTS DEPARTMENT AND LATER EXPANDED THE CLASSES TO INCLUDE A BROADER PUBLIC. HIS EFFORTS LED TO THE FOUNDING OF THE SCHOOL OF FINE ARTS. OVER TIME, THE SCHOOL EVOLVED AND WAS OFFICIALLY RENAMED **SILPAKORN UNIVERSITY** ON OCTOBER 12, 1943. IN ITS EARLY DEVELOPMENT, THE FIRST FACULTY ESTABLISHED WAS THE FACULTY OF PAINTING AND SCULPTURE, NOW KNOWN AS THE FACULTY OF PAINTING, SCULPTURE, AND GRAPHIC ARTS. IN 1955, THE FACULTY OF THAI ARCHITECTURE WAS FOUNDED (LATER RENAMED THE FACULTY OF ARCHITECTURE), AND ADDITIONAL FACULTIES WERE ESTABLISHED TO ACCOMMODATE THE UNIVERSITY'S GROWING ACADEMIC INTERESTS, INCLUDING THE FACULTY OF ARCHAEOLOGY AND THE FACULTY OF DECORATIVE ARTS.

IN 1966, SILPAKORN UNIVERSITY ADOPTED A POLICY TO DIVERSIFY THE ACADEMIC FOCUS OF ITS FOUR FACULTIES INTO SUB-SPECIALIZATIONS TO MEET ITS EXPANDING ACADEMIC INTERESTS AND ACTIVITIES. HOWEVER, DUE TO LIMITED PHYSICAL SPACE AT **THE WANG THA PHRA CAMPUS**, A NEW CAMPUS WAS ESTABLISHED AT **SANAM CHANDRA PALACE CAMPUS** IN NAKHON PATHOM PROVINCE, LOCATED ON THE FORMER RESIDENTIAL GROUNDS OF KING RAMA VI. THE FIRST TWO FACULTIES AT THIS CAMPUS WERE THE FACULTY OF ARTS (1968) AND THE FACULTY OF EDUCATION (1969). THREE MORE FACULTIES WERE LATER ADDED: THE FACULTY OF SCIENCE IN 1972, THE FACULTY OF PHARMACY IN 1985, AND THE FACULTY OF ENGINEERING AND INDUSTRIAL TECHNOLOGY IN 1991 (ORIGINALLY CALLED THE FACULTY OF INDUSTRIAL TECHNOLOGY).

IN 1999, THE FACULTY OF MUSIC WAS FOUNDED, FURTHER ENHANCING THE UNIVERSITY'S ACADEMIC EXCELLENCE AND SPECIALIZATION IN THE ARTS. TO EXTEND ITS EDUCATIONAL CAPACITY,

SILPAKORN UNIVERSITY ESTABLISHED A NEW CAMPUS IN PHETCHABURI PROVINCE

IN 1997 TO PROMOTE HIGHER EDUCATION IN THE WESTERN PROVINCES OF THAILAND. THIS CAMPUS WAS NAMED **THE PHETCHABURI INFORMATION TECHNOLOGY CAMPUS**. THE FACULTY OF ANIMAL SCIENCES AND AGRICULTURAL TECHNOLOGY AND THE FACULTY OF MANAGEMENT SCIENCE WERE ESTABLISHED IN 2001 AND 2002, RESPECTIVELY, AT THE PHETCHABURI CAMPUS. IN 2003, THE FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AND SILPAKORN UNIVERSITY INTERNATIONAL COLLEGE (SUIC) WERE ALSO FOUNDED TO OFFER INTERNATIONAL CURRICULUM IN VARIOUS ACADEMIC FIELDS. ADDITIONALLY, SILPAKORN UNIVERSITY ESTABLISHED A GRADUATE SCHOOL IN 1972 TO MANAGE AND FACILITATE ALL GRADUATE PROGRAMS OFFERED BY THE UNIVERSITY.

THE AREAS OF THE THREE CAMPUS SITES ARE AS FOLLOWS:

1. **WANG THA PHRA CAMPUS: 3.17 ACRES**
2. **SANAM CHANDRA PALACE CAMPUS: 163.41 ACRES**
3. **PHETCHABURI INFORMATION TECHNOLOGY CAMPUS: 258.54 ACRES**

FOR THE UI GREEN METRIC 2025, ONLY THE AREAS OF THE SANAM CHANDRA PALACE CAMPUS AND THE PHETCHABURI INFORMATION TECHNOLOGY CAMPUS WILL BE CONSIDERED, AS THE WANG THA PHRA CAMPUS PRIMARILY SERVES AS A MUSEUM, THE CAMPUS AREA, THE NUMBER OF STUDENTS AND STAFF, IS INSIGNIFICANT COMPARED TO THE OTHER CAMPUSES. THEREFORE, **THE TOTAL AREA OF SILPAKORN UNIVERSITY INCLUDED IN THIS REPORT IS 421.95 ACRES OR 1,707,582 SQUARE METERS.**



PHETCHABURI INFORMATION TECHNOLOGY CAMPUS



WANG THA PHRA CAMPUS



SANAM CHANDRA PALACE CAMPUS

ประเภทของสถาบันอุดมศึกษา
TYPE OF HIGHER EDUCATION INSTITUTION
COMPREHENSIVE

ภูมิอากาศ
CLIMATE
TROPICAL WET

จำนวนวิทยาเขต
NUMBER OF CAMPUS SITES

3

CAMPUS SITES
WANG THA PHRA CAMPUS
SANAM CHANDRA PALACE CAMPUS
PHETCHABURI INFORMATION TECHNOLOGY CAMPUS

ที่ตั้งของวิทยาเขต
MAIN CAMPUS SETTING
URBAN



วิทยาเขตมีพื้นที่ทั้งหมด
TOTAL CAMPUS AREA
1,707,582 SQUARE METER

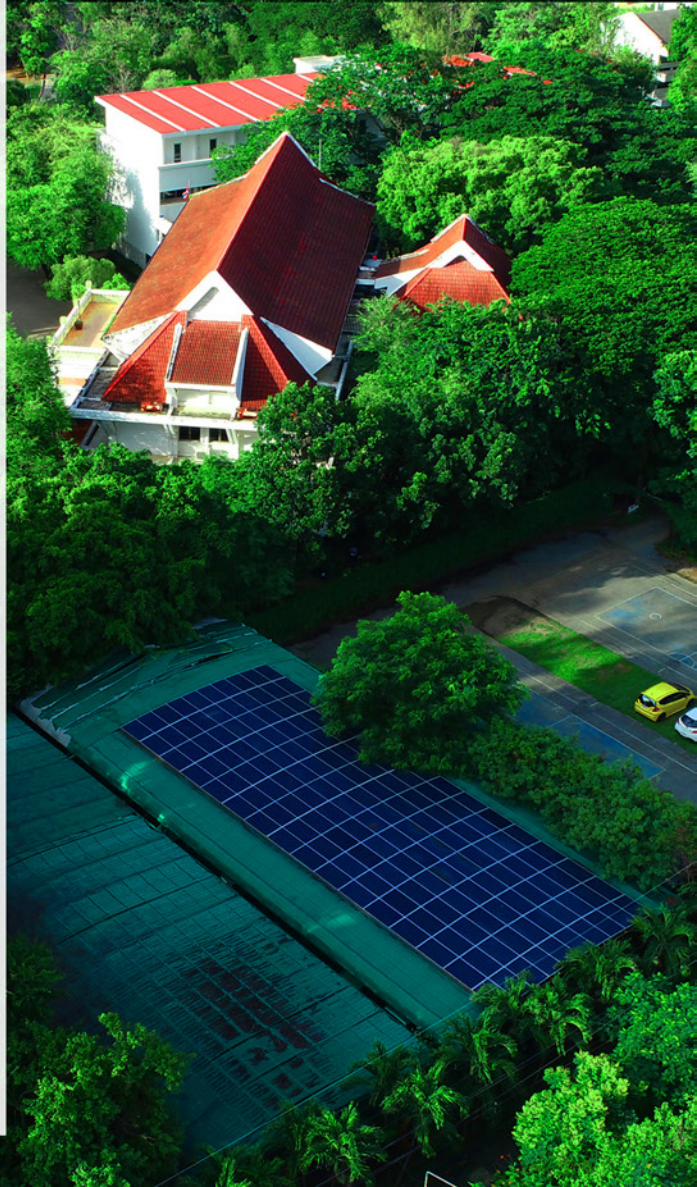
พื้นที่ชั้นล่างของอาคาร ภายในวิทยาเขตทั้งหมด
TOTAL CAMPUS GROUND FLOOR AREA OF BUILDINGS
124,966 SQUARE METER

พื้นที่อาคารทั้งหมดของวิทยาเขต
TOTAL CAMPUS BUILDINGS AREA
508,597 SQUARE METER

อัตราส่วนของพื้นที่เปิดโล่งต่อพื้นที่ทั้งหมด
THE RATIO OF OPEN SPACE AREA TO TOTAL AREA
92.68%

SILPAKORN UNIVERSITY, SANAM CHANDRA PALACE CAMPUS,
IS LOCATED IN NAKHON PATHOM PROVINCE,
ABOUT 50 KILOMETERS WEST OF THAILAND'S CAPITAL,
BANGKOK. NAKHON PATHOM'S POPULATION
IN 2025 IS ESTIMATED TO BE 794,000.
THE POPULATION OF SILPAKORN UNIVERSITY,
SANAM CHANDRA PALACE CAMPUS, IS APPROXIMATELY
19,300, INCLUDING 17,647 STUDENTS, 736 ACADEMIC STAFF
AND 917 ADMINISTRATIVE STAFF.

SILPAKORN UNIVERSITY, PHETCHABURI CAMPUS,
IS LOCATED AT "1 MOO 3 SAMPRAYA, CHA-AM, PHETCHABURI
76120, THAILAND." THE POPULATION OF PHETCHABURI IN
2025 IS ESTIMATED TO BE 475,000. THE POPULATION OF
SILPAKORN UNIVERSITY, PHETCHABURI CAMPUS,
IS APPROXIMATELY 10,173, INCLUDING 9,725 STUDENTS,
238 ACADEMIC STAFF AND 210 ADMINISTRATIVE STAFF.
THEREFORE, THE TOTAL POPULATION USED
IN THIS REPORT IS 29,473.





พื้นที่ทั้งหมดของมหาวิทยาลัยที่ปกคลุมด้วยพืชป่า
TOTAL AREA ON CAMPUS COVERED IN FOREST VEGETATION
THE PORTION OF THE CAMPUS COVERED
BY FOREST VEGETATION ACCOUNTS FOR
34.87%

CALCULATED AS FOLLOWS: $(595,382/1,707,582) \times 100\%$.

THEREFORE,
THE RATIO OF OPEN SPACE TO TOTAL AREA IS 92.68%.
THE PORTION OF THE CAMPUS COVERED BY FOREST VEGETATION
ACCOUNTS FOR 34.87% CALCULATED AS FOLLOWS:

$(595,382/1,707,582) \times 100\%$.

WHILE PLANTED VEGETATION COVERS 39.98%
OF THE CAMPUS CALCULATED AS FOLLOWS:

$(682,611/1,707,582) \times 100\%$.

ADDITIONALLY,
**THE AREA DEDICATED TO WATER ABSORPTION, EXCLUDING
FOREST AND PLANTED VEGETATION,**

CONSTITUTES 15.80% OF THE TOTAL CAMPUS AREA ,
CALCULATED AS FOLLOWS: $(269,820/1,707,582) \times 100\%$.

TOTAL FOREST VEGETATION AREA: 595,382 M²

TOTAL AREA: 1,707,582 M²

PERCENTAGE AREA: 34.87%

พื้นที่ทั้งหมดของวิทยาเขตที่ครอบคลุมพืชพรรณ แปลงผัก
TOTAL AREA ON CAMPUS COVERED IN PLANTED VEGETATION
WHILE PLANTED VEGETATION COVERS
39.98%

OF THE CAMPUS

CALCULATED AS FOLLOWS: $(682,611/1,707,582) \times 100\%$.

THEREFORE,

THE RATIO OF OPEN SPACE TO TOTAL AREA IS 92.68%.

THE PORTION OF THE CAMPUS COVERED BY FOREST VEGETATION ACCOUNTS FOR 34.87%

CALCULATED AS FOLLOWS: $(595,382/1,707,582) \times 100\%$.

WHILE PLANTED VEGETATION COVERS 39.98% OF THE CAMPUS

CALCULATED AS FOLLOWS: $(682,611/1,707,582) \times 100\%$.

ADDITIONALLY,

THE AREA DEDICATED TO WATER ABSORPTION, EXCLUDING FOREST AND PLANTED VEGETATION,

CONSTITUTES 15.80% OF THE TOTAL CAMPUS AREA ,

CALCULATED AS FOLLOWS: $(269,820/1,707,582) \times 100\%$.

TOTAL PLANTED VEGETATION AREA: 682,611 M²

TOTAL AREA: 1,707,582 M²

PERCENTAGE AREA: 39.98%

พื้นที่ลักษณะดูดซับน้ำ

TOTAL AREA ON CAMPUS FOR WATER ABSORPTION BESIDES THE FOREST AND PLANTED VEGETATION

THE AREA DEDICATED TO WATER ABSORPTION, EXCLUDING FOREST AND PLANTED VEGETATION, CONSTITUTES **15.80%** OF THE TOTAL CAMPUS AREA ,
CALCULATED AS FOLLOWS: $(269,820/1,707,582) \times 100\%$.

THEREFORE,

THE RATIO OF OPEN SPACE TO TOTAL AREA IS 92.68%.

THE PORTION OF THE CAMPUS COVERED BY FOREST VEGETATION ACCOUNTS FOR 34.87%

CALCULATED AS FOLLOWS: $(595,382/1,707,582) \times 100\%$.

WHILE PLANTED VEGETATION COVERS 39.98% OF THE CAMPUS

CALCULATED AS FOLLOWS: $(682,611/1,707,582) \times 100\%$.

ADDITIONALLY,

THE AREA DEDICATED TO WATER ABSORPTION, EXCLUDING FOREST AND PLANTED VEGETATION,

CONSTITUTES 15.80% OF THE TOTAL CAMPUS AREA ,

CALCULATED AS FOLLOWS: $(269,820/1,707,582) \times 100\%$.

TOTAL ABSORPTION AREA (EXCLUDING FOREST AND PLANTED VEGETATION) : 269,820 M²

TOTAL AREA: 1,707,582 M²

PERCENTAGE AREA: 15.80%



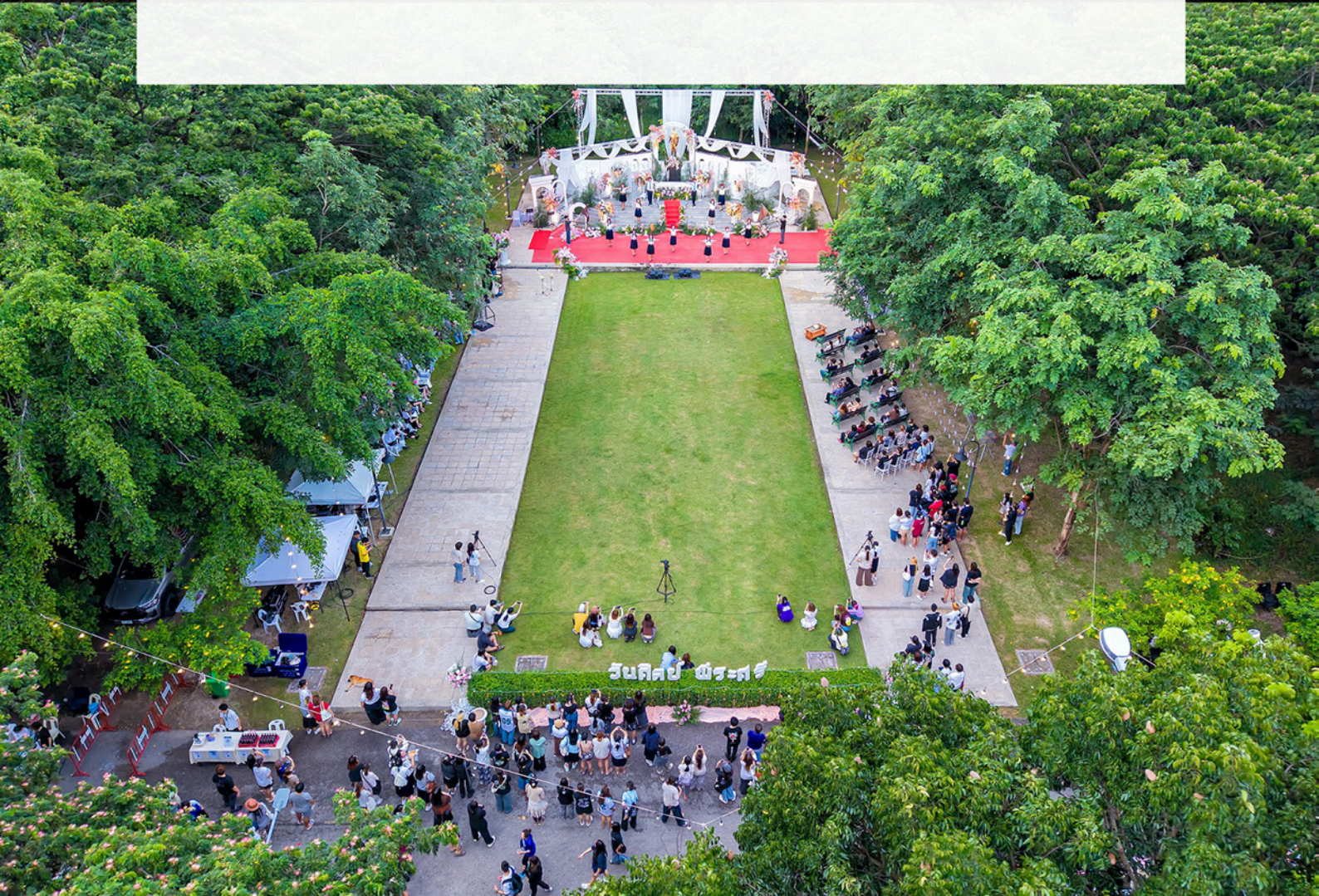
จำนวนนักศึกษาที่ลงทะเบียนเรียน
TOTAL NUMBER OF REGULAR STUDENTS (PART TIME AND FULL TIME)
27,372 REGULAR STUDENTS

จำนวนนักศึกษาที่ลงทะเบียนเรียนแบบออนไลน์
TOTAL NUMBER OF ONLINE STUDENTS (PART TIME AND FULL TIME)
27,372 ONLINE STUDENTS

จำนวนบุคลากรทั้งหมดภายในวิทยาเขต
TOTAL NUMBER OF ACADEMIC AND ADMINISTRATIVE STAFF
2,101 ACADEMIC AND ADMINISTRATIVE STAFF



จำนวนพื้นที่เปิดโล่งต่อจำนวนประชากรทั้งหมดภายในวิทยาเขต
THE TOTAL OPEN SPACE AREA DIVIDED BY TOTAL CAMPUS POPULATION
40-70 SQUARE METERS/PERSON





เงินงบประมาณทั้งหมด ทั้งเงินรายได้และเงินแผ่นดิน
TOTAL UNIVERSITY BUDGET (IN US DOLLARS)
21,522,058 US DOLLARS

งบประมาณที่มหาวิทยาลัยลงทุนเรื่องความยั่งยืนและมหาวิทยาลัยสีเขียว
UNIVERSITY BUDGET FOR SUSTAINABILITY EFFORTS (IN US DOLLARS)
5,402,890 US DOLLARS

มหาวิทยาลัยสนับสนุนงบประมาณที่เกี่ยวข้องกับด้านมหาวิทยาลัยสีเขียว
PERCENTAGE OF UNIVERSITY BUDGET FOR SUSTAINABILITY EFFORT
15%



สิ่งอำนวยความสะดวกสำหรับความต้องการพิเศษและหรือการคลอดบุตร
**CAMPUS FACILITIES FOR DIFABLE, SPECIAL NEEDS AND OR MATERNITY CARE
FACILITIES EXIST IN ALL BUILDINGS AND ARE FULLY OPERATED**

สิ่งอำนวยความสะดวกด้านความปลอดภัย
**SECURITY AND SAFETY FACILITIES
SECURITY AND SAFETY INFRASTRUCTURE AVAILABLE AND FULLY FUNCTIONING
AND SECURITYRESPONDING TIME FOR ACCIDENTS, CRIME, FIRE,
AND NATURAL DISASTERS IS LESS THAN 5 MINUTES**

สิ่งอำนวยความสะดวกโครงสร้างพื้นฐานด้านสุขภาพสำหรับนักเรียน อาจารย์ และบุคลากร เพื่อความเป็นอยู่ที่ดีขึ้น
**HEALTH INFRASTRUCTURE FACILITIES FOR STUDENTS, ACADEMICS AND ADMINISTRATIVE STAFFS' WELL-BEING
HEALTH INFRASTRUCTURE AVAILABLE (FIRST AID, EMERGENCY ROOM, CLINIC,HOSPITAL
AND CERTIFIEDPERSONEL), SYSTEM AND ACCESSIBLE FOR PUBLIC**





กองงานวิทยาเขตเพชรบุรี

การอนุรักษ์พันธุ์พืช สัตว์ป่า

**CONSERVATION: PLANT (FLORA), ANIMAL (FAUNA), OR WILDLIFE, GENETIC RESOURCES FOR FOOD AND AGRICULTURE SECURED IN EITHER MEDIUM OR LONG-TERM CONSERVATION FACILITIES
CONSERVATION PROGRAM >75% IMPLEMENTED**

การวางแผน การดำเนินการ การติดตาม และ/หรือการประเมินผลของโปรแกรมทั้งหมดที่เกี่ยวข้องกับการตั้งค่าและโครงสร้างพื้นฐานผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร

**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF ALL PROGRAMS RELATED TO SETTING AND INFRASTRUCTURE THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)
PROGRAM HAS BEEN IMPLEMENTED, EVALUATED, AND IS CURRENTLY REVISED**

ผลลัพธ์ของโครงการด้านสภาพแวดล้อมและโครงสร้างพื้นฐานที่มีต่อการสนับสนุนเป้าหมายการพัฒนาที่ยั่งยืน (SDGs)“

**IMPACT OF SETTING AND INFRASTRUCTURE PROGRAMS
IN SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS (SDGS).
SIGNIFICANT IMPACT (SUPPORTING 6-9 SDGS)**





การใช้พลังงานไฟฟ้าอย่างมีประสิทธิภาพ
ENERGY EFFICIENT APPLIANCES USAGE
95.04%

SILPAKORN UNIVERSITY

IS FIRMLY COMMITTED TO BEING AN ENVIRONMENTALLY CONSCIOUS AND SUSTAINABLE ORGANIZATION.

THE PRIMARY GOAL IS THE CONCRETE REDUCTION OF ELECTRICITY CONSUMPTION WITHIN THE UNIVERSITY.

TO ACHIEVE THIS OBJECTIVE, THE UNIVERSITY HAS INITIATED A MAJOR PROJECT TO ENHANCE THE EFFICIENCY OF ELECTRICAL APPLIANCES BY UPGRADING OUTDATED DEVICES TO MODERN, HIGH-EFFICIENCY MODELS. THIS PROJECT COVERS ALMOST EVERY TYPE OF ELECTRICAL APPLIANCE THAT CONTRIBUTES TO THE UNIVERSITY'S ENERGY USAGE, INCLUDING:

- **LIGHTING EQUIPMENT:** TRANSITIONING TO LED LAMPS TO REDUCE ENERGY CONSUMPTION AND INCREASE SERVICE LIFE.
- **COOLING/AIR CONDITIONING EQUIPMENT:** UPGRADING AIR CONDITIONERS, FREEZERS, FRIDGES, AND WATER DISPENSERS TO ENERGY-SAVING MODELS.
- **OFFICE/RESEARCH EQUIPMENT:** REPLACING COMPUTERS AND FANS.
- **UTILITY SYSTEMS:** IMPROVING PUMP MOTORS,

WHICH ARE VITAL FOR THE OPERATION OF THE BUILDING SYSTEMS. ALL NEW EQUIPMENT WILL BE SELECTED BASED ON INTERNATIONAL AND NATIONAL ENERGY STANDARDS, SPECIFICALLY THROUGH CERTIFICATION FROM THE ENERGY STAR LABEL OR THE THAILAND'S ENERGY EFFICIENCY NO.5 LABEL.

DETAILS AND USAGE DATA FOR THE VARIOUS DEVICES CURRENTLY IN USE ACROSS BOTH CAMPUSES ARE COMPILED IN THE TABLE BELOW. THIS INFORMATION WILL SERVE AS A DATABASE FOR PLANNING AND EXECUTING THE EQUIPMENT REPLACEMENT TO SUCCESSFULLY MEET THE ESTABLISHED GOALS.



พื้นที่อาคารอัจฉริยะทั้งหมดของมหาวิทยาลัย
TOTAL CAMPUS SMART BUILDING AREA (SQUARE METER)
433,108 SQUARE METER

การใช้งานอาคารอัจฉริยะ
SMART BUILDING IMPLEMENTATION
86.33 %

THE STATISTICS CLEARLY INDICATE THAT AN EXCEPTIONALLY HIGH PROPORTION OF THE UNIVERSITY'S PHYSICAL INFRASTRUCTURE IS INTEGRATED INTO THE SMART BUILDING FRAMEWORK.

SMART BUILDING AREA 433,108 M²
TOTAL CAMPUS BUILDING AREA 501,712 M²
PROPORTION COVERED APPROXIMATELY 86.33%



จำนวนแหล่งพลังงานหมุนเวียนในมหาวิทยาลัยศิลปากร
NUMBER OF RENEWABLE ENERGY SOURCES IN CAMPUS
MORE THAN 3 SOURCES

โปรดระบุแหล่งพลังงานหมุนเวียนในมหาวิทยาลัยและกำลังการผลิตเป็นกิโลวัตต์ชั่วโมง
PLEASE SPECIFY RENEWABLE ENERGY SOURCES IN CAMPUS AND PROVIDE CAPACITY PRODUCED IN KILOWATT HOUR

SOLAR POWER : 2,409,000 kWh

BIO DIESEL : 4,000 kWh

CLEAN BIOMASS : 36,000 kWh

COMBINE HEAT AND POWER : 5,000 kWh

The renewable energy source can produce about 2,454,000 kWh per year. The details are as follows:

1. **Solar cells** serve as a primary renewable energy source across our campuses, generating approximately 1,100 kilowatts of solar power produced 2,409,000 kWh per year.
2. Our university is recognized as a leading institution in **biomass** research, with numerous faculty members having published their findings in prestigious journals. This research has been leveraged to enhance the university's energy supply, utilizing about 15 kilowatts of clean biomass produced 36,000 kWh per year.
3. We operate a small **biodiesel** plant on campus, where a portion of the biodiesel produced is utilized to power the university's diesel vehicles, generating approximately 1.5 kilowatts of clean biomass produced 4,000 kWh per year.
4. In addition to biomass, we also harness **biogas**. Some biogas sources, managed by our faculty, are situated near the university, and we utilize this biogas for cooking activities on campus, with a capacity of about 2 kilowatts produced 5,000 kWh per year.

(It is important to note that while we do not have biogas sources directly on campus, we utilize biogas from nearby facilities).



สรุปการใช้พลังงานไฟฟ้าต่อปี
ELECTRICITY USAGE PER YEAR (IN KILOWATT HOUR)
20,378,003.68 kWh

THE TOTAL ELECTRICITY USAGE OF SILPAKORN UNIVERSITY,
SANAM CHANDRA PALACE CAMPUS,
IN THE PREVIOUS YEAR WAS **16,233,235.70 KWH**,
AND **PHETCHABURI INFORMATION TECHNOLOGY CAMPUS**
WAS **4,144,767.98 KWH**.
THEREFORE, **THE TOTAL ELECTRICITY USAGE**
WAS 20,378,003.68 KWH.

SANAM CHANDRA PALACE CAMPUS

TOTAL ANNUAL CONSUMPTION:

THE TOTAL ELECTRICITY USAGE OVER THE ENTIRE 12-MONTH PERIOD IS 16,233,235.70 KWH. PEAK CONSUMPTION: THE HIGHEST MONTHLY CONSUMPTION WAS RECORDED IN AUGUST 2025 WITH 1,696,092.50 KWH.

LOW CONSUMPTION: THE LOWEST CONSUMPTION OCCURRED IN MAY 2025 WITH 1,073,325.00 KWH.

HIGH-USAGE PERIOD: THERE IS A NOTICEABLE PATTERN OF HIGH USAGE DURING THE MONTHS OF MARCH, JULY, AUGUST 2025, AND SEPTEMBER, POTENTIALLY INDICATING HIGH OPERATIONAL ACTIVITY OR PERIODS OF PEAK COOLING DEMAND (HOT SEASON).

SEASONAL VARIATION: THE DIFFERENCE BETWEEN THE PEAK AND LOWEST MONTH IS SUBSTANTIAL, INDICATING SIGNIFICANT SEASONAL OR OPERATIONAL VARIANCE IN ENERGY DEMAND.

PHETCHABURI INFORMATION TECHNOLOGY CAMPUS

TOTAL ANNUAL CONSUMPTION: THE TOTAL ELECTRICITY USAGE FOR THE 12-MONTH PERIOD WAS 4,144,767.98 KWH.

PEAK CONSUMPTION: CONSUMPTION WAS CONSISTENTLY HIGHEST DURING THE MID-YEAR ACADEMIC AND HOT MONTHS:

THE THREE HIGHEST MONTHS WERE JULY 2025 (466,562.17 KWH), SEPTEMBER 2025 (462,047.33 KWH), AND AUGUST 2025 (460,232.76 KWH). USAGE WAS ALSO VERY HIGH IN OCTOBER 2024 AND MARCH 2025, BOTH AT APPROXIMATELY 444,800 KWH.

LOWEST CONSUMPTION: THE LOWEST USAGE OCCURRED IN THE TRANSITIONAL MONTHS, POTENTIALLY CORRELATING WITH REDUCED ON-CAMPUS ACTIVITY OR Milder WEATHER: APRIL 2025 (190,940.18 KWH) AND MAY 2025 (191,009.24 KWH) SHOWED THE ABSOLUTE LOWEST CONSUMPTION, WITH FIGURES LESS THAN HALF OF THE PEAK MONTHS.



จำนวนประชากรเทียบกับจำนวนการใช้พลังงานไฟฟ้า
TOTAL ELECTRICITY USAGE DIVIDED BY TOTAL CAMPUS' POPULATION (KWH PER PERSON)
2400 KWH PER PERSON

อัตราส่วนของการผลิตพลังงานทดแทนต่อการใช้พลังงานทั้งหมดต่อปี
THE RATIO OF RENEWABLE ENERGY PRODUCTION DIVIDED BY TOTAL ENERGY US
11.19 %



จำนวนโครงการนวัตกรรมด้านพลังงานและการเปลี่ยนแปลงสภาพภูมิอากาศ
**NUMBER OF INNOVATIVE PROGRAM(S) IN ENERGY AND CLIMATE CHANGE
MORE THAN 3 PROGRAMS**

โครงการมหาวิทยาลัยที่มีผลต่อการเปลี่ยนแปลงสภาพภูมิอากาศ
**IMPACTFUL UNIVERSITY PROGRAM(S) ON CLIMATE CHANGE
PROVIDE TRAINING, EDUCATIONAL MATERIALS, SEMINARS/CONFERENCES, AND ACTIVITIES
WHICH ARE IMPLEMENTED BY COMMUNITIES AT THE INTERNATIONAL LEVEL**

การวางแผน การดำเนินการ ติดตาม และ/หรือประเมินผลโครงการทั้งหมดที่เกี่ยวข้องกับพลังงาน
และการเปลี่ยนแปลงสภาพภูมิอากาศ ผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร
**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF ALL PROGRAMS RELATED TO ENERGY
AND CLIMATE CHANGE THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY
PROGRAM HAS BEEN IMPLEMENTED, EVALUATED, AND IS CURRENTLY REVISED**

ผลลัพธ์และผลกระทบของโครงการด้านพลังงานและการเปลี่ยนแปลงสภาพภูมิอากาศ
ต่อการสนับสนุนเป้าหมายการพัฒนาที่ยั่งยืน (SDGS)
**IMPACT OF ENERGY AND CLIMATE CHANGE PROGRAMS IN SUPPORTING THE
SUSTAINABLE DEVELOPMENT GOALS (SDGS).
SIGNIFICANT IMPACT (SUPPORTING 6-9 SDGS)**





ใช้กระเป๋าผ้า
แทนการใช้ถุงพลาสติก

งดรับถุงพลาสติก
เพื่อลดปริมาณขยะ
และตระหนักถึงสิ่งแวดล้อม

สโมสรนักศึกษาคณะวิทยาศาสตร์
มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี

โปรแกรมการรีไซเคิลขยะของมหาวิทยาลัย RECYCLING PROGRAM FOR UNIVERSITY WASTE 3R PROGRAM > 75% IMPLEMENTED

AS A CORE PART OF ITS SUSTAINABILITY MISSION, **SILPAKORN UNIVERSITY** HAS STRATEGICALLY IMPLEMENTED A COMPREHENSIVE 3R PROGRAM ACROSS BOTH CAMPUSES. THROUGH KEY INDUSTRY PARTNERSHIPS AND WIDESPREAD INITIATIVES, THE UNIVERSITY HAS ACHIEVED SIGNIFICANT SUCCESS IN ITS WASTE MANAGEMENT EFFORTS. A CORNERSTONE OF OUR STRATEGY IS WASTE REDUCTION AT THE SOURCE, ADDRESSED THROUGH A VARIETY OF POLICIES AND MEASURES. TO COMBAT SINGLE-USE PLASTIC WASTE, WE ACTIVELY ENCOURAGE STUDENTS AND STAFF TO USE PERSONAL CONTAINERS AND CUPS, A PRACTICE INCENTIVIZED BY DISCOUNTS AT ON-CAMPUS STORES AND CAFES. THIS IS COMPLEMENTED BY THE LAUNCH OF THE UNIVERSITY'S OWN BRANDED DRINKING WATER, DESIGNED TO MINIMIZE PLASTIC PACKAGING, AND THE ADOPTION OF BIODEGRADABLE BIOPLASTIC (PBS) CUPS IN OUR CAFETERIAS. FURTHERMORE, WE ARE ADVANCING OUR PAPERLESS POLICY BY TRANSITIONING TO A FULLY DIGITAL OPERATIONAL MODEL, WHICH INCLUDES DIGITAL TEACHING MATERIALS, PAPER-FREE ONLINE MEETINGS, AND A CENTRALIZED PLATFORM FOR ROOM AND VEHICLE RESERVATIONS TO ELIMINATE UNNECESSARY PAPERWORK. UNDERSCORING OUR COMMITMENT TO INTERNATIONAL STANDARDS, THE UNIVERSITY IS CURRENTLY IN THE PROCESS OF OBTAINING CARBON FOOTPRINT OF PRODUCTS (CFP) CERTIFICATION FROM THE THAILAND GREENHOUSE GAS MANAGEMENT ORGANIZATION (TGO). BEYOND REDUCTION, OUR PROGRAM EMPHASIZES RESOURCE MAXIMIZATION THROUGH ROBUST REUSE AND RECYCLING SYSTEMS. WE CHAMPION THE CIRCULAR ECONOMY BY PROMOTING THE REUSE OF MATERIALS; FOR INSTANCE, OUR CAMPUS RENOVATION AND LANDSCAPE PROJECTS INCLUDE A POLICY TO REPURPOSE SALVAGED CONSTRUCTION MATERIALS, SUCH AS REUSING OLD PAVING BLOCKS TO CREATE NEW WALKWAYS, SIGNIFICANTLY REDUCING CONSTRUCTION WASTE. OUR RECYCLING EFFORTS ARE SYSTEMATICALLY STRUCTURED AND STRENGTHENED BY MEMORANDA OF UNDERSTANDING (MOUS) WITH INDUSTRY LEADERS LIKE SCGP, TPBI, AND IVL, WHICH ESTABLISH CLEAR CHANNELS FOR PAPER AND PLASTIC RECYCLING. THE UNIVERSITY CONTINUOUSLY EXPANDS ITS RECYCLING CAPABILITIES TO CREATE A CLOSED-LOOP SYSTEM. WE HAVE RECENTLY EXTENDED OUR PROGRAM TO INCLUDE THE SEGREGATION OF UHT MILK CARTONS, WHICH ARE SENT TO A PARTNER FACILITY (ECO FRIENDLY THAI CO., LTD) FOR RECYCLING INTO "GREEN BOARDS," AN ECO-FRIENDLY CONSTRUCTION MATERIAL. OUR MANAGEMENT OF ORGANIC WASTE IS EQUALLY COMPREHENSIVE; FOOD WASTE, LEAVES, AND BRANCHES ARE COLLECTED AND CONVERTED INTO ORGANIC FERTILIZER USED TO NOURISH GREEN SPACES ACROSS THE CAMPUS. WE ARE NOW PLANNING TO COMMERCIALIZE THIS COMPOST FOR THE LOCAL COMMUNITY, WITH A PORTION OF THE REVENUE DESIGNATED TO FUND FUTURE SUSTAINABILITY ACTIVITIES. THIS HOLISTIC APPROACH NOT ONLY ENHANCES OUR ENVIRONMENTAL MANAGEMENT BUT ALSO FOSTERS A DEEPLY INGRAINED CULTURE OF ENVIRONMENTAL RESPONSIBILITY AMONG ALL STUDENTS AND STAFF.



ปริมาณกระดาษและพลาสติกทั้งหมดที่เกิดขึ้นจากการใช้ในปี
TOTAL VOLUME OF PAPER AND PLASTIC PRODUCED THIS YEAR
3,015 TONS

IN 2025, **THE CAMPUS PRODUCED 3,015 TONS OF WASTE**, CONSISTING OF 2,528 TONS OF PLASTIC AND 487 TONS OF PAPER. THIS REPRESENTS A TOTAL REDUCTION OF 785 TONS (20.7%) COMPARED TO 2024. PLASTIC WASTE COMPRISED 823 TONS OF SOFT PLASTIC AND 1,705 TONS OF HARD PLASTIC, WHILE PAPER WASTE WAS ENTIRELY OFFICE PAPER.

ปริมาณกระดาษและพลาสติกทั้งหมดที่เกิดขึ้นจากการใช้ในปี
TOTAL VOLUME OF PAPER AND PLASTIC PRODUCED THIS YEAR
3,800 TONS

LAST YEAR, OUR CAMPUS PRODUCED A TOTAL OF 3,800 TONS OF WASTE, COMPRISING 3,100 TONS OF PLASTIC AND 700 TONS OF PAPER. . THE PLASTIC WASTE CONSISTED OF 1,000 TONS OF SOFT PLASTIC (I.E. PLASTIC BAGS) AND 2,100 TONS OF HARD PLASTIC (I.E. PET BOTTLES), WHILE THE PAPER WASTE WAS ATTRIBUTED TO OFFICE PAPER.





โครงการลดการใช้กระดาษและพลาสติกภายในวิทยาเขต
PROGRAM TO REDUCE THE USE OF PAPER AND PLASTIC ON CAMPUS
MORE THAN 10 PROGRAMS

SILPAKORN UNIVERSITY IS COMMITTED TO FOSTERING AN ENVIRONMENTALLY RESPONSIBLE CAMPUS. WE HAVE IMPLEMENTED A MULTI-FACETED STRATEGY FOCUSED ON REDUCING PAPER AND PLASTIC CONSUMPTION THROUGH DIGITALIZATION, WASTE REDUCTION PROGRAMS, AND COMMUNITY ENGAGEMENT.

1. DIGITAL TRANSFORMATION FOR A PAPERLESS CAMPUS WE HAVE DIGITIZED CORE ADMINISTRATIVE PROCESSES TO SIGNIFICANTLY MINIMIZE PAPER USAGE:

1.1 UNIVERSITY-WIDE SYSTEMS: AN ONLINE "D-SARABAN" SYSTEM MANAGES ALL INTERNAL COMMUNICATIONS, WHILE DEDICATED WEB APPLICATIONS HANDLE LEAVE REQUESTS, ROOM/VEHICLE BOOKINGS, AND JOB APPLICATIONS, ELIMINATING TRADITIONAL PAPER FORMS.

1.2 PAPERLESS MEETINGS: WE UTILIZE IPADS AND ONLINE PLATFORMS LIKE ZOOM, MICROSOFT TEAM AND GOOGLE MEET FOR MEETINGS, REPLACING PRINTED AGENDAS, NOTES, AND HANDOUTS.

1.3 MINDFUL PRINTING: STAFF ARE ENCOURAGED TO PROOFREAD DOCUMENTS CAREFULLY BEFORE PRINTING TO PREVENT UNNECESSARY WASTE.

2. REDUCING SINGLE-USE PLASTICS & PROMOTING REUSABLES

OUR INITIATIVES ACTIVELY ENCOURAGE THE CAMPUS COMMUNITY TO ADOPT SUSTAINABLE HABITS:

2.1 INCENTIVE PROGRAMS: WE OFFER DISCOUNTS ON FOOD AND BEVERAGES AT PARTICIPATING SHOPS FOR INDIVIDUALS WHO BRING THEIR OWN CONTAINERS. FREE DRINKING WATER IS ALSO AVAILABLE AT REFILL STATIONS ACROSS CAMPUS.

2.2 REUSABLE ALTERNATIVES: WE PROMOTE THE USE OF CLOTH BAGS OVER SINGLE-USE PLASTIC BAGS THROUGH AWARENESS CAMPAIGNS AND BY DISTRIBUTING COMPLIMENTARY TOTE BAGS. THE "SU REFILL SHOP" OPERATES ON A ZERO-WASTE MODEL, OFFERING PRODUCTS WITHOUT SINGLE-USE PLASTIC PACKAGING.

2.3 ECO-FRIENDLY MATERIALS: WHEN DISPOSABLE ITEMS ARE NECESSARY, WE OPT FOR SUSTAINABLE ALTERNATIVES SUCH AS PAPER PLATES AND ECO-FRIENDLY STRAWS.

3. COMPREHENSIVE WASTE MANAGEMENT & EDUCATION

WE SUPPORT OUR REDUCTION EFFORTS WITH ROBUST RECYCLING INFRASTRUCTURE AND EDUCATIONAL OUTREACH:

3.1 EFFECTIVE RECYCLING: THE CAMPUS IS EQUIPPED WITH SEGREGATED WASTE BINS TO FACILITATE PROPER SORTING. WE HAVE ALSO ESTABLISHED PARTNERSHIPS WITH RECYCLING COMPANIES TO ENSURE MATERIALS ARE PROCESSED RESPONSIBLY.

3.2 COMMUNITY ENGAGEMENT: WE REGULARLY CONDUCT WORKSHOPS AND TRAINING SESSIONS TO EDUCATE STUDENTS AND STAFF ON EFFECTIVE SUSTAINABILITY PRACTICES AND BUILD A SHARED COMMITMENT TO OUR ENVIRONMENTAL GOALS. OF HARD PLASTIC, WHILE PAPER WASTE WAS ENTIRELY OFFICE PAPER.



ปริมาณขยะอินทรีย์ทั้งหมดที่ผลิตได้
TOTAL VOLUME ORGANIC WASTE PRODUCED THIS YEAR (TONS)
569 TONS

IN 2025, **SILPAKORN UNIVERSITY GENERATED 569 TONS OF ORGANIC WASTE**, REPRESENTING AN INCREASE OF 11 TONS (2.0%) FROM 558 TONS IN 2024. THE ORGANIC WASTE COMPRISED 185 TONS (32.5%) OF FOOD WASTE AND 384 TONS (67.5%) OF LEAVES AND SIMILAR MATERIALS. THE INCREASE IN FOOD WASTE GENERATION WAS ATTRIBUTED TO THE GROWING STUDENT POPULATION ON CAMPUS DURING THIS ACADEMIC YEAR.

ปริมาณขยะอินทรีย์ทั้งหมดที่ผ่านการบำบัดแล้วในปีล่าสุด
TOTAL VOLUME ORGANIC WASTE PRODUCED LAST YEAR (TONS)
558 TONS

IN 2024, **SILPAKORN UNIVERSITY PRODUCED 558 TONS OF ORGANIC WASTE**, CONSISTING OF FOOD WASTE AT 180 TONS (32.3%) AND LEAVES AND SIMILAR MATERIALS AT 378 TONS (67.7%).

ปริมาณรวมของของเสียอินทรีย์ที่ได้รับการบำบัดในปี
TOTAL VOLUME ORGANIC WASTE TREATED THIS YEAR
569 TONS

IN 2025, **SILPAKORN UNIVERSITY TREATED 569 TONS OF ORGANIC WASTE**, REPRESENTING 100% OF ALL ORGANIC WASTE GENERATED ON CAMPUS. THE TREATMENT PROCESS ENCOMPASSED 185 TONS OF FOOD WASTE AND 384 TONS OF LEAVES AND SIMILAR MATERIALS. TREATMENT METHODS INCLUDED DOWN-CYCLING 165 TONS OF FOOD WASTE, UP-CYCLING 20 TONS OF FOOD WASTE, AND UP-CYCLING ALL 384 TONS OF LEAVES AND ORGANIC MATERIALS. THE UNIVERSITY ACHIEVED COMPLETE DIVERSION OF ORGANIC WASTE FROM LANDFILLS, DEMONSTRATING FULL IMPLEMENTATION OF SUSTAINABLE WASTE TREATMENT PRACTICES ACROSS CAMPUS OPERATIONS.

ปริมาณรวมของของเสียอินทรีย์ที่ได้รับการบำบัดในปี
ORGANIC WASTE TREATMENT
EXTENSIVE(>85% TREATED)

SILPAKORN UNIVERSITY HAS IMPLEMENTED WASTE RECYCLING INITIATIVES ACROSS BOTH CAMPUSES TO REDUCE THE VOLUME OF WASTE AND RESIDUAL MATERIALS. ORGANIC WASTE, INCLUDING LEAVES AND FOOD RESIDUES FROM CAMPUS CANTEENS, IS UTILIZED AS RAW MATERIAL IN THE COMPOSTING PROCESS TO PRODUCE ORGANIC FERTILIZER FOR AGRICULTURAL PURPOSES WITHIN THE CAMPUS GROUNDS, THEREBY REPLACING CHEMICAL FERTILIZERS. SURPLUS COMPOST PRODUCTION IS DISTRIBUTED TO NEIGHBORING COMMUNITIES AND INTERESTED PARTIES. LEAVES AND BRANCHES ARE SHREDDED AND PROCESSED TO SERVE AS THE PRIMARY RAW MATERIAL FOR COMPOST PRODUCTION. THE MAJORITY OF FOOD WASTE IS COLLECTED AND REPURPOSED AS ANIMAL FEED, WHILE A PORTION UNDERGOES FERMENTATION TO PRODUCE INOCULANT CULTURES USED AS ADDITIVES IN THE COMPOST PRODUCTION PROCESS. THESE OPERATIONS ARE DIRECTLY MANAGED BY DESIGNATED UNIVERSITY DEPARTMENTS.



ปริมาณขยะอนินทรีย์ทั้งหมดที่ผลิตได้
TOTAL VOLUME INORGANIC WASTE PRODUCED THIS YEAR (TONS)
3,105 TONS

DURING THE 2025 ACADEMIC YEAR, SILPAKORN UNIVERSITY GENERATED A TOTAL OF 3,015 TONS OF INORGANIC NON-TOXIC WASTE ACROSS BOTH CAMPUSES, REPRESENTING A REDUCTION OF 785 TONS (20.7%) COMPARED TO THE PREVIOUS YEAR'S TOTAL OF 3,800 TONS.

ปริมาณขยะอนินทรีย์ทั้งหมดที่ผ่านการบำบัดแล้วในปีล่าสุด
TOTAL VOLUME INORGANIC WASTE PRODUCED LAST YEAR (TONS)
3,800 TONS

DURING THE 2024 ACADEMIC YEAR, SILPAKORN UNIVERSITY GENERATED A TOTAL OF 3,800 TONS OF INORGANIC NON-TOXIC WASTE ACROSS BOTH CAMPUSES. THE WASTE STREAM COMPRISED THREE PRIMARY CATEGORIES: PAPER WASTE (700 TONS, 18.4%), SOFT PLASTIC WASTE (1,000 TONS, 26.3%), AND HARD PLASTIC WASTE (2,100 TONS, 55.3%).

ปริมาณรวมของของเสียอนินทรีย์ที่ได้รับการบำบัดในปีนี้
TOTAL VOLUME INORGANIC WASTE TREATED THIS YEAR
2,750 TONS

DURING THE 2025 ACADEMIC YEAR, SILPAKORN UNIVERSITY ACHIEVED COMPLETE TREATMENT OF ALL 2,750 TONS OF INORGANIC NON-TOXIC WASTE GENERATED ACROSS BOTH CAMPUSES. THE ENTIRE WASTE VOLUME, COMPRISING 487 TONS OF PAPER, 663 TONS OF SOFT PLASTIC, AND 1,600 TONS OF HARD PLASTIC, WAS SUCCESSFULLY PROCESSED THROUGH RECYCLING AND REUSE TREATMENT METHODS, RESULTING IN A 91% DIVERSION RATE FROM LANDFILLS.

PLASTIC WASTE IS SYSTEMATICALLY SORTED DURING THE WASTE SEPARATION PROCESS, ALLOWING THE UNIVERSITY TO SELL BOTH SOFT AND HARD PLASTICS. HOWEVER, NOT ALL SOFT PLASTICS, SUCH AS POLYETHYLENE (PE) AND POLYPROPYLENE (PP), CAN BE SOLD, UNLIKE HARD PLASTICS LIKE POLYETHYLENE TEREPHTHALATE (PET), WHICH CAN BE ENTIRELY COMMERCIALIZED.

ของเสียอนินทรีย์ที่ได้รับการบำบัด
INORGANIC WASTE TREATMENT
EXTENSIVE(>85% TREATED)

SILPAKORN UNIVERSITY HAS IMPLEMENTED AN INTEGRATED INORGANIC WASTE MANAGEMENT FRAMEWORK ADDRESSING THE COMPLETE WASTE LIFE-CYCLE—FROM PREVENTION AND REDUCTION THROUGH TREATMENT TO RE-SOURCE RECOVERY.

1. DIGITAL INFRASTRUCTURE FOR WASTE PREVENTION
2. INTEGRATED PLASTIC WASTE REDUCTION STRATEGY
3. CONSTRUCTION WASTE MATERIAL RECOVERY
4. CIRCULAR ECONOMY IMPLEMENTATION AND EDUCATION



ปริมาณขยะมีพิษทั้งหมดที่ผลิตได้
TOTAL VOLUME TOXIC WASTE PRODUCED THIS YEAR (TONS)
4.5 TONS

DURING THE CURRENT ACADEMIC YEAR 2025, **SILPAKORN UNIVERSITY** PRODUCED A TOTAL OF 4.5 TONS OF TOXIC WASTE ACROSS CAMPUS OPERATIONS. THIS VOLUME COMPRISES 1.5 TONS OF ELECTRONIC WASTE AND 3 TONS OF LABORATORY CHEMICAL WASTE. THE REDUCTION IN OVERALL TOXIC WASTE PRODUCTION DEMONSTRATES THE UNIVERSITY'S ONGOING COMMITMENT TO ENVIRONMENTAL SUSTAINABILITY AND IMPROVED WASTE MANAGEMENT PRACTICES AT THE INSTITUTIONAL LEVEL.

ปริมาณขยะมีพิษทั้งหมดที่ผ่านการบำบัดแล้วในปีล่าสุด
TOTAL VOLUME TOXIC WASTE PRODUCED LAST YEAR (TONS)
5.25 TONS

IN THE PREVIOUS ACADEMIC YEAR 2024, THE UNIVERSITY GENERATED A TOTAL OF 5.25 TONS OF TOXIC WASTE. THIS INCLUDED 2 TONS OF ELECTRONIC WASTE FROM OBSOLETE EQUIPMENT AND TECHNOLOGICAL DEVICES, AND 3.25 TONS OF LABORATORY CHEMICAL WASTE FROM RESEARCH AND EDUCATIONAL ACTIVITIES. THESE FIGURES SERVE AS THE BASELINE FOR MEASURING THE UNIVERSITY'S YEAR-OVER-YEAR IMPROVEMENT IN TOXIC WASTE REDUCTION INITIATIVES.

ปริมาณขยะมีพิษที่ได้รับการบำบัดในปีนี้
TOTAL VOLUME TOXIC WASTE TREATED THIS YEAR
4.5 TONS

THE UNIVERSITY HAS SUCCESSFULLY TREATED AND MANAGED 3.5 TONS OF TOXIC WASTE THROUGH VARIOUS SUSTAINABLE METHODS DURING THE 2025 ACADEMIC YEAR. TREATMENT PROCESSES INCLUDED REUSING 1 TON OF ELECTRONIC WASTE COMPONENTS AND DOWN-CYCLING 3 TONS OF LABORATORY CHEMICALS THROUGH APPROPRIATE DISPOSAL AND CONVERSION METHODS. ADDITIONALLY, THE UNIVERSITY ACHIEVED A REDUCTION OF 0.75 TONS IN TOTAL TOXIC WASTE PRODUCTION COMPARED TO THE PREVIOUS YEAR, REFLECTING A 14.3% DECREASE THAT UNDERSCORES THE EFFECTIVENESS OF THE INSTITUTION'S WASTE MINIMIZATION STRATEGIES AND ENVIRONMENTAL STEWARDSHIP PROGRAMS.

การบำบัดขยะมีพิษ
TOXIC WASTE TREATMENT
EXTENSIVE(>85% TREATED)

THE UNIVERSITY MAINTAINS COMPREHENSIVE DOCUMENTATION OF TOXIC WASTE VOLUMES GENERATED FROM ELECTRONIC EQUIPMENT AND LABORATORY OPERATIONS ACROSS VARIOUS ACADEMIC DEPARTMENTS, AS PRESENTED IN THE ACCOMPANYING DATA TABLE. ELECTRONIC WASTE IS MANAGED THROUGH SUSTAINABLE PRACTICES INCLUDING RESALE TO CERTIFIED RECYCLERS AND DONATION PROGRAMS BENEFITING UNDER-RESOURCED EDUCATIONAL INSTITUTIONS. ANY REMAINING ELECTRONIC WASTE REQUIRING DISPOSAL IS HANDLED THROUGH AUTHORIZED LANDFILL FACILITIES OPERATED BY THE UNIVERSITY'S CONTRACTED WASTE MANAGEMENT PARTNER. CHEMICAL WASTE GENERATED FROM LABORATORY OPERATIONS WITHIN THE FACULTY OF SCIENCE, FACULTY OF PHARMACY, AND FACULTY OF ENGINEERING IS COLLECTED AND TREATED BY LICENSED PRIVATE WASTE MANAGEMENT CONTRACTORS. ALL CHEMICAL WASTE TREATMENT PROCEDURES COMPLY WITH THE REGULATORY STANDARDS ESTABLISHED BY THE MINISTRY OF HIGHER EDUCATION, SCIENCE, RESEARCH AND INNOVATION OF THAILAND, ENSURING SAFE AND ENVIRONMENTALLY RESPONSIBLE DISPOSAL PRACTICES IN ACCORDANCE WITH NATIONAL LABORATORY CERTIFICATION REQUIREMENTS.



การบำบัดของเสีย
SEWAGE DISPOSAL

TREATED WITH TERTIARY TREATMENT

SILPAKORN UNIVERSITY HAS IMPLEMENTED A COMPREHENSIVE WASTEWATER MANAGEMENT SYSTEM. PRELIMINARY TREATMENT SYSTEMS ARE INSTALLED UNDER EACH BUILDING, FEEDING INTO A CENTRAL POND FOR ADVANCED TERTIARY TREATMENT USING UV IRRADIATION AND AERATION.

THE RECYCLED WATER IS THEN REUSED FOR TOILET FLUSHING. THIS PROJECT IS CURRENTLY UNDER CONSTRUCTION AT THE SANAM CHANDRA PALACE CAMPUS, WITH COMPLETION EXPECTED BY 2026. A SIMILAR SYSTEM HAS ALREADY BEEN SUCCESSFULLY IMPLEMENTED AT THE PHETCHABURI INFORMATION TECHNOLOGY CAMPUS.



การวางแผน การดำเนินการ ติดตาม และ/หรือประเมินผลโครงการทั้งหมดที่เกี่ยวข้องกับการจัดการของเสีย
ผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร

**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF ALL PROGRAMS RELATED TO WASTE MANAGEMENT
THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY
PROGRAM HAS BEEN IMPLEMENTED AND EVALUATED**

SILPAKORN UNIVERSITY HAS IMPLEMENTED AN INFORMATION TECHNOLOGY SYSTEM
TO MONITOR WASTE DISPOSAL PRACTICES AS FOLLOWS.

PLANNING:

- DESIGNED GOOGLE FORM SYSTEM FOR WASTE SORTING OBSERVATIONS
- PLANNED DATA RECORDING STRUCTURE FOR WASTE VOLUME TRACKING BY TYPE
- DEVELOPED FRAMEWORK FOR INTEGRATING LOAD CELL TECHNOLOGY INTO CENTRAL FACILITIES

IMPLEMENTATION:

- IMPLEMENTED INFORMATION TECHNOLOGY SYSTEM FOR WASTE DISPOSAL MONITORING
 - INTRODUCED LOAD CELL TECHNOLOGY AT CENTRAL WASTE FACILITIES
 - DEPLOYED DATA RECORDING SYSTEMS ACROSS FACULTIES AND DEPARTMENTS

MONITORING:

- CONDUCTED CONTINUOUS WASTE SORTING OBSERVATIONS USING GOOGLE FORMS
- RECORDED WASTE DATA FROM EACH FACULTY AND DEPARTMENT THROUGH LOAD CELL TECHNOLOGY
 - TRACKED WASTE VOLUMES BY TYPE IN REAL-TIME
 - COLLECTED DETAILED AND ACCURATE WASTE MANAGEMENT DATA

EVALUATION:

- ANALYZED TRACKING RESULTS FROM CONTINUOUS MONITORING
- ASSESSED WASTE DISPOSAL PRACTICES ACROSS CAMPUS UNITS
- REVIEWED DETAILED WASTE DATA FOR MANAGEMENT EFFECTIVENESS

ADDITIONALLY, SILPAKORN UNIVERSITY PLANS TO TRANSITION FROM MANUAL DATA COLLECTION METHODS
TO AUTOMATED SYSTEMS. THIS ENHANCEMENT WILL BE ACHIEVED THROUGH THE IMPLEMENTATION OF
A SMART WASTE BIN PROTOTYPE SYSTEM DEVELOPED IN COLLABORATION WITH THE FACULTY OF ENGINEERING
AND INDUSTRIAL TECHNOLOGY. THE PILOT PROJECT WILL BE DEPLOYED AT THE SANAM CHANDRA PALACE CAMPUS,
WITH FULL OPERATIONAL CAPACITY ANTICIPATED BY 2026.





ผลลัพธ์ของการจัดการของเสียที่มีต่อการสนับสนุนเป้าหมายการพัฒนาที่ยั่งยืน (SDGs)
IMPACT OF WASTE MANAGEMENT PROGRAMS IN SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)
SIGNIFICANT IMPACT (SUPPORTING 6-9 SDGs)

SUSTAINABLE DEVELOPMENT GOALS



SILPAKORN UNIVERSITY'S COMPREHENSIVE WASTE MANAGEMENT PROGRAM DEMONSTRATES STRONG ALIGNMENT WITH SUSTAINABLE DEVELOPMENT GOALS (SDGs) 12 AND 13. THE RELATED ACTIVITIES ARE SUMMARIZED IN DETAIL BELOW:

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

- 3R PROGRAM IMPLEMENTATION (REDUCE, REUSE, RECYCLE)
- SINGLE-USE PLASTIC REDUCTION THROUGH PERSONAL CONTAINER INCENTIVES
- BIODEGRADABLE BIOPLASTIC (PBS) CUPS IN CAFETERIAS
- UNIVERSITY-BRANDED DRINKING WATER WITH MINIMAL PACKAGING
- PAPERLESS DIGITAL OPERATIONS
- CONSTRUCTION MATERIAL REUSE (REPURPOSING OLD PAVING BLOCKS)
- MOUS WITH SCGP, TPBI, AND IVL FOR PAPER AND PLASTIC RECYCLING
- UHT MILK CARTON SEGREGATION AND RECYCLING
- CARBON FOOTPRINT OF PRODUCTS (CFP) CERTIFICATION PURSUIT

SDG 13: CLIMATE ACTION

- CARBON FOOTPRINT OF PRODUCTS (CFP) CERTIFICATION FROM TGO
- PAPERLESS POLICY REDUCING DEFORESTATION
- PLASTIC WASTE REDUCTION LOWERING GREENHOUSE GAS EMISSIONS
- ORGANIC COMPOSTING REDUCING LANDFILL METHANE EMISSIONS

ADDITIONALLY, SEVERAL ACTIVITIES SUPPORT BROADER SDGS, AS FOLLOWS:

SDG 4: QUALITY EDUCATION

- DIGITAL TEACHING MATERIALS AND PAPERLESS OPERATIONS
- ENVIRONMENTAL RESPONSIBILITY CULTURE DEVELOPMENT FOR STUDENTS AND STAFF

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

- UHT CARTON-TO-GREEN BOARD RECYCLING INNOVATION
- DIGITAL PLATFORM FOR ROOM/VEHICLE RESERVATIONS
- CLOSED-LOOP RECYCLING SYSTEMS

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

- ORGANIC WASTE COMPOSTING FOR CAMPUS GREEN SPACES
- COMPOST COMMERCIALIZATION FOR LOCAL COMMUNITIES
- CONSTRUCTION MATERIAL SALVAGE AND REUSE POLICY

SDG 15: LIFE ON LAND

- ORGANIC WASTE CONVERSION TO FERTILIZER
- CHEMICAL-FREE CAMPUS GREEN SPACE NOURISHMENT
- BIODIVERSITY SUPPORT THROUGH ECOSYSTEM PRESERVATION

SDG 17: PARTNERSHIPS FOR THE GOALS

- MOUS WITH SCGP, TPBI, AND IVL
- PARTNERSHIP WITH ECO FRIENDLY THAI CO., LTD
- COLLABORATION WITH THAILAND GREENHOUSE GAS MANAGEMENT ORGANIZATION (TGO)
- COMMUNITY ENGAGEMENT THROUGH COMPOST SALES PROGRAM



UI GREEN METRIC SUSTAINABILITY REPORT 2023
SILPAKORN UNIVERSITY : SANAM CHANDRA PALACE | PHETCHABURI INFORMATION TECHNOLOGY

WATER

การอนุรักษ์น้ำ นโยบายในการจัดการน้ำ WATER CONSERVATION PROGRAM IMPLEMENTATION 50% WATER CONSERVED

SILPAKORN UNIVERSITY HAS IMPLEMENTED SYSTEMATIC WATER MANAGEMENT POLICIES AND PROJECTS UNDER THE CONCEPT OF “**SILPAKORN GREEN CAMPUS**” TO PROMOTE EFFICIENT AND SUSTAINABLE WATER USE. THESE INITIATIVES INTEGRATE WATER CONSERVATION, WASTEWATER TREATMENT, WATER REUSE, AND AWARENESS PROGRAMS, ALIGNING WITH SDG 6: CLEAN WATER AND SANITATION.

IN 2024 (B.E. 2567), THE UNIVERSITY ANNOUNCED THREE KEY POLICIES RELATED TO WATER AND ENVIRONMENTAL MANAGEMENT:

- WATER MANAGEMENT POLICY (2024) - FOCUSES ON REDUCING TAP-WATER CONSUMPTION, IMPROVING WASTEWATER-TREATMENT EFFICIENCY, AND ENCOURAGING RESPONSIBLE WATER USE ACROSS ALL UNITS.
 - POLICY ON BIODIVERSITY CONSERVATION AND UTILIZATION OF WATER RESOURCES (2024) - AIMS TO PROTECT AQUATIC ECOSYSTEMS, CONTROL WASTEWATER DISCHARGE, PROMOTE RAINWATER HARVESTING, AND STRENGTHEN COMMUNITY COLLABORATION IN WATER-RESOURCE RESTORATION.
 - NET ZERO EMISSION POLICY (2024) - LINKS WATER AND ENERGY MANAGEMENT TO THE UNIVERSITY'S CARBON-REDUCTION GOALS, TARGETING CARBON NEUTRALITY BY 2039 (B.E. 2582) THROUGH EFFICIENT USE OF WATER AND ENERGY.
- THESE POLICIES HAVE BEEN EFFECTIVELY TRANSLATED INTO ACTIONS THROUGH VARIOUS FACULTY- AND DIVISION-LEVEL INITIATIVES SUITED TO THEIR SPECIFIC CONTEXTS.

EXAMPLES OF WATER-CONSERVATION PROJECTS AND UNIT-LEVEL INITIATIVES

- FACULTY OF SCIENCE OPERATES WASTEWATER-TREATMENT PONDS TO REMOVE CONTAMINANTS FROM SCIENCE BUILDINGS 1 AND 4.
- CENTRAL LIBRARY OFFICE DISPLAYS “SAVE WATER” STICKERS IN DISHWASHING AREAS AND STAFF RESTROOMS TO RAISE AWARENESS OF WATER CONSERVATION.
- FACULTY OF PHARMACY IMPLEMENTS THE PROJECT “WASTEWATER TREATMENT WITH ALTERNATIVE ENERGY – THE BEGINNING OF A LOW CARBON SOCIETY,” INSTALLING A SOLAR-POWERED AERATOR IN THE WASTEWATER-TREATMENT POND. THE ACTIVITY WAS PROMOTED THROUGH THE FACULTY NEWSLETTER “PHA MA SEE” (JANUARY 2024) TO ENHANCE AWARENESS OF RENEWABLE-ENERGY WASTEWATER TREATMENT.
- NEW STUDENT ORIENTATION 2025 – “SU DIVERSITY OF CREATIVITIES” ALL NEW STUDENTS RECEIVED SU REUSE GLASS BOTTLES TO PROMOTE ENVIRONMENTAL AWARENESS AND SUSTAINABLE LIFESTYLES, REFLECTING SDG 12 (SUSTAINABLE CONSUMPTION AND PRODUCTION).
- SANAM CHANDRA PALACE CAMPUS OFFICE ORGANIZED THE ACTIVITY “REDUCE WASTE, REDUCE POLLUTION, SAVE THE ENVIRONMENT,” DISTRIBUTING REUSABLE WATER BOTTLES TO STAFF TO REDUCE PLASTIC WASTE AND ENCOURAGE RESPONSIBLE WATER CONSUMPTION.

WATER-INFRASTRUCTURE SYSTEMS AND TECHNICAL MEASURES

SILPAKORN UNIVERSITY CONTINUOUSLY UPGRADES ITS WATER-MANAGEMENT INFRASTRUCTURE TO ENSURE EFFICIENCY AND SUSTAINABILITY:

- SEPARATE SEWERAGE AND RAINWATER DRAINAGE SYSTEM IMPLEMENTED AT BOTH SANAM CHANDRA PALACE AND PHETCHABURI INFORMATION TECHNOLOGY CAMPUSES TO PREVENT WASTEWATER CONTAMINATION. WASTEWATER FROM ACADEMIC AND ADMINISTRATIVE BUILDINGS IS DIRECTED TO THE CENTRAL TREATMENT POND, AND TREATED WATER IS REUSED FOR LANDSCAPE IRRIGATION AND GREEN-AREA MAINTENANCE.
- WATER REUSE PUMPING SYSTEM RECLAIMED WATER IS PUMPED BACK FOR CAMPUS LANDSCAPE MAINTENANCE, REDUCING DEPENDENCE ON MUNICIPAL WATER SUPPLY.
- AERATOR INSTALLATION AERATORS ARE INSTALLED IN PONDS TO MAINTAIN WATER QUALITY, INCREASE DISSOLVED OXYGEN, AND PREVENT STAGNATION.
- WATER-SAVING SANITARY FIXTURES (THAI GREEN LABEL STANDARD)
 - FAUCETS: FLOW \leq 4.5 L/MIN
 - URINALS: \leq 1.6 L/FLUSH
 - TOILETS: \leq 4.8 L/FLUSH
- SILICONE BUTTONS INSTALLED TO CONTROL WATER FLOW IN OVER 75 PERCENT OF UNIVERSITY BUILDINGS
- WATER CONSERVATION SIGNAGE “SAVE WATER” AWARENESS SIGNS AND STICKERS ARE DISPLAYED ACROSS ALL BUILDINGS TO PROMOTE RESPONSIBLE WATER USE.

AT PHETCHABURI CAMPUS

1. INTEGRATED AREA PROJECT TO SOLVE FLOODING PROBLEMS ON TRANSPORTATION ROUTES: THE PROJECT INCLUDES THE EXCAVATION OF A WATER RETENTION POND COVERING AN AREA OF OVER 3 RAI (APPROXIMATELY 4,800 SQUARE METERS), CAPABLE OF STORING 19,200 CUBIC METERS OF RAINWATER. THIS INITIATIVE EFFECTIVELY ADDRESSES THE FLOODING ISSUES ON TRANSPORTATION ROUTES.

2. WASTEWATER TREATMENT POND PROJECT: PHETCHABURI CAMPUS HAS IMPLEMENTED A WASTEWATER REUSE SYSTEM, USING WATER FROM THE THIRD TREATMENT POND TO IRRIGATE FRUIT TREES.

THE DETAILS OF POND 3 ARE AS FOLLOWS:

DIMENSIONS OF THE WASTEWATER TREATMENT POND (POND 3):

WIDTH: 47.15 METERS, LENGTH: 151.62 METERS, DEPTH: 2.30 METERS, WHICH EQUALS AN AREA OF 7,148.89 SQUARE METERS.

TRAPEZOID-SHAPED AREA: WIDTH: 37.35 METERS, LENGTH: 141.82 METERS, EQUATING TO 5,296.98 SQUARE METERS.

VOLUME OF REUSED OR RECYCLED WATER:

CALCULATION: $(7,148.89 + 5,296.98) / 2 = 6,222.94 * 2.30$ METERS.

TOTAL VOLUME OF WATER IN POND 3 = 14,312.77 CUBIC METERS.

THEREFORE, FOR OUR CAMPUSES OVER 75% OF THE WATER HAS BEEN CONSERVED.



การนำน้ำเสียกลับมาใช้ใหม่
WATER RECYCLING PROGRAM IMPLEMENTATION
MORE THAN 25 - 50% WATER RECYCLED

1. WATER TANKS ARE USED TO COLLECT CONDENSATION FROM AIR CONDITIONING SYSTEMS.
2. THE NEWLY CONSTRUCTED WATER TREATMENT SYSTEM.
3. WATER FROM THE DRINKING WATER PROCESS IS RECYCLED BACK INTO THE SYSTEM FOR FURTHER TREATMENT.
4. REUSE OF TREATED WATER FOR IRRIGATION OF GREEN AREAS AT SANAM CHANDRA PALACE CAMPUS, SILPAKORN UNIVERSITY
5. SILPAKORN UNIVERSITY, PHETCHABURI IT CAMPUS, RECEIVED ASSISTANCE FROM THE LAEM PHAK BIA ROYAL PROJECT IN DESIGNING AN OPEN DRAINAGE SYSTEM FOR WASTEWATER FROM VARIOUS BUILDINGS. THE WATER FLOWS INTO WASTEWATER TREATMENT PONDS 1, 2, AND 3 SEQUENTIALLY. THESE PONDS RELY ON NATURAL PROCESSES SUCH AS GRASS, SUNLIGHT, AND WIND. THE PHETCHABURI CAMPUS OFFICE HAS INSTALLED AN IRRIGATION SYSTEM THAT USES TREATED WATER FROM POND 3, WHICH HAS UNDERGONE PURIFICATION AND QUALITY CHECKS, TO IRRIGATE FRUIT TREES IN THE AGROFORESTRY PROJECT AREA AND THE SUFFICIENCY ECONOMY LEARNING CENTER.

MORE THAN 40% OF WASTEWATER FOR BOTH CAMPUSES HAS BEEN RECYCLED FOR REUSE.

การใช้อุปกรณ์ประหยัดน้ำ

WATER EFFICIENT APPLIANCES USAGE

MORE THAN 80% OF WATER EFFICIENT APPLIANCES INSTALLED

SILPAKORN UNIVERSITY PROMOTES WATER EFFICIENCY THROUGH THE INSTALLATION OF LOW-FLOW AND AUTOMATIC FIXTURES ACROSS ALL CAMPUSES. WATER-SAVING TAPS, LOW-FLUSH TOILETS, AND SILICONE-BUTTON BIDET SHOWERS HAVE BEEN INSTALLED IN RESTROOMS AND LABORATORIES TO MINIMIZE WATER WASTE. FLOW RESTRICTORS ARE APPLIED IN LABORATORY SINKS TO REDUCE WATER DISPERSION. APPROXIMATELY 81.2% OF WATER-EFFICIENT FIXTURES HAVE BEEN INSTALLED ACROSS BOTH SANAM CHANDRA PALACE AND PHETCHABURI CAMPUSES. THIS INITIATIVE CONTRIBUTES TO THE UNIVERSITY'S SUSTAINABILITY POLICY AND ALIGNS WITH SDG 6: CLEAN WATER AND SANITATION.

น้ำที่ผ่านการบำบัดและนำกลับมาใช้ใหม่

CONSUMPTION OF TREATED WATER

MORE THAN 50 - 75% TREATED WATER CONSUMED

OUR UNIVERSITY HAS EFFECTIVELY IMPLEMENTED A COMPREHENSIVE WATER MANAGEMENT STRATEGY THAT MAXIMIZES THE USE OF TREATED WATER. OVER 50% OF THE TREATED WATER IS ACTIVELY UTILIZED BY BOTH STUDENTS AND STAFF, HIGHLIGHTING THE COMMITMENT TO SUSTAINABILITY AND RESOURCE EFFICIENCY. THE INTEGRATION OF ADVANCED PROCESSES, SUCH AS DISTILLATION, ALLOWS FOR THE REINTRODUCTION OF WATER FROM THE DRINKING WATER TREATMENT PROCESS BACK INTO THE DRINKING SUPPLY, ENSURING A CONTINUOUS CYCLE OF WATER USE. FURTHERMORE, THE UTILIZATION OF WATER FROM THE WASTEWATER TREATMENT POND FOR GARDENING DEMONSTRATES OUR DEDICATION TO ENVIRONMENTAL STEWARDSHIP AND THE PROMOTION OF GREEN SPACES ON CAMPUS. THE INCORPORATION OF WATER FROM AIR CONDITIONING SYSTEMS AND THE WASTEWATER SYSTEM FOR FLUSHING PURPOSES FURTHER EXEMPLIFIES INNOVATIVE APPROACHES TO RESOURCE MANAGEMENT. THE ESTABLISHMENT OF A NEWLY CONSTRUCTED WATER TREATMENT PLANT AND AN EFFICIENT IRRIGATION SYSTEM REFLECTS OUR ONGOING EFFORTS TO ENHANCE WATER CONSERVATION PRACTICES, SUPPORTING BOTH EDUCATIONAL AND ENVIRONMENTAL GOALS WITHIN THE UNIVERSITY COMMUNITY. OVERALL, THESE INITIATIVES NOT ONLY CONTRIBUTE TO THE UNIVERSITY'S SUSTAINABILITY OBJECTIVES BUT ALSO SERVE AS A MODEL FOR RESPONSIBLE WATER MANAGEMENT IN EDUCATIONAL INSTITUTIONS.



การควบคุมมลพิษทางน้ำภายในวิทยาเขต

WATER POLLUTION CONTROL IN CAMPUS AREA

**POLICY AND PROGRAMS FOR WATER POLLUTION CONTROL
ARE FULLY IMPLEMENTED AND MONITORED REGULARLY**

SILPAKORN UNIVERSITY PLACES GREAT IMPORTANCE ON THE CONTINUOUS CONTROL AND PREVENTION OF WATER POLLUTION ACROSS BOTH CAMPUSES. AT THE SANAM CHANDRA PALACE CAMPUS, PREVENTIVE MEASURES HAVE BEEN IMPLEMENTED BEFORE THE DISCHARGE OF WASTEWATER. FOOD AND GREASE TRAPS HAVE BEEN INSTALLED IN ALL BUILDINGS BEFORE THE WASTEWATER IS RELEASED INTO THE TREATMENT POND. IN 2025, ADDITIONAL OPERATIONAL MEASURES WERE INTRODUCED BY CARRYING OUT GREASE AND WASTE REMOVAL IN DRAINAGE PIPES AND CLEANING THE BACK AREAS OF SAKAEW AND PHETCHARAT CANTEENS, IN COLLABORATION WITH THE NAKHON PATHOM MUNICIPALITY. THESE ACTIVITIES AIM TO PREVENT PIPE BLOCKAGES, REDUCE CONTAMINATION RISKS, AND MAINTAIN HYGIENE IN FOOD SERVICE AREAS WITHIN THE CAMPUS.

การวางแผน การดำเนินการ ติดตาม และ/หรือประเมินผลโครงการทั้งหมดที่เกี่ยวข้องกับการจัดการน้ำ
ผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร

**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF ALL PROGRAMS RELATED TO
WATER MANAGEMENT THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)
PROGRAM HAS BEEN IMPLEMENTED**

SILPAKORN UNIVERSITY SANAM CHANDRA PALACE CAMPUS HAS INSTALLED SIX WATER LEVEL MONITORING SIGNS ALONG THE SAKAEW CANAL AS TOOLS FOR MONITORING AND CONTROLLING WATER LEVELS FOR EFFECTIVE FLOODGATE OPERATION. THIS INITIATIVE HELPS REDUCE FLOODING RISKS AND SUPPORTS SYSTEMATIC WATER RESOURCE MANAGEMENT WITHIN THE CAMPUS. THE INSTALLATION POINTS INCLUDE THE 50TH ANNIVERSARY BRIDGE CANAL, SAKAEW BRIDGE CANAL (MARKET SIDE), PHETCHARAT CANTEEN CANAL (SCIENCE BUILDING 4 SIDE), THE OLD GARDEN OFFICE AREA, AND THE FRONT AND BACK OF THE DAM NEAR THAP KAEW DORMITORY 2. THIS PROJECT IS PART OF THE UNIVERSITY'S ONGOING DEVELOPMENT OF ENVIRONMENTAL INFRASTRUCTURE AND PUBLIC UTILITIES. IT NOT ONLY IMPROVES ON-CAMPUS WATER MANAGEMENT BUT ALSO REFLECTS THE ADOPTION OF SMART WATER MANAGEMENT PRACTICES, ENHANCING THE UNIVERSITY'S IMAGE IN SUSTAINABLE ENVIRONMENTAL OPERATIONS. IN THE FUTURE, THE UNIVERSITY PLANS TO INTEGRATE AUTOMATIC WATER-LEVEL SENSORS AND IOT-BASED OR ONLINE DASHBOARD ALERT SYSTEMS TO ENABLE REAL-TIME MONITORING AND CONTROL OF WATER LEVELS. THIS UPGRADE WILL ENHANCE PRECISION AND EFFICIENCY IN CAMPUS WATER MANAGEMENT AND SERVE AS A FOUNDATION FOR DEVELOPING A FULLY INTEGRATED SMART WATER MANAGEMENT SYSTEM



จำนวนรถยนต์ที่มหาวิทยาลัยเป็นเจ้าของ
NUMBER OF CARS ACTIVELY USED AND MANAGED BY THE UNIVERSITY
85 CARS

จำนวนรถยนต์ที่เข้ามาภายในวิทยาเขตในแต่ละวัน
NUMBER OF CARS ENTERING THE UNIVERSITY DAILY
1,972 CARS

จำนวนรถมอเตอร์ไซด์ที่เข้ามาภายในวิทยาเขตในแต่ละวัน
NUMBER OF MOTORCYCLES ENTERING THE UNIVERSITY DAILY
1,508 MOTORCYCLES

จำนวนยานพาหนะทั้งหมดต่อจำนวนประชากรภายในวิทยาเขต
THE TOTAL NUMBER OF VEHICLES DIVIDED BY TOTAL CAMPUS POPULATION
MORE THAN 0.045 - 0.125

การบริการรถรับส่ง
SHUTTLE SERVICES

PROVIDED BY UNIVERSITY, REGULAR, AND ZERO EMISSION VEHICLE. OR SHUTTLE USE IS NOT APPLICABLE

จำนวนรถรับ-ส่ง (รถโดยสาร/รถไฟฟ้า) ที่ให้บริการภายในวิทยาเขต
NUMBER OF SHUTTLES OPERATED IN YOUR UNIVERSITY
12 SHUTTLES

จำนวนผู้โดยสารเฉลี่ยของรถรับ-ส่ง แต่ละครั้ง
THE AVERAGE NUMBER OF PASSENGERS OF EACH SHUTTLE
77 PASSENGERS

จำนวนเที่ยวของรถไฟฟ้าที่ให้บริการโดยรวมในแต่ละวัน
TOTAL TRIPS OF EACH SHUTTLE SERVICES EACH DAY
54 TRIPS



นโยบายยานพาหนะที่ไม่ปล่อยมลพิษ มลพิษเป็นศูนย์
ZERO EMISSION VEHICLES (ZEV) POLICY ON CAMPUS
ZERO EMISSION VEHICLES ARE AVAILABLE, AND PROVIDED BY UNIVERSITY FOR FREE

จำนวนเฉลี่ยของยานพาหนะที่ไม่ปล่อยมลพิษในมหาวิทยาลัยแต่ละวัน
THE AVERAGE NUMBER OF ZERO EMISSION VEHICLES (ZEV) ON CAMPUS PER DAY
740 CARS

จำนวนทั้งหมดของยานพาหนะที่ไม่ปล่อยมลพิษในมหาวิทยาลัยต่อจำนวนประชากรภายในวิทยาเขต
THE TOTAL NUMBER OF ZERO EMISSION VEHICLES (ZEV) DIVIDED BY TOTAL CAMPUS OPULATION
MORE THAN 0.02



พื้นที่จอดรถยนต์ทั้งหมด
TOTAL PARKING AREA
26,593 SQUARE METER

อัตราส่วนพื้นที่จอดรถยนต์ต่อพื้นที่ทั้งหมด
THE RATIO OF THE PARKING AREA TO TOTAL CAMPUS AREA
MORE THAN 1 - 4%

นโยบายด้านการขนส่งของมหาวิทยาลัย เพื่อจำกัดและลดพื้นที่จอดรถในช่วง 3 ปี ที่ผ่านมา
PROGRAM TO LIMIT OR DECREASE THE PARKING AREA ON CAMPUS FOR THE LAST 3 YEARS (FROM 2022 TO 2024)
PROGRAM RESULTING IN MORE THAN 30% DECREASE IN PARKING AREA OR
PARKING AREA REDUCTION HAS REACHES ITS LIMIT.

นโยบายลดและจำกัดการนำรถยนต์ส่วนบุคคลเข้ามาภายในวิทยาเขต
NUMBER OF TRANSPORTATION INITIATIVES TO DECREASE PRIVATE VEHICLES ON CAMPUS
3 INITIATIVES, OR INITIATIVE NO LONGER REQUIRED



นโยบายการมีทางเดินเท้า/ฟุตบาท ภายในวิทยาเขต

PEDESTRIAN PATH POLICY ON CAMPUS

**PEDESTRIAN PATHS ARE AVAILABLE, DESIGNED FOR SAFETY CONVENIENCE,
AND IN SOME PARTS PROVIDED WITH DISABLED-FRIENDLY FEATURES**

ระยะทางการเดินทางโดยประมาณรายวันของยานพาหนะภายในมหาวิทยาลัย (กิโลเมตร)

APPROXIMATE DAILY TRAVEL DISTANCE OF A VEHICLE INSIDE CAMPUS ONLY

3.3 KILOMETERS



การวางแผน การดำเนินการ ติดตาม และ/หรือประเมินผลโครงการทั้งหมดที่เกี่ยวข้องกับการขนส่ง
ผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร

**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF ALL PROGRAMS RELATED TO TRANSPORTATION
THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)
PROGRAM HAS BEEN IMPLEMENTED**

ผลลัพธ์ของการจัดการของเสียที่มีต่อการสนับสนุนเป้าหมายการพัฒนาที่ยั่งยืน (SDGs)
**IMPACT OF TRANSPORTATION PROGRAMS IN SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)
SIGNIFICANT IMPACT (SUPPORTING 6-9 SDGs)**





จำนวนรายวิชา/หลักสูตรที่เกี่ยวข้องกับสิ่งแวดล้อม
NUMBER OF COURSES/SUBJECTS RELATED TO SUSTAINABILITY OFFERED
215 COURSES/SUBJECTS

จำนวนรายวิชา/หลักสูตร ที่เปิดสอน
TOTAL NUMBER OF COURSES/SUBJECTS OFFERED
256 COURSES/SUBJECTS

จำนวนหลักสูตรการศึกษาด้านความยั่งยืนที่เปิดสอนทั้งหมด
TOTAL NUMBER OF STUDY PROGRAM RELATED TO SUSTAINABILITY OFFERED
68 STUDY PROGRAM

อัตราส่วนของหลักสูตรความยั่งยืนต่อหลักสูตร รายวิชาทั้งหมด
THE RATIO OF SUSTAINABILITY COURSES TO TOTAL COURSES/SUBJECTS
MORE THAN 20%

เงินทุนวิจัยสำหรับงานวิจัยด้านสิ่งแวดล้อมความยั่งยืน
TOTAL RESEARCH FUNDS DEDICATED TO SUSTAINABILITY RESEARCH
4,610,000 USD

เงินทุนวิจัยทั้งหมดที่มหาวิทยาลัยได้รับโดยเฉลี่ย
TOTAL RESEARCH FUNDS (IN US DOLLARS)
5,480,000 USD

สัดส่วนของเงินทุนด้านสิ่งแวดล้อมและความยั่งยืน เทียบกับเงินทุนวิจัยทั้งหมด
THE RATIO OF SUSTAINABILITY RESEARCH FUNDING TO TOTAL RESEARCH FUNDING
MORE THAN 40%



จำนวนอาจารย์และนักวิจัยในมหาวิทยาลัยในรอบปี
NUMBER OF LECTUCERS AND RESEARCHERS ON CAMPUS IN ONE YEAR PERIOD
1242 LECTUCERS AND RESEARCHERS

จำนวนผลงานวิชาการ/ผลงานวิจัยด้านสิ่งแวดล้อมและความยั่งยืนในรอบปี
NUMBER OF SCHOLARLY PUBLICATIONS ON SUSTAINABILITY IN ONE YEAR PERIOD
784 SCHOLARLY PUBLICATIONS

อัตราส่วนของผลงานตีพิมพ์ทางวิชาการเกี่ยวกับความยั่งยืนต่ออาจารย์และนักวิจัยในมหาวิทยาลัยในรอบปี
RATIO OF SCHOLARLY PUBLICATIONS ON SUSTAINABILITY TO LECTURERS AND RESEARCHERS ON CAMPUS IN ONE YEAR PERIOD
0.5-1



จำนวนการจัดงานกิจกรรม/โครงการ ที่เกี่ยวข้องกับด้านสิ่งแวดล้อมและความยั่งยืน
NUMBER OF EVENTS RELATED TO SUSTAINABILITY
90 EVENTS

จำนวนกิจกรรม/โครงการที่จัดโดยองค์การนักศึกษาที่เกี่ยวข้องกับความยั่งยืนในรอบปี
NUMBER OF ACTIVITIES ORGANIZED BY STUDENT ORGANIZATIONS RELATED TO SUSTAINABILITY PER YEAR
58 ACTIVITIES

เว็บไซต์ที่เกี่ยวข้องกับด้านสิ่งแวดล้อม
UNIVERSITY-RUN SUSTAINABILITY WEBSITE
WEBSITE IS AVAILABLE, ACCESSIBLE, AND UPDATED REGULARLY

เว็บไซต์ที่เกี่ยวข้องกับด้านสิ่งแวดล้อม
SUSTAINABILITY WEBSITE ADDRESS (URL) IF AVAILABLE
WWW.SUGREENCAMPUS.SU.AC.TH
WWW.SUSTAINABILITY.SU.AC.TH

รายงานที่เกี่ยวข้องกับด้านสิ่งแวดล้อม
SUSTAINABILITY REPORT
SUSTAINABILITY REPORT IS ACCESSIBLE AND PUBLISHED ANNUALLY

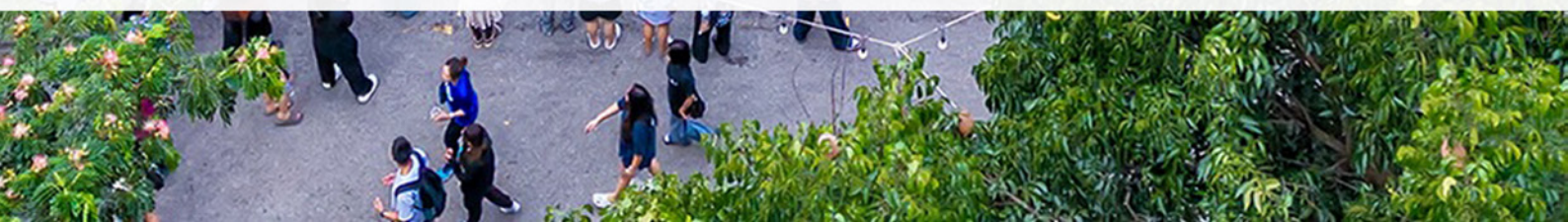
ที่อยู่รายงานความยั่งยืน
SUSTAINABILITY REPORT LINK ADDRESS
[HTTP://WWW.SUSTAINABILITY.SU.AC.TH/?PAGE_ID=2648](http://WWW.SUSTAINABILITY.SU.AC.TH/?PAGE_ID=2648)



จำนวนกิจกรรมทางวัฒนธรรมในวิทยาเขต
NUMBER OF CULTURAL ACTIVITIES ON CAMPUS
22 EVENTS PER YEAR

จำนวนโครงการของมหาวิทยาลัยที่รับมือกับแพร่ระบาดของเชื้อไวรัสโควิด-19
NUMBER OF UNIVERSITY PROGRAM(S) TO COPE WITH INTERNATIONAL COLLABORATIONS
12 PROGRAMS PER YEAR

จำนวนโครงการบริการชุมชนอย่างยั่งยืนหรือเกี่ยวข้องกับนักศึกษา
NUMBER OF SUSTAINABILITY COMMUNITY SERVICES PROJECT ORGANISED AND/OR INVOLVING STUDENTS
13 PROJECTS PER YEAR



จำนวนของโครงการใหม่ที่เกี่ยวข้องกับความยั่งยืน
NUMBER OF SUSTAINABILITY-RELATED STARTUPS
7 STARTUPS





จำนวนผู้สำเร็จการศึกษาที่เกี่ยวกับงานสีเขียวทั้งหมด
TOTAL NUMBER OF GRADUATES WITH GREEN JOBS
60 GRADUATES

จำนวนผู้สำเร็จการศึกษาทั้งหมด (รอบ 3 ปีล่าสุด)
TOTAL NUMBER OF GRADUATES
5,850 GRADUATES

ร้อยละของจำนวนบัณฑิตที่ทำงานด้วยสิ่งแวดล้อมในช่วง 3 ปีล่าสุด
PERCENTAGE OF NUMBER OF GRADUATES WITH GREEN JOBS (FOR THE LAST 3 YEARS)
LESS THAN 1%



ความพร้อมของหน่วยงานหรือสำนักงานที่ประสานงานหรือเกี่ยวข้องกับความยั่งยืน
**AVAILABILITY OF UNITS OR OFFICES THAT COORDINATE OR ARE RELATED TO SUSTAINABILITY
UNITS OR OFFICES WITH UNIVERSITY LEADER DECREE OF ESTABLISHMENT,
STRUCTURE AND DUTIES HAS BEEN OPERATIONAL
AND LEAD THE UNIVERSITY IMPLEMENTATION OF SUSTAINABILITY**

การวางแผน การดำเนินการ ติดตาม และ/หรือประเมินผลโครงการทั้งหมดที่เกี่ยวข้องกับการกำกับดูแลมหาวิทยาลัย
ผ่านการใช้เทคโนโลยีสารสนเทศและการสื่อสาร

**PLANNING, IMPLEMENTATION, MONITORING AND/OR EVALUATION OF UNIVERSITY GOVERNANCE
THROUGH THE UTILIZATION OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)
PROGRAM HAS BEEN IMPLEMENTED, EVALUATED, AND IS CURRENTLY REVISED**

ผลลัพธ์ของการศึกษาและวิจัยที่มีต่อการสนับสนุนเป้าหมายการพัฒนาที่ยั่งยืน (SDGs)
IMPACT OF EDUCATION AND RESEARCH PROGRAMS IN SUPPORTING THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)
VERY HIGH IMPACT (SUPPORTING 14-17 SDGs)



SILPAKORN UNIVERSITY CONTINUOUSLY IMPLEMENTS EDUCATION AND RESEARCH ACTIVITIES THAT CONTRIBUTE TO THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS (SDGs). THE UNIVERSITY INTEGRATES SUSTAINABILITY CONCEPTS INTO TEACHING AND LEARNING AT ALL LEVELS, AND PROMOTES THE CREATION OF KNOWLEDGE IN ENERGY, ENVIRONMENT, AND SOCIAL INNOVATION THROUGH ACADEMIC WORKS AND COMMUNITY ENGAGEMENT PROJECTS RELATED TO SUSTAINABILITY.

IN 2025, **SILPAKORN UNIVERSITY** ACHIEVED A GLOBAL RANKING OF 601-800 IN THE THE IMPACT RANKINGS 2025, REFLECTING ITS STRONG COMMITMENT TO ADVANCING THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS.

THE UNIVERSITY'S OUTSTANDING PERFORMANCE IS DEMONSTRATED THROUGH FOUR KEY SDGs AS FOLLOWS:

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES – RANKED 5TH IN THAILAND AND 77TH GLOBALLY

SDG 13: CLIMATE ACTION – RANKED JOINT 6TH IN THAILAND AND 201-300 GLOBALLY

SDG 6: CLEAN WATER AND SANITATION – RANKED JOINT 7TH IN THAILAND AND 101-200 GLOBALLY

SDG 14: LIFE BELOW WATER – RANKED 7TH IN THAILAND AND 80TH GLOBALLY

FACT FILE 2024

UI GREENMETRIC 2024

SILPAKORN UNIVERSITY
THAILAND



UI GREENMETRIC WORLD UNIVERSITY RANKINGS

SILPAKORN UNIVERSITY
#286





UNIVERSITY PROFILE

NAME : SILPAKORN UNIVERSITY
 EST. : 1943
 COUNTRY : THAILAND

1. VERIFIED DATA

Campus Sustainability Scores

Overall Performance **76.75 %** Total Score **7675 / 10000**



SI Setting & Infrastructure
 Current: **1025** Maximum: 1500
 68.33%

WR Water
 Current: **700** Maximum: 1000
 70.00%

EC Energy & Climate Change
 Current: **1575** Maximum: 2100
 75.00%

TR Transportation
 Current: **1525** Maximum: 1800
 84.72%

WS Waste
 Current: **1275** Maximum: 1800
 70.83%

ED Education & Research
 Current: **1575** Maximum: 1800
 87.50%

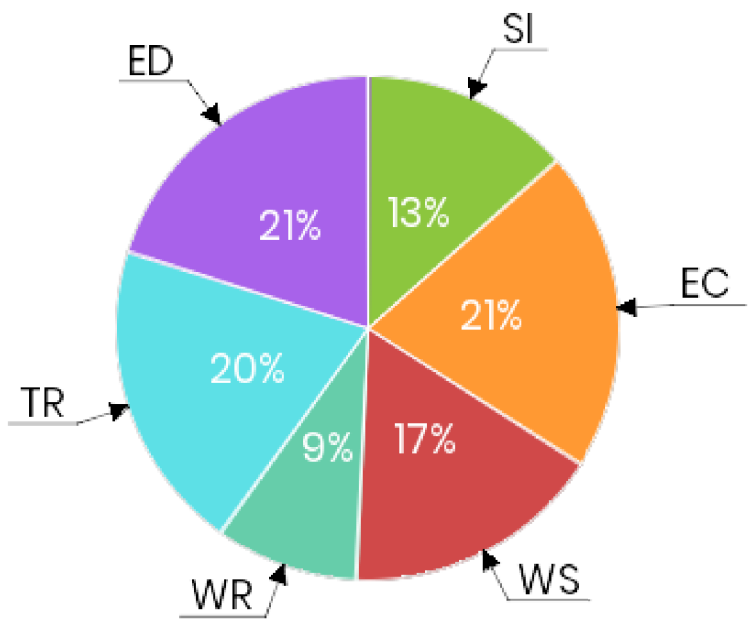
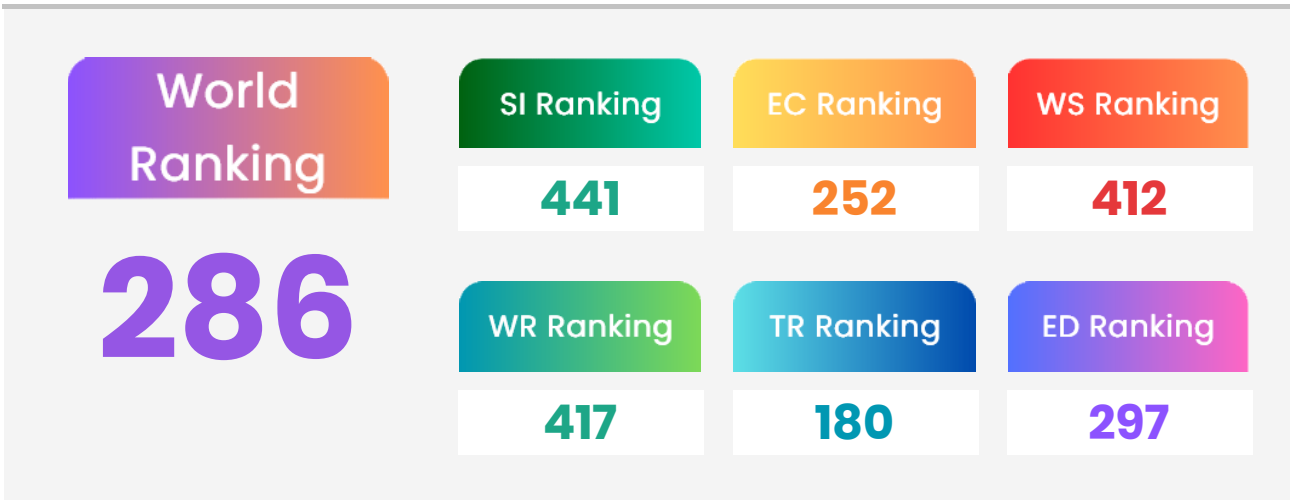


Figure 1.1 Category Score Contribution to Total Score

2. RESULTS SUMMARY



3. WORLD RANKINGS HISTORY

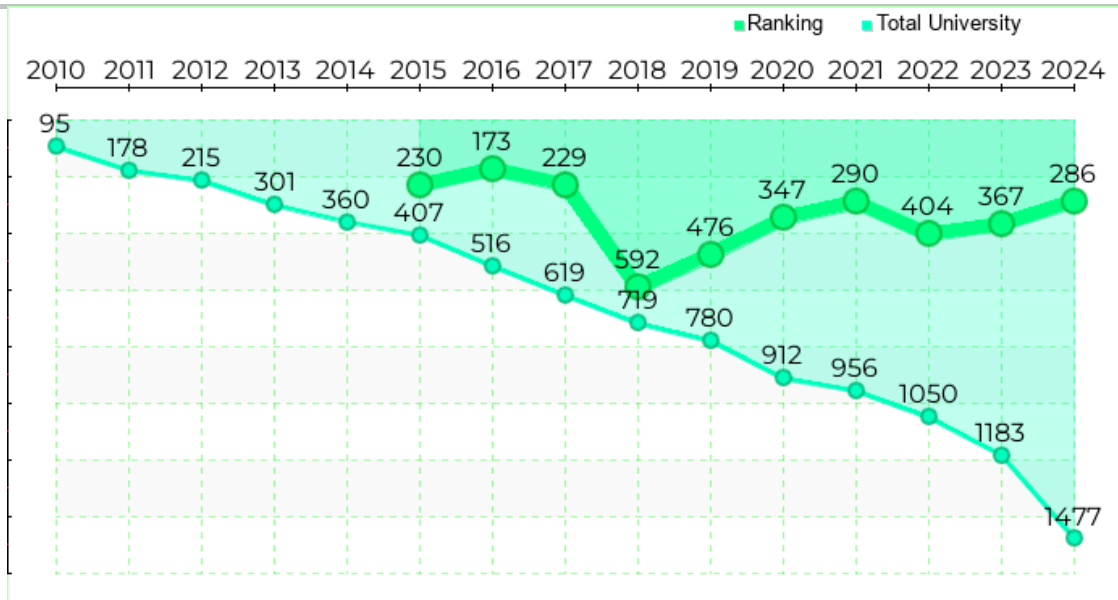
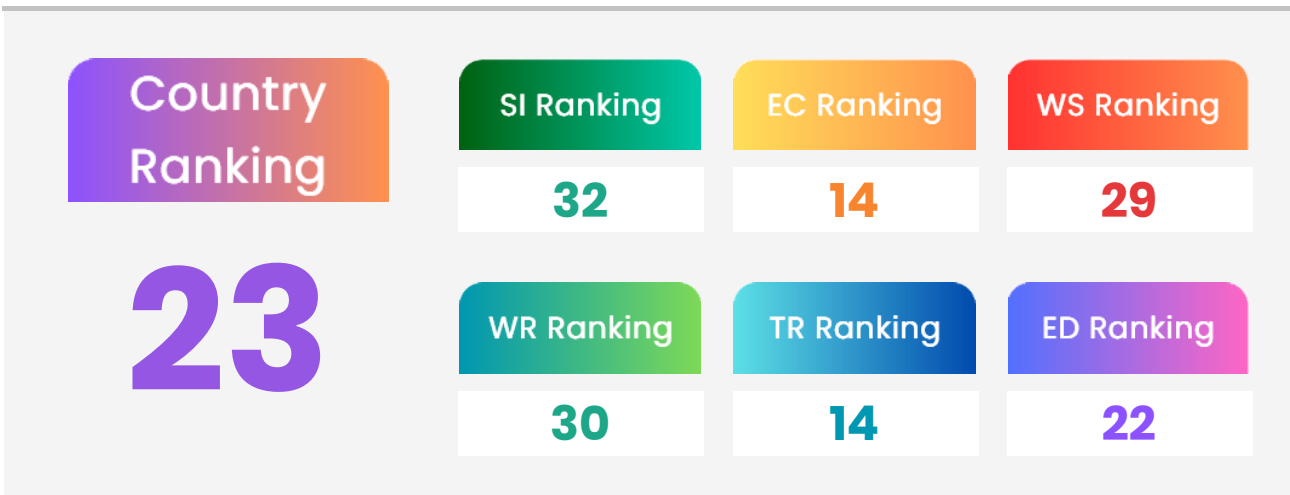


Figure 3.1 World Rankings History Diagram

4. RANKING IN THAILAND



5. PERFORMANCE BY INDICATOR

Setting and Infrastructure

The campus setting and infrastructure information provides the basic information about the university's policy on green environment. The indicators also show whether the campus deserves to be called a Green University. The aim is to encourage the participating universities to provide more spaces for greenery and safeguard the environment



Indicator		Point
SI.1	The ratio of open space area to total area	150
SI.2	Total area on campus covered in forest vegetation	100
SI.3	Total area on campus covered in planted vegetation	150
SI.4	Total area on campus for water absorption besides the forest and planted vegetation	50
SI.5	The total open space area divided by total campus population	150
SI.6	Percentage of university budget for sustainability efforts	150
SI.7	Percentage of operation and maintenance activities of building in one year period	50
SI.8	Campus facilities for disable, special needs and/or maternity care	75
SI.9	Security and safety facilities	50
SI.10	Health infrastructure facilities for students, academics and administrative staffs' well-being	50
SI.11	Conservation: plant (flora), animal (fauna), or wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities	50

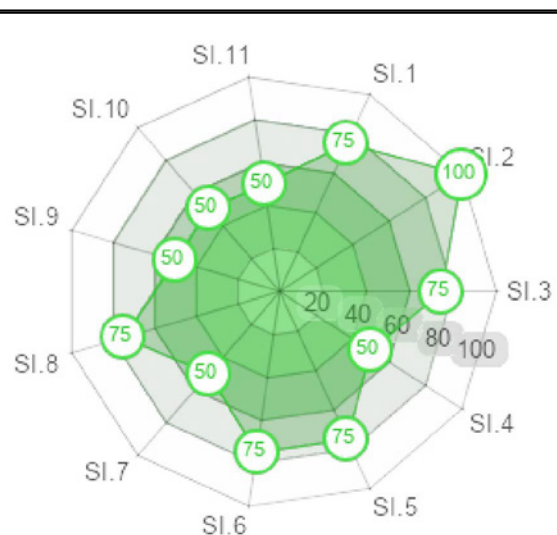


Figure 5.1 Percentage of Score to Maximum Score for Setting and Infrastructure

Energy and Climate Change

The university's attention to the use of energy and climate change issues has the highest score in this ranking. In our questionnaire, we define several indicators for this area of concern, i.e., energy-efficient appliances usage, the implementation of smart buildings/automation buildings/intelligent buildings, renewable energy usage policy, total electricity usage, energy conservation programs, elements of green buildings, climate change adaptation and mitigation programs, greenhouse gas emission reductions policy, and carbon footprint. Within these indicators, the universities are expected to increase their efforts in energy efficiency in their buildings and to care more about nature and alternative energy resources.



Indicator		Point
EC.1	Energy efficient appliances usage	150
EC.2	Smart building implementation	150
EC.3	Number of renewable energy sources on campus	225
EC.4	Total electricity usage divided by total campus' population	225
EC.5	The ratio of renewable energy production divided by total energy usage per year	150
EC.6	Elements of green building implementation as reflected in all construction and renovation policies	200
EC.7	Greenhouse gas emission reduction program	200
EC.8	Total carbon footprint divided by total campus' population	100
EC.9	Number of innovative program(s) in energy and climate change	100
EC.10	Impactful university program(s) on climate change	75

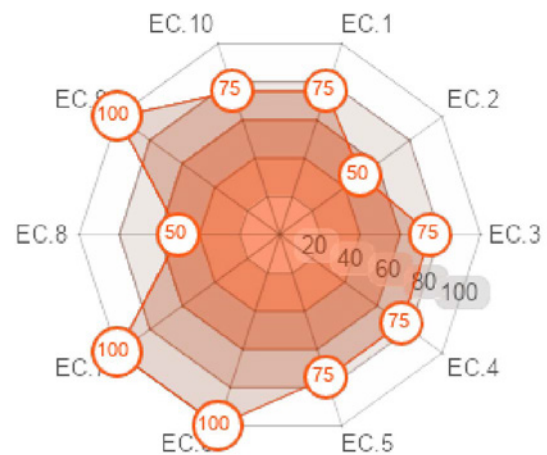


Figure 5.2 Percentage of Score to Maximum Score for Energy and Climate Change

Waste

Waste treatment and recycling activities are major factors in creating a sustainable environment. The activities of university staff, students, and communities around university produce a lot of waste; therefore, some recycling and waste treatments programs should be among the concern of the university, i.e., 3R (Reduce, Reuse, Recycle) program, organic waste treatment, inorganic waste treatment, toxic waste recycling, sewage disposal, policies to reduce the use of paper and plastic on campus.



Indicator		Point
WS.1	3R (Reduce, Reuse, Recycle) program for university's waste	225
WS.2	Program to reduce the use of paper and plastic on campus	300
WS.3	Organic waste treatment	150
WS.4	Inorganic waste treatment	150
WS.5	Toxic waste treatment	225
WS.6	Sewage disposal	225

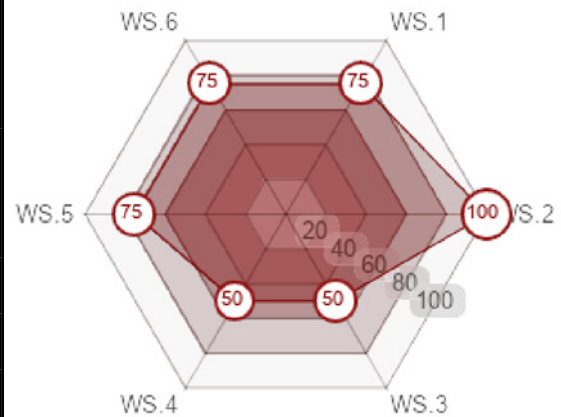


Figure 5.3 Percentage of Score to Maximum Score for Waste

Water

Water usage at university is another important criterion in the UI GreenMetric. The aims are to encourage universities to decrease groundwater usage, increase water conservation programs, and protect habitats. Water conservation programs, water recycling programs, water-efficient appliances usage, and treated water usage are among the criteria



Indicator		Point
WR.1	Water conservation program & implementations	150
WR.2	Water recycling program implementation	150
WR.3	Water efficient appliances usage	150
WR.4	Consumption of treated water	100
WR.5	Water pollution control in the campus area	150

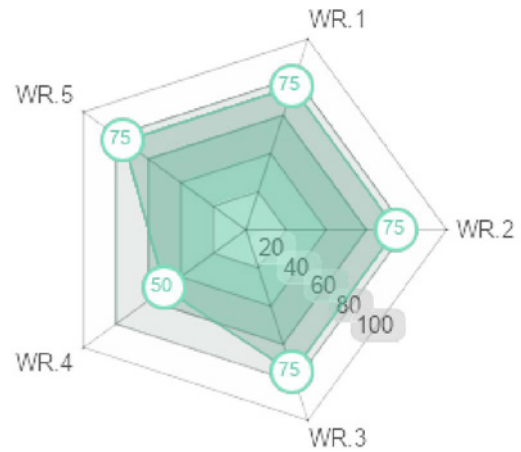


Figure 5.4 Percentage of Score to Maximum Score for Water

Transportation

Transportation systems play an important role in carbon emission and pollutant levels at universities. Transportation policies that limit the number of motor vehicles on campus and encourage the use of campus buses, shared vehicles, and zero emission vehicles (i.e. bicycles, electric cars, electric motorcycles, canoes, snowboards, etc.) will encourage a healthier environment. The pedestrian policy encourages students and staff to walk around campus and minimize the use of private vehicles. The use of environmentally friendly public transportation will decrease the carbon footprint around campus.



Indicator		Point
TR.1	The total number of vehicles (cars and motorcycles) divided by total campus' population	150
TR.2	Shuttle services	300
TR.3	Zero Emission Vehicles (ZEV) availability on campus	200
TR.4	The total number of Zero Emission Vehicles (ZEV) divided by total campus population	200
TR.5	Ratio of the ground parking area to the total campus area	150
TR.6	Program to limit or decrease the parking area on campus for the last 3 years	100
TR.7	Number of initiatives to decrease private vehicles on campus	200
TR.8	The pedestrian path on campus	225

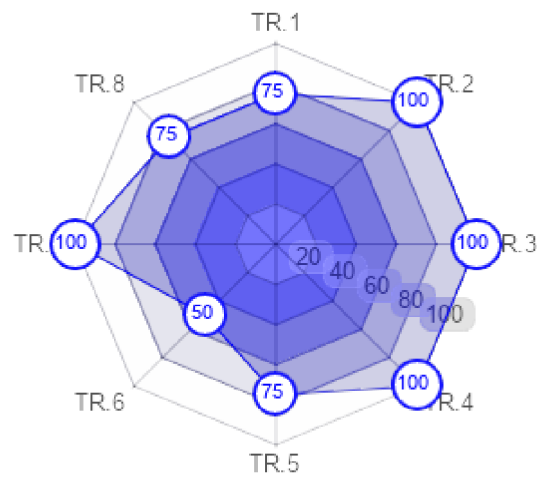


Figure 5.5 Percentage of Score to Maximum Score for Transportation

Education & Research

The university's education and research information provide basic information about the university's policies and actions in creating and supporting their students, academic and non-academic staff with sustainability awareness. This criterion also encourages universities to report their sustainability activities, strategies, and targets to their stakeholders.



Indicator		Point
ED.1	The ratio of sustainability courses to total courses/subjects	225
ED.2	The ratio of sustainability research funding to total research funding	150
ED.3	Number of scholarly publications on sustainability	200
ED.4	Number of events related to sustainability (environment)	200
ED.5	Number of activities organized by student organizations related to sustainability per year	200
ED.6	University-run sustainability website	150
ED.7	Sustainability report	100
ED.8	Number of cultural activities on campus	100
ED.9	Number of university sustainability program(s) with international collaborations	100
ED.10	Number of community services related to sustainability organized by university and involving students	100
ED.11	Number of sustainability-related startups	50

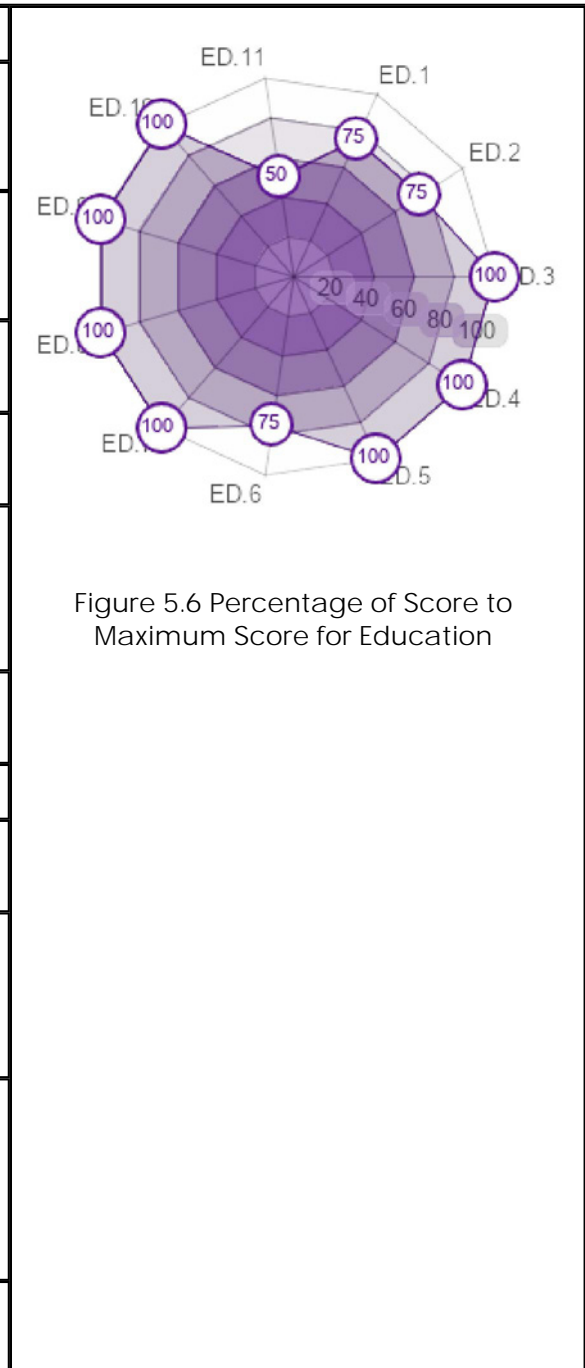


Figure 5.6 Percentage of Score to Maximum Score for Education



UI GREENMETRIC WORLD UNIVERSITY RANKINGS

About UI GreenMetric

UI GreenMetric World University Rankings is an annual publication of university rankings on sustainability. It is an initiative from the University of Indonesia that ranks universities around the world based on their commitment and actions towards sustainability. UI GreenMetric World University Rankings aims to increase university awareness

History

UI GreenMetric World University Rankings is a non-profit initiative of University of Indonesia developed since 2010.

In 2009 the University of Indonesia hosted an International Conference on World University Rankings. The conference was attended by World University rankers such as Webometrics, HEEACT, and others. In 2010, Prof. Dr. Gumilar Rusliwa Somantri as Rector of the University of Indonesia at that time-initiated UI GreenMetric World University Rankings and appointed Prof. Riri Fitri Sari as the chairperson. Soon a team consisting of Junaidi, Budi Hartono, Allan Lauder, and Prof. Dr. Ir. Gunawan Tjahjono formulated UI GreenMetric Questionnaire and introduced UI Ranking to the world. In 2011, 11 new indicators in 5 categories have been added. Subsequently Education has been added as a new category in 2012. By the year 2015, a massive improvement was introduced including carbon footprint and a more systematic data collection. In 2016 an online based review and validation system has been set for the assessors.

UI GreenMetric took Policy into Action in 2016; Global Partnership for Sustainable Future in 2017; Universities, Impacts, and Sustainable Development Goals (SDGs) in 2018; Sustainable University in a Changing World: Lessons, Challenges and Opportunities in 2019; Universities' Responsibility for Sustainable Development Goals and World's Complex Challenges in 2020; Universities, UI GreenMetric, and SDGs in the Time of Pandemic in 2021; Collective Actions for Transforming Sustainable Universities in the Post-Pandemic Time in 2022; and Innovation, Impacts and Future Direction of Sustainable Universities in 2023 as its annual themes. In 2024, 1477 universities from 95 countries participate in the rankings.

To reach and coordinate more participating universities, UI GWURN was established in 2017 with a national coordinator in each country. To make it work, Junaidi formulated strategic framework for the network. Currently, there are 39 national coordinators in Asia, America, Africa and Europe. Each voluntarily organizes national workshop inviting other universities in their country. Since its establishment in 2010, it has been increasingly recognized as the first and only universities ranking on sustainability and has been used by participating universities to benchmark and do continuous improvement in the area of sustainability.

As a member of IREG, more activities and collaboration among participating universities are expected to achieve our common goal: sustainable university for sustainable future. UI GreenMetric itself developed its own ranking system by studying other ranking systems such as: The Times Higher Education World University Rankings (THE) sponsored by Thompson Reuters, the QS World University Rankings, the Academic Ranking of World Universities (ARWU) published by Shanghai Jiao Tong University (SJTU), and the Webometrics Ranking of World Universities (Webometrics), published by Cybermetrics Lab, CINDOC-CSIC in Spain.

Table 1. UI GreenMetric Timeline

UI GREENMETRIC TIMELINE	
2010	UI GreenMetric published for 95 Universities
2011	UI GreenMetric added 11 new indicators within 5 categories
2012	Education became one of the categories
2015	Education became one of the categories
2016	Focusing on university action toward sustainability
2017	UIGWURN established
2018	Focusing on SDGs and enlargement of memberships
2019	Improving questionnaire and data collection method
2020	Three new questions on social and economic impacts
2021	Introducing social, cultural, economic, and pandemic aspects in the questionnaire
2022	Adding an indicator related to water pollution and adjusting related to the current pandemic condition
2023	Adding an indicator related to 3R waste program, student organization activities and international collaboration
2024	Indicator adjustments and new indicators related to utilizing ICT

Methodology

UI GreenMetric collects data through an online questionnaire. All participants answered some questions for some period. After that, UI GreenMetric expert members and reviewers validate the answers based on the evidence that participants provide. This year's categories and weighting of points are shown as follows. The specific indicators and their points awarded are shown in Table 3. Each indicator has been uniquely identified by a category code and a number (e.g., SI 5).

In our list, universities with the same total score will be ranked according to the highest weighted indicators, i.e firstly based on its Energy and Climate Change (EC) score, then based on the total score for Waste (WS), Transportation (TR), Education (ED). Subsequently it will be based on its Setting and Infrastructure (SI) score, and last will depend on its Water (WR) score.

Table 2. Categories used in the ranking and their weighting

No	Category	Percentage of Total Points (%)
1	Setting and Infrastructure (SI)	15%
2	Energy and Climate Change (EC)	21%
3	Waste (WS)	18%
4	Water (WR)	10%
5	Transportation (TR)	18%
6	Education and Research (ED)	18%



The specific indicators and their points awarded are shown in Table 3. Each indicator has been uniquely identified by a category code and a number (e.g., SI 5).

Table 3 Indicators and categories

No	Criteria	Point
1	Setting and Infrastructure (SI)	
SI1	The ratio of open space area to total area	200
SI2	Total area on campus covered in forest vegetation	100
SI3	Total area on campus covered in planted vegetation	200
SI4	Total area on campus for water absorption besides the forest and planted vegetation	100
SI5	The total open space area divided by total campus population	200
SI6	Percentage of university budget for sustainability efforts	200
SI7	Percentage of operation and maintenance activities of building in one year period	100
SI8	Campus facilities for disable, special needs and/or maternity care	100
SI9	Security and safety facilities	100
SI10	Health infrastructure facilities for students, academics and administrative staffs' well-being	100
SI11	Conservation: plant (flora), animal (fauna), or wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities	100
	Total	1500
2	Energy and Climate Change (EC)	
EC1	Energy efficient appliances usage	200
EC2	Smart building implementation	300
EC3	Number of renewable energy sources on campus	300
EC4	Total electricity usage divided by total campus' population (kWh per person)	300
EC5	The ratio of renewable energy production divided by total energy usage per year	200
EC6	Elements of green building implementation as reflected in all construction and renovation policies	200
EC7	Greenhouse gas emission reduction program	200
EC8	Total carbon footprint divided by total campus' population (metric tons per person)	200

EC9	Number of innovative program(s) in energy and climate change	100
EC10	Impactful university program(s) on climate change	100
	Total	2100
3	Waste (WS)	
WS1	3R (Reduce, Reuse, Recycle) program for university's waste	300
WS2	Program to reduce the use of paper and plastic on campus	300
WS3	Organic waste treatment	300
WS4	Inorganic waste treatment	300
WS5	Toxic waste treatment	300
WS6	Sewage disposal	300
	Total	1800
4	Water (WR)	
WR1	Water conservation program & implementations	200
WR2	Water recycling program implementation	200
WR3	Water efficient appliances usage	200
WR4	Consumption of treated water	200
WR5	Water pollution control in the campus area	200
	Total	1000
5	Transportation (TR)	
TR1	The total number of vehicles (cars and motorcycles) divided by total campus' population	200
TR2	Shuttle services	300
TR3	Zero Emission Vehicles (ZEV) availability on campus	200
TR4	The total number of Zero Emission Vehicles (ZEV) divided by total campus population	200
TR5	Ratio of the ground parking area to the total campus area	200
TR6	Program to limit or decrease the parking area on campus for the last 3 years (from 2021 to 2023)	200
TR7	Number of initiatives to decrease private vehicles on campus	200
TR8	The pedestrian path on campus	300
	Total	1800
6	Education and Research (ED)	
ED1	The ratio of sustainability courses to total courses/subjects	300
ED2	The ratio of sustainability research funding to total research funding	200
ED3	Number of scholarly publications on sustainability	200
ED4	Number of events related to sustainability (environment)	200
ED5	Number of activities organized by student organizations related to sustainability per year	200
ED6	University-run sustainability website	200
ED7	Sustainability report	100
ED8	Number of cultural activities on campus (e.g.Cultural Festival)	100
ED9	Number of university sustainability program(s) with international collaborations	100
ED10	Number of community services related to sustainability organized by university and involving students	100
ED11	Number of sustainability-related startups	100
	Total	1800



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