The Green University for Happiness

Walailak University

Sustainability Report

2018 - 2019

Base On: ISCN - GULF Sustainable Campus Charter
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Walailak University, named after HRH Princess Chulabhorn Walailak, is a government university and also a comprehensive university offering progressive courses in the fields of social science, science and technology and health science. The university continually enhances its environment to become a residential university fully equipped with holistic infrastructures and facilities as well as spearheads the landscape management so that it fruitfully serves as an accessible learning source surrounded by the proper, green, clean and unpolluted environment as recognized under the concept of Green University.

In response to a dramatic change of the world over the past few years, Walailak University has evolved accordingly by preparing not only the physical development but also actively orienting the students toward the world’s progressive changing rhythms. Additionally, Walailak University is determined to set a high standard for education and research in compliance with the changes, encourage innovation development, take a more active role as a center of academic services in the upper southern region and the country and be recognized as an educational center on an international level. Promoting the university to become the sustainable university for happiness in a principal mission as enshrined in the 5th Strategic Plan 2018 – 2037.

Understanding in such concept has been consolidated through a number of activities including the development and renovation of the physical environment in a form of sustainable development for education, work and campus life. The Sustainable Development Goals (SDGs) proposed by the United Nations has been integrated into the policy. In 2018 – 2019, the university has initiated several projects concerning sustainability. On behalf of Walailak University, I would like to present the sustainable development report of 2018 - 2019 as a testament to our determination to be the sustainable university for happiness.

Prof. Dr. Sombat Thamrongthanyawong
President of Walailak University
March 29th, 2019 marked the 27 years since Walailak University was established. For over 27 years, we have facilitated many progressive steps of development and advancement in all relevant aspects. Two years ago, it became accelerating because of the global change. We, therefore, took this opportunity to call today “the Changing Age” of Walailak University.

The first change was to reform the teaching and learning methods. The One-way learning in the class (No interaction) was replaced with UKPSF (The UK Professional Standards Framework from The Advance Higher Education (AdvancyHE) to ensure the efficient learning of the students. This framework is aimed to strengthen the analytical and synthesis skills of the students. All lecturers (100%) at Walailak University have been trained on UKPSF framework in the variety of levels, ranging from Associate Fellow, Fellow, Senior Fellow, and Principal Fellow. By the end of 2019, 40% of the total lecturers received the certificates of accomplishment for the Fellow and the Senior Fellow levels. This has put Walailak University a great success as the only one institution that has achieved this in the country. All of these indicated Walailak University’s commitment on improving and reforming the teaching and learning methods. This was to ensure that all personnel is well equipped with the skills to teach the students to be critical thinking, analytical, synthesis, and creative.

The language institute was also established to revolutionize English learning. The students are required to select English language courses for 6 school semesters or 2 college years which in the past, they were required only for 3 semesters or 1 college year. This reformation will also apply with major courses of each student. To ensure that the students can actually apply their English in their daily life, all major courses will be taught in English at least for 50% of the classes. Within the period of 3 years, all departments will develop and increase the English instruction courses to reach the goal.

To produce the graduates in alignment with the need of the country, which is being efficient and proficient in profession, Walailak University has improved the cooperative education. In this new course, students are required to take the cooperative education for 8 months or 2 semesters instead of 4 months like in the past. When the staff take the graduates, they do not have to worry about the working skills. At Walailak University, we make sure that all graduates have the efficient knowledge and proficient skills in both academic and vocational.

In term of learning facilities, the new students starting in the year 2018 will get to study in the Smart Class Room and the modern lab (Digital LAB) in the health science courses and the science and technology course. Another facility that cannot be missed is the Sports Complex. We have improved and renovated the stadium to be modern and serving all students and university personnel. The health center of Walailak University to be finished in 2019 will be open for services in 2021 offering the 120 bed facility for the in-patients. It also is expected to accommodate 419 in the year 2022.
Another proud of Walailak University is “Walailak Garden”. It was developed on 255 rai of land with the reservoir area in 130 Rai while its 125 Rai made up of landscape. Today, all people living in Nakon Si Thammarat province and nearby are visiting this garden. Those interested to visit Walailak Garden in a group, either from academic, government or other sectors can request a tour guide or join the Campus Tours offered by us.

Aside from all the changes and improvements of Wailailak University for over 27 years, we hosted a big event called “Walailak day” from March, 25 - April 3, 2019. In the event, there was a Walailak Agriculture Fair where the exhibition was held to show the agricultural development to simulate and boost the local economy in Nakon Si Thammarat province. It also provided the opportunity for the farmers and local people to present and exhibit their agricultural and local products. This fair helped strengthen the agriculture and sustainability of the community. In the event, there was also the Walailak Research which was held during 27-28 March 2019. It also hosted an international conference entitled “the 4th Era of Industrial Revolution and its Impact” from 27-30 March 2019.

Vision

To be an institution of good governance, to be a leading source of knowledge, the best in local, and the excellent in the global.

Aspiration

We aspire to explore, to search for, to preserve and to transfer the knowledge in order to generate and maintain our academic improvement and excellence. This aspiration aims to bring forth the citizens with knowledge and virtue for the never-ending benefits of the nation and mankind. We are strongly committed to building a graduate embedding the following qualifications.

1. To become an up-to-date citizen of national and global, that possesses the democratic ideology, great knowledge, and wide perspectives.

2. To be an academic or vocational expert with knowledge, capacity, and skills in the interested fields and can efficiently apply those in their profession.

3. To be a “Pundit” who have consciousness, morality, and work ethic.
Mission

Walailak University has 4 main missions as the followings.

1. To produce and develop the labors to deliver the international standard and the needs in developing the national economy and society.

2. To study, explore, research, and develop the new knowledge that will create the quality graduates who are efficient to become self-reliant and also excellent in the international competition.

3. To provide the academic services to the public and private sectors including giving consultancy, suggestions for research, development, technology, and survey. We also offer training and developments to cultivate the innovation for economic and social development of the nation and region.

4. To conserve and restore the arts and culture heritage including customs, traditions, pure art and applied arts to set the example for the locals as a comprehensive learning institution.

For more information, please visit the university website: www.wu.ac.th
Organizational structure of Walailak University

Walailak University

University Council

President

Internal Audit Unit

Vice president
Division of International Affairs and Education

- Akkhararatkhunumari Veterinary College
- Walailak University International College
- College of Dentistry
- Walailak University International College
- The Center for International Affairs
- Walailak University Language Institute

Assistant to the president
Division of Education Quality Development

- UKPSF Project
- The Center for Teaching and Learning Innovation

Vice president
Division of Academic Affairs

Office of Registration
- The Center for Academic Services
- The Center for Cooperative Education and Career Development
- The Center for Library Resources and Services
- The Center for Teaching and Learning Innovation
- Walailak University Hospital

Assistant to the president
Division of Academic Affairs

- Curriculum Standard and Graduate Quality (The Center for Teaching and Learning Innovation)
- Curriculum Development (New curriculum) (The Center for Teaching and Learning Innovation)
- Registration (The Center for Academic Services)
- Testing Services and Testing (The Center for Academic Services)
- Education Services (The Center for Academic Services)

Vice president
Division of Planning and Development

- Division of Planning and Strategy
- Division of Finance and Accounting
- Botanic Garden
- University Farm Office
- Quality Assurance
- The Center for Teaching and Learning Innovation
- Walailak University Hospital
- Graduate School

Vice president
Division of Administration

- The Center for Digital Technology
- The Center for Scientific and Technological Equipment
- Division of Central Administration
- Division of Landscape Architecture and Environment
- Walailak University Coordination Unit, Bangkok
- Green University Project

Vice president
Division of Research and Development

Institute of Research and Innovation
- Science and Technology Education Park
- Research Institute for Health Science
- The Center for Academic Services

Vice president
Division of University Council

Office of University Council

Vice president
Division of Student Affairs

- Division of Student Affairs
- Walailak Abode of Culture

Assistant to the president
Division of Sports

- Division of Sports and Health

Assistant to the president
Division of Legal Affairs

- Division of Legal Affairs
- Division of Civil Society and Community, The Center for Academic Services

Assistant to the president
Division of Construction Management

- Division of Construction Management

Assistant to the president
Division of Civil Society and Special Affairs

- Division of General Affairs and Correspondence
- Division of Property and Supplies

Assistant to the president
Division of Land and Buildings

- Division of Land and Buildings
- Green University Project
**Important Statistic**

### Scimago Overall Rankings (Among Thai Universities)

![Scimago Overall Rankings Graph]

### UKPSF Fellowships and Training

(100% of WU teaching staff have undergone either full UKPSF Certificate Program or internally organized Pre-UKPSF Course since the beginning of 2018)

![UKPSF Fellowships and Training Pie Chart]
The proportion of the total number of students

The proportion of students pursuing an internship aboard
The proportion of WU staff with academic titles

Articles published in ISI/Scopus Indexed Journal
Articles published in other journals
Green Walailak University Policies

Walailak University is determined to develop and promote environmental quality both in an academic and participation aspect and to cultivate conscience for good environment for students, staff, communities, societies and the country as a whole. The principal focus is on an environmental management in diverse dimensions including the resource, environmental technology, waste and pollution, human and society dimensions in order for the university to stand as a world class university treating environmental issues with priority and being accepted on the ASEAN and global community levels. To accomplish this mission, the Sufficiency Economy Philosophy principles and the Sustainable Development Goal as stipulated by the United Nations are applied as follows;

1. Developing and creating a master plan dictating the use of land with priority if energy saving and environmental conservation.
2. Taking a revolutionary action to enforce decreased use of energy and extensive use of renewable/alternative energy within the university
3. Encouraging decreased use of water supply and effective water supply management within the university to ensure optimal benefits.
4. Supporting waste management and zero waste by taking into consideration economic and social factors for the purpose of reducing waste by endorsing the practice of reducing, reusing and recycling and also demand effective and sustainable pollution reduction within the university
5. Providing a transport service for environmental sustainability and use and provision of public transports, bicycles and walking paths within the university
6. Endorsing every lecturer/student/staff – organized activity related to seeking effective solutions against the climate change issues caused by Green House Effects
7. Facilitating the university’s environmental education and research by integrating sustainability into all curriculums and advancement as a research center for sustainability innovations
8. Supporting and facilitating cooperation on academic, management, development and creation of technology and innovation for environment between the university and other organizations both on a national and international level
9. Achieving the status of a proper model and holistic learning platforms of sustainability developed under collaboration of communities and stakeholders
10. Acknowledging that sustainable development of the university is not only the mission but also the responsibility of all.

Prof. Dr. Sombat Thamrongthanyawong
President of Walailak University
Walailak University is a comprehensive university offering courses in social science, science and technology and health science and continually advancing its environment to serve as a residential university fully equipped with holistic infrastructures and facilities. The university landscape has been organized to be a learning source in a good, green and non-polluted environment (Green University). The university operates under the policy of Green Walailak University driven by my determination to continually proceed as specified in the Green Walailak University approach, regarded so highly that it is enshrined in the university’s 20 year strategic plan (2018 - 2037) in the fifth strategic issue concerning developing an image of becoming a happy green university.

In compliance with the mission of supporting and facilitating environmental conservation and creating the environment constituting good health for students, several projects have raised awareness of the university not only for the communities but also surrounding communities. Parts of the university’s success were represented by university evaluation awards such as the environment-friendly university ranked by UI Green Metric which was in compliance with UI Green Metric World ranking. To achieve the university’s identifying image of a green university of sustainable staff in the aspects of infrastructure management, energy and climate change management, waste management, water supply management, transportation system management and environmental education and research, the WU Green University committee has been appointed to put to practice the policy and establish the sustainable university for happiness. The committee consists of administrators and academic experts from multiple faculties. Additionally, the WU Green University committee is in charge of coordinating all the sustainability projects in the university. The WU Green university committee appointment was designed in such manner to ensure a sustainable practice equally contributed by high ranked administrators to staff. The management is based on the integration between the university’s academic and action workforces to develop the sustainable university for happiness. At the end of 2017, Walailak University joined SUN of Thailand committed to the ultimate goal of aligning Thai societies with the United Nations’ sustainable development goals. For further information on the sustainable university for happiness, please visit the university website https://green.wu.ac.th/.
The 1st Principle- effectiveness of sustainability of buildings and resource management in the university

The 1st principle: With respect for nature and societies being the priority, actions involving construction planning, renovation and implementation of any buildings in Walailak University are carefully considered based on their sustainability. Walailak University complies with the policy of creating and conserving the environment allowing our students, staff to study and work within the sustainable environment. To fully become the sustainable university for happiness as determined by the university policy, considerations about construction and renovation projects are virtually based on their sustainability attributes. The projects’ details were subject to a scrutinizing analysis process conducted by the Green University Committee, the Design and Architecture committee assembling teams of architectures, engineers and designers of relevant expertise. At Walailak University, physical resource management plays a significant role. Therefore, coordination and conveniences of all the parties involved (service users, students, staff and outside units) are immensely taken into account.

Approaches to achieve the 1st principle

In 2018 - 2019, the university has been materializing the WU master plan entailing the green building design concept and actions as well as management within the university. Many projects have been initiated between 2018 – 2019 with a solid commitment to the university’s campus life quality improvement principles and sustainable effectiveness improvement of the buildings in the university. The university investigated all the buildings and natural tears and wears came into sight. Thus, over the past few years, several of the buildings have been renovated to provide safer and more effective teaching, learning and working environment. The buildings’ air-conditioning systems, for instance, have been upgraded to for optimum effectiveness together with automatic classrooms possessing the capacities to switch the class’s energy system to an on/off mode by itself, detect real-time energy use and display an overall data summary for future energy management. The university also acknowledges that a systematic data gathering is an indispensable part of success in sustainable development. On that regard, based on the approaches scheduled in 2018 - 2019

The systematic data gathering and analysis processes of the university’s actions including amounts of resources used (an energy resource) and amounts of pollution being released to the environment (hazardous waste) have been made the focus of advancement. Empowered by the accurate and conclusive information, the university can practically and sustainably utilize the data for development measurement, appropriate goal setting as well as future creativity contemplation.
## Initiatives and Outcomes of the 1st Principle in Fiscal Years 2018 - 2019

<table>
<thead>
<tr>
<th>Topics</th>
<th>Goals and initiatives</th>
<th>Outcomes (fiscal year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important topics</td>
<td>Objectives and goals</td>
<td>Important initiatives</td>
</tr>
<tr>
<td>1. Resource usage and management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Use of electricity</td>
<td>Providing basic information on use of electricity</td>
<td>12,806,009.59 kWh/year</td>
</tr>
<tr>
<td>1.2 Use of water supply</td>
<td>Providing basic information on use of water supply</td>
<td>770,413 m³/year</td>
</tr>
<tr>
<td>1.3 Costs of energy and water supply and the amount saved</td>
<td></td>
<td>The total electricity costs: $1,639,005.03 (50,153,553.95 THB)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The total water supply costs: $20,440.40 (625,476.36 THB)</td>
</tr>
<tr>
<td>1.4 Products / Total amounts of supplies purchased</td>
<td>Walailak University endorses a replacement for printed paper with electronic documents in an office.</td>
<td></td>
</tr>
</tbody>
</table>

### 2. Campus Waste and Waste Management

| 2.1 Waste and Recycling | To reduce amounts of waste on campus and achieve a goal of reducing all types of waste | Endorsing the waste management program under the concept of “WU Zero Waste” | The total amounts of waste: 2,000 kilograms / day |
| 2.2 Paper and plastic use reduction program on campus | The university launched the plastic waste reduction campaign in 2019.  
1. Launching the campaign “Say No to Plastic” encouraging the students and staff to not receive plastic bags in the university market and requiring use of reusable shopping bags instead.  
2. Launching the program “Say No to non-reusable plastics” rewarding the students and staff using reusable shopping bags and water cups with stamps which can later be exchanged for gifts. Up to 10 food and beverage | Implementation of these two programs resulted in 164,764 reduction of plastic bags and 1,026 of plastic cups in 2019. |
<table>
<thead>
<tr>
<th>stalls join this program.</th>
<th>3. Establishing the policy and IT systems propelling the Paperless System such as E-office, E-service, E-form, E-signature for daily office tasks and E-learning</th>
<th>Total amounts of printing papers saved: 3,134,021 sheets/Year, Accounting for 6,268 reams, amounting to 510,459.36 THB/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Introducing the Two-Side use of paper requiring both sides of paper be used for informal communication within organizations</td>
<td></td>
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</tr>
</tbody>
</table>

### 2.3 Organic Waste Management

The university carries out systematic organic waste management.

1. Making compost out of leaves, braches, mowed Manila grass from different campus gardens and using it in WU Park. The amounts of compost made are adequate for the park maintenance. Because of the amount of 1.5 tons of compost annually made, Costs of fertilizer purchase can be saved more.

2. All food waste from the university The university succeeded in
canteens is retrieved by stall owners to be fed to farm animals such as pigs and used to make compost. disposing of a daily proportion of canteen food waste without any being thrown away or released to the environment. Also, a growth rate of pigs fed with food waste is compared with that of the pigs fed with industrial food to set a model of organic pig farming for farmers in nearby communities. At the final stage, dung from the pig farm is further utilized for a biogas production process.

| 2.4 Inorganic Waste Management | 1. The university launched a wastewater treatment and hazardous, general and inorganic waste management | The university introduced the recycling bank project aimed to buy recyclable waste at a university- |
systems. For inorganic waste, the process starts with separation at an originating source through use of labeled waste cans and transferring it to the campus waste separation facility. Designated price. The saleable includes hard paper, paper, glass, and aluminum and metal bottles. This project serves as a gathering center for later waste disposal.

3. Considering service users

<table>
<thead>
<tr>
<th>3.1 In-building Ventilation Quality</th>
<th>The university has renovated the Night Canteen and installed proper ventilation systems to ensure good airflow within some buildings as well as highly effective air-conditioning systems to keep the in-building environment comfortable. An office’s designated photocopy room has been introduced by the office renovation project to keep proper ventilation and increase workplace safety.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Cooperation among stakeholders on planning (Integrated designs)</td>
<td>In terms of physical resource management, the university has increased responsibility for design and construction on campus. The university promotes a participatory design in each design/redevelopment project. This process extensively involves conducting users’ needs analysis in order to develop a design proposal meeting needs of all the parties involved.</td>
</tr>
</tbody>
</table>

4. Building design

<p>| 4.1 Applying sustainable building construction standards to building | To develop the proper environment for teaching, learning and | Architects and engineers are commissioned to integrate the Green Building design principles into new building construction and renovation projects on campus. Building development is |</p>
<table>
<thead>
<tr>
<th>Exploration/Construction and Renovation</th>
<th>Working in compliance with the sustainability standards</th>
<th>Regulated by Energy Conservation Promotion Act B.E. 2535 and other rules and legislations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Long-term building use and durability</td>
<td>In 2018, the university expresses determination to pursue sustainable building development by appointing The Green University Committee and Design and Construction Committee to implement the sustainable development approaches in the university buildings. Details of each project are subject to thorough analysis and consideration of the committees from construction to maintenance stages specifically on the basis of sustainability. Additionally, the university has also appointed the Energy Conservation Committee to enforce the optimal use of energy through the Walailak University Energy Conservation Policy. To minimize long-term usage problems and durability, architects and engineers used durable and sustainable environment-friendly construction materials for the newly constructed and renovated buildings.</td>
<td></td>
</tr>
<tr>
<td>4.3 Integrated landscape and building design</td>
<td>The building and landscape design approaches have been established to ensure optimal use of the university’s land. Between 2018 – 2019, a huge number of big and small trees have been planted to increase green areas and the restitution for the unused land was conducted to be converted to the university’s green areas.</td>
<td>The total amount of the university land areas including forest areas and plants: 66.45%</td>
</tr>
</tbody>
</table>
The 2nd principle: Walailak University’s action plan drafting and goal setting

The 2nd principle: To ensure the university’s long-term development sustainability, the university sets an action plan and goals as well as environmental and social goals. Walailak University has evolved in harmony with educational needs and campus life quality of the students, staff and a huge leap of technological evolution. The four year period between 2016-2019 has virtually been the transforming phase of the university while the university’s planning conforms to the WU plan. Nevertheless, both internal and external changes which have occurred over the past few years significantly urge and in fact necessitate revision of physical development planning across the university. Therefore, the revision program of the WU master plan establishment entered into force in 2016 for the purpose of improving the new university master plan in accordance with the sustainable university for happiness policy.

Approaches to achieve the 2nd Principle

Management approaches for the 2nd principle remain in compliance with the university’s plan targeting sustainable physical environment development and promotion of campus life quality as emphasized in the sustainable university for happiness policy. In general, the development strategies are as follows:

1. Review of the WU Master Plan

As a residential university with vast amounts of open land, the new building development planning is still committed to a design with optimally open space to extensively benefit from natural light replacing electricity use inside a building. Walailak Park, spanning over 100.79 acres, divided into 51.38 acres of water and 49.41 acres of land, was built to serve as a recreational space for the university staffs, lecturers, students and also members of Thasala community, Nakhon Sri Thammarat as well as visitors from across the country, together with campsites and museums representing the university’s priority given to management of unused land.

2. WU Transportation Management

The main strategy in this regard is dedicated to Walailak University students and staff’s convenient transport for a daily commute and journey from one spot to another on campus. It is also aimed to reduce the number of personal fuel vehicles such as cars and motorcycles and to ultimately endorse the minimum-carbon emission policy. Various means of transport has thereby been upgraded since 2016. The staff shuttle bus service for the university staff evidences the abovementioned effort. Additionally, the electric shuttle bus system has been operating under the project “WU Electric Shuttle Buses” to ease the traveling within the university for both students and staff. Above all, the launch of this project is aimed to help reduce not only air pollution which is a leading cause of Global warming but also an accident rate. Additionally, it is in compliance with the Green University policy with E-Bus Tracking and the Walk-For-Health project intended to encourage the use of Covered Walk Way when traveling between buildings on campus. This is all to establish
a low-carbon emission community spirit within the university. In the near future, the university is making progress toward addition of bicycle lanes on campus.

3. Quality Health and Living Standard Improvement

The university makes it a mission to develop the sustainable environment which accommodates teaching & learning and working. In 2016-2019, the university facility systems have been improved to achieve the ultimate goal of providing safe environment and good health. At present, a number of services are made available for the university students and staff. One popular example is the WU Sports Complex offering a wide variety of exercise choices and WU Park serving as a recreational space not only for WU students and staff but also the nearby communities. The facility inspires staff and students to actively engage in exercise for their health and well-being.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Goal and initiative</th>
<th>Outcome (Fiscal year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Important topics</strong></td>
<td><strong>Objectives and goals</strong></td>
<td>Fiscal year 2017-2018</td>
</tr>
<tr>
<td><strong>1. The goal of managing the university’s Green House Gas (GHG)</strong></td>
<td><strong>1.1 Green House gas emission (GHG)</strong></td>
<td>The university’s GHG emission management was started in fiscal year 2016. In the first phase, an evaluation of GHG emission from transport on campus was studied. In fiscal years 2018-2019, the scope of GHG emission has been expanded to cover all campus activities.</td>
</tr>
<tr>
<td><strong>2. Review WU master plan</strong></td>
<td><strong>2.1 all of the university’s land</strong></td>
<td>WU master plan was drafted and then revised in 2016 which covers the master plan for the areas within and outside the educational areas. The</td>
</tr>
<tr>
<td>Project consists of a master proposal and a fundamental structure diagram.</td>
<td>The total land area for water absorption: 32.10%</td>
<td></td>
</tr>
</tbody>
</table>

### 3. On-campus Transportation Management

#### 3.1 Fundamental Data investigation

- To provide fundamental transport data which will facilitate the university’s fundamental structure planning
- The investigation project has annually been conducted since 2016.
- The number of vehicles driven into the campus/day: 1,989 (in total)
- The number of cars driven into the campus/day: 1,082
- The number of motorcycles driven into the campus/year: 907

#### 3.2 Use of bicycles and Covered Walk Ways

- To encourage use of alternative means of transport on campus:
- The health program/ the university encourages use of Covered Walk Ways as daily exercise for the staff and students.
- Pedestrian paths on campus are all connected and covered by metal roofs called (Cover Walk Way).
- The average number of bicycles ridden into campus/day: 255
### 3.3 Making an integrated plan for travelling

To decrease the number of personal fuel vehicles on campus

1. The staff shuttle commute service is provided. The electric shuttle system has been operating since 2018, covering 5 connected routes across campus.

2. The university targets to decrease an amount of carbon dioxide emission by 40% within 5 years.

<table>
<thead>
<tr>
<th>The shuttle service for the university students and staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of operating electric shuttle buses: - 16 buses</td>
</tr>
<tr>
<td>The number of bus users: 13 users</td>
</tr>
<tr>
<td>The number of journeys made by the staff shuttle commute buses: 628 times/day</td>
</tr>
</tbody>
</table>

### 4. Food

#### 4.1 Food safety

To ensure the quality of food and beverage sold in the university canteens

The food safety program was commenced in 2007 by School of Public Health generally performing food contamination tests, conducting food safety activities and performing customers’

Joining volunteer programs

Mandatory for all of the canteen food sellers
### 5. Social condition within WU Community

#### 5.1 Access to Services and Facilities

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction evaluation.</th>
</tr>
</thead>
</table>

1. To provide students and staff with facilities including Walailak University Hospital, WU Sports Complex, dormitories, bank, convenience stores etc.
2. To extend service hours of some facilities such as The Center for Library Resources and Educational Media and WU Sport Complex etc.

Walailak University Hospital provides a wide range of medical services for staff and public. The number of students and staff receiving medical consultation: 10,326 persons

<table>
<thead>
<tr>
<th>5.3 Participatory Infrastructure and landscape development planning</th>
<th></th>
</tr>
</thead>
</table>

The university has drafted a building development/renovation plan with high consideration of the environment agreeable to all stakeholders.

The Green University committee and Design and Construction committee has been appointed to discuss issues concerning the university planning and environment design together with all stakeholders.

<table>
<thead>
<tr>
<th>5.4 Work conditions, health and safety</th>
<th></th>
</tr>
</thead>
</table>

The university provides safe work environment enabling good health and others unrelated to work

1. Walailak University aims to become a traffic accident-free university within five years and is determined to serve as a model of a university with sustainable traffic accident – free campus.
2. The 100% Helmet project on campus
3. The 5S committee has been made a mandatory evaluation for every department
4. The university allots the budget for promoting physical environment within a workplace
2. The university staff are entitled to basic social welfare as legislated on the labor laws with additional benefits.

6. Land use and biodiversity

| 6.1 Land and building use and biodiversity | The university adopts effective land use management to achieve optimal benefits. | The Green University committee and Design and Construction committee cooperate in establishing collaborative policies and development directions to sustain the area’s biodiversity upon any means of land use, building construction and renovation. |
The 3rd Principle – Walailak University’s integration of research and educational facilities

The 3rd Principle – this principle is intended to put the organization’s mission in compliance with sustainable development through research and educational facilities

Approaches to achieve the 3rd Principle

It is evident that the institution’s commitments and specific information sources is a key factor to achieve the future success of being a sustainable university. The university’s sustainable policy must be not only a Top-Down but also Down-Top approach. This premise demanded an establishment of the Green University Policy back in 2017.

The university conforms to the sustainable approaches in three aspects of sustainable development including the environmental, economic and social aspects by taking action in each one of these activity categories, namely 1) basic infrastructures and physical qualifications of the university 2) health and quality living standards 3) resource management 4) education and research and 5) administration and social participation. The university has applied the concept of Sufficiency Economy Philosophy (SEP) introduced by H.M.The Late King Bhumibol Adulyadej and The Sustainable Development Goals (SDGs) proposed by the United Nations (SDGs) to achieve the optimal approach for sustainable development. The Green University Committee and the Green University Project team were formed to sustainably ensure effective physical resource management and address issues concerning the policy implementation with the president and vice-president closely supervising any actions, activities and projects regarding sustainability within the university. Consistent evaluations and inspections within the university will also be performed by the Green University committee. Hence, as an educational institution, it is imperative that education and research addressing environmental issues strive as a crucial springboard for the university’s sustainability enhancement. In fiscal year 2018 – 2019, the university has administered different projects through existent bachelor degree curriculums and those higher as well as several research teams. A large number of documents were made to emphasize educational association of higher education which is highly beneficial for the university as well as to promote learning, innovation creation and significant breakthroughs.

Finally, in terms of academic services for a society, acting upon the university’s concept of providing academic services through social engagement, knowledge and potentials in various fields of expertise, namely health science, science and technology and social science, are applied to propel the communities in many aspects including the environmental, economic and social aspects which are sustainably environmentally friendly. All sectors collaborate in achieving the goals including community, academic, government and private sectors particularly within Thasala District under the name Thasala Model : Smart and smile city which is in absolute compliance with the vision of Walailak University “Gateway to Achievement”.
### Initiatives and outcomes of the 3rd principle in (fiscal year) 2018-2019

<table>
<thead>
<tr>
<th>Topics</th>
<th>Goals and initiatives</th>
<th>Outcome (fiscal year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Important topics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Objectives and goals</strong></td>
<td><strong>Important initiatives</strong></td>
<td><strong>Year 2017-2018</strong></td>
</tr>
<tr>
<td><strong>1. Integration</strong></td>
<td>To raise awareness of sustainability problems among the university’s staff and students</td>
<td>Many institutions including physical resource management, the research institute and research teams have started a number of research projects integrating research and educational facilities.</td>
</tr>
<tr>
<td><strong>1.2 Sustainability-integrated curriculums</strong></td>
<td>To increase knowledge on sustainability issues among students</td>
<td>The university treats the sustainability-integrated bachelor and higher degree curriculums</td>
</tr>
</tbody>
</table>
1.3 Curriculums or research related to sustainability

Research teams with a partial or intensive focus on sustainability

The university research teams consist of research focusing on science and technology, health science and social science.

2. Integration with the society

2.1 Programs, projects or activities associating the university with industrial, government or civil society sectors

To associate the university projects, activities and programs with industrial, government or civil society sectors.

A number of programs and projects have been developed under cooperation of industrial, government or civil society sectors.

“WU Social Engagement” operates across Nakhon Sri Thammarat and the upper southern region.

2.2 Student & community run programs and activities geared toward more sustainable actions

Each year, WU students from different faculties organize a large number of projects strengthening connection and providing services to communities.

The number of student organizations focusing on environment and sustainability: 5
3. Research and studies involving use of laboratories / IT and sustainability facilities

<table>
<thead>
<tr>
<th>3.1 Research and studies focusing on energy conservation in laboratories/IT facilities</th>
<th>To set the energy saving standards within buildings</th>
<th>An index of energy from buildings in the university</th>
<th>An index of energy from buildings in the university</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Research and studies focusing on reduction of hazardous waste from research process and IT facilities</td>
<td>Conducting a pilot study</td>
<td>Systematically exploring safety and reducing research-derived hazardous waste</td>
<td></td>
</tr>
</tbody>
</table>

4. Commitments and resources for the university’s sustainability

<table>
<thead>
<tr>
<th>4.1 Continuity of the sustainability policy applying to the entire organization integrating academics with problems</th>
<th>Walailak University is a world class university producing knowledge and innovations necessary for a constructive and sustainable transformation of Thai societies.</th>
<th>“Sustainable development” is one integral topic specified in the university’s Strategic Plan 2017-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Commitment to the principles and initiation of sustainability under cooperation with outside institutions and organizations</td>
<td>To introduce sustainable development in education and the university’s implementation through cooperation with Walailak University cooperates with other Thailand’s world class universities to form Sustainability</td>
<td>1. UI Green Metric World university ranking 2. Sustainable University Network of Thailand (SUN Thailand)</td>
</tr>
</tbody>
</table>
outside organizations.

University Network Thailand (SUN Thailand) in 2016 to achieve the shared goal of establishing a sustainable development framework for education in Thailand

<table>
<thead>
<tr>
<th>4.3 Special resources and budget for sustainability of the university</th>
<th>Total research funds allotted to environment and sustainability research (average per annum over the last 3 year):</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 632,869 (19,365,741.40 THB)</td>
<td>Total research funds allotted to environment and sustainability research (average per annum over the last 3 year): $ 3,717,173.56 (113,745,510.93 THB)</td>
</tr>
</tbody>
</table>
References

WU Green University
Division of Planning and Strategy
Center for International Affairs
Center for Innovative Learning and Teaching
The Center for Educational Services
The Center for Academic Services
The Center for Scientific and Technological Equipment
The Center for Digital Technology
Walailak Sport and Health Center
Division of Land and Building
Division of Landscape Architecture and Environment
Walailak Botanic Garden

Water treatment, Waste, Hazardous Waste and General Waste Management System Management

Walailak University Sustainability Report 2018 – 2019

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Base on: ISCN - GULF Sustainable Campus Charter
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