

# chapter 5

# Inclusion

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4
QUALITY EDUCATION


5
GENDER EQUALITY


10
REDUCED INEQUALITIES


Corresponding SDGs



TCC Group Family Day | TCC DAKA Renewable Resource Recycling Center



## 5.1

# Climate Action Talents



AI Nelson An-ping Chang introduces Digital Intelligence Navigators.

Thinking and action are not only expected of all TCC employees but also serves as a key criterion in our talent selection process. With digital and green dual transformation as its core, TCC fosters both individual potential and corporate sustainability through diverse development and just transition mechanisms.

TCC is reaching out to the younger generation through its 2025 recruitment campaign, using diverse formats such as campus events, job fairs, exhibitions, and themed seminars to attract climate action talent. The 2025 recruitment theme, Mobilis in Mobili—the motto of the protagonist in Twenty Thousand Leagues Under the Sea—has been reinterpreted by Chairman Nelson An-ping Chang to mean: “Changing in a changing world.” As AI reshapes industries, TCC seeks bold talent to challenge norms and shape the future. Digital Intelligence Navigators (DIN) will work under the Chairman’s Office, lead key projects, and collaborate globally to gain industry insight and join TCC’s core decision-making.

The Digital Intelligence Navigator (DIN) program is named not only for its acronym but also borrows from the meaning of 'din' as noise, symbolizing the powerful and positive transformation AI trends are bringing to the organization. We aim to recruit forward-thinking, practical talents who are innovative, and can harness various AI tools to drive organizational transformation.



At the NTU recruitment event, TCC colleagues introduced various job opportunities to students



## Headquarters Recruitment Information Session

In April 2024, TCC hosted a recruitment event at its headquarters themed “Becoming Climate Action Talent,” highlighting the company’s vision in green transition and low-carbon innovation. The event attracted 350 participants and featured interactive formats to explore TCC’s culture and career paths.

## Deep Campus Engagement

### National Taiwan University's Taiwan Pathfinder Program - Cross-Disciplinary Internship Project

At "Alumni Talk," TCC's HR shared talent trends, while NTU alumni offered career and sustainability skill insight.

### Summer Internship Program

TCC's summer internship combines sustainability, cross-disciplinary learning, and field visits, with senior mentors guiding interns through core businesses to cultivate and recruit top talent.

### Campus Visit Programs And Lectures

- Hsing Academy with National Chung Hsing University: TCC served as a mentor, sharing real-world practices at the Changbin plant through lectures and site visits, connecting students with the green energy.
- "Innovative Practices of Smart Grid" Corporate Visit Program with Chung Yuan Christian University: Held a seminar and visited Zhishan Charging Station to help students understand energy tech and grid-scale storage applications.
- National Taipei University of Business Department of Business Administration/Industry-Academia Master's Program: Through visits and lectures, students learned how TCC builds an inclusive workplace and gained insights into its 70-year development as a private enterprise.
- Yilan University and National Taipei University of Technology Visits: In addition to learning about TCC's culture, students visited energy storage and charging sites to explore operations, and attended the construction materials expo to understand TCC's low-carbon solutions in practice.

### Scholarships

- Dean's Award for Graduates, NTU College of Engineering.
- Scholarship for Master's and Ph.D. Graduation Thesis Exhibition, Chemical Engineering, NTU.
- TCC Summer Internship Grant.

### Materials Sustainability Industry Program And Internship Project

TCC and Yilan University launched an industry-academia program at Ho-Ping Power Company to train applied electromechanical talent. As of March 2025, 43 interns were recruited, with five retained.

### NTUST Institute of Applied Materials Industry-Academia Collaboration

In 2024, Molicec partnered with NTUST's Institute of Applied Materials on a hands-on industry-academia program, allowing students to understand industry practices while enhancing Molicec's process stability, R&D efficiency, and talent pipeline.

## Action Spotlight



## CIMPOR Academy

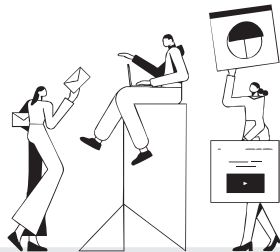
CIMPOR partners with universities to launch the CIMPOR Academy, a 12-month talent program for top students and graduates in technical and scientific fields. It combines theoretical training to build professional knowledge with hands-on internships guided by experienced mentors. Participants gain practical experience, business insight, and a deeper understanding of CIMPOR, laying a strong foundation for future careers.

5.2

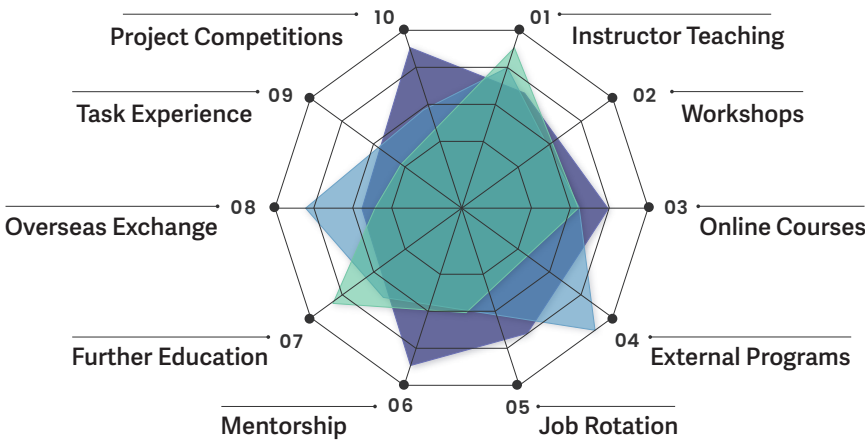
# Employee Development

According to the National Development Council's 2024 report, Taiwan will become a super-aged society in 2025. The OECD reports that Portugal and Türkiye face aging populations and labor shortages due to brain drain. TCC responds by promoting cross-generational integration and cross-domain development to encourage knowledge sharing and build a diverse, people-centered workplace.

Talent is the core driver of corporate growth. TCC is committed to building a learning organization by offering diverse learning pathways, including instructor teaching, workshops, online courses, external programs, mentorship, and job rotation. Through varied approaches, employees strengthen their expertise and develop into "Climate Action Talent."



10 Types of Employee Development Methods



## TCC Talent Development and Training System

### Sustainability



- [New Recruit Orientation](#)
- [Carbon Academy](#)
- [ISO and Important Policies](#)
- [Sustainable Learning Action Program](#)

### Management



- [Management Courses for Executives](#)
- [Mid-level/Low-level Management Courses](#)
- [Industry-Academia Seminar](#)
- [Cross-Industry Forum](#)

### Cross-Disciplinary



- [Creativity Courses](#)
- [Thinking Courses](#)
- [Self-management Courses](#)
- [Interpersonal Intelligence Courses](#)
- [Agility Management Courses](#)

### Developments



- Humanity**
  - [Internal Trainer Training](#)
- Education**
  - [TCC Lyceum](#)
- Lifestyle**
  - [Healthcare](#)
  - [Financial Management](#)
  - [Slasher Series](#)
- Language Proficiency**
  - [English Study Subsidy](#)

### TCC KEY FACTS

Number of internal transfers Increased by

4.5 times

compared to 2024



## Sustainable Learning Program — Internationalization X Strong Generation

To drive sustainable transformation and globalization, TCC adopts 'learning for all' as its core strategy. In 2024, training emphasizes internationalization and strong generation through programs like the MIT Energy Initiative, language courses, and finance and health seminars, enhancing employee capabilities in ESG, global growth, and diverse prosperity.

### MIT ILP Industry Liaison Program

Since 2020, TCC has been a part of the MIT ILP. In 2024, this collaboration expanded to include the MITeI, with a focus on energy and sustainability. The partnership's content, integrated into the internal TCC Lyceum platform, helps talent advance TCC's dual transformation.

### Language Learning

#### English Small Talk

To support international expansion, TCC offers online themed language courses to strengthen cross-border communication skills.

#### English Small Group Classes

Four small-group English classes, covering current events, conversation, business communication, and writing—help employees improve workplace communication.

### Financial Management Seminars

TCC caters to its 'strong generation' staff, the family's financial mainstay, with targeted retirement and risk seminars for enhanced financial literacy and employment stability.

### External Training Programs

#### Taiwan Sites (including Subsidiaries)

TCC subsidizes employees' participation in short-term external courses, professional seminars, and workshops to learn about the latest industry trends and technologies, broadening their professional knowledge and skills. The applicable areas include eight categories: work safety, professional

skills, certification acquisition, legal compliance, environmental hygiene, general education, management, and others. Employees may apply based on their job requirements to strengthen their career competitiveness.

969 participants

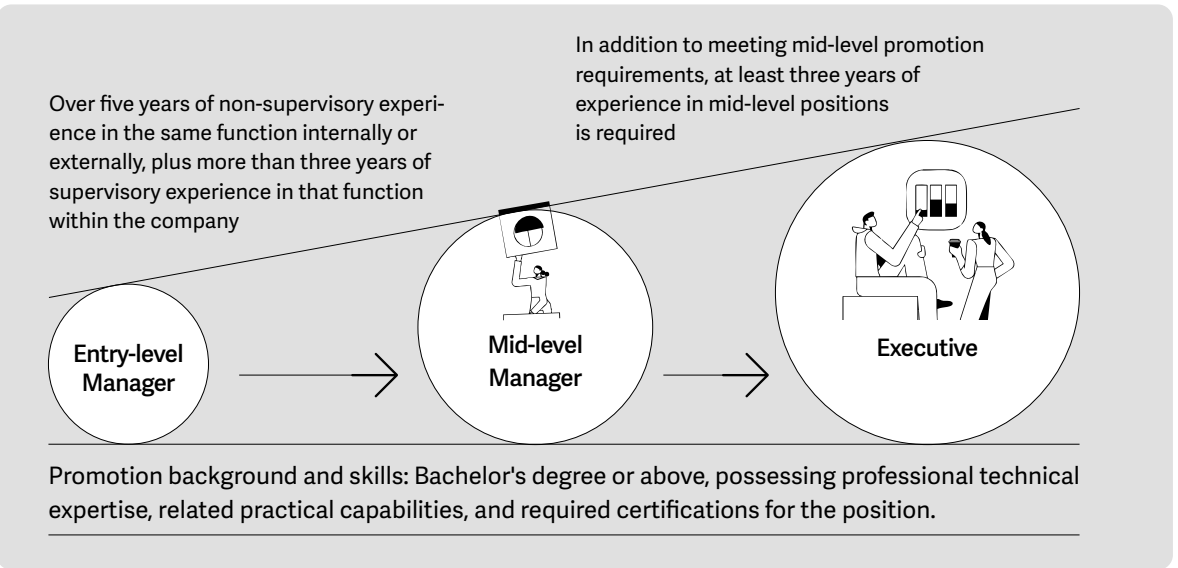
Subsidy amount NT\$2,902,219

Total hours reached 9,824.2 hours

## Transparent Promotion Channels

TCC promotes key talent through a transparent system based on performance and potential. Candidates must have two years of strong evaluations and meet organizational needs.

The process includes reviews, assessments, and supervisor nominations to ensure fairness and support career growth.



## Cross-Generational Integration: Starting with Understanding

The manufacturing industry relies heavily on experience to accelerate site setup. Emphasizing knowledge and skill transfer, TCC adopts hands-on mentorship and resource deployment across fields. It fosters cross-generational collaboration to strengthen teamwork and support young talent.

### Providing a Stage for Young Talents

#### 11 Categories of Professional Internship Program

- Focusing on Early Experience, Early Cultivation, and Talent Selection
- Five Major Features
  - Cross-Domain Proposal Competition
  - Exclusive Workplace Mentors
  - Build Workplace Networks
  - Cross-Sector Site Visits
  - Diverse Thematic Courses
- Offering Summer, Semester, and Academic Year Options

### Middle-Generation Succession & Expert Hub

Cross-business Unit Transfer Mechanism: Promote middle-generation succession training and support young teams .

- **Retiree Rehiring:** TCC rehired 20 retired employees in 2024 to provide expert insights and guidance for specific projects.
- **Expert Hub:** Noting retirees' desire to stay active for fulfillment or financial reasons, TCC plans to launch the "Expert Hub" in 2025. The program will support retirees in maintaining purpose and engagement, aligned with government mid-to-senior employment initiatives through flexible strategies.



2024 Internship Program Participants

## Cross-Disciplinary Talent Development

TCC's talent strategy centers on co-creation, global vision, and mobility to drive cross-department collaboration and international development. By integrating diverse expertise, TCC cultivates T-shaped talents with deep skills and broad capabilities. Flexible career paths, global programs, and internal transfers promote innovation and cross-domain growth. In 2024, internal transfers increased 4.5 times from 2023, with plans to expand globally.

### TCC KEY FACTS

Internal Position Replacement Rate

82%

### Action Spotlight

## "I Never Realized How Vast the World of Green Energy Truly Is."

After 23 years at Ho-Ping Power, I was fully familiar with plant operations. By chance, I transferred to TCC Green Energy. Though both focus on power generation, green energy presents far greater challenges. Managing solar PV projects across diverse sites has brought constant learning and made this the most rewarding phase of my career. This transition taught me the value of lifelong learning. I encourage both mid-career and younger colleagues to seize opportunities and prepare for the future.



TCC Green Energy Manager  
Chih-Chien Lin



Employee Development Programs

Employee Learning Methods — / Workshop / Instructor Teaching

Program Name	Training Aspects	Target Audience and Content	Indicators Linked to Company Operations
<b>New Employee Training</b> <div>Participants: 142</div> <div>Employee Percentage: 1.84%</div>	<b>New Employee Development</b>	Target — New Employees Key Corporate Policies and Internal Regulations / Occupational Safety and Health Training Sustainability Practices Overview / Internal Systems Training	Overall Employee Retention Rate 92.94% Internal Position Replacement Rate 82% Internal Transfer Rate 6% Internal Promotion Rate 6%
<b>TCC European Journey</b> <div>Participants: 3,835</div> <div>Employee Percentage: 49.68%</div>	<b>Culture</b>	Target — All Employees Understand European Cultural Heritage and Modern Development / Establish Diverse Thinking and Promote Sustainable Practices	
<b>Cultural Inclusion Program</b> <div>Participants: 329</div> <div>Employee Percentage: 25%</div>	<b>Culture</b>	Target — Molicele Employees TCC subsidiary Molicele has launched a series of cultural inclusion initiatives aimed at fostering integration and teamwork among employees of diverse national and cultural backgrounds. "We Are Family " Taiwan–Philippines Exchange Activity: By learning each other's everyday and workplace language, employees from Taiwan and the Philippines gain a better understanding of cultural and communication differences, thereby improving cross-cultural collaboration.  Interactive Experience Workshops: Molicele organized a Cultural Experience Seminar, inviting colleagues from the Philippines and Vietnam to share their home countries' culture, history, and language. These exchanges help deepen cultural understanding and respect, further strengthening intercultural awareness and team cohesion.	
<b>Leadership Program</b> <div>Participants: 33</div> <div>Employee Percentage: 0.43%</div>	<b>Leadership</b>	Target — New Managers Management Capabilities and Practical Applications / Establish a Common Language Provide Practical Management Tools and Methods / Strengthen Practical Application Abilities	Post-course satisfaction: 96% Post-course test average: 88.1/100
<b>Advanced Technology Capability Development</b> <div>Participants: 3084</div> <div>Employee Percentage: 39.95%</div>	<b>Digital Transformation</b>	Target — All Employees Latest Developments in Generative AI / The Impact of AI on Industry Transformation Opportunities and Challenges Brought by AI	The AI x IoT Machine Health Monitoring Program has been deployed at 25 cement sites worldwide. Four plants have adopted AI to optimize mining routes in Mainland China.
<b>Carbon Academy</b> <div>Participants: 633</div> <div>Employee Percentage: 8.2%</div>	<b>Sustainable Transformation Leadership</b>	Target — All Employees Greenhouse Gas Inventory Workshop / Product Carbon Footprint Workshop Scope 3 Inventory Trends and Practical Training / Engineering Carbon Footprint Training Course Supplier Carbon Footprint Course / Emission Reduction through Alternative Raw Materials & Fuels / Innovative IP – Fire-Resistant Low-Carbon Cement Storage Cabinets	Revenue from low-carbon products grew by 84% The Carbon Academy offers greenhouse gas inventory training, carbon management training, and product carbon footprint workshops, saving the Company external training costs of NT\$7,097,144.

## TCC Carbon Academy

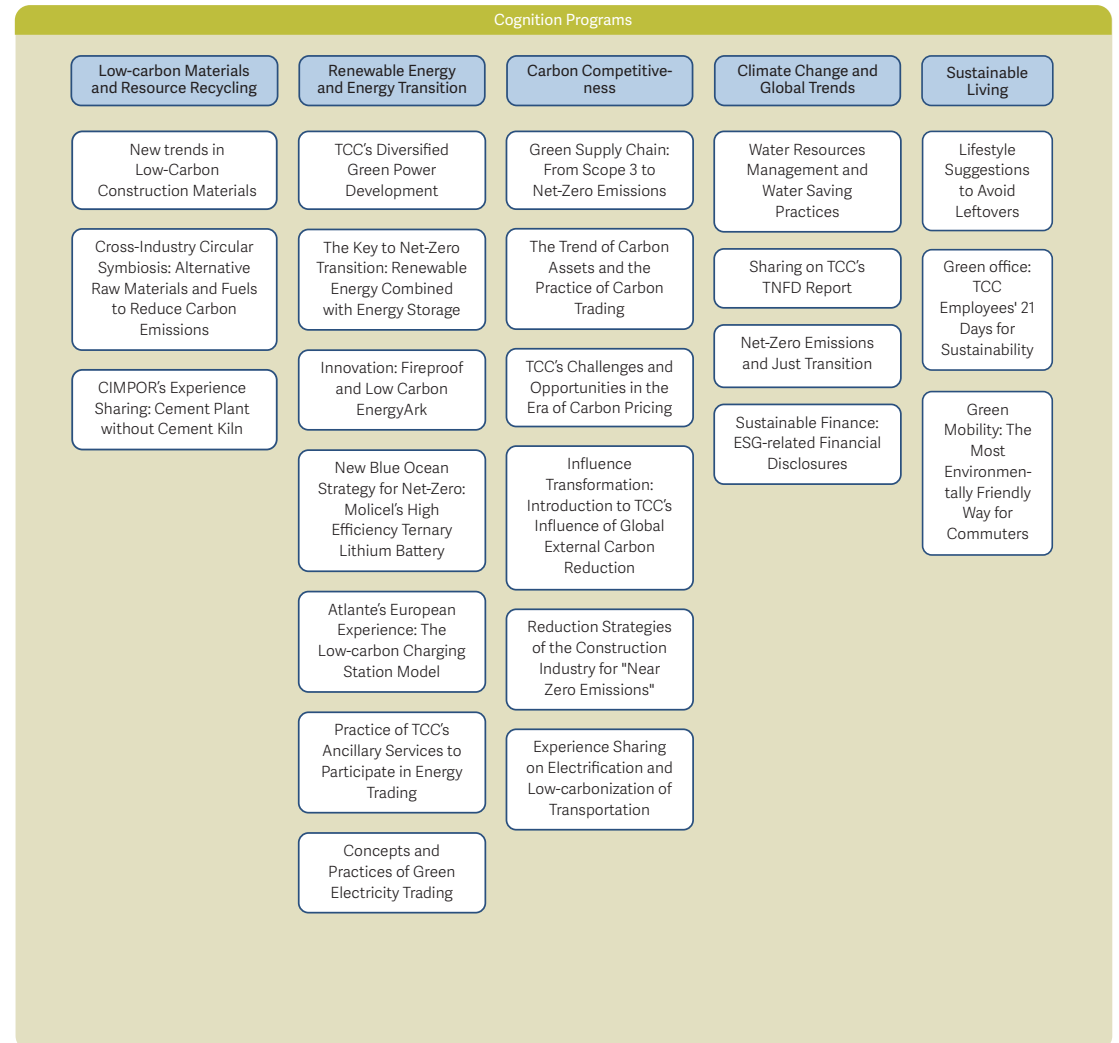
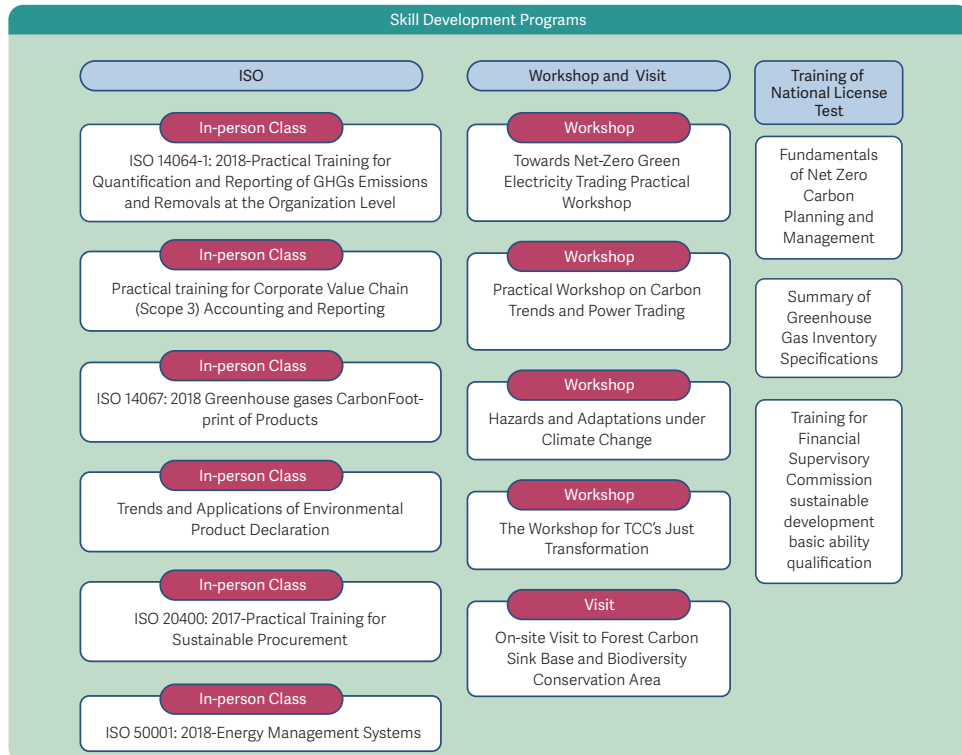
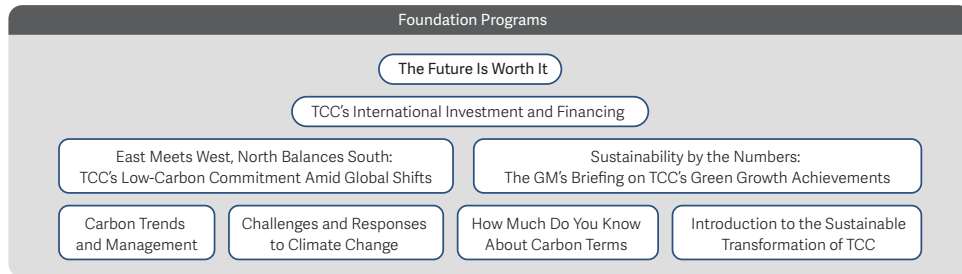
### Foundation Programs

### Cognition Programs

### Skill Development Programs

TCC launched Sustainable Learning Program to build internal climate talent and cross-domain sustainability expertise, driving sustainable products and supply chains. The 2024 course theme is Addressing Climate Challenges and Creating Opportunities for Net-Zero Transition, aiming to strengthen carbon management capabilities, align with

international standards, and enhance accurate carbon communication. In-person training is provided for key staff, with open registration for all employees. A point-based system links learning results to annual reviews to boost engagement. The program also extends to suppliers to strengthen sustainability across the value chain.





## Internal Trainer Development

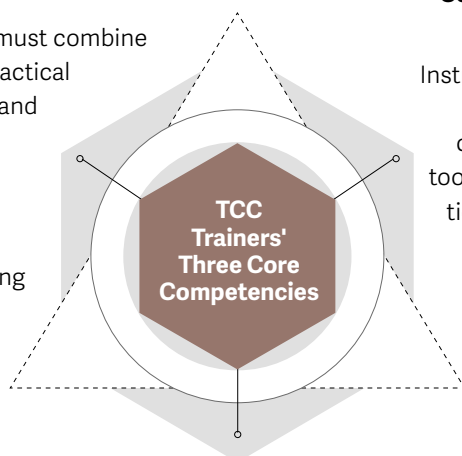
TCC fosters a culture of continuous learning and experience sharing by training skilled and passionate employees to become internal instructors. At TCC Carbon Academy, some courses are led by internal supervisors, including mid-to-senior managers with strong communication skills and external speaking experience. Instructors are selected based on the professional needs of the energy and cement business units to ensure a balance of theory and practical insight. Internal trainers are required to demonstrate three core competencies. TCC supports course creation by helping instructors define objectives, improve delivery skills, and design accessible, professional materials to ensure high-quality online learning.

### Professional Knowledge

Instructors must combine expertise, practical experience, and case-based teaching to support learner understanding

### Teaching and Communication Skills

Instructors should convey ideas clearly and use tools and interaction to enhance learning efficiency



### Guidance and Empathy Skills

Instructors should understand learners, guide discussions, and foster an engaging environment

## Action Spotlight — Internal Trainer Case



### CIMPOR CTO - Berkan Fidan Non-kiln Cement Plant

Sharing how CIMPOR applies AI and digital transformation to support cement decarbonization.



### Engineering Affairs Department Manager - Gibbs Chang

### Industrial Symbiosis: Emission Reduction through Alternative Raw Materials & Fuels

TCC supports industrial waste treatment by using it as alternative fuels and raw materials, reducing carbon emissions.



### NHOA.TCC Manager - Mark Ma TCC Carbon Academy Key to Net-Zero

Transition: Renewable Energy Combined with Energy Storage  
Sharing how TCC's low-carbon storage solutions address the intermittency of renewables.



5.3

Employee Remuneration and Benefits

TCC upholds a people-oriented approach and values every effort made by its employees. Through fair remuneration and comprehensive benefits, we motivate growth, drive innovation, and shape the future together.

TCC has proposed a fair wage philosophy by referencing local prices and cost of living. Through analysis of publicly available data, the company continuously reviews local living costs and salary structures, aiming to gradually advance toward the goal of 'decent work'.

TCC KEY FACTS

100%

of TCC employees are eligible for the Employee Stock Option Program (ESOP)

Taiwan locations (including subsidiaries)

2017-2024 | Taiwan, Mainland China (including subsidiaries)

Childbirth and maternity benefits and subsidies

Over NT\$1.47 Million Disbursed

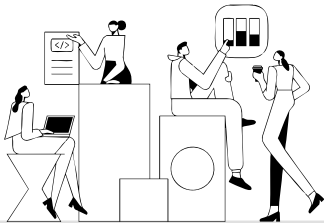
650 TCC Babies Born

Remuneration Policy and Shared Profits

Fair Evaluation System with 100% Performance Appraisal

TCC offers competitive market salaries and generous performance bonuses to motivate employees. TCC's remuneration policy reflects a commitment to sharing operational performance, with employee compensation determined by factors including performance and job responsibilities. Discrimination based on gender (including sexual orientation), race, class, age, marital status, language, thought, religion, political affiliation, place of origin, birthplace, appearance, facial features, or disabilities is strictly prohibited.

TCC has established a fair performance appraisal system, ensuring employee objectives align with company strategy. Combining quantitative individual goals and qualitative competency assessments, employee performance is closely linked to overall company profitability. In 2024, 100% of employees received performance evaluations, excluding those within their three-month probation period.



Performance Appraisal Mechanism

Type	Objectives and Content	Frequency
Goal-Oriented Management	Direct and second-level supervisors conduct initial and secondary evaluations for all employees. Evaluation indicators are 60% quantitative work objectives and 40% qualitative competency indicators(including Sustainable Action by All).	Annually
Agile Dialogue	Departments hold regular monthly or weekly meetings for continuous communication, with supervisors encouraged to provide proactive feedback during quarterly reviews.	At least once per quarter
Multi-Dimensional Performance Appraisal	By integrating competency metrics into the assessment mechanism, performance appraisals are aligned with company culture, core values, and sustainability goals.	Once per year
Team Performance Appraisal	Evaluate the performance of cross-team or cross-business project working groups and provide appropriate recognition to encourage them.	Once per year



## Annual Performance Appraisal Linked to Sustainability Indicators

For details on senior executives' remuneration, please refer to [CH1.2](#)

### Sustainable Action by All

Annual performance indicators for all TCC employees (including President, Vice President, and Managers) include "Sustainable Action by All" and "Sustainable Learning Action Program" participation, accounting for 10%. This directly aligns with the Company's sustainability goals. Indicators include emission and carbon reduction, water reuse, waste management, supply chain and partner engagement, risk mitigation, talent development, and anti-corruption and anti-bribery measures.

### SBT-Linked Remuneration

Cement plants in Taiwan and Mainland China set individual carbon emission targets based on SBT goals, incorporated into quarterly and annual bonus KPIs. The KPI is based on carbon emission intensity per ton of cementitious materials, with achievement directly correlating to quarterly and annual bonuses.

## Sound Remuneration

Taiwan locations (including subsidiaries)



### Employee Stock Option Program (ESOP)

TCC launched its ESOP in 2019, matching monthly employee contributions 1:1 into a trust. Two annual lump sums are also allowed, with a 10% company match. Employees nearing age 60 receive enhanced support for retention and retirement planning.



### Employee Savings Mutual Fund

TCC encourages employee savings with age-based deposits made in January and July. The Employee Welfare Committee adds 50%, and all funds go into a benefit trust. In 2024, 1,325 employees joined, totaling over NT\$2.3 million.



### Treasury Shares Program

TCC has established the Treasury Shares Program as a long-term incentive, linking performance evaluations to sustainability goals like carbon reduction.



### Quarterly and Performance Bonuses

100% of Group employees receive quarterly bonuses. TCC introduced the quarterly bonus system in 2018 to share results, evaluating quarterly EPS and key indicators, plus each plant's SBT carbon emission intensity target achievement. Based on operational and individual performance, TCC's bonus system aims to share profits. Relevant risk and sustainability indicators are integrated into evaluation criteria:

- **Environmental:** Pollution control, SBT target achievement
- **Social:** Occupational safety
- **Governance:** Quality, information security, anti-corruption, and anti-bribery



Note 1: For the systems of European subsidiaries CIMPOR, OYAK CEMENT, and NHOA Group, please refer to their respective sustainability reports.

## Creating a Vibrant Workplace

### Action Spotlight

## TCC Sustainable Healthy Living



TCC GROUP HOLDINGS  
Monday at 11:00 AM



🌟 Looking for a Dynamic Workplace? Exciting Activities and Challenges Await at TCC!

TCC values employees' health and encourages them to maintain exercise habits

The Company actively forms teams to participate in competitions | Ongoing self-organized events:

- 🏊 Sun Moon Lake Swimming Carnival - Guaranteed entry spots, plus accommodation at 5-star Fleur de Chine Hotel
- 🚣 Dragon Boat Racing - TCC Dragon Boat teams that win national competitions are rewarded with honorary leave
- 🚴 Round-Island Cycling Relay - Embark on a nine-day team challenge to push your limits
- 🏠 Weekend Getaway - Five generations come together along Dagou Riverside to make lasting memories

【TCC Hosts Sustainable Healthy Lifestyle Festival to Foster Mutual Employee Motivation】

🏆 A total of 842 TCC employees enthusiastically joined health point, calorie, and walking challenges.

Accumulated running 39,030 km + cycling 60,573 km = circling Taiwan 106 times!

🔥 Total 6.77 million calories burned, equivalent to 880 kg weight loss!



📷 TCC Annual Tradition – "TCC Dragon Boat Championship"



📷 TCC Island Cycling Relay



### TCC's Intergenerational Urban Forest Adventure —

#### Dagou Riverside Hike

In July 2024, TCC organized an ecological tour along Dagou Riverside, using nature to foster intergenerational connection among employees spanning six generations.

*"As we climbed steeper slopes and covered more ground, I realized that my companions had changed several times along the way, yet mutual encouragement propelled us to the finish. Colleagues of varying ages shared stories and experiences during the hike. I was pleasantly surprised to see senior colleagues transform from professional and serious at work to relaxed and chatty after hours, revealing how different everyone becomes once their work shirts are off."*

-HR Huang, Chia-Chi and Hsu, Yu-Chia

### TCC Selected as

#### Business Weekly X 104 Job Bank | 2024

- 🏆 Top 100 Enterprises for Senior Workers
- 🏆 Senior-Friendly Employer Award

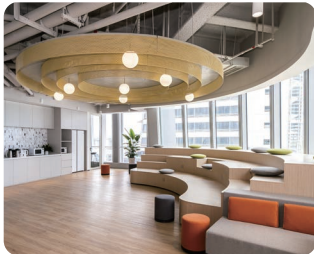
#### Common Health Magazine | 2024

- 🏆 CHR Corporate Healthy Responsibility Award
- 🏆 Best Companies to Work for in Asia



# Employee Support Program

TCC is committed to fostering a healthy work environment. Through the Employee Support Program, we provide comprehensive care from physical and mental to family aspects, fulfilling TCC's long-term commitment to employee well-being.



## Work Autonomy and Flexibility

### Flexible Hours and Agile Working

**Hybrid Agility to Work /Time Difference Leave —**  
Employees working across time zones may apply for time difference leave the following morning.

**Flexible Office Attendance —**  
Employees can adjust their working hours as needed, with flexible attendance periods available. In 2024, 239 employees applied.

## Family Care and Support

### Maternity Protection and Support

**Nursing Care Service —**  
Pregnant employees receive one prenatal and one postnatal consultation, plus occasional phone calls for health education. In 2024, on-site services totaled 551 uses.

**Nursing Room —**  
Facilities are available at all operational locations, with unlimited access during lactation, with time counted as regular working hours.

### Diverse Leave Benefits

**Paid Personal and Sick Leave —**  
Employees are entitled to 3 days of fully paid leave to support employees through various life events.

### Family Care and Support

**Childbirth Incentive & Celebration Bonus —**  
NT\$10,000 for the first child, NT\$20,000 for the second, NT\$50,000 for the third, plus an additional celebration bonus.

- In 2024, 192 employees applied with a total of NT\$1,714,903
- 544 TCC babies were born in Taiwan from 2017 to 2024.

### Paid Maternity & Parental Leave —

Taiwan legally provides female primary caregivers with 8 weeks of paid maternity leave and 6 months (26 weeks) of parental leave at 80% of insured salary. In Mainland China, female primary caregivers are entitled to 3 weeks (15 days) of paid maternity leave by law. They also receive a total of 32 weeks of paid parental leave, including 83 days paid based on the department's average monthly wage and 80 days of fully paid childcare leave.

**Paid Parental Leave —** Spouses receive 7 days of paid paternity leave and 6 months of childcare leave at 80% of the insured salary.

Hybrid  
Agility  
to Work

**Paid Family Care Leave —** Offers 3 days paid leave, exceeding legal requirements. In 2024, 157 applied, totaling 2,684 hours.

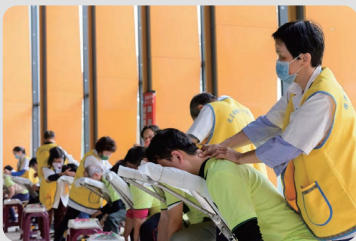
**Work from Home —** Office employees with childcare needs for children under 12 may work from home 3 days monthly.

## Physical, Mental Health and Safety

### Sports and Health Programs

**New Assistance Programs to Promote Physical and Mental Health —**  
TCC will launch the Employee Assistance Program (EAP) in 2025

- One-on-one Consultation | Once per Year
- Toll-free Employee Care Hotline
- Regular Stress Relief Seminars



5.4

# Occupational Health and Safety

GRI 403-1 / 403-2 / 403-3 / 403-4 / 403-5 / 403-6 / 403-7 / 403-8 / 403-9 / 403-10



*"Whether they are colleagues or contractor personnel, we are responsible for anyone who enters our company premises to work. 2024 is a time for us to strengthen occupational safety. Let's work together to build a safe and sustainably operated TCC."*

--Chairman Nelson An-ping Chang

## Occupational Health and Safety Management

Committed to a safe workplace and zero occupational injuries, TCC's "Internal Control Policies for Occupational Safety and Health Management" apply to all Group employees, outsourced workers, and contractors. The safety regulations include "Occupational Safety and Health Management Regulations," "Occupational Safety and Health Management Plan," and "Occupational Safety and Health Code of Practice," promoting a safety culture through behavior-based management. CIMPOR and OYAK CEMENT also prioritize employee OHS in their Integrated Management System Policy.

To drive management intensity, TCC, CIMPOR and OYAK CEMENT have clear remuneration linkage mechanisms: TCC's management team's annual performance bonuses are adjusted based on OHS performance; 10% of CIMPOR employees' variable pay is directly linked to OHS performance; OYAK CEMENT's OHS incentive program rewards employees for promoting safety awareness among partners and visitors.



### TCC KEY FACTS

# ISO 45001

Certified

Taiwan and Mainland China Cement Business & OYAK CEMENT  
Planning underway for CIMPOR, E.G.C. Cement Corp and Feng Sheng Enterprise Company Limited

100% of contractors signed the Safety and Health Responsibility Commitment  
Taiwan and Mainland China



[Occupational Safety and Health Policy Statement](#)



### TARGET

TCC

2016-2018 Average Baseline  
**Lost Time Injury Frequency Rate (LTIFR)**  
**Total Recordable Incident Rate (TRIR)**

-35%

reduction in the past 3 years  
(including contractors)

CIMPOR & OYAK CEMENT

By 2030  
**Lost Time Injury Frequency Rate (LTIFR)**  
reduced to

below 1

**Lost Time Severity Rate (LTISR)**  
reduced to

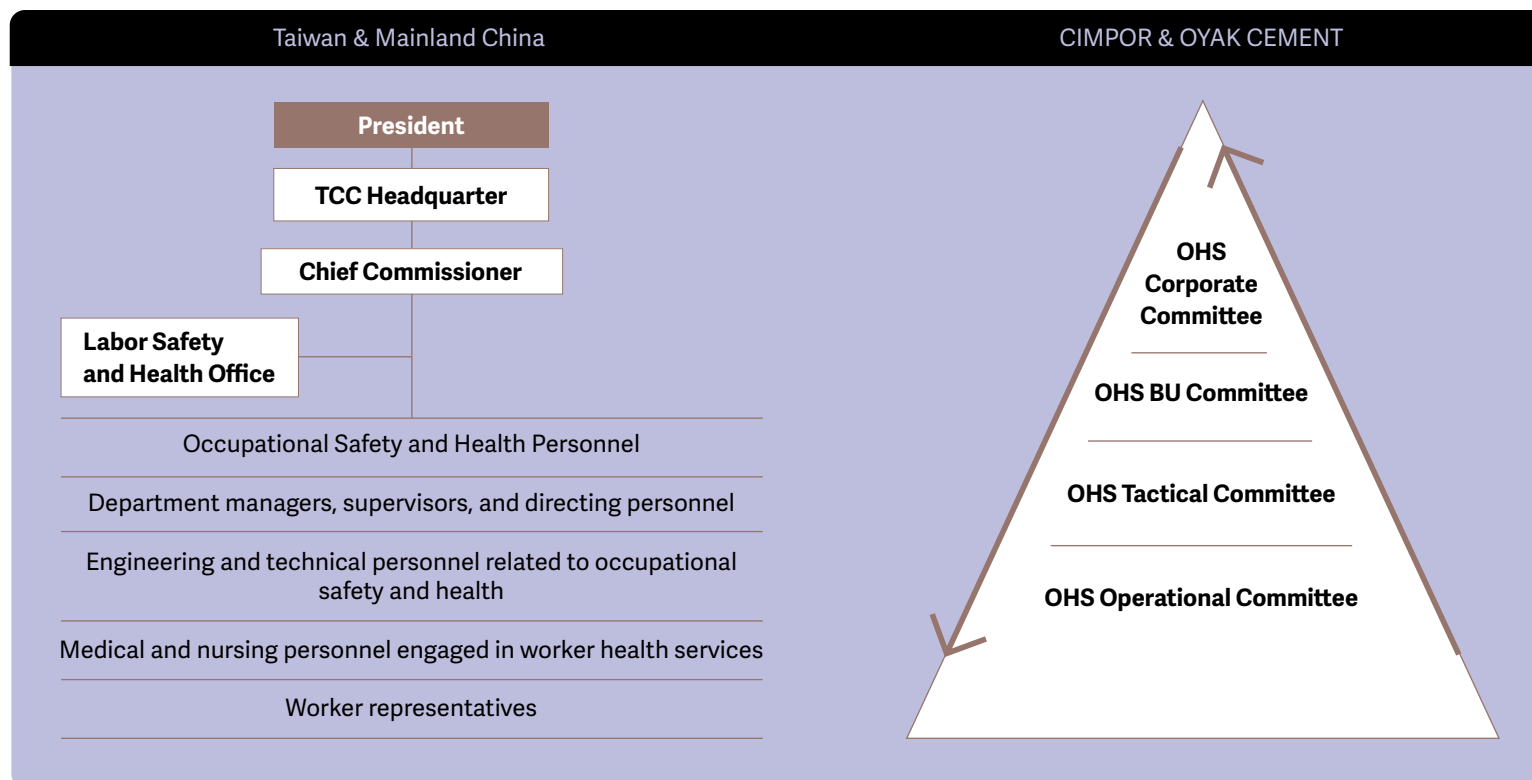
below 0.001

## Occupational Safety and Health Committee

TCC prioritizes employee workplace safety. Monthly TCC meetings, chaired by the Chairman, begin with OHS performance and improvement plans. TCC's OHS management system includes legally required Labor Safety and Health Offices (LSH Offices) at each site. Taiwan sites hold quarterly OHS meetings, while Mainland China plants meet monthly; led by the Chief Commissioner, these meetings track progress, review improvements, decide OHS matters, and report to headquarters. In 2025, "Safety Improvement Promotion Teams" were formed at each plant to boost OHS performance and prevent

accidents. Monthly "Group OHS Meetings" are held, with headquarters Occupational Safety and Health Management Office overseeing plant improvements and implementation. Safety awareness is also reinforced via presidential-approved disciplinary actions. For CIMPOR and OYAK CEMENT, the CIMPOR Group's Board of Directors supervises their OHS Committee's operations. A digital OHS monitoring platform consolidates accident reports and data, enabling the committee to continuously identify, manage risk events, and analyze trends.

## Occupational Safety and Health Committee Organization



## Action Spotlight

OYAK CEMENT promotes DOST (Turkish for "friend"; Davranış Odaklı Saha Turları – Behavior-Based Field Inspections). This program prevents accidents through safety dialogues, observations, and risk discussions. It optimizes OHS management via employee feedback collected by the Focal Point system. An annual OHS Roadmap sets targets for all plant areas, incorporating monthly KPI tracking. Employees are encouraged to report OHS risks, and managers regularly inspect plants, reporting back to Headquarters. CIMPOR's European and African operations use the INTELEX OHS management system to integrate incident recording, notification, risk control, and data analysis. All workplace incidents are logged, and dedicated units conduct investigations and report to boost efficiency and transparency.



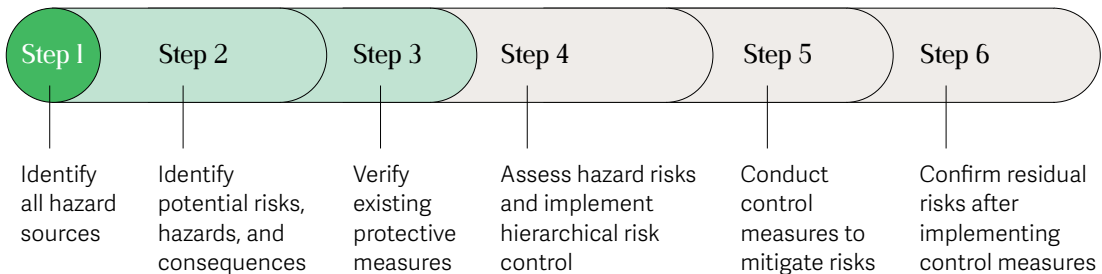


### Occupational Safety Reporting Mechanism

To enhance OHS management efficiency, TCC transitioned from "Occupational Safety Monthly Reports" (2021) to "Weekly Reports" (December 2024) for improved data tracking. These reports cover work injury statistics, audit findings/improvements, contractor violations/outcomes, and OHS training. Since October 2024, Taiwan cement plants daily report high-risk operations and control effectiveness for immediate correction. In 2024, two OHS monthly meetings discussed performance, enhancements, and the Safety Improvement Promotion Team's implementation in Taiwan and Mainland China. TCC has established occupational disease management and tracking mechanisms, with sites adhering to local regulations. TCC commissions accredited bodies for regular environmental monitoring (quarterly or biannually), and enhances plant safety facilities and signage to protect employees, who can legally refuse dangerous work. Sites employ contracted or full-time medical staff who grade health checks, provide proactive care, and conduct special operational checks. Employees in Taiwan undergo roving health check-ups every three years; Mainland China employees receive annual health assessments. Occupational diseases are diagnosed by occupational physicians or qualified institutions. To enhance management, all CIMPOR on-site medical staff are under the OHS Office, gaining real-time insights from health examinations and periodic care.

### Hazard Identification and Risk Assessment

TCC conducts hazard identification and risk assessment for routine and non-routine operations. This involves evaluating hazardous workplaces and assessing the severity and frequency of OHS risks across various processes and activities to calculate OHS risk indicators. From identified hazards, TCC assesses their OHS risks and implements relevant measures, considering regulations and the effectiveness of existing controls.



### Road Safety Management

#### Taiwan Transport & Storage

All vehicles at TCC subsidiary Taiwan Transport & Storage are equipped with safety features like lane departure warnings, fatigue driving alerts, and tire pressure monitors. Daily alcohol tests and driving behavior monitoring ensure driver focus and safety. Regular driver training promotes safety awareness. Vehicle incidents are reviewed monthly in management meetings and converted into training cases.

### Heat Hazard Project

Following 2024 human rights due diligence for Taiwan suppliers, TCC launched a Heat Hazard Project. This project promotes high-temperature work guidelines, manages heat-related illnesses, and provides protective measures exceeding legal requirements in its Taiwan and Mainland China plants. Measures include renovated, air-conditioned rest areas for employees/contractors, replaced water dispensers for continuous clean drinking water, and permitting temporary sun umbrellas for contractors. From 2025, during the annual heat hazard prevention period, outdoor technical personnel at TCC's Taiwan and Mainland China plants will receive high-temperature allowances and cooling sprays to enhance workplace safety.



Work Injury, Fatality, and  
Near-Miss Incident Investigation  
& Improvement Process

In 2024, incident reporting was conducted via email. Starting in 2025, the official launch of the occupational accident reporting system will require incidents to be reported within one hour of their occurrence. Its integrated form design enhances accuracy and efficiency, standardizing reporting channels and enabling real-time updates for transparency.

Incident Occurrence	<p>Major occupational accidents require immediate reporting to the OSH Office and supervisors. Contractors must notify the supervision unit within 30 minutes, contacting fire and medical units as per regulations. Taiwan plants report major accidents to local labor inspection authorities within 8 hours; Mainland China plants, within 1 hour.</p>	<p><b>Near-Miss Incidents</b></p> <ul style="list-style-type: none"><li>● Near-miss incidents require same-day reporting to the supervisor.</li><li>● The Investigation Form must be completed and submitted to the OSH Office for records.</li></ul>
Incident Cause Investigation	<p>Following a major occupational accident, the OSH Office aids units in establishing an "Occupational Accident Investigation Taskforce" for on-site inspections with labor representatives and department supervisors. After submitting an "Accident Prevention Report" to the President, the accident's course and handling are reviewed in a meeting within one week.</p>	<ul style="list-style-type: none"><li>● The originating unit analyzes the incident and submits evidence for OSH Office review.</li><li>● The OSH Office verifies root cause management and action completeness.</li><li>● If necessary, the matter is reported and discussed at monthly "Group OHS Meetings."</li></ul>
Incident Review & Improvement	<p>Units track and review improvements from Taskforce findings until completion. Major accident sites are photographed for evidence and, along with investigation reports, forwarded to the OSH Office as training case studies to prevent recurrence.</p>	<p>The OSH Office conducts on-site re-inspections to verify the effectiveness of improvement measures.</p>



In 2024, minor work injuries in Taiwan and Mainland China stemmed from entanglement, falling objects, and falls. Post-incident, TCC investigated root causes and boosted inspections in high-risk areas. For example, Ho-Ping Power Plant conducts regular supervisory audits and monthly area inspections by department OHS representatives. The company also increased plant visit frequency and added training to prevent recurrence, aiming for **"zero workplace injuries."**

### Contractor Safety Management

"When you join TCC,  
you become part of our family."


To ensure contractor safety on-site, TCC established "Contractor OHS and Environmental Management Rules," mandating OHS compliance. All contractors must sign a "Safety and Health Responsibility Commitment" and complete OHS education upon entry, also completing "Workplace Environmental Hazards Notice" and "Notification." Digital safety training tests assess personnel, boosting OHS awareness and ensuring adherence to environmental safety and health regulations for all on-site workers. OYAK CEMENT strengthens contractor safety by categorizing them into four risk levels during procurement and contracting, adhering to its "Occupational Health, Safety and Environmental Regulations" with specific rules for each category. CIMPOR manages contractors via its "Occupational Health and Safety Contractor Management Manual."

### Health & Safety Education Training to Enhance OHS Awareness

TCC conducts annual labor, occupational safety, and disaster prevention training per government regulations. Employees regularly undergo new and refresher

training for certifications in first aid, oxygen-deficient operations, hazardous equipment, and OHS supervision. The Company also actively participates in government-organized disaster prevention seminars and certification training.

Taiwan	Mainland China	CIMPOR	OYAK CEMENT
2025 Plan			
Annual Training Hours 10 hours annually for all employees (including general staff and managers at all levels)	Annual Training Hours Mining personnel: minimum 72 hours Other employees: minimum 24 hours	Annual Training Hours 14 hours annually for all employees	Annual Training Hours 16 hours annually for all employees and contractors
Topics include Enhanced on-site operational environmental safety regulations	Annual "Safety Re-education" Training Mining personnel: minimum 20 hours Other employees: minimum 8 hours	Topics include Work at heights, confined space operations, 7 Life-Saving Rules, first aid, and fire drills	Strengthening Occupational Safety Culture Training Managers Employees in high-risk roles (specialized training)



### VR Immersive Education & Training

Yingde Plant (Guangdong) & CIMPOR

Yingde Plant's OHS Lecture Hall, opened in November 2024, features interactive simulations for fire extinguishing, CPR, fall arrest, and helmet impact. It also has a VR experience zone using storylines to teach employees about potential OHS risks like mining truck blind spots, high-altitude operations, electric shock, and dormitory fires. Additionally, CIMPOR produces educational videos from actual plant incidents and conducts fire department drills to enhance employee evacuation capabilities.

**TCC KEY FACTS**

### Occupational Health and Safety Education Training

| Taiwan, Mainland China, CIMPOR, and OYAK CEMENT

## Accumulated Employee Training Attendance

118,358 participants

Training Hours — 62,482 hours



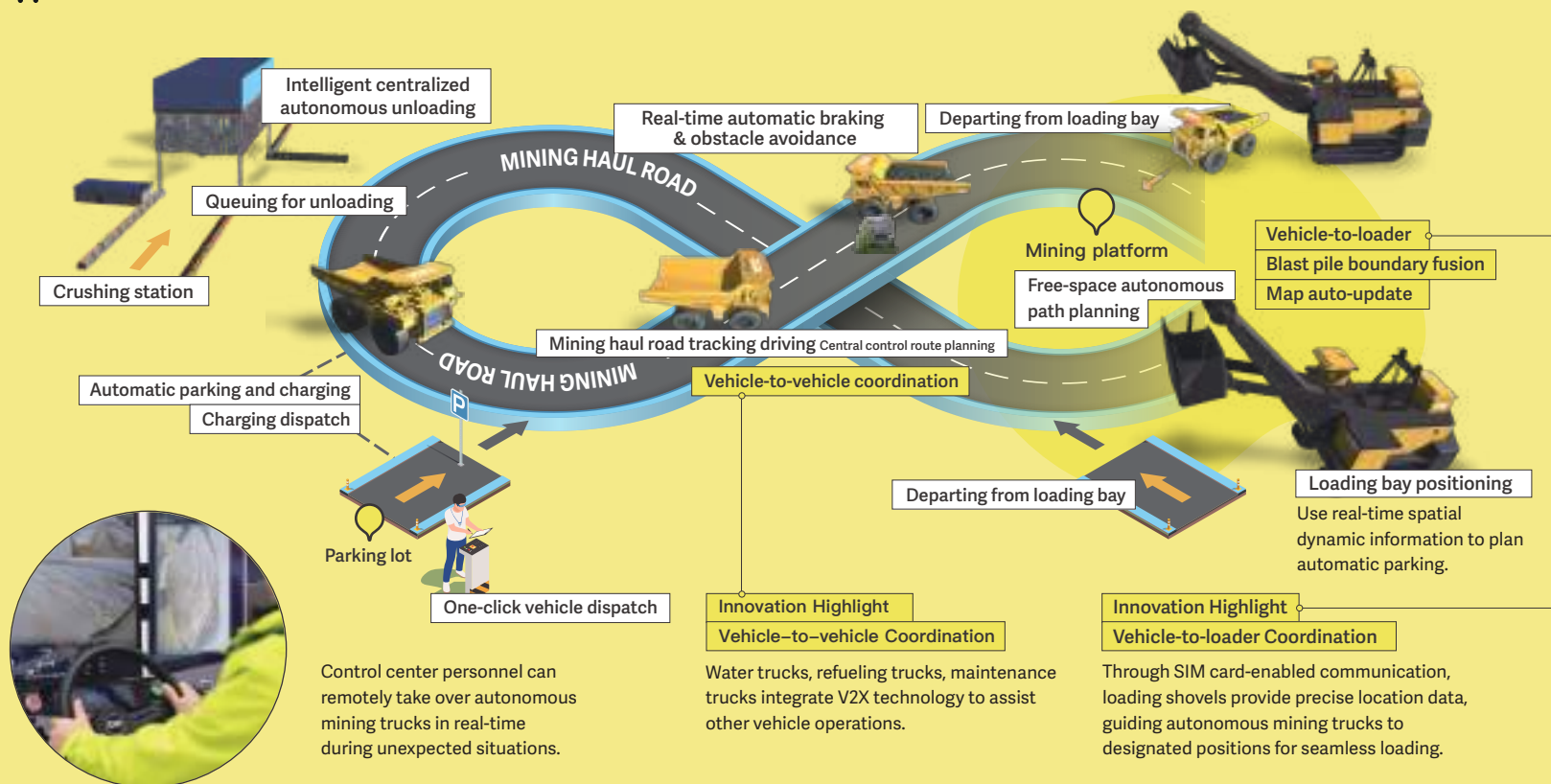


## AI Smart Monitoring & 5G Applications Enhance OHS Management Efficiency

All TCC workplaces feature clear warning signs and safety boards (risk reminders, PPE requirements, emergency contacts), as well as evacuation cards and the 7 Life-Saving Rules (entry guidelines). Employees who identify immediate danger while working can cease operations and evacuate to a safe location. TCC is committed to maintaining production site safety. This includes using automated equipment to keep employees from high-risk areas and leveraging 5G technology and AI systems to enhance management and provide real-time OHS risk alerts.



### AI Unmanned Mining Sites | Fully Autonomous Transportation



#### Jurong, Yingde, Chongqing, Guigang, Guangan, and Anshun Plants

Unmanned mining relies on digitalized mines, featuring 3D modeling and dedicated 5G networks. Centralized 3D visual control enables closed-loop management, significantly improving safety and efficiency. Guigang and Chongqing plants have completed digital mine construction. Jurong Plant fully adopted unmanned mining trucks, with Yingde Plant activating 10. Guangan and Anshun plants are in the process of implementation.

#### Yingde, Guigang, Jurong, and Chongqing Plants

In 2025, TCC will upgrade its smart mine capabilities with new AI recognition for safety helmets, hazardous behaviors, and personnel clearance. Deployment will be expanded, integrating drone technology with the smart platform for automated flight and remote supervision, driving a comprehensive intelligent upgrade of mining operations.



Yingde Plant

## AI Intelligent Driving Supervision

AI cameras in mining vehicles detect driver drunk driving, fatigue conditions, and unsafe behaviors, automatically alerting the control center with screenshots. Personnel intervene via intercoms to prevent accidents. All Taiwan RMC trucks will adopt similar intelligent supervision systems for real-time alerts.



Ho-Ping Power Plant

## Digital Periodicals

Monthly OHS management updates are shared with all employees via digital periodicals, and staff must complete OHS knowledge questionnaires.



Guangan Plant

## Real-Time Notification

The "Grid Safety Management System" clarifies risk levels and OHS responsibilities by role. Integrating a "Safety Production Management Tool APP" and "WeChat Safety Management Groups," employees at all grid levels can use their phones on-site for inspections, pre-work safety pledges, hazard/accident reporting, and OHS training/assessments. This significantly boosts the timeliness and convenience of risk reporting.



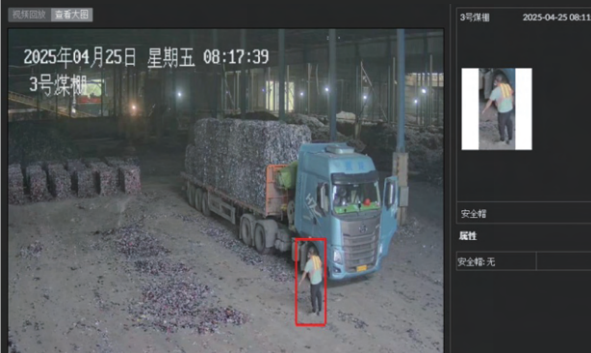
## AI Image Recognition

Suao Plant, Taipei RMC Plant, CIMPOR & OYAK CEMENT

In 2024, Taiwan plants completed their AI-assisted recognition system proof of concept, planning priority implementation in cement plants by 2025. Türkiye and Portugal plants will install 60 AI cameras to record occupational safety incidents, identifying improvement opportunities.

Guigang Plant

Using AI camera recognition, the system monitors personnel safety compliance (helmets, seat belts, masks, reflective vests) and fire protection system safety, with continuous optimization through added monitoring items.



Hoping Plant, Suao Plant

## AI Facial Recognition Management

In 2025, these plants will be demonstration sites for a single-entry and exit management system. Employees and contractors will use separate facial recognition systems for biometric access, integrating with the OSH Office's digital engineering surveillance to boost contractor management. Ho-Ping Power Plant had already implemented contractor facial recognition in 2019 and an employee system in 2020.



Ta-Ho Maritime

## Remote Medical Services

In 2024, TCC subsidiary Ta-Ho Maritime partnered with Taipei Medical University to launch a 24/7 remote healthcare network for seafarers. This service provides zero-time-difference medical contact and emergency consultation, enhancing seafarer health. Training covers medication, first aid, psychology, and general healthcare. Doctors provide video consultations, prescribing from ship inventory, dispensed by certified onboard colleagues. The service also includes five remote follow-up consultations per patient, with nurses monitoring, which effectively reduces medical detours, lowering carbon emissions and conserving energy.

5.5

# Human Rights Protection

GRI 2-24 / 2-25 / 2-30

TCC firmly prohibits child labor, human trafficking, and forced labor, and complies with all relevant wage and working hour regulations to ensure timely payment of fair living wages. At the same time, we foster a safe and healthy work environment, supporting employees in maintaining good physical and mental health and work-life balance.



**Human Rights Policy**

Anti-discrimination, Anti-harassment, and Anti-bullying Policy

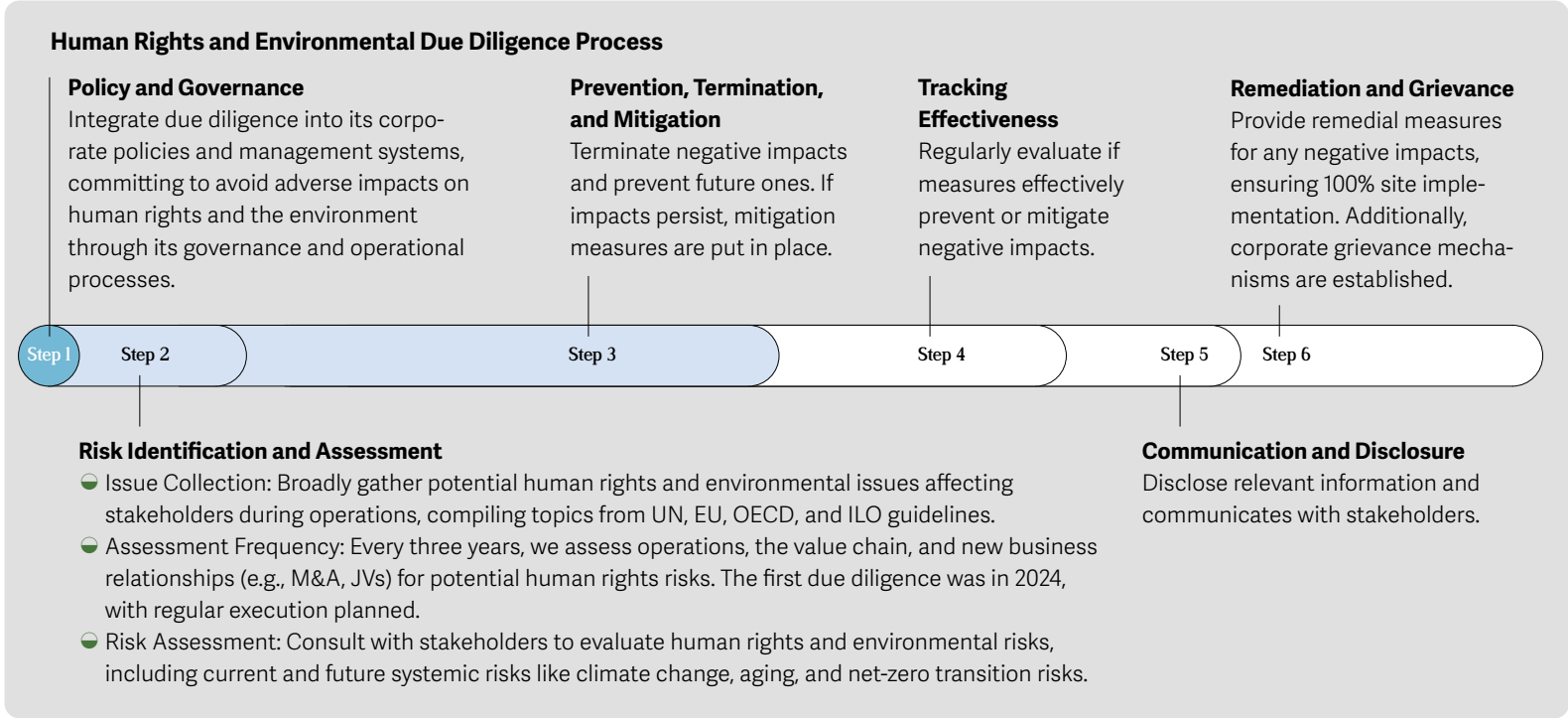
## Aligning with Global Standards: First Human Rights and Environmental Due Diligence Report Released

TCC launched human rights due diligence in 2019, triennially assessing 100% of its operations, value chain, and new business relationships (e.g., M&A, JVs) across all locations (including Mainland China, subsidiaries, affiliates) to identify risks. Global expansion to other business groups begins in 2025.

In 2024, TCC released its first Human Rights and Environmental Due Diligence Report, aligning with the EU CSDDD and other guidelines. Initial implementation focused on TCC Operation Headquarters, Taiwan cement, and RMC plants. The 2025 scope will expand to include

Mainland China employees, Taiwan subsidiaries, and Molice Taiwan plant, with methodology discussions for European subsidiaries starting in 2025.

The 2024 report identified priority rightsholders (employees, local communities, customers, suppliers, contractors) based on five principles, including female employees and indigenous people. Most critical issues are controlled by existing measures; remaining risks are integrated into remedial mechanisms for effective governance.





## Human Rights and Environmental Risk Assessment & Verification

Following ISO 31010 risk assessment methods and the Due Diligence Guidance for Responsible Business Conduct, TCC conducts questionnaire surveys and stakeholder consultations to understand human rights and environmental risk items across six rightsholders categories. Prioritization of due diligence issues is based on their high likelihood and significant impact.

Following human rights and environmental due diligence, TCC proposes prevention and mitigation for potential impacts on critical human rights and environmental issues, and remediation for existing impacts. To verify adequate handling of potential/negative impacts, quantitative or qualitative indicators referencing the UN Guiding Principles on Business and Human Rights track management, effectiveness, and grievance remediation via a dashboard. Existing management and prevention/mitigation measures reduce most risks to low residual levels; remaining risks are remediated with strengthened preventive management.

However, with systemic risks like climate change, an aging population, and net-zero transition, challenges are severe. More comprehensive prevention and mitigation strategies are needed to strengthen overall response. For detailed information, please refer to TCC's [2024 Human Rights and Environmental Due Diligence Report](#).



### Supply Chain Human Rights & Environmental Due Diligence

Through questionnaires to TCC employees and personnel from suppliers and contractors in

office and factory operations, we identify human rights risk issues among significant tier-1 suppliers and contractors. Issues include, but are not limited to: forced labor, human trafficking, child labor, freedom of association, collective bargaining, wages and benefits, bullying and harassment, climate change, biodiversity, and environmental degradation.

### Key Tasks for Human Rights & Environmental Due Diligence in 2025

In 2025, TCC will continue its human rights and environmental due diligence, gradually expanding scope to other global business groups. Workshops, qualitative interviews, and questionnaires will foster active rightsholder participation, ensuring findings align with actual needs. TCC will also strengthen international supply chain human rights management, continually referencing UN, ILO, and other international conventions and guidelines. Combined ISO risk assessment methods and management standards to establish a human rights and environmental risk management mechanism tailored to global business entity needs.

#### Latest Human Rights Due Diligence Results

	% of total assessed
Own operations	100%
Contractors and Tier I suppliers	80%
Joint ventures	100%



Gender Neutral Toilets  
TCC DAKA Graffiti House



## Strengthen Human Rights Management

### Human Rights Education & Training

TCC includes its "Human Rights Policy," "Statement of Integrity and Ethical Conduct," and "Anti-discrimination, Anti-harassment, and Anti-bullying Policy" as mandatory annual training. All employees must read the policy documents and complete tests yearly. In 2024, online reading rates for Taiwan and Mainland China employees reached 98%, totaling approximately 2,215 hours (calculated based on 15 minutes reading/test time). CIMPOR and OYAK CEMENT plan to launch in 2025.

#### TCC KEY FACTS

Human Rights Education & Training Hours  
2,215 hours

Engagement Rate

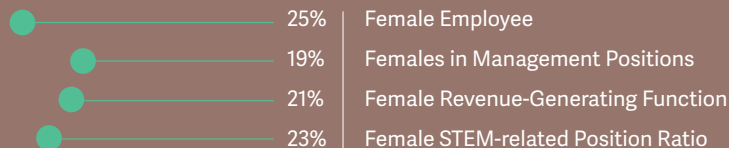
87%

#### TCC KEY FACTS

Female Employee Composition in 2024 —  
Cement & Battery Business, NHOA Energy

2025 TARGET: 22% Female Employees

#### International Employees 7%



### Zero Tolerance for Misconduct & Bullying

TCC values employee rights and promotes a safe, inclusive workplace. An "Anti-discrimination and Anti-harassment Policy" guides employees in preventing and addressing misconduct. In Q1 2025, anti-bullying measures will be added into the "Anti-discrimination, Anti-harassment, and Anti-bullying Policy," strictly banning all forms of bullying and providing secure grievance channels. Training and promotion further support awareness and a respectful work environment.

TCC provides a Employee-Friendly secure online platform and confidential feedback channel to protect whistleblower privacy and prevent retaliation. Policies and grievance mechanisms are in place to prevent discrimination and harassment, ensuring employee well-being. In 2024, TCC recorded zero violations of the Gender Equality in Employment Act worldwide.

### Gender Equality

#### Valuing Employee Diversity by

##### Respecting & Accepting Individual Differences

- TCC's construction materials business involves physically demanding roles, often attracting more male applicants. To reduce groupthink, TCC sets female representation targets, with NHOA Energy and Atlante aiming to increase female engineers tenfold.
- TCC developed an AI resume analysis system that uses big data to match talent, reducing bias in manual reviews. Recruitment ads must use gender-neutral language to avoid stereotypes.

### Cultural Integration

#### Exchanging Cultural Heritage

- Food is a gateway to cultural understanding. TCC fosters cross-cultural exchange through activities like sharing Italian cuisine at Christmas and Taiwanese snacks at birthdays. In 2024, TCC co-hosted "Dante Movie Night" with the Italian Economic, Trade and Cultural Promotion Office, pairing Italian food with casual networking.
- TCC supports foreign colleagues in Taiwan with rental matching, medical assistance, and transport to energy sites, helping them adapt and integrate into the workplace.



## Action Spotlight

### A European Journey Through the Eyes of TCC People

A total of 3,835 participants

In 2024, TCC launched a diversity and inclusion lecture series covering humanities, history, lifestyle, environmental sustainability, and industry development, aiming to foster cross-cultural interaction, intergenerational integration, and gender-inclusive career development. The first session featured Chairman Nelson An-ping Chang and cross-business unit colleagues sharing "A European Journey Through the Eyes of TCC People" via guided reading and panel discussion, exploring Europe—a climate change leader—through its culture, history, and cuisine.



### Listen to Employees' Deepest Concerns & Help Identify Occupational Burnout



Daniele Cassioli, a blind water skiing world champion, serves as NHOA Energy's Ambassador for Inclusion

TCC actively prioritizes employee mental health. NHOA Energy pioneered the AI-powered Beaconforce platform in 2022, which analyzes daily responses to identify potential burnout. In 2023, NHOA Energy partnered with nilo.health to offer anonymous 1-on-1 and team psychological counseling in over 32 languages (10 hours per person biannually). Online courses and retired athlete consultants also guide stress relief through exercise. In 2024, employee participation reached nearly 70%, with full implementation at Atlante. TCC will leverage this success for gradual global expansion, with an Employee Assistance Program (EAP), including counseling services, set for 2025 implementation.

In 2024, MoliceL enhanced diversity and inclusion for foreign colleagues, offering cultural experiences, Mandarin courses, and 24-hour translation and life assistance to aid their integration into Taiwan's workplace. MoliceL also upholds human rights by enforcing zero recruitment fees and ensuring equal promotion and career development opportunities for foreign staff, demonstrating strong commitment to ethnic integration.

### MoliceL Committed to Creating a Friendly & Inclusive Workplace





### Employee Engagement Survey

TCC has conducted annual employee engagement surveys since 2019, using questionnaires to gather diverse employee perspectives. TCC analyzes results across survey dimensions, communicating findings to unit supervisors and employees to develop improvement and optimization plans. Regular meetings then review, track, and oversee implementation effectiveness. The 2024 survey covered all employees (including Mainland China, affiliates); future surveys will include overseas subsidiaries.

In 2024, a third-party organization conducted an anonymous engagement survey for all employees in Taiwan, Mainland China, and affiliated companies, with a 98% response rate. The survey, which was the first to use an international standard model, found an overall average engagement of 87%. This new international standard will serve as a key benchmark for future tracking and optimization, with overseas subsidiaries planned for inclusion.

	2021	2022	2023	2024
Engagement Survey Results	96.1%	90%	92.96%	87%
Response Rate	96.71%	97.6%	95%	98%

### Freedom of Association and Collective Bargaining

To foster a harmonious labor-management relationship, TCC has established labor unions across all its Taiwan plants and signed collective bargaining agreements. In 2024, the proportion of all employees who joined a union across TCC’s cement businesses in Taiwan and Mainland China, as well as Ho-Ping Power Plant, was 91% of the total workforce. To protect the rights of all employees in Taiwan, the terms of both collective agreements and work rules apply to all employees, who are not treated differently based on any factors, including their membership status or willingness to join a union. TCC holds quarterly labor-management and/or union meetings for open communication and discussion on various issues. Additionally, regular Town Hall Meetings feature the chairman's keynote speech and offer live and anonymous online Q&A to address employee needs promptly.

### Engagement Survey Items



#### JOB SATISFACTION

**If a suitable opportunity arises, I would recommend others to work at the Company.**  
**I am willing to take on additional work to help the Company succeed.**

2025  
Improvement  
Plan

TCC plans career development paths, facilitate new employee onboarding, and implement 6-month/1-year growth dialogue. The TCC Connect Guide strengthens real-time supervisor-employee communication and feedback, boosting work engagement and satisfaction.



#### PURPOSE

**I understand how my work contributes to the Company's goals.**  
**I clearly understand the Company's overall goals.**

2025  
Improvement  
Plan

The TCC Culture Guide promotes identifying with corporate mission/vision by promoting corporate cultural communication, hosting Townhall events, and diverse engagement activities.



#### HAPPINESS

**My work gives me a sense of achievement.**

2025  
Improvement  
Plan

Through the TCC Well-being Guide, we promote welfare-enhancing activities, encouraging employees to cultivate a sustainable lifestyle with physical and mental balance.



#### STRESS

**I do not encounter major obstacles in completing my work.**  
**My department/team is capable of handling our work challenges.**

2025  
Improvement  
Plan

Promote the TCC Well-being Guide, implement Employee Assistance Program (EAP), provide psychological support services and stress management courses, and add health seminars and family-friendly childcare facilities.


5.6

# Social Engagement Partners

GRI 413-1 / 413-2

## Social Engagement Policy | Doing Better, Together

For TCC, social welfare goes beyond financial donations, it is about leveraging our core business, integrating technology and services, and implementing comprehensively in environmental, social, and governance aspects.

 **TCC KEY FACTS**

Cumulative to 2024

TCC DAKA cumulative visitors

**8,772,095 people**

Hoping Sustainability Charity Foundation subsidy amount

**NT\$2,861,136**

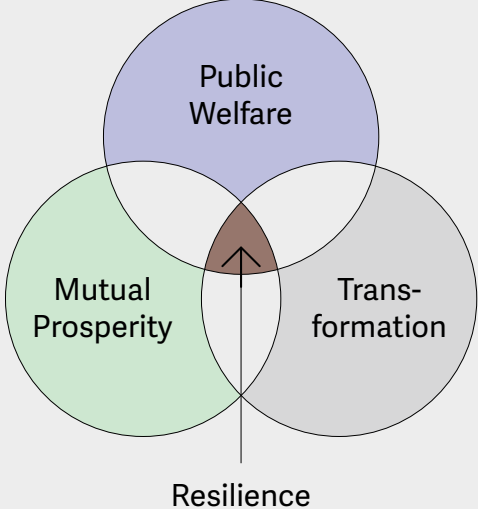
Ho-Ping Power Company Maritime Emergency Relief subsidy amount

**NT\$750,000**



Opened in January 2020, TCC DAKA Open Ecological Circular Factory (TCC DAKA) is Taiwan's first open tourist factory in heavy industry. Its creation followed a 2019 Hualien County Government invitation for TCC to manage household waste via a private BOO (Build-Operation-Own) project for cement kiln co-processing, initiating TCC's industry and community inclusion efforts. Through open communication, TCC transformed community opposition into mutual trust. Guided by Chairman Nelson An-ping Chang's philosophy that "a factory cannot exist isolated; it is always connected with surrounding communities. A factory should become a part of society and local life," TCC opened the Hoping Plant as a non-profit initiative, aiming to coexistence with the community and fostering dialogue between industry and society.

Activities, social networks, and visiting opinion leaders serve as vital communication channels. By integrating residents' expectations and needs into its strategies across public welfare, co-prosperity, and transformation, TCC actively works to build a resilient community.



Affected by earthquakes and typhoons, Hualien was the focus of social engagement in 2024. TCC extended care to stakeholders near the Hoping Eco-friendly Low-carbon Energy Park by promoting the Carbon Reduction Parent-Child Bankbook, utilizing social media to encourage online purchases for eco-friendly local brands. TCC also strengthens the community safety net with home repair services, the Hoping Care Bus, and the Hoping Sustainability Charity Foundation.

## Daily Support Without the Fireworks — Building Hopping into a Resilient Community



To foster engagement and trust with community, TCC welcomed 7-Eleven and Starbucks to TCC DAKA. Instead of traditional rent, TCC earmarks a revenue percentage for a local fund, making every DAKA consumer a contributor. This cross-industry collaboration has taught TCC how to create social impact with diverse sectors, exemplified by Starbucks becoming Asia's first community store. Hopping Village's development is a shared goal with TCC. The village faces an aging population and economic hardship, particularly the systemic gap between low-to-middle income and impoverished families. This creates diverse needs, including educational resources, medical care, and support for elderly living alone. Beyond academic support from the Cement Academy (CH5.7), TCC is moving beyond profit-sharing to directly invest in emergency assistance and education.

### Action Spotlight

#### Hoping Sustainability Charity Foundation

Established in October 2022, the foundation operates under a co-decision system, with the Hoping Village chief and three indigenous chairpersons as directors. It created the Hoping Emergency Relief Fund to aid impoverished children and families facing financial hardships. As of 2024, 74 cases have been approved. Following this model, the nearby Ho-Ping Power Company established the Ho-Ping Power Maritime Emergency Relief Fund in 2023. This fund assists fishing vessels in distress within the Suao Fishermen's Association's jurisdiction, as well as fishermen and their families. Its management committee was formed in collaboration with the Fishermen's Association and fishing groups.



#### Heping Elementary School ETA

(English Teaching Assistant)

TCC has sponsored the ETA program since 2020, enabling a foreign teacher stationed at Heping Elementary School for English teaching. With TCC DAKA's fund, the school further hired foreign teachers for two-hour weekly English courses within the community, supporting parents' continuing education and students' after-school tutoring.

#### Cultivating Local Sports Talent in Hoping

The Hoping Plant has established reward measures since 2022, covering competitions and overseas training to encourage local excellence in sports, arts, culture, and traditional skills. By 2024, applications were received for national and regional sports events, and total of NT\$205,500 has been distributed. Scholarships for local students are also provided to cultivate outstanding talent.

#### Program for Electrical Engineering Technicians

In partnership with National Dong Hwa University, TCC launched an Industry-Academia Program for Electrical Engineering Technicians at Hualien Siwei High School. This program offers local admission without an entrance exam, helps students gain professional certifications, and encourages careers in new energy. Graduates receive priority for TCC job openings, fostering local technical talent.





Market Vendors in DAKA

### TCC DAKA as Local Residents' Living Circle

From 2020 to 2022, TCC's "Local Co-prosperity" program created non-manufacturing jobs through the DAKA Market and local tour guide hires. TCC also combined its resources with local expertise, forming a home repair team and launching care buses to bolster community safety. The DAKA Market specifically championed female empowerment, enabling Indigenous women to run stalls and expand into e-commerce, turning recreational classes into full-time careers. In December 2021, a certified SROI analysis showed that every NT\$1 invested generated NT\$3.54 in social value. The success underscores the community's potential and active participation. The engaged tribal mothers fuel the third phase of TCC's Social Engagement initiative— Joint Action (2023-2025).

### Home Repair Services and Hopping Care Bus

In 2022 and 2024, TCC DAKA and Suao Plant established home repair service centers. These centers provide basic components free of charge, building an efficient, high-quality professional reputation. The Hopping Village Care Bus was launched afterward with accessible bus standards, equipped with automatic lifts to accommodate passengers with disabilities. Local drivers are hired to transport villagers, fulfilling daily needs. By 2024, it had completed 2,082 trips, with medical visits accounting for 61% of the usage. In June 2024, the Hopping Plant was invited to share its experience at the local Health Center.

#### TCC KEY FACTS



A 79-year-old grandmother living in Suao: "It's such a relief that TCC could fix the utilities for our elders. We are truly grateful."

#### Hoping Plant

Accumulated total of  
**200 households**  
**684 repair cases**  
Total of  
1,665.5 hours committed

#### Suao Plant

Accumulated total of  
**38 households**  
**61 repair cases**  
Total of  
97 hours committed

### Action Spotlight

## From Food Delivery to Hundred — million Entrepreneur

The top-performing bento shop at DAKA Market was founded by local resident Huang-Wen Zheng, who previously delivered for his mother's bento business. After brand discussions with TCC, he saw significant first-year income. During the pandemic, he pivoted to high-end tourist car rentals using premium cars and licensed tour guide drivers. This strategy captured returning tourists post-pandemic, growing his venture into an enterprise exceeding NT\$100 million in revenue.







### Carbon Reduction Parent-child Bankbook —

#### Connecting Schools with Families for Carbon Reduction

In 2023, TCC's social engagement evolved into "collective action," moving beyond one-way support to deep community collaboration. This shift aims to address climate change and industrial transformation challenges, and mitigate the economic and social impacts of the Ho-Ping Power Plant's 2040 decommissioning. That year, TCC launched the Carbon Reduction Parent-child Bankbook program. This initiative boosts residents' environmental awareness through waste reduction, recycling, and energy saving. TCC's team quantifies these actions, converting them into "carbon coins" as rewards to encourage participation and foster carbon reduction habits in families. Daily eco-friendly actions now translate into tangible rewards: products with carbon labels traded using carbon coins.

The program, initially engaging 85 students and 60

parents, expanded in 2024 to include Dong Ao Elementary, Ho-Ping Power Plant employees, and Heping Indigenous Mothers' Classroom. TCC's courses for employees and indigenous mothers directly address livelihood challenges from the plant's 2040 decommissioning. For instance, energy-saving courses, co-organized with the Hualien Wilderness Protection Association, openly discuss the challenges of thermal coal power plants, carbon fee impacts, and the urgency of industrial transformation through carbon reduction and alternative materials. TCC also outlines plans for electric mining trucks and ocean thermal energy conversion, clarifying the transformation's future impact for stakeholders. To amplify carbon reduction, TCC introduced eco-friendly tableware at local sports events, promoting reduced disposable plastic, weaving sustainability into the community fabric. This multi-faceted engagement reached 170 parents and children in the first year, expanding to 300 villagers in 2024, demonstrating TCC's deep community commitment and guidance towards sustainability. Please refer to the '[Carbon Reduction Parent-child Bankbook](#)' video on YouTube, which showcases neighborhood life transformation.

#### TCC KEY FACTS

##### Participants in 2024

##### Carbon Reduction Parent-child Bankbook Program

Dong Ao Elementary School (Yilan) — 55 students, 38 parents, and 8 teachers

Hoping Plant (Hualien) — 68

Ho Sheng Mining Co., Ltd. (Hualien) — 38

Ho-Ping Power Plant — 6

Indigenous Mother's Classroom — 20 (Heping), 19 (Hezhong)

##### Two-year cumulative carbon reduction

5,426.56 kg CO<sub>2</sub>e

#### Action Spotlight

## Recycle with Peace (Hoping) Now!

TCC DAKA installed GEMMA smart recycling machines and packaging-free laundry detergent stations in cooperation with the Hualien County Environmental Protection Bureau, encouraging people to bring containers when purchase while reducing waste and carbon emissions.

**Total sales of packaging-free laundry detergent : 2,945 liters**

**Total sales of packaging-free dishwashing detergent: 1,516 liters**

#### Annual Carbon Reduction

892,646.1 kg CO<sub>2</sub>e





### Open Tours at the Shaoguan and Yingde Plant

TCC's first open ecological circular factory in Mainland China - the Shaoguan Plant and Water Park, was inaugurated in November 2021. It spans nearly 10,000 m<sup>2</sup> and features areas for water play, family entertainment, rest plaza, comprehensive service, and green trail leisure. Water is heated by cement kiln and maintained at room temperature. The facility is open free of charge to surrounding communities.



With the "social industry, co-prosperity and greenery" concept, the Yingde Plant open factory covers approximately 80,000 m<sup>2</sup>. Since its opening at the end of 2024, the park has welcomed over 40,000 visitors by April 2025. It features cement crafting workshops, red tea soap-making workshops, family entertainment zones, green fitness areas, and animal interaction zones. Taking biodiversity and diversified development as opportunities, residents are naturally drawn to the plant to learn while enjoying leisure activities, transforming it from a mysterious, high-walled building into a welcoming place where residents can explore, experience, and enjoy.

### Long-term Water Support for the Community

The Chongqing Plant has long provided daily water free of charge to its surrounding community. This commitment began in 2009 after a landslide isolated nearby Shaxichang Town and damaged its water supply, prompting the plant to dispatch water trucks as immediate aid. Since 2012, a direct pipeline from the plant has ensured a permanent water supply, securing basic needs and forging a lasting, friendly relationship.





## Major Earthquake on April 3rd Building Industrial and Community Resilience Together



On April 3, 2024, at 7:58 AM, a 7.3 magnitude earthquake, the strongest since the 921 Earthquake, shook Hualien for nearly a minute.

TCC's Hoping Eco-friendly Low-carbon Energy Park experienced intensity 6+ shaking. Ho-Ping Power Plant suffered boiler damage, causing a 36-day shutdown. Hoping EcoPort's equipment was damaged, with parts falling into the sea, and a displacement of over 50 cm occurred between the plant and the port. Equipment repairs, though expected to take a year, required longer rehabilitation,

with internal damages emerging until early 2025. Subsequent rains and typhoons repeatedly damaged mining roads, at times isolating the Hoping Plant and impacting operations through mid-2025. Total earthquake repair costs exceeded NT\$2.3 billion, marking a significant unexpected incident for TCC.

### Strengthening Post-disaster Resilience: Advancing Restoration and Response Capabilities

Following the earthquake, Ho-Ping Power Plant repairs were delayed by aftershocks until April 15. The first unit reconnected on April 16, with the second unit following on May 13 after annual maintenance. Coal silo reinforcement finished late 2024, foundational repairs early 2025. Hoping EcoPort largely completed coal unloader and cement ship loader restoration by February 2025.

Post-earthquake, all units optimized response. Ho-Ping Power Plant increased emergency food reserves, fire drills, and physical exercises. Hoping plant secured backup mining access roads and improved equipment seismic resistance. Suao plant completed structural reinforcement of mining ropeway towers, enhancing transportation stability.

### The April 3rd Earthquake Highlighted RRRC's Crucial Role in Handling Hualien's Household Waste

The Su-Hua Highway disruption halted waste collection for months, leading to a surge of furniture and construction waste in Hualien. This increased landfill reliance and environmental burden. With RRRC's gasification furnace resuming operations in late May 2024, it continues its vital waste processing, reducing landfill dependence and odors, improving local life, and achieving circular economy and co-prosperity goals.



## Continuously Support the Development of Resilient Communities

Following a year of review and action, TCC honed its focus on equipment repair, operating systems, and community resilience. It established a disaster prevention management mechanism, encompassing equipment seismic reinforcement, employee safety training, and community evacuation support, to build a more resilient environment for the Hoping area.

The recent earthquake validated the foresight of their joint emergency relief fund. This fund was swiftly mobilized to cover home repairs, supplies for evacuation centers, and temporary renovations of outdated offices, providing approximately NT\$200,000 in emergency relief items.



### Economic Resilience

#### TCC Supports Local Brands During Hualien's Slack Tourism

TCC leverages its influence to support Hualien's eco-friendly brands and products via social media. TCC DAKA guides filmed travel show-style content to promote online shopping and delivery of indigenous delicacies. They also encouraged employee group purchases for post-disaster recovery, reporting a 10% sales increase.

**Guide:** "We bring Hualien to them when tourists aren't visiting, supporting earthquake-affected communities through online promotion."



### Life Resilience

#### Post-earthquake Employee Support

TCC partnered with the Hualien County Health Bureau and counseling centers to offer stress relief seminars, one-on-one counseling, on-site services, and hotline support. These initiatives helped employees cope with earthquake-related stress and improve mental well-being.

#### Care Buses Assist Residents' Daily Purchases

After a ten-day suspension due to transport disruptions, the Hoping Care Bus partially resumed service from April 16th to 26th. Offering four daily round trips, the wheelchair-accessible buses helped residents with shopping and medical visits, ensuring independent travel for those with limited mobility.

#### Home Repair Hotline for Affected Households

To assist residents, the Hoping plant's home repair team resumed services just three days after the earthquake. They immediately repaired residential water/electricity systems and public facilities, including restoring water supply to elderly residents' tanks/pipes and reconnecting broken pipelines, minimizing inconvenience.

### Disaster Prevention Resilience

#### TCC Hoping Shelter Activated: First Corporate-initiated Disaster Relief in Hualien

Frequent natural disasters, including the April 3rd earthquake and 2024 typhoons, often cut off transportation and displace Hoping Village residents for months. TCC responded by renovating its former office into the Hoping Temporary Shelter, now an official emergency evacuation site managed by the Xiulin Township Office. Drawing on experiences assisting victims and noticing the village's primarily composition of elders with chronic illnesses, women, and children, TCC created a safe, comfortable, and dignified living space that emphasizes privacy, convenience, and spatial diversity.



Kitchen with water dispensers and refrigerators



## 2023 Major Earthquake in Türkiye One of the Most Painful Days



On February 6th, 2023, Türkiye was hit by back-to-back 7.7 and 7.6 magnitude earthquakes, devastating Kahramanmaraş and affecting 11 provinces.

Fortunately, TCC's subsidiary OYAK's plants in Adana, Mardin, and İskenderun, though near the epicenter, sustained no damage or casualties.

In response to this rare disaster, OYAK CEMENT is actively supporting community reconstruction and providing resources for medium and long-term recovery.

While ensuring product quality for Türkiye's rebuilding efforts, OYAK CEMENT is also advancing green building, urban development, transportation, and living initiatives. Their goal is to create a safer, more livable environment for residents and pave the way for a green future.

OYAK CEMENT, through its "Children of the Republic Türkiye's Future Project," helps earthquake-affected children create lasting memories. This includes organizing earthquake resilience workshops for elementary and middle school students, where they gain hands-on understanding of building seismic resistance.



Provided assistance for airport road repairs



5.7

# Educational Equity

## Cement Academy

Scholar Harmony | Eager to learn | Rooted in education

The Cement Academy was founded by former TCC Chairman KOO Chen-Fu. The name of the program in Chinese, “Shih-Ming,” comes from the English for “cement”. “Shih” denotes a talented individual and “Ming” means diligent, reflects a passion for learning. The name embodies the hope that this initiative and act of love will be carried forward and endure in the future.

Since the establishment of the Cement Academy in 2012, TCC has upheld the core principles of “character, academic excellence, and quality” as its core principles, helping underprivileged elementary students near TCC's cement plants across Taiwan and Mainland China continuously access proper educational resources.

**Guizhou**  
Jinyin Elementary School (Anshun Plant)

**Guangxi**  
Daguo Elementary School (Guigang Plant)  
Yaoshan Elementary School (Guigang Plant)

**Chongqing**  
Yanjing Elementary School (Chongqing Plant)  
Xiangluzhan Primary School (Chongqing Plant)

**Sichuan**  
Guixing Town Elementary School (Guangan Plant)  
Zhengdong Central Elementary School (Xuyong Plant)  
Xikou Elementary School (Huaying Plant)

**Guangdong**  
Chengbei Primary School (Yingde Plant)  
Yinghongzhen Central Elementary School (Yingde Plant)  
Pukou Elementary School (Jingzhou Plant)  
Luyang Central Elementary School (Huaihua Plant)

**Liaoning**  
Xidayao Town Central Elementary School (Liaoning Plant)

**Taiwan**  
Shih Min Elementary School (Suao Plant)  
Yongle Elementary School (Suao Plant)  
Dong Ao Elementary School (Suao Plant)  
Heping Elementary School (Hoping Plant)  
Shanwei Elementary School (CSRC Linyuan Plant)  
Jhongyun Junior High school (CSRC Linyuan Plant)

TCC KEY FACTS

2021-2024  
The Cement Academy  
has benefited

5,128

students cumulatively  
| Taiwan and Mainland China

### Cement Academy Creates a Stage Where Dreams Take Flight

After-school tutoring in English, computer skills, and talent courses helps children explore their interests and unlock their potential.

Nutritious meals including tasty lunch boxes, bread, snacks, and milk, provide the energy needed for healthy growth.

Holiday activities including Children's Day games and exciting summer camps allow children to grow through learning and playing.

Annual Christmas performances highlight their progress and every moment on stage is a testament to their growth.

Material donations, such as stationery and learning resources, help ease the burden on students so every child can learn with peace of mind.



## Action Spotlight

### Heping Elementary School's Graduating Class Explores TCC Headquarters on A Fascinating Graduation Trip

Heping Elementary School, near our Hualien Heping Plant, arranged a special graduation trip to visit TCC Headquarters. TCC shared its sustainability and new energy efforts via electric vehicles and interactive games with sustainable themes. This offered children a deeper understanding of how their family's workplace actively impacts the environment. The exchange was also particularly meaningful for colleagues.

"Seeing the curiosity in the children's eyes made me realize that my daily work has the power to shape the future. I hope this exchange has planted a seed of environmental sustainability in their hearts."

by *Sally*  
Human Resources Department



Hualien Heping Elementary graduates visit TCC's Low-Carbon construction materials exhibit

### The CIMPOR Avec Vous Program Provides Learning Resources for African Children

Avec Vous is derived from French, meaning "together with you." CIMPOR launched the Avec Vous program in Attinguié, Ivory Coast in February 2025, achieving quality education through high-quality infrastructure. The kindergarten, fully funded and newly equipped by the Ivory Coast plant, is now open, offering learning supplies to students. Collaborating with surrounding communities, CIMPOR aims to continue creating opportunities for children to explore the world.



Guests at the event included Mrs. Belmonde DOGO, Minister of National Cohesion, Solidarity and the Fight against Poverty; H.E. Deniz ERDOĞAN BARIM, Ambassador of Türkiye to Ivory Coast; Mr. Cem Çelik, CEO of CIMPOR Africa; Mr. YASİN TEKİNARSLAN, CIMPOR Côte d'Ivoire Country Director; local authorities and community leaders; and school pupils

## 5.8

# Cultural Preservation

Culture encompasses the lifestyle, values, and beliefs of an ethnicity and reflects social integration.

Traditional cultural arts, whether performed on stage or expressed in everyday behavior, offer valuable guidance and support

TCC has long supported cultural development, providing key aid to the C.F. Koo Foundation in preserving and promoting various traditional operas and endangered performing arts. The Company also sponsors events such as the Children's Folklore & Folkgame Festival, Lanyang Mazu Cultural Festival, encouraging public engagement with arts and cultural activities. With "cultural conservation" as its mission, the C.F. Koo Foundation established the Taipei Li-yuan Peking Opera Theatre in 1997. Led by veteran Li, Bao-chun and young professionals, the theatre conserves traditional opera, produces "New Old Plays," and performs newly adapted works. It promotes traditional opera, cultivates performers, and builds audiences, ensuring cultural continuity. Furthermore, via domestic and international tours, the "TaipeiEYE" tourist theater, and the "Koo Cloud Theater" YouTube channel, the beauty of traditional culture is shared worldwide.



📷 Peking Opera's "THE CONFIDANTS" is a "newly adapted Peking opera" brand, based on Guo Qihong's play of the same name. It marks Li Pao-Chun's first attempt to create a work combining Peking Opera and Kunqu Opera

## International Tourist Theater Company TaipeiEYE, Showcase of Chinese Culture

### #RootedInTradition

### #ProsperityInDiversity

### #OnstageBackstageInteraction

Three weekly performances at TaipeiEYE offer an artistic feast, led by the Taipei Li-yuan Peking Opera Theatre. It features top troupes in Peking Opera, puppet shows, indigenous song and dance. Content is adapted from famous myths, legends, and historical stories, making it

both familiar and fresh, vivid and interesting. Before the performance, "onstage and backstage" activities like costume try-ons, face painting demos, headdress demos, traditional music, prop handling, paper crafts, and rubbings allow deep cultural immersion. During major festivals, added folk art interactions highlight local traditions and enrich the audience experience.

### TCC KEY FACTS

2024 Supporting Cultural Development Invested over

**NT\$ 11.8 million**

Including an annual donation of NT\$10.5 million to the C.F. Koo Foundation.

TaipeiEYE

**133**

Performances

A total of

**13,126**

participants

Japan 36% Korea 28%

Europe and America 16%

Koo Cloud Theater 2020-2024 Accumulated 990,436 views

Peking Opera Neo-Classics "THE CONFIDANTS" **4 Performances**  
Metropolitan Hall, Taipei & National Taichung Theater - Playhouse



[The C.F. Koo Foundation](#)



## Masters Personally Pass Down the Torch of Traditional Performing Arts

The Taipei Li-yuan Peking Opera Theatre promotes traditional opera by bringing Peking Opera to campuses annually, based on major production themes. This guides younger generations to appreciate opera, starting with understanding performance characteristics. In 2024, masters personally taught, introducing the essence of Peking Opera and Kunqu Opera fusion. Troupe members also hone their skills; for instance, lead Jinghu player Tseng, Hsiao-Chu, sought guidance from the Tianjin Peking Opera Theatre on bowing, fingering, and musical interpretation during Mainland China tours and Taipei performances, significantly enhancing her artistry. In 2024, 17 lectures and workshops were held, with 930 participants.

### Action Spotlight

#### Celebrating TCC's 70th Privatization Anniversary with Taipei Li-yuan Peking Opera Theatre's Creative Performances

The Taipei Li-yuan Peking Opera Theatre presented a performance themed around "Reducing Carbon and Cherishing Resources." Master Li, Bao-Chun led three sheng and dan role performers in singing, while other performers waved large blue flags symbolizing clear skies, along with red and blue ribbons representing sunlight and seawater. Using Peking Opera movements like turns, tiger-presses, somersaults, and tumbles, they symbolically swept away black-clad carbon spheres, purifying them to restore clean air, water, and land to humanity. This creative performance demonstrates TCC's determination to actively engage in low-carbon transformation, embrace green energy, and serve life.



### 一切遇見 皆匯於此 Where Visionaries Converge

Master Li, Bao-Chun's Remarks at the Completion Ceremony of TCC. C. F. KOO Building in Hangzhou:

"TCC has inherited former Chairman Koo Chen-Fu's mission of social service, embracing loyalty, righteousness, and cultural identity cherished by global Chinese communities. The vast realm of art, like a boundless ocean, revealed to me in conversations with Uncle Koo many "opera reflects life" philosophies.

Witnessing the C.F. KOO Building's innovative design at today's ceremony, it embodies the insight: "without inheritance, there is confusion; without innovation, there is stagnation." This illustrates that progress requires inseparable tradition and new ideas. The piano-accompanied Zhuge Playing the Zither segment exemplifies this seamless blend of Chinese and Western music.

In the performance of Eternal Loyalty and Righteousness, through the familiar character Guan Yu, using the form of Peking opera to weave together the lines: "Mountains and clouds may move but noble spirit endures," "Loyalty and righteousness passed down through the ages for thousands of years."

# Stakeholder & Material Topic Analysis

GRI 2-12 / 2-25 / 2-29 / 3-1 / 3-2 / 3-3

## Double Materiality Analysis of Sustainability Issues

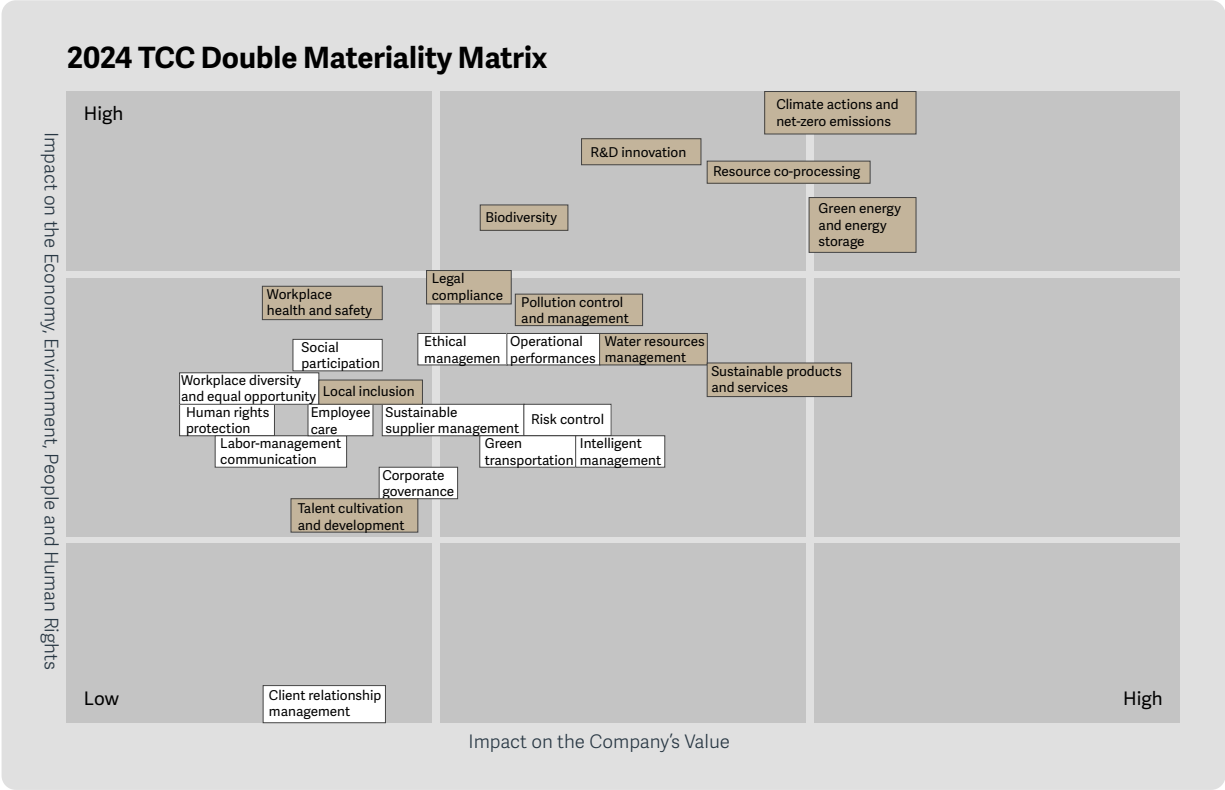
TCC conducts a sustainability issue assessment every two years. This year, the Company adopted the Double Materiality analysis principle in accordance with the GRI Universal Standards 2021. In compiling the sustainability issue list, TCC comprehensively considered global sustainability development trends, international sustainability rating frameworks (such as MSCI, S&P CSA, and CDP), sustainability disclosure standards (such as GRI Standards, and SASB Standards), industry characteristics, and best practices of industry peers. Stakeholders' opinions on each issue were surveyed, evaluating both the impact on corporate value and impact on the economy, environment, people, and human rights. A thorough evaluation of positive and negative impacts was conducted from both internal and external organizational perspectives. Material sustainability topics for the year were then identified based on the level of impact and likelihood of occurrence.

Through the double materiality analysis, eight material sustainability topics were identified, including “climate action and net-zero emissions”, “resource co-processing”, “green energy and energy storage”, “R&D innovation”, “low-carbon products and services”, “biodiversity”, “legal compliance” and “workplace health and safety”. Meanwhile, considering that “pollution control and management” and “water resources management” have a higher negative impact on the economy, environment,

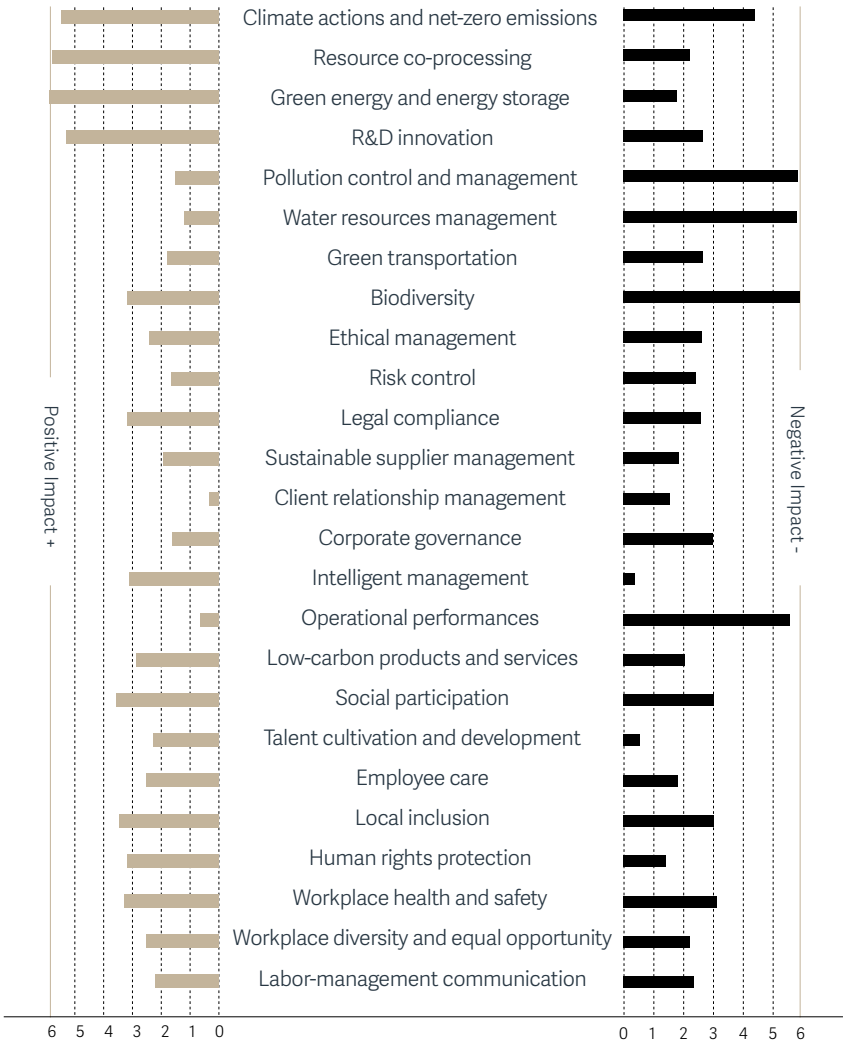
people and human rights, and are the focuses in the industry disclosure of various sustainability disclosure standards, both are also included in the material sustainability topics this year. In addition, in the human-centered, TCC puts employee inclusion and common good into practice. After discussion at the management meeting, “talent cultivation and development” and “local inclusion” are included in the material topics this year as well.

TCC has maintained the 12 material sustainability topics identified in the 2023 analysis. The results of

the materiality assessment were approved by the Board of Directors. Also, the development and achievement on these material sustainability topics are linked to the executive remuneration. The materiality analysis process and results have been independently assured by **Deloitte Taiwan**, a third-party assurance provider, in accordance with ISAE 3000 (Revised), and verified by **BSI Taiwan** in accordance with the **GRI Standards and AA1000AS v3 Type 1 Moderate Assurance Level**.



2024 Positive/Negative Impacts on the Economy, Environment, and People and Human Rights




Stakeholder and Material Topic Assessment Process


	Process	Approach	Key Performance
1	Identify Stakeholders	TCC's key stakeholders were identify through questionnaires completed by Department heads and relevant personnels.	Identified 10 categories of stakeholders
2	Focus on TCC's Sustainability Issues	Design a list of sustainability issues with reference to international sustainable development trends and international sustainability rating standards.	25 sustainability issues cover corporate governance, economy, environment, and people and human rights
3	Assess the Impact of Sustainability Issues on the Economy, Environment, People, and Human Rights	Conducted a materiality assessment workshop, inviting executives at Vice President level and above to identify actual and potential positive and negative impacts. Additionally, departments distributed questionnaires to internal and external stakeholders to understand the level of impact on each issue.	337 questionnaires collected
4	Assess the Impact of Sustainability Issues on Operations	Members of the Corporate Sustainable Development Committee, along with executives at Vice President level and above, assessed the impact of sustainability issues on operations. They determined the significance of each issue based on its severity and likelihood of its potential positive and negative impacts on TCC's operations.	8 VP-level and above supervisors discussed at management meeting
5	Double Materiality Assessment	Summarize internal/external survey results, map double materiality matrix, link issues and TCC sustainability strategies, and decide material topics for 2024.	12 material topics identified by the Corporate Sustainable Development Committee
6	Determine Material Topics	Submit the 12 material topics identified to the Board of Directors to ensure these material topics are aligned with the business risks and strategies of TCC.	Submitted to the Board of Directors compliance of in sustainability and integrity

### Stakeholder Identification Results


Referring to the AA1000 Stakeholder Engagement Standard (SES), TCC identifies and prioritizes the key stakeholders based on the five principles, i.e., Responsibility, Influence, Tension, Diverse Perspectives, and Dependency.




**Government & Competent Authorities**  
They affect policy and industry development and care TCC’s legal compliance




**Industry Associations/  
Industrial & Academic Organizations**  
They partner to advance the industry and share business insights




**Shareholders and Investors**  
They fund TCC and care for operational performance and sustainability




**Media**  
They help TCC in disclosing and communicating sustainability-related actions



**Clients**  
They value TCC's quality, services, operations, compliance, and environmental protection efforts




**Local Communities**  
Residents near TCC sites concern about its local operations



**Employees**  
The key for ongoing breakthroughs and innovations as a crucial human capital at TCC



**Sustainability Associations**  
They are concerned about TCC’s sustainable actions, and share the latest trends with TCC



**Suppliers/Contractors**  
Partner in quality improvement and jointly address environmental and social issues



**Environmental Groups/NGOs**  
They value TCC’s environmental, employee, and community efforts and urge more progress



## Impact Management of Material Topics

Supply Chain TCC Operations Products/Services Local Communities

Material Topic	GRI Topics/ SASB Indicators	Significance to TCC (Operational Materiality)	Significant Impacts	Impacts to Value Chain	Policy Commitment	Management Actions	Chapters of Disclosures
Climate Actions and Net-Zero Emissions	GRI 201: Economic Performance 2016 GRI 302: Energy 2016 GRI 305: Emissions 2016 SASB Topic: Greenhouse Gas Emissions	The cement industry is a high-carbon industry that has a negative impact on the climate. TCC proactively adopts emission reduction measures to bring positive impacts to climate change via innovative technologies.	+ Climate-related opportunities - Climate-related risks		TCC participates in the global low-carbon transition and stays aligned with the "Paris Agreement" to limit global warming to 1.5°C or lower.	Seven Carbon Reduction strategies have been formulated, aiming to march towards the goal of 'Net Zero by 2050'.	Carbon Competitiveness Chapter 2
Resource Co-processing	GRI 306: Waste 2020 SASB Topic: Waste Management	TCC extends its core power as services through the co-processing technology of cement kilns to help the society and industries resolve waste issues while creating positive impacts like circular use of resources.	+ Circular economy of resources + Good interaction with society		TCC is committed to resource recycling and using recycled materials with low environmental impact for the sustainable use of resources of Earth.	Industrial wastes of various industries are co-processed leveraging the high temperature property of cement kiln. In addition, TCC DAKA Renewable Resource Recycling Center was established to facilitate the treatment of domestic wastes for the local residents in Hualien.	Carbon Competitiveness Chapter 2
Green Energy and Energy Storage	GRI 302: Energy 2016 SASB Topic: Energy Management	TCC develops green energy in response to the government's energy transition policy, which helps reduce the industry's dependence on fossil fuels, mitigating climate change. This also yields positive impacts on the overall economy and society.	+ Technological and product innovation + Climate-related opportunities		Setting out from its 3 core businesses, TCC created new living models of low-carbon new energy, so as to build all-round EV low-carbon cities for the future.	Actively invest in the development of renewable energies, smart energy storage, and integrated services with solar, charging and storage applications; launch EnergyArk Energy Storage Cabinet that is fireproof and fire-extinguishing.	Carbon Competitiveness Chapter 3

Note: +indicates a positive impact; -indicates a negative impact.

Material Topic	GRI Topics/ SASB Indicators	Significance to TCC (Operational Materiality)	Significant Impacts	Impacts to Value Chain	Policy Commitment	Management Actions	Chapters of Disclosures
Low-Carbon Products and Services	GRI 301: Materials 2016 SASB Topic: Product Innovation	Committed to product lifecycle management, TCC continuously researches and controls its processes to reduce the carbon content of products and the water resources used in manufacturing. This ensures that its products meet client needs and comply with environmental standards	+ Technological and product innovation + Climate-related opportunities		Aiming for low carbon, energy saving, and zero waste in TCC products, TCC demands the partners in the value chain to implement sustainability management in facets of production, manufacturing, transportation, and services.	Introduce various ISO management systems to systematically manage the production process and improve the green content in products by setting production targets such as product's carbon emission intensity.	Chapter 2 Chapter 3
Legal Compliance	GRI 205: Anti-corruption 2016 GRI 206: Anti-Competitive Behavior 2016 SASB Topic: Pricing Integrity & Transparency	Legal compliance not just reduces operational risks and penalties but also improves overall operational performance. TCC has established a corporate culture on the basis of integrity to ensure that all operational procedures comply with relevant legal and regulatory requirements.	- Operational risks such as penalties or losses arising from regulation violation		TCC has established rigorous internal control and legal compliance systems, prevent compliance risks, and protect the Company's reputation. TCC also prohibits any conduct of unfair competition and upholds a free-market competition mechanism.	Identify and track matters such as law amendments and competent authority requirements through the "Internal/External Issues Registry" on a regular basis. Meanwhile, establish the reporting system and whistleblower protection mechanism to establish compliance awareness among employees.	Chapter 1
Workplace Health and Safety	GRI 403: Occupational Health and Safety 2018 SASB Topic: Workforce Health & Safety	Failure to properly implement workplace safety measures will expose employees to potential occupational safety risks, possibly lead to safety incidents, increasing losses and legal liabilities. TCC attaches great importance on workplace environment, establishing a safe workplace without concerns for employees.	+ Healthy and safe workplace -Occupational hazards		"OHS Policy" has been stipulated at TCC, 100% applied to all employees and contractors. Also, TCC has been aiming for "zero work-related injuries" among employees and contractors.	The ISO 45001 OHS management system has been introduced and 100% applied to the cement plants, RMC plants, and Operation Headquarters of TCC. Additionally, the workplace safety awareness of personnel is strengthened via safety management and promotion for contractors, occupational health and safety education and training, etc.	Chapter 5

Note: + indicates a positive impact; - indicates a negative impact.

Material Topic	GRI Topics/ SASB Indicators	Significance to TCC (Operational Materiality)	Significant Impacts	Impacts to Value Chain	Policy Commitment	Management Actions	Chapters of Disclosures
R&D Innovation	Self-defined material topic SASB Topic: Product Innovation	TCC continues to invest in the research and development in basic construction materials, energy storage equipment, and carbon capture technology, actively improves product and business values, introduces energy for innovation to the industry.	+ Technological and product innovation + Climate-related opportunities		Continuously invest in the research of low-carbon products and technologies, develop innovative and eco-friendly products and services, and boost added value.	Establish R&D centers and new units dedicated to business promotion, actively seek opportunities to collaborate with international entities, and harness energy for innovation.	Carbon Competitiveness Chapter 2 Chapter 3
Biodiversity	GRI 101: Biodiversity 2024 SASB Topic: Biodiversity Impacts	The quarrying of limestone, the primary raw material for cement, may lead to destruction of the ecosystem on land. Committed to restoring the original ecosystem services and maintaining biodiversity, TCC actively reduces the negative impacts potentially arising from operations.	+ Maintaining biodiversity systems - Loss of biodiversity		With the "Biodiversity Policy" and "No Deforestation Commitment" formulated Committed to prevents and reduces impacts of development to nature, and engages in restoration projects.	TCC has implemented biodiversity protection measures on land and at sea. Also, it has become one of the TNFD Early Adopters. TCC is engaged in indigenous species ecosystem restoration projects and soil research programs in its mines.	Chapter 4
Local Inclusion	GRI 413: Local Communities 2016	TCC actively participates in community development and charitable activities, establishes various channels to connect with local communities, as well as promotes inclusion of enterprises and local residents.	+ Social impact increase - Reputation damage		The EARTH HELPER initiative communicate sustainability value in collaboration with sustainability partners.	Organize EARTH HELPER carbon reduction sustainability actions, Carbon Reduction Parent-Child Bankbook, etc., and establish Hoping Sustainability Charity Foundation.	Diversity and Inclusion Chapter 5

Note: ◦+ indicates a positive impact; ◦- indicates a negative impact.



Material Topic	GRI Topics/ SASB Indicators	Significance to TCC (Operational Materiality)	Significant Impacts	Impacts to Value Chain	Policy Commitment	Management Actions	Chapters of Disclosures
Talent Cultivation and Development	GRI 404: Training and Education 2016	Improving the professional level of personnel and meet the development needs of the Company, drive innovation and enhance competitiveness, help mitigate the talent gap, and construct a vibrant talent system.	+ Increase in the corporate talent asset competitive-ness - Talent loss		Talents constitute the crucial cornerstone of sustainable business operations. Committed to cultivating diversified developments of its employees, TCC endeavors to maximize their potential.	Offering interdisciplinary and diversified opportunities, TCC launched the “TCC Climate Action Talent Recruitment Program,” and provides support through employee development blueprint and training resources.	Diversity and Inclusion Chapter 5
Pollution Control and Management	GRI 305: Emissions 2016 SASB Topic: Air Quality	TCC rigorously manages the pollution of noise, wastewater, and exhaust gas through reduction, collection, and control technologies, thereby reducing the negative impacts of the company's operations on the environment.	- Pollutions and impacts on the surrounding environment		Aiming for “zero pollution and zero emission/dis-charge,” TCC adopts the best available pollution preventive and control technologies and measures.	TCC has strengthened its environmental protection and treatment facilities to prevent water, air, and soil pollution, including the internal monitoring of wastewater and high standards for managing air emissions.	Chapter 2
Water Resources Management	GRI 303: Water and Effluents 2018 SASB Topic: Water Management	TCC actively enforces various water consumption and conservation plans in order to address the potential negative impacts arising from water shortage and the impacts from water withdrawal on communities where it operates.	+ Water resources management and reuse - Water resources consumption and pollution		Aiming for “not a drop of water wasted,” TCC seeks a sustainable use of water resources, improves water resources management to increase water use efficiency.	Effectively managing the use of water resources through the implementation of water conservation programs, certification to the ISO Management System, and establishment of a systematic water footprint management platform, among other initiatives.	Chapter 2

Note: ++ indicates a positive impact; -- indicates a negative impact.