2025 International Youth Environmental Education Activities

[Sustainable Concepts • Taiwan Experience • International Practices]

Empowering Youth for Sustainable Development

I. Purpose of the Program

This course is organized to uphold the spirit of global vision and local action and to deepen Taiwan's leadership role in promoting environmental education in the Asia-Pacific region. This course combines international vision with local action and is designed for foreign students in Taiwan. By visiting some of Taiwan's traditional aquaculture industry sites and observing environmental challenges and policy responses, participants will be able to directly see local sustainability challenges and think about ways to engage in environmental action. By gaining practical experience and seeing multiple perspectives, they will fulfill the purpose of engaging in international environmental education exchanges for youth.

The theme of the course is "Local Environmental Action and Circular Economy," aligning with Taiwan's 2050 Net-Zero Transition strategy on resource circulation. It focuses on the issue of "white pollution" in the ocean that is confronting the oyster industry along the coastal areas of Budai Township in Chiayi County. Starting from real-world industry settings, the course guides students to understand the following contexts:

- 1. Industrial development and environmental pressure: Traditional oyster farming has driven local economic development, but it has also created an environmental burden due to waste oyster shells, oyster sheds, and polystyrene floats.
- 2. The practice and transformation of the circular economy: From the reuse of oyster shells and the recycling of waste fishing nets to corporate ESG actions, this section will show how Taiwan's policies, industries, and communities respond to environmental challenges.
- 3. Local action and international dialogue: Considering cases of young people returning to their hometown, international students, through stimulating group exchanges, will propose solutions, and form green suggestions that are culturally suitable and feasible.

The course objective is to connect local environmental practitioners in Taiwan with young international talents studying in Taiwan, so that more people internationally will understand Taiwan's experiences on the ground, strategies for solutions and feasible plans to help transform traditional aquaculture industry practices to align with a circular economy model. Observation of the transformative practices will serve as reference cases for other countries for dealing with their own environmental issues, while enhancing Taiwan's image and promoting international cooperation. It will serve as an environmental education case with a profound impact.

II. Organizers

- Sponsored by Ministry of Environment
- Co-organized by the Global Environmental Education Partnership Asia-Pacific Regional Center (GEEP APRC) (Entrusted by the Ministry of Environment to Yiyuan Co., Ltd. for management and operation)

III. Date

September 7 to September 8, 2025

IV. Venues

- Budai Sea Bus (Cake Beach Experience) (No. 5, Xinnan 1st St., Budai Township, Chiayi County)
- Haomei Boat House (Haomei Agriculture and Fishery) (No. 700, Huweiliao, Budai Township, Chiayi County)
- Taiwan Chemical Fiber Corporation Xingang Plant (No. 1, Zhongyang Industrial Park, Xingang Township, Chiayi County)
- Auditorium of the Environmental Protection Bureau of Chiayi County (No. 2-1, West Section of Xianghe 2nd Road, Puzi City, Chiayi County)

V. Number of participants

Thirty (30) international students and 5 local participants will be selected for the program. There may be a waiting list depending on availability of spots.

VI. Eligibility and Qualifications

This program is designed for students from Asia-Pacific countries who are studying in Taiwan. However, a number of local students interested in environmental education and practitioners in environmental education will also be selected to participate. Priority will be given to individuals who have never taken the course before. The organizer will verify that applicants have the following qualifications before selecting participants.

- International students studying in Taiwan universities and colleges under the "Regulations Regarding International Students Undertaking Studies in Taiwan".
- Students from universities and colleges in Taiwan who are studying in environment-related departments or are interested in environmental education (including master's and doctoral students). An English certification document to verify English proficiency must be provided.
- Practitioners in the field of environmental education in Taiwan must provide an English certification document to prove their English language proficiency.

VII. Registration Procedure and Timeline

- Registration Online at <u>https://reurl.cc/4LvzWj</u>.
- Registration Period: From now <u>until July 4, 2025</u>
- Two weeks after the application deadline, acceptance notices will be sent by e-mail.

VIII. Course Deposit

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To guarantee attendance, participants must pay a confirmation deposit which will be returned at the end of the program.

Upon receiving notification of acceptance, participants must pay a confirmation deposit of NT\$1,000 by the date specified in their acceptance e-mail. The deposit will be returned in cash on the day that participants complete the program. Participants who fail to pay by the deadline will forfeit their spot in the program. The deposit will not be returned to those who fail to attend the program or do not complete it.

Participants may pay the deposit at Cathay United Bank or pay an inter-bank or postal transfer fee.

| Payment Method | ATM transfer or in-bank payment |
|-----------------|----------------------------------|
| Remittance Bank | Cathay United Bank Beixin Branch |
| Bank code | 013 |
| Account Number | 226035011305 |
| Account Name | Yi Yuan Ltd. |

After paying the deposit, participants must e-mail copies of their payment receipt and their program confirmation letter to complete the registration process.

If confirmed participants need to withdraw from the program, they must contact a co-organizer by phone or e-mail before July 31, 2025 (Thursday), to allow another applicant to take their spot and have their "confirmed attendance deposit" returned. However, a remittance fee of NT\$30 will be charged (deducted from the deposit before it is remitted); no refund will be made for cancellation of registration two weeks after July 31, 2025.

IX. Program Costs

The co-organizers will cover the cost of the lessons, meals, accommodation (2 persons per room), and transportation during the program. Participants are responsible for transportation to the meeting point and any extra accommodation expenses.

X. Items to Note

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- This program includes the Sea Bus Ecology Course. Please consider your own needs (e.g. sensitivity to odors) and make sure you have no objections before applying.
- Before the program, please read documents related to circular economies and the livestock industry to further your background knowledge and better facilitate discussions during the program.
- The co-organizers agree to comply with the *Personal Data Protection Act* and will ensure that all participants' personal information will be handled responsibly and in accordance with the specified purposes.

- Participants are deemed to have agreed to the organizer taking video and photographs of the entire event, and agree that the organizer may use the aforementioned images (videos and photos) for public broadcast, public screening, public transmission and use in newspapers, magazines, websites, exhibition halls or any form of media for the purpose of subsequent educational promotion and policy marketing. If you disagree, please do not register for this program.
- Meals will be provided during the event. Please indicate your dietary needs (meatless, vegetarian, food allergies, etc.) when registering, and bring your own eco-friendly cups and tableware.
- The hotel only provides towels. It does not provide disposable items, so please bring your own toiletries (toothpaste, toothbrush, shower gel, shampoo, slippers, etc.).
- To ensure the quality of the event, conserve energy and reduce carbon emissions, participants shall board the shuttle bus together at the specified meeting points. People who fail to arrive at a meeting point on time should go to the event location on their own.
- In a force majeure event, the organizer reserves the right to postpone or cancel the program if the government announces suspension of work and classes. We will notify you immediately by phone or e-mail if there are any changes to the program.

XI. Contact Information

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• Ministry of Environment

Ms. Yi-Ching Lin

yiching.lin@moenv.gov.tw

Global Environmental Education Partnership Asia-Pacific Regional Center (GEEP APRC)

Contact number: 02-2388-0028

Ms. Hui-Hui Kou, Email: <u>yixue8913@gmail.com</u>

XII.Course Objectives and Procedures

GEEP APRC Taiwan plays a key role in international environmental

education partnerships and in environmental education for a circular economy.

- The Global Environmental Education Partnership (GEEP) was initiated in 2014 by the U.S. Environmental Protection Agency, the Taiwan Environmental Protection Administration, and the North American Association for Environmental Education. GEEP is committed to promoting environmental education around the world, hoping to create a fairer and more sustainable future through the power of education, where people can prosper together while living in harmony with nature.
- 1. Environmental education is the driving force behind the concept of circular economy. Environmental educators need to pay attention to how to transform the various linear thinking patterns we have taken for granted in the past and rethink issues such as design, production and consumption informed by the concept of circularity.

Course Objectives:

In order to enable young participants from various countries to observe Taiwan's environmental problems, and think deeply about "What I can do," the course is designed to combine theory and practice, academic learning and practical experience, implementation of actions, sharing and discussion. Going from the basics to advanced concepts, participants will be guided to understand current conditions, think about different viewpoints, and study Taiwan's environmental action cases, engage in sharing and exchange, and provide peer feedback. It is hoped that before facing environmental issues in their own country in the future, they can first build up their inner sensitivity, strengthen their awareness of problems and problem-solving skills, and use Taiwan's environmental education and experience to plant the seeds of environmental action in advance.

By entering aquaculture industry sites and marine waste hotspots along the Budai coast, students will witness white pollution in the ocean, ecological impacts and industrial transformation challenges along the southwest coast of Taiwan, and personally participate in activities such as environmental surveys, waste recycling workshops and generation of creative solutions.

2. Course Schedule:

| | Time | Theme | |
|-------------|-----------------|---|--|
| | 09:00-09:25 | Meet at Chiayi HSR Station | |
| | 09:25-09:40 | Travel to destination and Check-in | |
| | 09:40-09:50 | Opening Rem | arks |
| | | Ministry of En | vironment, GEEP APRC Representatives |
| | 09:50-10:10 | < Ice Breaker | > Self-introductions, Group Interaction Challenge, Build |
| | | Rapport, Unde | rstanding and Trust |
| | | < 7 | The Story of Oyster Farming in Chiayi County > |
| | 10:10-11:00 | Special His | story of Oyster Aquaculture on Taiwan's Southwest Coast |
| | | Lectures Ch | ien-Cheng Chang, Section Chief of the Fisheries Section, |
| | | Ag | riculture Department, Chiayi County Government |
| | | < 7 | The Promotion Strategies and Processes of Circular Economy |
| | | an | d Recycling in the Aquaculture Industry > |
| | | Re Special | use of Discarded Oyster Shells in Slippers, Medical Materials, |
| | 11:10-12:00 | Lectures and | Building Materials |
| | | Ker | n-Mu Chang, Deputy Director General, Climate Administration, |
| | | Mi | nistry of Environment (former Director of the Environmental |
| | | Pro | otection Bureau of Chiayi County) |
| | 12:30-13:30 | Lunch | |
| | 13:30-15:00 Lea | Experiential | < Budai Sea Bus (Cake Beach) Ecological Tour > |
| | | Learning and | Understand the Ecological and Climate Regulation Functions of |
| | | Observation | Oyster Sheds and Sharpen Nature Observation Skills |
| | | Experiential | < Haomei Boat House Experiential Activities > |
| | 15.20 17.20 | - | Learn about the Environmental Education Functions and Space |
| | | Learning and Observation | Regeneration of the Haomei Boat House, and Understand How |
| | | Observation | Culture Promotes Sustainable Actions |
| | 17:20-18:20 | Dinner | |
| | 19:10-19:40 | Hotel Check- | in |
| 19:40-20:30 | 10.40 20.20 | Sharing Starı | y Sky Stories |
| | 19:40-20:30 | Youth Perspective and International Interaction, Panel Discussion | |

<Sunday, September 7, 2025>

| Time | Theme |
|-------------|--|
| 09:00 | Assemble |
| 09:25-09:40 | Warm-Up Activities |
| | < Factory Exploration Visit > |
| 09:40-11:30 | Explore How Industries Are Transforming Towards Sustainability, Complete |
| | Observation Task Cards and Record Sustainable Practices |
| 11:40-12:30 | Lunch |
| 12:30-14:20 | < Group Discussion > |
| 12.30-14.20 | Through Guided Discussions, Participants can Exchange and Discuss |
| 14:30-15:30 | < Sharing of Results > |
| 14.30-13.30 | Publish and Share Group Achievements |
| 15:30-16:00 | Graduation Ceremony |
| 16:20 | Return to Chiayi HSR Station |

Day 2 Schedule <Monday, September 8, 2025>

XIII. Program Description

1. Background of the activities

On the Budai coast of Chiayi, white polystyrene fragments are washed ashore by waves, abandoned oyster sheds and fishing nets are entangled among rocks and mangroves, and oyster shells are piled up in mounds. This was once one of the most important oyster production bases in Taiwan, supporting the livelihoods of thousands of local fishermen for decades and constituting a unique living landscape on the southwest coast of Taiwan. Going out to sea in the early morning and drying oysters in the evening was once a way of life for the people of Budai. Aquaculture is blood and sweat, and the source of livelihood for many families.

However, with the increase in production and the expansion of advanced equipment, improperly managed oyster farming structures, fishing nets, and floats have gradually become a significant environmental burden. According to surveys conducted by environmental groups between 2020 and 2021, as much as 70% of marine debris along Taiwan's coastlines originated from abandoned aquaculture gear. In areas such as Changhua, Yunlin, Chiayi, and Tainan, over 60% of this debris came from aquaculture-related facilities. Oyster farming structures in the southwest have even drifted with ocean currents all the way to the northeastern coast. Polystyrene floats, worn down by the sea, break into fragments and generate large quantities of microplastics, resulting in what is commonly known as "white pollution," which

is steadily polluting our coastlines and ecosystems.

This activity will be mainly held in Budai, Chiayi. Through the Asia-Pacific Youth Environmental Education Exchange Platform, we invite young people from various countries to visit this coastline that is full of challenges but also offers opportunities. They will see with their own eyes the environmental problems left behind by the conventional aquaculture industry and understand that "white pollution" has not just a visual impact, but is a crisis that penetrates the food chain and calls for better international ocean governance.

At the same time, we will also give participants reasons for hope, – showing how abandoned fishing nets can be processed into recycled fibers for functional clothing, how oyster shed wood can be transformed into exhibition installations, and how marine waste can be transformed into works of art. This is not just a visit, but a journey to measure environmental problems with our feet, see the possibility of transformation with our eyes, and think about how to direct our actions with our hearts.

We hope that through participation and observation, young people will understand the complexity and reality of environmental issues and be inspired to become part of the changes for a better future. This is not only Taiwan's story, but also a common challenge faced in coastal areas around the world. Through such exchanges of experience, we hope to cultivate more young people with an international perspective, who are capable of critical thinking, action and cooperation, and to inject new energy into the sustainable development of the Asia-Pacific region.

- 2. Core objectives of the course:
 - Cognitive level
 - Understand the general situation of promoting environmental education in Taiwan and the Asia-Pacific region
 - Understand local environmental issues in Taiwan
 - Enhance international students' understanding of the government's sustainable development policies
 - Skill level
 - Cultivate cross-cultural communication skills and environmental awareness
 - > Curriculum Plan for Experiencing Taiwan's Environmental

Education Sites or Community Environmental Actions

- Improve problem-solving and creative thinking skills through experiential activities and group tasks
- Attitude

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- Stimulate interest in sustainable living and willingness to actively participate
- Cultivate environmental citizenship with an international perspective and local connections
- Refer to Taiwan's local environmental action and education programs and share practices that can be applied in participants' home countries
- 3. Teaching Method: Emphasis on "learning by doing, doing by learning"
 - **Experiential Learning**
 - Field visit: Sea bus ecological tour
 - Action tasks: observation record cards, classification challenges, action design
 - Problem-based Learning
 - Guide students to understand key environmental issues and cultivate their ability to solve problems, think across fields and envision local actions
 - Group discussion: Strategic planning for inventory, community engagement and sustainable development
 - Generate solutions: Propose feasible green living ideas for participants living in Taiwan
 - Cross-cultural comparison and reflection
 - Inspire students to start from their own country's culture and system and compare it with conditions in Taiwan
 - Differences in scale and methods of agriculture and fishery, and acceptance of plastic reduction culture

Multi-sensory learning

- Visual: Wetland ecology and policy visualization
- Listen: Tour guide's explanation and story sharing by peers
- > Touch: Picking up sea waste handcrafting
- Taste: Lunch with local seafood, combined with a discussion on "Food and Sustainability"
- 4. Field visits/ environmental education course experience

Haomei Boat House (a community base combining environmental education and creation of art)

The Chiayi Haomei Community has been carrying out a spontaneous "fence-building and sand-fixing" environmental action for 10 years, the beach area was in one year. The results are impressive. In 2022, it also won the Special Award for Sustainability Story of the Top 100 Global Destinations, and was shortlisted for the Green Destination Story Award at the world's largest travel show ITB Berlin in 2023. In 2024, it was awarded the "Special Award in the Community Group of the 9th National Environmental Education Award" in Taiwan.

Haomeili, Chiayi, was once an old warehouse at Budai Fishing Port. Now it has been transformed into a new community base that combines sustainable education, local culture and artistic creation. With "regeneration" as its core spirit, Haomei Boathouse transforms environmental issues into creative inspiration, and has become the most action-oriented learning environment in this course.

The base offers a variety of environmental education courses. For example, students can actually transform collected marine waste (such as styrofoam fragments, waste ropes, plastic bottle caps, etc.) into material for art, creating works that "convey awareness" from "traces of pollution." Through group creation, display and sharing, students not only understand the environmental phenomena they observed, but also further developed their own green living proposals.

Course Content 1: Cultural Observation Record Card

Record elements of local art, environmental design and community interaction, and reflect on the connection between local creation and sustainable education

Course content 2: Sea waste creation task

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Each group uses designated recycled marine waste materials to

complete a themed creative work, to express their understanding and interpretation of the relationship between "man and the sea".

Learning focus: Integration of local creation and environmental education, waste recycling practices, environmental and cultural narratives

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Budai Sea Bus (Wetland × Mangrove × Ecological Education Action Classroom)

Starting from Budai Port, the "Budai Sea Bus" offers not only marine ecology, but also an experiential classroom during the voyage. As the boat slowly moves forward, passing through the intertidal zone and mangroves, the wetland ecology along the coast, flying birds and swaying water plants form a flowing natural textbook.

This is an important wetland conservation area along Chiayi's coast. It is rich in biodiversity and is also an important stop for migratory birds in Taiwan. Through field observation, recordings and team discussion, participants will learn about the ecological functions, environmental changes and human impacts of wetlands, and deepen their understanding of habitat protection and climate adaptation.

Course Task 1: Wetland "One Piece" Mission Card

Each group was given an observation task card to record designated species or landscape clues, such as fiddler crabs, egrets, mangrove root structure, etc., to complete the "Observation Bingo" challenge.

Course Task 2: Ecological tour, interactive question and answer

With real-time explanations and Q&A interactions by professional tour guides, it promotes instant response and in-depth learning.

• Learning focus: Wetland <u>ecosystem service functions</u>, coastal conservation actions under climate change, and ecotourism practices.

Taiwan Chemical Fiber Corporation Xingang Plant (Industrial Transformation × Circular Economy × ESG Practice Case)

At Formosa Plastics & Chemicals Hsingang Plant, students will start from the industrial site to understand how the manufacturing industry can practice corporate social responsibility (CSR) and environmental sustainability (ESG) in the face of climate change and international carbon reduction pressure. Since 2018, Formosa Plastics & Chemicals has been promoting the recycling of discarded fishing nets into recycled nylon, turning marine waste into high-value fabrics, becoming an international case study that combines environmental protection, technology and the circular economy.

Through guided tours, recordings, tasks and challenges, this visit will allow participants to think from another perspective: "If I were a business operator, how would I balance production and sustainability?" participants will also observe how factories implement environmental management at the operational level, in areas such as energy use, raw materials recycling, and carbon emission management.

• Course Task 1: Question card and ESG quiz

Test to assess participants' understanding of corporate sustainability practices

• Course Task 2: Circular economy observation task

The group will designate observation topics (such as raw material sources, production carbon reduction, recycling applications, etc.), complete field records and write a summary report.

Lesson 3: Group sharing and commentary tasks

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Based on the observations, participants will consider "How else do I think this company can become more sustainable?" and take part in a brief discussion and presentation.

Learning focus: Corporate sustainability (ESG), industrial carbon management, circular economy architecture and system implementation