



# STOU

## SUSTAINABILITY ANNUAL REPORT 2022



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# Message from STOU President



ASSOC. PROF. DR. MANIT JUMPA  
Distinguished Member of the University Council  
Acting President  
Sukhothai Thammathirat Open University

At Sukhothai Thammathirat Open University, “Green” has become a buzzword over past few years and “Sustainability” is more concerned with the future. Across our lifetime in a world that is constantly changing, the direction for driving Thailand towards the “Security, Prosperity, Sustainability” goal is set in the 20-year National Strategic Plan. Thailand has also made considerable strides in the area of inclusive and sustainable development.

To embrace the opportunities of this ever-shifting world, STOU has emerged the stronger identity of the university. Sustainable Development Goals become an integral role in our university’s sustainability strategy since we have leveraged our position as a sustainable university.

We focus on provision of academic services through knowledge integration for the communal, societal and national prosperity and sustainability. We are committed to raising our personnel and students’ awareness, promoting sustainable development, operating sustainable campus, activating research and imbedding sustainability into our teaching and daily life.

STOU continue to confront pandemic, climate change as well as social, economic, environmental and structural disparities. We are now beginning to see beyond the complicated and intertwined challenges of SDGs in order to achieve our sustainable internationalization and value creation.

# Introduction

**"STOU** IS COMMITTED  
TO PROVIDING  
EQUITY AND  
QUALITY LIFELONG  
LEARNING FOR ALL  
TO RESPOND TO  
**SUSTAINABILITY**  
IN THE DIGITAL AGE."





# University Strategy for Sustainability



## Mission 5

Develop the university to achieve security, prosperity, and sustainability under good governance principles

## Strategy 12

- Physical Infrastructure Development for Sustainable University
- STOU Green & Clean
- Smart Campus
- Infrastructure Development

# World Rankings in 2022 (1,050 Universities)



World Ranking	SI Ranking	EC Ranking	WS Ranking
<b>489</b>	499	554	505
	WR Ranking	TR Ranking	ED Ranking
	285	469	628

# Thailand Rankings in 2022

## (47 Universities)

<b>Country Ranking</b>	<b>SI Ranking</b>	<b>EC Ranking</b>	<b>WS Ranking</b>
<b>28</b>	<b>35</b>	<b>26</b>	<b>30</b>
	<b>WR Ranking</b>	<b>TR Ranking</b>	<b>ED Ranking</b>
	<b>19</b>	<b>28</b>	<b>35</b>

Top 10

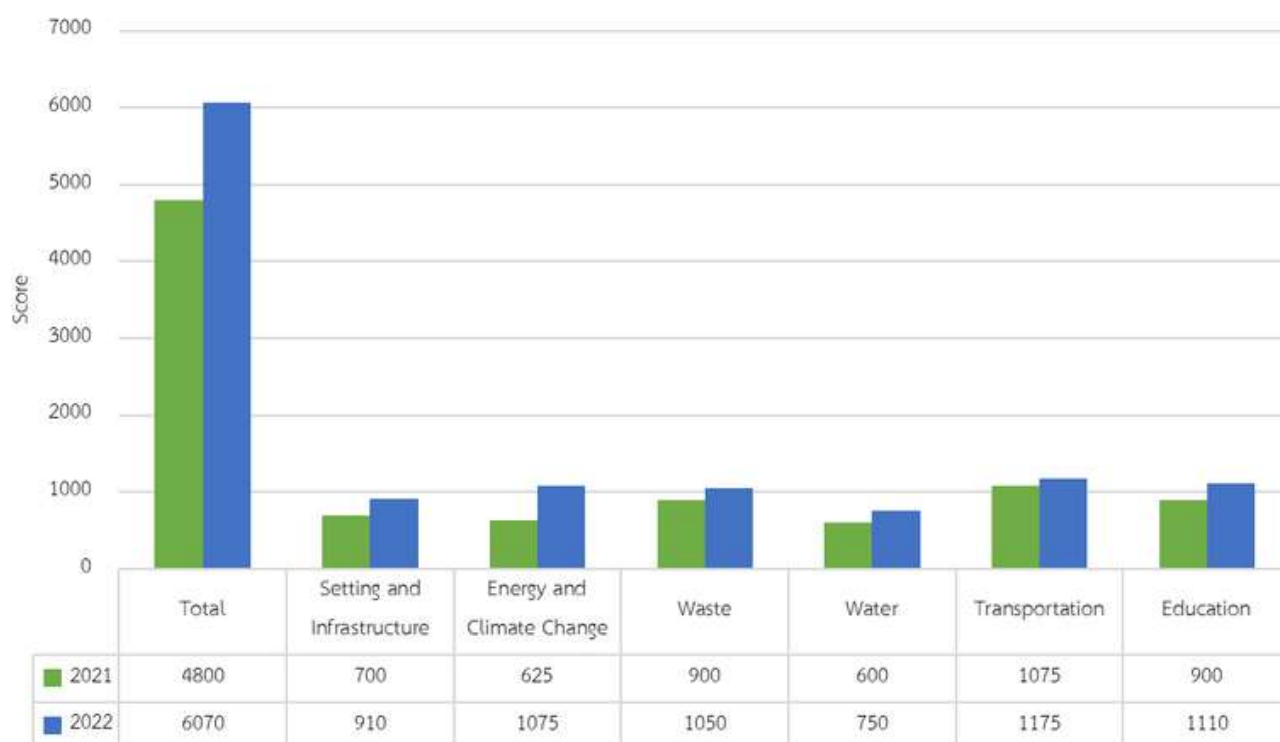
Ranking	University	Country	Total Score	Setting and Infrastructure	Energy and Climate Change	Waste	Water	Transportation	Education
9	Kasetsart University	Thailand	8650	1175	1675	1575	900	1600	1725
14	Mahidol University	Thailand	8585	1160	1600	1575	950	1675	1625
21	King Mongkut's University of Technology Thonburi	Thailand	8375	1250	1675	1425	650	1700	1675
25	Suranaree University of Technology	Thailand	8375	1325	1425	1650	850	1525	1600
37	Maharakham University	Thailand	8200	1300	1525	1275	800	1550	1750
38	Siam University	Thailand	8200	1125	1450	1425	850	1600	1750
45	Walailak University	Thailand	8125	1350	1475	1425	850	1650	1375
50	Mae Fah Luang University	Thailand	8060	1300	1360	1350	850	1550	1650
53	Rajamangala University of Technology Thanyaburi (RMUTT)	Thailand	8025	1100	1625	1500	950	1450	1400
71	Dhurakij Pundit University	Thailand	7835	960	1575	1575	750	1375	1600

26-30

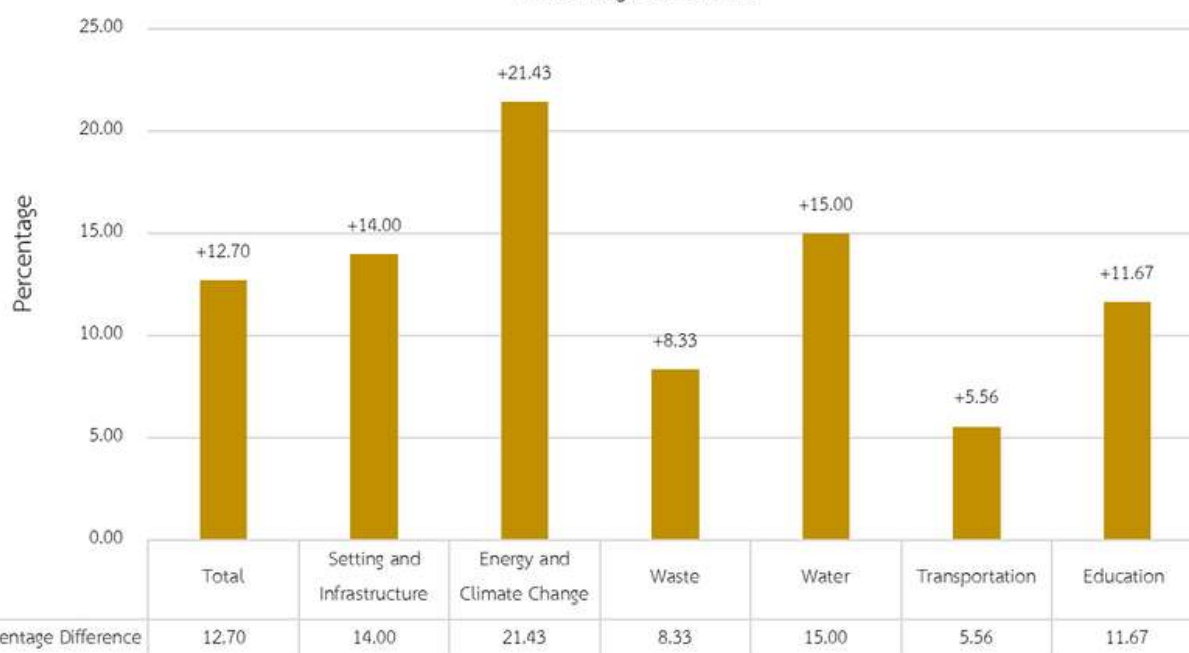
Ranking	University	Country	Total Score	Setting and Infrastructure	Energy and Climate Change	Waste	Water	Transportation	Education
245	Huachiew Chaiermpakiet University	Thailand	6125	925	1450	1200	400	1050	1100
249	Loei Rajabhat University	Thailand	6105	955	1000	900	650	1400	1200
254	Sukhothai Thammathirat Open University	Thailand	6070	910	1075	1050	750	1175	1110
255	Prince of Songkla University	Thailand	6065	1030	960	900	750	1100	1325
259	Pibulsongkram Rajabhat University	Thailand	6050	1075	1200	750	700	1325	1000

# Results Comparison Year 2021 - 2022

Total Score

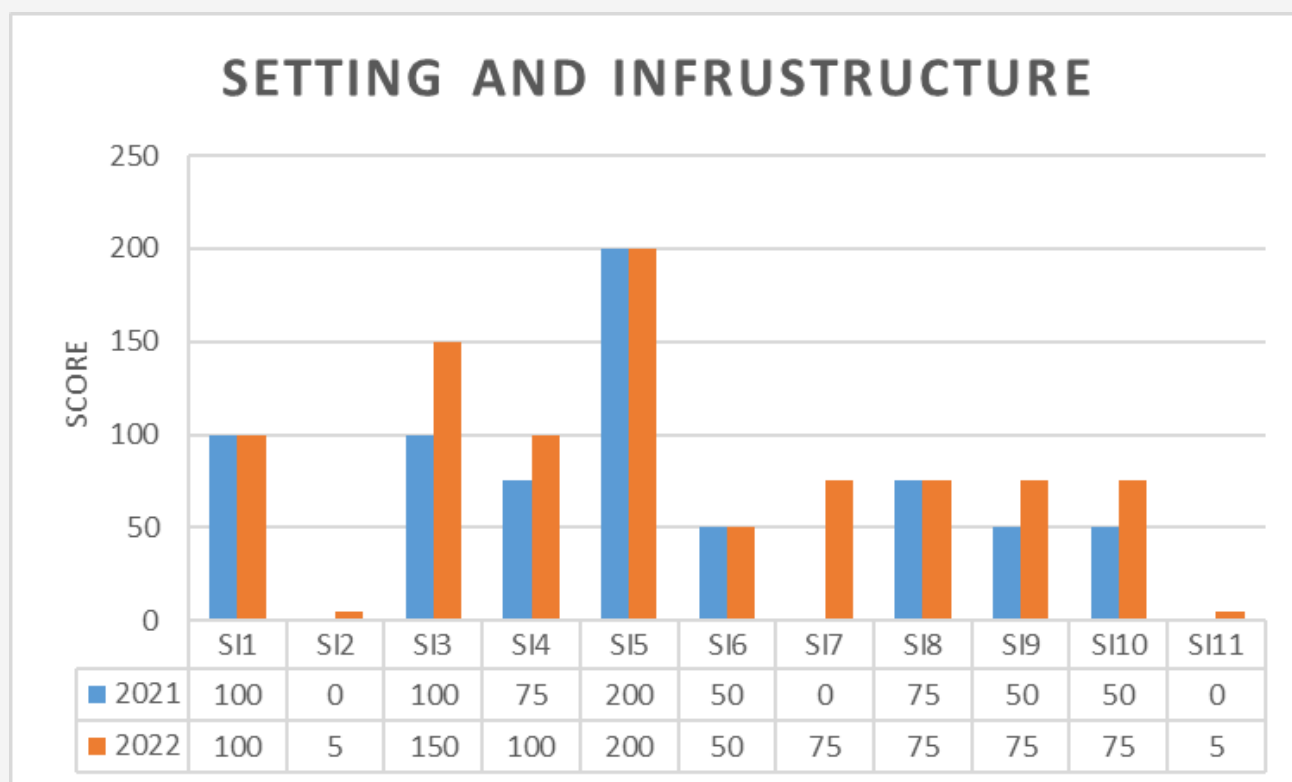


Percentage Difference





# Results Comparison Year 2021 - 2022



**SI1** The ratio of open space area to total area

**SI2** Total area on campus covered in forest vegetation

**SI3** Total area on campus covered in planted vegetation

**SI4** Total area on campus for water absorption besides the forest and planted vegetation

**SI5** The total open space area divided by total campus population

**SI6** Percentage of university budget for sustainability efforts

**SI7** Percentage of operation and maintenance activities of building in one-year period

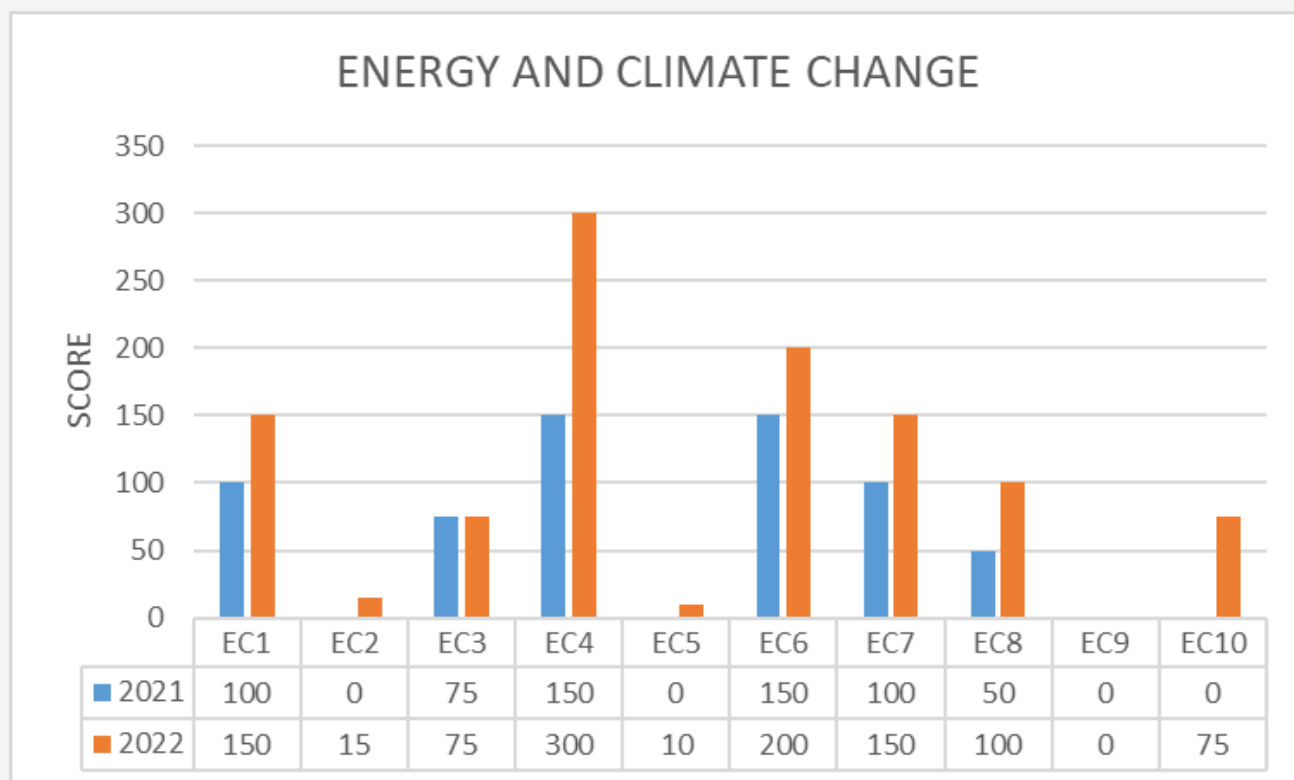
**SI8** Campus facilities for disable, special needs and or maternity care

**SI9** Security and safety facilities

**SI10** Health infrastructure facilities for students, academics and administrative staffs' wellbeing

**SI11** Conservation: plant, animal, and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities

# Results Comparison Year 2021 - 2022



**EC1** Energy efficient appliances usage

**EC2** Smart building implementation

**EC3** Number of renewable energy sources on campus

**EC4** Total electricity usage divided by total campus' population (kWh per person)

**EC5** The ratio of renewable energy production divided by total energy usage per year

**EC6** Elements of green building implementation as reflected in all construction and renovation policies

**EC7** Greenhouse gas emission reduction program

**EC8** Total carbon footprint divided by total campus' population (metric tons per person)

**EC9** Number innovative program(s) in Energy and Climate Change

**EC10** Impactful university program(s) on climate change

# Results Comparison Year 2021 - 2022



**WS1** Recycling program for university's waste

**WS2** Program to reduce the use of paper and plastic on campus

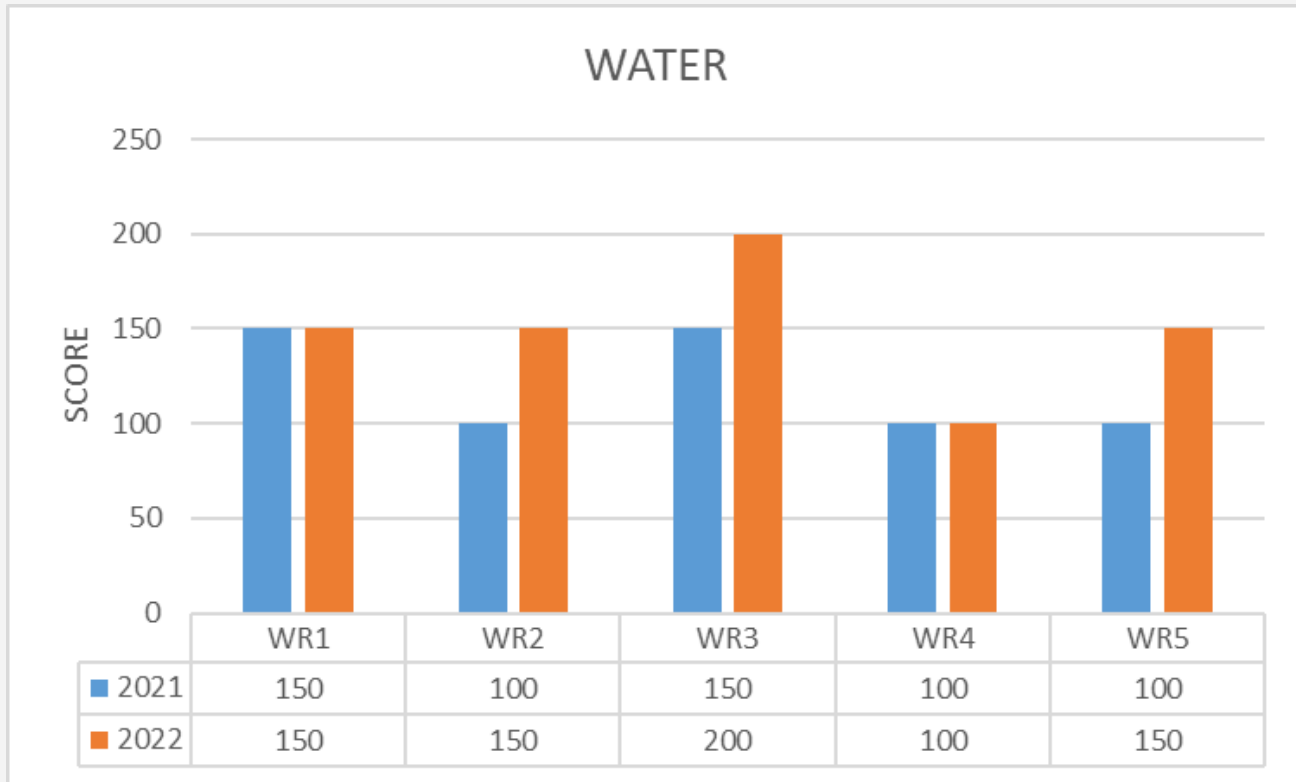
**WS3** Organic waste treatment

**WS4** Inorganic waste treatment

**WS5** Toxic waste treatment

**WS6** Sewage disposal

# Results Comparison Year 2021 - 2022



**WR1** Water conservation program & implementations

**WR2** Water recycling program implementation

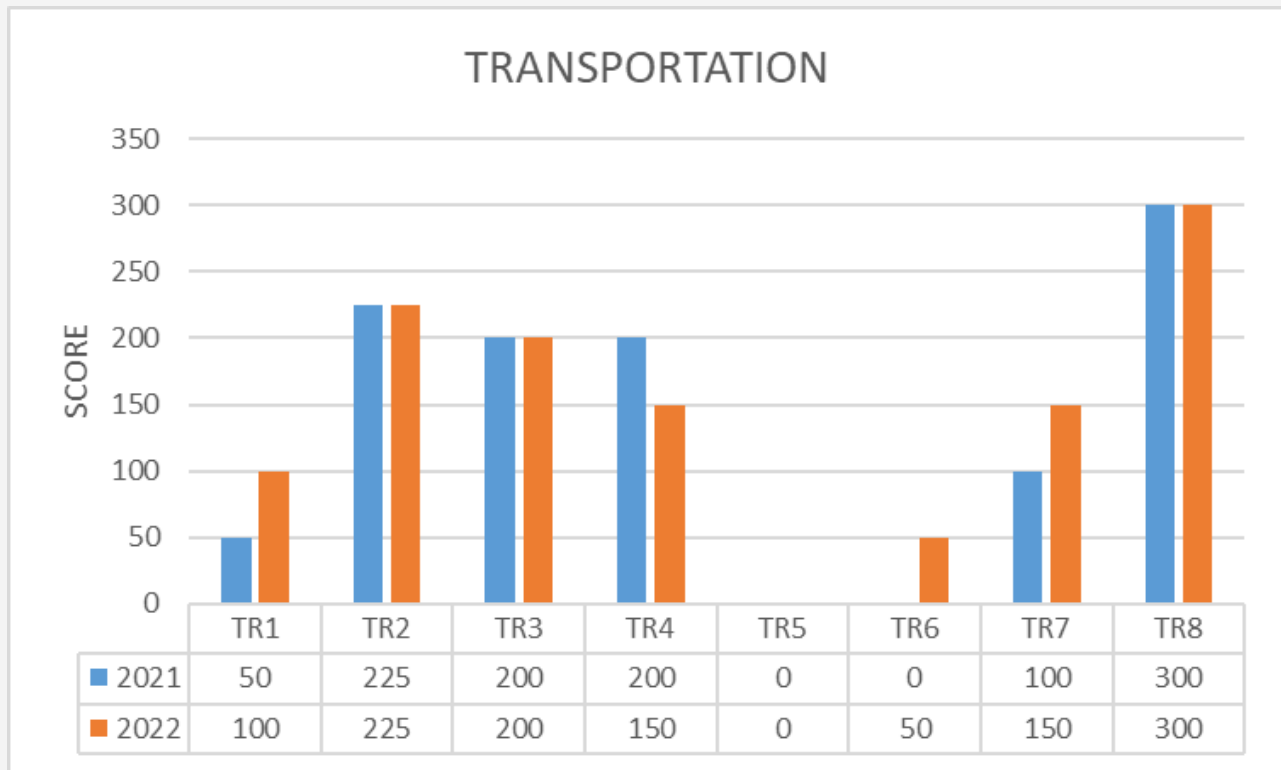
**WR3** Water efficient appliances usage

**WR4** Consumption of treated water

**WR5** Water pollution control in campus area



# Results Comparison Year 2021 - 2022



**TR1** The total number of vehicles (cars and motorcycles) divided by total campus' population

**TR2** Shuttle services

**TR3** Zero Emission Vehicles (ZEV) policy on campus

**TR4** The total number of Zero Emission Vehicles (ZEV) divided by total campus population

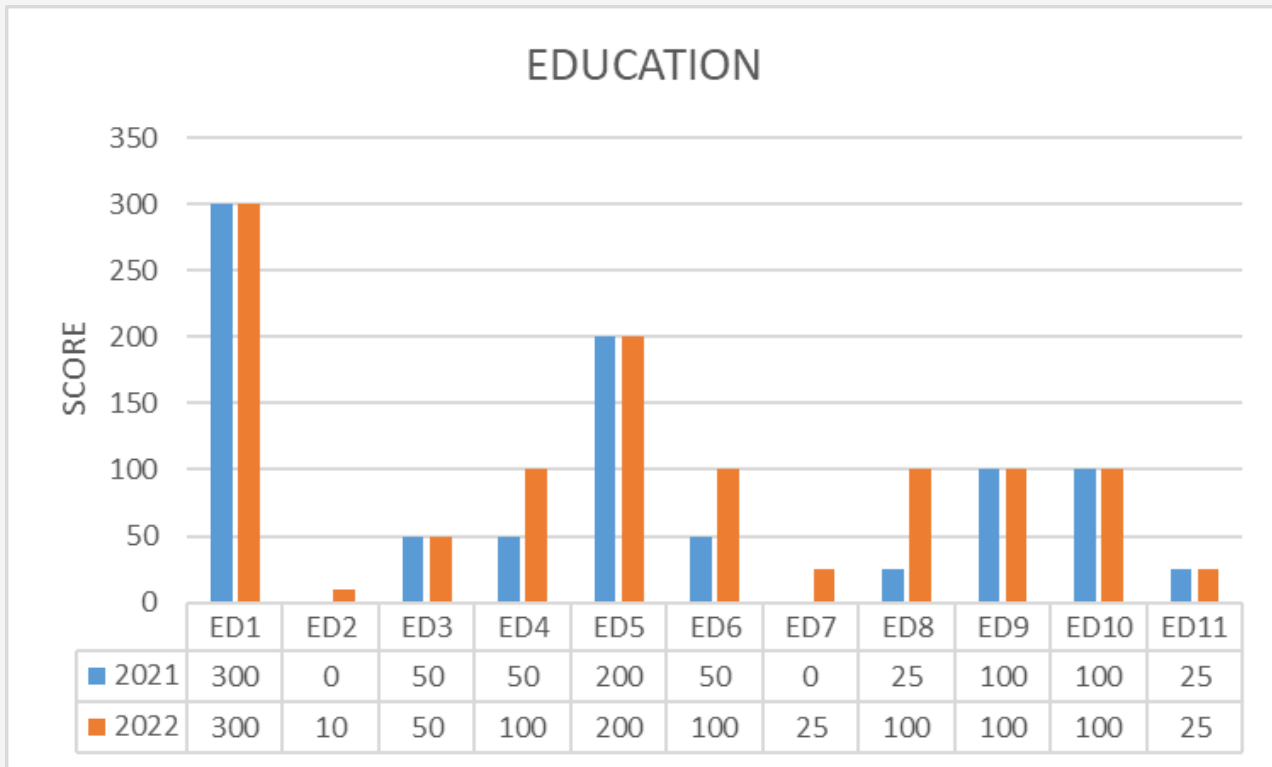
**TR5** Ratio of ground parking area to total campus area

**TR6** Program to limit or decrease the parking area on campus for the last 3 years (from 2019 to 2021)

**TR7** Number of initiatives to decrease private vehicles on campus

**TR8** Pedestrian path on campus

# Results Comparison Year 2021 - 2022



**ED1** The ratio of sustainability courses to total courses/subjects

**ED2** The ratio of sustainability research funding to total research funding

**ED3** Number of scholarly publications on sustainability

**ED4** Number of events related to sustainability

**ED5** Number of student organizations related to sustainability

**ED6** University-run sustainability website

**ED7** Sustainability report

**ED8** Number of cultural activities on campus

**ED9** Number of university program(s) to improve teaching and learning

**ED10** Number of sustainability community services project organized and/or involving students

**ED11** Number of sustainability-related startups

# Setting and Infrastructure



Type of higher education institution  
**Comprehensive**

Climate  
**Tropical Wet**

Number of Campus  
**13**

Sukhothai Thammathirat Open University (Headquarters in Nonthaburi)

Regional Academic Resources and Community Engagement Centers

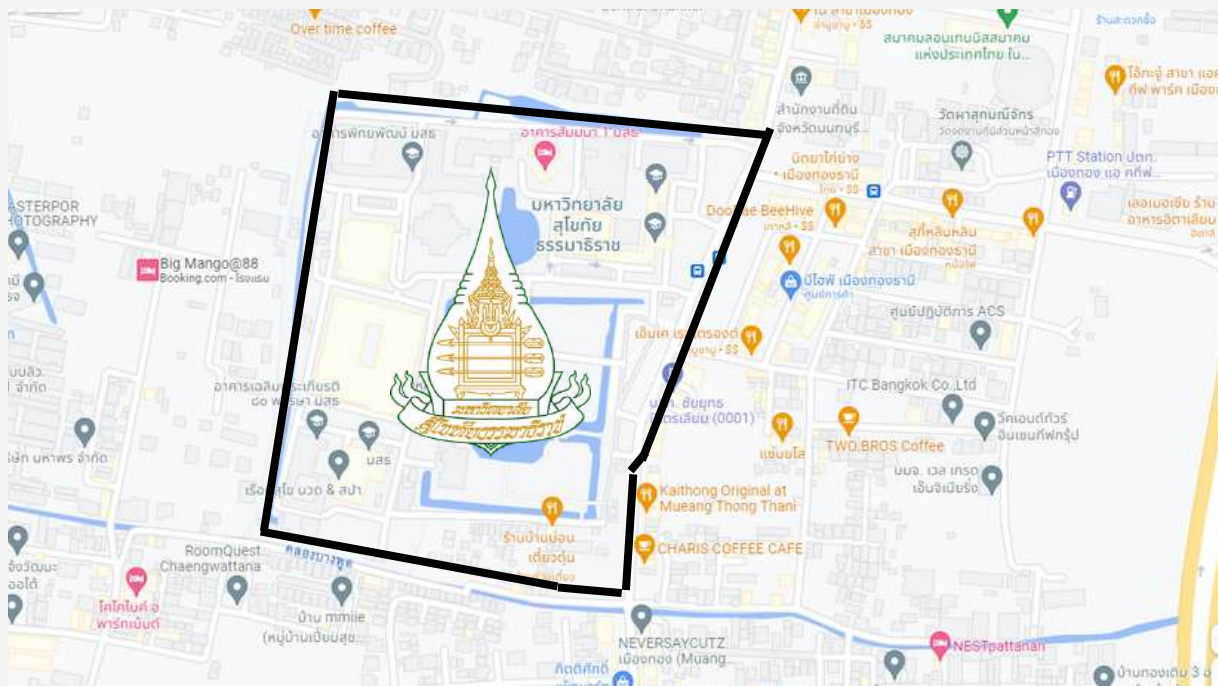
- Nonthaburi (Vicinity Central Provincial Cluster)
- Kanchaburi (Lower Central Provincial Cluster 1)
- Phetchaburi (Lower Central Provincial Cluster 2)
- Lampang (Upper Northern Provincial Cluster 1)
- Sukhothai (Lower Northern Provincial Cluster 1)
- Nakhon Sawan (Lower Northern Provincial Cluster 2)
- Nakhon Si Thammarat  
(Southern Gulf of Thailand Provincial Cluster)
- Yala (Southern Provincial Cluster)
- Chanthaburi (Eastern Provincial Cluster 1)
- Nakhon Nayok (Eastern Provincial Cluster 2)
- Udon Thani  
(Upper North-Eastern Provincial Cluster 1)
- Ubon Ratchathani  
(Lower North-Eastern Provincial Cluster 2)



# Setting and Infrastructure

## Campus Setting Urban

### Headquarters in Nonthaburi



Total Campus Area  
**424,589 M2**

Headquarters in Nonthaburi and Regional Academic Resources  
and Community Engagement Centers

Total campus ground floor area of buildings  
**64,720 M2**

Total campus buildings area  
**219,787 M2**

The ratio of open space to total area  
**85.22%**



# Setting and Infrastructure

Total area on campus covered in forest vegetation  
**0%**

Total area on campus covered in planted vegetation  
**32.50%**



Total area on campus for water absorption  
besides forest and planted vegetation  
**38.60%**



# Setting and Infrastructure

Total number of regular students  
**58,393**

Total number of online students  
**58,393**

Total number of academic and administrative staff  
**1,922**

The total open space area divided by  
total campus population  
**> 70 m<sup>2</sup> /person (72.63%)**





# Setting and Infrastructure

Total university's budget (in US Dollars)  
**75,792,358**

University's budget for sustainability effort  
**3,204,165 USD**

Percentage of University's budget for sustainability effort  
**4.23%**

Percentage of operation and maintenance activities of building  
**75%**



# Setting and Infrastructure

Campus facilities for disable and maternity care

Facilities are partially available and operated





# Setting and Infrastructure

Security and safety facilities  
Security infrastructures are available with  
security responding time to accidents,  
crime, fire, and natural disasters is  
more than 10 minutes



# Setting and Infrastructure

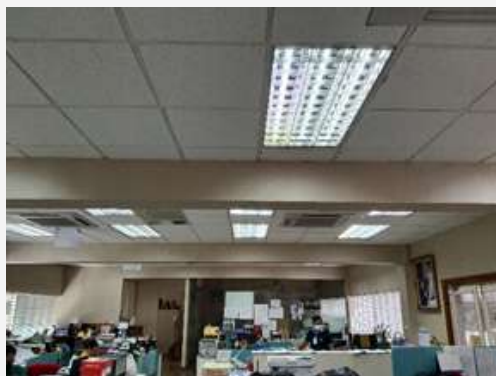
Health infrastructure facilities for students and academic and administrative staff wellbeing  
Health infrastructure (first aid, emergency room, clinic, hospital and certified personnel) are available.





# Energy and Climate Change

Energy efficient appliances usage  
> 50 - 75% (73%)



Number of renewable energy sources on campus  
1 source (Solar Power)  
Capacity produced 1,000 kWh



# Energy and Climate Change

Electricity usage per year  
**688,401 kWh**

Total electricity usage divided by total campus' population  
**< 279 kWh**

The ratio of renewable energy production divided by total energy usage per year  
**< 0.5%**

Elements of green building implementation as reflected in all construction and renovation policies  
**> 3 elements**



**Natural Ventilation  
for Air Circulation**



**Natural Lighting  
for Daily Source**



**Natural Features to  
Provide Natural Shade  
for the Buildings**



**Less Glass Windows to  
Reduce Solar Radiation**



**Green Building awarded as  
"Building Energy Code"**



# Energy and Climate Change

Greenhouse gas emission reduction program  
Program(s) aimed to reduce two out of three  
scopes emissions (Scope 1 and 3)



Total carbon footprint (CO<sub>2</sub> emission)  
1,000.66 metric tons



# Energy and Climate Change

Total carbon footprint divided by  
total campus' population  
> 0.42 - 1.11 metric tons per person

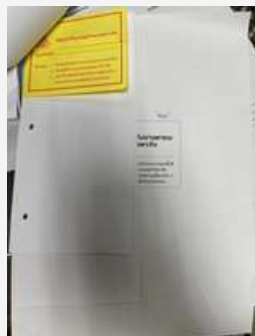
Impactful university program(s) on climate change  
Provide training and educational materials for  
surrounding communities and at national level





# Waste

## Recycling program for university's waste Partial (1 - 25% of waste)



## Program to reduce the use of paper and plastic on campus More than 3 programs



# Waste

## Organic waste treatment Partial (25 - 50% treated)



Compost from Dry Green Waste



Compost from Fresh Green Waste



Vemicompost



# Waste

## Inorganic waste treatment Partial (> 1- 25% treated)



Waste Sorting



Electronic Waste (E-Waste) to TES, certified handing company

# Waste

## Toxic waste treatment Partial (> 50 - 75% treated)



Disposed by an authorized company for final treatment



TES Company Limited, experts in recycling electronic waste

## Sewage disposal Treated technically for reuse





# Water

**Water conservation program & implementations**  
**> 25 - 50% water conserved**



**Water recycling program implementation**  
**> 25 - 50% water recycled**



# Water

Water efficient appliances usage  
> 50% of water efficient appliances installed



Consumption of treated water  
> 25 - 50% treated water consumed





# Water

Water pollution control in campus area  
Fully implementation and monitored occasionally



# Transportation

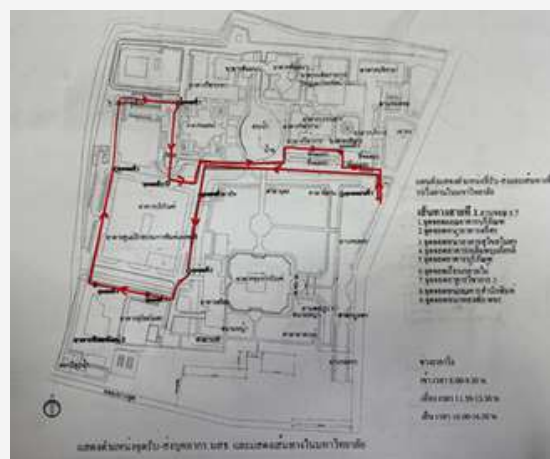
Number of cars actively used  
and managed by university  
**77**

Number of cars entering the university daily  
**500**

Number of motorcycles entering the university daily  
**100**

The total number of vehicles  
divided by total campus' population  
**> 0.125 - 0.5 (0.14)**

Shuttle services  
**Shuttle service is provided by university,  
regular and free**



# Transportation

Number of shuttles operated in the university  
3

Average number of passengers of each shuttle  
8

Total trips of each shuttle services each day  
10

Zero Emission Vehicles (ZEV) policy on campus  
Zero Emission Vehicles are available,  
and provided by university free





# Transportation

Average number of Zero Emission Vehicles (ZEV) on campus per day  
80

The total number of Zero Emission Vehicles (ZEV) divided by total campus population  
> 0.008 to  $\leq 0.02$

Total ground parking area  
61,150 M2

Ratio of ground parking area to total campus area  
12.23%





# Transportation

Program to limit or decrease the parking area  
on campus for the last 3 years  
**Program in preparation**



Number of initiatives to decrease private vehicles  
on campus  
**3 initiatives**



# Transportation

**Pedestrian path on campus**  
Pedestrian paths are available, designed for safety, convenience, and in some parts provided with disabled- friendly features



**Approximate daily travel distance of a vehicle  
inside your campus only**  
**80 km**



# Education and Research

Number of courses related to sustainability offered  
181

Total number of courses offered  
669

The ratio of sustainability courses  
to total courses/subjects  
27%

Total research funds dedicated to sustainability research  
(Average annually for the past 3 years)  
1,280 USD

Total research funds  
(Average annually for the past 3 years)  
268,086 USD

The ratio of sustainability research funding  
to total research funding  
< 1%

Number of scholarly publications on sustainability  
(Average annually for the past 3 years)  
1

# Education and Research

Number of events related to sustainability  
(Average annually for the past 3 years)

10





# Education and Research

Number of student organizations  
related to sustainability

77



University-run sustainability website

1 Website



Sustainability website address (URL)  
[www.green.stou.ac.th](http://www.green.stou.ac.th)



# Education and Research

## Sustainability report STOU Sustainability Annual Report 2022



### STOU SUSTAINABILITY ANNUAL REPORT 2022



Sukhothai Thammathirath Open University

<http://green.stou.ac.th/>



# Education and Research

Number of cultural activities on campus  
More than 3 events per year



Number of university programs  
to improve teaching and learning  
More than 3 programs





# Education and Research

Number of sustainability community services project organized and/or involving students  
**More than 3 projects**



Number of sustainability-related startups  
**2 startups**





## Contact us

### Headquarters

Sukhothai Thammathirat Open University  
9/9 Mu 9, Chaengwattana Rd.  
Bangpood, Pakkret  
Nonthaburi 11120  
Thailand



+66 2 504 7171-75



[www.stou.ac.th](http://www.stou.ac.th)