

17 PARTNERSHIPS
FOR THE GOALS



SUSTAINABILITY REPORT
TAMKANG UNIVERSITY

2020
PARTNERSHIPS
FOR THE GOALS





PARTNERSHIPS FOR THE GOALS

Relationships to support the goals

In 2020, TKU has 101 teachers serving in governmental units, undertaking a total of 303 governmental units and sustainable development goals-related projects; another 74 teachers serving in non-governmental organizations, participating in the formulation of sustainable development goals policies. Relevant policy formulation or provision of consultation and other tasks include primary and secondary education, international politics, labor relations, economic development, environmental improvement, biochemical medicine, water resources conservation, engineering technology, disaster prevention, and other topics. Facing the COVID-19 pandemic, TKU still managed to conduct 12 international academic seminars related to sustainable development goals. In 2020, TKU published at least 105 journal papers with international scholars and received 13 MAGIC programs subsidized by the Ministry of Science and Technology. Cooperation with international NGOs includes: obtaining the assistance of the International Jane Goodall Education and Conservation Institute to implement the graduation project "Fun in the Forest," advocating the correct way to get close to forests and animals, integrating multimedia and technology into daily life, and learning to coexist with nature, promoting forest protection educa-

tion; assist non-profit organizations with fundraising, assist NGOs in implementing sustainable development projects; assist in the construction of websites, digital learning and other matters; assist the foundation in proposing creative social marketing proposals; the Cambodian service learning group is conducted in Kampot Province, Cambodia Chinese and computer teaching services and local trainings of teachers; the Thai Service Study Group went to Bang Nam Trang School and Nansai School in Phengsilaok, Thailand to conduct Basic Mandarin teaching, practical life courses, village material distribution, interviews and exchanges. Cooperated with the local NGO section and the Tamsui Historic Sites Museum, started with student service learning, combined with translation theory and skills, to translate the Chinese webpage guides of the Tamsui Historic Sites Museum into Spanish; the "Global Local Action Practice Project" cooperates with educational institutions or NGOs to lead Students enter local community institutions, continue cooperative relationships, create operating models, obtain public welfare resources, achieve goals and produce results; combine junior year's overseas experience and language skills to apply the local culture and practice SDG4 goals; carrying out the "Influence of Natural Disasters on Managers' Compensation" to explore whether natural disasters are a non-monetary factor that affects managers' salaries, to increase public attention to the risks of natural disasters and their impact on corporate governance policies; cooperated with the Suao Township Office to plan the vision of smart urban and rural areas and cooperated with the Department of Innovative Information and Technology to proposed a demonstration system and the achievable prototype plan; and also cooperated with the Lanyang Museum to discuss the use of the Internet of

Things, mobile devices, digital interactive machines, etc., to enhance the interactive environment between the museum and tourists; and the creation of a voice interactive commemorative photo shooting site as the procurement of hardware were completed and the development of relative software commenced; an alliance has been signed with the Taiwan Sustainable Energy Research Foundation, the CTCI Education Foundation (CTCIEF), and other private organizations to promote sustainable development goals; the University's Social Responsibility Practice Project Tamsui Good Life Team cooperates with Tamsui area primary and secondary schools to expand the learning results of educational resources. The Department of Information and Library Science and the teaching faculties of the Department of Educational Leadership and Technology Management assist local schools to provide after-school tutoring for students.

Relationships with regional NGOs and government for SDG policy

In 2020, 101 teaching faculties of TKU served as consultants, deliberative members, professional evaluation members, review members, or advisory members in governmental units to assist the government in formulating or promoting relative policies of sustainable development goals; TKU also undertakes a total of 303 projects relative to sustainable development goals (SDGs) and jointly formulates SDG policies with governmental units. The key points are summarized as follows:

1. The teaching faculty of the Department of Chinese from the College of Liberal Arts served as the member of the "Long-term

follow-up evaluation plan for Chinese reading literacy," responsible for reviewing the content of the plan, actual measurements and evaluations, and standard-setting to the understanding of the effectiveness of the implementation of the new 12-year national education syllabus.

2. Two teaching faculties from the College of Science implemented governmental projects. One project combines organic synthesis cell culture and embryo observation to develop new anti-kidney cancer substances; another project proposed a new biflavonoid (biflavone) synthesis method, the results may provide a reference for relative synthesis in the future. In addition, two teaching faculties implemented the Ministry of Science and Technology project, using theoretical calculation methods to study protein sequences related to Amyotrophic Lateral Sclerosis (ALS). The research results may provide the fundamental knowledge of medication design.
3. The teaching faculty of the Department of Water Resources and Environmental Engineering of the College of Engineering was employed as an independent director of Taiwan Water Supply Company under the Ministry of Economic Affairs, and a member of the Taipei City Government's "Taipei Disaster Prevention Expert Advisory Committee" as well as a member of the "Deji Water Reservoir Management Committee" of the Ministry of Economic Affairs. Committee members jointly promote the implementation of sustainable development goals.
4. The Department of Economics of the College of Business and Management will guide the establishment of a fish-vegetable

symbiosis system in the ECC School campus in July 2020. In the future, it will focus on the establishment of operable and monitorable operation modules.

5. The teaching faculty of the Graduate Institute of European Studies from the College of International Affairs has long been concerned about EU-related issues. They often cooperate with governmental agencies and non-governmental organizations, accepting the commissioning of their research projects or participating in the review, and provide professional opinions as a policy reference. In 2020, the Department of Diplomacy and International Relations has two instructors that implemented governmental projects related to SDGs.
6. The teaching faculty of the College of Education has long served as members of the twelve-year national education and 108 syllabus relative committees and revisional groups of the governmental agencies, participated in a series of Ministry of Education's promotions of the primary and secondary school curriculums and evaluation committees, and are committed to promoting governmental departments that promote the 108 syllabus. Cross-system collaboration and adjustments of the syllabus, and provide relevant professional opinions on the implementation of the syllabus as well as the professional development of teachers.

In 2020, 22 teachers of TKU served as directors, supervisors, non-positional directors, or chairpersons of NGOs, and worked with NGOs to formulate the policies of sustainable development goals. The key points are summarized as follows:

1. The Department of Economics from the College of Business and Management and the Cambodian NGO ECC School discussed the sustainable development goals of the economy and tried to establish a cycle farming system.
2. In 2020, the teaching faculty of the Graduate Institute of European Studies from the College of International Affairs served as the advisory committee member of the "Document Collection, Symposium, and Interviews for the Sustainable Development of Free Trade Agreements between the European Union and Other Countries" hosted by the Association of Industrial Relation, Taiwan.

Cross sectoral dialogue about SDGs

In 2020, due to the impact of the COVID-19 pandemic, TKU hosted a total of 12 international academic seminars related to sustainable development goals, and conduct inter-departmental dialogues with governmental organizations on sustainable development goals. The highlights are as follows:

1. Through participating in various seminars, the teaching faculties of the College of Science continued their communication and academic exchanges with domestic and foreign experts and scholars, this benefits the domestic bio-organic chemistry cross-field research, future planning, cancer medical breakthroughs, and other topics.
2. The teaching faculties from the Department of Architecture of the College of Engineering participated in the construction of healthy promotional plans for workplace workers. The civil engineering teacher serves as a member of the CTCI Education Foundation (CTCIEF) and the Taiwan Sustainable Energy Research Foundation. They meet regularly to provide consultations and assist the foundation in promoting sustainable development goals.
3. Students from the Department of Management Sciences of the College of Business and Management participated in the activity of the Ministry of Education and won the Best Inspiration Award. The Department of Public Administration organized the "Labor Rights and Regulations Adjustment Series Forum in the Digital Platform Economy" to build consensus in the industry through joint industry-academia participation and labor-management cooperation. This gradually expands and deepens discussions on the protection of the rights and interests of couriers, which is an important part of policy formulation and implementation backup force.
4. The 3 relative conferences that the College of International Affairs participated in from 2018-2021 in Europe are all related to the COVID-19 pandemic, public health, and EU governance; the Graduate Institute of International Affairs and Strategic Studies hosted the "2nd Japan & Global Political and Economic Changes Under the Influence of COVID-19 Academic Symposium," and published 24 papers, and invited scholars from Malaysia, Poland, Japan, Mainland China, and South Korea. A total of 45 people from 6 countries participated; they've also participated in the video conference of the National Institute of Basic Issues in Japan to discuss the first island Chain defense and other related issues; the Graduate Institute of China Studies has organized a semi-

nar on "Taiwan and Southeast Asian Countries' Perspectives on China," inviting experts and scholars of China Studies institutions from Malaysia, Singapore, Vietnam, and India, hoping that discussions with different research perspectives will help Taiwan promote a new southbound policy while strengthening partnerships; Assistant Professor Dr. Mor Sobol from the Department of Diplomacy and International Relations participated in the ODKJG and gave a presentation on the subject of "Negotiating the ultimate deal? Trump's Middle East policy and its effect on China and EU's involvement in the peace process," which analyzes how U.S. policy affects China and the European Union (EU)'s participation in the peace process.

5. In 2020, the Graduate Institute of Educational Policy and Leadership from the College of Education and the Chinese School of Future Education Society worked with National Academy for Educational Research to organize the "Human and Land: Local Studies and University Social Responsibility in the New Curriculum Era" academic seminar to discuss the new syllabus era. The significance and practice of university social responsibility and local studies are shared. In 2020, the Graduate Institute of Educational Psychology and Counseling and Xingren Elementary School in the Tamsui District conducted 3 cooperation-discussion sessions of the cross-disciplinary narrative projects to construct the educational resources of TKU and Xingren Elementary School; the director of the Graduate Institute of Educational Psychology and Counseling participated in the Taoyuan City Domestic Violence and Sexual Assault Committee and Child and Adolescent Sexual Exploitation Prevention

and Control Consultation Conference on June 5th and December 4th, 2020 to construct policies and prevention guidelines for safety and sexual equality. The Graduate Institute of Futures Studies participated in the "UNESCO Futures Literacy Summit 2020" video conference hosted by UNESCO in 2020. TKU President, Dr. Huan-Chao Keh delivered a speech at Futures Studies Journals Booth, giving a clear introduction to TKU's contribution to the future and proposing the future vision. The teaching faculties of the Graduate Institute of Educational Policy and Leadership served as the "Twelve-year National Basic Education Curriculum Technical and Comprehensive Senior Secondary Schools 2020 Annual Promotion and Guidance Plan," the annual work plan of the discipline center of ordinary senior secondary schools, and the Twelve-year National Basic Educational Syllabus Guidelines on the mid-term/final report review committee of the school counseling work plan, and provided professional advice needed for the promotion of the plan.

TKU conducted inter-departmental dialogues with non-governmental organizations on sustainable development goals in 2020. The key points are summarized as follows:

1. A team of teaching faculties from the Department of Information and Library Science, History, and Information and Communication implemented the commission of the New Taipei City Tamsui Historic Sites Museum. They have had many seminars and visited with the Village Chief of Tamsui Shalun and the elders in the village to record the local customs of Tamsui and preserving them as precious intangible cultural assets; the Department of Mass Communi-

cation's 2020 "Information Interview and Editing Course," interviewed the local transportation and environmental issues in Tamsui, and interviewed with local environmental NGOs, experts and scholars, and local cultural and historical organizations for dialogue.

2. The Department of Public Administration from the College of Business and Management hosted the "Working Rights and Regulations Adjustment Series Forum in the Digital Platform Economy" in 2020 to discuss how to strengthen the insurance mechanism for couriers and how to promote the occupation and traffic safety of couriers through technology management.
3. The director of the Graduate Institute of Educational Psychology and Counseling from the College of Education served as a professional consultant for TzuHsin Children's Home and TzuHsin Youth's Home in Taichung City and established policies and practical work guidelines for the placement of children and youth. In 2020, the Graduate Institute of Curriculum and Instruction and Oxfam Hong Kong co-organized the "Fast Fashion Teacher Workshop," which was conducted in a remote and synchronized manner, leading students to discuss the issues caused by fast fashion.
4. The College of Artificial Innovative Intelligence Innovation Academy worked with Hongtai Group and Hongsheng Construction to discuss smart city cooperation, combining the energy of local enterprises with universities to create local characteristics and construct smart buildings based on placemaking which leads to a smart city,

with the vision of turning Tamsui into an international bilingual smart city.

International collaboration

The number of academic journal papers was jointly published by TKU and international scholars in 2020, the number of applications for research awards totaled 105. In addition, TKU received a total of 13 free international cooperation value-added (MAGIC) programs from the Ministry of Science and Technology during the 2019-2020 academic year. Introducing more and broader global strategic partners for international cooperation. TKU collects or measures relevant data related to sustainable development goals through international cooperation and formulates plans or papers to solve sustainable development goals. The key abstracts are as follows:

1. The College of Liberal Arts and Yamaguchi University in Japan became international partnered schools in 2014. Scholars from both schools focused on "East Asian Culture" and regularly publish the academic journal JEAJ (Journal of East Asian Identities). In 2020, the 5th issue of JEAJ published a total of 6 Papers.
2. The teaching faculties of the Department of Mathematics from the College of Science cooperate with scholars from Japan, Canada, Russia, the United States, and other countries to conduct medical big data research; a total of 12 SCI journal papers were published in 2020. The synchrotron radiation team of the Department of Physics signed a contract with the National Space Center to build an advanced radiation technology experimental station, which can be used for the development of nanomaterials

and energy technologies for the benefit of mankind. The team has 4 papers on international cooperation in 2020. One of the faculty members of the Department of Physics published a paper in the most authoritative science (Science) journal, which demonstrates the high results of international cooperation projects through multi-party international cooperation and long-term research. The teaching faculties of the Department of Chemistry cooperate with the professors of the National University of Singapore to research the synthesis of iron-containing catalysts, with the goal of decomposing pollutants in the water with a green chemical method. The faculty of the Department of Chemistry cooperated with the professors of Tay Nguyen University, Vietnam, and used inhibitors in the research of anti-Alzheimer's disease and anti-Parkinson's disease. The teaching faculties of the Department of Chemistry collaborated with professors from Tay Nguyen University and the Ho Chi Minh University of Technology in Vietnam to publish papers on topics related to hunger elimination, health relief, and environmental water resources.

3. In October 2020, teaching faculties from the Department of Chemical and Materials Engineering of the College of Engineering participated in the "67th Anniversary Conference of the Chemical Engineering Society of Taiwan and the Achievement Presentation of Chemical Engineering Department of the Ministry of Science and Technology & International Symposium on Sustainable Chemical Engineering in Taiwan, Japan and Korea" and published papers. As of November 2020, they also participated in the "Wastewater Treatment Technology Seminar 2020" as the host and published papers, discussing physical and chemical treat-

ments, environmental nanotechnology, emerging pollutants, and novel treatment technologies, and engineering practices and applications; in 2020, teaching faculties of the Department of Water Resources and Environmental Engineering and foreign scholars jointly published 13 journal papers and 2 seminar papers related to SDG6 of clean water and sanitation. In 2020, a faculty in the Department of Mechanical and Electro-Mechanical Engineering jointly published a journal paper related to the smart drone team with scholars from the partnered school of Vel Tech University in India; and conducted a speech at the International Conference (IDAD2020) conference, and also served as an international advisory committee member of the conference.

4. A teaching faculty from the Department of Diplomacy and International Relations of the College of International Affairs published "Discussion on the Interaction of China's Economic Development, Oil Price and U.S. Shale Oil," "The Possible Impact of the U.S.-China Trade Friction on the International Trade Order," and "The Transfer of Japanese Academy to Taiwan's Higher Education Enlightenment" and other 3 conference papers related to international cooperation.

Collaboration with NGOs for SDGs

In 2020, 74 teaching faculties from TKU served as directors, supervisors, non-positional directors, or chairpersons of non-governmental organizations or enterprises, assisting in cooperation to promote the implementation of sustainable development goals and achieve permanent developments through

student volunteer projects and research projects. The key points of the sustainable development goals are summarized as follows:

1. Student Aspiration Program

- Through professional knowledge and ability service-learning courses, the Department of Management Sciences assisted 2 non-profit organizations in fundraising and NGOs to implement sustainable development projects; the Department of Educational Technology and the Department of Statistics assists in the establishment of websites, digital learning, and other matters; the Department of Mass Communication assists the foundation with creative social marketing proposals.
- The Cambodian Service Study Group went to Kampot Province, Cambodia to provide Chinese and computer teaching services and local teaching faculties' training, with a total of 150 people served; the Thai Service Study Group went to Bang Nam Trang School and Nansai School in Phengsilaok, Thailand to conduct Basic Mandarin teaching, practical life courses, delivery of village materials, interviews, and exchanges, serving a total of 350 people.
- The students of the College of Liberal Arts are assisted by the International Jane Goodall Education and Conservation Institute to implement the graduation project "Fun in the Forest," which advocates getting closer to forests and animals in a correct manner, integrating them into daily life using multimedia and technology, learning to coexist with na-

ture, and promote the knowledge of forest protection.

- The College of Foreign Languages & Literatures cooperated with the Tamsui Historic Sites Museum, started with student service learning, combined with translation theory and skills, to translate the Chinese webpage guides of the Tamsui Historic Sites Museum into Spanish.
- The Department of English Language and Culture from the College of Global Development cooperates with 5 different local educational institutions or NGOs to lead students to enter local community institutions in a project-based way, understanding the needs of the local, and continued cooperation to create a feasible operation mode, obtained public welfare resources from outside sources, and then achieved the goal in a team manner; in addition to the practical integration of the international experience and language ability of the junior year abroad with the local cultural application, the SDG4 high-quality education can be more thoroughly practiced with the use of the goal of unity and social participation.

2. Research Project

- The College of Business and Management researches the "Influence of Natural Disasters on Managers' Compensation" to explore whether natural disasters are a non-monetary factor that affects managers' salaries, to increase public attention to the risks of natural disasters and their impact on corporate governance policies.

The College of Global Development cooperated with the Suao Township Office to plan the vision of smart urban and rural areas and cooperated with the Department of Innovative Information and Technology to determine the main direction of the Suao Cold Spring Intelligent Voice Interactive Display Machine and Simple Dialogue Puzzle Game Machine. In addition, the department cooperated with the Lanyang Museum to discuss the use of the Internet of Things, mobile devices, digital interactive machines, etc., to enhance the interactive environment between the museum and tourists, and the creation of a voice interactive commemorative photo shooting site with the assistance of teachers and students from the Department of Innovative Information and Technology, the procurement of hardware were completed in 2020 and the development of relative software commenced.

Publication of SDG reports

An overall university sustainability reports was issued in 2019 and will be issued annually since; in 2020, it will focus on SDG4: Quality Education, SDG6: Clean water and sanitation, SDG7: Affordable and clean energy, SDG8: Decent Work and Economic Growth, SDG11: Sustainable Cities and Communities, SDG12: Responsible Consumption and production, SDG17: Partnerships for the Goals; 7 sustainable development goals to issue independent reports. In June 2021, the other book of the TKU Social Responsibility and Sustainability Report will be published, revealing the university's sustainable practices on-campus environment, social practice participation, and school governance for public references.



Education for the SDGs

TKU continues to promote environmental sustainability and offers courses that meet the educational philosophy of sustainable development goals as follows: (1) The general courses of the TKU include "Life Care and Service Experience," "Forest Ecology and Tree Protection," "Ecological Community Construction," and the "Underprivileged Groups and Social Welfare" courses. (2) Humanities courses include "Environmental Ethics" and "Art and Life-Dialogue with Masters" courses, which explore the concept of environmental sustainability from a reflective perspective and convey and practice sustainable values through art; leading students to connect with local culture and expanding the society to participate in and promote sustainable urban and rural area development. (3) In the social field, there are courses in "Happiness Economics," "Human Rights and Social Justice," "Cultural Globalization," "Economic Future," and "Social Future-Urban Future." Students may understand the concept and development of facing globalization, the impact of globalization on national sovereignty, political economy, cultural society, NGOs to individual influences, as well as enabling students to understand the characteristics and content of the current international situation and expand their international horizons. In addition, based on the spirit of sustainable development, issues within each region may be explored and the current and future challenges that may be faced and understood. (4) In the field of science, there are courses of "Technology Sustainability" and "Marine Technology," which enable students to understand the past achievements of human civilization, current difficulties, and future chal-

lenges, and to provide students with the most forward-looking scientific concepts and literacy. The future is to think about the development of emerging technologies, how to respond to social needs and the sustainable development of civilization, and find the best solution.

Commitment to meaningful education around SDGs

TKU continues to promote environmental sustainability, general education cuts into sustainable development issues from different perspectives, so that students can obtain a broader and in-depth understanding of sustainable development, and incorporates the spirit of practical experience into the teaching content; all professional fields are also under the concept of development education, diversified and different-oriented courses are offered. The plan to establish a new "sustainable development" micro-learning program connects the general education courses of different disciplines in the three major fields with main-axis topics and lays the foundation for students' knowledge of sustainable development.

The general courses of the TKU include "Life Care and Service Experience," "Forest Ecology and Tree Protection," "Ecological Community Construction," and the "Underprivileged Groups and Social Welfare" courses.

Humanities courses include "Environmental Ethics" and "Art and Life-Dialogue with Masters" courses, which explore the concept of environmental sustainability from a reflective perspective, and convey and practice sustainable values through

art; leading students to connect with local culture and expanding the society to participate in and promote sustainable urban and rural area development.

In the social field, there are courses in "Happiness Economics," "Human Rights and Social Justice," "Cultural Globalization," "Economic Future," and "Social Future-Urban Future." Students may understand the concept and development of facing globalization, the impact of globalization on national sovereignty, political economy, cultural society, NGOs to individual influences, as well as enabling students to understand the characteristics and content of the current international situation and expand their international horizons. In addition, based on the spirit of sustainable development, issues within each region may be explored and the current and future challenges that may be faced and understood.

In the field of science, there are courses of "Technology Sustainability" and "Marine Technology," which enable students to understand the past achievements of human civilization, current difficulties, and future challenges, and to provide students with the most forward-looking scientific concepts and literacy. The future is to think about the development of emerging technologies, how to re-

spond to social needs and the sustainable development of civilization, and find the best solution.

Courses on sustainability

TKU continues to promote environmental sustainability, especially the "Future Studies" and "Professional Knowledge Service Learning" courses in general education, which have the connotation of sustainable development. In 2020, the 8 Colleges, Center for General Education and Core Curriculum, and Office of Physical Education will open 505 university departments and 41 research institutes, a total of 546 sustainability-related courses, and a total of 27,475 enrolled students. In addition, to expand the concept of a sustainable curriculum, the university plans to open the first "sustainable development micro-learning program" to enhance student's awareness of the major issues of global sustainable transformation and to ponder the challenges of coexistence of people and the environment under digital transformation.

Education for SDGs in the wider community



In 2020, a total of 160 courses was introduced to the community to participate in the diversified community activities. Among them, the course of "Professional Knowledge Service Learning," combined the diversified nature of "curriculum" and "service" to perform real tasks within the community field, while encouraging students to apply what they have learned, enhancing self-reflection ability, appreciating diverse differences, and understand social issues and cultivate civic abilities. Each department has at least one professional knowledge and ability service-learning course every academic year. In 2020, the professional knowledge and ability course will invest NT\$6.57 million (including fundraising from outside units). There are 84 college courses and 15 research institutes, which are opened by 74 teaching faculties with 3,445 students enrolled in courses. Teaching faculties of various professions lead students to utilize their majors, participate in community service, and

jointly contribute to community development. For instance, students of the Department of Architecture enter the old streets and utilized the architectural profession and creativity to revitalize the abandoned space, and assist in the development of the freshwater local university-based curriculum; in addition, in 2020, TKU's instructors will lead 76 students to participate in community affairs, including public services, environmental protection, care for the disadvantaged, cultural preservation, and diversity learning.





SDG17：夥伴關係

2020 年承接政府單位且主題與永續發展目標相關之計畫案：303 件

2020 年舉辦國際學術研討會場次：12 場

2020 年專業知能服務學習課程與 NPG 或 NGO 合作數：逾 20 個

2019 學年度柬埔寨志願服務隊服務當地兒童人數：150 名；泰國志願服務隊服務當地兒童人數：350 名

2020 年「化學遊樂趣」舉辦 68 場活動，服務人次達 7388 名。



全球夥伴關係

2020 年本校有 101 位教師在政府單位任職，承接政府單位與永續發展目標相關計畫案共 303 件；另有 74 位教師在非政府組織任職，參與制定永續發展目標政策。有關政策制定或提供諮議等工作包括：中小學教育、國際政治、勞資關係、經濟發展、環境改善、生化藥劑、水資源保育、工程技術、防災等課題。即使受到 Covid19 疫情影響，本校仍勉力舉辦與永續發展目標相關之國際學術研討會計 12 場。2020 年與國際學者發表期刊論文至少 105 篇，獲科技部補助自由型國際合作加值 (MAGIC) 方案 13 件。與國際 NGO 合作工作包括：獲國際珍古德教育及保育協會協助執行畢業專題「森活好友趣」，提倡以正確的方式親近森林與動物，將多媒體、科技融入日常生活，學習與大自然共存，推廣森林保護教育；協助非營利組織募資，協助 NGO 實踐永續發展專案；協助建置網站、數位學習等事務；協助基金會提出創意社會行銷提案；柬埔寨服務學習團在柬埔寨貢布省進行中文及電腦教學服務及在地種子教師培訓；泰國服務學習團在泰國彭式洛府挽南庄學校以及南賽學校，進行華語基礎教學、實用生活課程、村落物資發送及訪談交流。協力在地 NGO 部分，與淡水古蹟博物館合作，以學生服務學習為出發，提供淡水古蹟博物館中文網頁導覽之西語翻譯；「全球在地行動實踐計畫」與教育機構或 NGOs 組織合作，帶領學生進入在地社區機構，接續合作關係，創造操作模式，對外取得公益資源，達成目標並產出成果；將大三出國經驗與語文能力結合運用於在地文化，實踐 SDG4 目標；進行「天然災害對經理人薪酬之影響」研究，探討天然災害是否成為影響經理人薪酬的非貨幣因素，藉此增加大眾對於天然災害風險的關注及對公司治理政策的影響；與蘇澳鎮公所合作，討論智慧城鄉的願景，由蘇澳鎮公所提出示範系統構想，與資創系討論可達成的雛型規劃；另與蘭陽博物館合作，討論藉由物聯網、行動裝置、數位互動機等，提昇博物館與遊客互動的環境；為建立語音互動式的紀念照拍攝點，已完成硬體採購，並著手開發相關軟體；與台灣永續能源研究基金會簽約締盟，結合中鼎教育基金會等民間機構共同推動永續發展目標的教育活動；另大學社會責任實踐計畫淡水好生活團隊與淡水地區中小學合作擴大教育資源之學習成果，圖書館以及教育學系教師等協助地方學校進行學生課後輔導，嘉惠地方學子。

參與區域性非政府及政府組織之 SDG 政策制定

本校 2020 年有 101 位教師在政府單位擔任顧問、審議委員、專業審查委員、評議委員或諮詢委員，協助政府制定或推動永續發展目標相關政策；本校亦承接政府單位且主題與永續發展目標相關之計畫案共 303 件，與政府單位共同制定永續發展目標政策，重點摘要如下：

1. 文學院中文系教師擔任「中文閱讀素養長期追蹤評量計畫」委員，負責審查計畫內容、實測評量、標準設定，以了解十二年國教新課綱實施成效。
2. 理學院有 2 位教師執行政府計畫案，其一計畫案結合有機合成細胞培養與胚胎觀察等方法，來開發新型抗腎癌物質；另一計畫案提出新的雙黃酮（biflavone）合成方法，結果可提供未來進行相關合成的參考。另有 2 位教師執行科技部計畫案，使用理論計算方法研究漸凍人相關的蛋白質序列，研究成果可提供藥物設計的基礎知識。
3. 工學院水環系教師受聘擔任經濟部所屬台灣自來水（股）公司獨立董事、臺北市政府「臺北市災害防救專家諮詢委員會」委員及擔任經濟部「德基水庫集水區管理委員會」委員，共同推動落實永續發展目標。
4. 商管學院經濟系於 2020 年 7 月輔導建置魚菜共生系統於 ECC School 園區，未來將朝向建立可操作與可監控的運作模組。
5. 國際學院歐洲所教師長期關注歐盟相關議題，常與政府機關，及非政府組織合作，接受其研究計畫的委託執行或參與審查，提供專業意見，作為政策參考，2020 年外交系有 2 位教師執行與 SDGs 相關政府計畫案。
6. 教育學院教師長期擔任政府機關十二年國教與 108 課綱相關委員會與修訂小組成員，並參與多項教育部推動之中小學課程與評鑑委員會，致力於促進 108 課綱推動之政府部門跨系統協作，以及課綱微調之工作，並提供課綱實施、教師專業發展等相關專業意見。

本校 2020 年有 22 位教師在非政府組織擔任董事、監察人、無給職理事或理事長，並與非政府組織一起制定永續發展目標政策，重點摘要如下：

1. 商管學院經濟系與柬埔寨 NGO 組織 ECC School 共同討論經濟永續的發展目標，並嘗試循環農作體系的建立。
2. 國際學院歐洲所教師 2020 年擔任中華勞資關係研究所主辦「歐盟與各國洽簽自由貿易協定永續發展專章文獻蒐集、座談與訪談」諮詢委員。

跨國跨部門對話

本校 2020 年因受 Covid19 疫情影響，舉辦與永續發展目標相關之國際學術研討會共 12 場，與政府組織進行有關永續發展目標的跨部門對話，重點摘要如下：

1. 理學院教師透過參與各類研討會，持續與國內外專家、學者進行充分溝通與學術交流，對國內生物有機化學跨領域研究及未來規劃、癌症醫療突破等議題大有裨益。
2. 工學院建築系教師參與營建職場工人健康促進計畫。土木系教師擔任中鼎教育基金會和台灣永續能源研究基金會委員，定期開會提供諮議，協助該基金會推廣永續發展目標之相關工作。
3. 商管學院管科系學生參與教育部「扛壩子 X 獻聲」的活動，獲得最佳鼓舞獎。公行系舉辦「數位平台經濟下勞動權益與法規調適系列論壇」，透過產學共同參與及勞資協力方式凝聚產業共識，逐步擴大及深化討論外送人員權益保障議題，作為政策擬定與執行之重要後盾。
4. 國際學院歐洲所於 2018-2021 年間參與 3 項相關會議，皆與新冠疫情、公共衛生、歐盟治理有關；日本政經所舉辦「第 2 屆 COVID-19 的影響下日本與全球政經變遷國際學術研討會」，共發表 24 篇論文，且邀請馬來西亞、波蘭、日本、中國大陸與韓國等地區學者，共計 6 國 45 人參加；另參與日本國家基本問題研究所視訊會議，討論有關第一島鏈防衛等相關議題；大陸所透過舉辦「台灣與東南亞國家的中國視角」研討會，邀請馬來西亞、新加坡、越南與印度等中國研究的機構的專家學者，希望透過不同研究視野的討論，有助於台灣推動新南向政策，同時強化夥伴關係；外交系莫少白助理教授參與 ODKJG，發表專題演講「Negotiating the ultimate deal? Trump's Middle East policy and its effect on China and EU's involvement in the peace process」，分析美國的政策如何影響中國和歐盟（EU）參與和平進程。
5. 教育學院教政所於 2020 年與中華未來學校教育學會、台灣教育研究院合作辦理「人地共好：新課綱時代的地方學與大學社會責任」學術研討會，探討新課綱時代，大學社會責任與地方學的意義與實踐分享。教心所於 2020 年與淡水區興仁國小進行 3 場跨領域敘事力計畫的相關討論與合作，建構淡江大學通識與興仁國小教育資源；教心所所長分別於 2020 年 6 月 5 日、12 月 4 日參與桃園市家暴力及性侵害委員會暨兒童及少年性剝削防制諮詢會議，建構安全與性平等的政策與防治方針。未來學研究所 2020 年參加聯合國教科文組織 UNESCO 主辦的「UNESCO Futures Literacy Summit 2020」視訊會議，本校校長葛煥昭在 Futures Studies Journals Booth 發表演講，對淡江未來化的貢獻作出清楚的介紹，並提出未來願景。教政所教師擔任「十二年國民基本教育課程綱要技術型及綜合型高級中等學校前導學校 109 年度推動及輔導計畫」、普通型高級中等學校學科中心年度工作計畫、十二年國民基本教育課程綱要前導學校輔導工作計畫之期中/期末報告審查委員，提供計畫推動所需之專業諮詢意見。

本校 2020 年與非政府組織進行有關永續發展目標的跨部門對話，重點摘要如下：

1. 文學院資圖系、歷史系、資傳系教師團隊執行新北市立淡水古蹟博物館委託案，多次與淡水沙崙里里長、里內耆老座談訪問，紀錄淡水在地民間習俗，保存珍貴非物質文化資產；大傳系 2020 年「資訊採訪與編輯課程」，採訪淡水在地交通環境議題，訪問在地環境 NGO 組織、專家學者與在地文史組織，進行對話。
2. 商管學院公行系於 2020 年舉辦「數位平台經濟下勞動權益與法規調適系列論壇」，探討外送員保險機制應如何強化及如何透過科技管理促進外送員的職業、交通安全。
3. 教育學院教心所所長擔任台中市慈馨兒少之家與慈馨少年家園專業顧問，建構兒少安置政策及實務工作方針。課程所於 2020 年與香港樂施會合作舉辦「快時尚教師工作坊」，以遠距同步方式進行，帶領學生透過議題討論，省思快時尚造成的問題。
4. AI 創智學院與宏泰集團、宏盛建設洽談智慧城市合作，以大學結合在地企業能量，營造在地特色，將以地方創生（Placemaking）為基礎，以建構智慧建築（Smart Building）到智慧城市（Smart City），並將淡水打造為國際雙語智慧城市的願景。

國際合作收集 SDGs 相關數據

本校於 2020 年與國際學者共同發表的學術期刊論文、申請研究獎勵篇數共計 105 篇，另本校於 108-109 學年度共獲科技部補助自由型國際合作加值（MAGIC）方案 13 件，引入更多、更廣泛的全球國際合作戰略夥伴。本校透過國際合作收集或衡量有關永續發展目標相關數據，及制定解決永續發展目標的計畫案或論文，重點摘要如下：

1. 文學院與日本山口大學於 2014 年結為姐妹校，兩校學者以「東亞文化」為主軸，定期發表學術期刊 JEAI（Journal of East Asian identities），2020 年出版 JEAI 第 5 期共發表 6 篇論文。
2. 理學院數學系教師與日本加拿大俄羅斯美國等國家學者合作，進行醫學大數據研究；2020 年發表 SCI 期刊論文共計 12 篇。物理系同步輻射團隊與國幅中心簽約，建置先進輻射技術實驗站，可用於奈米材料與能源技術的開發，造福人類，團隊於 2020 年已有 4 篇跨國合作之論文。物理系教師有 1 篇論文發表於最具權威科學（Science）期刊，透由多方國際合作和長期研究，展現國際合作案之高度成果。化學系教師與新加坡國立大學教授合作，進行含鐵催化劑的合成研究，目標以綠色化

學方法分解水中之汙染物質。化學系教師與越南西原大學教授合作，抑制劑於抗阿茲海默症以及抗巴金森症之研究。化學系教師與越南西原大學、胡志明科技大學教授合作發表消除飢餓、解救健康、環境水資源相關議題論文。

3. 工學院化材系教師於 2020 年 10 月參加「台灣化學工程學會 67 週年年會暨科技部化學工程學門成果發表會暨台日韓捷永續化學工程國際研討會」並發表論文，並於 2020 年 11 月參加「2020 年廢水處理技術研討會」擔任主持人並發表論文，探討物理化學處理及環境奈米技術、新興污染物與新穎處理技術及工程實務與應用；水環系教師 2020 年與國外學者共同發表與 SDG6 潔淨水與衛生相關之期刊論文 13 篇及研討會論文 2 篇。機械系教師，2020 年與印度姊妹校 Vel Tech University 學者共同發表與智慧無人機團隊相關之期刊論文 1 篇，並在國際會議（IDAD2020）大會演講論文 1 篇，亦擔任大會國際諮詢委員。
4. 國際學院外交系教師發表「中國經濟發展、石油價格和美國頁岩油的相互影響探討」、「美中貿易摩擦對國際貿易秩序的可能影響」及「日本「學院讓渡」對台灣高等教育的啟示」等 3 篇國際合作相關之會議論文。

與非政府組織合作

本校於 2020 年有 74 位教師在非政府組織或企業擔任董事、監察人、無給職理事或理事長，協助共同合作推動落實永續發展目標，並透過學生志願計畫、研究計畫等方式達成永續發展目標，重點摘要如下：

1. 學生志願計畫

- (1) 透過專業知能服務學習課程，管科系協助 2 個非營利組織募資，協助 NGO 實踐永續發展專案；教科系、統計系協助建置網站、數位學習等事務；大傳系協助基金會提出創意社會行銷提案。
- (2) 柬埔寨服務學習團前往柬埔寨貢布省進行中文、電腦教學服務及在地種子教師培訓，服務人數共計 150 人；泰國服務學習團前往泰國彭式洛府挽南庄學校以及南賽學校 2 個地點，進行華語基礎教學、實用生活課程、村落物資發送及訪談交流，服務人數共計 350 人。
- (3) 文學院學生獲國際珍古德教育及保育協會協助執行畢業專題「森活好友趣」，提倡以正確的方式親近森林與動物，藉由多媒體、科技運用的形式，融入到日常生活中，學習與大自然共存，推廣森林保護教育。

- (4) 外語學院與淡水古蹟博物館合作，以學生服務學習為出發，結合翻譯理論與技巧，將淡水古蹟博物館中文網頁導覽內容翻譯至西語。
- (5) 全球發展學院語言系「全球在地行動實踐計畫」，與在地 5 個不同教育機構或 NGO 組織合作，帶領學生以 Project-based 方式，進入在地社區機構，了解在地需求，接續合作關係，創造出可行之操作模式，對外取得公益資源，再以團隊方式達成目標；除可將大三出國之國際化經驗與語文能力實際結合於在地文化運用之外，更徹底實踐 SDG4 優質教育中學用合一與社會參與的目標。

2. 研究計畫

- (1) 商管學院進行「天然災害對經理人薪酬之影響」研究，探討天然災害是否成為影響經理人薪酬的非貨幣因素，藉此增加大眾對於天然災害風險的關注及對公司治理政策的影響。
- (2) 全球發展學院與蘇澳鎮公所合作規劃智慧城鄉願景，並與資創系共同合作，確定以蘇澳冷泉智慧語音交談展示機及簡易對答益智遊戲機為主要方向。另與蘭陽博物館合作，討論藉由物聯網、行動裝置、數位互動機等，提升博物館與遊客互動的環境，並由資創系師生協助建立語音互動式的紀念照拍攝點，2020 年完成硬體採購，並著手開發相關軟體。

永續發展目標報告書

本校自 2019 年開始每年發布學校整體永續發展報告，並於 2020 年開始針對 SDG4: Quality Education、SDG6: Clean water and sanitation、SDG7: Affordable and clean energy、SDG8: Decent Work and Economic Growth、SDG11: Sustainable Cities and Communities、SDG12: Responsible Consumption and production、SDG17: Partnerships for the Goals 等 7 項永續發展目標發布獨立報告。2021 年 6 月另出版《2020 淡江大學社會責任與永續報告書》(2020 Tamkang University Social Responsibility and Sustainability Report)，揭露本校關於校園環境、社會實踐參與以及學校治理等永續作為，供社會大眾參考。

永續發展目標教育

本校持續推展環境永續，開設課程符合永續發展目標的教育理念者如下：

1. 校共通課程有「生命關懷與服務體驗」、「森林生態與樹木保護」、「生態社區建構」、「弱勢團體與社會福利」課程。
2. 人文領域課程有「環境倫理」、「藝術與人生—與大師對話」課程，以反思的角度探討環境永續概念，並藉由藝術傳遞與實踐永續價值；引領學生與地區文化連結，擴大社會參與並促進永續城鄉的發展。
3. 社會領域有「幸福經濟學」、「人權與社會正義」、「文化全球化」、「經濟未來」、「社會未來—城市未來」課程，讓學生瞭解面對全球化的概念與發展，探討於全球化進程中下對國家主權、政治經濟、文化社會、NGO 乃至於個人的影響，讓學生能夠瞭解當前國際局勢的特質與內容，並擴大其國際視野，此外並基於永續發展的精神，進而探討各區域內部的問題，理解目前以及未來所可能面臨的挑戰。
4. 科學領域有「科技永續」、「海洋科技」課程，讓學生能明瞭人類文明過往之成就、目前之困境、以及未來之挑戰，更能提供學生最具前瞻性之科學概念與素養，未來在思考發展新興科技，如何回應社會需求以及文明永續發展，找尋最佳解方案。

推動永續教育的承諾

本校持續推展環境永續，通識教育從不同角度切入永續發展議題，使學生對永續發展有廣泛且深入的認識，並將實踐體驗精神融入於教學內容中；各專業領域也在永續發展教育理念下，開設多元且不同面向課程。並規劃將新設「永續發展」微學程，以主軸式議題串連三大領域中不同學門的通識課程，奠定學生永續發展的知識涵養。

1. 校共通課程有「生命關懷與服務體驗」、「森林生態與樹木保護」、「生態社區建構」、「弱勢團體與社會福利」課程。
2. 人文領域課程有「環境倫理」、「藝術與人生—與大師對話」課程，以反思的角度探討環境永續概念，並藉由藝術傳遞與實踐永續價值；引領學生與地區文化連結，擴大社會參與並促進永續城鄉的發展。
3. 社會領域有「幸福經濟學」、「人權與社會正義」、「文化全球化」、「經濟未來」、「社會未來—城市未來」課程，讓學生瞭解面對全球化的概念與發展，探討於全球化進程中下對國家主權、政治經濟、文化社會、NGO 乃至於個人的影響，讓學生能夠瞭解當前國際局勢的特質與內容，並擴大其國際視野，此外並基於永續發展的精神，進而探討各區域內部的問題，理解目前以及未來所可能面臨的挑戰。

科學領域有「科技永續」、「海洋科技」課程，讓學生能明瞭人類文明過往之成就、目前之困境、以及未來之挑戰，更能提供學生最具前瞻性之科學概念與素養，未來在思考發展新興科技，如何回應社會需求以及文明永續發展，找尋最佳解方案。

校內永續課程

本校持續推展環境永續，特別是通識教育中的「未來學學門」和「專業知能服務學習」課程，都具備永續發展內涵。2020年本校8個學院及通識與核心課程中心、體育事務處，開設大學部505門、研究所41門，共計546門永續相關課程，選課學生共27,475人次。為擴展永續課程之理念，本校規劃開設校內首個「永續發展微學程」，以提升學生認知全球永續轉型的重大議題，思辨數位變革下人與環境共存的挑戰。

社區永續教育

2020年，共有160門課程進入社區參與多元的社區活動。另設「專業知能服務學習」課程，結合「課程」與「服務」的多元性質，在社區場域中執行真實任務，同時鼓勵學生應用所學，增進自我反思能力，欣賞多元差異，瞭解社會議題及培養公民能力。每學年各學系至少開設一門專業知能服務學習課程，2020年，專業知能課程投入經費657萬元（含向校外單位爭取經費），開設大學部84門，研究所15門，共由74名教師開設，選課學生共3,445人次。各專業教師帶領學生運用所學專業，參與社區服務，共同為社區發展貢獻心力。例如：建築系學生進入老舊街市，運用建築專業與創意，活化廢棄空間，協助開發淡水在地學校本位課程；另外，2020年，本校教官帶領76班學生參與社區大小事務，包括公共服務、環境保護、弱勢關懷、文化保存、多元學習等5類服務。





TAMKANG UNIVERSITY

No.151, Yingzhuan Rd.,
Tamsui Dist., New Taipei City 251301,
Taiwan (R.O.C.)
Tel:+886-2-2621-5656