

# Society Inclusion

## 06

6.1 SPECIAL COLUMN—LIFE TRANSITION PRACTICES	87	6.4 CO-PROSPERITY WITH LOCAL COMMUNITIES	90
6.2 EARTH HELPER: CARBON REDUCTION SUSTAINABILITY ACTION	88	6.5 PHILANTHROPIC ACTIONS	92
6.3 HOPING CARBON REDUCTION PARENT-CHILD BANKBOOK	89	6.6 LOW-CARBON THEATRE	93

**TARGETS**



**EARTH HELPER**, the Carbon Reduction Sustainability Action: 585 metric tons of carbon reduction in 2023



**TCC Community Plan:** Cumulative investment of NT\$ 0.8 billion in 2025 \_From 2022



**Education Investment:** NT\$ 33.5 million invested cumulatively by 2025 \_From 2022

2022 PERFORMANCE HIGHLIGHTS

**EARTH HELPER** the Carbon Reduction Sustainability Action

| cumulatively as of March 31, 2023

LINE Official Account

**10,512** PEOPLE joined

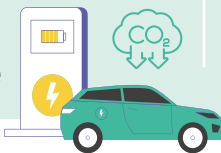


Carbon Reduction and Sustainable Action

**7,363** PEOPLE joined

NHOA.TCC energy storage charging station carbon reduction in 2022

**53,242.36** KG CO<sub>2</sub>e



**Social Inclusion**

| cumulatively as of December 31, 2022

TCC DAKA

**6.06** MILLION VISITORS

ECO tour Satisfaction

**96.8%**

Accesses to the Tour  
7,323 PEOPLE

Approval from tribal consultation (Knlibu Tribe)

**97.6%**

Hanben Ocean Station

**39,838** VISITORS

Convenient Beach Cleaning

**143** PARTICIPANTS



**Public Welfare Fund**

Hoping Sustainability Charity Foundation

| from Oct to Dec 31, 2022

**NT\$1,156,750** contributed

Community Development Contributions

| cumulatively from 2017 to Dec 31, 2022

**NT\$12.08** BILLION

C.F. Koo Foundation

**877,995** Views of Koo Cloud Theater

Aw-Hwa Elementary School Education Fund

| from Jan to Dec 31, 2022

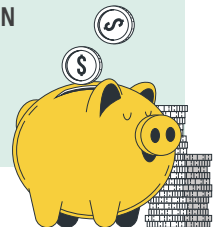
**NT\$28,390** contributed



Social Welfare Contributions

| cumulatively from 2016 to Dec 31, 2022

**NT\$4.77** BILLION





Hanben Ocean Station Marine Debris Painting



2023 World Earth Day DAKA Green Market



2023 World Earth Day Hanbean Ocean Station Beach Cleanup



## 6.1/ Special Column Life Transition Practices

Net-zero transition encompasses 4 facets: industrial, energy, social, and lifestyle. The lifestyle facet needs public participation to achieve sustainability in transportation, diet, housing, and more.

TCC's sustainability initiative, EARTH HELPER, promotes charging during off-peak

hours and features a carbon-reducing lifestyle bankbook project to encourage children to form daily carbon reduction habits. Through these actions, TCC aims to cultivate public awareness of carbon reduction and achieve Taiwan's Net Zero by 2050 vision.

### Two Lifestyle Transition Sustainability Initiatives of TCC

#### Sustainability Education Program

ACTION

##### Hoping Carbon Reduction Parent-Child Bankbook



PURPOSE

TCC collaborates with local communities near plants to promote sustainability. It starts with local elementary schools to instill carbon-reducing habits in daily life, such as waste reduction, resource recycling, and energy-saving, to foster a sustainable lifestyle attitude.

TARGETS & RESULTS

Aiming for **206kg CO<sub>2</sub>e** reduced in total in the 1st semester (60 school days from March 4 to May 31, 2023)



#### EARTH HELPER

##### Carbon Reduction Sustainability Action



EV owners lead the green lifestyle movement and can inspire their friends and families to join the transition towards a carbon-reducing lifestyle, planting the seeds of change.

Aiming for **586 METRIC TONS** of carbon reduced in 2023



##### Cherish Earth via Off-peak Charging



充電不用車擠車系  
下班充電轉換心情  
充飽再衝刺

NHQA, TCC

Guide EV owners to change their charging habits.

The average off-peak charging rate effectively raised to 56%, and the power delivered during off-peak hours increased by 6 times, across all stations during the two-week period in December 2022

**Reducing 4 METRIC TONS of carbon**  
Ongoing in 2023



## 6.2 / EARTH HELPER, the Carbon Reduction Sustainability Action

### MANAGEMENT APPROACH

TCC's EARTH HELPER initiative upholds UN SDG Target 12.8 "ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature," and communicates such with sustainability partners.

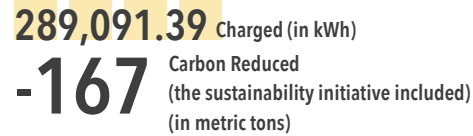


EARTH HELPER is a lifestyle philosophy based on the belief that we all share one Earth.

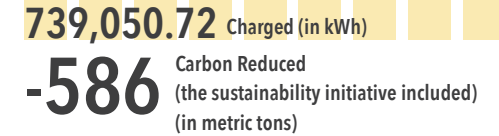
In March 2022, TCC initiated a collaborative action called "EARTH HELPER," urging EV owners and the public to shift to low-carbon green vehicles or begin energy-saving and carbon reduction efforts. The initiative also encourages responsible consumption, waste/carbon reduction, and species conservation. Participants can earn sustainability points through the actions. In 2023, TCC expanded the EARTH HELPER initiative and partnered with 8 iconic enterprises and groups, including LDC Hotels & Resorts Group and Zerova Technologies, to connect 30 physical EV charging stations such as AUDI and Volvo in Taiwan to create Taiwan's largest carbon reduction network. The top 10 EARTH HELPERS with the highest sustainability points of the year receive the "Sustainability Honor" award. The first-place winner gets to go on a carbon-neutral tree-planting trip to A.ROMA in Italy, while the second to tenth place winners can stay at Fleur de Chine in Nantou with a carbon-negative package, becoming net-zero travelers of sustainability. Furthermore, TCC uses the widely known messaging app, LINE, to promote easy sustainability practices in daily life. The app pushes monthly messages about fun and easy sustainability activities that everyone can have fun engaging their sustainable living.

### Results of EARTH HELPER

Result in 2022



Target for 2023

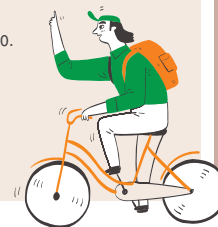


### Earth Helper Sustainability Actions in 2022



#### My Low-carbon Travel

Through interactions like the carbon reduction challenge game at TCC DAKA in Hualien and the Sustainable Traveler Survey online, TCC educates people on the carbon emissions of travel and encourage them to become carbon-reducing travelers, making sustainable choices wherever they go.



#### Fleur de Chine Lake Cleaning Activity

Travelers are encouraged to stay at the world's first five-star hotel with GSTC (Global Sustainable Tourism Council) Certification from Control Union-Fleur de Chine. Participate in lake cleaning at 7-8 a.m. and contribute to keeping Sun-Moon Lake beautiful!



#### Taroko Gorge Marathon

Taroko Gorge Marathon encourages participants to use eco-friendly cups during the event and to avoid using disposable cups.



#### Sustainable 99: Green to Work

In response to green commuting, commuters are encouraged to ride bicycles aiming for 111, i.e. once a week for at least 10 km per month.



#### The Ultimate Glory for Inclusion with Earth: ZEUS Medal

TCC will award the "ZEUS" medal to any participant who achieves a carbon reduction of 2,000 kg and plant an endangered orchid in their name at its original habitat on Lanyu (Orchid Island).



## 6.3 / Hoping Carbon Reduction Parent-Child Bankbook

### MANAGEMENT APPROACH

Through education, TCC transforms Heping Elementary School into Taiwan's first semi-carbon-trading elementary school.

### Cultivate carbon reduction habits with the Hoping Parent-Child Carbon Reduction Bankbook

TCC starts with school education and promotes the Carbon Reduction Parent-Child Bankbook program, which converts resource recycling efforts on campus into carbon coins on a bankbook. This helps children learn about Net Zero through carbon reduction, waste reduction, and resource recycling, while cultivating everyday carbon reduction habits such as energy-saving. The program instills in children the attitude of cherishing resources for environmental sustainability.

On March 4, 2023, TCC and Heping Elementary School collaborated on the "Hoping Carbon Reduction Parent-Child Bankbook" program. Students and parents earn carbon coins for their carbon reduction actions, which can be exchanged for semester carbon labels or Carbon Reduction Label Award from TCC DAKA.

TCC promoted the program to help students understand the connection between their behavior and sustainability, emphasizing the importance of individual actions for Earth's sustainability. The program also raised awareness of sustainability in the local community of Heping, creating a paradigm of carbon reduction action from individual behavior to community impact and ultimately to societal change.



**歡迎帶著不要的**

回收物對應的減碳量 (以減碳量 x 金額)

項目	價	減碳量 (kgCO <sub>2</sub> e)
購物紙	1	69
PPF 手提紙	1	241
塑膠	1	117
一號電池	1	820
二號電池	1	401
三號電池	1	134
四號電池	1	74
5V 電池	1	313

對白潔 DAKA 的 GEMMA 智慧回收機進行回收囉!

**如何回收累積碳幣**

1. 於手機下載「ECCOCO」APP 加入會員，記得完成填寫在存摺對應的手機號碼。
2. 每次將 DAKA 回收機裡裝滿，記得拿自備手機開啟 APP 輸入你綁定的手機號碼。每個月月底才有辦法將 ECCOCO 累積的碳幣換取獎勵呢！將會換成對應的碳幣存入你的存摺。

**和平減碳生活 親子存摺**

自今年暑假 2022 暑假 EARTH HELPER 減碳金豬存摺，第一階段由白潔 DAKA 的 WICATCC 充電站出發，邀請學童參與回收舊電池或舊電風扇，並由該類社大同學參與各種減碳小旅行，一起為體力打掃環境吧！未來希望同學們能與同學一起為 EARTH HELPER 提高減碳的參與感一起努力！

主辦單位：台泥和平園、台泥 DAKA、和平國小  
 協力單位：和平村辦公室、ECCOCO、荒野保護協會花蓮分會、綠色和平、工研院研創能源集團、和平港



### Hoping Carbon Reduction Parent-Child Bankbook

#### TARGET PARTICIPANTS

85 students and 60 parents from Heping Elementary School in Hualien

#### TIME

Phase I: March 4, 2023 to the end of semester in June

Note: Two-year program with planning underway for the following phases

#### FEATURE

Collaborate with The Society of Wilderness (SOW), Industrial Technology Research Institute (ITRI), ecco, and Greenpeace, to deliver sustainable living courses.

## 6.4 / Co-prosperity with Local Communities

### MANAGEMENT APPROACH

TCC engages in community development and philanthropic activities to demonstrate TCC's local care in various forms.

TCC DAKA Eco-Factory (TCC DAKA) opened to the public on January 9, 2020, as the first open cement plant in Taiwan, reflecting on the relationship between industry, cement sector, and nature. TCC's actions are communicated through a variety of activities transparently, promoting sustainable development and interacting with different communities.

### Green Shopping at TCC DAKA Market

Vendors for TCC DAKA Market in 2023 will be reselected based on criteria such as reducing the use of disposable utensils and plastic bags/packaging, or offering a NT\$5 discount to travelers who bring and use eco-friendly utensils.



### Establishment of Hoping Sustainability Charity Foundation

TCC DAKA is a non-profit organization that directs stall cleaning fees from DAKA Market vendors, guided tour fees, and a percentage of revenue from Uni-President Group on-campus stores to the Heping Elementary School Education Fund. The fund, which has received nearly NT\$4 million in cumulative contributions as of 2022, aims to improve the learning environment and provide more educational resources, such as subsidies for field trips or hiring teachers with expertise from other areas, for more diverse learning opportunities in the rural elementary school.

TCC established the "Hoping Sustainability Charity Foundation" in October 2022, with village leaders and tribal chairs on the Board of Directors. The foundation includes the Hoping Emergency Relief Fund, which provides aid to families facing poverty or emergency situations. Nelson An-ping Chang, TCC Chairman, further envisages Hoping Emergency Relief Fund to provide long-lasting resources for the tribes and the generations to come.

**NT\$1,156,750**

cumulatively as of the end of 2022

### Hanben Ocean Station at Aohua, Working to Protect 30% of the Ocean of the UN Biodiversity Conference (COP 15)

TCC's Hoping Power Plant collaborated with the Coast Guard Administration in 2021 to revitalize the first floor of the inspection office by Hanben Beach, providing a place for travelers to rest and care for ocean conservation. The station also worked with Aohua Village, offering marine activities and tribal itineraries, and established the Ocean Marketplace to provide job opportunities. In 2022, two tour guides from Aohua Village obtained their SUP Coaching License through the Station's assistance. Income from the station was directed to the Aw-Hwa Elementary School Education Fund, which totaled NT\$28,390 as of 2022.

TCC launched "Convenient Beach Cleaning" on World Oceans Day 2022, in response to the UN theme of the year "Revitalization: Collective Action for the Ocean," allowing travelers to borrow beach cleaning tools and participate in marine debris painting activity for free.

**143 participants** as of 2022



### Package-free Laundry Detergent and Dishwashing Detergent Smart Refill Station

In November 2022, TCC DAKA supported the Hualien County Environmental Protection Bureau's project by installing a package-free laundry detergent refill station on campus. The station offered an eco-friendly detergent from a biomedical company and aimed to encourage customers to bring their own containers. In addition, TCC DAKA and the 7-ELEVEN Lienhe Store on campus collaborated to provide empty milk bottles for use at the refill station. Thanks to the success, the first dishwashing detergent refill station in Taiwan was further added in 2023.

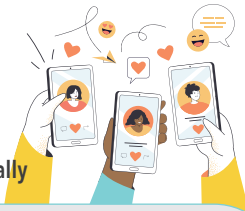
### English Teaching Assistant (ETA) Program to Cultivate Multilingual Proficiency at Heping Elementary School

Since 2020, TCC has sponsored the English Teaching Assistant (ETA) Program at Heping Elementary School, which introduces a foreign English teacher each semester to create an immersive English environment. The ETA, Nick, enjoyed the local life and often participated in tribal activities.

Heping Elementary School further uses TCC DAKA's education fund to support Mr. Nick in opening a weekly 2-hour English course in tribes after school in helping parents offer after-school English tutoring and foster a foreign language learning environment.



All Hanben Ocean Station Staff elected as OCA Volunteers to Protect the Ocean More Professionally



Like Comment Share



50% of Local Employment at Vakangan Green Energy Hot Spring Park

TCC collaborated with Fleur de Chine to create Vakangan Green Energy Hot Spring Park, which had a soft opening on August 27, 2022. The park offers geothermal power generation, hot springs, and gourmet experiences. Over half of the shops are local businesses from Pasikau, and as of 2022, 50% of the employees are Pasikau villagers. The park provides job opportunities and estimated to attract nearly 100,000 visitors per year. TCC introduced the first geothermal power generation tour in Taiwan, Vakangan Geothermal Drilling Exhibition. It started on August 27, 2022, and was open to the public during the drilling process. The exhibition aimed to showcase the geothermal project and drilling process and educate people about geothermal energy. As of March 31, 2023, there were 2,848 visitors.



Home Repair Project to Solve Home Repair Difficulties in the Rural Area

Heping village is 30 minutes away from downtown Hualien, and repair costs are two to three times higher for villagers, which could not be delivered to the villagers on the day, either. Many repair issues in the tribe were pending for years as a result. TCC DAKA established the Home Repair Service Center in July 2022 to offer free home repair services to the Heping Village. In 2022, the service has delivered 761.5 hours of services and completed 183 repair works.

A 60-year-old church in Heping tribe had a monthly water bill of NT\$7,000 recently. The church member that helped contact the home repair services said: "After I contacted the home repair team, they came to check it out shortly, proposed recommended solutions, and even took care of the lighting issue in the process. They made several trips, not shying away from troubles and were careful in their works. They were like angels sent by God. We're deeply grateful!"

The home repair team consists of three members, two of whom are local youth who returned to work in their homeland. The third member worked for over 20 years as a contractor for TCC Hoping Plant, making him a semi-villager of Heping! Let's have a look at these gentlemen.



TCC Care Bus Assist the Tribe Elders to Seek Medical Treatment in Urban Area

The Heping Village had limited transportation options, including the local train and community bus. Disabled villagers often had to rely on family to drive them to downtown. To address this, TCC Hoping Plant created the Heping Village Care Bus with a dedicated wheelchair section and elevator. The bus runs daily between Heping Village and downtown Hualien, stopping at key locations like the Township Office, major hospitals, and Hualien Train Station. Service began on July 6, 2022, and 452 passengers had accessed the service by the end of the year.

## 6.5 / Philanthropic Actions

### MANAGEMENT APPROACH

TCC is committed to supporting underprivileged communities and creating a sustainable society through proactive philanthropic efforts.



### Five Supporting Measures of Cement Academy



#### After-school Courses

Children are offered after-school classes in English, computers, and talents to encourage diverse interests and holistic development, promoting a focus on learning and growth.

#### Nutritious Food

Children are provided with box meals, bread, desserts, and nutritious milk to support their health and well-being.

#### Children's Day Activities & Summer Camps

Children can participate in Children's Day activities and summer camps to promote further growth and learning.

#### Result Presentation

The Christmas celebration presents the learning results of the year.

#### Donation

Stationery and basic supplies are donated to schoolchildren in rural areas.

### Cement Academy for All Children's Right to Elementary Education

Since 2012, TCC has been implementing the Cement Academy, a philanthropic project that supports underprivileged school children near cement plants in Taiwan and Mainland China. With Dong Ao Elementary School added in 2022, the project has grown to include 22 partner schools, benefiting a total of 10,857 students, with 1,324 students supported in 2022.

### Inauguration of Cement Academy Jointly by Dong Ao Elementary School and TCC Suao Plant

On the inauguration ceremony in October 2022, Cheng-Min Wu, the Principal of Dong Ao Elementary School, said in a sentimental tone: Although TCC Suao Plant is on the other side of the mountains, it does not give up the care for the children in the rural area here. I'm appreciative for the spaces Cement Academy provided to school. Aside from mathematics and English, Cement Academy allows the school to freely open art classes for archery, dance, and indigenous theater for children to not just learn their mother tongue in acting, but also learn about their tribal culture.

During the TCC Building Christmas Lighting Ceremony in December, students and faculty from Dong Ao Elementary School brought Christmas caroling with their flute and xylophone melodies and Atayal singing. Passers-by were also captivated by their performances.





## 6.6 / Low-carbon Theater

C.F. Koo Foundation preserves traditional dramas and other performing arts that are in danger of extinction, using restoration, adaptation, and incubation to ensure cultural inheritance in the modern world.

For decades, the C.F. Koo Foundation has been promoting traditional theater, both old and new plays, to increase the visibility of this cultural form. Through software and hardware improvements, the Foundation not only promotes Chinese opera but also low-carbon energy conservation in theatrical performances.

TCC Cement Hall upholds the principle of energy conservation, replacing all equipment with LED lights, increasing brightness (from 750W to 1,300W per light) and reducing total power consumption to one seventh of the previous level. In addition, since LED lights do not emit heat, air-conditioning can be reduced to one third of the original load for each 2-hour performance at full brightness.

Regarding software, the Peking Opera at TCC Cement Hall employs a virtual performance style, emphasizing space over solid objects. Symbolic objects are used, combined with postures and movements, for performances in variety. Also, repeated costumes are used to reduce unnecessary making of props and costumes.



### Outreach Lecture of Peking Opera

In 2022, Peking Opera outreach lectures were organized in schools and communities in collaboration with Taipei City Reading and Writing Association. Allowing the public to witness the members' demonstration performance up close.

**A total of 13 lectures were organized with 747 participants in 2022**

### Koo Cloud Theater

Koo Cloud Theater, Taiwan's only online theater channel, entered its third year and showcased nearly 80 plays, including 11 live performances. In 2022, it presented a diverse range of plays, including Peking Opera, Sichuan Opera, Kunqu Opera, Huangmei Opera, Henan Opera, Taiwanese Opera, Hakka Opera, and puppetry theater, providing novel experiences to the audience.

In 2022, Koo Cloud Theater showcased 37 programs, including 6 live broadcasts, and received 877,995 total views, a 30% increase than the previous year. The channel also gained 10,139 subscribers, with an annual growth rate of 26%. In 2023, it aims to increase its domestic and international online viewership, and promote Taiwanese plays.

