[SDGs 17] Partnership for the Goals

[17.3.1] Please indicate if your university publishes progress against SDG1

NCUT's Collaboration with NGOs to Support the United Nations Sustainable Development Goals (SDGs)

NCUT actively aligns its institutional strategy with the United Nations 2030 Agenda for Sustainable Development, emphasizing partnership (SDG 17) as the foundation for achieving all other goals. NCUT recognizes that universities play a pivotal role not only in education and research but also in mobilizing partnerships that link academia, industry, and society. Through sustained collaboration with non-governmental organizations (NGOs), enterprises, and local governments, NCUT integrates education, research, and community engagement to create scalable impact in environmental protection, climate action, social inclusion, and responsible innovation.

1. **These NGO partnerships serve three primary purposes:**

   A. Translating academic research into community-driven sustainable practices**;**

   B. Empowering local industries and citizens with practical ESG and SDG competencies**;**

   C. Extending Taiwan's contribution to global sustainability dialogues and cooperation frameworks**.**

2. **Academic–NGO Cooperation for Sustainable Innovation**

   A. **Establishment of the ESG Sustainable Development Center**

In 2023, NCUT established the ESG Sustainable Development Center, designed as a comprehensive platform that integrates research, training, and consulting for enterprises pursuing net-zero transformation. The Center collaborates closely with the ESG Sustainable Development Association of Taiwan and Bell International Inspection and Certification Group, building a service network that unites corporate, academic, and civil-society partners.

Through these alliances, NCUT provides:

- Carbon-inventory services compliant with ISO 14064-1 and ISO 14067 standards;

- Carbon-optimization and emission-reduction planning tailored for SMEs;

- Certification and auditing support in partnership with international NGOs and professional bodies;

- Training for ESG professionals, bridging academia and industry through workshops and practical simulations.

This collaborative framework not only strengthens the university's applied-research capacity but also accelerates Taiwan's progress toward its 2050 Net Zero Emission Goal.

B. Research-Driven Environmental Cooperation

NCUT's research teams engage with multiple environmental NGOs to co-develop applied technologies for pollution prevention, resource recycling, and renewable energy deployment. Examples include:

- Joint projects with Taiwan Hydrogen and Fuel Cell Association on hydrogen-energy demonstration and safety testing;

- Collaboration with Taiwan Energy and Environmental Development Association to monitor community carbon footprints and design localized carbon-reduction plans;

- Joint studies on circular-economy models with the Taichung Environmental Education Alliance, focusing on industrial waste reutilization and life-cycle analysis.

3. Capacity-Building and Education for Sustainable Development

A. ESG and SDG Training Courses

NCUT works with NGOs and professional associations to design cross-disciplinary ESG curricula open to students, corporate representatives, and the general public. These courses integrate environmental science, social governance, and sustainable finance. Examples include:

- ESG Carbon Management Certification Program, co-organized with the ESG Sustainable Development Association;

- Corporate Sustainability Reporting Workshops, introducing GRI Standards and TCFD Frameworks;

- Circular Economy Design Lab, conducted jointly with regional environmental NGOs to help SMEs reduce waste and energy consumption.

B. Youth and Community Engagement

NCUT's University Social Responsibility (USR) Promotion Office integrates NGO resources into community-oriented sustainability education. Students participate in "learning-by-doing" projects—waste-sorting drives, carbon-reduction campaigns, and energy-saving workshops—guided by NGO mentors.

Through these service-learning modules, NCUT transforms academic learning into real-world sustainability action while cultivating civic responsibility and global awareness among students.

C. Global Education Exchange and SDG Capacity Networks

In partnership with international NGOs and educational organizations, NCUT promotes transnational sustainability learning:

- Collaboration with Overseas Community Affairs Council (OCAC) and NGO partners for the Industry-Academia Co-operative Bachelor's Program for overseas Chinese students, emphasizing SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

- Joint faculty development programs with the Czech Jihlava Institute of Technology, exchanging best practices in green engineering and sustainability pedagogy.

4. Community-Based Environmental and Social Campaigns

A. Waste Reduction and Resource Recycling Campaigns

Together with municipal NGOs, NCUT runs continuous outreach campaigns on waste segregation, recycling, and composting. Activities include:

- Public workshops demonstrating household waste sorting and food-waste composting;

- Campus–community partnerships promoting plastic-free lifestyles;

- Donation of reusable items and participation in "Zero Waste Taichung" campaigns led by environmental NGOs.

B. Plastic-Reduction and Green Living Projects

Aligned with Taiwan's Single-Use Plastic Directive, NCUT collaborates with the Taichung Environmental Protection Bureau and local NGOs to advocate "Bring Your Own Container" and reusable tableware. Awareness campaigns, educational posters, and training sessions encourage both students and community members to adopt eco-friendly consumption habits.

C. Sustainable Transportation and Low-Carbon Mobility

NCUT partners with local NGOs to expand bicycle-sharing systems and promote electric-vehicle use. Joint events such as "Green Commuting Day" integrate environmental education with public participation, contributing to reduced campus and community carbon emissions.

5. Academia–Industry–NGO Integration and Knowledge Transfer

A. Technical Training and Knowledge Dissemination

NCUT organizes open lectures and technical exchanges with NGOs and corporate partners to promote sustainable manufacturing and energy efficiency. For example:

- The lecture "Planning and Energy-Saving Design of Air Compressed Utility Systems", delivered by alumnus Chiu Chun-mao (General Manager of Neoair Co.), showcased the

synergy between academia and enterprise in developing low-carbon industrial technologies.

- The Taiwan Hydrogen and Fuel Cell Conference co-hosted by NCUT and NGOs created an international platform for sharing hydrogen-energy innovations and policy frameworks.

B. Technology Transfer and Sustainable Innovation Projects

Through its Industry-Academia Collaboration Office, NCUT facilitates technology-transfer agreements with companies engaged in green manufacturing, environmental monitoring, and renewable-energy production. Many of these enterprises are NGO members or collaborate with civil-society networks, allowing NCUT to amplify the impact of its research beyond academia.

6. Regional and International Partnerships for SDG Implementation

A. Local and Regional Engagement

NCUT collaborates with the Taichung City Government and local NGOs in the "Gaia Day" initiative, promoting climate-change awareness through public exhibitions, tree-planting events, and citizen-science projects. Similar partnerships extend to rural communities in Changhua and Nantou, where NCUT students assist NGOs in developing environmental education curricula for elementary and junior-high schools.

B. International Collaboration and Volunteering

Through its global NGO alliances, NCUT broadens its reach across Asia:

- **Chiang Rai Overseas Volunteer Team Program**: NCUT students travel to Thailand to conduct environmental-education workshops and English teaching, promoting SDG 4 (Quality Education) and SDG 13 (Climate Action).

- **"Green University Partnership Network"**: joint programs with institutions and NGOs in Japan, Czech Republic, and Indonesia to exchange sustainability innovations and campus-management models.

7. Impact and Outcomes

A. Institutional Impact

- Establishment of comprehensive ESG and SDG governance structure, integrating NGO partnerships into NCUT's administrative framework.

- More than 50 industry and NGO cooperation projects conducted annually through the Sustainable Development Center.

- Development of sustainability performance indicators (SPIs) for continuous monitoring of carbon reduction, energy efficiency, and community impact.

B. Educational Impact

- Over 3,000 students and corporate participants trained in ESG and sustainability fields.

- Integration of service-learning courses linked to NGO partnerships into all five colleges.

- Enhanced student employability through internship opportunities in NGO-led sustainability programs.

C. Societal Impact

- Tangible reductions in community carbon emissions through joint awareness and recycling campaigns.

- Strengthened public understanding of sustainable lifestyles and energy conservation.

- Creation of long-term regional sustainability alliances connecting NCUT, local governments, and NGOs.

8. Future Directions

To sustain and expand its impact, NCUT aims to:

- Establish an SDG Collaboration Platform integrating NGOs, enterprises, and international partners for policy exchange and joint research.

- Develop digital ESG tools that enable local SMEs and NGOs to track and report sustainability performance.

- Expand international outreach, forming partnerships in Southeast Asia and Europe to promote transnational SDG research and training.

- Institutionalize NGO participation in NCUT's annual sustainability reporting and evaluation processes to ensure transparency and accountability.

NCUT's collaboration with NGOs exemplifies how higher-education institutions can translate global goals into local and regional action. By aligning research, education, and community engagement with civil-society partnerships, the university bridges the gap between theory and practice, policy and implementation. Its initiatives—from carbon-management consulting and community climate campaigns to global volunteer programs—reflect NCUT's holistic approach to sustainable development.

Through these cooperative frameworks, NCUT demonstrates leadership in promoting inclusive, innovative, and effective pathways to achieving the UN Sustainable Development Goals. The university's long-term engagement with NGOs ensures that its impact is not confined to campus borders but extends to industries, communities, and international partners, embodying the spirit of Partnerships for the Goals (SDG 17).

Shuttles for Exam Candidates

- Education Overturns Poverty – Enhancing the quality of education for economically disadvantaged students

- Guidance for Professional Certificate Awards

>>Brief description >>	Micro-credit courses for certificates are offered so that students can choose courses based on their needs, with an attendance rate of over 80%. These courses allow students to obtain multiple professional certificates, enhancing their integration of disciplines and theory. An additional scholarship for English language learning is also provided.
>>Results>>	Statistics on this program from the past three years are shown in table

Statistics on Professional Certificate Awards

Year	Students eligible for tuition and fee exemption	Students eligible for the Ministry of Education's Disadvantaged Scholarships	Indigenous students	Total
2022	12	22	0	34
2023	14	11	2	27
2024	17	7	1	25

>>Brief description >>	1. Online Learning: Complete MOOC courses, pass assessments, and obtain certificates. 2. Students who acquire an 18-hour course completion certificate are eligible to apply for rewards.
>>Results >>	An 18-hour course completion is rewarded with NT$20,000, substituting learning hours with a work-study approach to allow students to gain tangible learning outcomes. Statistics on the MOOCs Learning Incentive Program from the past three years are presented in following table.

Incentives for MOOCs Learning

>>Brief description >>	1. Online Learning: Complete MOOC courses, pass assessments, and obtain certificates. 2. Students who acquire an 18-hour course completion certificate are eligible to apply for rewards.
>>Results >>	An 18-hour course completion is rewarded with NT$20,000, substituting learning hours with a work-study approach to allow students to gain tangible learning outcomes. Statistics on the MOOCs Learning Incentive Program from the past three years are presented in following table.

Statistics on the MOOCs Learning Incentive Proogram

Year	Students eligible for tuition and fee exemption	Students eligible for the Ministry of Education's Disadvantaged Scholarships	Indigenous students	Total
2022	135	89	29	253
2023	280	167	52	499
2024	304	152	40	496

Life Bridge Program [Office of Academic Affairs

>>Brief description >>	1. Students are encouraged to learn knowledge and skills from entrepreneurial mentors before graduation. This initiative helps students develop the right attitudes and mindset, gain a deeper understanding of workplace practices, and better prepare for their future careers before beginning employment. 2. Through a 36-hour pre-employment preparation course and mentor-student pairings based on the mentor's expertise and the student's field of study, the program creates the most valuable learning experiences.
>>Results >>	Each participant completes 36 hours of coursework, submits assignments, and delivers a final presentation to qualify for a subsidy of NT$30,000. Statistics on the Life Bridge Program over the past two years are presented in following table.

Statistics on the Life Bridge Program

Year	Students eligible for tuition and fee exemption	Students eligible for the Ministry of Education's Disadvantaged Scholarships	Indigenous students	Total
2023	21	11	1	37
2024	20	9	2	31

▲Life Bridge Program

Maker Learning Course

>>Brief description >>	Students are encouraged to enroll in innovation and entrepreneurship training courses or activities to enhance their learning efficiency (limited to in-person courses offered at the on-campus Maker Base.)
>>Results >>	Students are motivated to participate in Maker Learning Courses. Statistics on the Maker Learning Course Incentive Program from the past three years are presented in following table.

Maker Learning Course

U-Start Reward Program

>> Brief description >>	Students are guided to participate in a series of innovation and entrepreneurship training courses or activities and to take part in various competitions both on and off campus, showcasing their learning outcomes.
>>Results >>	Students have been assisted in competing in innovative "maker" competitions and "Makerthon" by demonstrating their learning results. Statistics from the past three years are shown in the following table.

Statistics on the U-Start Reward Program

Year	Students eligible for tuition and fee exemption	Students eligible for the Ministry of Education's Disadvantaged Scholarships	Indigenous students	Total
2022	32	15	1	48
2023	34	18	1	53
2024	20	9	1	30

U-start Reward Program

Creative Innovation and Skills Training Incentive Program

>> Brief description >>	1. This program, organized by the Office of Industry-Academia Collaboration, promotes innovation, entrepreneurship, creative thinking, and technical training through on-campus and off-campus courses, including lectures, workshops, and hands-on technical activities. 2. Mandatory Requirement: Visit the university's Art Center at least once and provide a photo showing the visit date and time. This proof is valid for one application only. 3. Elective Courses: Participate in nationwide innovation, entrepreneurship, or technical training activities, such as lectures, workshops, or hands-on experience. Applicants must accumulate 18 hours of learning, with a minimum of one hour per course to count toward the total.
>>Results >>	Applicants must submit training certificates or evidence of participation issued by the hosting unit. Approved cases are eligible for a subsidy of NT$10,000 each, with a maximum of two applications per person. Statistics on the Creative Innovation and Skills Training Incentive Program from the past three years are shown in the following table.

Statistics on the Creative Innovation and Skills Training Incentive Program

Year	Students eligible for tuition and fee exemption	Students eligible for the Ministry of Education's Disadvantaged Scholarships	Indigenous students	Total
2022	32	15	1	48
2023	34	18	1	53
2024	20	9	1	30

▲Metalworking Dog Tag Necklace Crafting   ▲Cement Succulent Pot Design and Creation   ▲Leather Beverage Carrier Crafting   ▲Tong Yang Blue Workshop   ▲Test Rite Retail DIY Creative Space

University Anti-Poverty Project – Disadvantaged Student Assistance Program

Student Aid

- To further support disadvantaged students in successfully attending school, NCUT assists college students whose family annual income is approximately in the bottom 40% bracket via subsidies from the government or the school.

- Statistics on student aid under the Disadvantaged Student Assistance Program from the past three years are presented in the following table.

Academic year	Day-school		Office of Continuing Education	
	Students	Total subsidy funds (NT$)	Students	Total subsidy funds (NT$)
2022	295	4,050,250	108	1,422,000
2023	246	3,415,000	96	1,225,250
2024	245	4,736,500	101	1,985,000

Tuition and Fees Exemption

A tuition and fees exemption mechanism has been implemented to alleviate the financial burden, enabling students to pursue their education with peace of mind and complete their studies. Statistics on tuition and fee exemption subsidies from the past three years are presented in the following table.

Statistics on Tuition and Fee Exemption Subsidies

Academic year	Semester	Descendants of military and civil servants	Children of active-duty military personnel	Students from low-income households	Students from middle-income households	Students with disabilities and children of disabled individuals	Children and grandchildren of families facing special circumstances	Indigenous students	Total number of disadvantaged students
2022	2022-1	5	1	235	305	466	61	110	1,183
	2022-2	6	0	188	294	462	57	105	1,112
2023	2023-1	6	1	242	314	441	67	111	1,182
	2023-2	6	1	190	289	439	55	106	1,086
2024	2024-1	6	0	244	315	462	48	109	1,184
	2024-2	6	0	175	245	441	48	104	1,019

Economically disadvantaged education flipping poverty plan

The "Economically Disadvantaged Education Flipping Poverty Plan" is a comprehensive strategy aimed at addressing poverty through education. This plan recognizes that education plays a crucial role in breaking the cycle of poverty and improving economic opportunities for individuals and communities. Here are some key elements and strategies typically associated with such a plan:

1. **Access to Quality Education:** The plan focuses on providing economically disadvantaged individuals, especially children and youth, with access to quality education. This may involve improving and expanding educational facilities, reducing barriers to enrollment, and ensuring that schools in disadvantaged areas have the necessary resources and qualified teachers.

2. **Early Childhood Education:** Recognizing the importance of early education, the plan may include initiatives to provide preschool education or early childhood development programs for economically disadvantaged children. These programs aim to prepare children for success in school and beyond.

3. **Scholarships and Financial Aid:** To make higher education more accessible, the plan may include scholarships, grants, or financial aid programs for students from low-income backgrounds. This can help reduce the financial burden of attending college or vocational training programs.

4. **Adult Education and Skills Training:** Poverty reduction plans often include adult education and skills training programs. These initiatives help adults acquire new skills or improve existing ones, increasing their employability and income-earning potential.

5. **Career Counseling and Guidance:** Providing career counseling and guidance services can help individuals, particularly youth, make informed decisions about their education and career paths. This can lead to better employment opportunities and reduced poverty rates.

6. **Community Support Services:** In addition to education, addressing poverty may require a range of support services such as healthcare, housing assistance, and access to nutritious food. These services can complement educational efforts by addressing the broader needs of economically disadvantaged individuals and families.

7. **Employment Opportunities:** The plan may also aim to create or expand job opportunities in economically disadvantaged areas. This could involve attracting businesses, promoting entrepreneurship, or investing in job training programs.

8. **Monitoring and Evaluation:** To assess the effectiveness of the plan, monitoring and evaluation mechanisms are typically put in place. This involves tracking key indicators such as school attendance, academic performance, graduation rates, and changes in income levels among the target population.

9. **Collaboration and Partnerships:** Poverty reduction plans often involve collaboration among government agencies, educational institutions, non-profit organizations, and community groups. Partnerships can leverage resources and expertise to implement effective interventions.

10. **Sustainability:** Sustainable poverty reduction requires a long-term commitment. The plan may outline strategies for ensuring the continuity of education and support services to prevent individuals from falling back into poverty.

It's important to note that the specific details of an economically disadvantaged education flipping poverty plan can vary depending on the region, available resources, and the unique needs of the target population. Such plans are typically designed to address the root causes of

poverty and empower individuals and communities to achieve economic stability and upward mobility through education.