



Program Brief for the 2022 International Environmental Issues and Education Workshop

【Sustainability • Taiwan's Experience • Global Practice】

Empowering Youth for Sustainable Development

I. Purpose of the Program

The 2-day training program aims to uphold the principle of global vision and local action as well as strengthen Taiwan's role at the forefront of environmental education in the Asia-Pacific region. Aligned with the United Nation's Sustainable Development Goals (UNSDGs), the program serves as a starting point to understanding various environmental problems and threats faced locally and globally and seeks to inspire potential solutions for environmental problems.

In line with the spirit of the previous IEIE workshops, the theme for this year's program is air pollution and carbon emission. Participants will comprise mostly of foreign students currently studying in Taiwan, followed by local university students who are interested in environmental education and lastly, practitioners in the field of environmental education.

Local educators and researchers in Taiwan and international students studying in Taiwan will be able to connect with each other, allowing the former to help the latter understand Taiwan's experience, courses of action, solutions, strategies and feasibility measures when facing air pollution issues. The program offers reference for other countries in dealing with environmental issues, helps expand Taiwan's influence, and facilitates international cooperation.

II. Organizers

Organized by the Environmental Protection Administration,
Executive Yuan

Implemented by the GEEP APRC and Environmentally Friendly
Seeds Co., Ltd.

III. Date : August 18 (Thursday) to 19 (Friday), 2022

IV. Venue

- Ririren Company Limited
- Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC Ecological Sustainability Park)
- Hotel National (Taichung)

V. Participants and Qualifications

Foreign students mainly from the Asia-Pacific region or other countries currently studying in Taiwan, local university students interested in environmental education, and practitioners in the field of environmental education. The organizer will review the qualifications of the applicants and decide on their admission.

An estimated 28 international students and 4 local participants will be admitted to each session. Alternative admissions are available depending on the situation.

- International tertiary or university students who study in Taiwan in accordance with the provisions under the Ministry of Education’s “Regulations Regarding International Students Undertaking Studies in Taiwan.”
- Nominees of the Environmental Protection Youth Leaders of the Taiwan EPA, or local university students (including graduate students) who are majoring in environmental departments, or are interested in environmental education, will be selected for admission based on their English proficiency (relevant documentary evidence must be submitted).
- Local environmental education practitioners will be selected for admission based on their English proficiency (relevant documentary evidence must be submitted).

VI. Registration and Deadline



- Register online at <https://reurl.cc/x96Amb>
- Registration opens on May 17, 2022 (Tuesday) and closes on June 14 (Tuesday). The list of the admitted participants will be announced on June 21 (Tuesday).

VII. Margin

- After receiving the notification of acceptance, participants are requested to pay the "Confirmation of Attendance Margin" of NT\$1,000 by the date in the notification letter. Refunds will be made in cash at the end of the event for those who have participated in the entire program. If applicants fail to pay the "Confirmation of Attendance Margin" by the designated date, the application will be cancelled. For those who do not attend or participate in the entire program, the "Confirmation of

Attendance Margin" will not be refunded.

- The "Confirmation of Attendance Margin" is suggested to be submitted in the form of "deposit without passbook" at Hua Nan Commercial Bank. Any additional handling fees such as interbank transfer or transfer by the post office are to be borne by the participants.

Payment methods	Transfer by ATM or at the counter
Bank	華南商業銀行(008)新店分行(1669)
Account No.	166100054861
Name	中華民國環境教育學會

- After transmitting the "Confirmation of Attendance Margin", participants are required to send back the receipt of the payment and the Margin Remittance Certificate (see attachment) by e-mail to complete the registration process.
- Program resources are limited. If any admitted participants are unable to attend the program, they are expected to inform the contact person by phone **no later than August 4 (Wednesday)** to allow their vacancies to be filled by people on the waiting list. A remittance handling fee of NT\$30 will be charged for the refund of the "Confirmation of Attendance Margin." The Margin will not be refunded if the cancellation is made after the deadline.

VIII. Expenses

During the program, costs for the course, meals, accommodation (twin room), and transportation will be covered by the organizer, but participants are responsible for their own transportation costs to the meeting place.

IX. Reminders

- The organizer abides by the provisions of the Personal Data

Protection Act to guarantee the security of applicants' personal data, and will only process and use personal data in accordance with the specified purpose of their collection. However, the organizer will also use the data in accordance with the "Guidelines for Contact Tracing Measures" announced by Taiwan's Central Epidemic Command Center.

- Participants agree to allow the organizer to document, film and photograph the entire event, as well as allow the organizer to broadcast, publicize, transmit and use the aforementioned recorded media in newspapers, magazines, websites, exhibition booths or any other forms of media all over the world for the purposes of educational promotion and marketing. Please do not participate in the program if you do not permit your likeness to be captured and publicized.
- Meals are provided during the entire program. Dietary requirements (meat, vegetarian, food allergies, etc.) must be indicated upon registration. Participants are required to bring their own reusable drinking cups and cutlery.
- Accommodation hotels only provide towels, no disposable products. Please bring your own personal toiletries (toothpaste, toothbrush, soap, shampoo, slippers, etc.)
- To ensure the quality of the program and to reduce carbon emissions, participants are encouraged to take the shuttle bus to the meeting place if possible.
- In case of typhoons or other force majeure, the organizer has the right to postpone or cancel the program if the government authorities announces the suspension of classes. If there is any change to the program, contact will be made immediately by email or phone.

- Participants are requested to abide by the following measures against COVID-19:
 - There will be a dedicated person at the entrance of the venue to take the participants' temperatures. Anyone with a forehead temperature of over 37.5 degrees Celsius will be refused entry and advised to seek medical attention.
 - Free alcohol-based disinfectants, cleaning and protection supplies will be provided by the organizer.
 - It will be mandatory to keep a safe social distance.
 - Masks should be worn during the entire program, except when eating and drinking.
 - The event will be conducted according to the guidelines announced by the Central Epidemic Command Center, including any adjustments to the epidemic prevention alert level, the number of participants, and the scope of the event. For other matters, the organizer will adjust the format, venues and dates of the event depending on the epidemic situation and other conditions.

X. Contact persons

- Environmental Protection Administration, Executive Yuan:
I-Hsin Kuo (Shin), 02-2311-7722 ext. 2726, ihkuo@epa.gov.tw
- GEEPAPRC 、 CSEE
Ching-Hsien Weng (Ivy), 02-7749-1020, info@geepaprc.org
Su-Ting Lin (Tina), 02-2311-3040 ext. 3092

XI. Program Objectives and Process

The program is based on the principles of inspiration, creation, and practice to further students' understanding of the current state of environmental education and environmental action in Taiwan. It aims to transform and apply Taiwan's experience to help identify local environmental problems in the participants' home countries.

The curriculum combines environmental education-related theories and practices, learning and experience, sharing and hands-on practice through simple ideas to deepen conceptualizations. It's designed to guide participants in understanding the current situation, deliberate multiple viewpoints, study Taiwan's environmental action cases, share and exchange and get feedback from teammates. Faced with their local environmental issues in their own countries, the participants can gather their insights and utilize Taiwan's experience in environmental education and action to plant seeds of environmental work.

Five Core Goals

1. Understand the important environmental issues in Taiwan and the Asia-Pacific region in recent years.
2. Understand the general state of environmental education promotion in Taiwan and the Asia-Pacific region.
3. Explore Taiwan's innovative strategies for environmental actions.
4. Share the practices that can be applied in the participants' home countries with reference to Taiwan's local environmental action.
5. Experience Taiwan's environmental education program site or community action program.



Figure 1: Inspire

Strengthen a sense of self-efficacy, internal control, focus and action.

Figure 2: Practice

Learn from Taiwan's experience.

Figure 3: Create

Transform knowledge into environmental action.

1st Day Course Schedule (August 18, Thursday)

Time	Theme	Speakers	Issues Tackled	Location
09:00-09:20	Gather at the meeting point at HSR Taichung Station for shuttle bus	GEEP APRC		HSR Taichung Station
09:20-10:00	Check-in	GEEP APRC		Houli Community
10:00-10:30	Opening Remarks	A representative from Taiwan EPA Judy Braus, Executive Director at NAAEE A representative from GEEP APRC		
10:30-11:00	Inspire 【Ice Breaker】 Hi, Team!	Friendly Seeds	Get to know teammates to motivate and encourage each other to learn	
11:00-12:00	Inspire 【Keynote Speech】 Taiwan's Role in GEEP APRC	Graduate Institute of Environmental Education at NTNU / Professor Tzu-Chao Chang	Experience Sharing in GEEP APRC	

Time	Theme	Speakers	Issues Tackled	Location
12:00-13:00	Lunch Break			
13:00-14:30	Practice	【Field Work】 The Hidden Environmental Costs Behind the Sweet High-altitude Grafted Pear	Ririren Company Limited / Jhen-Jie, Hsu, and high-altitude grafted pear farmer	Houli Community /Field Work
14:30-15:50	Practice	【Field Work】 Products, Agricultural Waste and Air pollution	Ririren Company Limited / Jhen-Jie, Hsu, and high-altitude grafted pear farmer	
15:50-16:10	Break Time			
16:10-16:40	Practice	【Experience Environmental Program】 Pear Branch DIY	Ririren Company Limited / Jhen-Jie, Hsu, and high-altitude grafted pear farmer	Houli Community
16:40-17:30	Create	【Convergence】 Initiating Environmental Action for Global Citizens	Friendly Seeds	
17:30-18:20	On the road / Hotel check-in		GEEP APRC	Hotel National (Taichung)
18:30-20:00	Dinner		GEEP APRC	
20:00-20:50	Create	【Social Night】	Friendly Seeds	
			Share environmental viewpoints and environmental issues in home countries	

2nd Day Course Schedule (August 19, Friday)

Time	Theme	Speakers	Issues Tackled	Location
08:30	Check-in			
08:40-09:20	One the road to TSMC TECEC			
09:30-11:00	Inspire	TSMC's Strategy and Actions Regarding Circular Economy and Net-Zero Carbon Emission	TSMC Ecological Sustainability Park	1. Through lectures and visits, learn about TSMC's contribution to circular economy and net-zero emission 2. See the actual utilization of green buildings in the fab TSMC Ecological Sustainability Park
11:00-11:20	TSMC TECEC to Business Incubation Center			
11:20-12:30	Create	【Communication】 Share the status of air pollution issues and solutions in different countries	Friendly Seeds	Participants share the air pollution status and related solutions of different countries Business Incubation Center
12:30-13:30	Lunch Break			Business Incubation Center
13:30-14:00	Program Completion Ceremony			
14:00-14:30	Travel to HSR Taichung Station			
14:30-	Return Home (Drop-off point: HSR Taichung Station)			

XII. Program Description

- Taiwan's role in GEEP APRC

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.

- Field Work / Experience Environmental Program

- **Ririren Company Limited**

The sources of air pollution consist of stationary pollution sources, mobile pollution sources, and other sources. When talking about air pollution reduction or control issues to the general public, the starting point is usually daily life, and ultimately it comes down to personal actions focused on daily transportation choices, which have less motivation to trigger action. Rarely do the other problems of air pollution that may be encountered in our lives receive any attention, and even fewer cases of actual air pollution are being addressed.

The high-altitude grafted pear farmers in Houli District, Taichung, had handled agricultural wastes by burning for years, creating rural air pollution problems. Taiwanese youths Jhen-Jie Hsu and Yi-Wei Lin jointly established Ririren Company Limited through Rural up - Innovative participation program for young fellows of Soil and Water Conservation Bureau, Council of Agriculture, Executive Yuan. In order to solve the problem of air pollution caused by burning agricultural waste, they summon volunteers and farmers to turn pear brunches into unique pear branch pens.

The team focuses on environmental sustainability in rural communities and transforms agricultural waste materials into an aesthetic product through cultural and creative design. Through innovation, consumers can support residents of communities who are dedicated to a more sustainable environment, and take

action for the abundant leftovers from the harvesting of fruits in Taiwan's rural areas. Beginning with getting involved in the high-joint pear industry, Ririren attempts to make a difference to the problem of burning and piling up traditional agriculture waste. In the past five years, Ririren influenced and cooperated with areas such as Zhuolan in Miaoli, Houli, Shigang, Dongshi in Taichung, and reduced 80% of the burning cases by the innovation of Pear Branch Pen and other wooden ware made from fruit trees.

Over the years, Ririren has expanded its services to cover the treatment of agricultural waste from different fruit trees as well as the application of Off-Grade products in Miaoli, Nantou, and Taoyuan. Ririren finds products that can be used from each fruit tree, meanwhile develop local characteristics to reduce pollution and waste. Currently, the company is working with Nantou's Yongfu community, Taoyuan's Yeheng tribe, Taichung's Shusheng Winery and more to provide different products made from longan, peach, and labrusca. Through product marketing, DIY kits, and technology sharing, Ririren has become a stakeholder in many places. This model also won the Taiwan Town Brand Award in 2019, and TW Design Best 100 Shopping Design Award for Social Care & Environmental Friendly by Shopping Design Magazine.

This is a case of Taiwanese youths who, in a creative way, focused on their own environmental concerns about air pollution generated by local industries and made efforts to improve air quality jointly with local governments by using innovative ideas to solve the problem of agricultural waste removal and burning. In the field trip, participants will get to know how farmers handle agricultural waste and the air pollution caused by improper processing. Furthermore, participants will visit pear orchards and waste burning sites and

take part in the difficult agricultural waste sorting process. Afterwards, participants will experience the recycling process of agricultural waste through agricultural waste DIY.



Sorting of agricultural waste



Field trip to pear orchard

○ **TSMC Ecological Sustainability Park**

TSMC pioneered the pure-play foundry business model when it was founded in Hsinchu in 1987, and has been the world's leading dedicated semiconductor foundry ever since. In addition to the worldwide industrial sites, the 15th Fab of TSMC was certified as an environmental education site by the Taiwan EPA in 2018, making it one of the significant sites for promoting environmental education. Through in-depth courses and activities, the general public are able to understand the overall contribution of Taiwan's local enterprises to the economy and the environment.

With on-site visits and professional sharing, international students can further understand how Taiwan's enterprises combine economic development and environmental protection, creating a win-win situation for both the economy and the environment through a circular economy industry model. In addition, the TSMC Ecological Sustainability Park is a green building, and the on-site visit to the park provides international students with an understanding of the design and operation of a

green fab.

Net-zero emission is the priority of major enterprises in Taiwan in the future. Lora Ho, Europe & Asia Sales Senior Vice President and ESG Committee Chairman of TSMC, said in the Sustainable Finance and Climate Change Summit in December 2021 that TSMC has set related mitigation measures, continued to strengthen its wide variety of green innovations, and actively adopted renewable energy to achieve its goal of net zero by 2050. The company has set the short-term goals of zero emissions growth by 2025, and reducing emissions to year 2020 levels by 2030. Through the sharing of the enterprise, the participating international students will have a basic understanding of how enterprises can achieve net-zero emissions through various technologies and measures.

XIII. Introduction of Lecturers

Speech	Name / Title	Organization	Specialization
Taiwan's Role in GEEP APRC	Professor Tzu-Chao Chang	Graduate Institute of Environmental Education at NTNU	Environmental values and environmental paradigm shifts, environmental education and education reform, sustainable development conceptualization and curriculum development, environmental education interactive learning theory and website planning.
TSMC's Strategy and Actions Regarding Circular Economy and Net-	TSMC Ecological Sustainability Park lecturers	TSMC	CSR, ESG, green manufacturing, supply chain

Zero Carbon Emission			
The Hidden Environmental Costs Behind the Sweet High- altitude Grafted Pear	Founder, Jhen- Jie, Hsu	Ririren Company Limited	Environmental communication and local practice

Attachment



NO.____

Margin Remittance Certificate

I, _____, have remitted the APRC IEIE for youth margin of \$1000.

the last 5 digits of the source account number,

or receipt of the payment : _____

Date: Month Date, 2022

※ Please email this form to the organizer at info@geepaprc.org after the remittance for processing.

NO.____

Margin Refund Receipt

I, _____, have received a refund of the margin of \$1,000.

Receiver(Signature): _____

Date: Month Date, 2022
