6、Intelligent School Affairs

6-1 Governance of School Affairs
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Governance of School Affairs

Decision-making organization and structure

Under the blueprint of the school affairs development program, the school has established a complete administrative decision-making organization and operating structure and allocated appropriate manpower to form a solid school affairs management team. Meanwhile, students are provided with a channel to participate in school affairs governance, and a management examination mechanism for school affairs governance has been established. Promoted by rigorous internal control and lean work, self-evaluation and adjustment are implemented with the results of school affairs research to continuously enhance the quality of school affairs development.

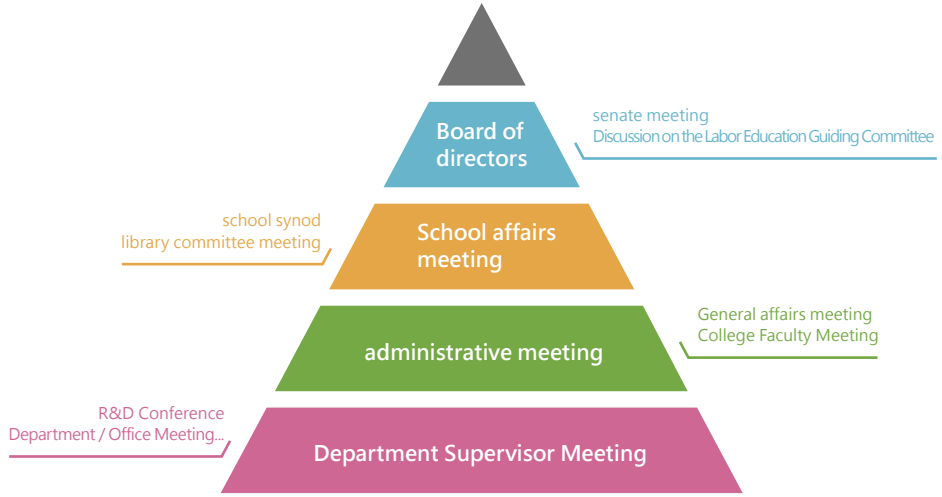
Board of directors

The operating procedure and criterion of the board of directors are conducted according to the charters and regulations approved by the Ministry of Education to exercise the powers and items of the board of directors listed in the Private School Law. On December 23, 2013, the "Charter of Donation by Tunghai University" was revised and approved by the Ministry of Education and implemented accordingly. The composition, powers, and operation of the board of directors are described as follows:

Composition： The total number of directors of the board is 15 and the chairman is 1 who is elected among the directors in the current year. The term of each director is 4 years and they are eligible for re-election.

Power： Dealing with relevant major decisions, such as the selection and dismissal of directors /chairmen/supervisors, personnel rights of the principal, financing and application of school resources, important financial executions and developments, review and implementation supervision of important school affairs programs and regulations, school restructuring, etc.

Operation： The chairman calls a board meeting, which is held at least twice every semester. The resolution is set out in the minutes of the meeting and distributed to directors, supervisors, and other attendees. The resolution is listed as an important file and must be kept permanently during the existence of the juridical person.



The organizational structure of the school's administrative decision-making

- Administrative executives at all levels implement internal authorization and hierarchical responsibility according to organizational systems and business. To maintain a smooth communication channel for administrative decision-making, administrative meetings and department executive meetings are held regularly to track the speed of decision-making in the organization.
- The administrative meeting, the school's main decision-making meeting, horizontally integrates administrative and teaching units at all levels. Meetings are held every two weeks during the semester to discuss important school affairs, administration, and discussions with the principal.
- Students are invited to participate in discussions on school affairs policies and major campus issues. The administrative decision-making process incorporates multiple perspectives to fully implement campus democracy.

School affairs meeting

The school affairs meeting was established according to Article 13 of the University Law and Article 22 of the School's Organizational Regulations, and the "Charter of the School Affairs Conference of Tunghai University" was stipulated to resolve major matters in school affairs, including programs and budgets for school affairs development, organizational protocols and important rules, establishment /change/discontinuation of teaching units, academic affairs/student affairs/general affairs/research matters, teacher evaluation, meeting proposals or matters discussed by the principal, etc.

Composition： Articles two to six of the charter of the school affairs meeting clearly define the composition of the meeting members and how they are generated, including ex-officio members, elected members, staff, and student representatives (Annex 1-5). The number of elected members must not be less than 1/2 of the number of general members; the number of student representatives is 1/9 of the number of general members.

Operation： In principle, the school affairs meeting is held in the first month after the beginning of each semester and the month before the end of the semester. In the 2014-2017 academic year, 16 school affairs meetings (including temporary school meetings) were held. The resolutions and meeting records were uploaded to the school's meeting record system for viewing by staff and students.

Management examination mechanism and internal control and internal audit

To truly grasp the progress of school affairs development and governance, the school conducts management examinations through self-assessment (school affairs assessment, department evaluation of degree programs, general education assessment, etc.). In the 2017 academic year, the school of the College of Management also passed the certification of the Association to Advance Collegiate Schools of Business (AACSB), and the College of Engineering also continued to participate in the certification of the Institute of Engineering Education (IEET). Additionally, a rigorous review and management mechanism has been stipulated for the Long-Term School Affairs Development Program, Teaching Excellence Program, Higher Education Sprout Project, and various government-sponsored integrated Programs (Such as the Humanities Innovation and Social Practice Program by the Ministry of Science and Technology, the University Social Responsibility USR Program of the Ministry of Education, etc.). In addition, through internal control and internal audit, the operations of administrative units continues to be improved.

Internal control system

- **Organization：**

  The internal control committee has the secretary's office as the business undertaker and the principal as the convener.

- **Regulation：**

  The school has stipulated the "Regulations for Implementing the School Internal Control System" in accordance with Article 2 of the "Regulations for Implementing the Internal Control System of the University and the affiliated Private School".

- **Result：**

  A.The school has implemented the internal control system since October 1999 and completed the manual of the internal control system in October 1999.
  B.The school has set up an "Internal System Advocacy" section for inquiries by school staff.

Internal audit system

- **Organization：**

  One full-time auditor under the principal, the internal audit committee, and 11 to 15 members were set up. With regard to the composition of the committee, the legal adviser of the school is an ex-officio member, and the full-time teachers who have not held administrative positions and have administrative qualifications are selected by each college. The Department of Finance and Department of Accounting recommend two people in the financial and accounting fields as professional members. They take the responsibilities for auditing personnel, finance, operations or related party transactions of the school, as well as supervising and reviewing the annual audit program prepared by the school's auditors based on the risk assessment to conduct regular audits or project audits of each business unit to help improve the school's operating efficiency, asset safety, and reliability of financial reporting.

- **Regulation：**

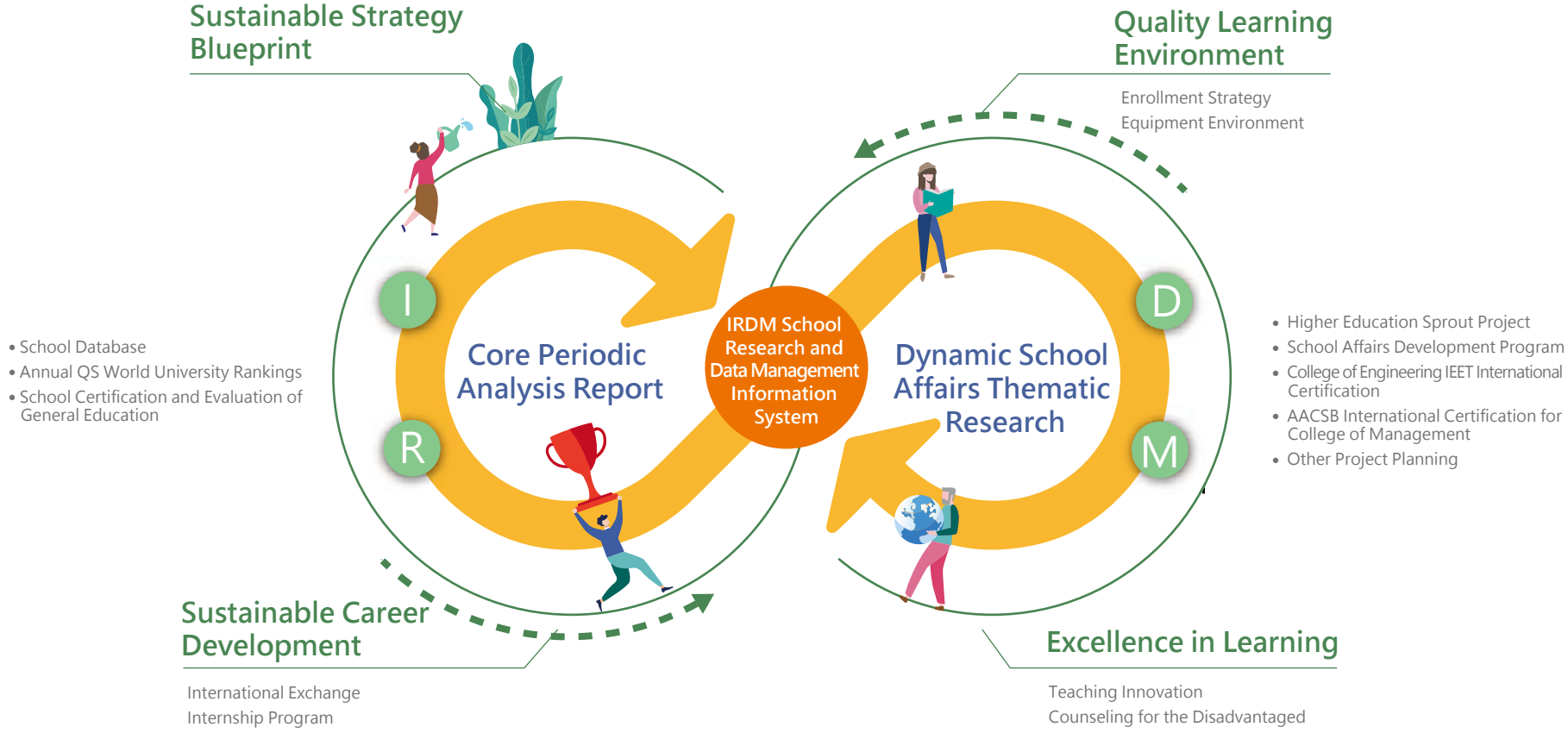
  The school passed the "Regulations for the Setup of the Internal Audit Committee" in December 2012, and established the "Regulations for Implementing Internal Audit" as the basis for auditors to implement auditing operations in May 2018 according to the "Regulations for the Implementation of the Internal Control System of the School Foundation and Private School".

- **Result：**

  The school completed 23 auditing operations and found 6 missing items in the 2015 academic year, completed 25 auditing operations and found 6 missing items in the 2016 academic year, and completed 28 auditing operations and found 8 missing items in the 2017 academic year. Afterward, all units made improvements within the deadline.

School Affairs Research

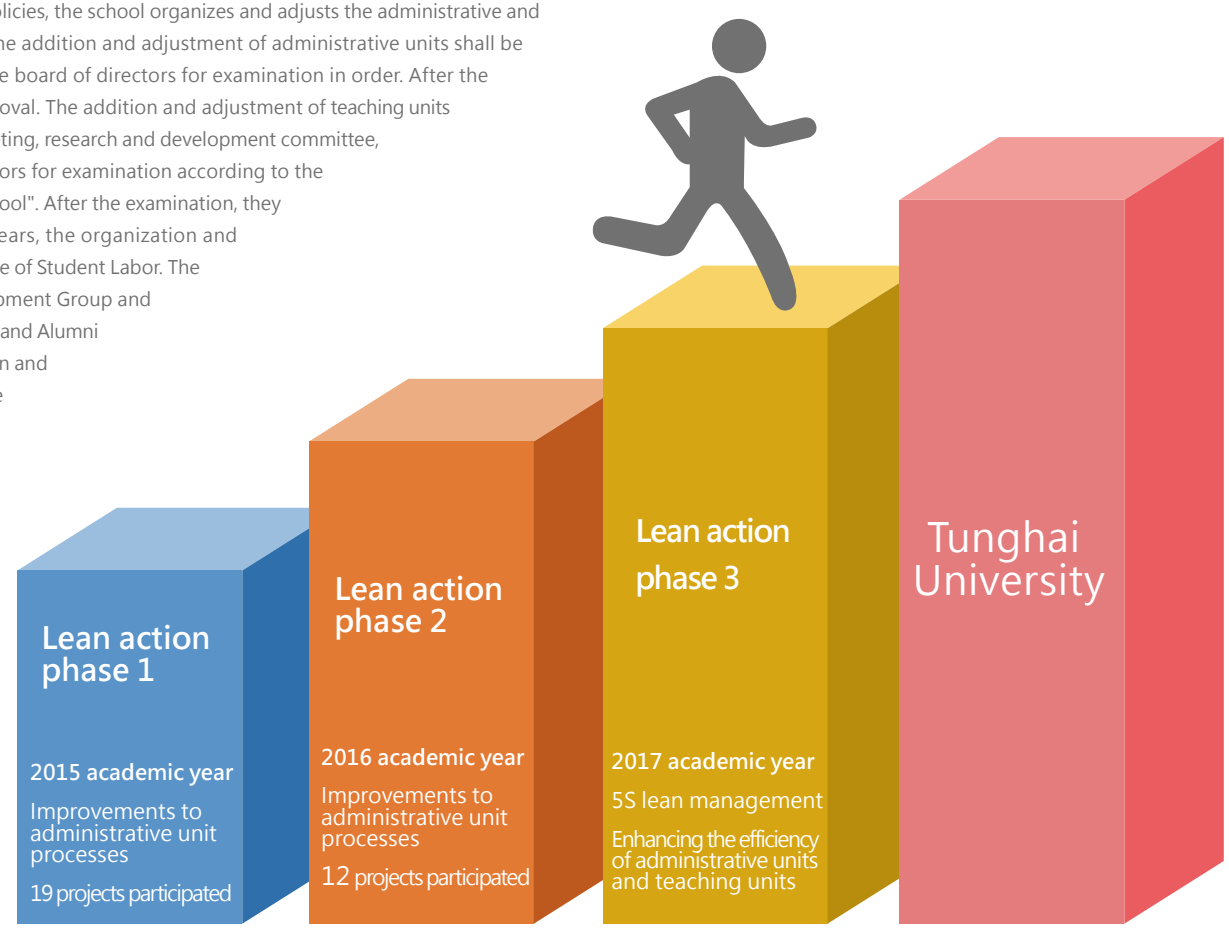
To implement the school governance and operation and examine the results of the policy, the school established a school affairs research office in the 2015 academic year and set the relevant guidelines. Starting from the 2017 academic year, to allow the school affairs research to be sustainably developed, the school developed the "School Affairs Research Platform" to digitalize and graphicalize the results, and then developed a teaching environment and growth path suitable for teachers' teaching and students' learning in the school. In addition, the school submits the analytical results of issues to business units for review and improvement, so as to continuously circulate assessments to optimize various school governance policies. Through student IPO (Input, Process, and Output) as the main theme, teachers can understand the learning process of students. Teachers actively inventory the database of the school computer center, the school database, and the columns and variables of KPIs for the higher education sprout project, and build the database of school affairs research. The teacher analyzes the student's learning process, including the integrated course (capstone course), learning assessment results, course satisfaction, student self-evaluation, employment situation, graduate employer satisfaction, and other data. It is expected that the quality of school affairs and administrative efficiency will be improved through the integration of various school affairs related materials, and analysis reports will be submitted regularly through dynamic school affairs thematic research.



Lean School Affairs

To cope with the school affairs development and the needs for national policies, the school organizes and adjusts the administrative and teaching units to run toward the operation of a sustainable university. The addition and adjustment of administrative units shall be submitted to the administrative meeting, school affairs meeting, and the board of directors for examination in order. After the examination, they shall be reported to the Ministry of Education for approval. The addition and adjustment of teaching units shall be submitted to the departmental affairs meeting, college affairs meeting, research and development committee, academic affairs meeting, school affairs meeting, and the board of directors for examination according to the "Regulations for the Addition and Adjustment of Teaching Units of the school". After the examination, they shall be reported to the Ministry of Education for approval. In recent years, the organization and adjustment include the addition of the Service Learning Group in the Office of Student Labor. The Audit Group was deleted from the Accounting Office. The Career Development Group and the Alumni Service and Social Resource Group were set up in the Placement and Alumni Office. The Po-Ya School was set up with the divisions of the Administration and Development Group, the Student Learning and Activities Group, and the Liberal Arts Learning Research Group. The Library Reference Group was changed into the Reference Service Group. The Enrollment Strategy Center was set up in the Office of Academic Affairs.

To further improve administrative efficiency and organizational activation, the school has launched lean actions since the 104 academic 2015. In the 2016 academic year, the "Lean Action and Promotion Office" was established to extend the lean concepts implemented in manufacturing industries for many years to all business teams throughout the school. By reviewing the workflow, waste is eliminated, efficiency is increased, processes are streamlined, and performance is optimized. Policies and systems are checked to be effectively conveyed or achieved through lean actions.



Three-phase framework for lean actions

Financial Information

The total income of Tunghai University in the 2015 academic year was about 2.577 billion dollars, in the 2016 academic year about 2.632 billion dollars, in the 2017 academic year about 2.665 billion dollars, and the average income in the 2015-2017 academic year was about 2.625 billion dollars. The main source of income comes from tuition and incidental fees, which accounts for 60%, followed by subsidy and beneficiary income, which accounts for 14%, and industry-academia cooperation income, which accounts for 10%. The former three account for 84% of the total income. From 2015 to 2017 academic year, the current expenditures respectively were 2.371 billion dollars, about 2.429 billion dollars, and 2.530 billion dollars. The first three main expenditures are mainly used for the teaching and research and training expenditure, which accounts for 59%, followed by the administrative management expenditure, which accounts for 20%, and the industry-academia cooperation expenditure, which accounts for 9%. All three account for 88% of the total expenditures. In order for the school to manage sustainably, according to each development dimension of the school affairs development program, the priorities of each course of action of the development programs for each college and related administrative unit, and the performance indicators of the short- and mid-term drawn up by each program, Tunghai University plans various input resources.

	2015 academic year	2016 academic year	2017 academic year	
Total income (hundred million dollars)	25.77	26.32	26.65	2.625 billion dollars average income in 2015-2017 academic year
Current expenditure (hundred million dollars)	23.71	24.29	25.30	2.443 billion dollars average expenditure in 2015-2017 academic year
Balance (hundred million dollars)	2.07	2.03	1.35	182 billion dollars average profit in 2015-2017 academic year

Three financial management strategies

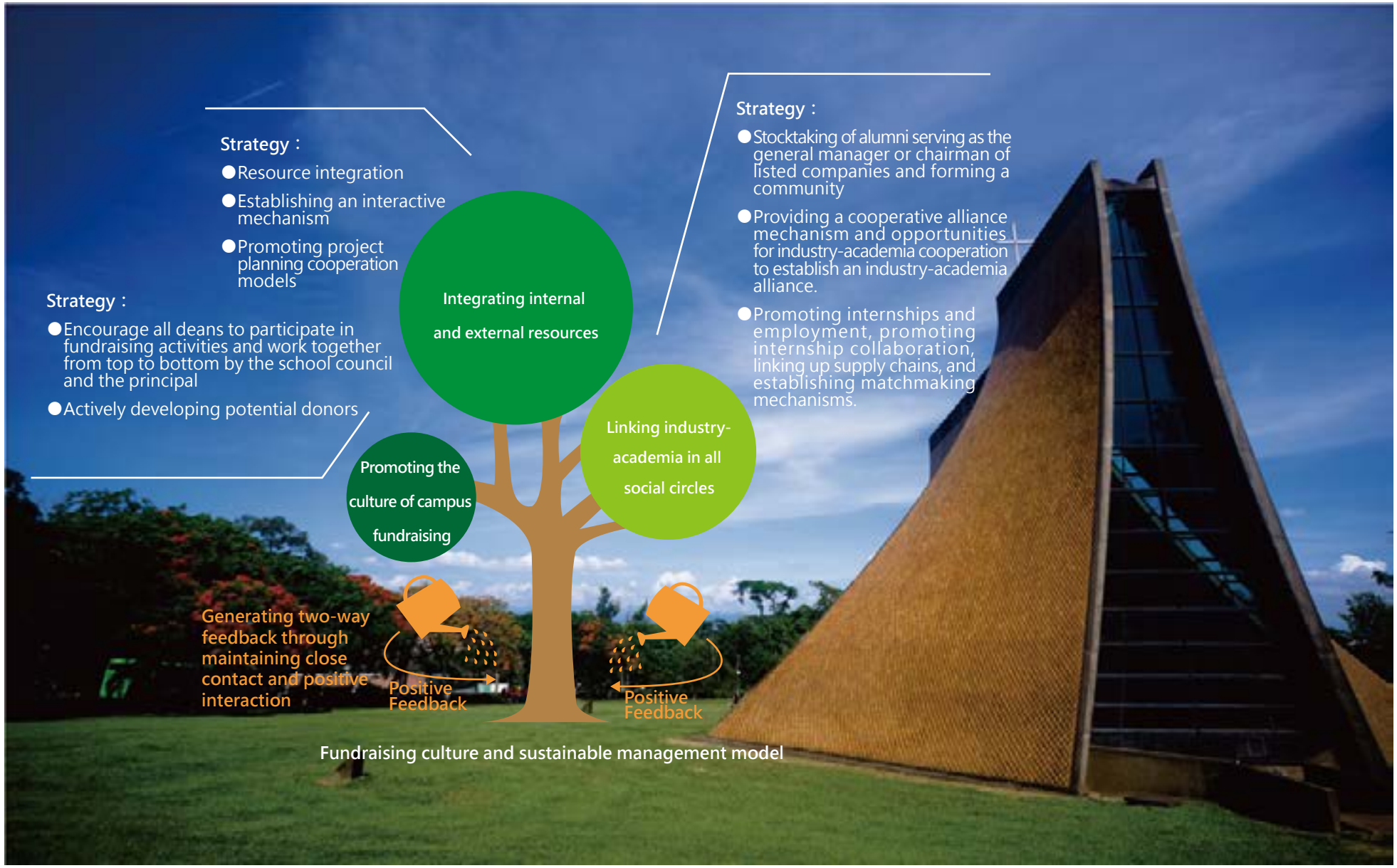
Establishing an accounting system
Establishing a financial internal control system
Establishing related regulations for operations

Seven financial application strategies

Budget management
Fund management
Increase in fundraising
Promoting school spin-off enterprises
Increase in income from industry
Increase in income from the promotion education
Increase in income from the Experimental Farm

School income and expenditure information:

Financial report of Tunghai University:



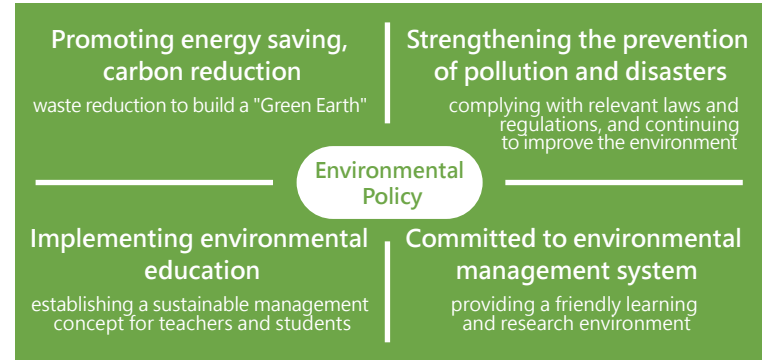
Fundraising culture and sustainable management model

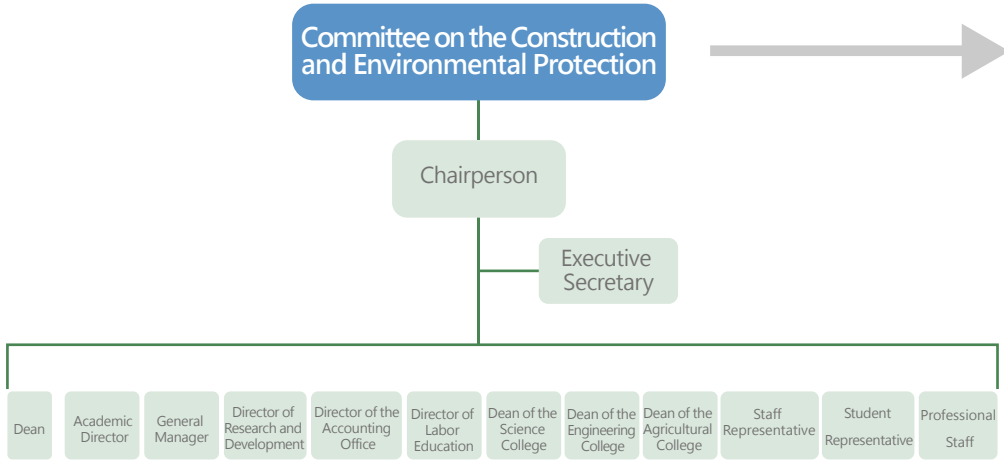
Sustainable Campus

Campus environmental management

Tunghai University clearly stipulated the environmental protection policies and goals by upholding the motto of "truth", "faith", and "deeds". Through the spirit of pollution control, disaster prevention, energy conservation and carbon reduction, and continuous improvement, the school is committed to complying with regulations and is committed to creating an environmentally friendly, safe, comfortable, and healthy learning environment. Based on "cognition of environmental protection and safety", "concept of improving environmental quality" and "mission of higher education to society", Tunghai University has continuously implemented the ISO 14001 environmental management system since 2010 and demonstrated the determination of the school to protect the environment through third-party authentication. Moreover, the system accords with the latest international environmental management trends and is certified again in December 2018 on a cycle of three years.

To cope with future development, Tunghai University has completed the overall construction of the substantial environment, promoted work related to environmental protection, improved environmental protection education concepts and policy formulation and implementation, and established a campus construction and environmental protection committee. The ex-officio members include the principal, the dean, the academic director, the general manager, the director of research and development, the director of the accounting office, the director of labor education, the dean of the science college, the dean of the engineering college, the dean of the agricultural college, a staff representative, and a student representative, three of whom are hired by the principal as principal members. The chairperson, also the principal, is responsible for integrating various resources to supervise the system to operate effectively. The Construction and Maintenance Group serves as an executive secretary to assist the chairman in supervising related work and business.



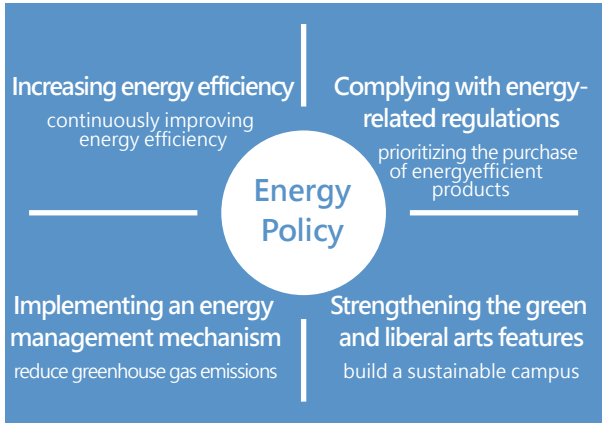


- Environmental Management Promotion Group
- Energy Conservation Promotion Group
- Campus Development Team
- School Landscaping Steering Group
- Toxic Chemicals Operations Management Committee

- Formulating campus construction and environmental protection policies
- Integrating the promotion of campus pollution prevention and control
- Reviewing environmental protection issues related to campus construction
- Supervising matters related to campus safety and sanitation
- Supervising the management of toxic chemical operations
- Supervising the implementation of nature conservation in school
- Supervising the implementation of environmental protection training and advocacy
- Supervising the implementation of the carbon reduction program and related matters
- Supervising campus landscaping work
- Other promotion of campus construction and environmental protection

Low-Carbon Campus

On the basis of social responsibility and sustainable management, Tunghai University has stipulated the promotion of energy conservation and carbon reduction policies and goals, in order to comprehensively construct energy conservation management mechanisms for all units in the school, with a view to replacing energy-consuming equipment and creating low-carbon green campuses. The school is committed to implementing the energy resource management policy and taking 2013 as the base period (EUI value) to reduce energy consumption by 1% year by year as a goal. To promote energy conservation for making full use of energy, Tunghai University participated in the "Energy Management System and Counseling Program" by the Bureau of Energy, Ministry of Economic Affairs. In 2014, the school introduced the ISO 50001 energy management system and obtained a third-party impartial unit certification to achieve a training spirit of energy management. This can continuously maintain the competitiveness of the school for being accredited again in 2017 on a cycle of three years.



Energy management

Tunghai University promotes the energy-saving program every year. In recent years, the school has continued to replace old equipment, introduce smart energy-saving systems, and fully replace existing diesel buses with electric buses. Compared with the years prior to 2017, the electricity consumption of Tunghai University in 2018 was 21,779,240 kWh, a decrease of about 4.6%; diesel consumption was decreased by 9.5% compared with the previous year; natural gas was increased by 6.2%. This shows that the energy-saving measures implemented year by year have achieved preliminary results. In addition, Tunghai University is expected to install solar panels on the roofs of the buildings of Chemical Engineering and Humanities to generate electricity with a total implementation capacity of 970kw. It is expected to generate 1.27 million kWh of electricity annually and reduce carbon emissions by more than 660 metric tons.

Table. Statistics on energy use each year

		2016	2017	2018
Direct energy consumption	Diesel (kiloliter)	4.58	2.29	2.072
	Natural gas(m^3)	304,596	323,090	343,065
Indirect energy consumption	Electricity(kWh)	23,448,560	22,834,040	21,779,240
Total floor area of the building(m^2)		299,594	299,894	302,262
Energy intensity (million joules/m^2)		0.00009423	0.00009395	0.00009204

Note: The scope of electricity covers the campus and dormitory of Tunghai University.

Greenhouse gas inspection

On the basis of "high awareness of environmental protection, safety, and sanitation" and "active mission of higher education to social demonstration", the school implemented the spirit of sustainable campuses and green universities. Since 2012, Tunghai University has organized a working group on the inspection of greenhouse gas. The head of the Environmental Science and Engineering Department led the students to form an "Environmental Pioneer Team" to conduct inspection works of campus greenhouse gas. All units cooperated with meticulous inspections to ensure that they could accurately grasp the data and emissions on the greenhouse gas inspection within the school. In addition, the external inspection of ISO 14064-1 greenhouse gases has been passed in 2013, which has been set as the base year. The follow-up procedure continued to follow the principles of ISO 14064-1 for Tunghai University to implement self-management and information disclosure.

Table. Greenhouse gas emission each year

Greenhouse gas emissions of Category 1 (ton CO2e)	Greenhouse gas emissions of Category 2 (ton CO2e)	Greenhouse gas emission intensity (ton CO2e/m)
2016 → 43.94	2016 → 14,960.181	2016 → 0.0502
2017 → 36.19	2017 → 14,568.11	2017 → 0.0485
2018 → 40.07	2018 → 13,895.15	2018 → 0.0463

Energy-saving measures

Case Study 1. Cloud Smart Energy-Saving Monitoring System (iGEMS)

Tunghai University promotes the energy-saving plan year by year and continues to discover inferior equipment with high energy consumption and low efficiency so as to reduce power use efficiency (PUE) and overall energy consumption. Additionally, the school has further established a cloud smart energy-saving monitoring system. In 2016, the school began to plan and carry out cloud energy consumption monitoring and power demand statistics, and conduct big data energy-saving analysis on each building as well as improve old equipment, including the installation of digital electricity meters to collect data on electrical equipment. With environmental temperature and humidity andCO_2 information, through the analysis of big data, the school can monitor related equipment with mobile devices at any time. Through the management unit to grasp the electricity consumption situation throughout the school, the electricity consumption strategy can be adjusted. By constructing the classroom and building the Internet of Things, the air quality, temperature, humidity, and brightness in the classroom can be monitored. By collecting classroom environment information, long-term energy analysis and improvement of big data in each building can be performed. In addition, the calculation of building utilization and classroom load can be used as a reference for classroom allocation. Currently, a total of 29 buildings in the first campus area have completed the implementation of a cloud smart energy-saving management system to monitor the energy consumption of the school so as to achieve a large-scale breakthrough in energy-saving results.

Case Study 2. Replacement of old lighting equipment

Currently, the traditional T8 type lamps were still used for lighting equipment in some of the buildings in Tunghai University. To achieve the actual effect of energy conservation and carbon reduction, through evaluation, the school replaced the lighting equipment in 19 buildings with LED lamps. In addition, the school gradually incorporated the electricity consumption into the monitoring system and set the switch time according to the seasons with automatically switching with environmental illuminance sensing. Therefore, in 2017, the school applied for the "Demonstration and Promotion Subsidy Program of the Energy-Saving Performance Guarantee Project, 2017" by the Bureau of Energy, Ministry of Economic Affairs. Currently, the construction has been completed. The project has saved a total of 2,038,413 kWh of power, saved 6,423,039 dollars in power costs, saved 507Kloe of oil equivalent, and reduced CO_2emissions by 1,062 tons.The energy-saving rate of the project reached 66%, which is better than the performance goal of more than 58% energy saving agreed before the program. The following table shows the recovery benefits of LED lighting equipment before and after the improvement:

Case Study 3. Complete initiation of electric buses

In addition to the commitment to the development of higher education, Tunghai University has a long-term goal of promoting a green and sustainable campus to promote cooperation with Tangeng Advanced Vehicles Corporation and Chip Right Corporation. The school changed the buses touring the campus to electric buses and began to operate in September 2016 to respond to low-carbon campuses and cities.

Campus shuttle buses were replaced with old diesel buses. In addition to traveling 105 times a day during the school day, unlike in the past, the school has increased the number of shuttle services on national holidays and winter and summer vacations, which indicates driving almost all year round. On national holidays and winter and summer vacations, buses travel 50 times from the Luce Chapel to the College of Management in the second campus area. The visitors' favorite destination, "Dairy Inn (Green Heart Hall)", has been added to the stops. In addition, special bus services are provided for large-scale activities such as mid-term and final exams, university entrance, etc.

The service of campus electric tour buses makes it easier for teachers, students, and tourists to move around the school. In addition to reducing the accidents caused by students riding motorcycles, this also creates a low-carbon campus environment, thus making a contribution to the city. Furthermore, industry-academia cooperation also plays an integral part in this case. The Department of Industrial Engineering of the school has signed a contract with Tangeng Advanced Vehicles Corporation and Chip Right Corporation to carry out industry-academia cooperation in the promotion and development of electric bus information. In the future, Tunghai University is expected to assemble electric buses every year to make every effort to save power and reduce carbon.

Water resource management

On the campus, Tunghai University actually connects with life, including sustainable water conservation, water cherishing, water-saving, in order to build a sustainable campus. As the saying goes, dripping water brings millions of workers. Therefore, the school focuses on promoting plans and designing practices to save water in response to the education's water-saving policy. The water consumption statistics for the past 3 years are shown in the table below. The total water consumption in 2017 was 673,445 tons, a decrease of about 15% compared to 2016.

Water-saving measures and results in 2015 to 2017

2015	**Name of the water saving plan:** Applying for the engineering of water meter installation in the staff dormitory **Measure:** Updating of water source pipeline and water meters in the staff dormitory	Amount of water saving (degree) 10,800
2016	**Name of the water saving plan:** Burying engineering of the updating of water source pipelines on Deyao Road **Measure:** The water source pipeline and fire protection water source pipeline buried in Deyao Road	Amount of water saving (degree) 7,300
2017	**Name of the water saving plan:**Burying engineering of the updating of water source pipelines on Deyao Road **Measure:** The water source pipeline and fire protection water source pipeline buried in Deyao Road	Amount of water saving (degree) 9,125
2018	**Name of the water saving plan:**Burying engineering of water source pipelines on Technology Road (the Department of Life Science to the Female Dormitory) **Measure:** (The Department of Life Science to the Female Dormitory) the water source pipeline and fire water source pipeline	Amount of water saving (degree) 5,840

Table. Statistics on water resource uses each year

year	Tap water consumption (degrees)	Groundwater withdrawal (degrees)	Total water consumption (degrees)
2015	235,928	547,500	783,428
2016	281,969	511,000	792,969
2017	198,945	474,500	673,445
2018	340,515	502,800	843,315

In cooperation with the Ministry of Education for the "Sustainable Campus Program", Tunghai University installed rainwater and reclaimed water recovery equipment. For various types of buildings and campus environments, the school further adopts different forms of rainwater for dispersed storage and treatment. After the rainwater collection, through the rainwater recovery system in the buildings of Humanities, Acacia Forest, etc., the rainwater is used for watering flowers, and the Tunghai Lake serves as a natural rainwater storage pond (an ecological pond). This greatly reduces stormwater runoff from drainage channels, and the treatment of subsided rainwater effectively promotes the use of water and soil resources to develop sustainable ecological maintenance.

The Tunghai Lake serves as a natural rainwater storage pond to reduce stormwater runoff from drainage channels.

The rainwater recovery system in the buildings of Acacia Forest and Humanities reduces groundwater collection.

The rainwater recovery system in the old building of the Department of Music can reduce groundwater collection.

Wastewater management

The wastewater sources of Tunghai University include domestic sewage, laboratory high-concentration waste liquid, and low-concentration washing wastewater. Pollution prevention facilities have been set up, including the sewage treatment plant in the male and female dormitory in the campus area, the sewage treatment plant in the College of Management in the second campus area, and the sewage treatment plant in the male and female dormitory in the second campus area (reclaimed water recovery system). Through these facilities, wastewater can be properly dealt with to comply with regulatory standards and discharged to Raft Creek according to hydrological characteristics.

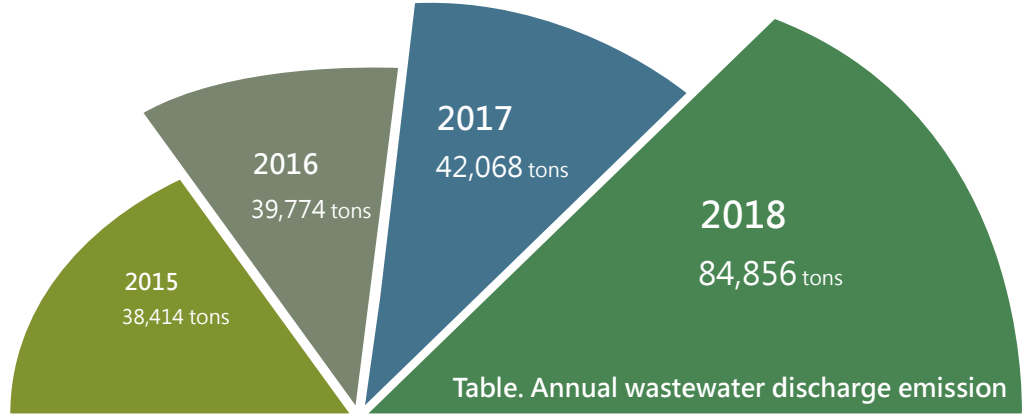


Table. Annual wastewater discharge emission

Photo of the sewage treatment plant in the male and female dormitory

Photo of the sewage treatment plant in the College of Management in the second campus area

Photo of sewage treatment plant in the male and female dormitories in the second campus area

Table. Test results of release water each year (annual average value)

	Sewage treatment plant in the male and female dormitory				Sewage treatment plant in the College of Management in the second campus area				Sewage treatment plant in the male and female dormitory in the second campus area			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
Effluent Standards 6.0~9.0 — pH value	7.2	8.2	7.3	7.6	7.1	7.5	7.1	7.3	7.2	7.2	7.2	7.7
Effluent Standards 30 — Suspended solids (SS) (mg/L)	2.4	2.7	5.5	4.5	1.5	5.9	5.6	8.6	7.8	22.2	17.4	6.8
Effluent Standards 30 — Biochemical oxygen demand (BOD) (mg/L)	4.4	7.7	9.5	2.9	22	10.2	3.8	3.2	6.4	16.2	10	3.4
Effluent Standards 100 — Chemical oxygen demand (COD) (mg/L)	26.8	31.6	25.8	11.5	22	28.8	12.5	12.3	43.6	53.5	34.2	11.1

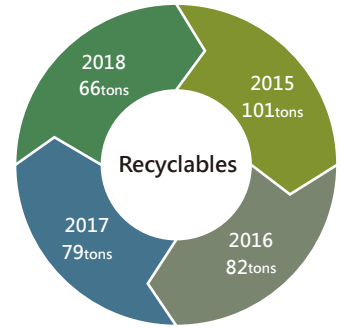
Waste management

To improve the result of recycling, Tunghai University actively promotes the mandatory classification of waste, waste reduction, and resource recovery to achieve sustainable recycling of resources and the establishment of a "zero waste campus". Garbage is divided into three categories: general waste, hazardous waste, and recyclables. Storage facilities for recycling are set up in the campus area and each of the departments, including waste paper, waste plastic, waste glass, waste metal, etc. The output of waste in 2018 was 924 tons, which was a decrease of about 3.24% compared to that in 2017, indicating a significant result.

Statistics on waste classification

Processing method: Wenshan incinerator

Processing method: Cleaned by qualified clearance companies



Processing method : Cleaned by qualified clearance companies

Processing method for recyclables

- Recyclables
- Fallen leaves and branches
- Waste fluorescent tube
- Used batteries
- Kitchen waste

Storage facilities for recycling are set up in the campus areas and offices in each of the departments. According to the items of resource waste classification, the waste is sent to the designated recycling station, and is transported by a qualified waste removal company.

After being put into the crusher, the large branches are transported to the compost yard for composting, whereas the fallen leaves are partly placed in the fallen leaf recovery bins, and are uniformly removed by the waste removal company for reuse.

After the fluorescent tubes in the campus area are replaced, they are recycled to the electrician workshop. Then the recycler is notified for regular recycling, and the abandoned fluorescent tubes at the designated recycling station will be uniformly dealt with by the waste removal company.

The used batteries are placed in the recycling bins of the offices in each of the departments for collection and then collected by the Environmental Safety Group of the school; the recyclers for the used and dry batteries are notified for regular recycling.

According to the classification of food waste, the waste in the campus area is sent to the designated recycling station for recycling; the waste in the conference room is sent to a recycling station for recycling by the conference organizer. Restaurants and convenience stores recycle their waste by themselves and request the waste removal company to remove the waste uniformly.

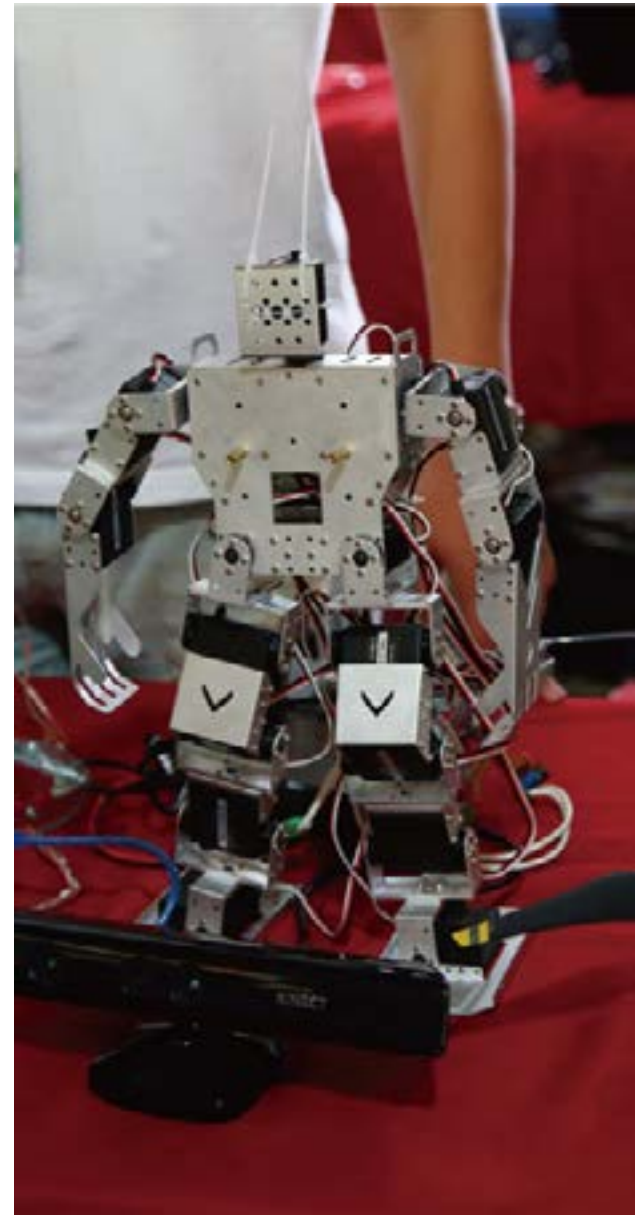
Photo of waste liquid from laboratories commissioned to clean up

Photo related to recycling

Processing method for waste liquid from laboratories treatment

- After the waste liquid from laboratories enters the site, its information will be coordinated, archived, and reviewed by the Environmental Safety Group, and the amount of waste output of the school will be tracked to avoid and reduce waste pollution.
- Before the 5th of each month and before the end of each month, the school declares the output and temporary storage of waste on the website of the Environment Protection Agency.
- The output of the waste liquid from laboratories is made into a report, declared for a cumulative record, and archived for inspection each month.
- The contract is entrusted for cleaning, and the documents are properly processed and archived for three years for inspection.

Waste code	Name of waste (Unit: kg)	2015	2016	2017	2018
C-0101	Mercury and its compounds	0	0	0	0
C-0105	Hexavalent chromium compounds	155	90	45	75
C-0119	Mixed waste containing toxic heavy metals and exceeding the dissolution standard	685	1235	880	845
C-0149	Mixed waste containing organic chlorine pollutants and exceeding the dissolution standard	3715	3840	3950	3600
C-0169	Mixed waste with organic compounds exceeding the dissolution standard	3990	3660	3430	3980
C-0201	The pH value of the waste liquid larger than (equivalent to) 12.5.	305	640	180	520
C-0202	The pH value of the waste liquid smaller than (equivalent to) 2.0.	0	460	380	460
C-0399	Mixture of other flammable waste	0	500	110	0
C-0402	Toxic gases above 250 mg HCN/kg produced by cyanide-containing pH values between 2.0 and 12.5	0	70	0	20
C-1503	Non-harmful waste acid	0	0	0	0
C-1799	Waste oil mixture	245	80	205	220
C-2301	Waste chemicals containing halogenated organics	0	0	80	0
C-2399	General waste chemical mixture	0	0	375	240



Currently, a total of seven department laboratories are included in the management of poisons in the Colleges of Science, Engineering, and Agriculture at Tunghai University. To effectively manage toxic chemicals, prevent surrounding environments from being polluted, and protect the safety and health of faculty and students, according to the "Regulations for the management on the Operation of Toxic Chemical Substances in Academic Institutions" and the the "Guidelines for the Establishment of the Committee on the Construction and Environmental Protection of Tunghai University", the "Committee on the Operation and Management of Toxic Chemical Substances of the Tunghai University" was established. The committee includes five members, which are composed of the general manager and two supervisors from related professional departments and two professional teachers in related fields such as toxic chemical substance toxicology, operation technology, or management expertise, and one chairperson, which is served by the general manager.

- The school regularly conducts surveys on the amount of toxic chemical substances announced and applies to the Taichung Environmental Protection Bureau for approval of operations which is below the minimum control limit. The school implements the collection of the operation records of toxic chemical substances and the monthly reports of the operation records and declares the operation manage ment matters to the environmental protection competent authority on a quarterly basis.
- All units are required to stipulate working codes in accordance with laws and regulations and strengthen the posting of signs of dangerous objects and hazardous materials.
- The storage place for concentrated hazardous materials has been prepared, and all departments are required to complete the storage work. Then, legal processing manufacturers are entrusted to deal with organic solvent waste liquid.
- The school has stipulated a program for the prevention and response to the hazards of toxic chemical substances and submitted it to the authorities for reference, which has been accurately implemented and declared.

Photo related to toxic management

Green Procurement

Tunghai University has actively participated in the training of government-held instructions for purchasing green products and obtained certification, so as to enhance the correct understanding of green procurement. In addition, the school actively promotes green procurement-related information to facilitate the teachers and students throughout the school to develop their own environmental protection awareness and implement it in various consumer behaviors. Teachers and students can give priority to green products that have less impact on the environment, with the hope to increase the amount and proportion of purchases year by year.

According to the Government Procurement Law and the Regulations for Preferential Procurement of Environmental Protection Products by the Government, the school based on the green procurement policy preferentially purchases green products that have environmental protection labels, environmental protection performance, recycled materials, recyclables, low pollution, energy-saving, an increase in social benefits or decrease in social costs, a decrease in dependence on limited resources, a reduction of resource consumption, and use of new types of development resources or other similar situations. The green products purchased in 2015-2017 are as follows:

Green product items	2015	2016	2017	2018
Computer equipment (dollar)	8,637,164	4,784,710	4,590,950	3,399,974
Sanitary paper, toilet paper, and toilet cleaner (dollar)	403,875	309,075	306,600	313,050
Air-conditioning (dollar)	7,379,084	330,461	174,182	410,900
Paper for office photocopy (dollar)	885,246	863,544	832,555	871,269
Water dispenser (dollar)	646,020	747,760	1,009,548	1,151,688
Projector and television (dollar)	281,932	240,000	38,000	1,054,566
Energy-saving fluorescent tube (yuan)	250,185	250,725	18,094,845	341,957
Electric bus renting (dollar)	0	1,583,856	4,983,780	4,798,917
Electric scooter renting (dollar)	108,000	108,000	108,000	24,000
Total amount of green purchase (dollar)	18,591,506	9,218,311	30,332,690	12,366,321
Proportion of green procurement (%) (amount of green purchase/amount total purchase)	7.84%	4.28%	13.92%	3.54%

Note 1: The amount of green procurement is the total amount of green procurement items listed each year; the total amount of procurement is the total amount of engineering, property, equipment, and equipment handled by the procurement group throughout the school each year.

Intelligence Campus (http://smile.thu.edu.tw/index.html)

Intelligence Service(iServ)

Tunghai G Suite cloud application service
(https://gsuite.thu.edu.tw)

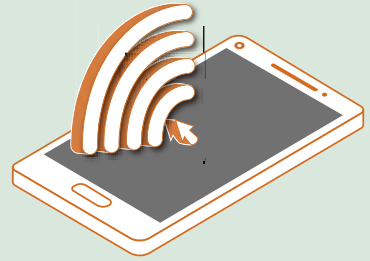
Through the cooperation between the school and Google, the email, "@ go.thu.edu.tw", and related web application services utilizes the G Suite for Education (formerly known as Google Apps for Education) web application service. In accordance with the criterion and terms of the Google service agreement, this service is provided for teachers and students of the school. G Suite for Education is an advanced version of the office service suite solution provided by Google for educational institutions for free. This solution provides a series of collaboration applications that allow users to have cloud application services, such as Gmail, Google Drive, shared calendar, online document editing, etc. Currently, there is no capacity limit for the space used (if there is any change, the policy issued by Google shall be the standard).

Short URL service
(http://smile.thu.edu.tw/iserv.html)

Through the short URL service of Tunghai University, teachers and students throughout the school can easily convert the long website into a short website with only 8 words. QrCode is also provided for the convenience of promotion.

Tunghai Line Bot platform
(https://line.ithu.tw)

As the successor of the Tunghai APP, the Tunghai Line Bot not only provides basic campus news, campus tour, bus query, and other functions, but also provides students with personalized functions such as querying personal timetables, labor locations, exam locations, compulsory subject lists, and scholarships.



WIFI Auto Connect

Self-registration service for Wi-Fi of the wireless network
(https://form2.thu.edu.tw)

To improve the user experience and the efficiency of login certification, the Computer Center launched the "Self-registration service for Wi-Fi devices of the wireless network in Tunghai University" in August of the 2017 academic year. In other words, faculty and students who own THU-NID of the school only need to register the MAC address of the mobile device used in this service. After the completion of the registration, the mobile device can be linked to the Internet as long as it enters the Wi-Fi environment of the school campus and is connected to the SSID, and "thu" or "TANetRoaming" is selected. The webpage for certification will no longer appear.

Electronic form
(https://form2.thu.edu.tw)

The school established the "Tunghai Electronic Form" in July 2017, and provided a service for faculty and students throughout the school to change the traditional paper questionnaire from a paper form to an online form, thus saving the costs of paper operation. Meanwhile, online questionnaire records are placed in the storage space of the school for safekeeping. The collected data can be exported as an Excel file for the convenience of statistics. After the data interface procedure, the data can also be provided to the computer center for other system applications, and can also be used as a data source for school affairs research and analysis.

Tunghai tDrive cloud hard drive

Tunghai tDrive cloud hard drive
(http://tdrive.thu.edu.tw)

Tunghai University cooperated with Microsoft Corporation and built a cloud storage service for Microsoft Office 365 with the domain "tdrive.thu.edu.tw" exclusively for Tunghai. The service of the tDrive cloud storage provides cloud storage space in a large 5TB capacity for each student and teacher. All document files from teachers and students can be stored in the cloud storage and can be synchronized onto various mobile devices, so that teachers and students can access their files anytime and anywhere whether the devices are connected or not. Users can access and share files from mobile phones, tablets, or computers, download files freely in the browser, and preview or edit files online in real-time, thus improving work efficiency.

Intelligence Management(iMan)

School Affairs Research Platform
(https://irdb.thu.edu.tw/thuir/)

In the 2015 academic year, the Computer Center established a school affairs research platform of the data Tunghai 1.0. The functions cross and consolidate related data files and systems between units. The analysis topics of statistical charts have expanded from 36 to 78 in 2017; however, the 1.0 platform is used mostly to perform analysis from the perspective of the data of each unit, which lacks horizontal statistics of cross-unit data. Therefore, starting from the second semester of the 2017 academic year, the storage cloud of the database of school affairs research was re-planned and built, with the revision into the Data Tunghai 2.0 platform. The Computer Center cooperated with the school affairs research office to classify and process the information of each school affairs administrative system in the school, and the data was collected into the school affairs research database. Currently, the 2.0 platform has accumulated and provided 28 school affairs quick reports and 40 various statistical charts.

Tunghai Network Testing
(http://speedtest.thu.edu.tw)

Do you often feel that the Internet is slow? Or do you think that a certain school system is slow, but you cannot find a way or data to determine or know what the speed of the current Internet is? Is it a network problem or a system problem? The computer center provides a website for network speed testing for users' reference. The URL is http://speedtest.thu.edu.tw, which can be directly connected with any browser. Whether it is a desktop computer or a mobile phone, it can be tested both inside and outside the school and does not require the installation of any special software or APP. The result of the testing is the connection speed between the current equipment operated and the Tunghai network testing host machine.

Tunghai Network
(http://space.thu.edu.tw)

In August 2017, the school built the "Tunghai Space Network" and gradually integrated the classrooms, conference halls, and buildings managed by each unit, as well as other space specifications that can be borrowed. Until 2018, the information of 3 responsible units, 6 types of venues, 12 buildings, and 164 venues for borrowing have been integrated. Online space inquiry and borrowing have been provided, and the average processing time for borrowing is only 786 seconds (about 13 minutes).

Network management information network
(http://ccnms.thu.edu.tw)

The external network traffic and bandwidth related information of the school and related links to the Tunghai network services are provided, such as the use of external bandwidth, dormitory network connection, network speed and website link testing, and the connection of the network backbone of each building in the school.

Wi-Fi log analysis platform
(http://speedtest.thu.edu.tw)

WiFi log analysis platform provides a variety of charts and maps for teachers and students in the school for references. The data source is the system log data of each wireless network base station in the school. The presented information comes from WiFi users who have successfully certified and logged in. This system provides chart classification within 15 minutes, on the present day, and on the previous 7 days. Come and take a look at which area and which time the most people are using WiFi!

Life Information(Info)

Campus Event System
(https://tevent.thu.edu.tw/tEvent_front/index.php)

To cope with the popularization of mobile devices and the simplification of the registration process for outsiders, the way of the screen presentation has been improved and the back-end platform has been integrated. In December 2015, the "Event Registration System" was redesigned and launched. Aside from the addition of original functions, several operations were added, such as QrCode and FB sharing functions, event participation records for students and faculty members to query, the simplified operation procedure by the backstage management interface, uploaded event posters displayed on the registration screen, and compulsory (elective) columns for custom registration data settings. In May 2016, the system further provided the function of signing in and registering activities through the IC card by teachers and students on campus in an internet-free environment, so as to increase the integration efficiency of the activity list of each unit.

Virtual reality campus tour
(https://reurl.cc/mn3dO7)

Through the technIQUE of 3D laser point cloud scanning, the actual scene of the Tunghai campus is converted into a digital data collection in virtual reality. This allows you to experience the visual feast of strolling on the Tunghai campus: enjoy the magnificent tour of the Luce Chapel, Wenli boulevard, clock tower, library, or walk into each of the colleges to admire the views of Tang-style architecture. Time and space seem to be still, allowing you to savor the beauty as if you were drinking a rare wine.

Bus dynamic information (Beta version)
(http://bus.thu.edu.tw/m.html)

For real-time dynamic information on buses in Taichung City, the blue line is Taiwan Avenue, and the bold dots on the map are buses. After clicking, bus-related information can be seen, such as license plates, time, and route. The red dot on the map is the bus for the outbound route; the purple dot is the bus for the return route; the green dot is the express bus for the outbound route; the blue dot is the express bus for the return route.

Instant traffic conditions
(http://ts.thu.edu.tw/busmap.php)

The dynamic information on traffic in Taichung City is provided, and the open data of Taichung City is integrated to be displayed on the map. The color is marked on the road; red indicates the congested section, whereas green indicates the smooth section. The bus dynamics are also marked above for users' references.

Intelligence Learning(iLearn)

iLearn
(https://ilearn.thu.edu.tw)

iLearn provides blended learning of online virtual learning and offline physical classroom learning and has four major features such as cloud services, action learning, flipped classroom, and data analysis. Meanwhile, various learning tools are integrated into the iLearn, allowing students to have a more diverse learning experience to be able to immediately grasp the progress of the courses and learning activities they have completed. Teachers in the classroom can design interactive course content, and students can complete classroom interactive activities through mobile phones, thus effectively improving participation and allowing teachers to immediately grasp the student's learning progress.

3D Virtual Application Cloud (VACS) Service
(http://vacs.thu.edu.tw)

No matter on or off campus, whether it is a laptop, mobile phone, or tablet, as long as you are a faculty member or student of Tunghai University, you only need a device with an Internet connection. Through the browser in your device, the device can be remotely connected to the "3D VACS Service" of the school within 24 hours. You no longer need to spend more time waiting to install these troublesome applications, nor do you need to consider spending money to replace a better computer. All you need to do is use the THU-NID and THU-PW authentication identities in the school. After logging in, you can use the software at any time, without even installing applications.

LTD Audiovisual platform
(http://ltd.thu.edu.tw)

LTD (Learning, Technology, Design) audiovisual learning platform integrates the audiovisual database of various lectures, courses, and series of activities in the school, which provides a solid foundation for online teaching and flipping classrooms. This allows learning not to be limited by time and space, enabling information to be transmitted to every corner in Tunghai. Tunghai LTD contains three main themes, such as creativity, career, and entrepreneurship. Each topic includes abundant connotations, with a view to strengthening interdisciplinary integration between communities through Tunghai LTD.

Social Practice Information Integration Platform
(http://se.thu.edu.tw)

This platform integrates social practice courses and activities of all units throughout the school, including professional service-learning courses, volunteer services, overseas services, community services, etc. Through the establishment of a single information platform and operating mechanism, various types of information throughout the school can be presented, such as abundant and diverse social practice activities, practice fields and issues, service types and contents, service results, teacher growth, students' learning result, external resources, etc.

Podcast interdisciplinary learning service system
(http://podcast.lib.thu.edu.tw)

In the interdisciplinary learning service system, achievements such as digital textbooks made by teachers of the school, micro-credit courses, etc., are collected. This system has a mobile version of the webpage so that students can learn online anytime and anywhere, thus improving the convenience of learning. The courses are divided into different categories according to colleges and departments. Students can go online anytime and anywhere to enhance the ability of review and interdisciplinary learning after school, so as to achieve systematic vertical drawing of files and interdisciplinary horizontal linking.

Intelligence Environment(iEnv)

Air quality monitoring (Beta version)
(https://aqi.thu.edu.tw/echarts/taichung)

In recent years, the issue of air pollution has gradually been emphasized. Tunghai University, surrounded by the thermal power plant, the Taichung industrial park, the waste incinerator, the crematorium, and the Central Science Park, has been proven to be the region with the worst air pollution index across the country. The air quality monitoring system provides visual air quality monitoring services and integrates information from the Environment Protection Agency, the Department of Environmental Protection, air boxes, and self-supporting PM2.5 sensors to provide users with a visual air pollution map. In addition, information on diseases such as influenza, pneumonia, and enterovirus has also been integrated. In this way, users can observe the relevance and allow government agencies to pay more attention to this issue.

Intelligence Campus Power Monitoring System
(http://igems.thu.edu.tw)

The electricity consumption information throughout the school is provided to present real-time electricity consumption information on the map. In addition, historical information is also presented through graphs and charts, so that users can adjust the required time information through the time filter. We can also check the ranking of building for electricity consumption and the ratio of electricity consumption. Finally, we also provide the function of electricity cost estimation, so that users can more clearly grasp the electricity consumption, and even further save electricity.

Intelligence campus environment monitoring (Beta version)
(http://icems.thu.edu.tw/sensor.php)

This system is a monitoring system for the environmental information of the library. Monitoring information includes temperature, temperature, and carbon dioxide. The floors include B1, 1F, 2F, 3F, and 4F, and two sensors are installed on each floor. Students can use this system to monitor the library's reading environment for abnormalities, thereby being aware of the surrounding environment.

Intelligence Green Energy Management System
(http://igems.thu.edu.tw)

The iGEMS system was installed in the computer room of the school to reduce the overall energy consumption. A huge amount of data processing and analysis framework is applied as the basis for the overall operation and storage of electric energy data. Information such as power usage records and power usage analysis is provided on the RWD graphical interface, allowing users to monitor power-using equipment anytime and anywhere. Digital electric meters are used to collect data from electrical equipment, together with environmental temperature and humidity and CO2 information, so that users can be provided with a graphical interface to facilitate data analysis. Information is monitored, such as servers in the computer room, air conditioners, machine power, air conditioner power, etc., in the computer center. In addition, the information of the computer classroom in the building of Great Intelligence Technology is also integrated to provide the function of real-time monitoring and control of the switch of the air-conditioning compressor, thus achieving the energy-saving function.

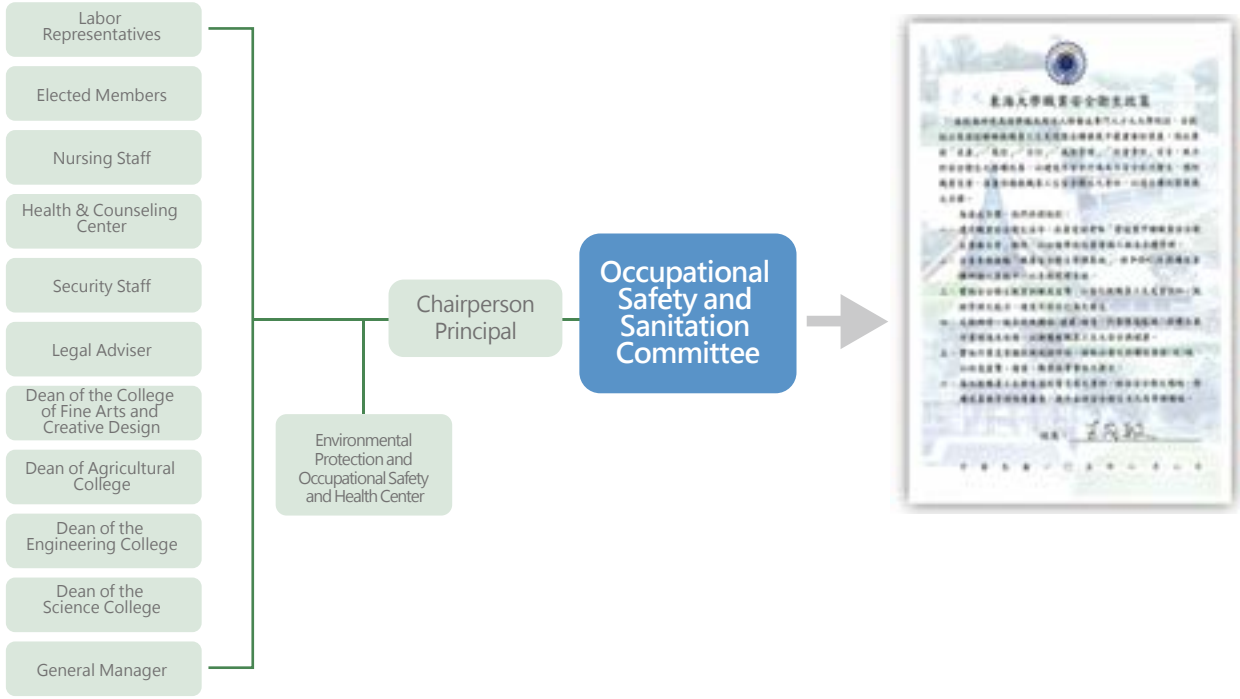
Safe Campus

Safe Working Environment

Tunghai University adheres to the spirit of promoting the "Campus Safety and Sanitation Management System" by the Ministry of Education. The principal personally signed the "Occupational Safety and Health Policy", which follows the dynamic management cycle of Plan-Do-Check-Action so as to commit to the continuous improvement of safety and sanitation.

According to the Occupational Safety and Sanitation Act, Tunghai University set up the OccupationalSafety and Sanitation Committee and the Labor Safety and Sanitation Center, including a total of26committee members, of which more than one-third are labor representatives. At least 4 meetings (and the above) are held every semester, and suggestions from various colleges (departments and institutes) on the improvement of the safety and sanitation space and equipment of the laboratory are widely adopted to ensure the safety of the space and equipment of each experiment or workplace and prevent occupational disasters.

- **Occupational Safety and Sanitation Committee：** the organization responsible for making reviews, coordinations, and recommendations related to occupational safety and sanitation.
- **Environmental Protection and Occupational Safety and Sanitation Center：** the organization responsible for stimulating, planning, supervising, promoting



- Formulating occupational safety and health policy
- Coordinating and advising on occupational safety and health management programs
- Reviewing the implementation plan for safety and health education and training
- Reviewing operational environmental monitoring plans, results and measures
- Reviewing issues on health management, prevention of occupational diseases and health promotion
- Reviewing various safety and health proposals
- Reviewing automatic inspections and safety and health audits.
- Reviewing preventive measures for hazards of machinery, equipment, raw materials, and materials.
- Reviewing the Occupational Hazards Investigation Report
- Evaluating the performance of on-site safety and health management
- Examining safety and health management issues for contractors
- Other matters related to occupational safety and sanitation management

To enhance the knowledge, skills, and attitudes of the "workplace safety and sanitation" of the faculty and students, according to the provisions of the Occupational Safety and Sanitation Act and the Occupational Safety and Sanitation Education and Training Rules, before the school year begins, Tunghai University organizes safety and sanitation education training and GHS hazards generalization and chemical classification management education training for new and in-service teachers and students. Safety and sanitation education and training courses for emergency personnel are held every two years. For supervisors in charge of specific chemical substances (including organic solvents), on-the-job education and training classes are handled every three years. The course for the prevention of musculoskeletal disorders and ergonomic hazards is conducted irregularly. For teachers and students who have been exposed to a noisy working environment for an extended period of time (average 8 hours a day and an average sound pressure level above 85 decibels), a hearing protection program is implemented to maintain the safety and health of teachers and students. Before entering a laboratory (internship classroom) or research room for a formal experiment (internship) or research, for each experiment (internship) or research nature, teachers in the experimental places of various departments (places) first deliver necessary safety and sanitation courses to new students along with tests. Only students who pass the tests can formally take an experimental (internship) or research credit course, and A copy of the safety and sanitation education and training record book is prepared and sent tothe Environmental Protection and Occupational Safety and Sanitation Center for the record. In addition, by delivering the course of "Introduction to Safety and Sanitation" that can be taken by students from all freshmen to seniors, students have a sense of the hazards in life and can develop behaviors according to the criteria in order protect themselves from the danger in occupation and life.

Table. Statistics of occupational disasters by academic year

Category	2015 academic year		2016 academic year		2017 academic year	
	Male	Female	Male	Female	Male	Female
Work injury rate (IR)	0	0.166	0	0	0	0
Occupational disease rate (ODR)	0	0	0	0	0	0
Lost working day rate (LDR)	0	9.79	0	0	0	0
Absence rate (AR)	0	0.962	0.446	0.585	0	0.917
Number of deaths on business	0	0	0	0	0	0

Note 1: Calculation of work injury rate = (total number of disability injuries/total working hours) x 200000
Note 2: The calculation of occupational disease rate = (total number of occupational diseases/total working hours) x 200000
Note 3: The calculation of lost working day rate = (total lost working day/total experienced working hours) x 200000
Note 4: The calculation of absenteeism rate = (total absence days/working hours in a year) x 100%, including work injury leave/sick leave/leave for a personal affair

Table. Statistics of Number of people for occupational safety and sanitation education and training

	2015 academic year	2016 academic year	2017 academic year
Number of people for safety and sanitation education and training in laboratory	514	515	525
Number of people for GHS hazard general and chemical classification management education and training	495	495	505
Number of students in safety and sanitation education and training	1,927	3,230	4,546
Number of students taking the course of the introduction to safety and sanitation	264	264	263

Introduction to safety and sanitation

Education and training of safety and sanitation for the Department of Hospitality Management

Perfect Health Management

In 2017, the school held a total of 9 physician on-site services with a total of 27 consultations and offered full or partial health examination fee subsidies for teachers. If special conditions are found in the analytical results, colleagues will be notified immediately for re-inspection. According to the analysis of the health anomalies of the faculty and the trend of medical examination data, the school formulates a health promotion program, holds various activities, and track the results year by year to adjust the program. In 2017, regarding health positions (including prevention and treatment of metabolic syndrome), sex education (including prevention and treatment of AIDS) and smoking prevention (including non-smoking campuses and drug abuse) as the themes of he alth promotion activities, the school conducted several lectures on health care, infectious disease promotion, and CPR first aid education to enhance the awareness, knowledge, and attitude of health and self-management of faculty. In addition, the school strengthened the first aid knowledge and skills of the faculty to enhance the ability to save people.

Table. Results of health promotion activities each year

Physician on-site service (session)	Workplace health lecture (session)
2015 → 7	2015 → 54
2016 → 9	2016 → 92
2017 → 9	2017 → 74
2018 → 6	2018 → 85

Number of employees receiving	Number of participants in the workplace health lecture
2015 → 8	2015 → 3899
2016 → 28	2016 → 9197
2017 → 27	2017 → 9848
2018 → 29	2018 → 9998

Table. Results of the general and special physical (health) examinations of faculty and students each year

2015	2016	2017	2018
86.7%	83.8%	93%	100%
Health check inspection rate (%)	Health check inspection rate (%)	Health check inspection rate (%)	Health check inspection rate (%)
The top four major abnormal items	The top four major abnormal items	The top four major abnormal items	The top four major abnormal items
Abnormal vision 88%	Abnormal vision 87.6%	Abnormal vision 94.2%	Abnormal vision 90.6%
Abnormal BMI 57.3%	Abnormal BMI 61.4%	Abnormal BMI 52.6%	Abnormal BMI 51.3%
Abnormal waist circumference 34.2%	Abnormal total cholesterol 54%	Abnormal triglyceride oleate 30.5%	Abnormal total cholesterol 35%
Abnormal total cholesterol 31.2%	Abnormal waist circumference 39.8%	Abnormal waist circumference 18.9%	Low density cholesterol abnormal 22.6%

Table. Subsidy for faculty and staff's health check

General and special physical (health) examination	Targets for health check :	Faculty and students applicable to the occupational safety laws and regulations (business personnel of category 2)
	Amount of the subsidy :	Full amount
Faculty and staff's health check	Targets for health check :	Full-time faculty (including guests, lectures, and lectures of outstanding alumni), contract staff, military training instructors, other full-time staff (including the School of Continuing Education, Computer Center, and recruitment committee), retired colleagues of the school.
	Amount of the subsidy :	Colleagues who have reached the age of 50 are subsidized once a year; colleagues who have not reached the age of 50 are subsidized once every two years, with a subsidy of 1500 dollars.

Statistics of parental leave

Category	Male	Female
Number of people who have the right to apply for parental leave without pay in the 2017 academic year	3	6
Number of people who apply for parental leave without pay in the 2017 academic year	1	4
Reinstatement rate (B/A)	100%	100%
Retention rate (D/C)	100%	0

Abnormal Health Improvement Program

- Analysis and evaluation of general and special physical (health) examination results, health management.
- Conducting Follow-up management and health guidance for those with abnormal health examination results.
- Assistance given to employers for the selection of workers for appropriate jobs.
- Planning and implementation of labor sanitation education, health guidance, physical and mental health protection, and cooperation with the health protection group to facilitate health promotion and other measures.
- Faculty and students' hearing protection program.
- Program of the prevention of musculoskeletal disorders and ergonomic hazards.

Course for the prevention of musculoskeletal disorders and ergonomic hazards

Garden Worker Health Promotion Conference

Description of the improvement means

- Statistics and analysis of the results of the medical examination report WITH graded health management.
- Tracking the results of further re-examination of employees and arranging interviews and health guidance for practicing physicians/ nurses according to the health check results.
- Performing shutdown or resumption of work and properly allocating labor to work in the workplace.
- Sending E-mails with regard to health messages to colleagues for references and cooperating with the Health and Consultation Center to promote health promotion related activities, such as vital fitness, walking on health trails, weight loss, health and diet education lectures, medical care lectures, health fairs, etc.
- Investigation and measurement of noise workplaces, noise engineering control, management of noise exposure time to faculty and students, special physical (health) inspection and management of noise and health operations, selection and wearing of soundproof protective gear, education and training of faculty and students, and the establishment and storage of data.
- Understanding ergonomic hazards through the questionnaire of the musculoskeletal symptom, and visiting the site when necessary to

Specific results

- General and special physical (health) examinations were completed on 190 people. Specifically, seven people for the special health checkups are Level 3 health management. After the professional doctors' follow-up appointments, all of them were changed to Level 2 health management.
- A total of 27 people were interviewed with professional doctors. (including 4 people with overload consultation)
- A total of 50 people were health-guided by nurses.
- A total of 5 people were interviewed with professional doctors for the prevention of musculoskeletal disorders and ergonomic hazards.
- The noise measurement of the garden workers is 82.2dBA, and the earplugs are continuously required to avoid occupational injuries.
- Due to the cancer of one employee, a meeting for work resumption was held on June 27, 106, and it was suggested that the work resumption was not possible.
- Professional doctors conducted two on-site visits to garden workers.

General and special physical (health) examination on faculty and students