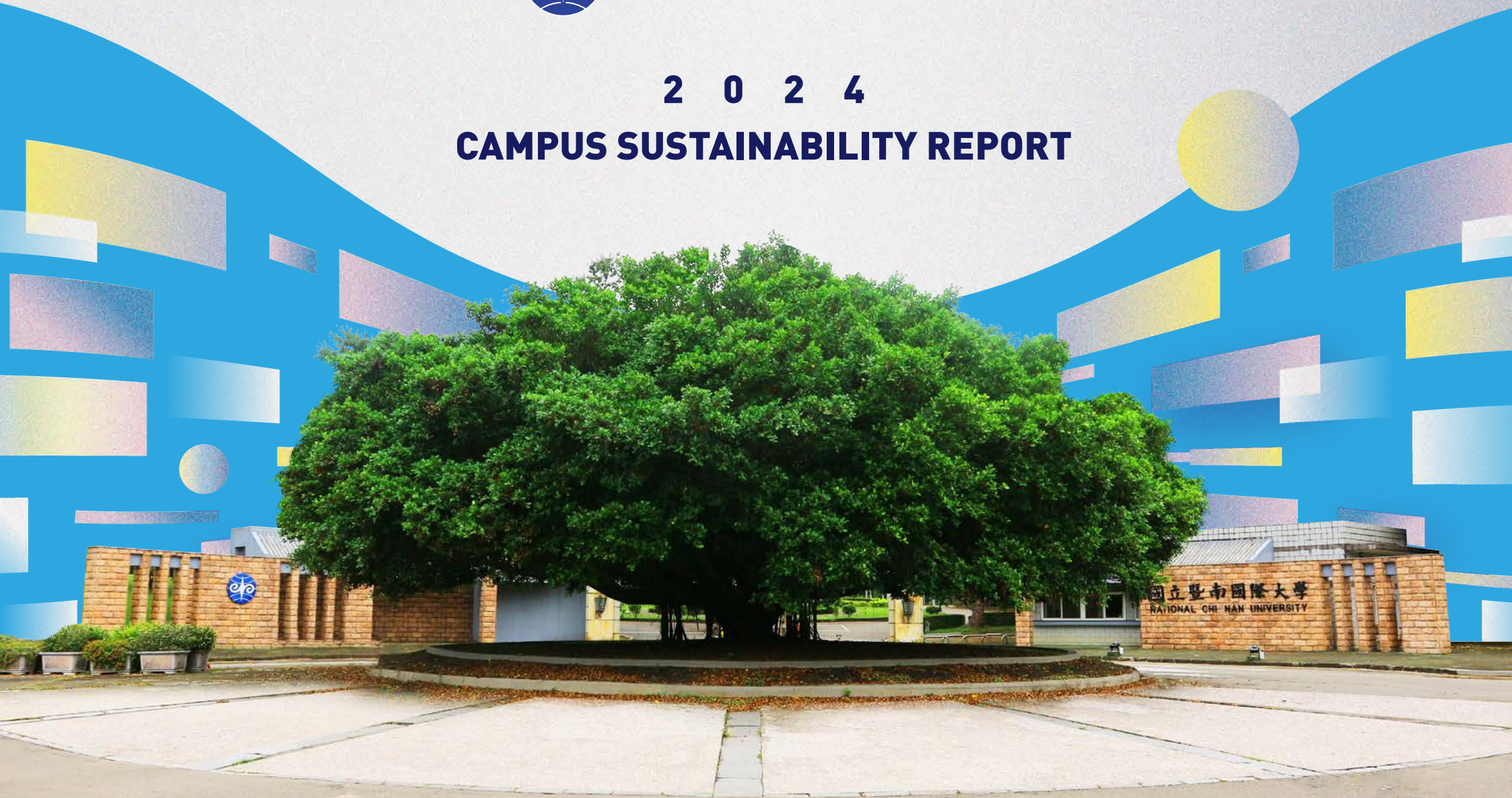




National Chi Nan University

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CAMPUS SUSTAINABILITY REPORT



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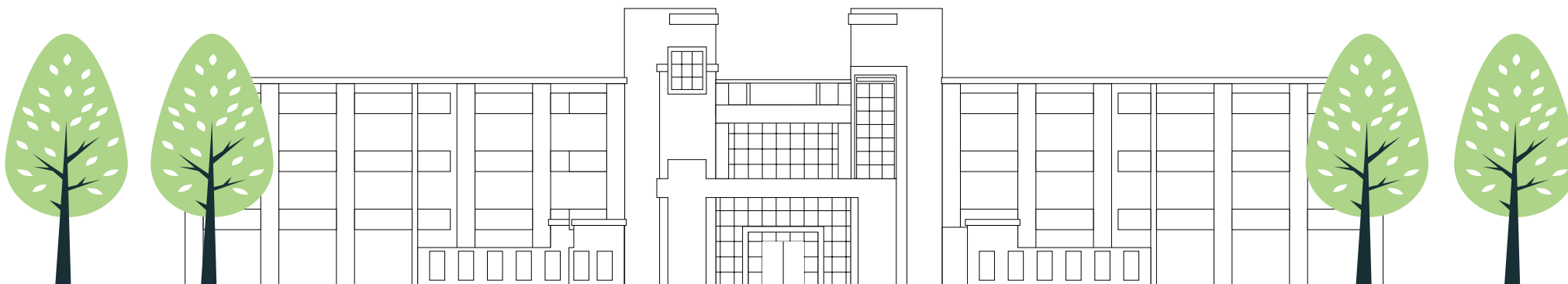
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Editorial Guidelines

The 2024 NCNU Campus Sustainability Report (hereinafter referred to as “this report”) was the 3rd Campus Sustainability Report, CSR. NCNU 「Environmental Protection and Occupational Safety and Health Center」 collected and edited this report in accordance with the UN’ s Sustainable Development Goals (SDGs). This report has explored the significance of the impacts for both actual and potential on the environment, economy, and people (including human rights) in terms of sustainability at NCNU, which could be a useful reference for the public viewers after related performance disclosure.

Reporting period and issuance

The scope of this report disclosed the data and information from Aug. 1, 2023~Janu. 31, 2024 to Janu.1~Dec. 31, 2024. Some contents included information prior to Aug. 1, 23.

NCNU Campus Sustainability Report published regularly.

Previous edition: published in July, 24.

Current edition: published in July, 25.

Next edition: est. publish in July, 26.

Report boundary and scope

NCNU was the main subject in the scope of content information of this report.

Writing basis

This report was core option edited based on the Global Reporting Initiative, GRI criteria as well as responded to UN’ s “Sustainable Development Goals (SDGs)” and disclosed practices, to compile the 3rd NCNU Campus Sustainability Report.

Restatement of information

The university's 2024 report contains no restatement of information.

Management approach

◎ Internal management

NCNU Sustainable Campus Report Team has provided the rough draft of this report. The accuracy and the integrity of the information and the data were viewed via supervisors from various units. Furthermore, the Environmental Protection and Occupational Safety and Health Center collected and edited this report as confirmed by the president before issuance.

◎ External certifications

NCNU engaged Ernst & Young to perform limited assurance on selected information in this report, in terms of ROC Accounting Research and Development Foundation’ s Assurance Standards No. 3,000 「assurance engagements other than audits or reviews of historical financial information.」 See Appendix OO of this report for further details.

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"To be responsible for our future by fulfilling society's needs"

Situated in the culturally rich and literarily vibrant Puli Township, Nantou County, NCNU became a pivotal center of knowledge, leading the development of the Shui Sha Lian region after the diligent efforts of its successive presidents. The critical challenge remained to stand firm and forge ahead for maintaining the success. To this end, NCNU positioned itself as a comprehensive university with both international perspective and local implementation, in order to become a distinguished and sustainable international university.

NCNU prioritized sustainability by having solar installations with a capacity of 8,640 kWp to aim for a net zero emissions campus by 2043. Over 60 full-time instructors practiced locally across five colleges with an average of 36 courses and over 1,000 students in related local practice each year. These efforts had been recognized with the National Sustainable Development Awards from the Executive Yuan and the Environmental Education Facility Accreditation from the Ministry of Environment. Additionally, NCNU received a total of NT\$93.16 million from the Ministry of Education's Higher Education SPROUT Project. This was a 13.2% increase, which was the highest subsidy among domestic public mid-sized universities since last year.

As a result, NCNU had been ranked 118th from The World University Ranking for Innovation (WURI) in 2024.

Confronting the challenges in the higher education environment, NCNU was poised to benefit from its strategic guidelines on refined culture, sustainable operation, and international perspective as approached its 30th anniversary. Pursued innovations and broke boundaries after maintaining a dynamic balance between globalization and localization, to implement "international thinking with local practice," NCNU aimed to cultivate future leaders endowed with global vision and social responsibility.

headmaster

Dr. Dong-Sing Wu



Images of sustainable development

GRI 2-23

President, deans of colleges, and senior supervisors worked together for the purpose of “intensifying Shui Sha Lian, going towards Southeast Asia, sprouting the higher education, and revitalizing the local area” in combination with UN’s “Sustainable Development Goals (SDGs).”



■ Performance of NCNU Sustainable Development

GRI 2-23

President, deans of colleges, and senior supervisors worked together for the purpose of “intensifying Shui Sha Lian, going towards Southeast Asia, sprouting the higher education, and revitalizing the local area” in combination with UN’s “Sustainable Development Goals (SDGs).”

- 1** The Ministry of Education subsidized the Higher Education SPROUT Project from 2022~2024, which increased yearly about **13.35%**.
- 2** Announcement of a number of seven professors had been nominated World's Top **2 %** Scientists in 2024.
- 3** In 2024, the number of industry-academia cooperation totaled 76 with a total amount of NT\$ 281,403,089, and the number of NSTC research project totaled 96 with a total amount of **NT\$117,411,944.**
- 4** The industry-government-academia cooperation, which had been implemented three phases for ten years, accumulating a total subsidy of **NT\$ 44,945,000.**
- 5** A total of **413** published journal articles in WOS (SCI, SSCI) numbered from 2022 to 2024.



- 1** Water resource mgmt. (**127,259 mt.** water consumption saving in 2024)
- 2** Power mgmt. (power generation of solar installations reached **14,738.8608 GJ**, about **33.8%** power consumption on campus in 2024)
- 3** Indoor air quality (CO2 435PPM, CH2O<0.02PPM, bacteria 90 CFU/m3, PM10 19µg/m3. **Results were met relevant provisions**)



- 1** **「Desk With Chair For Disaster Prevention」** received the Bronze **Medal Award** from Taiwan Innotech Expo in 2024.
- 2** The Digital Companions for Learning accompanied over **1,928 schoolchildren.**
- 3** Supported Sreng Kim High School water resource project to improve the drinking water quality for **1,714 faculty members and students.**
- 4** Effectiveness and spread of the LED lighting program reduced **327,000 kWh** electricity consumption and avoiding **165.8 mt.** of carbon emissions.
- 5** The Agricultural Water Conservation Demonstration Project conserved **9,910 mt.**, achieved **9.9%** water-saving rate, and reduced about **1,545 kg** CO2e carbon emissions.
- 6** 2024 SDGs SUSTAINABLE BOARD GAME DESIGN COMPETITION, **Golden Award.**



■ Performance highlights in recent years

UI GreenMetric World University Rankings



44th place in 2024 Ranking
World Top **50** 「Setting & Infrastructure」
ranked **2nd** place for five consecutive years
Comprehensive University ranked **1st** place
domestically for eight consecutive years

WURI Ranking



Global Top 300 Innovative Universities
118th



NCNU and Nantou County Government signed an MoU to establish “Designated Shelters for Preventive Evacuation and Special Needs Placement.”

NCNU continued to strengthen the ability of disaster prevention on campus by providing student dormitories as emergency shelters and improving operational processes. Meanwhile, installed **21** emergency generators and energy storage systems, maintaining regularly to ensure their proper functions.



Taiwan-Japan Local Revitalization and Service Innovation Exchange Forum in May 2024

Worked with 2024 Asia-Pacific Social Innovation Summit by holding the “Taiwan-Japan Local Revitalization and Service Innovation Exchange Forum” to invite 12 Japanese local revitalization practitioners for knowledge exchange with industrialist in Qingjing and Puli.



To cultivate the first cohort of nursing professionals locally for Nantou County

NCNU established a Department of Nursing for the Indigenous Special Program in Elderly Health and Long-Term Care Management. The first cohort of 47 students, a new force to the county’s medical workforce, commenced clinical internships in medical fields working in concert with government long-term care policies to improve the shortage of healthcare professionals and the challenges of rural medical services in Nantou, May 2024.

THE World University Rankings



World
University
Rankings 2024

**Ranked 1501+
in 2024**

Young University Rankings



**Ranked 501+
in 2024**

THE Impact Rankings



**Ranked global
801-1000th
place in 2024**



Asia-Pacific Sustainability Action Awards_ Golden Award in 2024

《TAISE》

APSAA & TSAA Awards Ceremony in 2024

Honored with the Asia-Pacific **Sustainability Action Awards, Golden Award** in 2024, NCNU's "Green Shui Sha Lian Sustainable Value and Talents Development Program," demonstrating its outstanding achievements in the field of University Social Responsibility (USR). Ministry of Education recognized this program as a role model for USR in Taiwan, which marked a major breakthrough in promoting sustainable development and local revitalization.



Taiwan University Sustainability Awards in 2024

Received the "Taiwan University Sustainability Awards, Golden Award of Sustainability Reporting in 2024" from former Minister of Education.

NCNU received Taiwan University Sustainability Awards in 2024 for its outstanding performance in sustainable development. The remarkable achievements from individual category of Golden Award of Sustainability Reporting in 2024 included environmental sustainability, social responsibility, and governance of institutional research. Notably, innovative initiatives, such as solar power installations and smart transportation solutions helped to build low carbon campus successfully toward the goal of net zero emissions by 2043.



Introduction of low carbon transportation solutions on campus in 2024

Introduced the e-scooter as a new green mobility solution in 2024, not only provided faculty and students with a more convenient mode of transportation but also reduced carbon emission from motorcycles. This achieved a more friendly campus mobility ecosystem by encouraging the use of e-scooters on campus and public transportation off campus.

Supporting the basis for Sustainable Development of University Social Responsibility (USR)



Center for Institutional Research provided fully analytical data support for assisting the fulfillment of social responsibility and achievement of Sustainable Development Goals (SDGs). Below was the concrete results of strengthening quality of education and promoting decision-making of institutional affairs after data analysis:

Core business outcomes

① Research Reporting System

Released subject-based research reports on a quarterly basis, covering the aspects of institutional research development, faculty teaching, and student learning then summarized them annually with comprehensive analyses and recommendations. As a result, identified areas for improvement then proposed innovative solutions to ensure long-term sustainability. Reports not only supported decision-making on campus but also directly implemented University Social Responsibility (USR) objectives.

② Promoting transparency of information

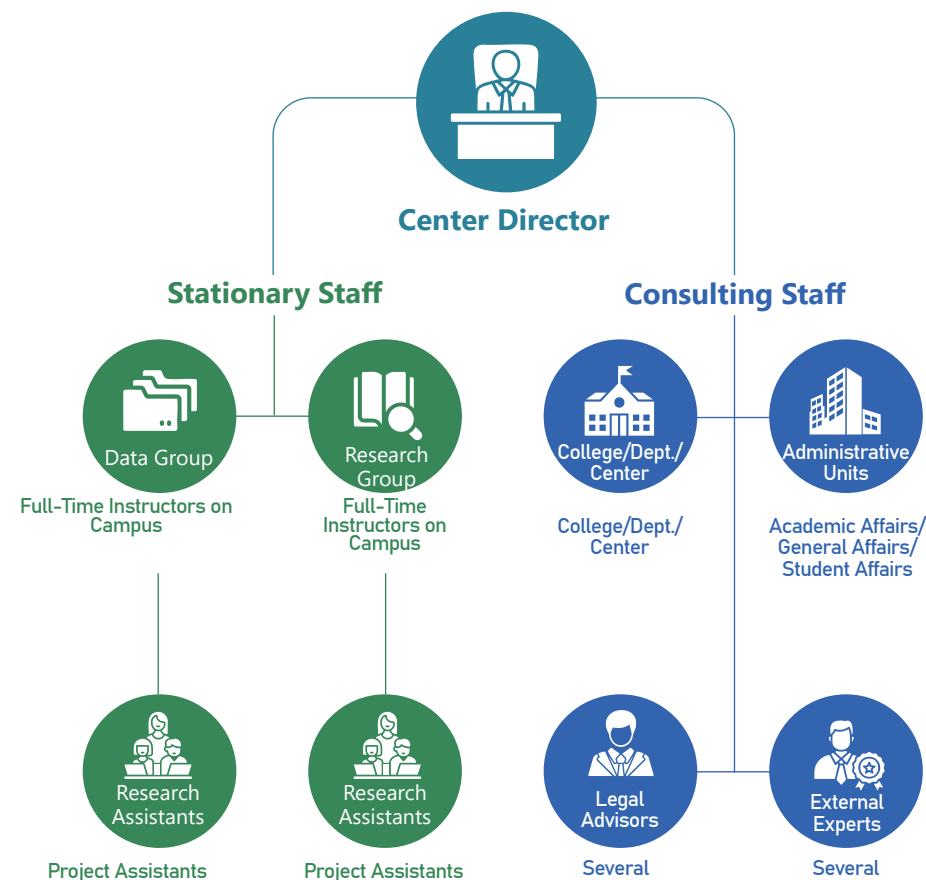
Center for Institutional Research issued a bi-monthly e-newsletter on a regular basis since July 2023, with a total of nine issues until the end of December 2024. Achieved 40%-45% reach rate, including topics such as analysis of university USR civic indicator and surveys on sophomore learning habits to promote the transparency in institutional research development. This not only fostered on/off campus communication but also encouraged social groups' participation toward the sustainable development of education.

③ Enhancement of quality management

The core was based on PDCA (Plan-Do-Check-Act) to complete in-depth analysis of three main subjects. Data-driven decision making raised suggestions for improving the core topics of institutional development. Reassessed resource allocation after the performance analysis of economically or culturally disadvantaged students. In addition, adjusted policies after studies on the reasons of student withdrawal and dropout.

④ Plans' performance evaluation, precision review and improvement

Conducted plans' performance evaluation, such as institutional research development plans, parts of Higher Education SPROUT Project, others (over NT\$20 million), and plans across fiscal years. Evaluated nine of them in 2023 and seven of them in 2024, achieving a 100% evaluation rate. Focused not only on short-term benefits but also on the creation of long-term value ensuring each resource investment contributed to institutional advancement. This ensured optimal resource allocation for University Social Responsibility Practice Project, promoting sustainable development benefits.



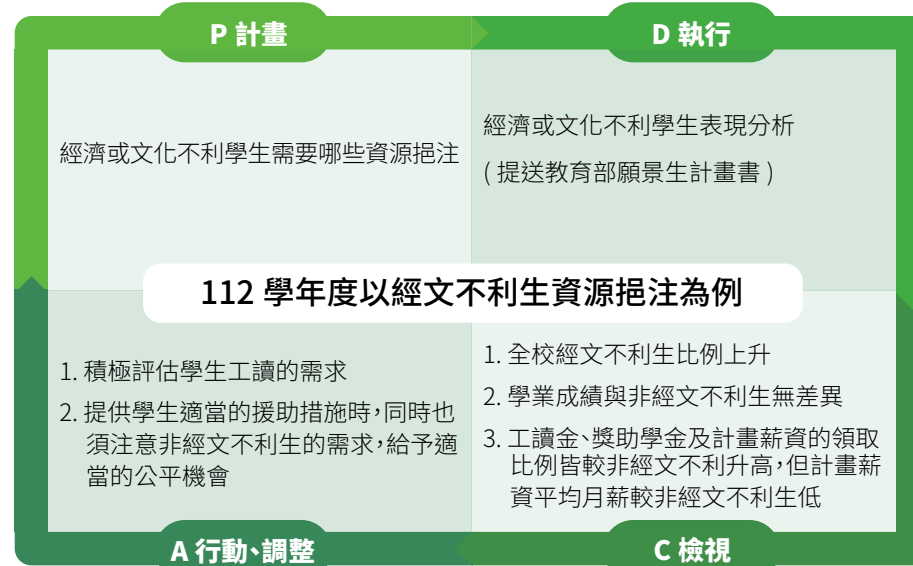
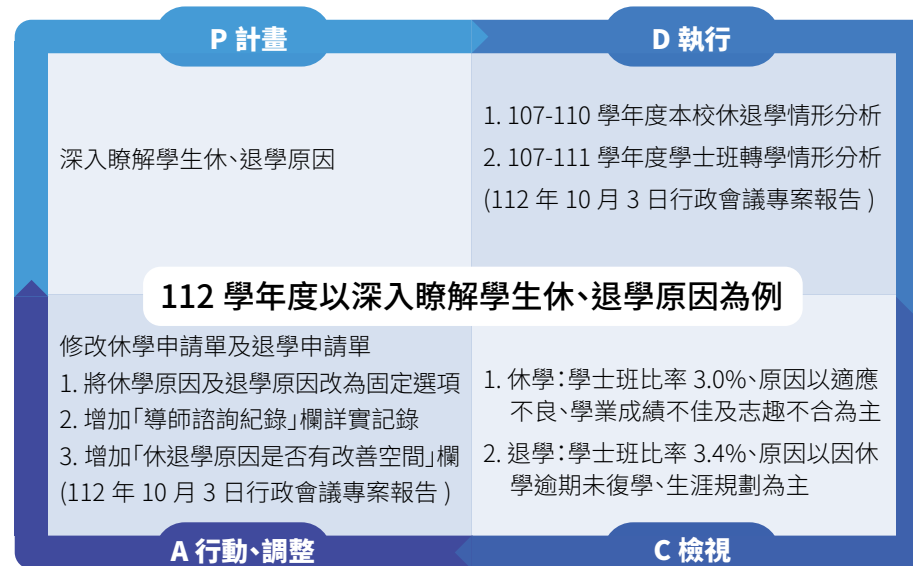
01.Organizational structure



02. Annual report



03. E-newsletter



04. Examples of PDCA

Communications with stakeholders

NCNU interacted faculty staff, and students internally and organizations, groups, and individuals externally while promoting sustainable development. Multi-communications with stakeholders were offered since the impact of operations by the performance of sustainable development in this respect, not only improving the transparency of NCNU governance but also providing the opportunity of sending feedback from stakeholders for a more comprehensive campus sustainability.

GRI 2-25、2-26

NCNU important open communication channels










Official website



Focal point

Social website (「Facebook fanpage」、YouTube「NCNU NEWS」 official channel、Instagram「ncnu_taiwan」 fanpage、「ncnu_pangoball fanpage」、「暨大生活圈 Line@」、「暨大校友會 Line@」)

Stakeholders	Faculty, staff, and students 	Students parents 	Entrepreneurs 	Government agencies 	Alumni 	People/NGO (Non-government organization) 	Suppliers 
Meaning to NCNU	Most important asset	Meet demand and expectation	Meet demand and expectation	Regulation compliance and supervision	Most important asset	Transform local area into on-site teaching	Important partners for satisfying resource of teaching service
Concerned topics	<ul style="list-style-type: none"> ✓ Campus safety ✓ Staff salary and benefit ✓ Learning resource ✓ Employment opportunity 	<ul style="list-style-type: none"> ✓ Governance ✓ Brand vision ✓ Learning resource ✓ Employment 	<ul style="list-style-type: none"> ✓ Student quality and ability ✓ Industry-academia cooperation and energy R&D 	<ul style="list-style-type: none"> ✓ Plan implementation effectiveness ✓ Univ. evaluation 	<ul style="list-style-type: none"> ✓ Graduates career development ✓ Graduates employment 	<ul style="list-style-type: none"> ✓ Learning resource ✓ Student quality and ability ✓ Brand vision 	<ul style="list-style-type: none"> ✓ Supplier mgmt ✓ Payment terms
Forms of communication and frequency	<ul style="list-style-type: none"> ✓ New faculty symposium ✓ Faculty social group ✓ Faculty/students meeting ✓ Mgmt. and labor council ✓ Dept., college, and institutional affairs 	<ul style="list-style-type: none"> ✓ Parents/faculty symposium ✓ Orientation ✓ University expo ✓ Admission information 	<ul style="list-style-type: none"> ✓ Industry-academia forum ✓ Employment expo. ✓ Enterprise conference ✓ Enterprise visit ✓ Internship meeting (before the beginning of intern.) 	<ul style="list-style-type: none"> ✓ Explanation session of competence authority ✓ Field trip evaluation ✓ Meeting of president/dean of academic affairs of national university and college ✓ Result report (in terms of demand) 	<ul style="list-style-type: none"> ✓ Alumni back home ✓ Alumni association ✓ Graduates survey (once a year) 	<ul style="list-style-type: none"> ✓ Service learning ✓ House rental expo ✓ The publicity of education ✓ Community fellowship ✓ Process activity (by year, by semester, or on occasions) 	<ul style="list-style-type: none"> ✓ Government Procurement Team ✓ Supplier meeting (in terms of demand)

01

About NCNU



Major subjects of this chapter

NCNU-01: Brand vision

Priority readers

- ☒ Entrepreneurs
- ☒ Faculty, staff, and students
- ☒ Parents
- ☒ Government agencies
- ☒ Alumni
- ☐ Community people/NGO
- ☐ Suppliers



1.1 Goals of institutional research development and strategy

1.2 governance

1.3 Endowment fund and sustainable development

1.4 Internal control

1.5 Stakeholders and major subjects' assessments

1.1 Goals of institutional research development and strategy

GRI 2-6、2-23、2-24

NCNU developed the distinctiveness of 「intensified Shui Sha Lian and looked towards Southeast Asia.」 thru dual core development of 「expanding international outlook while developing local distinctiveness」 since the establishment that bore the mission of balanced area development and promoted overseas Chinese education exchanges. Jointly formulated six development strategies thru institutional research consulting meeting, consensus camp, and revision of institutional research development planning regularly.

Since the publication of the first report in 2022, President Dong-Sing, Wu served as the chief editor each year. The Environmental Protection and Occupational Safety and Health Center integrated each teaching and administrative units. They abode by GRI criteria in response to UN' s Sustainable Development Goals (SDGs). In response to net zero emissions policy in 2050, added solar power installations and actively revitalized extensive campus space. 「Shui Sha Lian College」 and 「College of Nursing and Health Welfare」 were established in succession for local demands, such as international tourism and LOHAS lifestyle, while expanding indigenous student admission and demonstrating social caring. In the aspects of 「social responsibility and sustainable development,」 actively coordinated with Ministry of Education' s Vision Plan to provide economically and culturally disadvantaged students with holistic learning assistance. Additionally, gained local people' s identity for promoting local distinctive industries and talents cultivation, local nursing personnel and cultivation of long-term care talents, and strengthening rural education.



Financial
information and
institutional
research



Sincere resolute,
learning for practice



Cultivated professional and moral
talents. Expanded international outlook
and developed local distinctively.



A comprehensive university with cultured and
distinctive features



- | | |
|---|---|
| <p>1 Teaching skills of faculty social group and innovative curriculum design</p> <p>2 Developing main subject of education and career counseling</p> <p>3 Revitalized the local area and practiced society.</p> | <p>4 Connected southbound countries and cultivated multinational experiences.</p> <p>5 Assistance of underprivileged students to promote the publicity of higher education</p> <p>6 Promoted local prosperity and the benefits of mutual learning.</p> |
|---|---|

1.2 NCNU governance

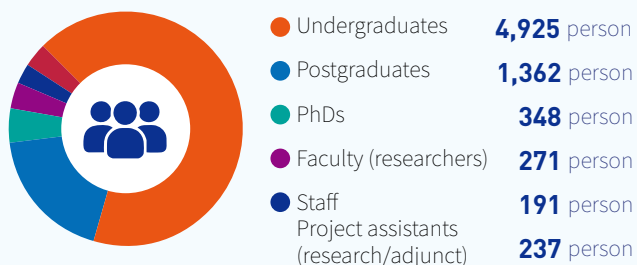
GRI 2-1、2-6、2-7、2-8

1. About NCNU

The address of National Chi Nan University is 1 University Road, Puli Township Nantou County 545301 Taiwan, R.O.C.

The connotation of the name “Chi Nan” came from The “Yugong” chapter of the book (Shujing) “from northernmost regions to south, the influence of our culture extended to all four seas,” which meant overseas spread of Traditional Chinese Culture in the South. The most important goal was to cultivate talents with international perspectives. The added word “international” after “Chi Nan” in Chinese distinguished the one with the same name in Guangzho, Mainland. “National Chi Nan University” was appropriately named. Presently, NCNU had six colleges, 25 undergraduates programs, 29 master programs, 17 PhD programs, seven in-service master’s programs, two overseas in-service master’s programs, two indigenous peoples in-service program, and one master program in industrial technology.

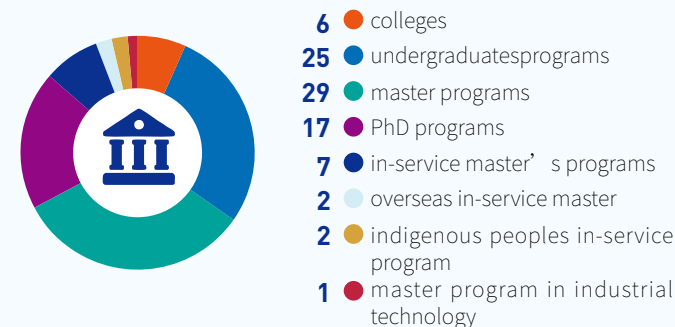
Number of faculty, staff, and students (Oct. 15, 24)



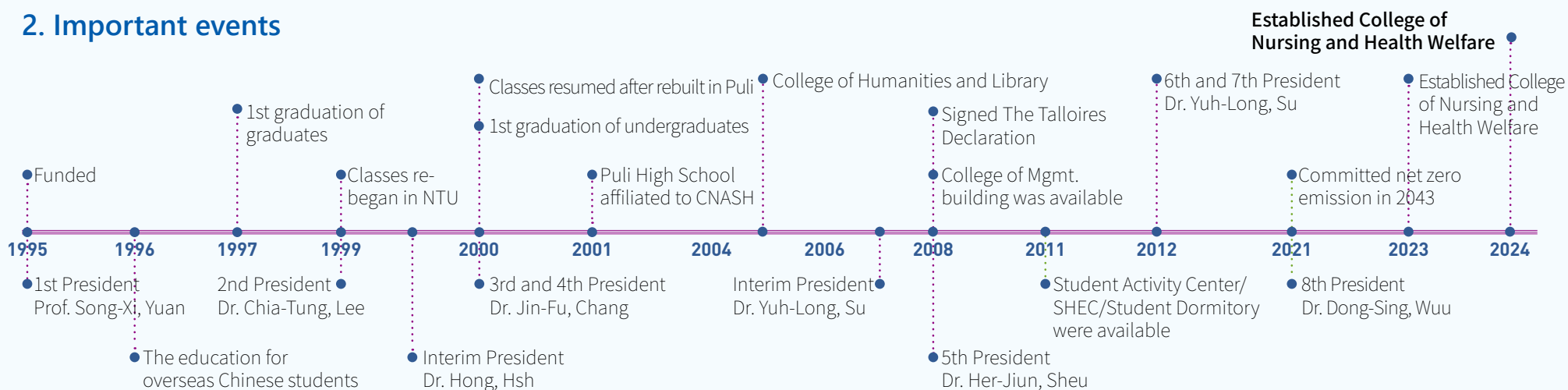
Number of subcontractors



Academics



2. Important events



GRI 2-9、2-10、2-11、2-12、2-13、2-14、2-15、2-16

3. Governance

Selection of president

The selection committee was co-assembled with representatives from Ministry of Education and NCNU in every four years. President candidate was decided by either public solicit or proactive approach. The performance of governance was evaluation in every three years.

Governance

Decision-making mechanism

- Established comprehensive administrative units, along with effective organizational meetings and decision-making/review mechanisms. The president oversaw all administrative affairs on campus and chaired regular meetings. Collective deliberations made decisions then follow-up and evaluation to promote related affairs smoothly.
- The Institutional Research Consulting Committee combined on/off campus experts to consult guidelines, academic development, college/department development, and evaluation.
- The Institutional Research Development Committee provided suggestions for key concerns.

Decision meeting

- The president convened the institutional research meeting, members including supervisors of first-tier units, over one half of faculty holding no administrative positions, and over 10% for student representatives.
- The administrative meeting discussed important administrative matters and assisted president to take care of related matters.

Each of the functional committees

Established various committees to control numerous main subjects and impacts, such as Sustainable Development Promoting Committee, Admission Committee, Curriculum Committee, Gender Equity Education Committee, and other committees.

Disclosures of financial information and institutional research



Establishment of 1st and 2nd level administrative units (Article 14 of the Organizational Charter):

Administrative units	Sub-units
Office of Academic Affairs	Registration & Curriculum Section, Information Service Section, Admission Section, and Center for Teaching and Learning Development
Office of Student Affairs	Section of Student Activity, Section of Health, Section of Student Dorm Service, Section of Guidance Counseling and Career Development, Student Security and Assistance Center, and Indigenous Student Resource Center
Office of General Affairs	Section of General Services, Section of Cashier, Section of Facilities Management, and Section of Construction and Maintenance
Office of Research and Development	Comprehensive Planning Section, Operations Center for Industry Collaboration & Continuing Education, and Entrepreneurship Incubation Center
Office of International and Cross-Strait Affairs	Division of International Affairs and Division of International Affairs
International Foundation Program	Section of Academic, Section of Student Affairs, and Section of General
Library	Acquisitions and Cataloguing Section and Reading Services Section
Computer and Network Center	System Section and Network Section
Environmental Protection and Occupational Safety and Health Center	Environmental protection section and Occupational Safety and health Section
Office of Secretariat	Documentation & Conference Service Section and Public Relations & Alumni Service Center
Office of Personnel	-
Accounting Office	-

To promote the administrative efficiency and the quality of services, conducted the optimization and adjustment of administrative human resources.

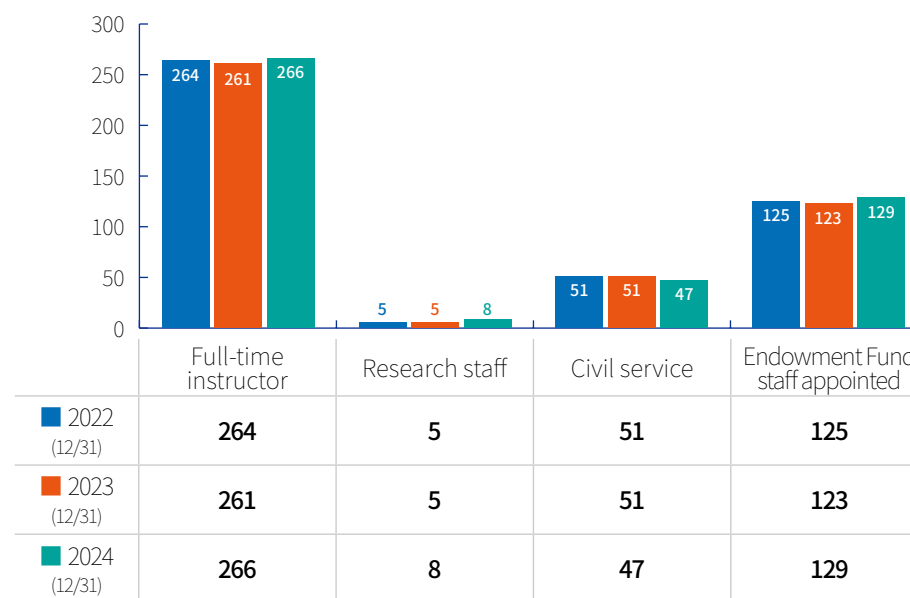
Teaching and research staff

In principle, appointed assistant professor, who held a doctorate degree or above. Formulated the “Principles for Competitive Faculty Quota Allocation at National Chi Nan University in 2022” to proactively appoint outstanding faculty, such as Yushan Fellow, through additional quota allocations.

Full-time staff

To promote the flexibility of staff funded by Endowment Fund, formulated and revised annually the Staff Improvement Project with competitive salary. Offered education and training for contract-based employee transitioning.

See below for the number of persons who transitioned to full-time instructors and full-time staff from 2022 to 2024



1.3 Endowment fund and sustainable development

1. Overview of financial management

Since the needs of development of institutional research, resource of teaching, and so on, financial income and expenditure increased gradually as well as available funds, cash and savings in last three fiscal years. Financial status was stable.

- (1) The final account of revenue was NT\$1,509,629,000 in 2022, which increased to NT\$1,635,763,000 with a grown rate of **8.36%** in 2024.
- (2) The final account of expenditure was NT\$1,601,016,000 in 2022, which increased to NT\$1,657,336,000 with a growth rate of **3.52%** in 2024.
- (3) The available funds was NT\$412,386,000 in 2022, which increased to NT\$564,961,000 with a grown rate of **37.00%** in 2024.
- (4) Cash and time deposits was NT\$1,278,567,000 in 2022, which increased to NT\$1,580,374,000, with a grown rate of **23.61%** in 2024.

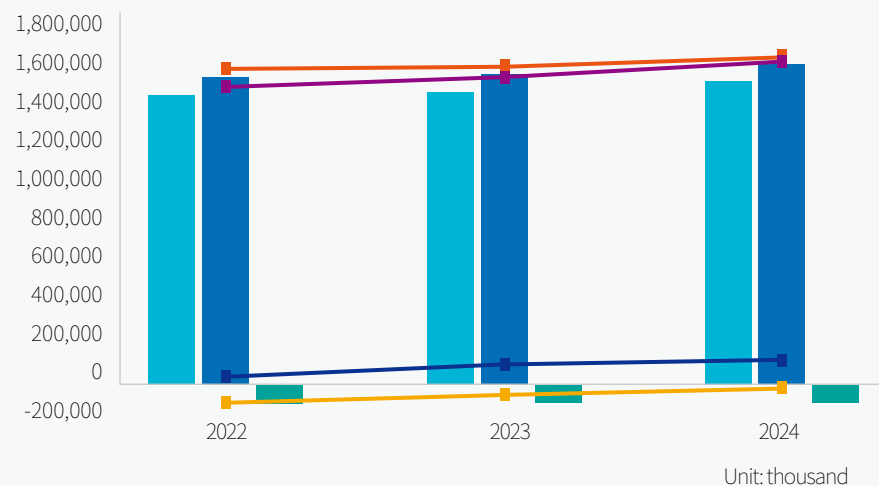
2. Financial risk assessment

See below for the “National University Management and Supervision Measures of Endowment Fund” (hereinafter referred to as “the measures”) in the Article 30 for the financial risk early warning indicator.

(1) Final statement had been **substantive surplus**.

- ① The annual surplus or shortage of revenues and expenditures, referred to final statement of substantive deficit of fiscal year, by the Generally Accepted Accounting Principles must adjust for the expenses of depreciation, depletion, and amortization for assets purchase of national treasury payment by the measures of Article 21 then the result still came deficit.
- ② See below for the final statement statistical table from 2022 to 2024.

Final statement statistical table from 2022 to 2024

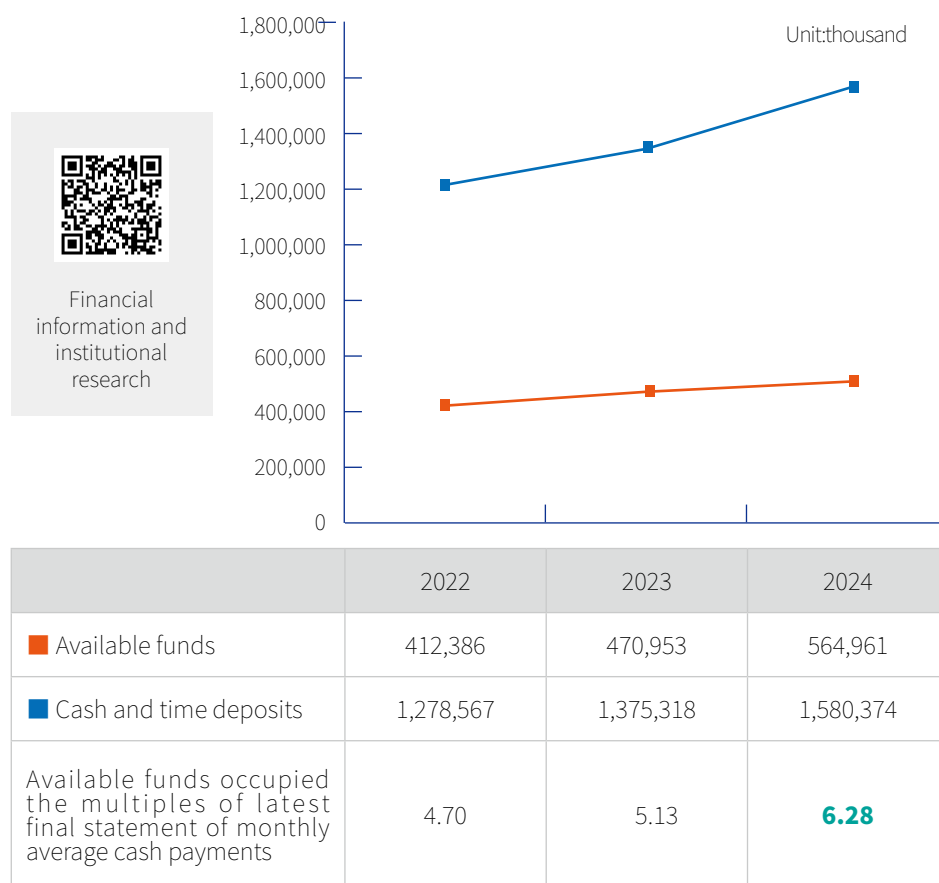


	2022	2023	2024
Final account of revenues	1,450,725	1,468,125	1,524,108
Final accounts of expenditures	1,543,755	1,557,790	1,611,067
Final account of surplus or deficit	-93,030	-89,665	-86,959
Final account of revenues	1,509,629	1,558,537	1,635,763
Final account of expenditures	1,601,016	1,611,411	1,657,336
Final account of surplus or deficit	-91,387	-52,874	-21,573
By the Generally Accepted Accounting Principles, must adjust for the expenses of depreciation, depletion, and amortization for assets purchase of national treasury payment, then, the result came surplus or deficit.	24,571	79,503	107,676

(2) Low on available funds affecting the soundness of the Endowment Fund

- 1 Available funds referred to the total amount of cash and the short-term realizable assets, deducted the short-term liabilities by the Article 10 of the measures.
- 2 See below for the statistical table of cash, time deposits, and available funds occupied the multiples of latest final statement of monthly average cash payments from 2022 to 2024.

Available funds statistical table from 2022 to 2024



3. Sustainable investment strategy

- (1) Formulated the Directions for Revenues and Expenditures of Investment Income in accordance with the 「National University Endowment Fund Establishment Act」 and established an investment management team responsible for related investment objectives.
- (2) The Endowment Fund Management Committee approved the investment plan. Then, suggested by the investment management team to implement investment objectives, limits, and directions.
- (3) To enhance sustainable development of the Endowment Fund, the promotion of investment objectives embodied principles of Corporate Social Responsibility (CSR), Environmental, Social, and Governance (ESG), and Principles for Responsible Investment (PRI). Also, formulated the Directions for Revenues and Expenditures of Investment Income, achieving the University's social responsibilities (USR).



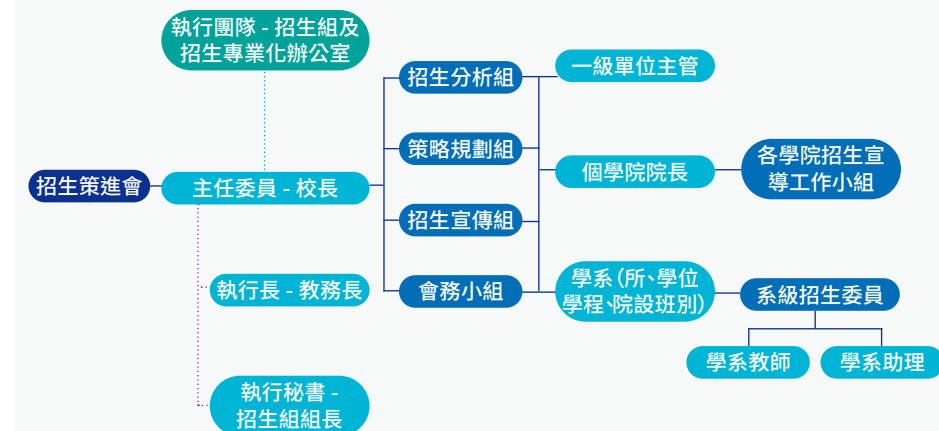
4. Sustainable Management Strategy in response to sub-replacement fertility

(1) Held Admission Strategy Meetings to strengthen important awareness of data analysis in institutional research among academic departments on a regular basis.

Established the 「Admission Strategy Meetings」 in Feb., 2021, which was composed of chairman Dr. Dong-Sing, Wu, directors of each Dept. and supervisors of first-tier administrative units to promote admission-related initiatives in a monthly meeting. Results of data analysis conveyed to first-tier supervisors. Not only this promoted authorities and displayed importance but also extended important explored topics. As a result, on/off campus experts and opinion leaders were invited in the meeting, which was beneficial to first-tier supervisors to raise effective countermeasures immediately. Student numbers continued to grow steadily, reaching 6,653 students in 113 academic year.

Student numbers continued to grow steadily, reaching 6,653 students in 113 academic year.

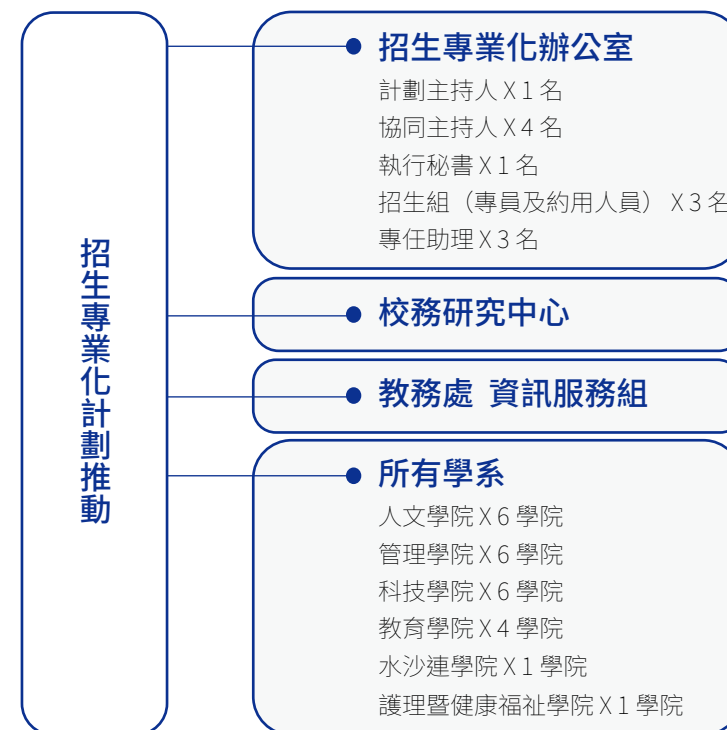
Organizational Structure of Admission Strategy Meetings



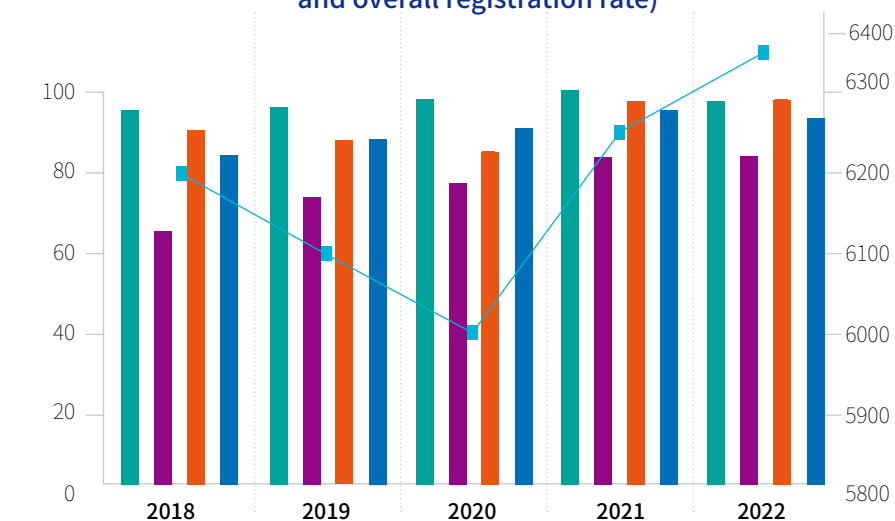
(2) Continued to promote the “Specialization of University Admissions Pilot Program” to optimize the selection mechanisms among academic departments.

Reform of college admissions system began after the implementation of 2019 Curriculum Guidelines in 2022. Each dept. confronted increasing challenges in reviewing students’ learning files. Ministry of Education approved “Specialization of University Admissions Pilot Program” to subsidize NT\$2,300,000 (2018), NT\$3,300,000 (2019), and NT\$5,500,000 (2020-2021) respectively. Received, moreover, NT\$6,000,000 subsidy from 2022 to 2023. Built a systematic admissions and selection mechanism year by year. This helped each dept. to conduct effective reviews within limited timeframes. Received latest **NT\$5,700,000 subsidy from Aug. 1, 2024 to July 31, 2026.**

Organizational Structure of the Admissions Professionalization Team



Current student numbers from 2018 to 2022 (incl. Enrollment by program and overall registration rate)



(3) Strove for additional quotas for Vision Plan to expand the recruitment of underprivileged students.

Balanced area development was a core mission as being the only national university in Nantou County. Proactively promoted the admission opportunities for underprivileged students since NCNU founded. This goal met the 「promotion of publicity of higher education」 of Higher Education SPROUT Project. Several measures were taken individually to ensure admission opportunities for economically or culturally disadvantaged students. This included indigenous peoples in-service program, recruitment expansion, reduction of application fees, priority admissions, scholarship programs, strengthening admission promotion, special admission channels, and direct admissions. Continued to improve the enrollment for underprivileged students after the considerations of students' family background, socioeconomic status, conditions for learning, and local enrollment. **Ministry of Education approved admission quota of 80(2021), 93(2022), 115(2023), 115(2024), and 115(2025) students respectively.**

(4) Addition of new academic dept., along with forward-looking employment

To practice University Social Responsibility (USR), assisted rural medical services and shortage of nursing professionals in long-term care institution. Utilized area advantages by collaborating with local healthcare providers. The College of Nursing and Health Welfare and Dept. of Nursing were established in 2023. The goal was not only cultivating nursing professionals but also upheld 「publicity of higher education」 by prioritizing recruitment of Indigenous student and those eligible for Vision Plan. Admission quota included a total of 29 general student, four Indigenous students, and an additional quota of 15 students under Vision Plan. Strove for additional 50 indigenous peoples in-service program for Dept. of Nursing in 2024, bring a total number of 98 students. This hoped continuous education for local junior high school students in Nantou. Then, pursued their nursing-related studies in NCNU after high school. Serviced their hometown after graduation. Added the Intelligent and Sustainable Agriculture Program (public exp.) with admission quota of 25 students in 2025.



NCNU's 「Vision Plan」 helped underprivileged students in pursuing their studies.



Promoted admission opportunities for underprivileged students by strengthening publicity in remote area and schools located in non-urban and non-mountainous regions.



Dept. of Nursing established a Clinical Skills Center with latest technology, enabling diverse training scenarios.



▀ The unveiling ceremony of the College of Nursing and Health Welfare, President Dr. Dong-Sing, Wu stated the intensifications of rural medical services and dedicated to cultivate health care professionals.



▀ Visited 50 high schools and conducted admission publicity dependent on a college-based approach where applicant numbers declined through this year's "Star Plan."



▀ Strove for increasing quota of Dept. of Nursing's indigenous peoples in-service program, completing the integrity of their knowledge system and employment support system.

5. Endowment fund and sustainable development-international students

Diversified recruitment:

Multi-channels to recruit, which included exchange students, visiting students, interns, and degree students. They came from different backgrounds, races, and countries. This could build multicultural campus environment.

Promoted overseas student support services:

Established a support system, which included tutoring and cultural adaptation. Promoted interaction and cooperation between local and overseas students via social activities and cultural exchanges.

Strengthened marketing and promotion:

Participated in education specialists and related annual meeting to promote and establish brand image simultaneously, which highlighted univ.'s uniqueness and advantage. This would attract more outstanding overseas students. Utilized social media and Internet platform for the publicity of education resources and quality of lives.

Established closed contacts with alumni:

Thru alumni's successful stories and experiences, increased univ.'s reputation and attractiveness. Encouraged alumni to participate in recruitment activities and provided language support as well as local influence.



▀ Participation in Taiwan Education Fair in the Philippines (2024/09/23-09/30)



▀ Outstanding international graduates case: NCNU- Ming-Hsun, Hsieh

6. Performance summary and goals setting

Aspects	Major subjects in 2024	Performance indicator	Goals in 2024	Status	Effectiveness in 2024	Goals in 2025
University governance	Business performance	Status of business performance	Continued to control the overall expenditures, maintained the financial stability of the university, and improved the strategy of self-financing.	Met	1. Final statement had been substantive surplus in last three fiscal years. 2. The expenditures of personal expenses at self-financing resources were controlled within 50% in last three fiscal years. 3. The available funds from endowment Fund was dependable presently.	Continued to control the overall expenditures, maintained the financial stability of the university, and improved the strategy of self-financing.
	Brand vision	Participated in university-related evaluations and awards	Participated in university-related evaluations or awards, increased university visibility and image enhancement.	Met	1. UI GreenMetric, World University Rankings 44th place in 2024 Ranking. 2. WURI Ranking, ranked 118th place globally.	Continued to participate in university-related evaluations and awards, increased university visibility and image enhancement.
	Learning effectiveness /Career counseling	Obtained certification and license via civil service.	Cultivated talents with certification and license via Comparative Examination.	Met	No. of obtained certification and license via civil service were 289 person/times.	Continued to cultivate talents.
		Graduates employment	Promoted resources of teaching and service, decreased the graduates unemployment rate.	Met	Graduates unemployment rate(graduates of 1st year 23%)	Continued to promote resources of teaching and service, increased the employment rate to meet the promise of parents.
	Teaching quality	Ensured the stability of teaching quality.	Overall teaching satisfaction	Met	Scored 4.52 of overall teaching satisfaction.	Continued to ensure stability of teaching quality, such as satisfaction of faculty teaching and resource of teaching equipment and facility to meet the promise of parents.
	Research achievements	Total amount of academic research and industry-academia cooperation	Actively strove for industrial innovation services and external plan resource in terms of government policy.	Met	NT\$398,000,000	Continued to actively strove for industrial innovation services and external plan resource in terms of government policy.
Sustainable environment	Energy	Government agencies and academic year EUI 56	Below government agencies and academic year EUI 56	Met	Government agencies and academic year EUI53.18 in 2024	Below government agencies and academic year EUI 56
	Biodiversity	Conservation science research	Conducted the conservation science research for pangolin and constructed pangolin friendly facility on campus.	Met	Applied permit to research , spoke the topic of pangolin conservation during general education course and opening days' ceremony.	Continued to conduct the conservation science research for pangolin, and constructed pangolin friendly facility on campus.
	Water and effluent	Met Ministry of Environment, water standard.	Met Ministry of Environment, water standard	Met	Each water test result met regulations.	Met Ministry of Environment, water standard
	Waste	Met Waste Disposal Act	Promoted recovery rate.	Met	43.7% recovery rate in 2023 and 43.8% recovery rate in 2024	Continued to promote recovery rate of waste.
Social responsibility	Local communities	Influenced participants' ways of thinking.	Guided faculty/students to re-explore the social meaning of youth stay/return home.	Met	No. of cooperative communities were 30 places/about 56 courses offered/about over 2,455 students.	Continued to influence participants' ways of thinking.
	Student life counseling	Applied for bursaries and scholarships.	Provided care for underprivileged students, counseling, and other measures.	Met	No. of participants of counseling activities were 8,014 person/times.	Continued to implement student life counseling.

GRI 2-18、2-27

1.4 Risk analysis and internal control

The development planning of overall operations was verified by the SWOT analysis of Strength, Weakness, Opportunity, and Threat. The Strength and Weakness were verified by area, geography, and faculty recruitment/remaining in office, whereas Opportunity and Threat were verified by change of education environment, trend of education reform, impact of sub-replacement fertility, austerity of education budget, and development of distinctive features.



1. Internal control

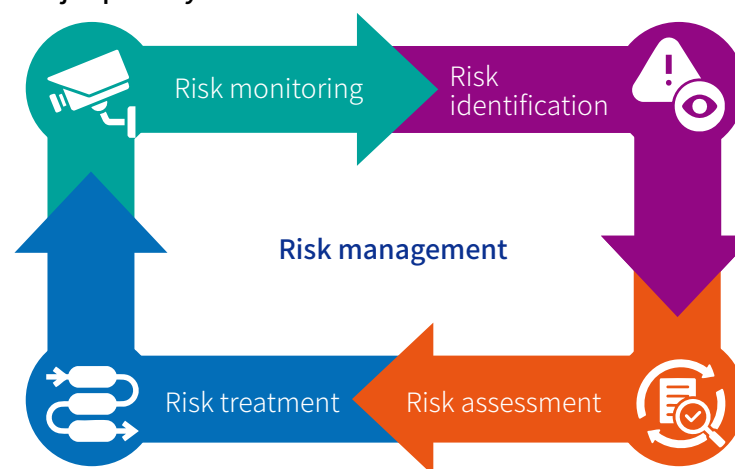
- The internal control was currently verified by National University Management and Supervision Measures of Endowment Fund, Risk Management and Crisis Handling of the Executive Yuan and Affiliated Agencies, and Operations of Promoting Risk Management by Ministry of Education. Established the Internal Control Project Team in charge of revising/adding items for internal audit result and self-assessment.
- The promotions in last three years: Signed the Effective Internal Control Statement in accordance with the establishment of internal control and implementation status to hold the assessment and the result of the audit in 2022 and 2023. Effective Internal Control Statement signed before the deadline in accordance with provisions.

2. Internal control and audit

- The 574th administrative meeting was held on Aug. 16, 22 to formulate the Directions for Internal Control and Audit Team. Auditors took turns from certified staff, such as team leaders or secretaries.
- Audit results: 14 audits completed in 2022, eight audits completed in 2023, and six audits completed in 2024. Each unit improved in terms of suggestions.
- No major penalty found in 2024 after reviewed.



Internal control



3. Risk monitoring and management mechanism

GRI 2-23、2-25

Aspects	Risk items		Risk management control guidelines	Management actions	Chapters
University governance	Business performance	Topics of reputation, sustainable blueprint in future, and final goal...etc	<ol style="list-style-type: none"> 1. Increased research, teaching, industry-academic cooperation, and social participation. 2. Strengthened admission promotion, public image creation, and development of a vision to become a refined and sustainability-oriented world-class university. 3. Strengthened the education of overseas Chinese students for the development of technology, integration, diversification, and internationalization. 4. Promoted joint dual-degree, deepened cross-straits and East Asia academic communication. 	Participated in related evaluations or rewards, increasing reputation and promoting public image.	1.1 Goals of institutional research development and strategy
		Topics of performance of education, operation, and financial status...etc.	<ol style="list-style-type: none"> 1. Actively strove for grant proposals from Ministry of Education, NSTC, and industry. Developed phase III of the solar panel installation project. 2. Strengthened communication and cooperation with local industries to increase the capacity of industry-academia research cooperation. 3. Encouraged students to study abroad, including internships and international conference, to increase international perspectives and participations. 4. Actively strove for Study Abroad Fair to expand overseas students' admissions and promote no. of international exchange students. 5. Encouraged integration field, to expand subfield research, to promote originality and added value. 6. Promoted interdisciplinary studies and full English programs. 7. Established fund-raising platform to actively revitalize the university's expansive 148 ha campus. 8. Promoted service quality and efficiency at administrative units' evaluations. 	Actively sought project source externally and implemented PDCA cycle-based quality management.	2.1 Performance of education
	Information security	Occurrence of inappropriate use of sensitive information, unauthorized access, and interruption or corruption	<ol style="list-style-type: none"> 1. Introduced Information Security Management System, ISMS and Personal Information Management System, PIMS. 2. Implemented access control management, access authority was given by account/ passwords for network and information system, in terms of business needs. 3. Held the education and training of information security, personal data protection as well as intellectual property courses in publicity for faculty, staff, and students yearly. 4. Established green computer room, implementing security measure for data center. 	Implemented ISMS, PIMS, and internal audit/control system.	2.5 Information security
Sustainable environment	Climate change and adaptation	Topics of climate crises of rainstorm, flood, typhoon, landslide, drought and air pollution	Daily maintenance for equipment to cope with natural disaster, such as typhoon, earthquake, and fire to prevent possible financial losses.	Conducted early warming and emergency response drill on campus.	3.1 Energy resource management
		Topics of net zero emissions	We would achieve the reduction of greenhouse gas emissions by 25% in 2021, a half of it in 2030, and net zero emissions in 2043 based on three net zero strategies: energy conservation and carbon reduction, renewable energy, and carbon offset.	Conducted inventory, in terms of ISO 14064-1 Greenhouse Gases-Part 1.	
	Biodiversity	Habitat destruction of endangered species and risks to ecosystem balance (invasive alien species, insufficient conservation awareness).	<ol style="list-style-type: none"> 1. Habitat conservation and management, continued to develop an eco-environment suitable for diverse species. 2. Regular environmental quality monitoring on campus to prevent pollution risks. 3. Traffic safety design, installed sign in endangered species activity zones to alert pedestrian. 4. Ecological restoration, planted host and nectar plants for butterflies to develop butterfly habitat. 	Regular habitat monitoring, infrastructure optimization, strengthened the publicity of conservation.	3.4 Biodiversity
Social responsibility	Human resource	Topics of collective bargaining, employee communication, and grievance mechanism...etc.	<ol style="list-style-type: none"> 1. Strengthened lateral communication among units by promoting liaison and coordination for organization. 2. Fully promoted computerized government document to improve efficiency. 3. Reviewed and revised the hierarchy charts to strengthen conformity between authority and responsibility. 	Implemented process standardization of administrative businesses and internal control and audit.	4.2 Development and benefits of faculty and staff
		Topics of employee education and training, functional management, promotion assessment, lifetime learning, and career development...etc	<ol style="list-style-type: none"> 1. Reasonably adjusted level 3 regulations for colleges/departments...etc. 2. Completed training mechanism. 		
	Local relations	Topics of charity or strategies of community participation, types of activities, resources input...etc.	Concatenated each of local topics via teaching as learning places for students, which was the important goal of education and developing talents.	Offered courses of social participation and diversified service learning then strengthened professional skills.	5-Social responsibility

1.5 Stakeholders and major subjects' assessments

GRI 2-29、3-1

Stakeholders’ identification, concerned with collected topics and classified subjects, assessed degrees of impact, materiality assessment, and review and discussion were of five steps to analyze pattern systematically from 2024 Campus Sustainability Report. Identified and communicated the sustainable topics with stakeholders. Continued to improve university operation. Therefore, the disclosed information from the Report could meet stakeholders’ needs.

In 2024, key highlights of major subject changes: placed more emphasis on the aspect of environmental sustainability, such as water resource management and strengthened commitment for environmental sustainability. Repositioned student’ s service strategy-from resource tracking to proactive learning support, to build a more efficient major subject’ s framework in line with sustainability trends.

NCNU revised the methodology for evaluating the level of impact from incidents for materiality assessment questionnaire in 2024-from only assessing positive impacts to consider both positive and negative impacts. The number of major subjects were adjusted to 11 items in 2024 compared to 12 topics in2023. The analysis of major topics changes is as follows:

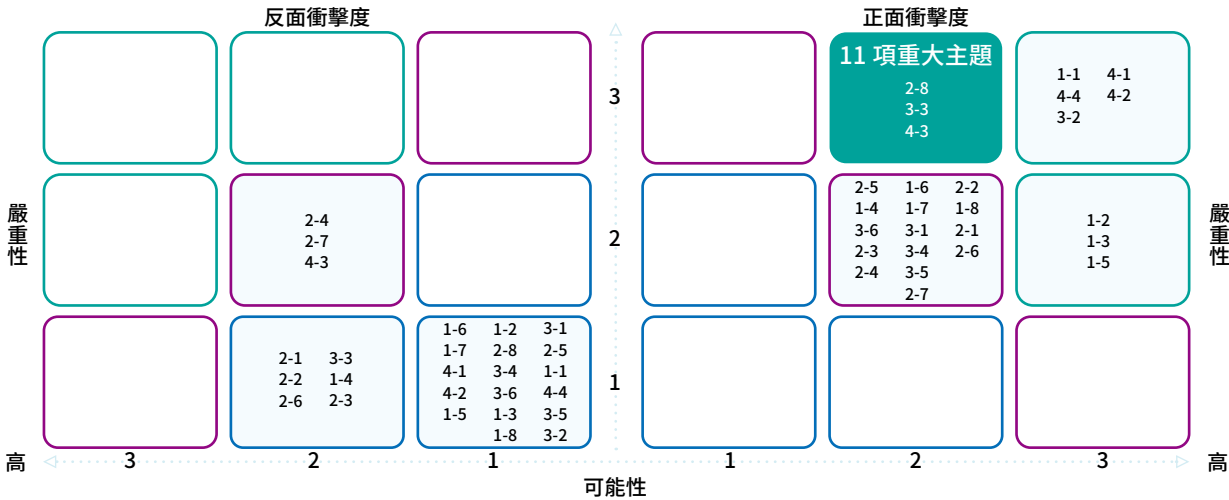
Aspects	2024 major subjects (11 items)	2023 major subjects (12 items)
Sustain-able envi-ronment	Energy (GRI 302) 1-1	Energy (GRI 302)
	Biodiversity (GRI 304) 1-3	Biodiversity (GRI 304)
	Wastes (GRI 306) 1-5	Wastes (GRI 306)
	Water and effluent (GRI 303)-new addtion 1-2	
Social responsi-bility		Occupational Safety and Health (GRI 403)-deletion
	Local communities (GRI 413) 2-8	當地社區 (GRI 413)
	Learning support and life counseling-new addition(NCNU-04) 4-3	Local communities (GRI 413)
University gover-nance		Governance (NCNU-02)-deletion
	Brand vision (NCNU-01) 3-2	Brand vision (NCNU-03)
	Business performance (GRI 201) 3-3	Business performance (GRI 201)
	Teaching quality (NCNU-02) 4-1	Teaching quality (NCNU-04)
	Learning effectiveness (GRI 201) 4-2	Learning effectiveness (GRI 201)
	研究成果與專利 (NCNU-03) 4-4	研究成果與專利 (NCNU-05)

26Topics

Concerned with collected topics and classified subjects

7internal and external stakeholders	Stakeholders identification
11Major subjects	Materiality assessment
Engagementmeeting	Assessed degrees of impact
21committee members	
3rdCampus Sustainability Repo	Review and discussion

Impact and Likelihood Matrix



NCNU would continue to strengthen management in the future and disclosed related information in the Report after analyzed the major subjects, responded to chapters and analyzed boundary, and reviewed by the Sustainable Development Promoting Committee.

GRI 3-2

Aspects	Major subjects	Impacts	Responded to chapters	Corresponding to GRI specific subject	Boundary impact and level of involvement		
					Upper (parents 、 high school)	NCNU	Lower (entrepreneur 、 university)
University governance	Business performance	Needed resources reduced for teaching, research, and service utilization.	2.1	GRI 201-1: Economic performance	◆	◆	◇
	Brand vision	Decreased willingness to study by parents and students.	Words from president	NCNU customized subjects (NCNU-01)	◆	◆	◆
	Learning effectiveness /Career counseling		2.1 2.2 2.3	NCNU customized subjects(NCNU-02)	◆	◆	◆
	Teaching quality			NCNU customized subjects(NCNU-03)	◆	◆	◆
	Research achievement	Decreased competition caused by unimproved professional skills of teaching, research, and service.	2.1	NCNU customized subjects(NCNU-04)	◆	◆	◆
Sustainable environment	Energy	Univ.' s financial cost was affected by the price increase in energy.	3.1	GRI 302-1: Energy	◇	◆	◇
	Biodiversity	Failed to conserve wildlife, which caused damage to NCNU image.	3.4	GRI 304-4: Biodiversity	◇	◆	◇
	Water and effluent	Water quality of adjacent rivers	3.2	GRI 303-2: Water and effluent	◇	◆	◇
	Waste	Impacted univ.' s financial cost due to waste disposal costs increase.		GRI 306-2: Waste	◇	◆	◇
Social responsibility	Local communities	Unable to achieve social responsibility and co-existing/co-prosperity with communities	5	GRI 413-2: Local communities	◆	◆	◆
	Student life counseling	Students' professional competences and employment competitiveness decreased.	4.4	NCNU customized subjects(NCNU-05)	◆	◆	◆

Management guidelines of major subjects

GRI 3-3

Major Subjects	Policies	Commitment	Mid and long-term goals	Specific strategies	Performance results	Evaluation mechanism
Business performance	The planned budget of endowment fund was based on mid/long-term development. The goal of estimated performance of education was included in the Annual Finance Planning Report.	The implementation of endowment fund and each of self-financing resources depended on surplus or making both ends meet. The plan for increasing income and reducing expenditure was needed when substantive deficit occurred.	Continued to strive for external resources of subsidy program, commission for project, and industry-academia cooperation.	<p>I. Assembled an investment management team to formulate annual investment planning and implement each of investment evaluations and decision-making. An Investment Efficiency Report would send to the Endowment Fund Management Committee on a regular basis.</p> <p>II. Audit assistants evaluated, expedited, and summarized the achievement of each of business performance goals routinely.</p> <p>III. The Endowment Fund Performance Report was made in accordance with the achievement of educational performance goals of the Annual Finance Planning Report.</p>	P16-23	Institutional affairs meeting, Committee for Institutional Research Development Planning, and Endowment Fund Management Committee Development Planning, and Endowment Fund Management Committee
Brand vision	Implemented the philosophy of education: 「Sincere resolute, learning for practice」	Cultivated talents with skills and morality, fusion of humanities in technology, practiced social caring and mission in education of sustainable resilience.	Became the role model of sustainable higher education in Central area. Promoted interdisciplinary knowledge and practice technology, influence of humanistic concern and educational innovation.	<p>Strategy I: Enhanced teaching skills of faculty social group and innovative curriculum design.</p> <p>Strategy II : Developed main subjects of education and career counseling.</p> <p>StrategyIII: Revitalized the local area and practiced society.</p> <p>Strategy IV: Connected southbound countries and cultivated multinational experiences.</p> <p>Strategy V: The assistance of underprivileged students to promote the publicity of higher education.</p> <p>Strategy VI: Promoted local prosperity and the benefits of mutual learning.</p>	P12-24	Institutional affairs meeting, Committee for Institutional Research Development Planning Development Planning
Learning effectiveness /Career counseling	Cultivated innovative and responsible talents for society needs.	Promoted resources of teaching and service to meet the promise of parents and country needs.	Provided inclusive, equitable, and high-quality education to cultivate integrated SIGMA talents with sustainable development capability (S), information technology capability (I), governance transition adaptability (G), multicultural capability (M), and accreditation in career (A).	<p>Strategy I: Optimized curriculum structure and implemented teaching mechanisms of evidence-based feedback.</p> <p>Strategy II: Promoted capabilities in information technology application and governance transition.</p> <p>Strategy III: Built a complete career counseling mechanism.</p> <p>Strategy IV: Implemented academic support and counseling mechanism for overseas students.</p>	P29-32	Student Counseling Committee
Teaching quality	Planned teaching and learning that met social needs and important policies of Ministry of Education.	Improved overall teaching quality and strengthened NCNU's competitiveness.	Increased internal and external teaching resources to demonstrate sustainability-oriented features and achievements of innovation in education.	<p>Strategy I: Established a counseling mechanism for new faculty members.</p> <p>Strategy II: Promoted interdisciplinary collaboration for faculty social groups.</p> <p>Strategy III: Held various trainings and subsidized for the development of digital and innovative courses.</p> <p>Strategy IV: Supported research in teaching practice projects and strengthened academic research assistance.</p> <p>Strategy V: Promoted a sustainable mechanism for faculty evaluation and promotion.</p>	P37-39	Performance evaluation meeting for institutional research development

Management guidelines of major subjects

GRI 3-3

Major Subjects	Policies	Commitment	Mid and long-term goals	Specific strategies	Performance results	Evaluation mechanism
Research achievements	Concerned local topics and practiced fields. Maintained good international interactions and communications.	Promoted competitiveness and professional growth of teaching, research and service.	The faculty social group cooperated with interdisciplinary academic research in addition to strengthen international academic communication and industry-academia cooperation.	Strategy I: Integrated faculty to propose interdisciplinary projects. Strategy II: Encouraged faculty to participate in all kinds of projects. Strategy III: Established award mechanisms. Strategy IV: Promoted local practice of smart agriculture technologies. Strategy V: Promoted interdisciplinary talent cultivation both on and off campus, and a platform for sharing international experiences in sustainable development.	P33-34	Performance evaluation meeting for institutional research development
Energy	Developed eco-campus by environmental management.	Implemented national energy policies	Broadly installed digital electricity meters, replaced outdated A/C and lighting fixtures, and implemented power management of related units on campus.	Replaced outdated electrical equipment with yearly allocated budget, began with AC aged nine years or older and followed by necessary daily lighting fixtures. The funding source came from solar power feedback fund, which energy conservation was invested with sustainable financial resources.	P46-49	Endowment Fund Management Committee
Biodiversity		UI GreenMetric University of Sustainable Development	Continued to conduct the conservation science research and constructed pangolin friendly facility on campus.	Ministry of Agriculture approved permit. Full-time researcher researched the home range of pangolin between NCNU campus and adjacent area (2025.05-2026.12) to clarify its habitat by a radio transmitter attached to it. Spoke the topic of pangolin conservation during general education course and opening days' ceremony. Encouraged faculty and students to use pangolin symbol for image marketing.	P57-58	Committee for Institutional Research Development Planning
Water and effluent	Reduced impacts on adjacent water environments.	Effluent met Ministry of Environment's laws and regulations.	Met water standard and environmental protection advocacy.	Kept updating sewage treatment facilities to maintain effluent quality standards.	P50	Environmental Protection and Occupational Safety and Health Committee
Waste	Kept trash off the ground and promoted recovery rate year by year	Implemented related disposals in accordance with Waste Disposal Act.	Reduced waste and promoted recovery rate.	Held each publicity and implemented disposal in accordance with laws and regulations.	P51	
Local communities	Intensified the development of Shui Sha Lian University Town.	A learning field was developed by innovative learning to break the boundary of learning space, in order to build a broader learning network and a learning mechanism of social innovation.	Cultivated talents with implementation abilities and practiced social innovations who cared about the topics of remote area for Taiwan.	Strategy I: Continued to deepen general education courses. Strategy II: Developed the local area revitalization with learning branch. Strategy III: Dedicated matters of public concern and higher education resources to underprivileged students. Strategy IV: Practiced to act locally with diversified academic activities by staff and students.	P75-95	Committee for Institutional Research Development Planning
Student life and counseling	Improved support mechanism for economically or culturally disadvantaged students.	Improved quality of lives and social mobility for economically and culturally disadvantaged students thru higher education.	Implemented student life counseling and caring as well as the applications of scholarships and bursaries.	Strategy I: Improved the admission rate of economically or culturally disadvantaged students. Strategy II: Provided economically or culturally disadvantaged students with comprehensive learning assistance. Strategy III: Provided economically or culturally disadvantaged students with needed resources. Strategy IV: Resilient students set an example for others.	P67-72	Student Affairs Committee and Student Counseling Committee

02 University governance



Major subjects of this chapter

GRI 201: Economic performance/learning effectiveness

NCNU-03: Learning effectiveness

NCNU-04: Teaching quality

NCNU-05: Research achievement and patent

Priority readers

- ☒ Entrepreneurs
- ☒ Faculty, staff, and students
- ☒ Parents
- ☒ Government agencies
- ☒ Alumni
- ☐ Community people/NGO
- ☐ Suppliers

2.1 Performance of education

2.2 Teaching quality

2.3 Internationalization

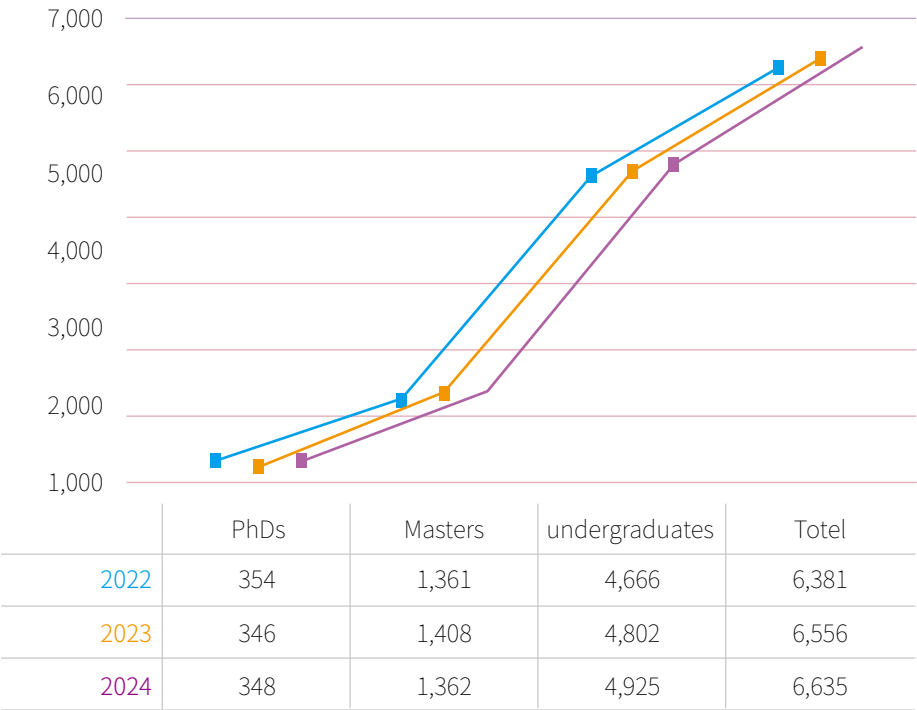
2.4 Participation of external organization



2.1 Performance of education

1.Student numbers grew steady.

Trend of student numbers by programs from 2022 to 2024



Total student numbers reached 6,381, 6,556, and 6,635 respectively, resulting annual growth rate of 2.74% and 1.21% from 2022 to 2024. PhD programs maintained between 345 and 355 students, while Master’s programs ranged approximately from 1,360 to 1,410 students. Undergraduates increased steadily from 4,666 (2022) to 4,925 (2024) students with a growth rate of 5.55%.

Established Department of Nursing strategically, in-service program in Nursing, and in-service program in long-term care for the elderly. Actively developed diversified recruitment to effectively maintain enrollment base. Student numbers kept stable growth from 2025 to 2028 based on current development trends.

2.Effectiveness-implementation of Higher Education Sprout Project

Actively promoted Higher Education Sprout Project to achieve the goal of net zero emissions in 2050. Made significant effectiveness, including innovative teaching, social responsibility, and industry-academia cooperation:

Aspect of teaching innovation

- Offered AI literacy-oriented courses and developed AI-powered learning assistant system to strengthen students’ interdisciplinary and self-directed learning capabilities.
- Actively developed joint dual-degree programs. Provided students with diverse overseas internship and exchange opportunities to promote their international mobility.

Aspect of social responsibility

- Promoted sustainable campus development and eco-friendly measures to implement the philosophy of environmental education.
- Encouraged faculty and students to participate in local mutual learning and care for rural education, and collaborated with local social groups to promote the resilience of disaster prevention on campus and in community.

Aspect of industry-academia cooperation

- Offered education industry-school co-construction programs in partnership with industry experts to strengthen students' practical skills.
- Built an innovation and entrepreneurial ecosystem to cultivate students’ abilities and promote their employment competitiveness.

Subsidy of Higher Education Sprout Project increased year by year from NT\$7,859,037 (2021) to NT\$89,788,348 (2024) with a growth rate of 10 times over, Ministry of Education highly commended about it.



3. Innovative inter-university collaboration model

NCNU partnered with National Ilan University, University of Taipei, and Taipei National University of the Arts to form the SCoT Four-University Alliance to build a role model of innovative inter-university collaboration. Pioneered the micro-credit course of 「Sustainable Study Tour: Campus Sharing and Interdisciplinary Practice.」 Broke through traditional university boundaries. Students could, therefore, explore different universities features.

The course guided students in understanding four universities' experiences and practices of sustainable development via intensive study tour format based on United Nations Sustainable Development Goals (SDGs).

This not only enriched students' learning but also strengthened their professional competences in the field of sustainable development. Also, this demonstrated the commitment to educational innovation, cross universities cooperation, and practice of the philosophy of sustainable development.



▲ 永續遊學：校園共享與跨域實踐結業式合照

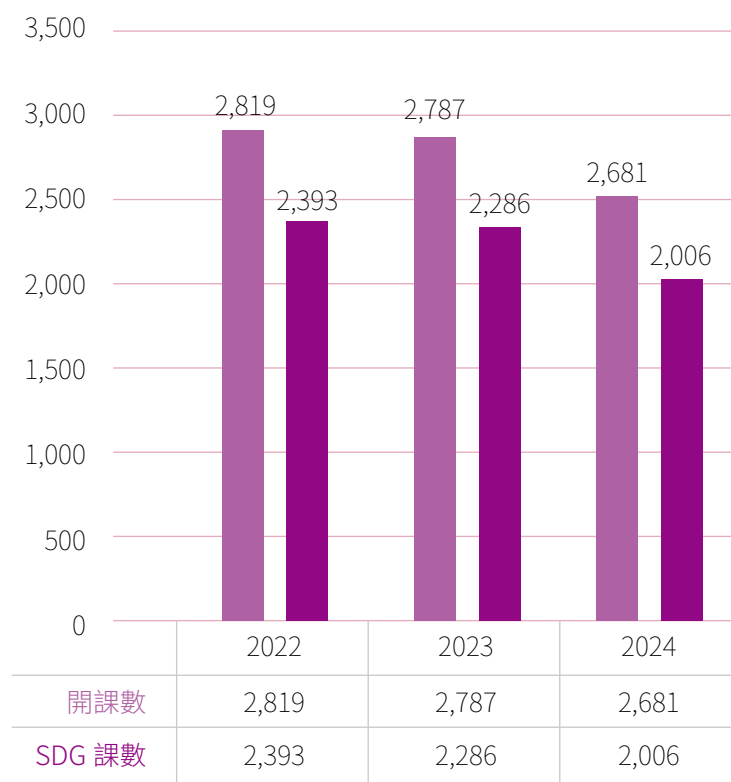
4. Incorporating sustainable development into Education

Incorporated sustainable development into curriculum plan. Offered 2,393, 2,286, and 2,006 related courses with United Nations Sustainable Development Goals (SDGs) respectively. The percentage of courses offered on campus that accounted for 85%, 82%, and 74.82% from 2022 to 2024.

Diversified development of sustainable curriculum

Emphasized diversity, interdisciplinary, and social participation for curriculum design in recent years. Incorporated elements of eco-conservation, renewable energy, green economy, social caring, justice and fairness, diverse culture, gender equity, and sustainable rural-urban into contents of curriculum.

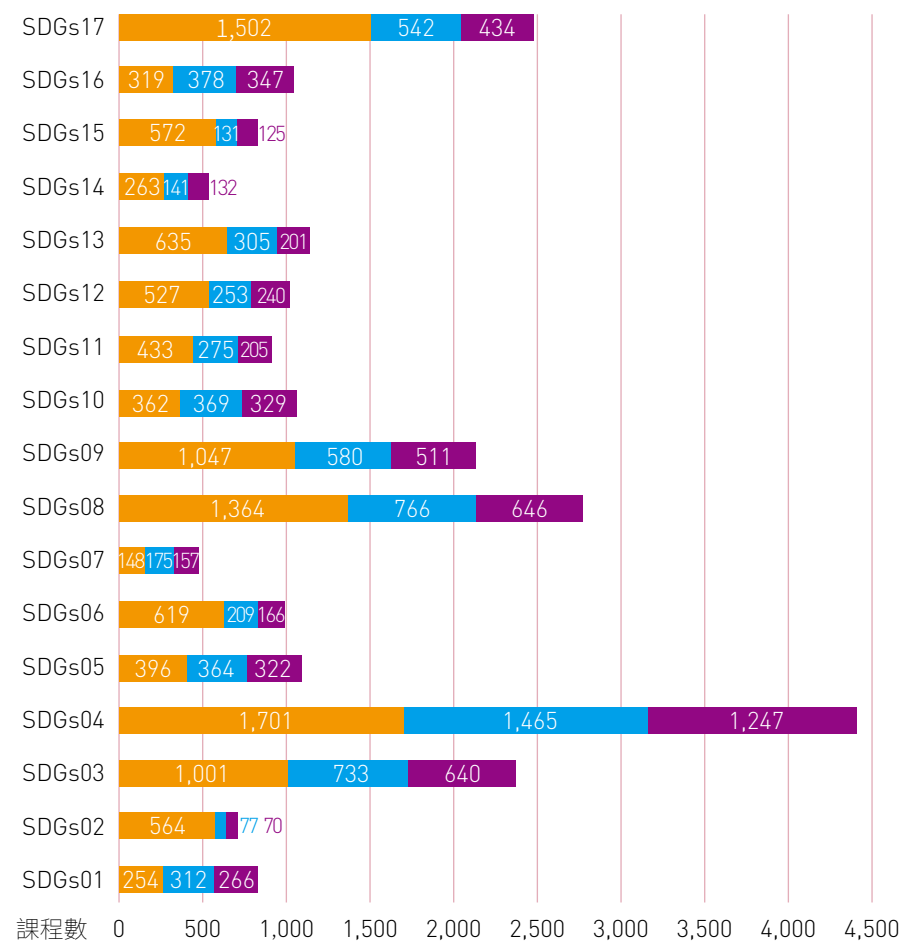
Number of courses and courses with SDGs from 2022 to 2024



Focus areas of SDG courses

SDG courses were mainly focused on:
SDG 4 「quality education」 (offered a total of 4,413 courses from 2022 to 2024)
SDG 3 「health and well-being」 (offered a total of 2,374 courses from 2022 to 2024)
SDG 8 「employment and economic growth」 (offered a total of 2,776 courses from 2022 to 2024)
SDG 17 「global partnership」 (offered a total of 2,478 courses from 2022 to 2024)

Corresponding courses with SDGs 17 items from 2022 to 2024



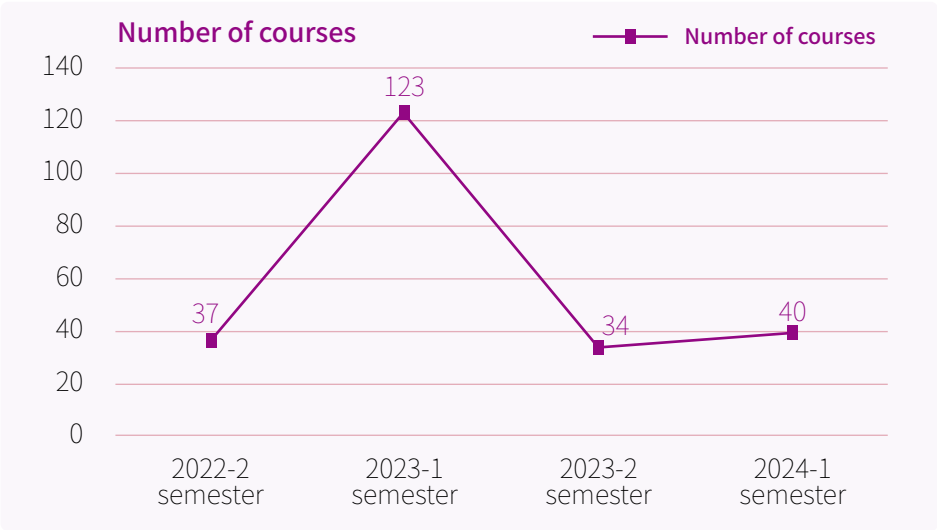
Distinctive courses of climate action and net zero emissions

Encouraged departments to respond global issues of 「climate change」 and 「net zero emissions」 for their curriculum design. Course content delved into the profound influence of ecosystem, society, economy, and global policy. Offered a total of 234 related courses from 111-2 semester to 113-1 semester. Faculty and students were also encouraged to participate in field-based research. College of Science and Technology and General Education Center’s courses emphasized strategies and technologies for net zero emissions. This helped students to practice carbon reduction and energy transition across various industries and fields.

Main courses included:

- Eco-conservation and green mapping
- Education practice of community environment
- Sustainable energy resources and carbon management
- Wetland eco-conservation
- Sustainable agriculture
- Environmental laws and regulations

Students could, therefore, fully understand needed diverse measures for achieving the goal of net zero emissions.



Students collaborated with industry experts and scholars for climate change program thru participation in professional seminars and internships. These courses and activities cultivated students’ abilities to tackle complex environmental issues of global climate challenges.



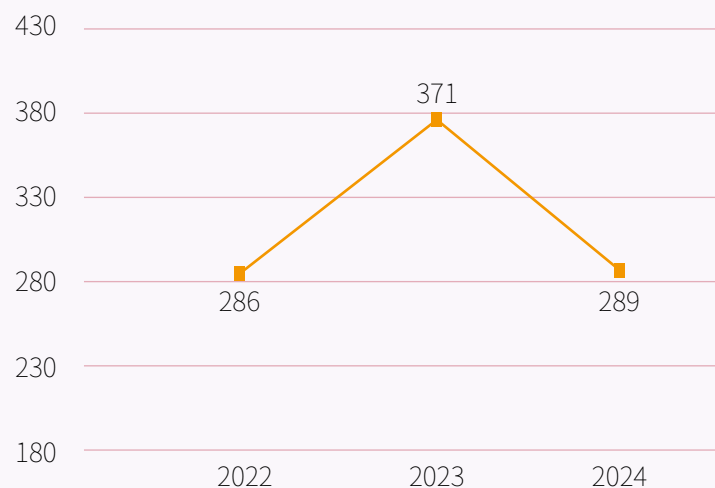
5. Achievements of professional certification and civil service examination

A total of **946** persons/time obtained certifications and licenses via civil service examination from 2022 to 2024.

Civil service examinations included senior/junior examination, special examination, special examination for public social workers, professional and technical social workers, special civil service examination for indigenous peoples, Junior Professional and Technical Examinations, and obtained lecturer's certificate.

Obtained certifications and licenses included Ministry of Education's Certificate of Proficiency for Teaching Chinese as a Second/Foreign Language, Level C Sports Coach Certificate, Level C Sports Referee Certificate, Life Insurance, Property Insurance, Foreign Currency, Investment-Type Insurance Certificate, Financial Securities related certificates, Foreign-language tour guide, Foreign-language tour manager, Technician Certificate, Republic of China, AUTOCAD Certificate, Digital Electronics Certificate, Hardware Installation Certificate, Organic, Specialized and Emergency Personnel Certificates, Environmental Safety and Health Related Certificates, Counseling psychologist, Adobe ACP, and Techiciency Quotient Certification...etc.

NCNU person/times growth chart of obtaining certifications and licenses via civil service examination from 2022 to 2024



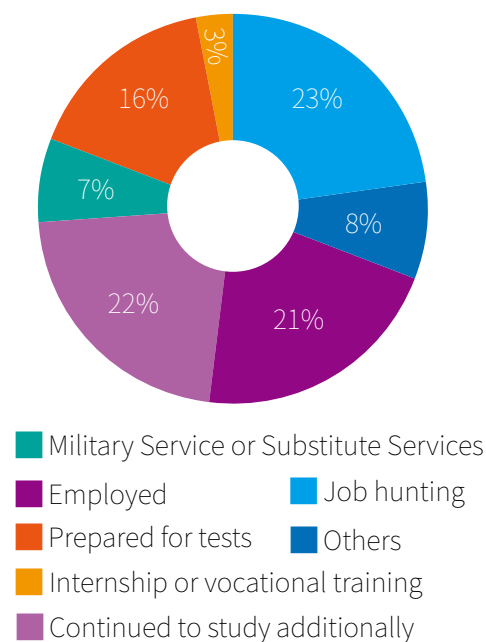
6. Graduates employment outcomes and career development

- Concerned graduates' employment competitiveness and career development. Assisted students in transitioning to the workforce thru curriculum plan, industry-academia cooperation, and career counseling mechanism. Outstanding performance in professional certification and civil service examination further strengthened graduates' competitive edge. Employment rate and salary levels grew steady.
- Held a recruitment expo on campus, 35 companies offered 835 job openings then matched 365 people out of 637 participants in 2023.

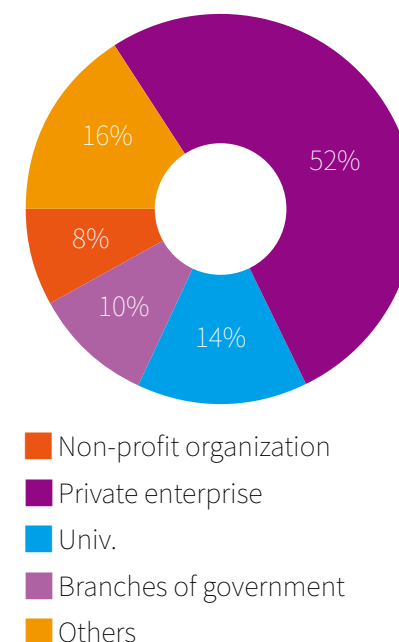
Presented in the chart on the left for the career trajectories of the graduates (graduates of 1st year) in 2023. See below for employment status.

Continued to conduct the graduates survey-graduates of 1st year, 3rd year, and 5th year as a reference for career counseling in future.

New graduates survey in 2023



Graduates employment in 2023



• (Source: this was online real-name questionnaires with a total of 1,420 valid samples and the total number of 1,425 students should be tracked in 2024. The effective recovery rate was 99.64%)

7. Research capacity and industry-academia innovation

Academic research performance: promoting international competitiveness

Actively encouraged faculty to involve in academic research, with a goal on publishing high-ranking and highly cited journal articles. Built a sustainable research environment. Strove for research projects from NTSC and Ministry of Education. Also, undertook actively government-commissioned projects and industry-academia cooperation from private enterprises to strengthen research capacity. This enhanced the connection between academic research and industrial technologies to create R&D effectiveness.

- Times Higher Education (THE) announced World University Rankings, NCNU ranked 698th globally from entering the top 1,000 worldwide based on the performance in industry-academia cooperation. Ranked 27th among universities in Taiwan in this category.
- Announcement of a number of seven professors had been nominated World's Top 2 % Scientists in 2024. A total of nine professors were listed in both the 「Lifetime Scientific Impact Rankings」 and 「2023 Annual Scientific Impact Rankings」 representing 3% of NCNU's faculty. They came from College of Science and Technology and College of Management. Their studies included semiconductor materials and devices parts, transportation systems, disaster management, artificial intelligence and IoT, and LED technologies.
- Formulated 「Rewards of academic research measures」. Rewarded full-time instructors for publishing scholarly outputs. The number of journal articles indexed in WOS (SCI and SSCI). This showed consistent growth, particularly those for which instructors served as first authors or corresponding authors.

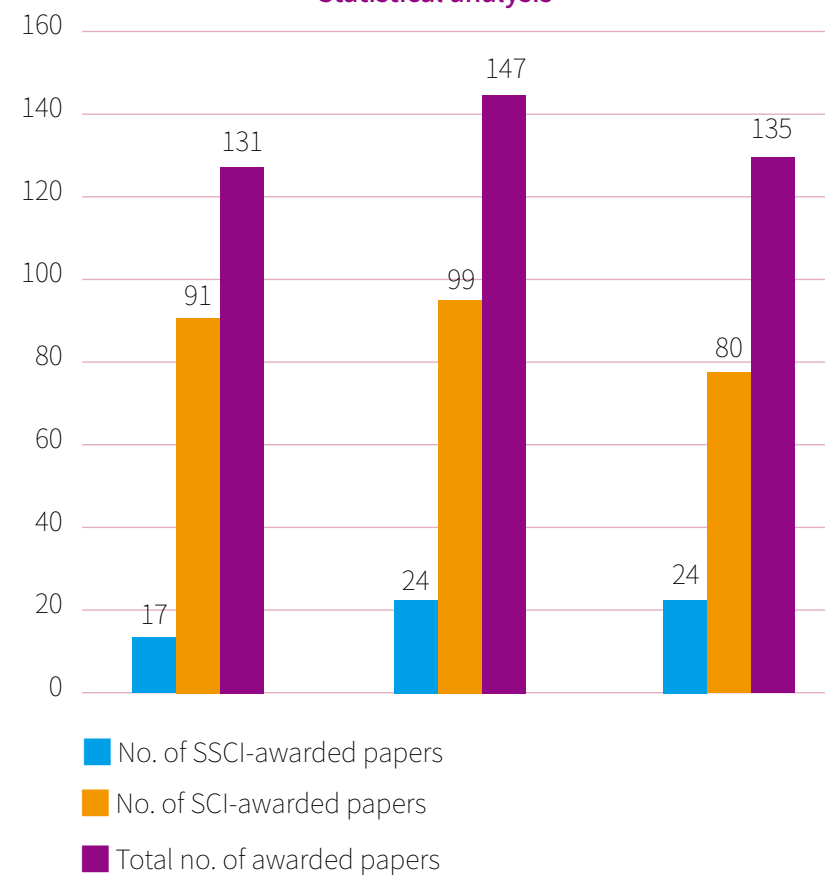
Statistical analysis of WOS (SCI, SSCI) journal articles from 2022 to 2024



Source: WOS database retrieval (May 22, 25)



No. of awards of published journal articles from 2022 to 2024 Statistical analysis

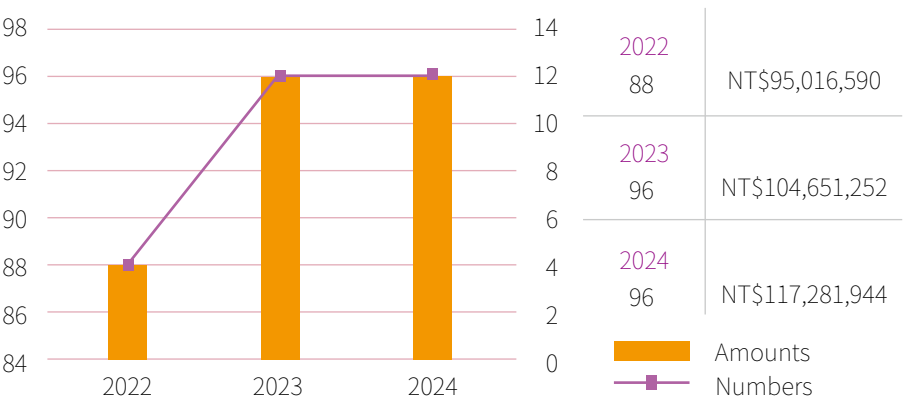


R&D capacity: accomplishments of science and technology research project



- **NSTC subsidized a total of NT\$90,055,000 for 「Humanity Innovation and Social Practice Coordination Project」 from 2013 to 2024.** The project was based on outlook and method of social innovation to promote local revitalization and achieve university social responsibility in Greater Puli Area.
- **NSTC subsidized a total of NT\$39,995,000 for 「University–Local Government Partnership for Local Humanities Development and Cross-Sector Governance」 project from 2016 to 2024.** This delivered specific designs, networks, and policy recommendations in Nantou County. Mainly focused on topics, such as open government, smart customer service, tourism logistics, Southeast Asian tour guide training, villages touring, food banks, long-term care, Indigenous care, senior education, coding education, and Indigenous museums. This, further, extended collaboration to other counties in Central area.
- **NSTC subsidized NT\$117,281,944 for 96 special research topic projects (passing rate 60.2%) in 2024.** Approved projects/ amount increased gradually every year from 2022 to 2024 as shown in the right figure. This indicated strong performance in academic research and professional performance.
- NSTC subsidized NT\$2,704,584 for 51 out of 89 projects (pass rate 57.3%) for 「College Student Research Projects」 in 2024. Number of applications increased significantly. This cultivated future technology research talents. Five students received the NSTC’ s highest honor for undergraduate research—the “Creative Award.

Numbers and amounts NSTC project



Industry-academia cooperation: interdisciplinary innovation and resource integration



- Promoted interdisciplinary innovation of humanities in technology for years. Transformed academic R&D capacity into productivity and economic activity thru joint efforts across colleges, departments, and centers. Collaborated with distinctive industries in Central area by government programs and subsidies to develop industry-academia networks. This had come across tourism, healthcare, social work, energy, ICT, education services, disaster prevention and protection, smart agriculture, artificial intelligence, space science, and enterprise management. This demonstrated diverse top quality achievements of industry-academia cooperation.
- Cultivated big data technologies and committed to practical application in educational administration. Assisted K12 Education Administration, Dept. of Higher Education, Dept. of Technological and Vocational Education, Dept. of Student Affairs and Special Education, Dept. of International and Cross-strait Education, Dept. of Information and Technology Education, Ministry of Education to establish more than 20 large-scale systems, such as platforms for high school enrollment management and financial aid application. Moreover, nationwide high school student learning portfolio data were crucial to 12-Year Basic Education policy and the next-generation university admissions reform. Related commissioned projects have reached NT\$380,000,000 from 2022 to 2024. This laid a solid foundation for the development of a national educational big data infrastructure.
- Signed the agreements of 「Health and Long-Term Care Talent Development Program for Rural Areas」 and 「Indigenous Elderly Health and Long-Term Care Talent Cultivation Program」 with Puli Christian Hospital that provided funds. Established College of Nursing and Health Welfare via industry-academia cooperation. Promoted performance of education and talents cultivation. Accumulated funding had reached NT\$30,000,000 from 2022 to 2024.

Years	2022	2023	2024	Total
Funding	8,800,000	11,200,000	10,800,000	30,800,000

A total of 74 industry-academia cooperation projects with a total funding of NT\$280,000,000 in 2024, this grew 6% more in 2023 and 20 % more in 2022. Demonstrated fine performance of industry-academia cooperation.

8. Intensification of social participation: incorporating expertise into local practice

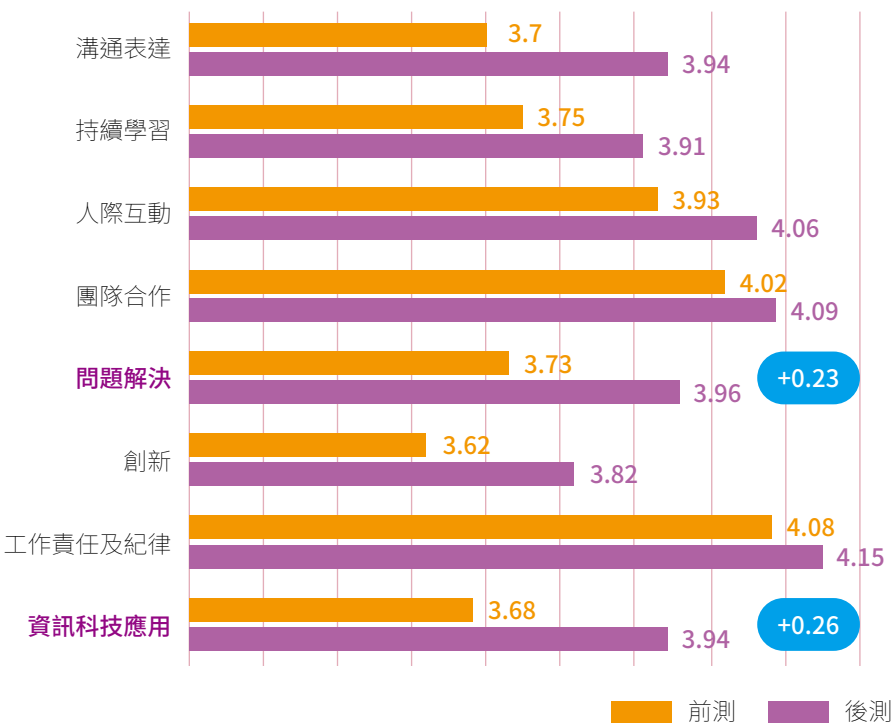
With the support of 「University Learning Ecosystem Innovation Program」 and 「Higher Education Sprout Project」 from Ministry of Education since 911 Earthquake, progressively developed social participation courses. These courses fused expertise and local social topics. Deepened students' interdisciplinary understanding and critical thinking. Integrated service learning and social participation courses into general education requirements by 2023. Each department actively promoted the social participation and the philosophy of learning.

Effectiveness of social participation courses

Offered a total of 22 social participation courses with 810 participants in 2023. Further expanded to 56 courses with 2,455 participants in 2024. In addition, cooperated 30 communities.

Performance of promoting students' common competencies

112 學年度社會參與學習課程學生共通職能施測結果



Core effectiveness of courses

- 「Work responsibility and discipline」abilities, highest performance, with a score of 4.15 points
- 「Information technology application」ability, greatest improvement, with an increase of 0.26 points
- Offered「information technology」as required course to emphasize AI applications and interdisciplinary integrations in 2024.
- Reduced study and application gap of expertise learning in future thru course practice.



Designing lesson plans for senior citizens, this fostered students to concern social topics then promoted their senses of social responsibilities.
Course: social service learning-Dept. of Counseling Psychology and Human Resource Development.

Sustainable development group

A total of 23 student organizations related to the Sustainable Development Goals (SDGs), covering nine SDG fields to cultivate students' sustainable literacies and practical abilities.

Environment and Sustainability Category (three organizations)

Mountaineering Club, Animal Protection Club, and Great Compassion Dharma Treasury Buddhist Society



Education and Culture Category (eight organizations)

Mountain Institute Education Group, Wind Ensemble Club, String Ensemble Club, Drama Club, Info-Maker Club, Astronomy Club...etc.



Social Service Category (five organizations)

Social Service Group, Chong-De Youth Volunteer Club, Tzu Ching Club, Vitality Yoga Club...etc.



International Exchange Category (seven organizations)

Overseas Chinese Students Sorority, Malaysia Student Association, Indonesian Student Association, Hong Kong and Macau Student Association...etc.



Student volunteers community services

1. Social Service Group:

adopted innovative learning methods, lively and interesting activities to understand deeply the importance of environmental conservation among elementary school students (Grades 3–6). Early environmental education was essential in response to global challenges, such as climate change, biodiversity loss, and pollution. This hoped children to understand natural ecosystem then learned to respect and cherish the Earth's resources thru handmade, outdoor exploration, and team-based challenges.

2. Great Compassion Dharma Treasury Buddhist Society:

held vegetarian promotional activities every Tuesday and Thursday on a regular basis. Advocated the benefits of plant-based diet. This not only improved carbon reduction but also addressed food inequity problem. Furthermore, provided community with senior care services during their free time.

3. Mountain Institute Education Group:

students designed their own projects thru a scratch graphical programming platform, in order to have a good education and equal development opportunity.

4. Malaysia Student Association:

overseas Chinese students were one of NCNU distinctive features. Assisted elementary school to beautify the environment, including painting the walls in township every year. This created fine memories when studied in Taiwan.



Community service team- Ready Go! Earth Call (Social Service Group)



(Great Compassion Dharma Treasury Buddhist Society)

2.2 Teaching quality

Faculty teaching supporting system

Dedicated to build a comprehensive faculty teaching supporting system to promote students' learning effectiveness. Held orientation program for new faculty and activity of faculty teaching knowledge, ability to adopt continuously changing for teaching environment. Actively encouraged faculty to establish faculty social groups and develop digital courses. Provided Teaching Assistant (TA) and tutoring system. In addition, held the Teaching Awards selection to promote teaching quality.

1. Training system for new faculty

Formulated the 「Guidelines for the Implementation of the Faculty Training System」 and provided channels for professional development to new faculty to adapt teaching environment. New faculty met twice per semester with mentor over a two-year period. Documented each meeting. New faculty could develop teaching strategies in collaboration with mentor on a regular basis.

2. Activity of faculty teaching knowledge, ability

Full-time or project instructors should attend the activity at least four hours every academic year in accordance with the 「Directions for Promoting Faculty Teaching Knowledge, Ability.」 Held relevant activities on a regular basis to strengthen teaching expertise growth. Also, encouraged collaboration among units to hold relevant activities. Provided certification for teaching hours earned through external programs. Fostered peer exchange and the development of innovative teaching methods thru diverse activities.



■ Held activity of faculty teaching knowledge, ability in 2024.



■ 「Media Literacy and Instructional Material Design」Exhibition of faculty social groups courses

3. Interdisciplinary faculty social groups

Encouraged faculty to assemble social groups to promote interdisciplinary teaching exchange. Established 「Guidelines for Subsidizing the Establishment of Faculty Social Groups」 that provided funding for research activities and social group subjects. Encouraged teaching innovations across departments. Shared teaching experiences thru meetings among faculty members on a regular basis, offered suggestions for courses integration and developed distinctive interdisciplinary teaching.

4. Promotion of digital materials and courses

Formulated “Subsidy Guidelines for the Development of Instructional Learning Materials” to encourage faculty to integrate instructional learning and course materials since 2011. Promoted producing course materials and digital learning courses. Subsidized a total of six projects in 2024. Established a platform for instructional courses to provide faculty and students with diversified learning approaches and sent to Ministry of Education for course certification.

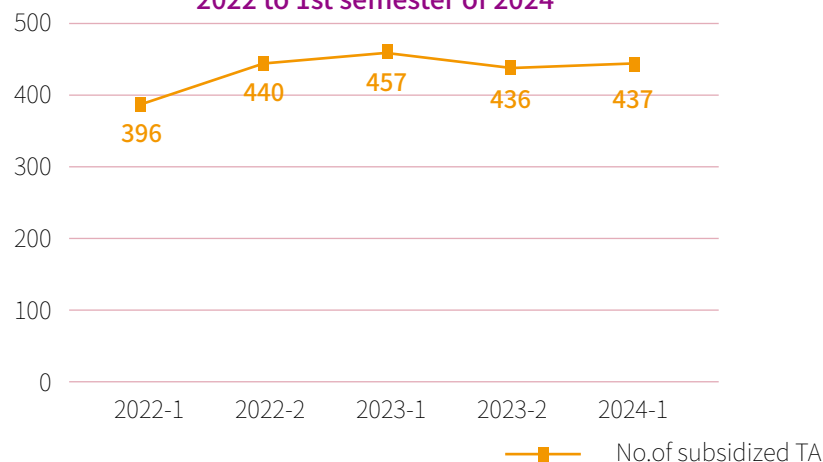


■ Digital course teaching video in 2023

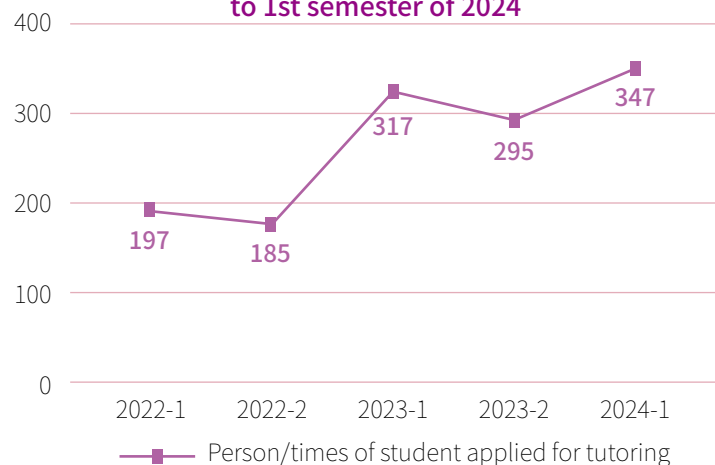
5. Teaching Assistant (TA)/tutoring system

Implemented tutoring system and teaching assistant (TA) to strengthen students' learning effectiveness. TA assisted faculty to produce course materials, led classroom discussions and internship activities. Each department recommended outstanding students to serve as peer tutors to provide underclassmen with tutoring after classes to improve their learning effectiveness.

Number of subsidized Teaching Assistants training from 1st semester of 2022 to 1st semester of 2024



Person/times of student applied for tutoring from 1st semester of 2022 to 1st semester of 2024



6. Rewards faculty for teaching excellence

To complete teaching mechanisms and reward teaching effectiveness, this was about to fully promote teaching quality and students' learning efficiency through 「Teaching Evaluation and Recognition Program」 annually to acknowledge faculty contributions. One faculty member was rewarded the 「Outstanding Teaching Award」 every year with a bonus of NT\$240,000 and 18 of them received 「Excellent Teaching Award」 each with a bonus of NT\$20,000. An annual award ceremony was held to honor these achievements and invite awardees to share their teaching experiences for the inheritance of pedagogical excellence.

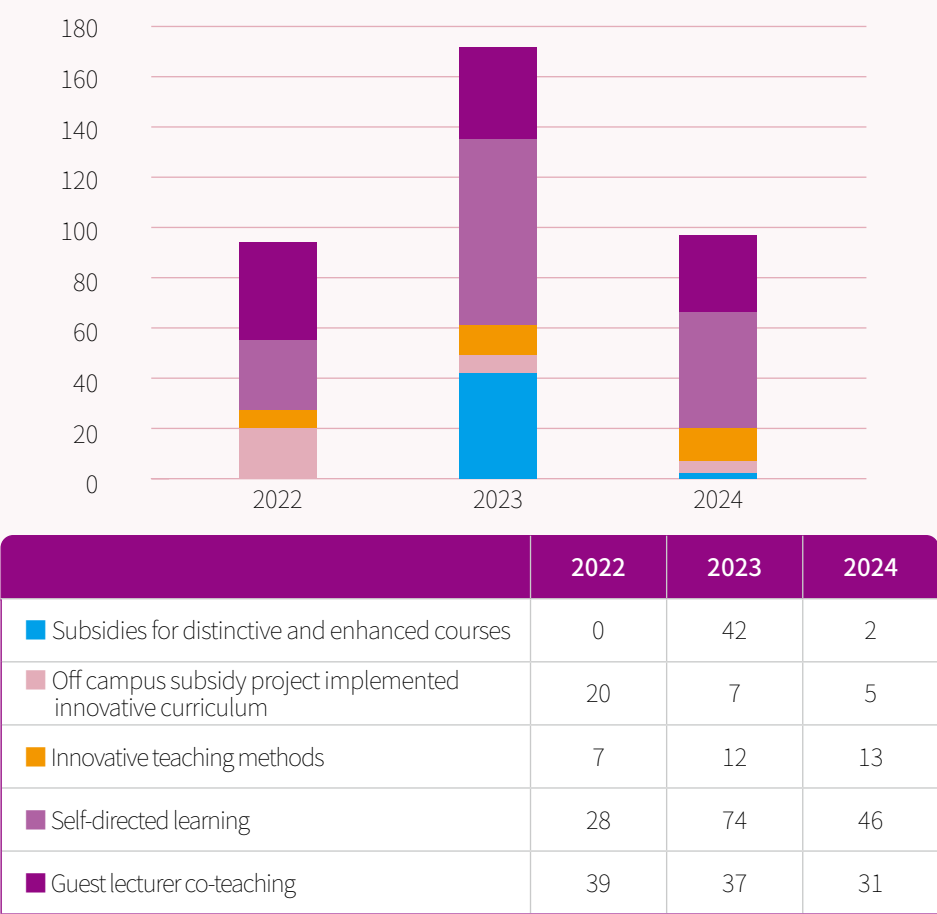


Held the Outstanding Teaching Award recipient-Prof. I-Hsuan, Cheng in 2024



7. Awarding innovative teaching courses

Actively assisted faculty to develop innovative teaching courses and integrate diverse teaching methods and contents to keep up with the Higher Education Sprout Project for cultivating students to become interdisciplinary talents with solid academic foundations, humanistic concerns, and mobility. Cored the quality enhancement by revising 「Guidelines for Incentivizing Teaching Excellence and Innovation」, 「Guidelines for Student Self-Directed Learning」, and 「Guidelines for Encouraging Interdisciplinary Learning among Students.」 This encouraged faculty to develop distinctive courses and promote interdisciplinary learning. A total of 97 innovative teaching courses were rewarded, demonstrating the achievement of teaching innovations.



8. Teaching evaluation mechanism

Built a complete teaching evaluation system to ensure teaching quality. The ave. was 95.15% by students’ evaluation. 87.11% students involved. Faculty and students noticed this. The whole univ. was 4.52, which reflected teaching satisfaction from faculty every semester in recent three years. This kept enhancing teaching quality by maintaining evaluation feedback.

Semester	2021-1	2021-2	2022-1	2022-2	2023-1	2023-2	Ave.
Total avai. Classes	1520	1429	1482	1420	1440	1308	1433
No. of classes filledout	1460	1364	1402	1324	1372	1259	1364
Evaluation (%)	96.05	95.45	94.60	93.24	95.28	96.25	95.15
Students filled out (%)	91.31	86.4	87.12	85.91	87.42	84.49	87.11
Ave. result of whole univ. evaluation	4.5	4.52	4.5	4.52	4.51	4.54	4.52

9. Accreditation for dept. quality assurance

Each dept. promoted the following: self-quality assurance and improvement mechanism, professional features, and teaching quality and international mobility. Entrusted the “Higher Education Evaluation and Accreditation Council of Taiwan” to arrange the quality accreditation for each of colleges/dept./programs in 2022. A total of 26 dept. were accredited. The result was announced in Aug. 2022. All of dept. were accredited. Dept. of Civil Engineering and Dept. of Applied Materials and Optoelectronic Engineering from College of Science and Technology, received their certifications from IEET Accreditation Council with the “Accreditation of Engineering Education, EAC2016” in 2022. The effectiveness-implementation appraisal was held by institutional research development meeting to continuously track the subsequent implementation status of 28 dept. and assist in making following improvements in 2023. Demonstrated the excellence in teaching quality thru accreditation system.

2.3 Internationalization

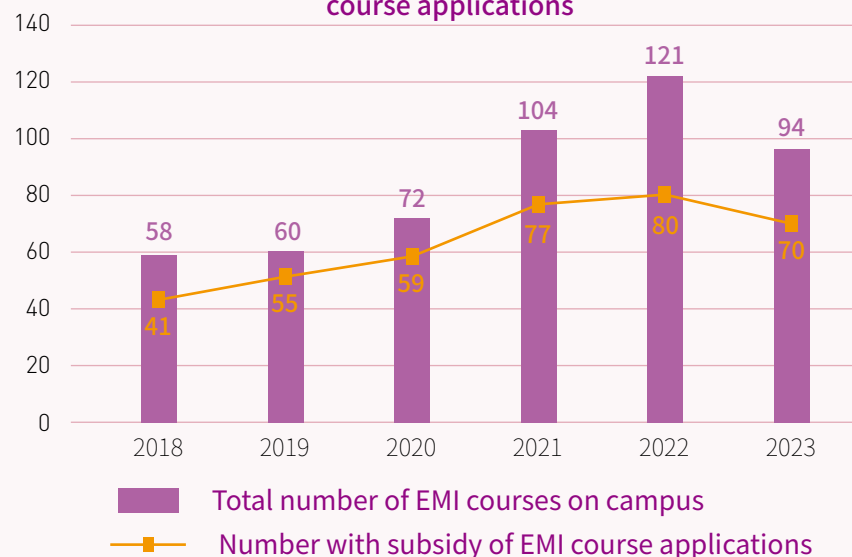
1. The implement of bilingual program from Ministry of Education

Received the subsidy of “The Program on Bilingual Education for Students in College, BEST” from Ministry of Education from 110th to 112th academic year, in conjunction with existing bilingual courses thru four aspects of “organization and system,” “faculty and teaching,” “student and learning,” and “promotion and quality assurance.” This completed the teaching and supporting system of the “English as a Medium of Instruction, EMI” on campus. In addition, provided students with diversified learning approaches and opportunities, improved students’ English skills, cultivated students with international outlook, and implemented the cultivation of international talents. Achieved the vision of “Improve students’ English skills and cultivate EMI faculty: Moved forward to be an international university.”

2. Increased no. of EMI courses

Encouraged faculty to teach classes in English professionally with award methods, such as increasing hour fee or grants on course materials. This cultivated students’ international competitiveness.

Total number of EMI courses on campus & Number with subsidy of EMI course applications



3. Faculty training

A group of 12 faculty flew to Macquarie University in Sydney, which was ranked to be one of the globally top 1% universities for a ten day training course on Janu. 22, 2024. This was to improve and strengthen faculty’s professional skills of EMI (English as a Medium of Instruction).

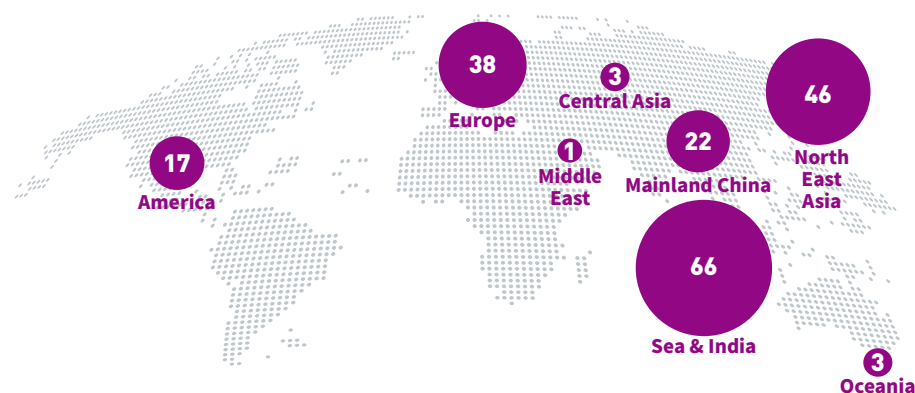


The opening ceremony for the EMI faculty training at Macquarie University in Australia on January 22, 2024

4. Enhancing international exchange and collaboration with overseas partner universities

Actively participated in NAFA, EAIE, APAIE, education specialists, bilateral higher education presidents’ forum, summits, and international ranking award ceremonies. Significantly developed overseas partnerships and continued to strengthen partnerships with existing partner universities. The number of partner universities increased from 149 in 2023 to 196 in 2024.

International Partnerships 196



5. Promoting students' international mobility

Cultivated students with global outlooks, intercultural understanding, and collaborative abilities that remained NCNU's core spirit of international education. The goal was to cultivate students to be the backbone force of international workplace in future. The subsidy program by Ministry of Education supported 97 students for short-term study across Europe, Asia, and America successively since 2022. This accumulated invaluable assets for their career developments in future.



Chien-Jung, Chen, student from Dept. of International Business Studies, took a group photo while participated in study exchange with international friends.

Examples of international exchange:

Chia-Wen, Hsieh, Master's student in Dept. of International Business Studies, who participated in an exchange program at Tama Art University in Japan to cultivate skills for collaboration in diverse cultural environment for the preparation of international workplace in future.

Yen-Chun, Chang, undergraduate in Dept. of International and Comparative Education, studied at Universität Osnabrück in Germany for the Global Marketing Management to delve into the core value of German culture and learn the ability of solving problems independently.

Mei-Ting, Su, Master's student in Dept. of Information Management, studied at University of Mons in Belgium for IoT technologies. Participated in Erasmus student network activities to build international connections for career development in future.

6. The connection of local area and international promotion

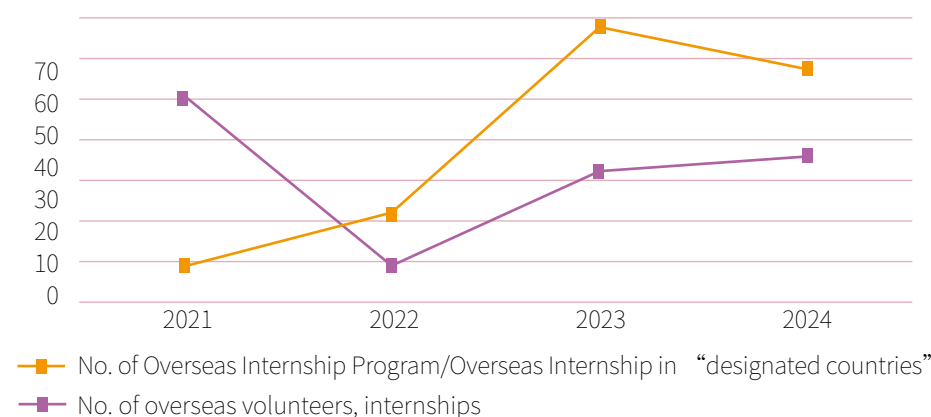
To encourage overseas Chinese students to return home for internship and international volunteer services of domestic students, scholarships and bursaries were offered for both of them every year. Particularly, overseas Chinese students invited domestic students to visit their home countries.

Based on local services in conjunction with overseas professional internships, arranged the experience camp for Taiwan local dialogue and culture. As COVID-19 was slowing down and borders reopening, the number of overseas volunteer services and overseas professional internships gradually increased in 2024. A total of 93 overseas volunteers and professional internship services (14 received subsidies on campus for overseas internships, 22 received subsidies on campus for international volunteer services, 16 were subsidized off campus with Overseas Internship Program, and 41 were subsidized off campus with Overseas Internship in "designated countries.")



Chinese language overseas professional internship

No. of overseas volunteers, internships, and no. with subsidy from 2021 to 2024



2.4 Participation of external organization

GRI 2-28

NCNU positively participated in each of interdisciplinary collaborative organizational activities to promote domestic sustainable communication, in hope of becoming the motive force of social progress and development. Below were of current participating organizations:



- Membership: chairman
- External advocacy: positively practiced the “Talloires Declaration” to reach social responsibility and mission of higher education.



- Membership: director
- External advocacy: promoted communications and collaborations among national universities to improve quality of education, academic research to next level, and international exchange.



- Membership: director
- External advocacy: elected talents, awarded academic research, respected morality and work ethic, and mutual encouragement for the purpose of social progress.



- Signed sustainable development MOU
- External advocacy: climate action, sustainable energy, corporate sustainability, UN's sustainable development (SDGs), and sustainable university



- Membership: founding chairman
- External advocacy: proposed solutions for discussion in response to key social topics and development challenges, such as sub-replacement fertility/aging, rural-urban disparities, local industries development, and community development.



- Membership: director
- External advocacy: strengthened the research of higher education, practice, policy, and promoting the development of higher education.



2.5 Information Security (InfoSec)

Sustainable development and InfoSec were inseparable. Not only Information technology (IT) and internet became an important infrastructure for modern organizations to maintain operations as well as promoting sustainable development but also provided innovation and growth with technical assurance. However, as reliance on IT and network increased, so did the InfoSec risk, which it must be regarded as an important topic related to ESG governance level during digitization process to promote organizational resilience as an important strategy. Based on PDCA (Plan-Do-Check-Act) cycle and coordinated with the 「Cyber Security Management Act」 since 2019, built, operated and continued to improve the Information Security Management System, ISMS. Implemented risk control measures from four aspects, such as organization, personnel, physical infrastructure, and technology to reduce potential risks to confidentiality, integrity, and usability of information asset, thereby ensuring a secure and stable campus IT environment.

Organizational Controls

Promoting Information Security Policy, establishing Information Security Promotion Committee

Promoted information security policy, built a comprehensive four-tier documentation framework of Information Security Management System (ISMS), and guided staff to maintain it. In addition, established Information Security Promotion Committee, consisted of first-tier supervisors among units in providing decision-making, support, and review to ensure it was in line with organizational strategy.

Built an InfoSec incident reporting mechanism to ensure timely response.

Established an InfoSec incident reporting contact point and a dedicated InfoSec email to promote incident response speed and reduce potential influences and losses. No cases of information security incidents that were overdue in reporting or response in 2024.

Promotion of centralized management of information system to maintain protection performance of overall InfoSec

Promoted centralization of campus information system by migrating them to Computer and Network Center for centralized management. This was to promote overall InfoSec on campus. The centralization rate reached 89.9% as of 2024.

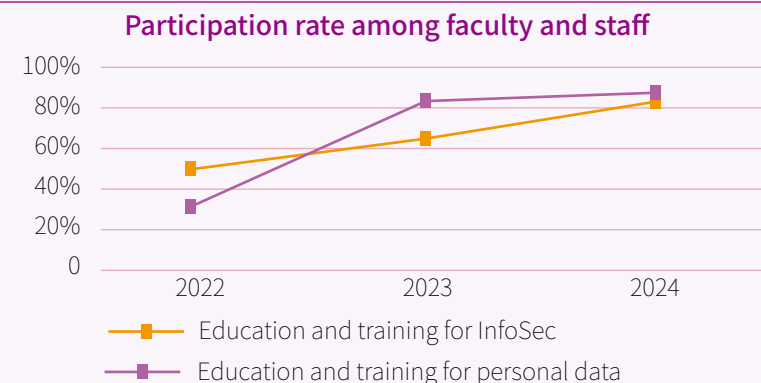
Strengthening Personal Data Protection, preventing intellectual property infringement

Implemented Personal Information Management System, PIMS for security management of personal data throughout its lifecycle, including collection, process, utilization, transmission, and destruction. In addition, established rules of prohibition for software infringement thru firewall, preventing the use of unlicensed software or services by faculty, staff, and students to protect intellectual property rights and prevent infringement.

People Controls

Held education and training for InfoSec and personal data to promote awareness, knowledge, and ability.

Held several education and training each year for faculty and staff to promote overall awareness, knowledge, and ability for InfoSec and personal data. Held three education and training for InfoSec and five education and training for personal data in 2024. Participation rate reached 82.3% and 86.5% among faculty and staff respectively (see figure 2.5-1), continued to move toward the goal of 100% participation rate.



↑ Fig. 2.5-1 education and training for InfoSec and personal data, faculty and staff participation

Secured protection capability by strong InfoSec team

The team consisted of one full-time InfoSec officer overseeing InfoSec operation on campus and three additional personnel providing managerial and technical supports. Sent related personnel to participate in training courses to obtain professional certifications on a regular basis to promote professional competence. As a result, they held nine valid professional InfoSec certifications and eight certificates of InfoSec vocational training in 2024.

Physical Controls

Strengthened data center security controls to build high efficiency stable environment.

Established closed-typed racks and individual modular rack access control systems to achieve hot and cold aisle isolation and optimize cooling efficiency in data center, it equipped with Very Early Smoke Detection Apparatus, VESDA thru the use of Proactive Aspirating Smoke Detection, ASD to allow faster fire-detection compared to conventional smoke detector, improving fire emergency response time. Also equipped with temperature and humidity monitoring, leak detection, power monitoring, and PUE (Power Usage Efficiency) measurement to achieve continuous supervision and measurement (see figure 2.5-2.) Proactively texted message to maintenance personnel when an anomaly occurred to ensure timely response and process.

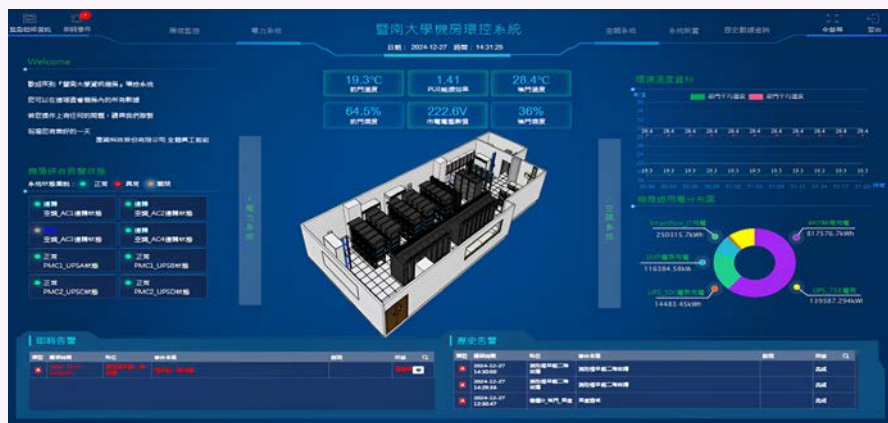


Figure 2.5-2 real-time temperature and humidity monitoring, power monitoring, and PUE (Power Usage Efficiency)

Built the Silver-level Green Data Center to promote the efficiency of energy use.

NCNU located at an altitude of 665 meters, with average winter temperatures below 20° C. Activated outside air intake mechanism to bring in outside cool air evenly into the data center when temperature dropped below 20° C to alleviate cooling load and promote the efficiency of energy use indirectly, achieving the goals of energy conservation and carbon reduction. The Green Data Center reached Silver-level with the average PUE value at 1.44 in 2024.

Technological Controls

Allocated diverse InfoSec tools for management control of campus network service security.

Purchased multiple InfoSec tools, including antivirus software licenses, web application firewall (WAF), and email filtering software to establish diverse defense mechanism that promoted campus network service security. Ensured InfoSec measures against emerging threats thru regular updates and optimization to continuously provide faculty and students with a secure network environment.

Purchased professional vulnerability scanning service to reduce the risk of InfoSec vulnerabilities.

The purchase of Nessus Professional, a vulnerability scanning service license, not only implemented comprehensive vulnerability scans for core system regularly but also provided each unit with on-demand scanning services in response to their needs or changes in internal/external environments. This reduced the risk of InfoSec attacks effectively after fast in finding and remediation of InfoSec breach.

Implemented backup mechanism to strengthen data availability.

Collaborated with NCKU by backing up core systems to their data centers while implemented data backup across different data centers on campus. Two universities distanced over 120 KM when implementing off-sites backup strategy. Reached a consensus with universities in Northern area to expand additional off-sites backup centers by the end of 2024 to strengthen data security assurance.

Implemented InfoSec scanning and device identification tools to check and eliminate hazard products systematically.

Assisted in collecting information on users' computers operating systems, installed software, and KB hotfixes after implemented advanced InfoSec tools to effectively promote the accuracy of asset inventory. In addition, gathered IP addresses and network interfaces of all online devices across network segments on campus automatically then compared vender and country of origin to fast in checking and eliminating potential hazard products against national InfoSec.

03 Sustainable environment



Major subjects of this chapter

GRI 302-1 302-4: Energy

GRI 303-2: Water and effluent

GRI 304-4: Biodiversity

GRI 306-2: Waste

Priority readers

- ☐ Entrepreneurs ☒ Faculty, staff, and students ☐ Parents ☒ Government agencies
- ☐ Alumni ☒ Community people/NGO ☐ Suppliers



3.1 Energy resource management

3.2 Pollution prevention and control

3.3 Biodiversity

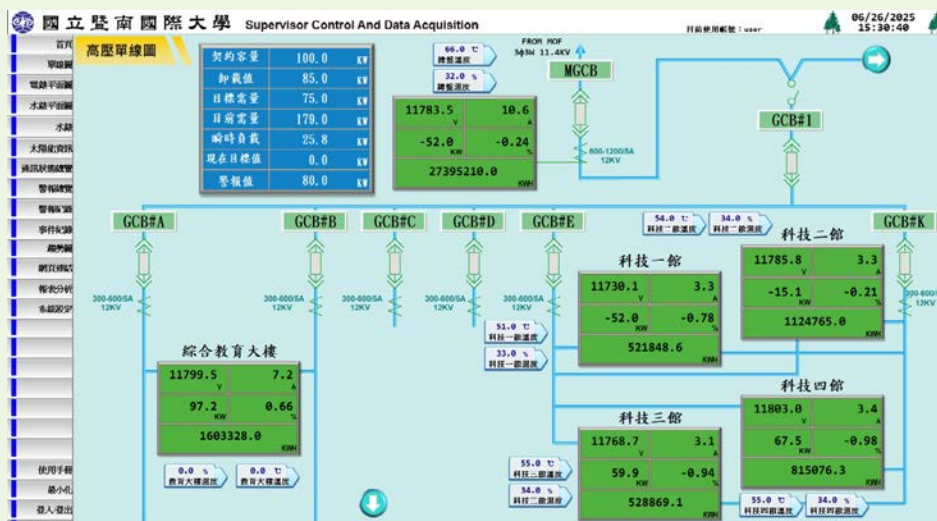
3.4 Green purchase and supply chain management

3.1 Energy resource management - Smart Monitoring System

GRI 302-1、302-4

1. Smart electricity meters

- Applied for Ministry of Education subsidy project to install smart electricity meters since 2022.
- Completed smart electricity meters of main power panels at eight buildings in 2022.
- Goal: Established precise power management to achieve energy conservation goal.



A total of 1,311 outdated lighting fixtures were replaced with LED panel lights, which spent NT\$1,300,000 in 2024. :

- The replacement benefits were of before: $1,785 \text{ units} \times 20 \text{ watts} \times 4 \text{ tubes} \times 8 \text{ hours/day} \times 365 \text{ days/year} \times 50\% \text{ utilization rate} = 750.5568 \text{ GJ}$
- The replacement benefits were of after: $1,785 \text{ units} \times 25 \text{ watts} \times 1 \text{ tube} \times 8 \text{ hours/day} \times 365 \text{ days/year} \times 50\% \text{ utilization rate} = 234.5472 \text{ GJ}$

Before subtracted after, the annual energy conservation efficiency was 516.0096GJ, totaled NT\$435,738.

2. Smart water meters

- Installed smart water meters at three main reservoir on campus in 2022.
- Completed installation of smart water meters at 23 buildings in 2024.
- Benefits: Monitored water consumption efficiency, early leak detection, and water conservation.

3. Solar power installations

- A total of 4.129 MWp of roof type solar power installed.
- Newly completed 「administrative building and SHEC」 roof type solar power installations in 2024.
- Phase I (1,539 kWp), phase II (1727 kWp), and phase III (5173 kWp)
- Goal: Full NCNU's ownership of solar power installations by 2043 to achieve RE100



4. Power management performance

- EUI baseline value: 56 (kWh/m² · year)
- EUI baseline value from 2020 to 2023: 54, 51, 54, and 55.2

- Met Executive Yuan' s 「Electricity Efficiency Management Program for Government Agencies and Schools」 demand.

Phase I

- ◆ Installed capacity : 1,539 kWp
- ◆ Location : College of Mgmt. and
- ◆ College of Science and Technology
Est. power generation (year): **6,875 GJ**



Phase II

- ◆ Installed capacity : 1727 kWp
- ◆ Location : Student dormitory, student restaurant, and faculty dormitory
- ◆ Est. power generation (year): **6,228 GJ**



Phase III

- ◆ Installed capacity : 5173 kWp(capacity planning)
- ◆ Location : Ground type: outdoor court and parking lot Roof type: administrative building and SHEC
- ◆ Est. power generation (year): **27,594 GJ**



Green transportation policy

1. Campus bus service

The campus bus began available on Feb. 1, 2019 to solve transportation insufficiency problem.

Key measures:

- Every 10-20 minutes per bus during semester
- Free rides on campus
- 40% fare discount for faculty, staff, and students
- Available real-time bus tracking via cell phone app



▶ The campus bus

2. High-speed rail shuttle reservation service

- Collaborated with Nantou Bus to provide shuttle services for students to go home in 2019.
- Schedule: 12:20, 15:20, and 17:30
- Free rides for students with valid student ID
- Required a minimum of 25 people for the service to operate.

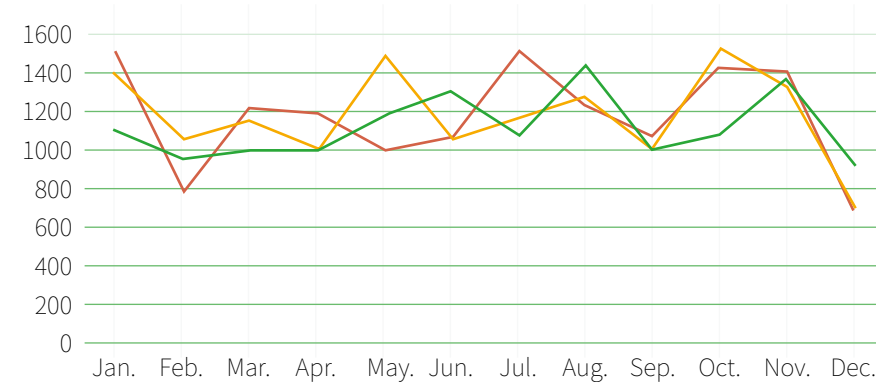


▶ Free rides for students with valid student ID

3. Fuel consumption of official vehicles

Reduction of fuel consumption in recent three years:

- 14,049.31 liters (458.80 GJ) in 2022
- 14,127.34 liters (461.35 GJ) in 2023
- 13,352.86 (436.06 GJ) in 2024
- comparison with 2022**



Month/year	2022	2023	2024
1	1509.78	1392.98	1107.23
2	781.34	1048.65	953.31
3	1,207.71	1145.77	990.02
4	1,181.99	1003.12	991.62
5	987.88	1486.23	1175.16
6	1,063.01	1050.01	1300.56
7	1,515.39	1165.97	1066.14
8	1,231.61	1273.42	1427.95
9	1,060.53	1017.84	998.33
10	1,422.47	1522.29	1073.71
11	1,403.96	1332.62	1358.95
12	683.64	688.44	909.88
Total (liters)	14,049.31	14127.34	13352.86

Management of greenhouse gas emissions and reduction strategy

1.Current situation of greenhouse gas emissions

Actively promoted greenhouse gas reduction, which amounted to 5,547 mt. CO₂e in 2021. This reduced approximately 25% in 2011 (base year). Carbon dioxide (CO₂) contributed to the major one of total emissions, followed by methane (CH₄), and nitrous oxide (N₂O).

2. Comprehensive carbon reduction strategy

Adopted internationally recognized carbon footprint classification standards to plan an integrated carbon reduction strategy based on scopes. Promoted the efficiency of overall energy use to move toward the goal of net zero emissions.



Carbon reduction strategy

Carbon reduction strategy	Effectiveness-implementation
Installed heat pump systems	<ol style="list-style-type: none"> Reduced the usage of natural gas by installing heat pump system in student dormitories. Installed heat pump systems in Sports and Health Education Center (SHEC) to reduce direct energy consumption.
Implementation of low carbon transportation	<ol style="list-style-type: none"> Gradually replaced official vehicles on campus with Electric Vehicles (EV).

Scope II: Energy indirect emissions management

Carbon reduction strategy	Effectiveness-implementation
Lighting system optimization	1. Phased out streetlights and classroom lighting with LED fixtures. 2. Adopted smart lighting control in public areas.
Air Conditioning (AC) upgrade	1. Renewed central AC units for inverter AC units (administrative building and Library). 2. Installed high efficiency AC units in computer classrooms.
Power management optimization	1. Adjusted power saving schedule to hibernate mode for water dispensers. 2. Reduced power demand and Energy Use Intensity (EUI) annually. 3. Continued to improve data center racks to promote Power Usage Efficiency (PUE). 4. Phased out outdated transformers to promote safety and reduce no-load losses.

Scope III: Other indirect emissions management

Carbon reduction strategy	Effectiveness-implementation
Sustainable water resource utilization	1. Each building built rainwater recovery system 2. Campus sewage treatment facilities reached 80% of recycled water conversion rate.
Promotion of low carbon transportation	1. Implemented vehicle identification system to charge parking fee to promote carpooling rate among faculty, staff, and students. 2. Implemented bus incentive discount, free rides at stops on campus, whereas 50% discount off campus. 3. Shared electric scooters for rent, provided 100 of them for commuting between PuLi Township and campus.
Promotion of low carbon lifestyles	1. Promoted campus meatless on Friday to reduce dietary carbon footprints. 2. Formed a habit of energy conservation 3. Formulated a reasonable AC usage management policy.
Increasing carbon sink	1. Collaborated a tree planning program with enterprises to increase carbon sink on campus.

3. Carbon reduction pathway in future

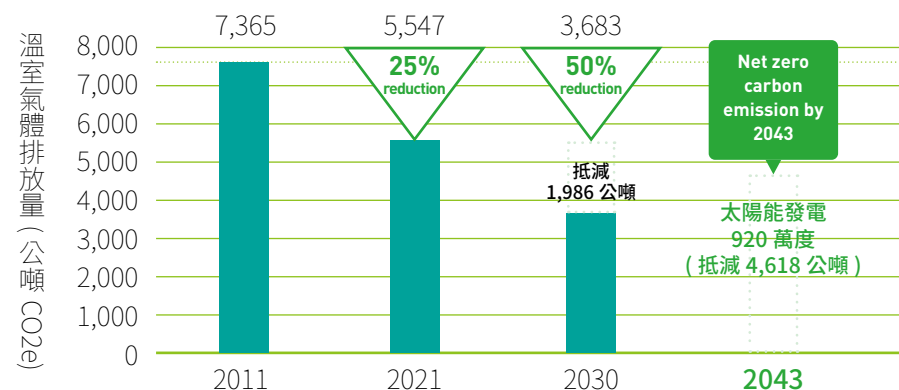
Formulated a clear goal for greenhouse gas reduction: base year in 2011, reduction of 30% in 2030, reduction of 50% in 2040, and net zero emissions in 2050.

NCNU-2043 net zero emissions roadmap

已實施節能措施：

- 1. 養成節能生活習慣
- 2. 改善資訊機房機櫃
- 3. 學生宿舍區熱泵系統
- 4. 行政大樓冰水主機更換
- 5. 電腦教室採用節能設備
- 6. 飲水機排程調整
- 7. 汰換路燈為 LED 照明
- 8. 體健中心熱泵裝置
- 9. 建置雨水回收再利用
- 10. 降低電力需量
- 11. 圖書館

- 公務車輛汰換成電動車 (抵減 34 公噸)
- 實施森林碳匯 100 公頃 (抵減 1,000 公噸)
- 持續汰換冷氣 500 台 (抵減 952 公噸)
- 是內燈管更換為 LED 燈管
- 太陽光發電示範系統
- 智慧節能系統
- 廢棄物循環再利用
- 每週一蔬食、校內步行、電動機車



以三大淨零策略：節能減碳、再生能源、碳中和為行動基礎，我們在 2021 年溫室氣體排放減 25%，可望於 2030 年達成減半的目標，並於 2043 年實現淨零排放

To achieve the goal of net zero emissions, continued to promote as follows:

- 1 Renewable energy development: expanded solar power installations on campus to increase the proportion of green power.
- 2 Implemented smart energy management for precise monitoring and control to promote overall energy efficiency.
- 3 Continued to phase out high energy consuming equipment to promote energy efficiency.
- 4 Expanded tree planning on campus to increase carbon sink.
- 5 Strengthened the cultivation of sustainability awareness among faculty and students to encourage the practice of low carbon lifestyles.

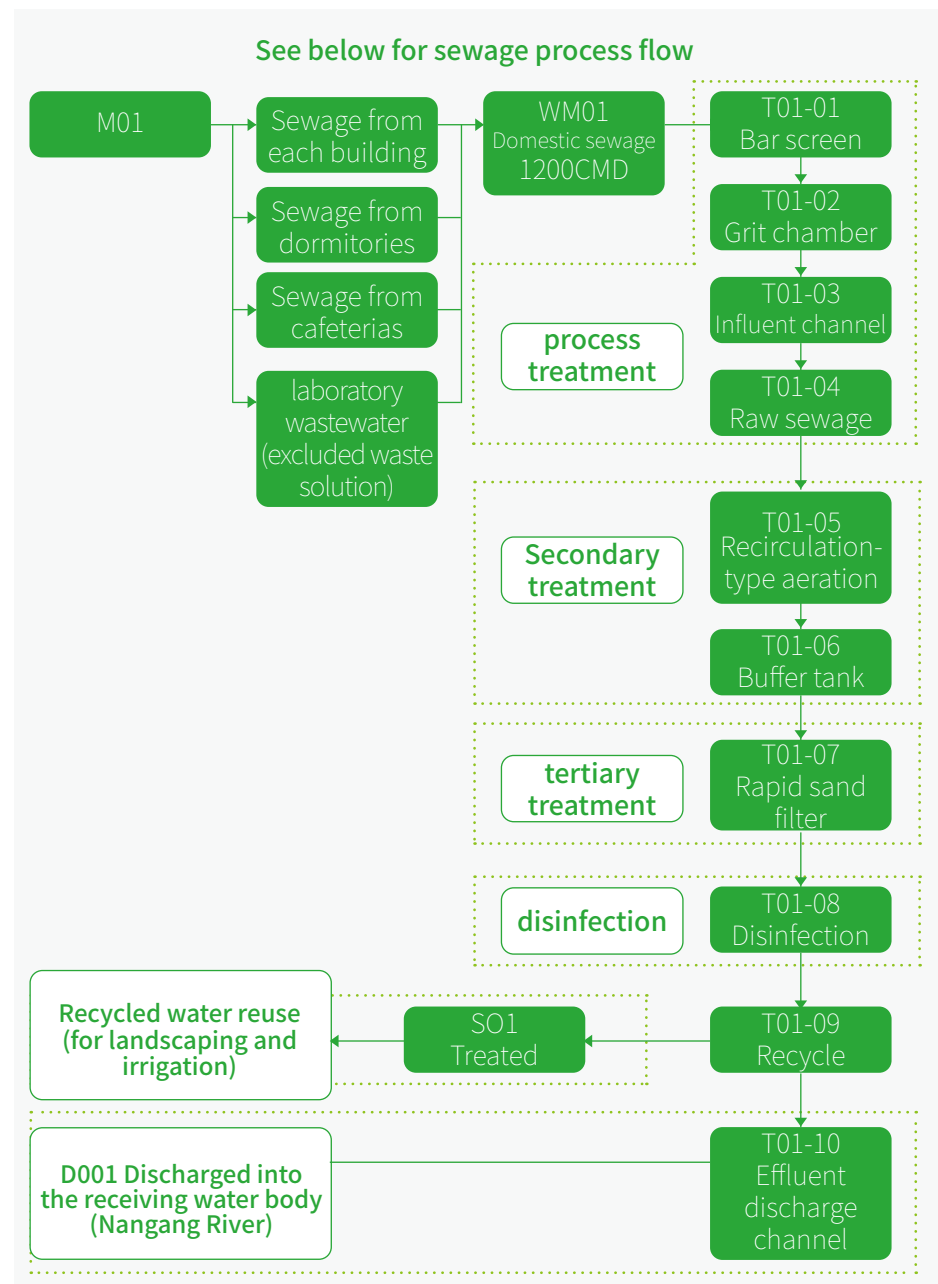
3.2 Pollution prevention and control GRI 302-2

Water resource management and sewage treatment

- Built complete sewage treatment facilities since founded in 1995
- Separate collection system of rainwater and sewage
- Sewage treatment plant capacity: 1,200 CMD design, presently treating approximately 600 CMD
- Process flow: process treatment → secondary treatment → tertiary treatment → disinfection → recycled water
- Water recovery rate maintained 74%-81% from 2022 to 2024.
- Effluent quality tests on a regular basis in line with standards

	2022	2023	2024
Tap water volume	212,763	204,828	238,201
Total wastewater volume	148,630	128,859	157,798
Reclaimed water volume	110,670	102,801	127,259
Total water consumption	64,133	26,335	80,403
Recovery rate	74.46%	79.77%	80.6%
Water consumption per capita(liter/day)	92	85	98

	2022/6/14	2022/11/10	2023/5/16	2023/11/16	2024/5/2	2024/12/2
COD(mg/L)	8.9	25.1	10.5	10	16.7	12.3
BOD(mg/L)	2	9.6	3.9	3.3	5.5	4.6
SS(mg/L)	2.5	2	1.5	1.9	6.2	2.2
Results	Passed	Passed	Passed	Passed	Passed	Passed



Waste and air quality management

GRI 306-2

1. Waste disposal policy

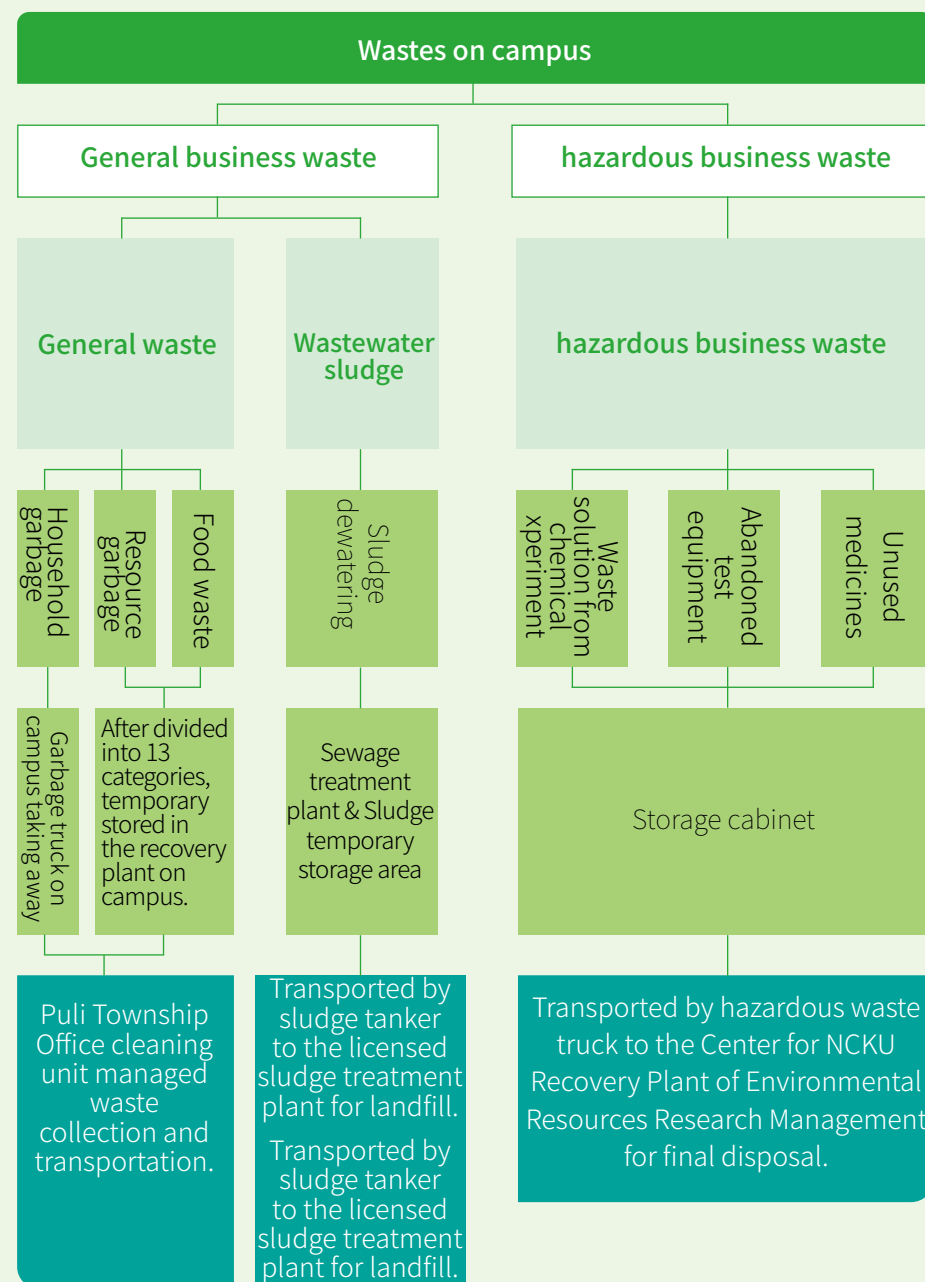
- Implemented 「keep trash off the ground」 policy since July, 2002.
- Wastes categorization on campus : General business waste: household garbage, resource garbage, food waste, wastewater sludge, waste solution from chemical experiment, abandoned test equipment, and unused medicines
- Resource recovery : recovery rate were 41% (2022), 45% (2023), and 43.8% (2024) respectively.
- Hazardous business waste : transported regularly by licensed hazardous waste truck.

General business waste in recent three years

	2022	2023	2024
Incineration	121,570kgs	104,750kgs	118,370kgs
Recovery	84,605kgs	81,397kgs	92,360kgs
Food waste	20,005kgs	15,610kgs	19,620kgs
Waste generation	206,175kgs	186,147kgs	210,730kgs
Recovery rate	41%	43.7%	43.8%

Hazardous business waste disposal status in 2024

Category	Treatment facility address	Treatment method	Weight (mt.)
C-0119/heavy metal waste solution	Off-site	chemical treatment	0.425
C-0299/medicines		chemical treatment	0.43
C-0399/medicines		Incineration	0.01
C-0399/glass		Incineration	0.71
D-1502/Alkaline waste solution		chemical treatment	0.25
D-1503/Acidic waste solution		chemical treatment	0.23
D-1799/waste oil		Incineration	0.25
D-2301/Halogenated waste solution		Incineration	2.45
D-2302/Non-halogenated waste solution		Incineration	0.4



2. Indoor air quality management

Unless required by competent authority, public places were subject to test the concentration of indoor air pollutants at least once in every two year routinely.

Recent tests were conducted on March, 2023. The results met relevant provisions.

	Test values	Test methods	Standard values
Carbon dioxide (CO ₂)	435	NIEA A448.11C	1000
Formaldehyde (CH ₂ O)	<0.02	NIEA A705.12C	0.08
Bacteria	90	NIEA E301.15C	1500
PM ₁₀ (μg/m ³)	19	NIEA A206.11C	75



3.3 Task Force on Climate-Related Financial Disclosures (TCFD)- governance

Status and commitment for climate change

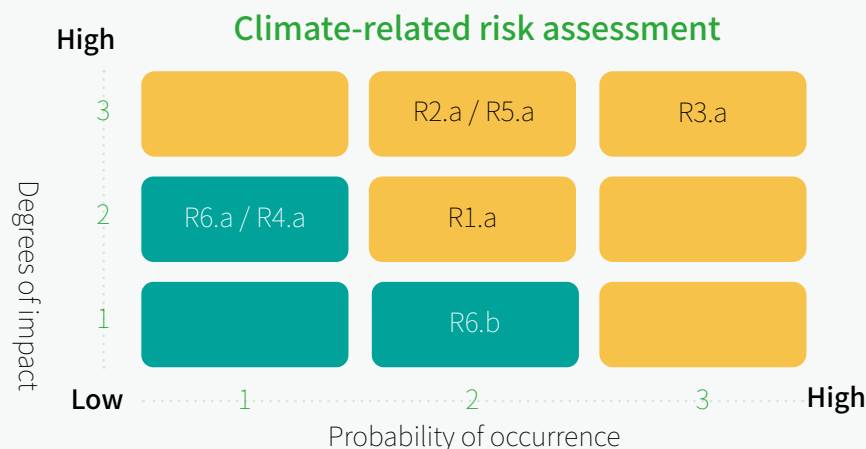
- Climate change came increasingly severe, not only caused significant impact on human life but also brought unprecedented threats against global ecosystem.
- The carbon reduction strategy was formulated based on the results of Greenhouse Gas Inventory. The goal was to achieve net zero emissions in 2043.
- We expected to pioneer the way of environmental protection and education as a result of contributing the future of the earth.

Climate change governance and management framework	
Institutional affairs meeting	the highest decision-making unit, having a meeting at least once/ semester to review key concerns, such as institutional research development plan and budget.
Committee for Institutional Research Development Planning	discussed institutional affairs, and other major related affairs assigned by the President. (de previous edition)
Sustainable Development Committee	responsible for discussing topics, such as CSR, SDGs, and ESG, integrated and implemented sustainable development.
Environmental Protection and Occupational Safety and Health Center	Responsible for power and water management, waste, resource recovery, and occupational safety topics on campus

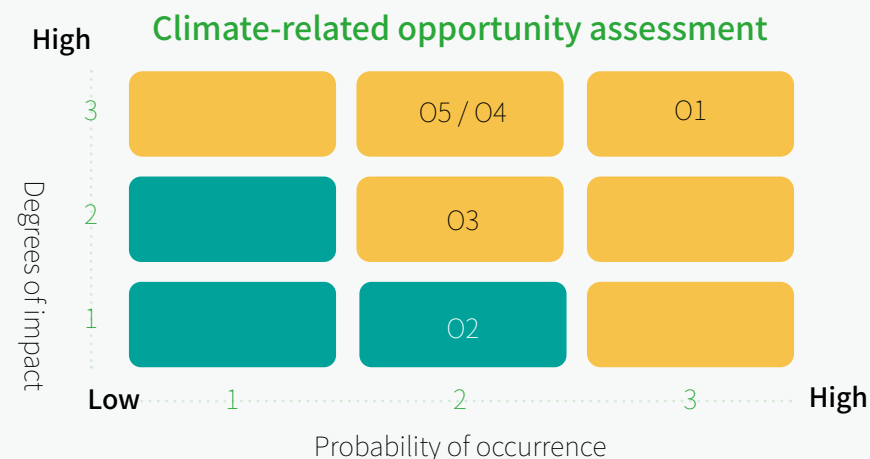
Key climate resolutions of Sustainable Development Committee	
TCFD disclosures	NCNU not only responded actively to the risks and opportunities by climate change but also disclosed TCFD in 2023.
Addressing strategies of climate-related topics	Sustainable Development Committee Addressing short, med., and long terms strategies and action plan of climate-related topics
Committed to net zero emissions in 2043	Expected to achieve net zero emissions in 2043 based on three net zero strategies: energy conservation and carbon reduction, renewable energy, and carbon offset.
Developed renewable energy	Installed solar power installations on own roofs at own expenses in line with government green energy policies, in order to reduce pollution and carbon emission.

strategies (I) Climate risk and opportunity management timetable

	Short term (1~3 yr.)	Med-term (3~10 yrs.)	Long term (over 10 yrs.)
Transition risks	<ul style="list-style-type: none"> ✓ Costs of energy resources increased (R3.a market) ✓ Strengthened the obligations of emissions reporting (R1.a policies and regulations). 	<ul style="list-style-type: none"> ✓ Stakeholders concerned and negative feedback increased (reputation R4.a) ✓ Costs of transition for low carbon campus (R2.a technology) 	
Physical risks	<ul style="list-style-type: none"> ✓ Frequency of extreme climate events and severity increased (R5.a extreme climate incidents- immediacy). 		<ul style="list-style-type: none"> ✓ Ave. temperature rising (R6.a extreme climate incidents- long term) ✓ Changing in rainfall pattern (R6.b. extreme climate incidents- long term)
Opportunities		<ul style="list-style-type: none"> ✓ Reduction of water consumption and usage (O1 resource efficiency) ✓ Participation in renewable energy project then use of energy conservation measures (O5 resilience) ✓ Making use of public sector incentive measures (O4 market) 	<ul style="list-style-type: none"> ✓ Use of low carbon energy resources (O2 energy source) ✓ Low carbon campus services promotion (O3 products and services)



Climate-related risk in major sequence: costs of energy resources increased (R3.a market), costs of transition for low carbon campus (R2.a technology), frequency of extreme climate events and severity increased (R5.a extreme climate events- immediacy), and strengthened the obligations of emissions reporting (R1.a Policies and Regulations), were of high climate risks.



Climate-related opportunity in major sequence: reduction of water consumption and usage (O1 resource efficiency), low carbon campus services promotion (O3 products and services), making use of public sector incentive measures (O4 market), and participation in renewable energy project then use of energy conservation measures (O5 resilience), were of high climate-related opportunity.

strategies (II) Impact assessment of climate-related risk

Types	Climate-related risk		Explanatory risk	Potential influence	Responsive strategy
transition	Market	Costs of energy resources increased.	<ul style="list-style-type: none"> ✓ Cost of energy increased due to rising electricity prices. ✓ The cost of green energy was higher than others. 	<ul style="list-style-type: none"> ✓ Financial cost increased. 	<ul style="list-style-type: none"> ✓ Green energy development
	Policies and regulations	Strengthened the obligations of emissions reporting.	<ul style="list-style-type: none"> ✓ The net zero emissions must be achieved in 2050 in response to Climate Change Response Act. 	<ul style="list-style-type: none"> ✓ Financial cost increased. ✓ Penalties for legal violations 	<ul style="list-style-type: none"> ✓ Committed to reach the goal of net zero emissions in 2043
	Reputation	Stakeholders concerned and negative feedback increased	<ul style="list-style-type: none"> ✓ Student willingness to enroll decreased due to lack of implementation of green campus or other negative feedback. 	<ul style="list-style-type: none"> ✓ Student numbers decreased. 	<ul style="list-style-type: none"> ✓ Committed to the transition for low carbon campus ✓ Green energy development
	Technology	Costs of transition for low carbon campus	<ul style="list-style-type: none"> ✓ Unable to achieve the transition for low carbon campus 	<ul style="list-style-type: none"> ✓ The cost of the transition for low carbon campus increased 	<ul style="list-style-type: none"> ✓ Smart energy conservation system ✓ Electric vehicle ✓ Renewed energy efficiency equipment
Physical risks	Extreme climate incidents	Frequency of extreme climate events and severity increased.	<ul style="list-style-type: none"> ✓ Heavy rainfall endangered campus environment which might cause financial losses. ✓ Work (traffic) safety of faculty and students were influenced by traffic disruption or downpour. ✓ Drought caused water shortage. 	<ul style="list-style-type: none"> ✓ Work (traffic) safety of faculty and students ✓ Financial cost increased. 	<ul style="list-style-type: none"> ✓ Implemented early warning on campus and emergency response mechanism. ✓ Concerned changes in water information at any time.
Types	Climate-related opportunity		Explanatory opportunity	Potential influence	Responsive strategy
opportunity	Resource efficiency	Reduction of water consumption and usage	<ul style="list-style-type: none"> ✓ Continued to reduce water consumption 	<ul style="list-style-type: none"> ✓ Financial cost decreased. 	<ul style="list-style-type: none"> ✓ Implementation of water conservation measures ✓ Water pipeline leak detection ✓ Constructed retarding basin.
	Energy source	Use of low carbon energy resources	<ul style="list-style-type: none"> ✓ Reduced greenhouse gas emissions on campus. ✓ Promoted the efficiency of energy use. 	<ul style="list-style-type: none"> ✓ Promoted NCNU image. ✓ Financial cost decreased. 	<ul style="list-style-type: none"> ✓ Fully utilized energy-saving and environmentally friendly labeled products.
	Products and services	Low carbon campus services promotion	<ul style="list-style-type: none"> ✓ Formed green campus. 	<ul style="list-style-type: none"> ✓ Promoted NCNU image. 	<ul style="list-style-type: none"> ✓ Implemented green campus measures
	Market	Making use of public sector incentive measures	<ul style="list-style-type: none"> ✓ Strove for government agencies' energy conservation and carbon reduction subsidy projects. ✓ Strove for government agencies' energy conservation and carbon reduction subsidy projects. 	<ul style="list-style-type: none"> ✓ Received subsidies from government agencies. 	<ul style="list-style-type: none"> ✓ Fully utilized energy-saving and environmentally friendly labeled products. ✓ Applied energy conservation and carbon reduction subsidies from government agencies.
	Resilience	Participation in renewable energy project then use of energy conservation measures	<ul style="list-style-type: none"> ✓ Development of renewable energy ✓ Actively promoted energy conservation and carbon reduction scheme as well as the efficiency of energy use. 	<ul style="list-style-type: none"> ✓ Promoted NCNU image. ✓ Financial cost decreased. 	<ul style="list-style-type: none"> ✓ Installed solar power installations. ✓ Planned net zero emissions in 2043.

Market and costs of energy resources Context analysis

Case I.

based on the context of International Energy Agency, IEA-net zero emissions in 2050 and Climate Change Response Act, Ministry of Environment, the time assumed from 2020 to 2050. Controlled the temperature rise at 1.5 ° C by the end of the century. Carbon emission of current policy controlled about 1.8 ° C. The carbon reduction pathway and pricing trend could result 2.7 ° C temperature rise. The annual expenditure would increase to NT\$2,500,000 when NCNU purchased carbon credit for carbon offset (NT\$500 per ton of CO₂e). This estimated greenhouse gas emission at stabilizing 5,000 metric tons of CO₂e and achieving net zero emissions in 2043.

Preparation for the responses to the results of context analysis

- ① Implemented ISO 14064-1 and PAS 2060 verification to improve reliability.
- ② Reduced greenhouse gas emissions. Promoted the efficiency of energy use.
- ③ The goal of net zero emissions in 2043

Case II.

“RCP2.6” the time assumed from 2021 to 2040. Nantou would confront 1.7° C mean annual temperature and 29.5% rainfall variability. Therefore, that estimated power consumption at stabilizing 10,000,000 kWh in 2030. Total electricity bill would increase NT\$21,000,000, estimated NT\$2.1 per kWh, annually when NCNU purchased renewable energy.

Preparation for the responses to the results of context analysis

- ① To reduce power consumption, in order to promote the efficiency of energy use
- ② Implemented green campus measures (comprehensively utilized energy-saving and environmentally friendly products and applied energy conservation and carbon reduction subsidies from government agencies).

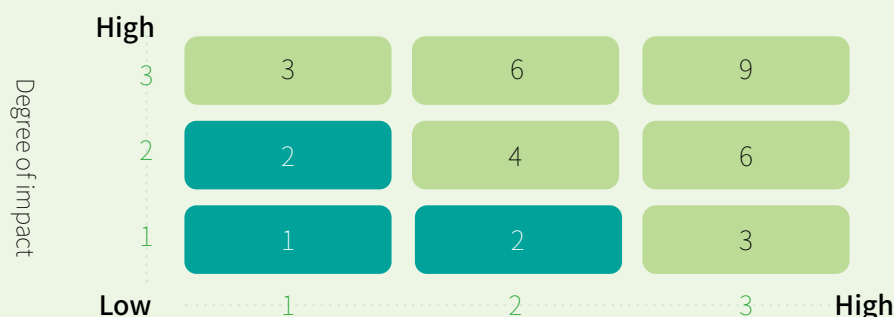
Risk management and Key Performance Indicators (KPI)

Risk management process

- ① **Established risks and opportunities management** : Assessed external risks and opportunities (social development trends, natural disaster events, and education industry) internal risks and opportunities.
- ② **Risk and opportunity identification** : identified the influence against sustainable development and the risk of goal of business performance achievement.
- ③ **Risk and opportunity assessment** : assessed degree of impact of risk/opportunity occurrence and probability of occurrence
- ④ **Treatment of risk and opportunity response** : assessed selectable treatment strategy, formulated and executed risk treatment action
- ⑤ **Continued to monitor** : Internal Control Project Team reviewed risk management report and audit report during institutional affairs meeting.
- ⑥ **Communicated and discussed terms** : conducted annual disclosure reports, such as NCNU sustainable campus report and corporate social responsibility website.

Risk assessment matrix

- **Probability of occurrence**: 3 (highly likely), 2 (likely), and 1 (unlikely)
- **Degree of impact severity**: 3 (very severe), 2 (severe), and 1 (moderate)
- **Risk level (probability of occurrence x degree of influence)**:
 - ⊙ High (6~9 points): required immediate action (substantive influence).
 - ⊙ Medium (3~4 points): formulated correspond plan then resources input (substantive influence).
 - ⊙ Low (1~2 points): processed internally.



Goals and measures of major risks and opportunities management

Major risks and opportunities	Indicators	Goals of 2024	Goals of 2030	Goals of 2040	Management measures
Strengthened the obligations of emissions reporting (R1.a Policies and Regulations).	Greenhouse gas emissions (base yr. in 2011)	Goal of 30% reduction achievement	Goal of reducing half of them	Net zero emissions achievement	Conducted inventory, in terms of ISO 14064-1 Greenhouse Gases-Part 1 annually.
Costs of transition for low carbon campus (R2.a technology)	Implementation of UI GreenMetric University measures	Implementation of UI GreenMetric University measures annually by 10 cases	Implementation of UI GreenMetric University measures annually by 10 cases	Implementation of UI GreenMetric University measures annually by 10 cases	Conducted related measures of energy conservation, water saving, reduction of waste, and sewage promotions annually.
Costs of energy resources increased (R3.a market)	Installed capacity of renewable energy	3,266KW	8,640KW	8,640KW	Installed solar power installations
Frequency of extreme climate events and severity increased. (R5.a extreme climate incidents-immediacy)	Implemented early warning on campus and emergency response mechanism.	Implemented early warming on campus and emergency response drill annually.	Implemented early warming on campus and emergency response drill annually.	Implemented early warming on campus and emergency response drill annually.	Implemented early warming on campus and emergency response drill annually.
Reduction of water consumption and usage (O1 resource efficiency)	Reduction of water consumption	Water consumption per capita 0.1 mt./ person/day	Water consumption per capita 0.08 mt./ person/day	Water consumption per capita 0.05 mt./ person/day	Continued to construct water recycling system, installed water saving devices comprehensively, and implemented water pipeline leak detection on campus.
Low carbon campus services promotion (O3 products and services)	Implementation of UI GreenMetric University measures	Implementation of UI GreenMetric University measures annually by 10 cases	Implementation of UI GreenMetric University measures annually by 10 cases	Implementation of UI GreenMetric University measures annually by 10 cases	Conducted related measures of energy conservation, water saving, reduction of waste, and sewage promotions annually.
Making use of public sector incentive measures (O4 market)	Applied energy conservation and carbon reduction subsidies from government agencies.	Applied one case of subsidy annually	Applied one case of subsidy annually	Applied one case of subsidy annually	Continued to apply energy conservation and carbon reduction subsidies from government agencies.
Participation in renewable energy project then use of energy conservation measures (O5 resilience)	Greenhouse gas emissions (base yr. in 2011)	Goal of 30% reduction achievement	Goal of reducing half of them	Net zero emissions achievement in 2043	Conducted inventory, in terms of ISO 14064-1 Greenhouse Gases-Part 1 annually. Promoted the efficiency of energy use.

3.4 Biodiversity

GRI304-4

The area of NCNU was approximately 1.49 square kilometers and located in areas of high elevation alongside Taomi Village and Nancun Village, where approximately a 0.5 square kilometers slope land was a habitat for numerous wild animals to live and grow, including protected species, such as pangolin, yellow-margined box turtle, maroon oriole, Taiwan blue magpie...etc.

The schedule of protected species on campus by NCNU

CASE 1 : Endangered species 【Land area】 Yellow-margined box turtle

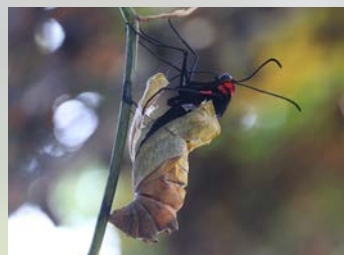
CASE 2 : Rare species 【Land area】 Pangolin, besra, serpent eagle , barred owlet, collared scops owl, mountain scops owl, maroon oriole, Taiwan hwamei , and jumbo dragonfly

CASE 3 : Other species 【【Land area】 Crab-eating mongoose, Taiwan partridge, Taiwan blue magpie, brown shrike, steere's liocichla, white-eared sibia, chestnut munia, striped-tailed rat snake, greenpond frog, and golden birdwing



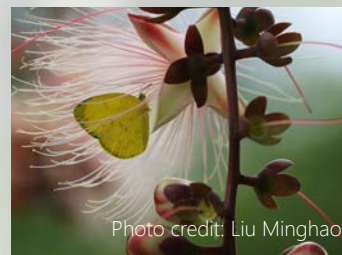
Restoration of rare golden birdwing

The habitat was developed successfully with host and nectar plants for butterflies, zollinger dutchmanspipe, and chman's pipe around Sun Pond for golden birdwing.



Conservation of rare jumbo dragonfly

Fine treated water was provided by NCNU sewage treatment plant for the habitat of rare jumbo dragonfly to reproduce. This implemented environmental education and species conservation. Kept updating and maintaining sewage treatment facilities to ensure water quality.



Biodiversity-environmental education park

Eco-environment overview

NCNU was located in Taomi Community, Puli Township. A diverse terrain and an altitude ranging from 400~800 meters developed natural environment with biodiversity. Faculty and students frequently observed and participated in eco-environment activities, including pangolin, formosan reeve's muntjac, yellow-margined box turtle, Taiwan blue magpie. Campus was characterized by ecological richness, including 23 species of frogs, eight species of fireflies, 161 species of butterflies, 67 species of dragonflies, and other endemic plants.

Achievements of eco-conservation on campus

The goal of campus landscape aimed to construct a diverse ecological park environment. The vision of restored native wildlife habitats was spearheaded by Prof. Guo-Dong, Peng, host and nectar plants for butterflies such as Kusukusu Eupatorium, Ixora chinensis, Double flower, and Taiwan Lemon Depressed Orange Ponkan were extensively planted in the secondary waterway ecological landscape project. This successful creation of butterfly habitats had attracted the *Athyma jina sauteri* to reside. The further long term plan was to restore Taiwan Native Aquatic Animals and Plants Garden for fireflies and others. The *Da-Ann Hygrophila* was currently restored successfully.



Center for
Habitat Mgmt.



Environmental education promotion activities

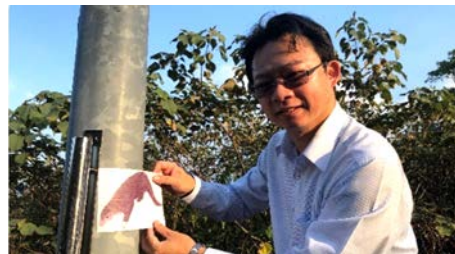
Warning signs had been placed for roads within the home range of endangered species. The temporary shelter unit-NCNU Sustainable Lifestyle Lab, was in charge of rescuing and monitoring of endangered species. In addition, five workshops of eco-conservation promotion were held for faculty and students, off campus visitor, and community people, about 300 participants in 2024. Additionally, through a co-production with a television station, launched the program My Animal Classmate – Pangolin to publicize pangolin conservation.



▶ Pangolin rewilding and monitoring



▶ A stairway for pangolin



▶ Sticker for pangolin

Awards

NCNU participated in the 「National Environmental Education Facility Short Video Competition」 hosted by National Environmental Research Academy in 2024. Dept. of Electrical Engineering, student Yen-Lin, Chiu received the Golden Award (NT\$30,000 bonus) for The Pangolin Guardian. Not only brought unique pangolin's eco-environment on campus but also conveyed a compelling message on environmental protection.

Continued to support and actively promote environmental education on/off campus, mobilizing the community to joint efforts for sustainable environment.



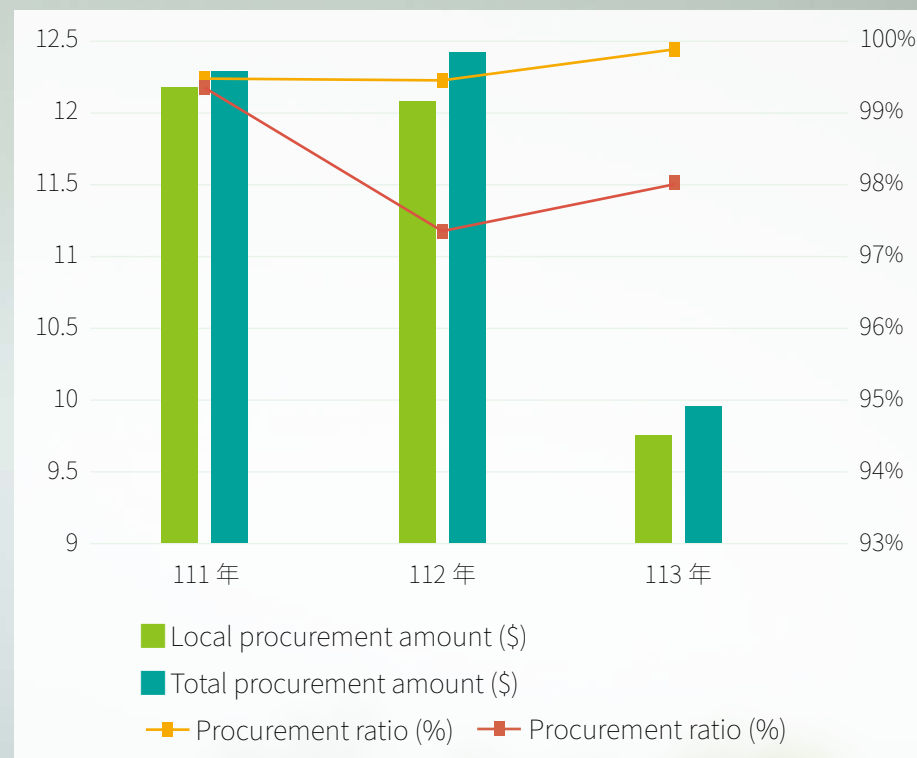
3.5 Green purchase and supply chain management

Green purchase

NCNU actively publicized green concept of environmental protection. Faculty and students could cultivate environmental literacy on campus. Any purchases must consider below certifications, such as “energy-saving label,” “environmentally friendly label,” “water saving marks,” “energy star,” or “energy efficiency class 1 and class 2 marks. Prioritized the selection of certified products with environmentally friendly label. Encouraged the use of recyclable, low pollution, resource saving green products. This fostered a green consumption trend. The green purchase achieved 97.71%, 99.47%, and 99.92% from 2022 to 2024, which exceeded the goal of 95% required by Ministry of Environment (former Environmental Protection Administration). This demonstrated the commitment to environmental protection and education.

Supply chain management

As a government agency, NCNU strictly complied with the “Government Procurement Act” process to ensure quality and guide each unit in engineering, finance, and service procurement. Formulated qualifications of tenderers based on characteristics and needs of procurement in terms of laws and regulations to ensure their undertaken abilities. 75 tender cases, 72 suppliers, and particularly local suppliers accounted for as high as 96%, the procurement expenditure was about NT\$97,630,000, which accounted for 98.1% from total expenditure in 2024. This demonstrated NCNU local economic support, which did conform to the principles of economic efficiency and social responsibility.



	2022	2023	2024
Green purchase			
Procurement ratio (%)	99.47	99.42	99.92
Supply chain management			
Local procurement amount (\$)	122,545,070	121,057,146	97,631,331
Total procurement amount (\$)	123,499,962	124,296,079	99,526,681
Procurement ratio (%)	99.23%	97.39%	98.1%

04 Blessed campus



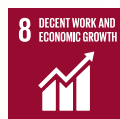
Major subject of this chapter

NCNU-05: Student life counseling

Priority readers

- ☐ Entrepreneurs ☒ Faculty, staff, and students ☒ Parents
☒ Government agencies ☐ Alumni ☐ Community people/NGO ☐ Suppliers

- 4.1 Gender equity and rights
- 4.2 Development and benefits of faculty and staff
- 4.3 Campus safety
- 4.4 Student health and counseling
- 4.5 Student rights, livelihood, and well-being





Gender equity
education website

4.1 Gender equity and rights

In order to provide faculty and staff a working and service environment free of sexual harassment, NCNU formulated 「Regulations for the Prevention, Complaint, and Disciplinary Measures of Sexual Harassment」, in accordance with Gender Equality in Employment Act, Sexual Harassment Prevention Act, Regulations of Sexual Harassment Prevention, and Amendments to the Regulations for Establishing Measures on Prevention of Sexual Harassment in the Workplace to maintain faculty and staff's working rights. Also, formulated the 「Implementation Guidelines for Gender Equality Education」 and 「Key Points for the Prevention of Gender-related Incidents」 to promote substantive gender equality, eliminate sexual discrimination, and maintain human dignity, which strengthened and built gender equity education resources and environment.

Related acts of gender equity and rights:

① Promoted gender equity awareness measures.

Held nine events of the publicity of gender equity education with 1,649 participants in 2024.

② Implemented gender equity education and award mechanisms.

To encourage faculty, staff, and students to participate in related activities of gender equity education, NCNU faculty was encouraged to offer related courses. Subsidy was available offered by Gender Equity Education Committee.

③ Offered gender related courses

General Education Center provided students with gender related electives of 「gender, education, humanities, and society」 and 「gender education」 in 2024.

④ Gender friendly software/hardware equipment on campus

Administrative building had one Breastfeeding Room. 200 emergency phones were available on campus (incl. two emergency phones outdoor). No. of CCTV were installed in terms of needs, about 102 CCTV in outdoor area, a vary number of CCTV in each building, about 198 CCTV in male dormitory, and about 188 CCTV in female dormitory.

Achieved the relevant provisions of “People with Disabilities Rights Protection Act” and the “Indigenous Peoples Employment Rights Protection Act” for equal employment opportunities. As a result, 11 indigenous people and 24 people with disabilities were employed on campus in present time. There would be no violations of the rights and interests of the indigenous people and related incidents in 2024.

Gender equity grievance channels

Students-sexual harassment/ sexual assault/sexual bullying incidents on campus

Responsible Unit:

Office of Student Affairs

Applicants:

one of sexual harassment, sexual assault, or sexual bullying incidents, one party was a faculty, staff, janitor, or student, another party was a student.

TEL: (049)2911573

FAX: (049)2911761

E-mail: hdcheng@ncnu.edu.tw

Faculty and staff-sexual harassment/sexual assault/sexual bullying incidents on campus

Responsible Unit:

Office of Personnel

Applicants:

occurrence of sexual harassment/sexual assault/sexual bullying incidents between faculty and staff

TEL: (049)2914473

FAX: (049)2911530

E-mail: personnel@ncnu.edu.tw



4.2 Development and benefits of faculty and staff

NCNU built a complete performance evaluation for faculty and staff, salary system to ensure talent development and rights assurance. The faculty salary management was held in accordance with Teacher Remuneration Act and NCNU’s regulations on seniority-based salary increases. Evaluated project instructor based on the Ministry of Education’s guidelines for hiring full-time contract teachers in higher education institutions and NCNU’s internal procedures. Evaluated civil service based on Civil Service Performance Evaluation Act. Evaluated NCNU-hired personnel (including contract-based employee, project administrative staff, and administrative workers) based on NCNU’s employment regulations and performance appraisal procedures. These ensured fair, transparent performance appraisal and career development opportunities for all personnel.

Statistics of faculty and research personnel from 2022 to 2024

	Full-time faculty rank					Full-time re-search staff
	Prof.	Associ-ate Prof.	Assis-tant Prof.	Lectur-er	To-tal	
2024-2	128	90	35	2	261	4
2024-1	129	93	36	8	266	8
2023-2	126	94	36	8	264	7
2023-1	126	90	37	8	261	5
2022-2	126	92	35	8	261	4
2022-1	127	※98	31	8	264	5

※Remarks: non-certified project instructor and research staff were included.

Statistics of staff

	2022	2023	2024
civil service	51	55	47
contract-based employee	115	105	97
project admin-istrative staff	0	7	20
administrative workers	11	12	12

※Remarks: leave without pay personnel was included

1.Faculty professional development

Dedicated to build a diverse faculty professional development framework under a complete foundation of personnel system. Continued to improve teaching quality and ensure sustainable development of faculty careers thru complete promotion mechanisms and support measures.

2.Faculty support measures

Implemented the following measures to support faculty professional development.

1. Limited flexible promotion scheme:

the Evaluation Measures of Faculty Appointment and Promotion was revised for needed faculty in accordance with flexible scheme for teaching-oriented faculty. Established several extension mechanisms for promotion:

- Deferred eligibility for promotion based on actual conditions during the period of leave on campus.
- Granting a one-year extension for each year of adjunct certified staff (up to a maximum of three years)
- Granting a one-year extension for pregnant female instructor, extended additional one year in line with sick leave.
- Allowing increased teaching hours in lieu of eligibility for promotion limitation for teaching-oriented faculty.

2. New faculty support:

- Held new faculty symposium to assist rapid integration into the campus community
- Reduced workloads for new faculty, depended on basic teaching hours within the first three years.
- Provided new faculty with dormitory assurance (up to six months).

3. Faculty professional growth






- Held faculty teaching knowledge, abilities series
- Established faculty social groups (a total of 23 faculty social groups in 2023-1 semester).

3. Built complete diverse promotion mechanisms for faculty to ensure developments of teaching and academic career.

To promote diverse promotions, the 「NCNU Evaluation Measures of Faculty Appointment and Promotion」 in Article 15 categorized them into 「academic field」, 「field of technological R&D」, 「field of research in teaching practice」, 「field of literary and artistic creation and performance」, and 「field of sports competition」 to ensure faculty members could have their career development pathways with different areas of expertise.

Approval of the first instructor's promotion to Associate Prof. via teaching in 2024, this implemented diverse promotion mechanism, faculty specialization, career development, and stability of faculty structure.

Statistics on the promotion of full-time faculty from 2022 to 2024

Promotion rank	2022		2023		2024	
	Associate Prof.	Prof.	Associate Prof.	Prof.	Associate Prof.	Prof.
 Academic field	3	5	2	3	4	4
 Field of techno-logical R&D	0	0	1	1	0	0
 Field of research in teaching practice	0	0	0	0	1	0
 Field of literary and artistic crea-tion and perfor-mance	0	0	0	0	0	0
 Field of sports competition	0	0	0	0	0	0
Total	3	5	3	4	5	4

4. Professional staff development

Built a complete staff development system to promote lifetime learning resources and service quality.



Diverse training system

1. Fundamental training:

- Required new personnel to complete 「Basic Administrative Competency Training」 course within one month on board
- Recommended staff members to participated in various training programs in terms of the annual training plan of Civil Service Development Institute, Directorate-General of Personnel Administration, Executive Yuan.
- Each unit held professional competency training based on needs.

2. Further education system:

- Provided full-time certified, technical, and specialized personnel with in-service training opportunities in accordance with 「NCNU Guidelines for Staff Continuing Education」
- Approved official leave to participated in training programs on/off campus without influence to business promotions

3. Participation in decision making:

- Staff representatives included each committee.
- Built a channel for expressed multi-opinions

4. Work experience:

- Opportunities for work experience
- Job matching/transfer

Learning hours of civil service in recent three years

Items	2022	2023	2024
Total hrs.	2,522	3,605	3,050
Ave. hrs.	44.25	66.76	64.89
No.	57	54	47

Learning effectiveness

- The average learning hours of every faculty member continued to exceed civil service's 20 hours/year standard.
- Despite fluctuations in overall learning hours due to personnel changes, maintained good learning quality.

Remuneration policy

Built a fair and equitable remuneration system for different job categories. :



President

President

as approved by “Teacher Remuneration Act” …etc. “Table of President and Adjunct Faculty Supervisory Differential Pay for Each of Public Schools”



Resource of teaching personnel

Full-time instructor

“Teacher Remuneration Act” and “Table of Teacher Salary Grades” … etc.

Full-time research staff

compared to instructor's provisions.



Staff

Civil service “Civil Service Pay Act” …etc./
contract-based employee work rules…etc.

Project personnel “Table of Full-Time Personnel Salary Standard” …etc.

Janitor “Directions for Janitor Management” …etc.

Staff caring and well-being

NCNU built a friendly work environment for faculty and staff physical and mental health, benefits.

Employee Assistance Program (EAP)

Continued to optimize EAP, provided staff needed service thru regular needs assessment and rolling revision:

1. Workplace services:

- Implemented a flexible working hours system.
- Built a counseling mechanism for low work performance.
- Designed job rotation mechanism for long-serving staff.
- Strengthened overtime management and implemented health rights assurance.
- Integrated related consulting, medical or psychological counseling resources for victims of sexual harassment.

2. Health services:

- Campus clinic
- Provided medical consulting and diagnosis
- Held health checkup regularly

3. Psychological services:

- Provided psychological counseling resources
- Community psychological counseling information

4. Faculty and staff with disabilities rights protection:

- Promoted life assistance
- Provided job accommodation, and grants application for assistive device (e.g. wheelchair, hearing aid, and computer mouse/joystick)

5. Other benefits:

- Implemented the employment rights assurance for parental leave and family care without pay and employing substitute staff.
- Provided new faculty and staff with dormitory assurance (up to six months).

NCNU placed particular concerns about the build-up of a gender-friendly workplace. This strengthened workplace friendly measures and dedicated to build a sustainable campus environment based on equality, respect, and care in 2024.

4.3 Campus safety

1. Campus safety notice

- Each building could be found emergency phones. That connected to campus security to report for immediate handling.
- The home page of NCNU website had the phone number of the Center for Campus Safety. This was 24 hours a day with General Incident/Accident Notification System online to prompt notice all of campus security personnel via e-mail and social media.
- Held traffic safety lectures each semester and publicized traffic safety in various languages for overseas Chinese and foreign students.
- On-site legal consultation service provided by a lawyer.

Occurrence

- Incidents of unexpected events: traffic accidents, suicide/self-harm, poisoning, and other unintentional injuries...etc.
- Safety-related incidents: fire, fraud, theft, domestic violence, sexual assault, sexual harassment, sexual bullying...etc.
- Deviant behavior: bullying, drug abuse, violent incidents, illegal activities...etc.
- Disciplinary conflicts
- Natural disasters
- Health-related incidents: disease, infectious disease, and notifiable infectious disease
- Child adolescent incidents: (under age 18 gender equity, drug abuse, suicide/self-harm, bullying, domestic violence...etc.)

Notice

- Campus emergency hotline: 049-2910-000(24 hours)
- On-duty campus security cell phone: 0932-576-184(24 hours)
- General notice within 72 hrs., statutory notice within 24 hrs. emergency incidents notice within two hrs.
(Over two or more individuals with serious injuries, poisoning, missing, death, or life-threatening conditions; requiring assistance from higher-level authority or immediate attention when exceeding the school's capacity to manage; negative

Handling

- The security office shall notify emergency incident response personnel.
- Dispatch personnel to the scene or hospital to understand the situation and provide assistance.
- Notify team leaders from relevant offices, instructors, and parents.
- Complete campus safety notice.
- Department or Guidance Counseling and Career Development Center continue to concern student(s).

113-1 學期校內交通事故 (24 件)

入院停車場入口	6
機車道	3
暨大行旅前	2
汽車主環道	2
男研究生宿舍前	2
體健中心前方彎道	2
管院機車停車場出口	1
機車到出口	1
機車道髮夾彎	1
大學生宿舍後機車道	1
其他	3

The NCNU Campus Safety Map

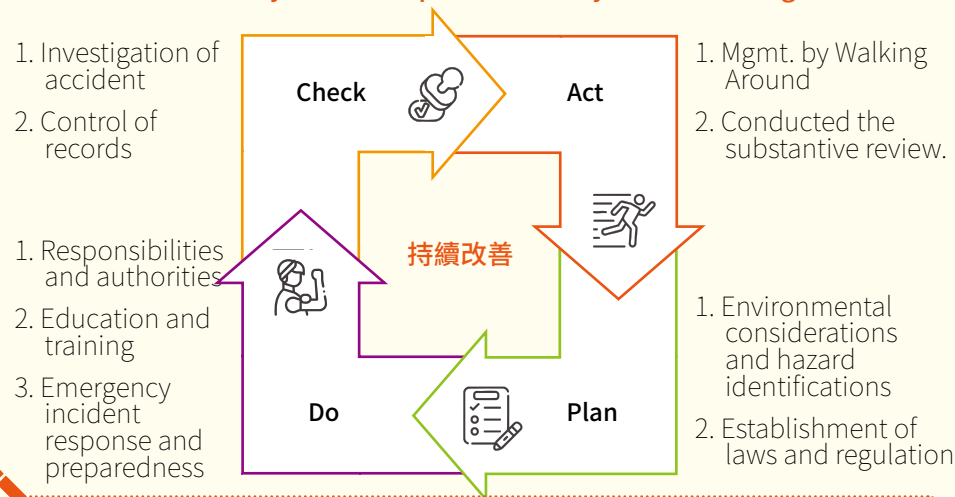


2.Occupational safety and health

NCNU upheld the philosophy of 「Healthy Campus, Safety First」 to build a complete occupational safety and health management system that covered 100% of faculty and staff. Continued to enhance risk management control to ensure campus safety and health of faculty and staff thru PDCA cycle. Ministry of Education certified Campus Occupational Safety and Health Management System for a three-year “Self-Management” certificate (valid from Aug. 2022 to July 31, 2025).

- Held the Environmental Protection and Occupational Safety and Health Committee Meeting four times annually. President served as the chairman.
- 10 out of total 22 members were labor relations representatives, which was 45.4% higher than the request of laws and regulations.
- Protected the whistleblower according to the law to strengthen the rights assurance for labors.
- Withdrew to safer distance when danger was about to occur, actively participated in the investigation of occupational accidents simultaneously.

The PDCA cycle of occupational safety and health mgmt.



Conducted 16 occupational safety inspections (including Category II and Category III) in 2024.
Held a total of nine occupational safety and health education and training, with a total of 1,661 participants completing the training in 2024.
NCNU was dedicated to practice the United Nations Sustainable Development Goals (SDGs) thru a complete occupational safety and health management. This created a safe and healthy working environment for all faculty and staff.

Prevention and management of occupational accidents

1. Notification website of occupational accidents on campus

- 1 Established E system for notification of occupational accidents.
- 2 Notified, investigated, and analyzed effectively when occupational accidents occurred.
- 3 Ensured proper handling for incidents of unexpected events then prevented them from happening.



2. Disabling injuries of faculty and students and occupational disease incidents

- 1 Number of recordable occupational injuries occurred on campus in 2024: 0
- 2 Number of severe occupational injuries on campus in 2024: 0
- 3 The disabling injury frequency rate (FR): 0 (times/million hours)
- 4 Laboratory occupational accidents occurred coincidentally on campus in 2024: 0

Occupational health management

The planning of health management matters were based on the analysis of annual health examination reports for occupational health specialists on campus to prevent the occurrence of occupational disease.

- A total of **104** in-services personnel health checkup in 2024
- A total of **16** field services by doctor of medicine in 2024
- A total of **4** protections of maternal health in 2024
- A total of **29** ergonomic hazards precautionary in 2024
- A total of **35** abnormal workload precautionary in 2024

Future prospect

Continued to strengthen the occupational safety and health management system, including the following future plans:

- 1 Digital and smart management: expanded E system' s range of application to promote the efficiency of occupational safety management.
- 2 Proactive health promotion: increased preventive health promotion scheme, shifting from reactive medical care to proactive prevention.
- 3 Deepening safety culture: incorporation of safety awareness into campus culture, this created safety climate of full participation.

4.4 Student health and counseling

NCNU was dedicated to promote students' physical and mental health by providing holistic health care and counseling service and constructing complete health management system. The Student Security and Assistance Center integrated health care on campus, psychological counseling, and health promotion to provide faculty and students with convenient, professional health care and support. Please refer to the Office of Student Affairs website for details on each detailed service. <https://student.ncnu.edu.tw/>

1. Promoting services of physical and mental health

Providing health services

To implement the philosophy of “Healthy University Town,” established a “NCNU Out-Patient Department (OPD)” with Puli Branch, Taichung Veterans General Hospital. The Health Service Center on campus was staffed with professional medical personnel to provide staff and students with timely, complete health care and health consultation. Services included: general out-patient care, specialist consultations, health consultations, injury treatments, and vaccinations to assist faculty and students maintaining their physical and mental health, disease prevention. 3,798 person/times with medical diagnosis and treatment services, 280 person/times with injury treatments, 1,159 person/times with freshmen health checkup, 1,241 person/times with explanatory meeting of health checkup results, 326 person/times with Hepatitis B vaccinations, and 48 person/times with Moderna COVID-19 vaccinations in 2024.

Holding health promotion activities

To build a healthy campus, these could help students to instill healthy concepts and habits, promote their first aid skills, achieve basic self-rescue and rescue abilities, and familiarize AED locations for immediate assistance during critical moments. In 2024, 1,038 students participated in 「CPR+AED」 training, 31 received standard first aid course, 206 person/times with HIV confirmatory tests, 182 person/times with blood donation event on campus, 21-Day Water Drinking Challenge event, and 76 attended body weight sculpting camps.



Freshmen health checkup



LOHAS yoga

2. Sports teaching environment

Diverse sports facilities

NCNU was dedicated to build diverse sport teaching environments with proper equipment and facilities, providing students with complete sports venues to promote physical and mental development. A wide range of indoor and outdoor sports facilities were available on campus to meet students’ needs.

Overview of sports teaching fields

Overview of sports teaching fields		
Space	Installations	No.
Indoor	Courts sports complex	2
	Table tennis room	12
	Gym	1
	Aerobics room	1
	Swimming pool	1
Outdoor	Center for Outdoor Exploration Education of the Central Area	1
	Athletic field	1
	Softball field, incl. mgmt. center	1
	Volleyball court	4
	Basketball court	8
	Tennis court	3
	Golf course	1
	Archery range	1

Performance of students’ physical fitness test

Continued to strengthen students’ physical fitness test, this promoted passing rate of cardiorespiratory fitness annually. Reflected the effectiveness of physical education.

Year	Cardiorespiratory fitness	Swimming skills
2022	83%	83%
2023	88%	83%
2024	85%	84%

Competition performance

NCNU’s students achieved strong performance from National Intercollegiate Athletic Games in recent years.



Feature development

Completed the Center for Outdoor Exploration Education of the Central Area in 2022. This center was expected to be a base for cultivation of local athletic talents, team works, new local attractions, and development of sport industry.

Distinctive highlights

- Constructed a diverse sport teaching environment with proper equipment and facilities.
- Actively established sports groups for faculty, staff, and students and offered diverse physical education courses.
- Developed distinctive sports to strengthen local connection.



3. Mental health and counseling support

Provided diverse psychological counseling services for assisting students to confront pressure and challenges of academics, interpersonal relationship, career planning. Promoted students' mental health development thru individual counseling, group counseling, and psychological test.

Primary prevention works:

1. Door-to-door mental health meeting

Introduced new multi-subjects every semester, including emotional awareness, interpersonal communication, self-understanding, emotional relationship, career exploration, gender equity...etc.

2. Emotional education

Promoted students' healthy emotions and relationship literacies thru activities, such as 「Sexual Health Literacy」 board game workshop.

3. Career counseling activities and career consulting

Provided career exploration and development counseling for assisting students in preparing for the workplace. This built complete career development blueprint.



Recruitment orientation



2024 NCNU Campus Recruitment-students inquiries

Surveys on various activities

	Door-to-door mental health meeting			Emotional education			One-on-one career consulting service	
	Events	Person/Times	Satisfied	Events	Person/Times	Satisfied	Events	Person/Times
2022	15	529	88%	8	764	87%	151	151
2023	13	346	89%	8	1,247	90%	125	125
2024	14	564	87%	9	1,649	92%	104	104

Career counseling

	2022		2023		2024	
	Events	Person/Times	Events	Person/Times	Events	Person/Times
UCAN Lecturer Training Program	3	64	3	33	3	36
UCAN class activities	5	225	8	667	18	910
Freshmen comprehensive assessment activities	19	1,028	25	1,057	25	962
Promotion of career mentorship system	2	46	2	28	3	52
Career lectures	20	1,020	21	593	30	1,116
Enterprise visits	6	261	8	196	6	220
Total	55	2,644	67	2,574	85	3,296

Secondary and tertiary prevention works:

1.Psychiatrist stationed for consultation

Provide professional medical assessments and assistance for students with mental health needs.

2022	Completed 18 events 18 person/times 92% satisfied
2023	Completed 20 events 20 person/times 94% satisfied
2024	Completed 18 events 18 person/times 92% satisfied

2.Doorkeeper for Suicide Prevention Project

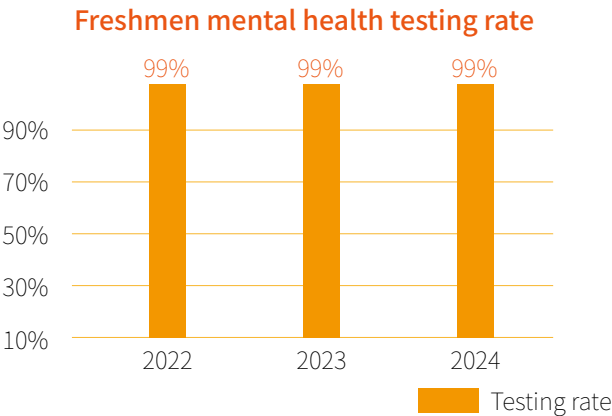
Strengthened suicide prevention networks on campus by promoting faculty and students' abilities of identifying and assisting students in need of care.



Doorkeeper for Suicide Prevention Project

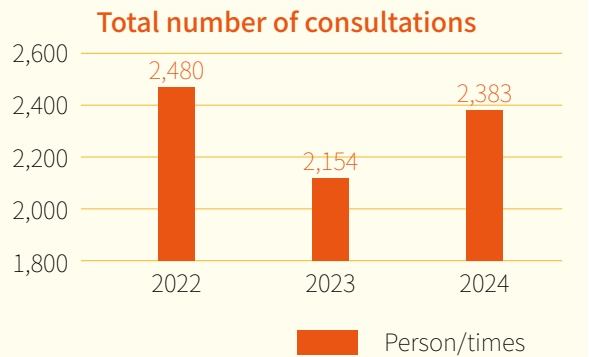
3.Freshmen mental health test

Maintained a high testing rate of 99% for three consecutive years (2022-2024) for finding earlier students in need of care.



4.Individual counseling

Provided one-on-one professional psychological counseling services to assist students in addressing topics, such as emotional distress, interpersonal relationship, and career development.



5.Group/workshop

Promoted students' mental health and interaction with people thru (e.g. handmade planting workshop) group or workshop.



Handmade planting workshop

6.Resource classroom counseling

Provided adaptive counseling and support for students with special needs, including:

- Board game interpersonal communication activity: enhanced social skills and interaction with people.
- Student knowledge, abilities activities: promoted learning adaptability.
- Publicity of special education: promoted fusion of campus education and friendly environment.



Board game interpersonal communication activity

4. Diverse student counseling and assistance

Overseas students caring and counseling

Provided full assistance, such as caring, counseling, and studying for overseas students. Helped them via the gathering of senior students when they came to Taiwan. Held exclusive freshmen seminar during the beginning of semester, including admission test, life counseling, sharing of experience...etc. Held activities with distinctive features, such as field day of international students, ancestor veneration, international week...etc., enhancing cultural fusion.



Overseas students get-together dinner of ancestor veneration in Chinese New Year

International Foundation Program, IFP Chinese Language courses and overseas Chinese students counseling

Level of Chinese language courses and tutoring were available since 1999. The International Foundation Program, IFP began to recruit Chinese Language prerequisites students in 2022. All of Chinese language courses were divided into three: fundamental, intermediate, and advanced courses after placement test results, which was for credit exemption of Chinese Language courses. Small-class teaching was available for foreign students at fundamental level. This was to help overseas Chinese students to adapt learning, life, and local environment in a smoothly way.



Chinese Language instructor providing student with one-on-one writing assistance

International Buddy for Learning Program

The International Buddy Program provided foreign students with friendly campus environment, assistance of campus life, fitting in local custom. In addition, this program created more language learning opportunities and international interactive experiences to expand international outlooks and perspectives. A total of 30 students participated in this program in 2024. Activities mainly included: The Sharing Session for International Buddy, freshmen orientation and meet-and-greet between foreign students and buddies, Mid-Autumn Festival welcome party, and year-end Thanksgiving gathering.



Mid-Autumn Festival welcome party

5. Financial assistance and counseling mechanism

Built counseling mechanism.

Set an example for supporting economically or culturally disadvantaged students with the Resilient Scholarships and Bursaries to build an integrated learning guidance mechanism. Supported them to establish learning circles based on community-based organizations to hold academic and social support activities, such as community service, friendly campus. This helped them to gain self-confidence and cultivate working abilities for future employment.

Continuous fundraising subsidies

① Vision Plan

The Office of Student Affairs, Career Development and Alumni Services Center, Student Security and Assistance Center raised funds with external units and alumni. Actively sought different subsidy channels in addition to expand the scope and amount of existing subsidies. Raised NT\$1,040,000 during 29th anniversary celebration in 2024 to continuously subsidize Vision Plan' s students.

② Scholarship for Economically Disadvantaged Students

The Sun Moon Lake Wenwu Temple Charity Association Scholarship and Bursary and Emergency Aid and , Chushan Zi Nan Temple' s Scholarship and Bursary for Economically Disadvantaged Students, Nantou County were long-term designated funding supports, which distributed montly or as one-time subsidies to qualified students.

Scholarship for Economically Disadvantaged Students on Campus subsidized near NT\$10,000,000 annually.

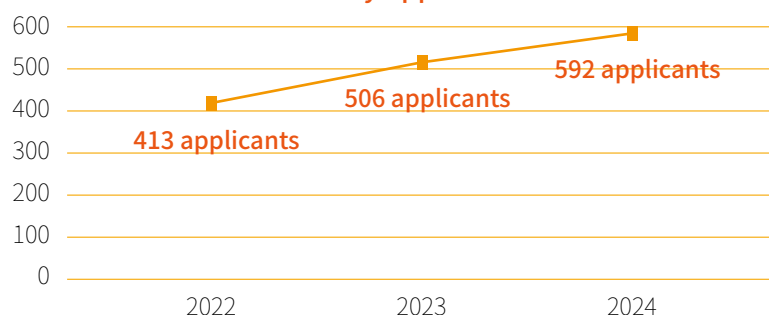
Excellent Resilience Scholarship and Bursary	NT\$5,400,000
NCNU' s Scholarship for Economically Disadvantaged Undergraduates	NT\$2,200,000
Chushan Zi Nan Temple' s Scholarship and Bursary for Economically Disadvantaged Students	NT\$400,000
Chung Tai Zen Center of Sunnyvale Scholarship and Bursary for Economically Disadvantaged Students	NT\$200,000
Sun Moon Lake Wenwu Temple Charity Association Scholarship and Bursary	NT\$160,000

Vision Fundraising Dinner

Held 「Vision Fundraising Dinner」 during 29th anniversary celebration in 2024 to continuously subsidize Vision Plan' s students.



Growth in the number of Excellent Resilience Scholarship and Bursary Applicants:



4.5 Student rights, livelihood, and well-being

Complete student autonomy and participatory mechanisms

- Well-structured student autonomy organization: NCNU Student Association featured a complete organizational structure, including Secretariat, Finance, Public Relations, Activities, Publicity, Student Rights, Affairs, and Club.
- Decision-making of institutional affairs: assurance of student representative participated in institutional affairs and each committee to implement students' expression of opinions.
- Diverse communication channels: held 「Appointment with the president」 event to promote communication and problem solving between faculty and students.
- Communication and learning across universities: visited institutions, such as Executive Yuan, Legislative Yuan to promote students' participation of public affairs.

Campus services and emergency response

Aspects	Concrete actions	Effectiveness-implementation
Cultural activities	Campus concert, Christmas light-up	Promoted campus cohesion.
Emergency response	Distribution of supplies during typhoon	Ensured students safety and living needs
Student empowerment	Presidents of clubs and dept. meeting	Promoted student autonomy.
General education	Adversity mgmt. lectures...etc.	Enhanced student soft power.

NCNU was dedicated to develop a campus environment, which respected student's subjectivity for the assurance of student rights and promoted well-being.

Distinctive highlights and achievements

- Thriving student autonomy: complete organization of NCNU Student Association that actively participated in decision-making of institutional affairs.
- On/off campus collaboration mechanisms: built strong partnerships with on/off campus institutions.
- Emergency response demonstration: worked together when typhoon came.
- Cultivation of democratic literacy: enhanced civic literacy and participation thru visiting government sectors



Democratic visit by University Student Autonomy Organizations – Executive Yuan / Legislative Yuan

05 Social responsibility



Major subject of this chapter

GRI 413-2: Local communities

Priority readers

- ☐ Entrepreneurs ☒ Faculty, staff, and students ☐ Parents
☒ Government agencies ☒ Alumni ☒ Community people/NGO ☐ Suppliers

5.1 Empowering rural education: diverse practices and innovative learning

5.2 Local revitalization assistance: diverse approaches to sustainable development

5.3 Diverse culture inheritance: indigenous culture and local exploration



5.1 Empowering rural education: diverse practices and innovative learning

NCNU deeply recognized the importance of local connection and social responsibility as the only national university in Nantou County. Expanded on-campus care into rural communities. Provided holistic support for schoolchildren in remote area and teachers thru diverse and innovative educational practices to build together an equal and high-quality education environment.

1. Participatory course practice: connected to expertise and local demands

The General Education Center was dedicated to let students to participate in various institutions/organizations, communities, industries, and festival events in Shui Sha Lian area, promoting students' deeply understanding to practical topics. Provided budget and course resources to actively promote social participatory course thru diverse course designs and innovative teaching models for abundant learning opportunities to students in rural schools. This stimulated students' learning interest and motivation. Not only created more future possibilities and opportunities for rural education but also developed students' international outlooks and social participation abilities.

Distinctive courses and practical achievements

Course titles	Main content	Participants	Social influence
Social Service Learning (Dept. of Educational Policy and Administration)	Southeast Asian Multicultural Camp at Ai-Lan Primary School	54	Promoted cultural understanding and exchange.
Traditional Farming and Rituals of the Seediq People	Studying tribe's traditional agricultural knowledge and rituals	30	Indigenous cultural preservation and inheritance
Value of Life (I) (Practicum)	On-site health care observation and practice	42	On-site health care observation and practice



These courses not only helped students to apply theoretical knowledge into real-world situation but also cultivated cultural sensitivity and social responsibility toward rural area. Students understood deeply the challenges and demands of rural education thru practical participation and service to develop innovative solutions.



Traditional Farming and Rituals of the Seediq People



Value of life (I) (Practicum)



Social Service Learning (Dept. of Educational Policy and Administration)

2. Enhanced teaching skills for rural teachers: promoted teaching quality and profession grown

According to Ministry of Education statistics showed, 523 substitute teachers in elementary schools and 124 in junior and senior high schools due to the challenges of insufficient qualified teachers, which was far exceeding the national average. Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC partnered with the Education Support for Taiwan and the Nantou County Government to promote 「Unlicensed Substitute Teacher Training Program」 to ensure teaching quality thru innovative strategies to promote substitute teachers' teaching skills.

Three strategies of enhancing teaching skills

1. Optimizing education resources

- Recruited senior teachers for training and guidance.
- Built a long-term support mechanism.
- Solved on-site teaching's practical problems

2. Digital training system

- Developed an online courses platform.
- Provided flexible learning approaches.
- Built a resource sharing mechanism.

3. Establishment of talent database

- Created professional teacher profiles.
- Optimized human resource allocation.
- Formed a continuous improvement mechanism.

Actual actions in 2024

NCNU collaborated with Tao-Yuan Primary School, Truku Elementary School, Lu Shan Elementary School, and Xinmin Elementary School by sending 14 mentor teachers paired with 14 unlicensed substitute teachers for training and guidance. Thru online and on-site support integrations, these teachers achieved professional growth rapidly, improved teaching quality then created better learning environments for students. This program was dedicated to build a balanced and quality education system in rural area, providing teachers and students with long-term stable support and growth opportunity.



▲ Nantou Unlicensed Substitute Teachers Support Program in 2024

3. Learning support after classes: Empowering Education Program for Fuxing Community

NCNU's College of Education USR collaborated with Shoufeng Temple in Puli Township based on the core of 「Public Private Partnership, PPP」 since 2017 to provide accompanying service-learning after classes and assist rural teachers' professional growth in Fuxing community, where it located in suburban area. Children were lack of long-term learning resources after classes. NCNU utilized diverse collaborative mechanisms to create diversified learning opportunities for community children.



Schoolchildren at Fuxing School participated in mix-aged learning activity, demonstrating the achievement of accompanying after class program.

Program development timeline:

● Beginning of collaboration (from 2017 to 2019):

incorporated program resources and service learning courses, established the Fuxing School to build an initial foundational operational model.

● Stablized development (from 2020 to 2022):

funded by private resources, such as Jin Feng Yuan Co., to expand service scope and depth of content.

● Sustainable development (from 2023 to present):

developed schemes, such as 「Hundreds of Industries Lecture」to connect between after class education, life and career development to expand support for rural teachers.

Achievements in 2024:



Students achievements

served constantly 18-20 schoolchildren with accompanying after classes and mix-age learning. Provided activities of homework guidance, reading skills cultivation, diverse exploration.



Enhanced teaching skills

supported teachers' professional growth across schools in Ren'ai Township and Yuchi Township, particularly relied on Faxiang Elementary School. Utilized co-empowerment workshop to develop course materials, which earned a Local Teaching Material Award in 63th National Primary & High School Science Fair (Life and Applied Sciences Category I).



Social participation

integrated resources of annual NT\$300,000 donation from Jin Feng Yuan Co. and NT\$100,000-NT\$200,000 from community people to continuously promote the operational model of "Public Private Partnership."

Connection with Sustainable Development Goals (SDGs):

Corresponded to SDG 1.3 (social protection system) and SDG 1.4 (equal rights to economic resources).

Promoted SDG 4 (quality education) and SDG 4.5-4.6 (equal access to all levels of education).



Thru Fuxing School, NCNU not only provided underprivileged schoolchildren with quality after classes learning resources but also provided rural teachers with professional support to practice educational equity and social responsibility. Achieved the core goal of 「education empowerment」 by expanding learning support after classes from individual students to families and communities.



4. Science and local dialogue: STEAM innovation in rural education

College of Education USR was dedicated to assist local students to know surrounding topics and develop problem-solving abilities. Cultivated active civic with scientific thinking and local perspective by concatenating STEAM learning in Shui Sha Lian area. Thru collaboration with the Affiliated Senior High School of National Chi-Nan University, CNASH, guided students to utilize scientific methods to solve topics, such as local agriculture and disaster prevention based on the core of actual problems.

Program development timeline:

● Built foundation (from 2020 to 2021):

collaborated with CNASH to develop initial courses scheme, establishing a STEAM local topics-oriented educational model.

● Deepening the topic (from 2022 to 2023):

guided students to develop social influential scientific topics based on major subjects of local topics

● Innovation development (from 2024 to present):

launched a STEAM themed camp and a regional high school students learning EXPO to expand scientific educational influence by organizing high school students' community service team.



Students from CNASH exhibited their innovative 「Desk With Chair For Disaster Prevention」 design, which received the Bronze Medal Award from Taiwan Innotech Expo in 2024.



Achievements in 2024:



Students achievements

students from CNASH received the Silver Award at University of Tsukuba's Science Edge 2023 with their Automated Apple Snail Removal Device」 and 「Desk With Chair For Disaster Prevention」 received the Bronze Medal Award from Taiwan Innotech Expo in 2024.



Enhanced teaching skills

established a 10-member faculty social group, conducted five professional trainings per semester, focusing on themed learning, such as robotics, programming, and micro.



Social participation

Collaborated with Department of Computer Science and Information Engineering, provided 20 local students with APCS, actively eliminating the information technology education gap between rural and urban areas.

Connection with Sustainable Development Goals (SDGs):

- Corresponded to SDG4 (quality education) and SDG 4.4 (relevant technical and vocational skills).
- Promoted SDG 4.3 (opportunities for high quality vocational and higher education).



Cultivated students to apply scientific knowledge to solve local problems thru STEAM educational innovation. This not only injected innovative vitality into rural education but also strengthened their connections with communities, cultivating future civic with 「problem-solving」 abilities.

5. Global Vision Development: Practicing diverse culture and international education

「Localized internationalization」 was the core goal of College of Education USR, which focused on cultivation of international literacies in rural primary and secondary schools thru diverse cultural experiences to develop citizens of global village with global vision. The diverse culture and international education specifically emphasized on creating abundant intercultural learning environment in terms of multicultural integration in Puli Township, which combined cultural resources from immigrant communities, such as Vietnam, Indonesia, and Myanmar.



College of Education USR, the International Cultural Carnival Program, brought multicultural experiences for schoolchildren in Puli Township.

Program development timeline:

- Built 「localized internationalization」 basic framework by combining the White Paper on International Education 2.0 and the philosophy of SDGs to develop initial planning.
- Launched second foreign language courses (e.g., French), developed Southeast Asian cultural exchange modules, and cultivated teachers' international education literacy at CNASH and Hong Ren Junior High School.
- Held a multicultural market, promoted community participation in international education, and expanded services to more schools in 2024.

Achievements in 2024:



Students achievements

held French language courses twice weekly for 13-14 weeks each semester for students from CNASH and Hong Ren Junior High School. Over 760 person/times participated in Southeast Asian cultural exchange activities.



Enhanced teaching skills

organized international education group for rural teachers to assist schools, such as Nan Feng Elementary School in developing international education courses. 76 person/times participated in international teacher literacy training.



Social participation

promoted 「Mountain City Meets Europe – Children's Cultural Market」 and 「Latin American Cultural Market.」 Provided cultural experiences from over ten countries, over 1,000 person/times participated.

Connection with Sustainable Development Goals (SDGs):

- Corresponded to SDG 4.5 (Elimination of education disparities) and SDG 4.7 (Promotion of education for sustainable development).
- Promoted SDG 10.2-10.3 (social inclusion and equal opportunity).



NCNU helped students from rural areas in Puli Township to develop global vision and promoted cultural understanding and mutual respect thru diverse cultural experiences and practice of international education. This program not only broke barriers against rural students' access to international culture but also created an educational environment that valued diverse culture and international mobility, laying the foundation for students' global civic literacies in future.

6. Digital Companions for Learning: narrowed the gap thru technology

NCNU undertook the Digital Companions for Learning, Ministry of Education based on the core philosophy of 「life accompanying life, and life teaching life」 since 2006. Dedicated to narrow the gap among students in rural areas to promote learning motivation and interest thru one-on-one online accompanying and learning model.

Program development timeline:

Initial stage (from 2006 to 2007):

began with online tutoring for 28 schoolchildren in Nantou County. Increased to 164 schoolchildren in 2007.

Growth stage (from 2008 to 2013):

adopted regional tutoring model, with annual service coverage exceeding 200 schoolchildren.

Deepening stage (from 2014 to present):

transitioned to individual application model. Intensified localization to continuously expand the influence.

Partner schools and performance in 2024:

Partner schools included Toda (Nantou County) Elementary School, Chunyang (Nantou County) Elementary School, Ren-ai (Nantou County) Elementary School, Fazhi (Nantou County) Elementary School, and Tong-Fu (Xinyi Township) Junior High School, with a total of 67 participating schoolchildren in 2024. Diverse contents of classes included SDGs-integrated learning, life and character education, scientific exploration, humanities literacy, and AI applications.

Social influence:

- Cultivated over 2,500 university companions to promote their abilities of self-management, social service, and digital care.
- Accompanied over 1,928 rural schoolchildren, held annual actual learning activities to enhance emotional connection.
- Promoted social competitiveness of rural schoolchildren to achieve educational equity thru fusion of technological innovation and humanistic concern.



Introduction to indigenous traditional housing



Science outreach activity



Education and training

Thru Digital Companions for Learning, NCNU not only practiced the University Social Responsibility (USR) but also provided rural schoolchildren with quality educational resources and companions, ensuring equal learning opportunities for each child to create together a better future.



5.2 Local revitalization assistance: diverse approaches to sustainable development

NCNU rooted in Nantou and dedicated to practice University Social Responsibility (USR). This included a number of aspects, such as general education courses on sustainable environment, cultural revitalization in Alang Snuiwill, under-forest economy in the Four-Village Joint Association, local revitalization model in Taomi and Cuoxing, agricultural technology innovation, promotion of science outreach education, international sustainability collaboration, cultivation of Shui Sha Lian interdisciplinary talent, and construction of innovative and entrepreneurial ecosystem. All of these demonstrated the commitment to sustainable development, jointly driven by various colleges and centers to form together a comprehensive ecosystem. Not only this promoted local development but also built diverse models for practicing social responsibility.

1. Environmental and ecological sustainability

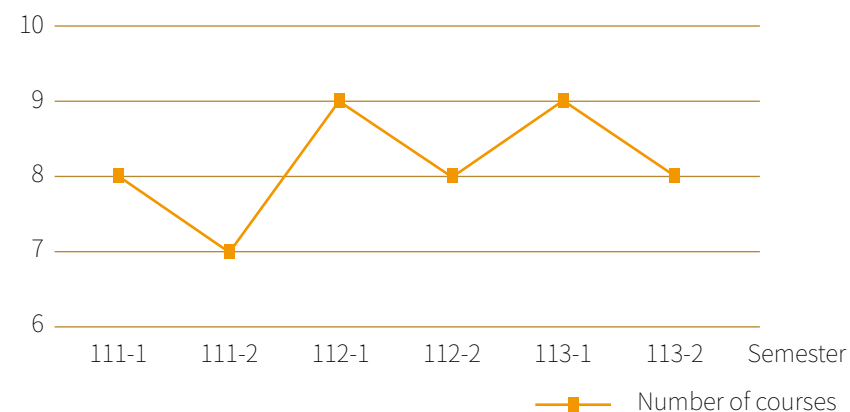
(1) General education and sustainable environment: courses practices in circular value

The General Education Center stimulated students learning interest and motivation, cultivated their abilities to understand diverse needs and challenges from different backgrounds simultaneously thru actively diverse courses design and innovative teaching models.



Students conducted a field study on wetland eco-conservation and water quality testing at Zhongguakeng Creek in Bei-Shan Village, Guoxing Township.

These sustainability-related courses not only taught in classrooms but also extended to practical fields. Provided students with opportunities of hands-on experiences while laying a theoretical foundation for community practice in future.



Students learned how to utilize green energy technology to solve current environmental problems thru general education courses related to environmental education. Gained a deeper understanding of practical methods for circular economy and environmental protection to promote the awareness of eco-conservation. Particularly, led students to conduct a field study on wetland eco-conservation at Zhongguakeng Creek in Bei-Shan Village, Guoxing Township during the wetland eco-conservation course in 2024-1 semester. Students utilized professional equipment to conduct water quality and pH testing when introducing wild river restoration engineering and understanding the fusion of eco-conservation and hydraulic engineering. This helped to understand the long-term influence of wetland eco-conservation to environment, intensifying environmental responsibility, and promoting notice and concern of sustainable circular value practice.



(2) Taomi and Guoxing: a dual-track development of eco-conservation and renewable energy

The practices of the Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC in Puli area, which demonstrated two complementary approaches to local revitalization.

「Taomi」 collaborated and 「NCNU」 built sustainability in future.

The development of Taomi eco-village highlighted the key role of organizational collaboration in local revitalization:

Establishment of cross-organizational collaboration platform

● Background of development:

Taomi eco-village began in 2015 when confronting challenges of fragmented leadership and parochialism within the community.

● Innovative solution:

Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC promoted the establishment of 「Taomi Eco-Village Community Development Coordination Association」 as a cross organizational collaboration platform.

● Integrated effectiveness:

successfully integrated local organizations, such as community development association and leisure agriculture promotion association, solving problems of resources overlap and lack of communication.

Development model based on the core of eco-conservation

● Integration of scientific research and environmental education:

not only monthly frog survey served as scientific research but also served as a platform for environmental education for connecting B&B owners and their children.

● Biodiversity conservation:

continued to deepen ecological capital of community thru the research of species, such as butterflies and *Sympetrum nantouensis*.

● Intergenerational empowerment mechanism:

built this mechanism for future generations from environmental education in local schools and cultivation of youth volunteers to preservation of cultural memory.

「Guoxing」 innovation: industrial transformation based on renewable energy

The case of Guoxing Township development demonstrated how to transform from environmental friendly technologies into local development:

Micro-hydropower project

● Beginning:

Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC began this project in Guoxing Township in Oct. 24.

● Innovative integration:

integrated renewable energy technology with the philosophy of local revitalization.

● Multiple concerns:

not only concerned technological innovation, such as planning of this project and environmental impact assessment but also noticed local talents development.

Establishment of the Industry-Government-Academia Collaboration platform

● Resource integration:

integrated resources of agriculture and tourism thru the platform.

● Innovative industries:

developed distinctive sustainable tourism routes.

● Strengthening resilience:

created new economic opportunities while strengthened the community's adaptability confronting to climate change.



▲ The 114th meeting of the Taomi Eco-Village Community Development Coordination Association



▲ Guoxing Local Revitalization, Salon Meeting in 2024



2. Cultural and community sustainability

(1) Alang Snuwill: agri-food culture and traditional attire

Alang Snuwill located at an altitude of 1,200 meters between Qingjing Farm and Lu-shan Hot Spring in Ren'ai Township, with approximately 1,300 residents, which demonstrated strong resilience and adaptability when confronting major natural disasters.

Environmental challenges and transformation opportunities

The tribe had been through a series of major disaster impacts:

- 921 Earthquake in 1999 Rethought the importance of environmental conservation, soil and water conservation after these disaster experiences. Meanwhile, awakened the value of traditional agricultural wisdom then transformed it into sustainable development.
- Typhoon Bilis in 2000
- Typhoon Khanun, induced mudslide in 2023

Innovative Practice in culture inheritance

Agricultural culture inheritance

Built an intergenerational learning platform of elders, youth, and schoolchildren based on the cultivated land as the core field adjacent to the Presbyterian Church. Thru practice of traditional farming methods, not only inherited agricultural knowledge but also reappeared the wisdom of harmonious coexistence with land, practicing the philosophy of sustainable agriculture.

Preservation of Weaving Culture

The Seediq weaving of Alang Snuwill was distinctiveness. The double-layered weaving in purple and red, in particular, was famous. The tribe actively transformed weaving into modern design when confronting the crisis of traditional crafts by fitting in life aesthetics and creating dual value of culture and economy.

Integrated innovation of industrial development

Built a diversified industrial development strategy:

- (1) Agricultural Industry upgrade: integrated traditional farming methods and modern technology to build sustainable agricultural production system.
- (2) Development of creative industries: transformed traditional weaving crafts into marketable creative products, creating new economic pathways.
- (3) Establishment of brand image: reshaped the Alang Snuwill brand by strengthening local distinctive features and promoting product value.

Achievement and influence of sustainable development

The Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC provided professional counseling to assist tribe to build an integrated development model:

● Organizational collaboration:

integrated resources, such as cultural health station and after-school are thru Holistic Care Association as a platform.

● Intergenerational exchange:

promoted inheritance of knowledge and skills between elders and younger generations.

● Knowledge preservation:

stored agricultural and traditional attire knowledge systematically thru WikiData database architecture since 2005.

● Demonstration effect:

provided valuable development experience to other indigenous tribes.



▲ Inheritance of Seediq traditional weaving crafts

This model integrated culture inheritance, industrial development, and organizational collaboration. Built a resilient tribe development pathway gradually, achieving sustainable balance of culture, economy, and environment.

(2) Four-Village Joint Association: co-creation of indigenous tribe under-forest economy

This association represented an innovative model of natural resource by self-management of the tribe. Fostered SDG15 Life on Land and Partnerships for the Goals.

Background and goals of the association

Shui Sha Lian Research Center for Humanities Innovation and Social Practice, SSLRC established this association in 2023, which was an innovative attempt to solve collaborative development problems in traditional tribe:

- Past difficulties: the Forestry and Nature Conservation Agency entrusted commercial companies to implement projects, such as economic crop transformation and eco-travel. Due to lack of familiarity with humane, ecological, and traditional cultural knowledge, resulting miscommunication.
- Transformation opportunity: the agency encouraged the tribe to undertake an 「under-forest economy planting program」 after establishment of the association in 2024.
- Collaborative network: the SSLRC connected four villages with a total of nine tribes, such as Alang Snuwill, Alang bwarung, Smratuc, and Délùgǔ, the association was co-found as a communion platform across tribes.

Innovative service model

Kissmarket

The SSLRC partnered with the Qingjing Guest House, where tribal handicrafts were able to sell in the 「kissmarket」. Meanwhile, promoted the philosophy of the association and visitors' concerns of environmental sustainability in 2024.

Ecological Interpretation Services

The SSLRC collaborated with the Yuanfeng Services Center to invite Seediq people of Délùgǔ as interpreters to fit traditional territory and agricultural plant knowledge in nature trail tours. This enabled visitors to:

- Gained a deeper understanding into the truth stories behind Taiwan' landscapes.
- Realized the connection between indigenous peoples and natural environment.
- Felt Seediq people' s unique cultural intelligence and lifestyle.



Ecological interpretation

This model integrated eco-conservation, culture inheritance, and economic development, successfully built a new pathway of sustainable development for tribe' s independant operation.

(3)International sustainability collaboration: ongoing emotion with 「Cambodia, 」 continuous mobility with 「NCNU」

College of Science and Technology USR team responded to SDG 6 Clean Water and Sanitation and SDG 17 Partnerships for the Goals with actual action thru a transnational water resources collaboration project. Provided practical technical and resource support to promote global practice of sustainable development goals.

Program development timeline

● The beginning of early practice (from 2017 to 2019)

- Established the first clean drinking water system, serving about 2,000 people in Boeung Krom Commune, Mukh Kampul District, Kandal Province, located near Phnom Penh, Cambodia in 2017.
- Conducted testing and improvement when returned in 2019. Meanwhile, conducted a fieldwork in Moeng Meanchey Village, Tang Krous Commune, Batheay District, Kampong Cham Province for 2nd location.

● Continued to maintain connection during COVID-19 (from 2020 to 2023)

- Continued to communicate with the Cambodia Sunshine Social Welfare Foundation thru online.
- Discussed the 「water resource and environmental sanitation」 topic, including an assessment for phase I's conditions of use and collaborative model in future.

● 「NCNU」 continued to revolve the new phase in 2024

- Collaborated with the International Sunrise Charity Foundation to support a water resource project at Sreng Kim High School.
- Location: the distance was 82.6 km from Phnom Penh, with a total of 1,714 faculty and students.
- Content of collaboration: joint donation for a slow sand filtration water purification system, with professional technical support
- Long-term plan: established partnership with President Mr. Long Dina to lay the foundation in future.

Social influence

● Media spread:

promoted visibility after nine media reports.

● Established the relationship:

shortened the distance between NCNU and Cambodia for long-term collaboration.

● Health influence:

improved drinking water quality for 1,714 faculty and students to promote health development.



▲ Group photo with faculty and students for launching ceremony of water purification system at Sreng Kim High School, Cambodia

(4) Interdisciplinary mutual learning: RAMTAU diverse culture enhancement program

This program built an inclusive and symbiotic social vision thru diverse cultural dialogue and practice, originating from cultural preservation of indigenous tribe. Focused on the topic of sustainable development at 「social dimension」 based on the core of the dialogue 「fallen behind others」 and 「progressive self.」 This emphasized the university's role and contribution to social responsibility. Conducted the establishment and spread of philosophy and value thru timely and innovative social practice. This practiced the philosophy of global citizen's local practice.

Vision and goal

NCNU was dedicated to address the social topics of people with diverse culture thru a shift in awareness:

1. **Cultivated diverse cultural dialogue ability**, to eliminate social discrimination and achieve social interaction of mutual understanding.
2. **Fostered underprivileged and marginalized groups to voice their needs**, understood deeply their intangible and non-material needs.
3. **Implemented community sustainable development**, responded University Social Responsibility (USR) to everyday local life.
4. **Cultivated topics of seed instructors and youths**, promoted deep-rooted education and social practice.



Learning away from home at ASEAN Square on Apr. 27, 2024



Topic field survey-Great Qingjing Migrant Community on Nov. 23, 2024

Practical strategies and achievements

Innovative interdisciplinary courses

Offered diverse topic-oriented courses and established innovative learning platform:

Type of courses	Number of courses	Number of participants
Formal courses	27	815 students crossed 24 departments from five colleges for electives.
Field surveys	13	439
Multilateral communication among universities	16	1007
Topic lectures	36	1495
Mutual learning and communication of youth groups	11	110
Paulo's movie theater	7	205
Diverse culture mid-night canteen	19	519
Collaborative courses	5	123
Civilian image workshop	1	28

Distinctive courses and innovations

Four main curriculum categories:

- 「Development and population movement」
- 「Topic integration」
- 「Interdisciplinary practicum」
- 「Field-based deepening」

Innovative learning methods:

- Built AO station as an innovative learning platform.
- Integrated theory and practice to cultivate critical thinking skills.
- Promoted cultural sensitivity thru in-depth field survey.
- Built empathy and intercultural conversation skills.



Education rooting action

「Three-phase of education rooting action」:



Topic lectures:

invited experts from various fields to share diverse cultural topics.



Field surveys:

led faculty and students to study fields of diverse cultures and communities.



Development of innovative lesson plans:

assisted faculty to fit diverse cultural topics in teaching.

Education rooting action

1. Established a collaborative preparation group with the Human Right Topic Team of the Compulsory Education Counseling Group, Nantou County
2. Cultivated seed teachers by enhancing training activities on-site.
3. Assisted elementary and secondary school teachers to integrate diverse cultural topics into courses.
4. Responded to 2019 Curriculum Guidelines on diverse culture and global literacy.

Field surveys and exchange of international topics

Conducted international comparison and exchange by connecting domestic and foreign related fields:

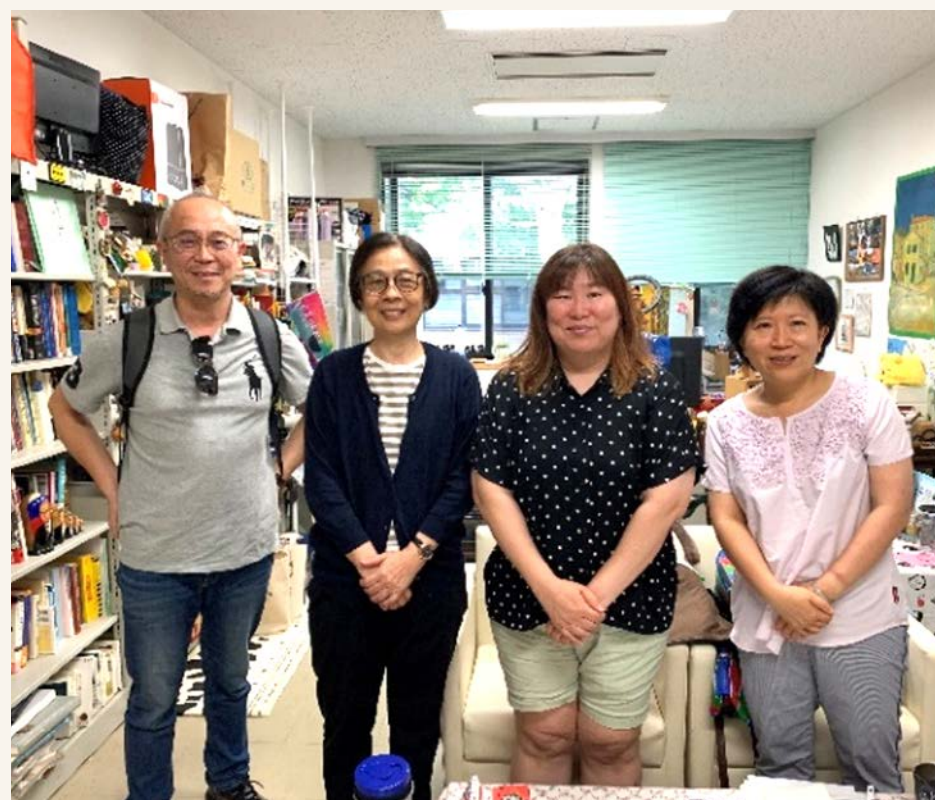
- **Hokkaido University, Japan:**
exchanged topics, such as 「immigration phenomena」 and 「integration of foreigners into Japanese society.」
- **Sapporo Regional Union:**
explored topics, such as migrant worker rights and inclusive diverse culture.
- **International intercultural understanding:**
expanded learners' international outlooks and cultivate global civic awareness.



Exchanged topics, such as diverse culture to expand international outlooks.



Exchanged with Sapporo Regional Union in Hokkaido.



Exchanged topics with related scholars from Hokkaido University.

3. Industry and sustainable innovation

(1) Technology empowered agriculture: local practice of smart agriculture technologies

College of Science and Technology USR was dedicated to promote agricultural sustainable development with technological solutions. This was to practice the Sustainable Development Goals (SDGs).



Establishment of a proper agricultural water management model

The team extended the development of the Agricultural Water Conservation Demonstration Project, in order to practice sustainable water resource management in 2024:

- **Participating field:**
conducted a total of 8.2 ha of water bamboo field monitoring.
- **Basic water consumption:**
farmer Lee used 7,243 mt. during the first cultivation period, whereas farmer Liu used 92,789 mt.
- **Optimized benefits:**
farmer Lee reduced 1,281 mt, whereas farmer Liu reduced 8,629 mt. thru seeding cultivation and water conservation test of bamboo shoot period
- **Overall effect:**
conserved 9,910 mt., achieved 9.9% water-saving rate, and reduced about 1,545 kg CO₂e carbon emissions.

The Farmland Water Resource Sensor Monitoring System and field survey

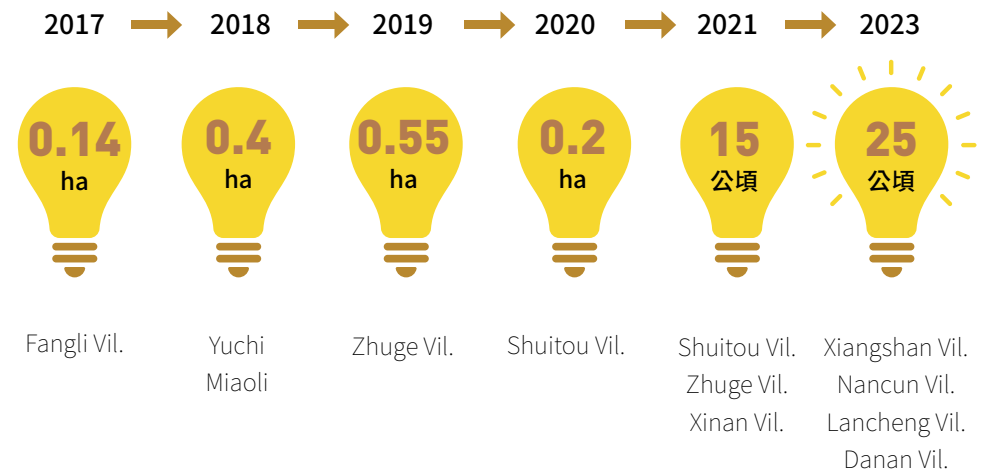


Effectiveness and spread of the LED lighting program

College of Science and Technology USR got involved in the LED lighting program since 2017. Solved agricultural energy consumption problem with technological solution. See below for the program development timeline:

- **Spread phase:**
from the beginning of 0.14 ha in Fangli Village in 2017, expanded to eight villages, including Xiangshan Village, Shuitou Village, Nancun Village, Lancheng Village, Danan Village, Zhuge Village, and Xinan Village in 2023.
- **Growth in scale:**
reached 25 ha total coverage area of the Agricultural Energy Conservation Demonstration Area.
- **Environmental benefits:**
reduced 327,000 kWh electricity consumption and avoiding 165.8 mt. of carbon emissions.

LED lighting project-field spread, reached 25 ha from 2017 to 2023.



(2)Promotion of science outreach education: technological knowledge became popular in local area.

Conducted related science outreach experiments of sustainable development thru science outreach activity to integrate local agriculture and distinctive ecology. This attracted local students and residents to participate, stimulating interests and imaginations in science.

Science outreach train activity design in 2024

College of Science and Technology USR team planned the science outreach train activity in 2024, which featured the following:

- **Diverse collaboration model:**
integrated 17 booths, inviting the joint participation of NCNU (six), Beishan Junior High School (one), Puli Junior High School (two), communities (four), and private enterprises (five).
- **Innovative and interactive design:**
broke away from traditional theoretical explanations by adopting hands-on experience models. Designed multi-stages activities. Earned a star when cleared a stage. Received a gift upon collected nine stars.
- **Promoted learning effectiveness:**
stimulated students' curiosity to increase their interests in science outreach thru engaging and exploratory activities.

Activity benefits and influence

Participation status

- **On/off campus honored guests:**
representatives from Department of Education, Nantou County Government, Nantou County Council, Puli Township, and supervisors at all levels on campus jointly participated.
- **Students participation:**
a total of 507 faculty and students from NCNU, Puli Junior High School, Beishan Junior High School, and Puli Elementary School participated.

Social influence

- **Media attention:**
Five news media reported.
- **Policy support:**
highly commended and committed to support continuously by county government and county council.
- **Expansion effect:**
expanded further to schools in rural areas, such as Ren'ai Township, Yuchi Township, and Sinyi Township.



Taiwan Science Outreach Train-Puli Station in 2024, jointly participated by faculty and students for science outreach activity.

(3) Shui Sha Lian interdisciplinary talent cultivation of sustainable industry

With a principal axis in 「Shui Sha Lian Sustainable Industry,」 the College of Management achieved the vision of sustainable rural development thru interdisciplinary talent cultivation and international exchange.

The vision of the program: this was dedicated to empower on/off campus interdisciplinary talents, increase the employment opportunities for returning to hometown individuals, utilize smart digital technologies, shorten rural-urban divide to cultivate interdisciplinary and intergenerational talents, establish international talent development mechanism thru the spirit of sustainable development in rural-urban areas, and achieve off-site field practice as well as SDG17: Partnerships for the Goals.

Practical strategies and achievements

Local industries sustainable development

Core scheme	Practical details
 Coffee industry	1. Assisted local specialties to promote quality and establish brand. 2. Supported home-returning youths to start business in coffee industry 3. Held coffee-making techniques and quality evaluation.
 Tourism industry	1. Developed sustainable hospitality models. 2. Designed distinctive itinerary and in-depth experiences. 3. Cultivated professional hotel-keepers.
 Distinctive industry	1. Promoted food and agricultural education and recreational area transformation. 2. Developed boutique souvenir. 3. Implemented digital technologies, such as beehive monitoring.

Employee retention/youth entrepreneurship



Mr. Chao-Ting, Ho interned at hotel



Mr. Kuan-Tai, Chen returned to his hometown for the youth entrepreneurship

Highlights and achievements from 2023 to 2024

Youth cultivation and entrepreneurial achievements

Project assistant student Kuan-Tai, Chen

returned to his hometown after graduation to participated in 「2024 Dongshan Estate-Grown coffee Friendly Match」 :

- Teamed with the Roasting Aesthetics Working Group to win the champion.
- Awarded third place in the Tainan Coffee Roasting Competition.
- Awarded second place in the Chuanliu Cup Hand Drip Coffee Competition.
- Established successfully the coffee shop “GOFFEE.”

Dept. of Tourism, Leisure and Hospitality Management, student Chao-Ting, Ho interned at Nahari Hotel in Kochi Prefecture, Shikoku, Japan:

- Hotel supervisor highly commended.
- Full-time employment after graduation

Award-winning students

Dept. of Tourism, Leisure and Hospitality Management, student Yu-Tung, Hsu:

received the Honorable Mention in the University Division of the 6th Just Beverage Art Challenge, Pour Over Coffee in 2024.

Dept. of Tourism, Leisure and Hospitality Management, student Hao-Te, Li and Dept. Of Chinese Language and Literature, student Hui-Chun, Huang:

received the 2024 SDGs SUSTAINABLE BOARD GAME DESIGN COMPETITION, Golden Award.

International exchange and industry-academia cooperation

International exchange achievements

「Rural Tourism and Local Revitalization:
New Directions in ESG Sustainability」 International Forum

2024.6.7

Number of participants: Over 150

Gathered experts from Taiwan, Thailand, and Japan, along with the Association for Agro and Rural Tourism of Taiwan to share experience.

Khon Kaen University, Thailand exchanged.



2024.6.24-27

Number of participants: 22

1. Discussed academic collaboration from both sides.
2. Taiwan and Thailand exchanged food culture.
3. Taught hand made noodle techniques.
4. Experienced Thai cuisine at Blue Elephant Cooking School, Bangkok.

Kochi University, Japan exchanged.



2024.7.18-23

Number of participants: 16

Gained Japan's experience in marketing agricultural specialties and local revitalization experience for promoting Shui Sha Lian agricultural specialties.

Industry-academia collaboration model

Experts, local partners, home-returning youths, and faculty and students jointly discussed:

1. Local specialties development:

promoted quality and established brand for local specialties, such as coffee, tea.

2. Tourism industry upgrade:

promoted hospitality service quality and developed distinctive itinerary.

3. Recreational area transformation:

promoted food and agricultural education and experienced design.

4. Integration of digital application:

utilized smart digital technologies to assist industrial upgrading.

Social influence achievements

1. Talent cultivation:

nurtured interdisciplinary talents with sustainable thinking.

2. Industrial upgrading:

assisted local specialties to promote quality and brand awareness.

3. Local employment:

increased the employment opportunities for returning to hometown individuals.

4. International exchange:

established the international talent development mechanism and the platform for sharing international experiences in sustainable development.



■ The program, 「Shui Sha Lian Talent Cultivation and Cross-Regional Practice,」 received the 2024 Taiwan Sustainability Action Golden Awards.

Expected NCNU to build the foundation for sustainable development in Shui Sha Lian area, achieving the responsibility and mission as the social promoter.

(4) Innovative and entrepreneurial ecosystem: cultivated local and indigenous entrepreneurial talents

NCNU's Entrepreneur Incubator continued to intensify local industrial innovation since the establishment in 1996. A local entrepreneurial ecosystem was developed in recent years to build a combination of economic value and sustainable development of innovative and entrepreneurial environment. This built a local micro-industry support system to promote diversified industries development and inclusive society.

Core mission and values

- Built a local entrepreneurship support and interdisciplinary exchange platform.
- Provided holistic counseling and marketing support.
- Promoted industrial upgrading and sustainable development.

Achievements of faculty and student entrepreneurship

Performance of innovation and entrepreneurship counseling

Provided students with holistic support for innovation and entrepreneurship thru Youth Development Administration, Ministry of Education's U-start Plan and Innovation and Entrepreneurship Education Program for Colleges and Universities:

Achievements

U-start Plan

1. A total of five teams received phase I subsidies (NT\$500,000 individually) from the Youth Development Administration, Ministry of Education from 2022 to 2024.
2. One team received phase II subsidy (highest amount that year) NT\$900,000.

Entrepreneurship Simulation Learning Platform

Two teams received NT\$200,000 individually in 2023.

New brand cultivation

Five student teams established new brands and operated from 2022 to 2024 (IT108, have a meal, and Floating Island SUP in 2022; Strength Pillar Source in 2023; overSEA in 2024).



Ensured education for all, fair, high-quality education, and lifetime learning.



Promoted tolerated and sustainable economic growth, everyone had a good job.



Built diversified partnership to promote sustainable vision.

Distinctive entrepreneurship consulting projects

1 Floating Island SUP (2022):

concatenated the core of local indigenous tribe to develop tourism. Presented vividly the Thao Tribe's traditional water culture and stories thru guided water tours of Sun Moon Lake. This enhanced tourists' understanding and identity of local culture. This team was recognized as an outstanding project of the Year and received highest NT\$900,000 subsidy.



▲ Floating Island SUP-highest NT\$900,000 subsidy of the year

2 Strength Pillar Source Project (2023):

built the first intelligent dispatch system for indigenous tribes. This integrated local demands and distinctive features, assisted indigenous association to manage human resource effectively, optimized work arrangement, and promoted efficiency and community participation.



▲ Strength Pillar Source

3 overSEA project (2024):

development platform focused on southbound markets. Delivered high quality international talents for enterprises thru overseas internships and pre-employment training programs.



▲ overSEA

Diverse resource integration platform

- Concatenated local enterprises, civil organizations, government agencies, and academic institutions.
- Built the ecosystem of supporting local entrepreneurship and sustainable development.
- Provided holistic counseling from launching a startup to growth and expansion.
- Promoted interdisciplinary resource sharing to ensure the benefits of economic, social, and environment.

The distinctive empowerment of indigenous entrepreneurship

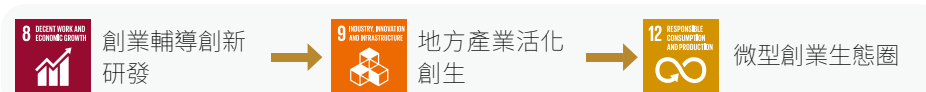
NCNU focused on the development of indigenous youth entrepreneurship to build a support system systematically.

- Established 「Central Area Indigenous Youth Entrepreneurship Ecosystem」 in 2022.
- Held 「Indigenous Youth Dream-Building Camp」 and entrepreneurship empowerment forum in 2023.
- Held 「2024 International Forum for Outstanding Young Innovators」 in collaboration with the Taichung Young Generation Distinguished Citizens Society of the Times.
- Established an intergenerational and interdisciplinary innovation exchange platform.

Sustainable development counseling for startups

Provided specialized counseling mechanism to startups in the incubation and acceleration stages:

- 1. Enterprise diagnosis:** grasped each startup's current development status and needs thru professional diagnosis.
- 2. Specialized counseling:** planned exclusive counseling scheme to tailor-made the strategy for accelerated growth.
- 3. Brand establishment:** assisted startups to establish their brand foundations, with a series of marketing plan courses.
- 4. Expert consultation:** provided guest lecturer consultation mechanism to promote enterprise brand image and market competitiveness holistically.
- 5. Industrial linkage:** fostered the linkage between startups and local industries to create collaborative opportunities.



▲ The Entrepreneur Incubator assisted the exposure and collaboration of new brands.



▲ The tailored-made counseling scheme accelerated industrial linkage.



▲ The International Forum for Innovative & Outstanding Youth gathered 360 talents from industry, academia, and research to demonstrate the achievements of interdisciplinary exchange.

5.3 Diverse culture inheritance: indigenous culture and local exploration

1. Campus tribe development: indigenous cultural education and inheritance

NCNU upheld the philosophy of culture diversity and sustainable education. Actively promoted the philosophy of indigenous cultural preservation and inclusive indigenous education thru campus space development and educational activities design to build a campus with distinctive and diverse indigenous culture since 2015.

Indigenous environmental education field

- Built the 「Indigenous environmental education field」 behind the library.
- Completed constructions, including millet garden, Seediq barn, Atayal bamboo house, Paiwan stone slab house, and Seediq half-underground house.
- The Paiwan stone slab house was shortlisted for the Ministry of Culture's 「Public Art Award-Education Outreach Award」 in 2020.
- Functions of education field: environmental education, cultural experience, and traditional knowledge inheritance.

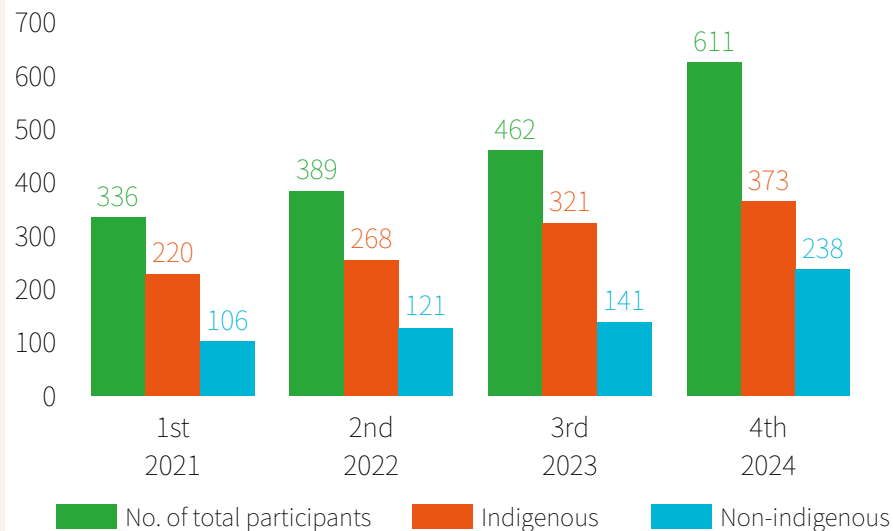
Cultural activities and achievements

The 「Life Festival」 had been held for four years annually since 2021.

The 4th 「Beautiful 4」 Life Festival:

- Designed five senses experience activities based on the subject of the Amis culture.
- Held grassland concert, cultural shop, and market.
- Accumulated a total of 1,800 participants, increasing non-indigenous participants annually.

Number of annual participants in the Life Festival



NCNU integrated SDGs with the fusion of the indigenous traditional wisdom and the philosophy of modern sustainability to establish culture inheritance and promote inclusive and symbiotic on both campus and local community.



2.Revitalizing the Plains Indigenous Culture: historical memory and innovative practice

NCNU offered 「Preservation and Revitalization of Plains Indigenous Culture」 course since 2018. Collaborated with Shui Sha Lian College USR to guide students conducting cultural preservation with innovative approaches in 2023. The course began on the topic of the Plains identity. Fostered students to understand Plains indigenous culture and life hacks, practice knowledge and social connection thru field trip based on six major Plains communities in the Puli region.

Teaching effectiveness and innovation

A total of 85 students enrolled in the course between 2022~2024, exploring the diversity of Plains indigenous culture thru diverse methods.



Cultivating deep thinking

held the 「Plains indigenous culture Summit Debate」 during the course to guide students thinking deeply to cultivate critical thinking skills.



Cultural experience on-site

arranged off campus visits, including Pazeh Homeland, Ailan Ship Mountain, Niumian Cultural Artifacts Museum, Siraya Tribe...etc. Students experienced personally the historical inheritance and the modern development of the Plains indigenous culture.



Cultural dialogue and identity

invited the Babuza Teria for a speech to share the mental journey of culture, history, and seeking self-identity. This intensified students' understanding and empathy to indigenous culture.

Cultural creativity and practice

Students demonstrated their accomplishments after cultureal exploration as follows:

- Board game design
- Creation of picture book
- Puppet micro-movie
- Radio drama

These works integrated stories from Chuanshan and elements of Plains indigenous culture, demonstrating the practical achievements of cultural preservation and innovation. During the courses, students learned to utilize cultural analysis and creative expression techniques to shorten the cultural distance gradually with Plains communities, promoting inclusion and understanding of social culture.



Walked into the Pazeh ancestral hunting ground live-action puzzle game cover.



Students conducted puzzle-solving activities in Pazeh Homeland.



3. Shui Sha Lian outdoor camp: environmental exploration and cultural symbiosis

Japanese anthropologist Torii Ryūzō praised Puli as a 「treasure trove for anthropologists,」 demonstrating the natural and cultural diversity. Shui Sha Lian College USR promoted the Shui Sha Lian outdoor camp since 2023. Upheld the philosophy of 「the entire Shui Sha Lian was a learning field for faculty and students.」 Guided students to experience and explore this land of diverse wisdom by integrating local resources to design innovative exploration routes.

Exploration and educational practice

The Shui Sha Lian outdoor camp practiced the UN's Sustainable Development Goals (SDGs) with field-trip approaches that integrated three subjects-natural ecology, culture and history, and local industries thru a total of 19 exploratory activities (accumulated 366 participants) from 2023 to 2024.

Categorized three kinds of activities:



Cultivating deep thinking

「Firefly watching in Taomi」 and 「Impression of Bakei」 led students to understand local biodiversity and natural resources, such as hematite.



Cultural experience on-site

「Walked into Pazeh」 and 「Takuan Hydro Power Plant exploration」 focused on local cultural preservation and community co-creation. This strengthened students' understanding to history and social sustainability.



Cultural dialogue and identity

i 「Mushroom wandering」 and 「Dried flower crafting」 connected the local industries development and responsible consumption, reflecting the importance of sustainable production.

Sustainable development and influence

These activities not only deepened students' literacies of sustainable topics and practical abilities but also achieved dual values of education and social responsibility. By fostering local culture inheritance, eco-conservation, and industrial innovation, this became iconic learning and sustainable action. Thru connecting campus and communities, Shui Sha Lian outdoor camp successfully built an innovative model of education, environment, and cultural symbiosis, providing a practical field of holistic education and sustainable thinking for students.



▲ The treasure of Bakei: understanding the hematite

Shui Sha Lian College cultivated students' recognition and responsibility to local environment thru diversified outdoor educational activities. By extending the philosophy of sustainable development from classroom to actual action, this reflected the key role of an educational institution in promoting Sustainable Development Goals (SDGs).

06

Appendix



6.1 Independent Assurance Opinion Statement, IAOS

6.2 GRI description and customized subject index

6.1 Independent Assurance Opinion Statement, IAOS

GRI 2-5



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會計師有限確信報告

國立暨南國際大學 公鑒

確信範圍

本會計師接受國立暨南國際大學(以下簡稱暨南大學)之委任,對2024年度永續報告書中所選定之永續績效資訊(以下稱「標的資訊」),執行財團法人中華民國會計研究發展基金會所發布之確信準則所定義之「有限確信案件」並出具報告。

標的資訊及其適用基準

有關暨南大學之標的資訊及其適用基準詳列於附件一。

管理階層之責任

暨南大學管理階層之責任係參考適當之基準編製標的資訊,包括參考全球永續性報告協會(Global Reporting Initiatives, GRI)所發布之2021年GRI準則(GRI Standards)及貴校針對依行業特性所選定之標的資訊,採用自行制定之其他基準,暨南大學管理階層應選擇所適用之基準,並對標的資訊在所有重大方面是否依據該適用基準報導負責,此責任包括建立及維持與標的資訊編製有關之內部控制,維持適當之記錄並作成相關之估計,以確保標的資訊未存有導因於舞弊或錯誤之重大不實表達。

本會計師之責任

本會計師之責任係依據所取得之證據對標的資訊作成結論。

本會計師依照財團法人中華民國會計研究發展基金會所發布之確信準則3000號「非屬歷史性財務資訊查核或核閱之確信案件」之要求規劃並執行有限確信工作,以發現標的資訊在所有重大方面是否有未依適用基準編製而須作修正之情事,並出具有限確信報告。本會計師依據專業判斷,包括對導因於舞弊或錯誤之重大不實表達風險之評估,以決定確信程序之性質、時間及範圍。

本會計師相信已取得足夠及適切之證據,以作為表示有限確信結論之基礎。

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會計師之獨立性及品質管理

本會計師及所隸屬組織遵循會計師職業道德規範中有關獨立性及其他道德規範之規定,該規範之基本原則為正直、公正客觀、專業能力及專業上應有之注意、保密及專業行為。

本事務所遵循品質管理準則1號「會計師事務所之品質管理」,該品質管理準則規定組織設計、付諸實行及執行品質管理制度,包含與遵循職業道德規範、專業準則及適用之法令規範相關之政策或程序。

所執行程序之說明

有限確信案件中執行程序之性質及時間與適用於合理確信案件不同,其範圍亦較小,因此,有限確信案件中取得之確信程度明顯低於合理確信案件中取得者。本會計師所設計之程序係為取得有限確信並據此作成結論,並不提供合理確信必要之所有證據。

儘管本會計師於決定確信程序之性質及範圍時曾考量暨南大學內部控制之有效性,惟本確信案件並非對暨南大學內部控制之有效性表示意見。本會計師所執行之程序不包括測試控制或執行與檢查資訊科技(ITT)系統內資料之彙總或計算相關之程序。

有限確信案件包括進行查詢,主要係對負責編製標的資訊及相關資訊之人員進行查詢,並應用分析及其他適當程序。

本會計師所執行之程序包括:

- 與暨南大學人員進行訪談,以瞭解暨南大學之業務與履行永續發展之整體情況,以及永續報導流程;
- 透過訪談、檢查相關文件,以瞭解暨南大學之主要利害關係人及利害關係人之期望與需求、雙方具體之溝通管道,以及暨南大學如何回應該等期望與需求;
- 與暨南大學相關人員進行訪談,以瞭解用以蒐集、整理及報導標的資訊之相關流程;
- 檢查計算標準是否已依據適用基準中概述的方法正確應用;
- 針對報告中所選定之永續績效資訊進行分析性程序;蒐集並評估其他支持證據資料及所取得之管理階層聲明;如必要時,則抽選樣本進行測試;
- 辨認及測試支持計算的假設;

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- 針對來源資訊之相關文件,抽選樣本進行測試以檢查其正確性;
- 閱讀暨南大學之永續報告書,確認其與本會計師取得關於永續發展整體履行情況之瞭解一致。

先天限制

因永續報告中所包含之非財務資訊受到衡量不確定性之影響,選擇不同的衡量方式,可能導致績效衡量上之重大差異,且由於確信工作係採抽樣方式進行,任何內部控制均受有先天限制,故未必能查出所有業已存在之重大不實表達,無論是導因於舞弊或錯誤。

結論

依據所執行之程序及所取得之證據,本會計師未發現標的資訊有未依照適用基準編製而須作重大修正之情事。

安永聯合會計師事務所

會計師: 羅文振



西元二〇二五年七月二十四日

3

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GRI 1: basic 2021 [GRI 1 excluding any disclosure]

6.2 GRI description and customized subject index

GRI criteria	Disclosed items	Chapter	Page No.	Omission/comment
[GRI 2] 一般揭露 2021	Organization overview and report			
	2-1 Organizational details	1.2	P13	
	2-2 Entities included in the organization's sustainability reporting	About this report	P2	
	2-3 Reporting period, frequency and contact point	About this report	P2	
	2-4 Restatements of information	About this report	P2	
	2-5 External assurance	About this report Independent Assurance Opinion Statement, IAOS	P2 、 97	
	Activity and working personnel			
	2-6 Activity, value chain, and other business relationships	Images of sustainable development	P4	
	2-7 Employees	1.2	P13	
	2-8 Workers who are not employees	1.2	P13	
	Governance			
	2-9 Governance structure and composition	1.2	P13	
	2-10 Nomination and selection of the highest governance body	1.2	P13	
	2-11 Chair of the highest governance body	1.2	P13	
	2-12 Role of highest government body in overseeing the management of impacts	1.2	P13	
	2-13 Delegation of responsibility for managing impacts	1.2	P13	
	2-14 Role of highest government body in sustainability reporting	1.2	P13	
	2-15 Conflict of interest	1.2	P13	
	2-17 Collective knowledge of the highest governance body	1.2	P13	
	2-18 Evaluation of the performance of the highest governance body	1.4	P22	
	2-19 Remuneration policies	4.2	P64	
	2-20 Process to determine remuneration	4.2	P64	

GRI criteria	Disclosed items	Chapter	Page No.	Omission/comment
[GRI 2] general disclosure 2021	Strategy, policy, and practice			
	2-22 Statement on sustainable development strategy	Word from president	P3	
	2-23 Policy commitments	Images of sustainable development and 1.1	P4 、 12	
	2-24 Embedding policy commitments	1.1	P12	
	2-25 Processes to remediate negative impacts	1.4	P22	
	2-26 Mechanisms for seeking advice and raising concerns	Communications with stakeholders	P10	
	2-27 Compliance with laws and regulations	1.4	P22	
	2-28 Membership associations	2.4	P42	
	Stakeholders' agreement			
	2-29 Approach to stakeholder engagement	1.5	P24	
	2-30 Collective bargaining agreements	-	-	None of agreement signed with faculty and staff

GRI criteria	Disclosed items	Chapter	Page No.	Omission/comment
[GRI3] general disclosure 2021	重大主題揭露			
	3-1 Process to determine material topics	1.5	P24	
	3-2 List of material topics	1.5	P25	
	3-3 Management of material topics	1.5	P26	

Major subjects

Specific subjects disclosure

GRI criteria	Disclosed items		Chapter	Page No.	Omission/comment
Economic performance					
GRI 201 economic performance2016	201-1	Direct economic value generated and distributed	1.3	P16-21	
GRI302 energy	302-1	Energy consumption within the organization	3.2	P46-49	
	302-4	Reduction of energy consumption			
GRI303 water and effluent	303-2	Management of impacts related to effluents	3.1	P50	
GRI 304 biodiversity 2016	304-4	Organization possessed, leased, managed branches or adjacent areas, which located in environmental protection areas or other areas of high biodiversity value.	3.4	P57-58	
GRI306 waste 2016	306-2	Wastes by categories and disposal methods	3.2	P51	
Non-discrimination					
GRI 406 non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	4.1	P61	No discriminatory incidents
Rights of indigenous people					
GRI 411 rights of indigenous people 2016	411-1	Incidents of violations involving rights of indigenous peoples	4.1	P61	No violations against the rights of indigenous people
Local community					
GRI 413 local community 2016	413-2	對 Operations with significant actual and potential negative impacts on local communities	5	P75-95	

GRI criteria	Disclosed items		Chapter	Page No.	Omission/comment
NCNU custom subjects					
Brand vision	NCNU-01	Cultivated talents with skills and morality, holistic developments, innovation excellence, local consciousness, and global outlooks.	1.2	P13-15	
Learning effectiveness/ career counseling	NCNU-02	Cultivated integrated SIGMA talents with sustainable development capability (S), information technology capability (I), governance transition adaptability (G), multicultural capability (M), and accreditation in career (A).	4.4	P67-72	
Quality of education	NCNU-03	Overall teaching quality, strengthened NCNU’ s competitiveness.	2.2	P37-39	
Research achievement	NCNU-04	Competitiveness and professional growth of teaching, research and service	2.1	P33-34	
Student life counseling	NCNU-05	Improved underprivileged counseling mechanism.	4.4	P67-72	
Brain vision	NCNU-01	Cultivated talents with skills and morality, holistic developments, innovation excellence, local consciousness, and global outlooks.	1.2	P13-15	

6.3 Task Force on Climate-Related Financial Disclosures (TCFD) Comparison Table

Code	TCFD suggested disclosures	頁碼
Governance		
	Described the organization's supervision of climate-related risks and opportunities.	52
	Described the management role in assessing and managing climate-related risks and opportunities.	53
Strategies		
	Described the organization's short, medium, and long term identifications of climate-related risks and opportunities.	53
	Described the impact of climate-related risks and opportunities on the organization's business, strategy, and finance planning.	54
	Described the organization's strategic resilience and considered different climate-related scenarios (included a 2°C or lower scenario).	55
Risk management		
	Described the organization's management processes of climate-related risks.	55
	Described climate-related Risk assessment matrix.	55
Indicators and goals		
	Described the organization's goals and measures of major risks and opportunities management, in terms of climate-related risks.	56

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