Global Environmental Education Partnership

Asia-Pacific Regional Center (GEEP APRC)

2023 International Environmental Issues and Education Workshop

Program Brief



[Sustainability • Taiwan's Experience • Global Practice] Empowering Youth for Sustainable Development

I. Purpose of the Program

This program was developed with the idea of "think globally, act locally" and is intended to strengthen Taiwan's leadership role in promoting environmental education within the Asia-Pacific region. Keeping in mind the UN's Sustainable Development Goals (SDGs), students will use Taiwan as a starting point as they learn more about local environmental issues and environmental challenges that threaten our world. We hope this course will inspire and equip them with the necessary skills and take action.

At the end of March 2022, the Taiwan government announced its 12 key strategies in *Taiwan's Pathway to Net-Zero Emissions in 2050*. These strategies helped serve as a reference when designing this program — most notably, structuring the program around zero waste and resource recycling. Finally, the program adopted the theme "Sparks Fly Between the Livestock Industry and the Circular Economy."

This program is designed for international students studying in Taiwan. However, a number of local students interested in environmental education and practitioners in environmental education will also be selected to participate. We hope this program can successfully link local educators and researchers with international students studying in Taiwan and help them understand how Taiwan has adopted a circular economy to transform its traditional livestock industry. Taiwan's example of taking action and testing out various solutions to determine which is most feasible can serve as a reference for other countries facing similar environmental issues, thereby expanding Taiwan's influence as well as promoting further international cooperation.

II. Organizers

Sponsored by the Environmental Protection Administration, Executive Yuan Co-organized by the GEEP APRC and Environmentally Friendly Seeds Co., Ltd.

III. Date

May 20(Saturday) to 21(Sunday), 2023 (2 days, 1 night).

IV. Venue

- Taiwan Sugar Corporation Animal Industry Business Division Dong Hai Feng Agricultural Circulation Park
 (No. 37, Ln. 91, Dexin Rd., Changzhi Township, Pingtung County)
- Tonghe Nongke Business Club (TH Hotel)

(No. 5, Yanfa 1st Rd., Changzhi Township, Pingtung County)

V. Participants 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 Taiwanese universities and colleges under the *Regulations Regarding International Students Undertaking Studies in Taiwan*.
- Finalists from the EPA's Environmental Youth Leader competition, students studying environment-related fields, or those interested in environmental education (including master's and doctoral students). Must provide documents to verify their English proficiency.
- Practitioners in the environmental education field in Taiwan. Must provide documents to verify their English proficiency.

VI. Number of Participants

Twenty-eight international students and four local participants will be selected for the program. There may be a waiting list depending on availability of spots.

VII. Registration and Deadline

- Register online at <u>https://reurl.cc/Y8E8K4</u>.
- Applications will be accepted from March 24 (Friday) to April 21 (Friday), 2023. Accepted applicants will be announced and notified via e-mail on April 26 (Wednesday), 2023.

VIII. Confirmation Deposit

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\$1000 by the specified date in their acceptance e-mail. The deposit will be returned in cash on the second day to participants who 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 Hua Nan Commercial Bank. Otherwise, participants are responsible for fees incurred by inter-bank or postal transfers.

Payment method ATM transfer or pay at the counter	
Remittance bank	華南商業銀行(008)新店分行(1669)
Account No.	166100054861
Account name	中華民國環境教育學會

- After paying the deposit, participants must e-mail their proof of payment receipt and their program confirmation letter to complete the registration process.
- If participants cannot attend the program, they must contact a co-organizer by phone or e-mail before **May 5 (Friday)**, **2023**, so another applicant may take their spot. A remittance fee of NT\$30 will be charged when refunding the participant's deposit. The deposit will not be refunded if the participant cancels after the deadline.

IX. Program Costs

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

X. Items to Note

- During the program, participants will be taken to a pig farm to understand how Taiwan's traditional livestock industry has evolved. Please consider your religious beliefs and any personal factors (e.g. sensitive to smells) and confirm that 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 ensure that all participants' personal information will be handled responsibly and in accordance with the specified purposes.
- Participants agree that the organizer may take photos and video recordings throughout the program, which may be subsequently broadcast, screened, and shared in newspapers, magazines, websites, exhibits, or any other form of social media for marketing and educational purposes worldwide. If you object, please do not participate in the program.
- Meals will be provided during the program. Please specify if you have any dietary restrictions (e.g., vegetarian, allergies) when applying, and bring your own environmentally friendly cups and utensils.
- The accommodation will provide towels but not single-used products. Please bring toiletries (toothpaste, toothbrush, body wash, shampoo, slippers, etc.).
- To help reduce carbon emissions, participants are suggested to take the shuttle bus together at the meeting point.
- In the event of a typhoon or other natural disaster, 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.

- Preventative measures for COVID-19 are based on the CDC's latest announcements.
 - Masks are not mandatory but are recommended if you have any health concerns or respiratory symptoms.
 - The co-organizers will provide alcohol disinfectant and cleaning supplies.
 - The sponsor reserves the right to adjust the program content and schedule based on any updates to the pandemic.

XI. Contact Information

- Environmental Protection Administration
 Ms. I-Hsin Kuo (Shin), 02-2311-7722 ext. 2726, ihkuo@epa.gov.tw
- GEEPAPRC \ CSEE

Ms. Ching-Hsien Weng (Ivy), info@geepaprc.org

Ms. Su-Ting Lin (Tina), 02-2311-3040 ext. 3092

XII. Program Goals and Schedule

This program aims to inspire, create. and help participants apply their learning in real-world situations as they learn more about environmental education and case studies of environmental action happening in Taiwan. We hope that participants can use what they have learned during the program better understand to environmental issues that are happening in their home countries.



The program combines theory and practice to allow students to learn and apply their knowledge in real-world settings. Students will start with simpler concepts before moving on to big-picture discussions as they learn more about the current environmental situation, think about different perspectives, study environmental action in Taiwan, share and exchange ideas, and give feedback to their partners. We hope this program will inspire them to confront environmental issues in their home countries and equip them with the necessary skills to help plant seeds of change.

The Five Core Goals are as follows:

- 1. Learn about critical environmental issues that have been affecting Taiwan and the Asia-Pacific region in recent years.
- 2. Learn about the promotion of environmental education in Taiwan and the Asia-Pacific region.
- 3. Discuss innovative strategies for environmental action in Taiwan.
- 4. Share strategies that can be applied in the home country after referencing Taiwan's environmental actions and educational programs.

5. Experience environmental education or community action through a Taiwanese curriculum.

Time	Theme
08:50-09:10	Meetup at Zuoying HSR Station
09:10-10:00	Travel to destination and Check-in
10:00-10:30	Opening Remark
	EPA Taiwan
	Judy Braus, Executive Director of NAAEE
	GEEP APRC
10:30-11:00	< Warm-up Activity > Friendly Seed
Inspire	Hi~ My Friends!
moprie	Partner exchanges, create learning opportunities, and strength
	educational motives
11:10-12:00	< Lecture > Chiu Kuo-Shu, Department of Water Quality
Inspire	Protection, EPA Taiwan
moprie	Strategies and history for promoting and utilizing manure
	and urine in livestock farming
	Taiwan's philosophy, policies, and initial result in promoting resource
	recycling in the livestock industry
12:00-13:30	Lunch
13:30-14:30	< Site Visit I > Tsai Yen-Ru, Deputy Director of Dong Hai
Apply	Feng Agricultural Circulation Park
Apply	Understanding how traditional livestock farming has
	evolved through circular economies
	Introduce the process of transforming old pig farms into the Dong Hai Feng Agricultural Circulation Park
14:30-15:50	< Site Visit II > Dai Nai-Cheng, Dong Hai Feng
	employee
Apply	Revealing the inner workings of a circular pig farm
	Visit and conduct environment education activities at Dong Hai
	Feng Agricultural Circulation Park Break / Refreshments
15:50-16:10	

Day 1 (May 20, Saturday)

Time	Theme
16:10-16:40	< Discussion and Feedback > Friendly Seed
	Reconvene and discuss circular economy through the lens of
	environmental education
16:40-17:00	Travel to Accommodation and Hotel Check-in
17:30-19:00	Dinner
19:30-20:20	< Sharing > Friendly Seed
Create	Sharing case studies from students' home countries on
	circular economies and traditional industries
	Students can exchange examples of case studies from their home
	countries amongst themselves

Day 2 (May 21, Sunday)

Time	Theme
08:30	Assemble
08:50-09:20	< Warm-up Activity > Friendly Seed
Inspire	Warm up!
09:20-10:10	< Lecture > Chang Tzu-Chao, Professor, NTNU
Inspire	The importance of environmental education in a circular
L.	economy
	Introduce GEEP APRC; discuss how environmental education can play
	in important role in a circular economy
10:20-11:30	< Lecture > Ku Hsin-Ping, General Manager, Tamago No
Inspire	Takara Biotechnology Corporation
	Environmentally friendly food production and zero-waste
	diet
	Case studies of agri-food and the circular economy
11:30-12:30	< International Dialogue I > Friendly Seed
Create	Through discussion, participants can exchange ideas and create short
	videos about what they have learned, and how to make a difference.
12:30-13:30	Lunch
13:30-14:30	< International Dialogue I > Friendly Seed
Create	Through discussion, participants can exchange ideas and create short
Create	videos about what they have learned, and how to make a difference.

Time	Theme
14:30-15: 30	< Sharing > Friendly Seed
Create	Each group can share their thoughts with each other with their short videos
15:30-16:10	Closing Ceremony
16:10-17:00	Travel to Zuoying HSR Station

XIII. Program Description

• Taiwan's role in GEEP APRC / The importance of environmental education in a circular economy

The Global Environmental Education Partnership (GEEP) was jointly founded in 2014 by the U.S. Environmental Protection Agency, the Taiwan Environmental Protection Administration, and the North American Association for Environmental Education. The vision of GEEP is to create a sustainable future where people and the environment prosper together through the power of education.

Environmental education is the driving force behind a circular economy as it's critical in allowing us to break away from traditionally linear ways of thinking. This allows us to brainstorm innovative new designs that allow for greener production and consumption within a circular economy, which should be taken more seriously by environmental educators.

• Site Visit / Environmental Education Course

Established in 1953, Taiwan Sugar's Dong Hai Feng Livestock Farm was originally a traditional pig farm with outdated equipment, poor efficiency, and struggled to commit to environmental protection. In recent years, Taiwan Sugar has committed itself to the government's new 5+2 innovative industries plan (new agriculture and circular economy) and spent NT\$680 million to renovate the Dong Hai Feng Livestock Farm into the Dong Hai Feng Agricultural Circulation Park.

The new enclosed negative pressure drencher barn automatically controls the temperature and humidity, providing the pigs with a more comfortable living environment. Furthermore, the enclosed design reduces the spread of disease.

Solar panels were built on the barn's roof, and the park has introduced green energy facilities such as a biogas power generation system. Liquid digestate is used to irrigate the neighboring farmland or is recycled and reused. Any solid digestate is converted into organic fertilizer to be returned to the farmland. Dong Hai Feng Agricultural Circulation Park is the first livestock farm in Taiwan that combines green energy, water conservation, and biomass circulation. All these steps help form a multi-faceted environment that integrates production, living, and ecology with the surrounding environment. The park also combines AR and VR interactive displays to create an environmental education and recreation area for visitors. Dong Hai Feng Agricultural Circulation Park was certified as an environmental education facility and venue by the EPA at the end of 2022.



Dong Hai Feng Recreation Area

New-style Pig Barn

XIV. Introduction of Lecturers

Chiu Kuo-Shu

Department of Water Quality Protection, EPA Taiwan

- Policy planning
- Promotion of utilization of livestock manure and urine resources and biomass in Taiwan

Tsai Yen-Ru

Deputy Director of Taiwan Sugar Corporation Animal Industry Business Division -

Dong Hai Feng Agricultural Circulation Park

• Taiwan Livestock Pig Farming Industry

Cheng Tzu-Chau

Professor, National Taiwan Normal University

- Environmental values and environmental paradigm shift
- Environmental education and education reform
- Sustainable development and curriculum development
- Interactive environmental education and website planning

Ku Hsin-Ping

General Manager, Tamago No Takara Biotechnology Corporation

- Application and development of egg-related materials
- Combination of animal farming technology and circular economy