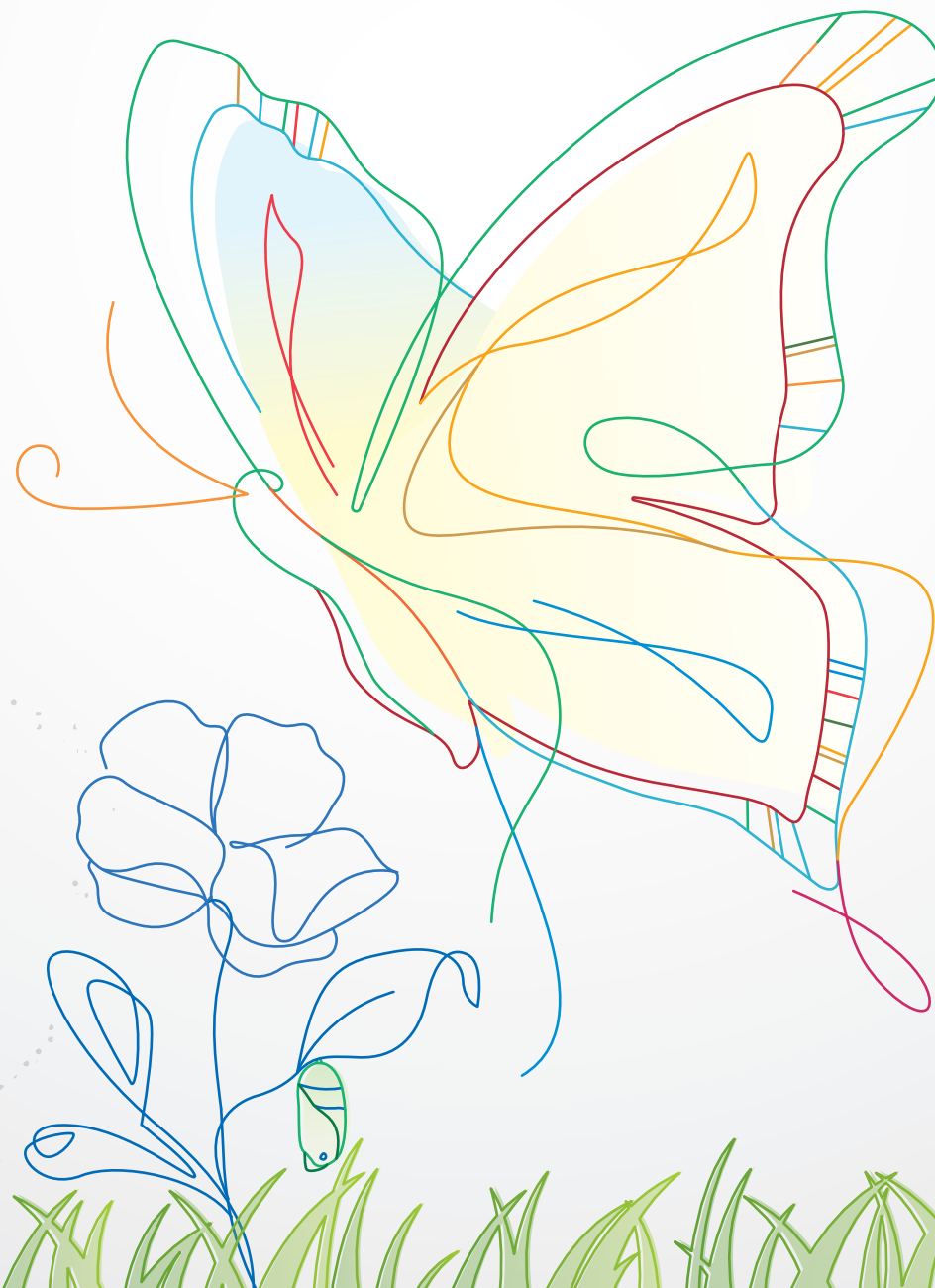




Taiwan Prosperity Chemical Corporation

2023 Sustainability Report



Chang Chun Group



About this Report

Over the years, TPCC has focused on its main business and is committed to providing customers with products of excellent quality. TPCC was merged into Chang Chun Group (hereinafter referred to as "CCPG" or "Group") in 2021, and has planned for sustainable operations in accordance with Chang Chun Group's sustainability strategy. We understand that the chemical industry has many impacts on economic development, environmental sustainability, and social development. Therefore, we, as citizens of the society, demonstrate our determination to fulfill our corporate social responsibility, coexist with the environment, prosper with our partners, and pursue sustainable operations.

The 2023 Sustainability Report prepared by TPCC reveals to our stakeholders the efforts and achievements of our proactive commitment to sustainability and corporate social responsibility based on the principles of openness, transparency and honesty. This report describes the Company's organizational overview and sustainable management practices, as well as its actions in corporate governance, business performance, product responsibility, environmental protection, employee care and corporate social responsibility.

Reporting Period and Publication Date of the Report

TPCC issues an annual sustainability report for the previous year on a regular basis. The previous version was issued in August 2023, and the current "2023 TPCC Sustainability Report" is issued in August 2024, covering the period from January 1, 2023, to December 31, 2023. To present the trends over the years, some information in this report includes data from two years (retrospective to 2022). If the scope of other data disclosures differs from the aforementioned, detailed annotations will be provided in the respective sections. Unless otherwise specified, all monetary amounts are in New Taiwan Dollars (NTD).

Data Recompilation

Due to errors identified in the previous reporting period, adjustments have been made to the 2022 natural gas consumption, total energy consumption, and percentage of grid electricity consumption.

Reporting boundary

The reporting boundary of this report includes TPCC's Taipei headquarter and the Linyuan plant in Kaohsiung.

Report Preparation Principles

The content structure of this report follows the GRI Standards issued by the Global Sustainability Standards Board (GSSB) and the SASB Standards – Chemicals issued by the International Sustainability Standards Board (ISSB) for reporting and disclosing information. This fully presents TPCC's management approach and performance in key ESG topics. Please refer to the appendix for the SASB Standards and GRI Standards index tables. The financial data used in the report is based on the financial statements. The social data covers the Taipei head office and the Linyuan plant in Kaohsiung; environmental data is primarily disclosed based on the main production site at the Linyuan Plant in Kaohsiung.

Report Management Process and External Guarantee/ Assurance

This Report was compiled by TPCC ESG editorial team in accordance with the policies of the ESG Operation Office of Chang Chun Group. The ESG editorial team was formed by the heads of all relevant departments/units of TPCC. All data is collected by the relevant departments, and has been confirmed by internal supervisors.

This report has been commissioned to KPMG, which conducted a limited assurance engagement in accordance with Assurance Standard No. 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the Accounting Research and Development Foundation of the Republic of China (based on International Standard on Assurance Engagements 3000). The selected information, applicable criteria, and the limited assurance report are included in the appendix of this report.

Contact Person

Should you have doubts about or recommendations for this Report, please feel free to contact us through the following ways:

Company Website: <http://www.tpcc.com.tw>

Address: 7F, No. 301, Songjiang Rd., Zhongshan District, Taipei City, Taiwan

Tel: 02-2563-3228

E-mail: ccpgcsr@ccp.com.tw



Table of contents

About this Report	1	1	TPCC Profile	5	2	Sustainable Management	9	3	Corporate Governance	16
Chairman's Statement	3									
2023 ESG Performance	4									
			1. Organization Profile	5		1. ESG Governance and Management Organization	9		1. Governance Framework	16
			2. Products and Value Chain	6		2. Stakeholder Engagement	9		2. Ethical Corporate Management	18
			3. Green Processes and Sustainable Practices	7		3. Material Topic Identification and Impact Management	12		3. Legal Compliance	19
			4. Business Performance	7					4. Customer Relationship Management	20
									5. Supplier Management	23
Appendices	60	4	Environmental Co-Prosperity	25	5	Quality Workplace	35	6	Social Responsibilities	56
GRI Standards Comparison Table	60		1. Sustainable Environmental Management	25		1. Human Rights Policies	35		1. Social Care	56
Topic Guidelines	62		2. Water Management	26		2. Workforce Diversity	38		2. Social Participation	58
SASB Standards Disclosure Comparison Table	65		3. Pollution Prevention and Control	27		3. Employee Benefits	40		3. Participation in External Associations	59
Third Party Assurance Statement	66		4. Energy management and GHG Emission	29		4. Talent Development	43			
			5. Waste Management	32		5. Critical Incident Management and Response	46			
			6. Hazardous Substance Management	34		6. Occupational Health and Safety	48			
						7. Staff Health Management	53			





Chairman's Statement

Dear Stakeholders,

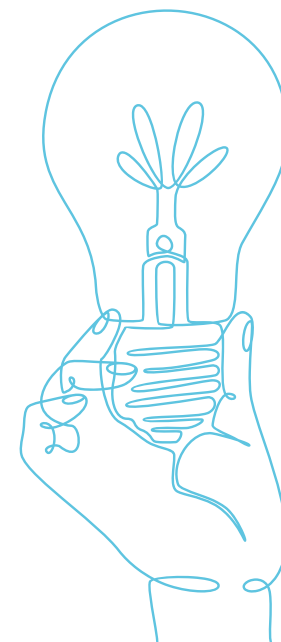
In 2023, the petrochemical industry faced dual challenges of global inflation and accelerated interest rate hikes. The ongoing Russia-Ukraine war was compounded by the Israel-Palestine conflict and the Red Sea crisis, creating an extremely adverse operating environment for the petrochemical sector. TPCC's revenue and profitability have been impacted by these challenging conditions, along with heightened competition, stricter regulations, and an unfavorable overall operating environment. However, TPCC has steadfastly adhered to its core business strategy centered on environmental friendliness, social well-being, and sustainable governance, demonstrating its commitment to ongoing development.

Since joining the Chang Chun Group (CCPG) two years ago, CCPG Executive Board Chairman Lin Shu-Hong has prioritized reshaping the safety awareness of all TPCC employees. Over these two years, he has personally visited the factories multiple times to teach safety concepts, underscoring the principle of "no safety, no production." Today, TPCC has comprehensively updated its safety instrument systems, continually replaced old and potentially failing production equipment, promoted and implemented Process Safety Management (PSM) activities, conducted all scenario simulation drills every three months, and established a regular on-site inspection system by employees. Safety has become embedded in the DNA of all TPCC employees and is deeply ingrained in daily operations. Moreover, since 2022, TPCC has invested over 940 million NTD in improving pollution control, energy saving, waste reduction, greenhouse gas reduction, and safety and environmental protection facilities. These changes have resulted in zero safety incidents for two consecutive years starting in 2022. However, we are not resting on these laurels. In 2023, TPCC continued to install fixed VOC detectors on-site, utilizing the Chang Chun Group's self-developed visual mapping system (CCP VISION) to display real-time VOC values. This enables rapid response to any anomalies.

Furthermore, TPCC, in line with the spirit of the Chang Chun Group, adheres to internationally recognized labor rights, prohibits discrimination, ensures equal employment opportunities, and views "people-oriented" as a core principle of sustainable business operations. This aligns with the United Nations Sustainable Development Goals (SDGs), focusing on five main action areas: enhancing human health and well-being, cultivating chemical industry professionals, practicing responsible production, strengthening industrial safety and hygiene, and integrating community resources and interactions. TPCC fulfills its corporate social responsibility and strives to create a society based on mutual benefit. In 2023, TPCC sponsored students from Linyuan Elementary School to design an offshore platform for collecting plastic waste and converting it into oil, a project they presented at the RoboRAVE contest in Houston, USA. This initiative reflects our commitment to fostering scientific education from a young age.

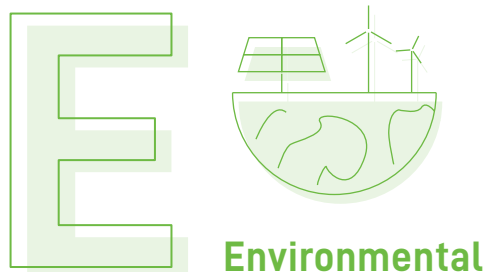
As we look forward to the new year, the petrochemical industry has yet to see a significant recovery. However, all TPCC employees, inheriting the enduring and resilient spirit of the 74-year-old Chang Chun Group, are ready to embrace change. We are committed to building a robust operational framework, continuing to focus on our core petrochemical business, actively developing differentiated, high value-added products, and adjusting our sales strategies dynamically in response to market changes and competitive conditions in various regions. This approach aims to seize business opportunities amidst the ongoing global industrial supply chain reorganization. Furthermore, we will integrate sustainability into all our business strategies, promoting a circular economy and energy conservation, and carbon reduction. We will enhance risk management related to climate change and create more environmentally friendly production conditions. These efforts are intended to strengthen TPCC's sustainable competitiveness, fostering the resilience needed to succeed in challenging economic environments.

Davy Cheng, Chairman





2023 ESG Performance



Environmental expenditure and investment amounted to

71 million NTD.



Annual water-saving project

saved **33.74** megaliters.



Annual energy-saving project achieved

10,523 tCO₂e carbon reduction.



100%

completion rate of legal compliance and human rights education training.



Local employee ratio reached

83.42%.



Annual childcare subsidy disbursement amounted to

336,936 NTD.



100%

signing rate of the Supplier Code of Conduct.



Local procurement ratio

reached **86%**.



No incidents of corruption, anti-competitive behavior, trust, or monopoly-related reports occurred in 2023.

ch1

TPCC Profile

1. Organization Profile
2. Products and Value Chain
3. Green Processes and Sustainable Practices
4. Business Performance

1. Organization Profile

Founded in 1991, TPCC is the first professional manufacturer of phenol/acetone products in Taiwan, belonging to the commodity chemicals manufacturing industry. In August 2021, TPCC was merged into the Chang Chun Group. The Company is actively engaged in system integration at all levels by drawing on CCPG's experience and strengths, in the hope of maximizing operational synergies with CCPG and providing key energy for the development of the global supply chain.

TPCC Overview



Taiwan Prosperity Chemical Corporation

Founded	May 28, 1991
Location of the Headquarters	7F, No. 301, Songjiang Rd., Zhongshan District, Taipei City, Taiwan
Manufacturing Plant Address	No. 9, Gongye 3 rd Road, Linyuan District, Kaohsiung City
Chairman:	Davy Cheng
President	Hou-Fu Chen
Capital	NT\$1.052 billion

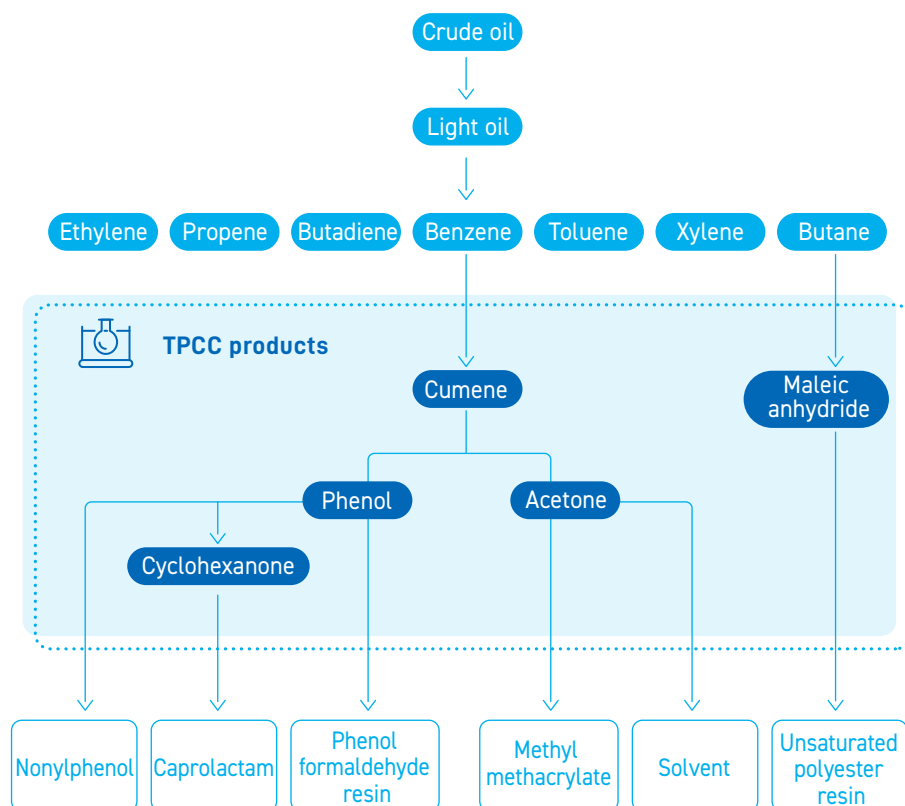
Philosophy
Integrity
Customer First
Creative Innovations





2. Products and Value Chain

TPCC is engaged in the manufacture and sale of commodity chemicals, mainly phenol, acetone, bisphenol A (BPA), cyclohexanone, alpha-methylstyrene, and maleic anhydride, all of which are important petrochemical intermediates. The upstream raw materials come from the petrochemical industry, and the downstream applications cover a wide range of industrial materials, including fibers, electromechanical, construction, automobiles, printed circuit boards, engineered plastics, specialty chemicals, papermaking, pharmaceuticals, and pesticides, etc.



In accordance with the Group's customer relationship management strategy, TPCC develops product business roadmaps and, through the Group's sophisticated business strategies and comprehensive integration of upstream and downstream resources, proactively monitors market developments, plans market expansion strategies, and deepens cooperation with clients.

Applications and Markets

Major products:	Major downstream applications	Major sales regions
Phenol	Industrial raw materials, additives, dyestuffs, pharmaceutical compounds, phenolic resins, adhesives, bactericidal and antiseptic agents	Taiwan, China
Acetone	Solvents, acrylic materials	Taiwan, China, Southeast Asia
Bisphenol A (BPA)	Epoxy resins, polycarbonate resins, plasticizers, antioxidants, heat stabilizers, coatings, printed circuit board materials, etc.	Taiwan, China
Cyclohexanone	Solvent, reaction triggering agent, upstream raw material of Nylon 6	Taiwan, Southeast Asia
Alpha-methylstyrene	Solvents, plasticizers, coatings	Taiwan, Northeast Asia
Maleic anhydride	Unsaturated polyester resin, additives, surfactants	Middle East, India



3. Green Processes and Sustainable Practices

With the goal of greening the production process, TPCC is committed to reducing energy waste and improving production efficiency in the production process, and is currently promoting the following projects at the Linyuan plant:



Process Improvement

- Acetone Filling Exhaust Improvement Project: Aimed at reducing the environmental impact of VOC emissions.
- Phenol Acetone Process CS/PS System Emission Improvement Project: Designed to reduce the environmental impact of VOC emissions during the material recovery process.
- Phenol Acetone Process Storage Tank Exhaust Improvement Project: Enhances process operation safety.
- Maleic Anhydride Process Sump Liquid Improvement Project: Improves the production site environment and reduces the impact of chemical exposure on personnel.



Other Environmental Protection Practices

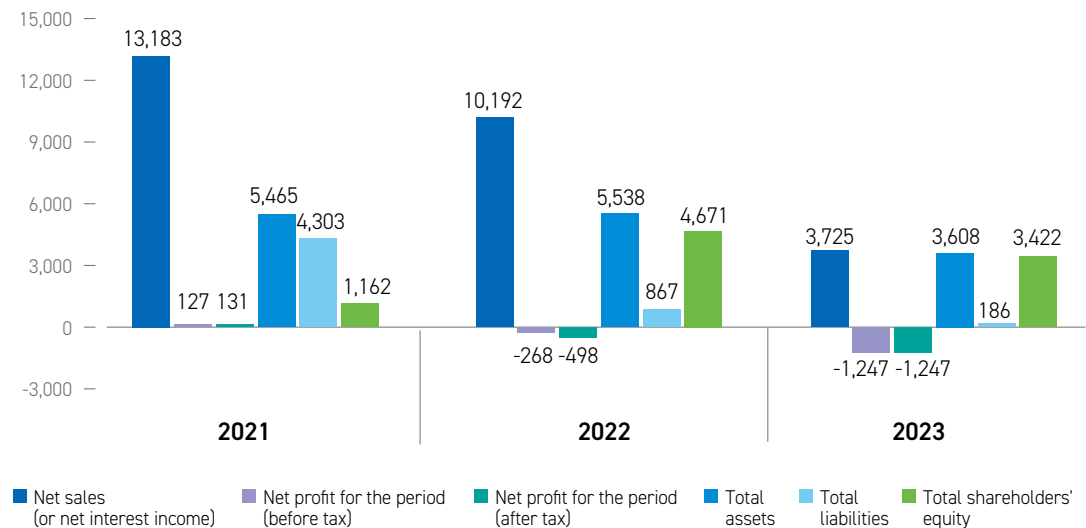
- Replacing the Heat Tracking Recovery Station in the Phenol Acetone Process: To achieve energy-saving benefits.
- New Wastewater Temporary Storage Tank Project: Enhances the operational stability of the wastewater treatment plant.
- Hydraulic Analysis Project of the Cooling Water System: Optimizes the use of water resources throughout the plant.
- Rainwater Harvesting System: Installed across the plant to supplement cooling tower water, achieving water-saving benefits.

4. Business Performance

2023 revenue was NT\$3,725 million, a decrease of 64% from 2022, mainly due to three factors. First, the outbreak of the Russian-Ukrainian war, and the continuation of the trade war between China and the United States and other factors, led to sharp fluctuations in global raw material prices, high bulk shipping costs, aggravating the impact of inflation, resulting in a significant decline in downstream demand, poor start-up rate of various industries, and the trade was halted; second, since the fourth quarter of 2021, the United States chemical plants resumed work after being shut down by the blizzard at the beginning of the year, and the demand for acetone imported from Europe and North America to Asia declined significantly, which compressed the room for sales of the Company's acetone products; furthermore, the Company's maleic anhydride and methylstyrene production lines were shut down for a long period of time for large-scale refurbishment due to high failure rates and poor conversion rates caused by old equipment, and the total production volume of the two products declined sharply compared to 2021, resulting in a decrease in revenue.

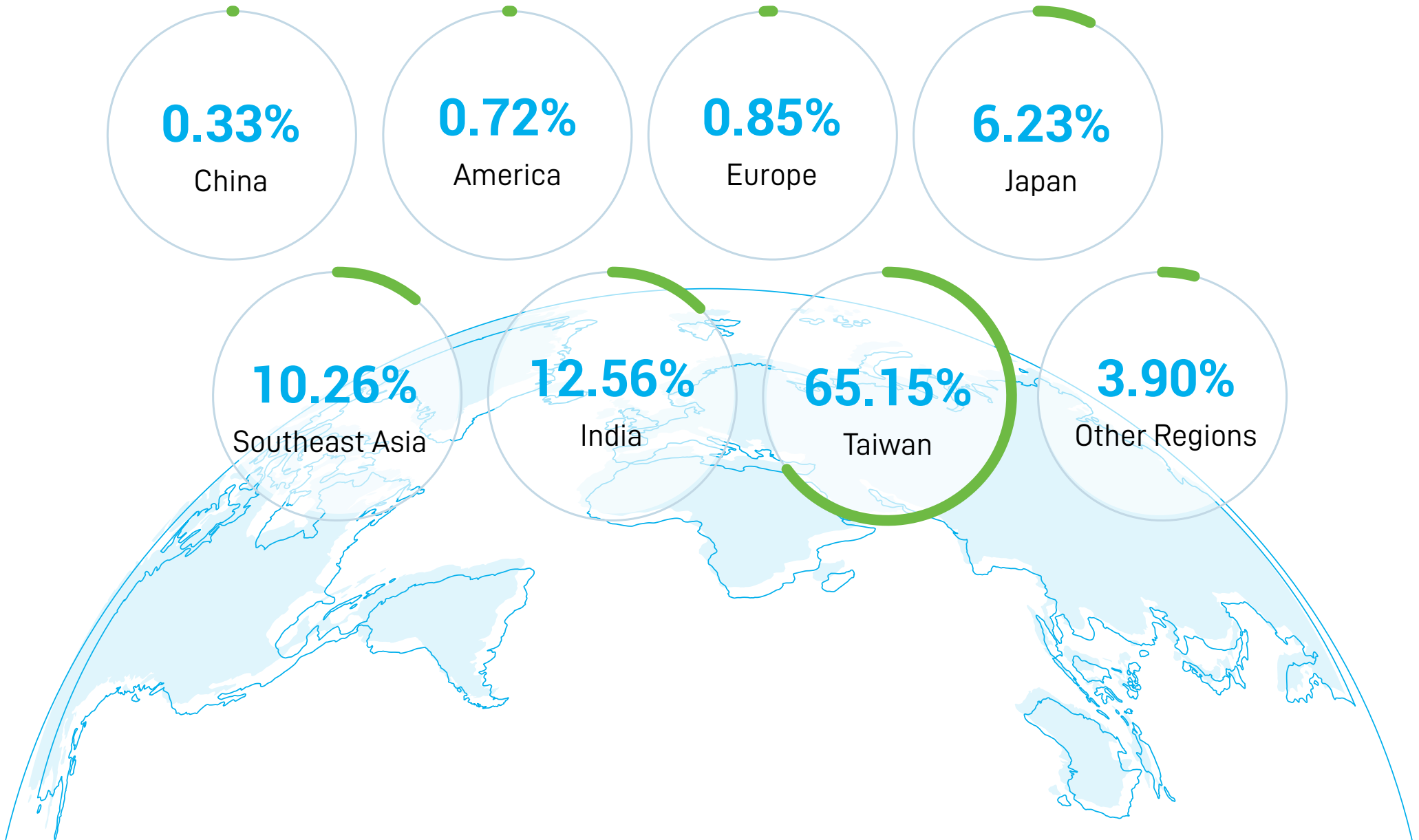
2023 Business Performance

(Unit: NTD millions)





Revenue Sales Distribution by Region



ch2

Sustainable Management

1. ESG Governance and Management Organization
2. Stakeholder Engagement
3. Material Topic Identification and Impact Management

1. ESG Governance and Management Organization

After joining the Chang Chun Group, TPCC gradually integrated its sustainable development strategy with the Group's, following the Chang Chun Group's ESG Committee structure. Under this structure, TPCC established the ESG Operation Office and four groups: Governance, Social, Environmental, and Supply Chain Management. The heads of the primary responsible departments serve as the executive secretaries for the ESG Operation Office and each group, and also act as committee members.

The ESG Operation Office supports various coordinating departments and integrates issues with factory representatives. It reports on sustainability performance and stakeholder communication results to the ESG Committee on a quarterly basis. In 2023, the ESG Working Group held four meetings and the ESG Committee held one meeting.





2. Stakeholder Engagement

The Company adopts multiple communication channels and regularly communicates with different stakeholders to obtain opinions from various parties. We also follow the suggestions of various parties to evaluate and review the direction of improvement, thus realizing two-way interaction with stakeholders.

The following table summarizes the communication with each type of stakeholders in 2023:

Category	Importance of Stakeholders to Chang Chun	Topics of Interest (20 topics)	Communication Channels/Frequency	2023 Communication Results
Customers	"Customer First" is TPCC's consistent business philosophy. By treating all customers with integrity, TPCC ensures that every customer can confidently receive our services, while fostering sustainable growth together with our customers.	Corporate Governance and Ethics Critical Incident Management and Response Water Management Chemical Safety Air Pollution Management	Irregular Phone calls, letters, faxes, web pages, customer visits, visits to customers Irregular Exhibitions Annual Customer satisfaction survey Irregular Customer visits and evaluations Annual Establishment of customer complaint channels	1 customer satisfaction survey. Average Score of Customer Satisfaction: 4.75
Suppliers/Contractors	Suppliers and contractors are the essential foundation for TPCC to maintain excellent product quality and service. They are also indispensable partners in achieving a sustainable supply chain.	Supplier Management Workplace Safety and Health Critical Incident Management and Response Corporate Governance and Ethics Legal Compliance	Irregular Phone calls, letters, faxes, web pages Irregular Visits to and from suppliers/contractors Regular Education and training to suppliers/contractors Regular Supplier evaluation and audit	There are 15 qualified raw material suppliers, 4 qualified transportation suppliers, and 197 qualified contractors with whom we have transactions. Safety and health training for contractors reached 1,178 person-times, totaling 1,178 hours. A total of 6 key raw material suppliers underwent corporate social responsibility risk assessments, with all results indicating low risk.
Community Residents Around the Plant	TPCC upholds the spirit of "taking from society and giving back to society." By listening to the community, engaging in positive two-way interactions, and delivering a positive impact, we aim to co-create a sustainable future together.	Water Management Air Pollution Management Corporate Governance and Ethics Legal Compliance Risks and Opportunities	Irregular Residents' complaint hotline, mail, guard booths Irregular Participate in/sponsor community events Irregular Environmental/public facilities adoption and maintenance	Linyuan Petrochemical Industrial Area Neighborly Fund of \$2.28 million.



Category	Importance of Stakeholders to Chang Chun	Topics of Interest (20 topics)	Communication Channels/Frequency	2023 Communication Results
Staff	"Talent" is TPCC's most important asset. By creating a friendly and stable workplace environment, we foster employee cohesion and deepen their sense of belonging.	Employment Relationships and Benefits Workplace Safety and Health Labor Rights Risks and Opportunities Legal Compliance	Weekly/monthly/quarterly/yearly Work meetings Quarterly Employee benefit meetings Irregular Internal meetings or seminars Annual Annual performance review Irregular Education and training Irregular Complaint mailboxes, electronic bulletin boards, questionnaires, interviews	Planned training courses 4 employee benefit meetings 4 labor-management conferences 1 Pension Committee meeting 1 annual performance review
Government/Competent Authorities	TPCC strictly adheres to legal regulations and maintains open communication channels with government authorities, jointly promoting stable and sustainable growth in the industry.	Supplier Management Workplace Safety and Health Critical Incident Management and Response Water Management Energy Management and GHG	Regular Application review Irregular Factory inspection by competent authorities Irregular Correspondence and telephone communication Irregular Visits by government officials More than once a year Participation in meetings (review meetings/discussion meetings/briefing sessions/seminars/forums, etc.)	Regularly report environmental and occupational safety and health related information in accordance with the law. Cooperated with the central and local authorities in the promotion and briefing sessions, reviews, audits, and conferences. Participated in 6 emergency response drills organized by government agencies.
Trade Associations	Through various exchange and sharing activities, TPCC actively interacts with industry associations to understand market trends and sustainability directions, jointly enhancing industry competitiveness.	Risks and Opportunities Workplace Safety and Health Critical Incident Management and Response Climate Change Mitigation and Adaptation Energy Management and GHG	Irregular Attendance at meetings organized by the associations Taking on key communication roles in the associations	Participated in 4 industry associations.



3. Material Topic Identification and Impact Management

Major Topic Communication and Investigation

TPCC attaches importance to the needs and expectations of its stakeholders, and utilizes questionnaire surveys to analyze issues of concern to stakeholders, which serve as a reference for the disclosure of information in the report and as a basis for the formulation of CSR policies, so as to facilitate effective communication with different stakeholders. In order to properly identify critical themes for TPCC's sustainable development, TPCC refers to the new version of GRI 2021 Material Topic Identification Process, evaluates the extent of TPCC's impacts on a variety of issues, including environmental, economic, and human/human rights, and manages them based on their actual and potential impacts.

Impact Management Mechanism

The Board of Directors is the highest governance unit with a supervisory and decision-making role in the impact management of material topics, with each of TPCC's authoritative units working to prevent or ameliorate potential or actual risks. After compiling a list of possible issues, we assess and rank the positive and negative impacts of each issue with department heads through questionnaires and interviews.

Process to determine material topics

In accordance with the new version of GRI 2021, we take the following four steps to identify material topics and assess the significance of impacts

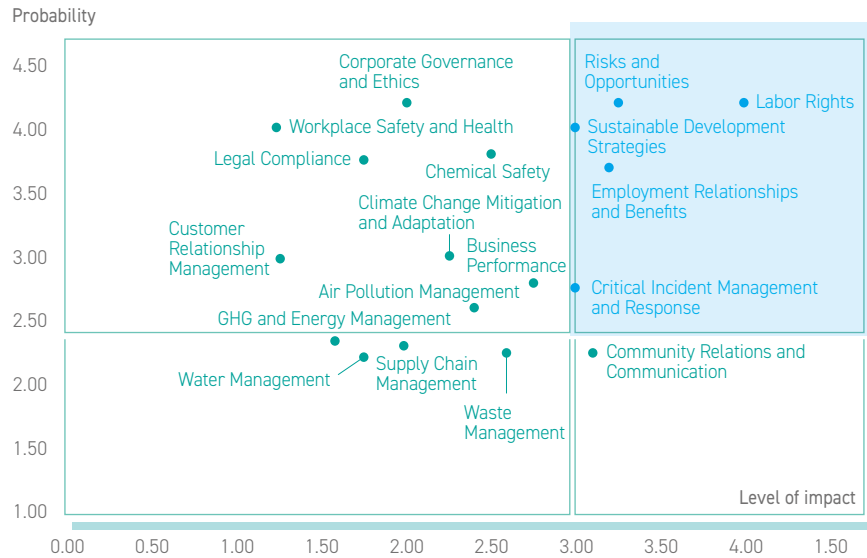
Step	Content	Description
Step 1 Understand organizational context	Stakeholder identification and sustainability topic list establishment	(1) Stakeholder Identification Through AA1000 SES 2015, the Company identified six categories of stakeholders of TPCC, including employees, governmental/competent authorities, customers, residents of the community surrounding the plant, suppliers/contractors, and trade associations. (2) List of Issues and Sources of Potential Impacts A total of 20 issues of concern to internal and external stakeholders have been selected with reference to international ESG trends, GRI standards, SASB chemical industry standards, international rating agencies' requirements for ratings, and the FSC's requirements for listed companies' corporate governance evaluations. Including: 1. Corporate Governance and Ethics, 2. Legal Compliance, 3. Risks and Opportunities, 4. Sustainable Development Strategies, 5. Business Performance, 6. Product Strategies and R&D Innovations, 7. Supplier Management, 8. Customer Relationship Management, 9. Workplace Safety and Health, 10. Critical Incident Management and Response, 11. Community Relations and Communication, 12. Labor Rights, 13. Employment Relationships and Benefits, 14. Climate Change Mitigation and Adaptation, 15. Water Management, 16. Energy Management and GHG, 17. Waste Management, 18. Chemical Safety, 19. Air Pollution Management, 20. Talent Acquisition and Cultivation. (3) External Stakeholder Engagement Survey Following GRI standards, we adjusted the material topic questionnaire to collect the level of concern from internal and external stakeholders on various issues. A total of 122 questionnaires were distributed, and 85 were returned. The questionnaire response rate was 69.7%. These stakeholder questionnaires will best inform our ranking of the material topics.



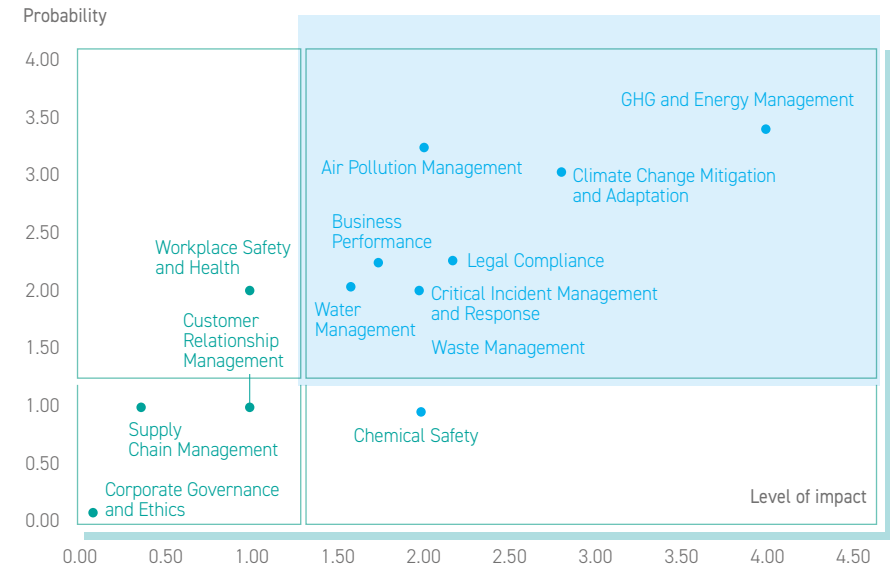
Step	Content	Description
Step 2 Identifying actual and potential impacts	Material topic impact assessments completed by internal management	(4) Assessment of TPCC operations' economic, environmental and human/human rights impacts The plant managers conducted positive and negative evaluations on 20 sustainability issues that could potentially cause actual or potential impacts. They analyzed the severity and likelihood of these impacts based on the actual and potential situations that could arise. Finally, two matrices are generated: the matrix of positive issues and the matrix of negative issues. The X-axis of the matrix represents the degree of impact and the Y-axis represents the probability of occurrence.
Step 3 Evaluate impact significance	Confirmation of material topics	(5) Confirmation of material topics After considering both positive and negative impacts, and evaluating the actual level of impacts and the probability of potential impacts, we have decided to first focus on managing negative impacts. Additionally, considering the company's development direction and stakeholders' ratings on these issues, five key material topics were ultimately selected.
Step 4 Determine the material topics to be covered	Identification of material topics and management metrics for reporting	(6) We mapped these 5 material topics against the GRI indicators and the United Nations Sustainable Development Goals (SDGs) in order to develop management indicators, resulting in the selection of five UN SDGs: #3Good Health and Well-being, #6Clean Water and Sanitation, #7 Affordable and Clean Energy, #12 Responsible Consumption and Production, and #13 Climate Action (7) Determining material topics and management objectives and targets for reporting In response to the GRI 2021 revision, SASB requirements, and the 2050 net-zero emissions trend, we have set up action plans and management targets in accordance with the division of authority and responsibility among the Company's various units, with the aim of enhancing TPCC's positive contributions and impacts on the economy, environment, and human/human rights, and minimizing and avoiding negative impacts.



Positive Impact Assessment Results



Negative Impact Assessment Results



Order of Positive Impacts

- ① Labor Rights
- ② Risks and Opportunities
- ③ Critical Incident Management and Response
- ④ Sustainable Development Strategies
- ⑤ Employment Relationships and Benefits



Order of Negative Impacts

- ① GHG and Energy Management
 - ② Climate Change Mitigation and Adaptation
 - ③ Critical Incident Management and Response
 - ④ Air Pollution Management
 - ⑤ Business Performance
- Water Management
Waste Management
Legal Compliance



Materials Topic

- ① GHG and Energy Management
- ② Critical Incident Management and Response
- ③ Labor Rights
- ④ Pollution Prevention and Control
- ⑤ Legal Compliance





Material Topics Impact Assessment and Management Policies (2023 Targets and Actual Performance)

TPCC Management has established a management approach to the material topics based on the Company's specific actions in 2023:

Materials Topic	Impact Boundary				Management Approach
	Upstream	TPCC	Community	Downstream	
GHG and Energy Management	✓	✓		✓	▶ Improvement of ISO 50001 and ISO 14064 management and implementation of PDCA ▶ Departments' active proposal of energy saving and carbon reduction projects. ▶ Electricity saving target set at $\geq 1\%$ per annum
Critical Incident Management and Response	✓	✓	✓	✓	▶ Implementation of ISO45001 for occupational safety and health management and process safety management ▶ Introducing of a safety operating procedure system to enhance personnel training ▶ Planning of emergency response drill
Labor Rights	✓	✓			▶ Formulation of human rights policies ▶ Facilitation of human rights education and training ▶ Good and accessible complaint channels
Pollution Prevention and Control		✓	✓	✓	▶ Process optimization and waste reduction ▶ Enhancing the reliability of control equipment and strengthening inspection mechanisms
Legal Compliance		✓		✓	▶ Compliance with all laws and regulations without being penalized for non-compliance

Note: ✓ Direct impact ✓ Indirect impact

ch3

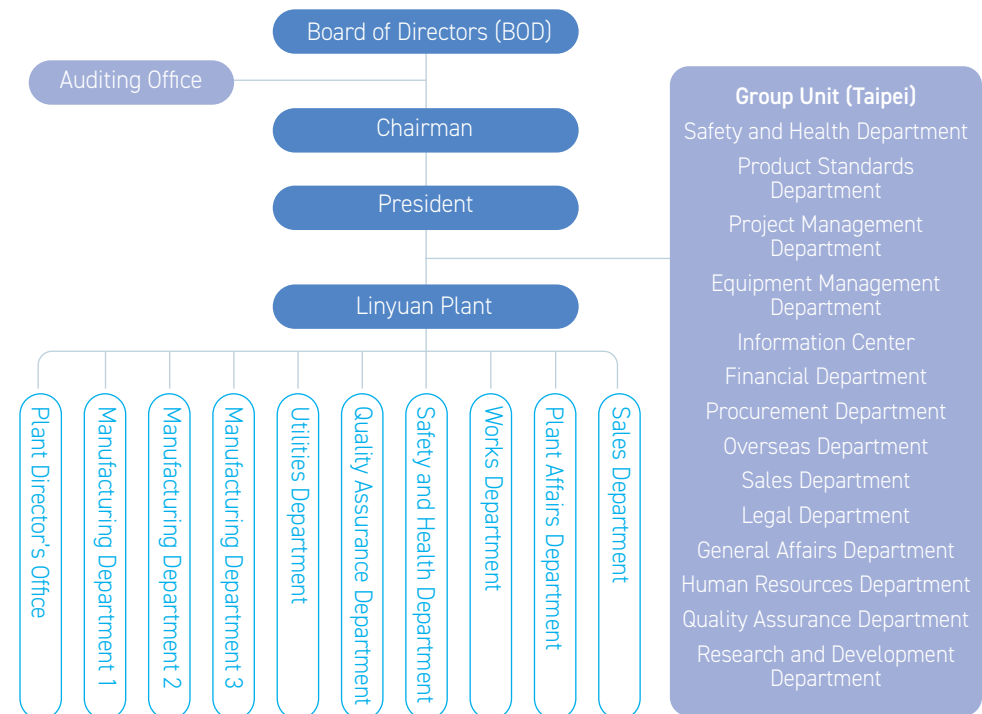
Corporate Governance

1. Governance Framework
2. Ethical Corporate Management
3. Legal Compliance
4. Customer Relationship Management
5. Supplier Management

1. Governance Framework

The highest governance authority at TPCC is the Board of Directors, composed of four directors with diverse professional knowledge and skills. They supervise and guide corporate governance, impact management, and sustainability initiatives, conducting regular reviews. The Board of Directors meets quarterly and more frequently when necessary. The number of board meetings (including interim and regular board meetings) in 2023 totaled 4, with 100% attendance rate.

Corporate Organization Chart





Board Members:

Title	Name	Legal Entity Represented
Chairman	Davy Cheng	Chang Chun Plastics Co., Ltd.
Director	Long-Shing Liao	Chang Chun Plastics Co., Ltd.
Director	Bing-Huang Lee	Chang Chun Plastics Co., Ltd.
Supervisor	Shih-Kuang Su	Chang Chun Plastics Co., Ltd.



The composition of the Board of Directors takes into account professional backgrounds and specialized knowledge and skills:

Core of Diversity Name of Director	Basic Composition					Professional Background				Expertise and Skills			
	Nationality	Gender	With Employee Status	Age		Own industry knowledge	Chemistry and Manufacturing	Finance and Supply	Information and Technology	Business management	Crisis management	Global market perspective	Leadership and Decision-Making Capabilities
				Aged 31-50	Aged Over 51								
Davy Cheng	Taiwan	Male			◎	◎	◎	◎	◎	◎	◎	◎	◎
Long-Shing Liao		Male			◎	◎	◎	◎	◎	◎	◎	◎	◎
Bing-Huang Lee		Male			◎	◎	◎	◎	◎	◎	◎	◎	◎
Shih-Kuang Su		Male			◎	◎	◎	◎	◎	◎	◎	◎	◎



2. Ethical Corporate Management

Policy and Commitment to Ethical Management

"Integrity and sincerity as corporate core values" is the cornerstone of Chang Chun Group's business operations. The Group emphasizes the importance of improving the corporate governance structure, strengthening the functions of the board of directors, and complying with laws and regulations. Inheriting the Group's belief in a transparent, open, and efficient corporate governance mechanism and strictly complying with relevant laws and regulations, TPCC strictly prohibits unlawful acts such as insider trading, conflicts of interest, and disclosure of undisclosed or confidential information to related parties, etc. To implement the integrity management policy, TPCC follows the "Business Ethics Audit Procedure" to conduct at least one internal audit annually. Based on the audit items and actual implementation results, a business ethics compliance assessment form is prepared. In 2023, the compliance rate reached 100%.

Anti-Corruption, Anti-Competition, Anti-Trust and Monopolistic Behaviors

TPCC adheres to the "Integrity Clause for Chang Chun Group & Related Enterprises" and the "Chang Chun Group Anti-Bribery and Anti-Corruption Commitment," demonstrating to stakeholders our commitment to eradicating any bribery and corruption activities. These principles are also incorporated into legal compliance and human rights education training to strengthen employee awareness. Externally, suppliers and contractors are required to sign the Supplier Code of Conduct to ensure effective anti-corruption communication. For incidents suspected of involving corruption, anti-competitive behavior, antitrust, and monopolistic activities or violations of the code of conduct, TPCC provides communication and anonymous complaint channels for employees and external stakeholders. A dedicated department investigates, penalizes, and strengthens training to prevent recurrence of such incidents. The complaint investigation system, whistleblower protection mechanism, and disciplinary measures are executed in accordance with the Chang Chun Group's "Complaint Investigation Procedure." No incidents of corruption, anti-competitive behavior, trust, or monopoly-related reports occurred in 2023.

Legal Compliance and Human Rights Training

TPCC conducts legal compliance and human rights education and training annually. In 2023, the training participation rate reached 100%, thereby ensuring the implementation of ethics and integrity.

Percentage of Employees Completing Legal Compliance and Human Rights Education and Training in 2023



Note : Management - Including junior supervisors and above; Non-management - General staff.



3. Legal Compliance



Positive: The Company has always complied with the requirements of various laws and regulations, and emphasizes on ethical management.

Negative: TPCC is engaged in the manufacture of chemical products with impacts on air pollution prevention, water pollution prevention, toxic chemicals and waste management. The Company had a negative impact in 2023 in the areas of air pollution with incidents of non-compliance and monetary penalties; improvements have been made immediately.

Management Approach for "Legal Compliance"

Significance of the Material Topic

Legal compliance is TPCC's ethical mission and responsibility. Strict adherence to relevant laws and regulations is a practice of social responsibility and accountability to stakeholders. By maintaining the company's reputation and trust, we can lead the business towards stable and sustainable growth.

Policy and Commitment

TPCC upholds the consistent approach of the Chang Chun Group, placing great importance on local laws and regulations. We have established a regulatory identification system to assess the potential risks caused by regulatory changes, avoiding the impact of legal violations on the company and achieving long-term stable development.

Responsible Departments

Legal Compliance Committee, Legal Department.

Communication/Complaint Mechanisms

- Chang Chun Group has established the "Employee Complaint Procedure" for internal use. Externally, we provide reporting mailboxes: ccpgaudit@ccp.com.tw / CCPGLG@ccp.com.tw, offering channels for employees and external stakeholders to communicate and submit anonymous complaints.
- The complaint investigation system, whistleblower protection mechanism, and disciplinary measures are executed in accordance with the Chang Chun Group's "Complaint Investigation Procedure."

Performance Evaluation Methods and Results

- The Legal Department holds regular Legal Compliance Committee meetings every six months and conducts an annual review of regulatory compliance management at the end of the year.

Target

Key Performance Indicators (KPI)	2024 Target	2025 Target	2030 Target
Completion rate of legal compliance and human rights education training.	Maintaining 100% every year (Excluding employees who have been with the company for less than three months, those on parental leave, and those on sick leave.)		
Tracking and revising internal systems or related contract content to comply with regulatory changes.	Number of cases actually implemented		
Providing the latest relevant legal information to each plant to ensure regulatory compliance identification rates.	Maintaining 100% every year		
Number of severe violations of business ethics (with fines exceeding 1 million)	Maintaining 0 every year		

Action Plans

Risk prevention: TPCC collaborates with the Group to conduct annual legal compliance and human rights education and training, deepening employees' understanding of legal principles. Additionally, TPCC has established the "CCPG Regulatory Identification System" to annually identify potential regulatory risks associated with various business activities.

Risk handling: Upon the occurrence of an incident or receipt of a report, the Chang Chun Group immediately establishes a response team to handle the situation promptly and appropriately, according to the nature of the incident.

2023 Outcomes

Key Performance Indicators (KPI)	2023 Target	2023 Outcome
Completion rate of legal compliance and human rights education training.	Maintaining 100% every year (Excluding employees who have been with the company for less than three months, those on parental leave, and those on sick leave.)	100%
Tracking and revising internal systems or related contract content to comply with regulatory changes.	Number of cases actually implemented	14 internal systems revised 64 standardized contract templates
Providing the latest relevant legal information to each plant to ensure regulatory compliance identification rates.	Maintaining 100% every year	100%
Number of severe violations of business ethics (with fines exceeding 1 million)	Maintaining 0 every year	0

Note: There was a total of 1 environmental violation (incidents exceeding 100,000 NTD), which has been fully rectified.



TPCC manages and audits HSE regulations through the internal "Regulatory Identification System." Each case's deficiencies are reviewed for improvement and progress is tracked. We strive towards the goal of zero fines, taking responsibility for the community and the surrounding environment.

📌 2022-2023 Statistics of Environmental Violations and Fines

Unit: 10,000 NTD

TPCC				
Item/Year	2022		2023	
	Number of Cases	Amount	Number of Cases	Amount
Air Pollution	1	10	1	15
Total	1	10	1	15

Note 1: The major deficiencies disclosed here are incidents with fines exceeding 100,000 NTD.

Note 2: Other pollution items not listed in the table indicate no violations for that year.

📌 2023 Description of Environmental Violations and Improvement Plans

Description of Violation	Improvement Plan
VOC sample test of equipment components revealed one instance exceeding the regulatory standard (2000 ppm).	1. Include the VOC-leaking component in the self-inspection list and conduct regular measurements according to the inspection plan. 2. Use samplers with better sealing to prevent VOC emissions.



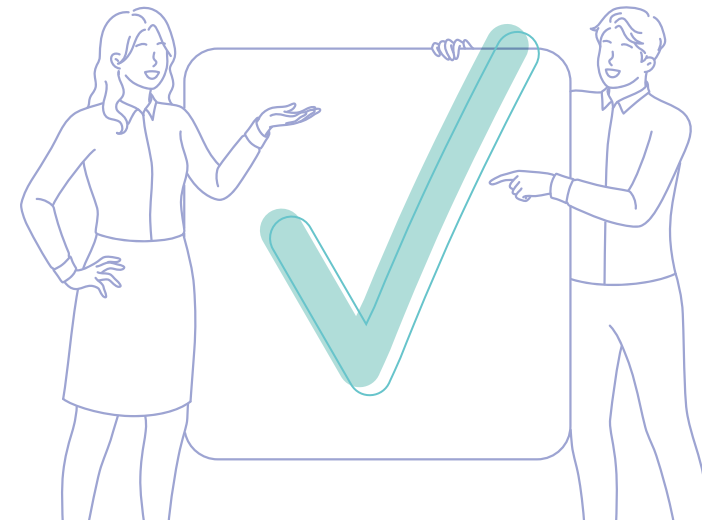
4. Customer Relationship Management

TPCC places great emphasis on customer-oriented quality management and customer relationship management. We regularly track and maintain good communication with customers through client visits, customer satisfaction surveys, feedback forms, and the CRM system. Based on customer feedback, we make adjustments or develop new solutions to reduce defect rates and customer complaints.

Quality Management

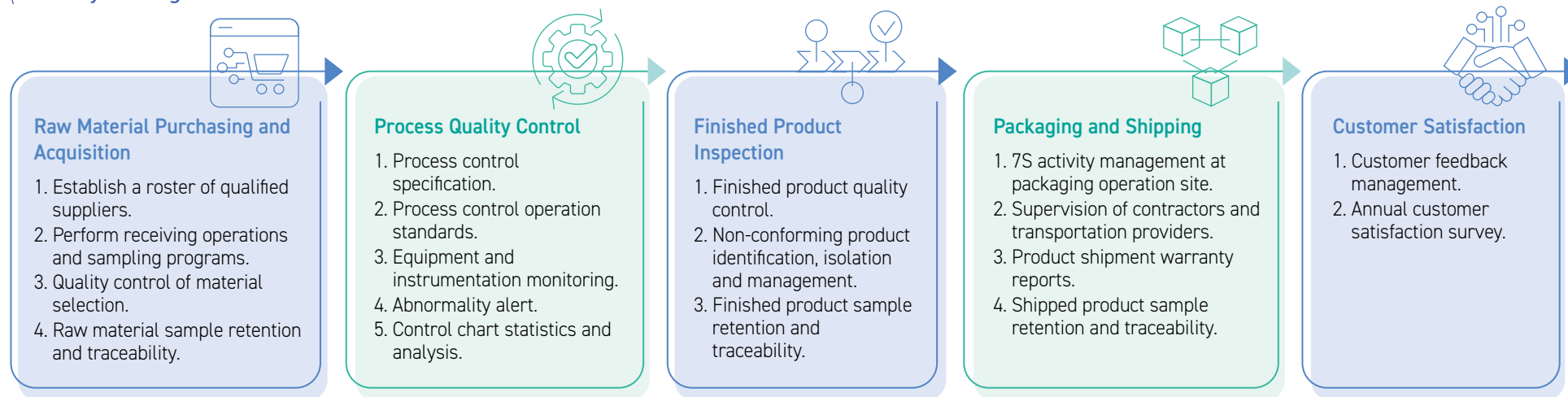
TPCC follows the quality policy of "Make continuous improvements; honor our commitments; improve our quality; satisfy our customers," and is committed to providing satisfactory products and services to our customers. To ensure quality and supply stability, we implement rigorous quality management and strengthen process control. Additionally, we have established a supplier management system to promote sustainable development of the supply chain.

We conduct thematic audits annually, review quality-related issues and management systems monthly, and thoroughly discuss quality improvement plans, new product development, and the application of existing products and new specifications through internal management meetings and various product production and sales activities. By continuously improving and innovating, we aim to enhance product quality and competitiveness, thereby increasing customer trust and satisfaction with our products.





Quality Management Procedures



Product Safety Management and Labeling

TPCC is committed to implementing the concept of the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals to reduce the hazards posed by chemicals to humans and the environment. A dedicated department is responsible for planning and executing the GHS-related processes and operations for the group.

Key management focus:



Establish GHS hazard classification for all products (to monitor the usage of chemicals classified as health and environmental hazards of Category 1 and 2).



Standardize the preparation and compliance promotion of Safety Data Sheets (SDS) and labels by integrating reliable data with classification logic.



Engage consulting firms to provide emergency consultation services (expanded to global emergency consultation phone services in 2023).

Product Information Disclosure

The company's official website provides detailed product information for customers. Customers can request product specifications and material safety data sheets (SDS), or raise any questions about the products through the website. The responsible department will respond to the relevant inquiries and feedback.



Customer Satisfaction

Customer satisfaction survey:

TPCC places great importance on customer feedback and conducts an annual customer satisfaction survey. The survey targets the top ten customers by sales volume or those who have raised complaints during the year. Through the survey results, we collect feedback and continuously improve, adhering to the principle of customer satisfaction as the highest priority. This helps maintain good relationships and communication channels with our customers.



Note: The average score of each item is taken, with the maximum score being 5

In 2023, TPCC conducted customer satisfaction surveys for its six main products and received a total of 73 responses. The average satisfaction score for 2023 reached 4.75. For lower-scoring items within each product category, we communicated with customers and conducted internal reviews to make improvements. Customer information is strictly controlled, and there have been no incidents of customer privacy breaches or data loss.

Customer Feedback Handling Procedures

To understand customers' valuable feedback, TPCC has established clear channels for customer complaints, return and exchange procedures, and compensation application processes. Feedback is collected through customer visits, email, and other channels, and all relevant feedback is entered into the customer feedback system.

Customer Feedback Handling Procedures





2023 Customer Feedback

In 2023, TPCC received two cases of customer feedback. TPCC carefully investigated these two cases and provided appropriate responses and resolutions to the issues raised by the customers.

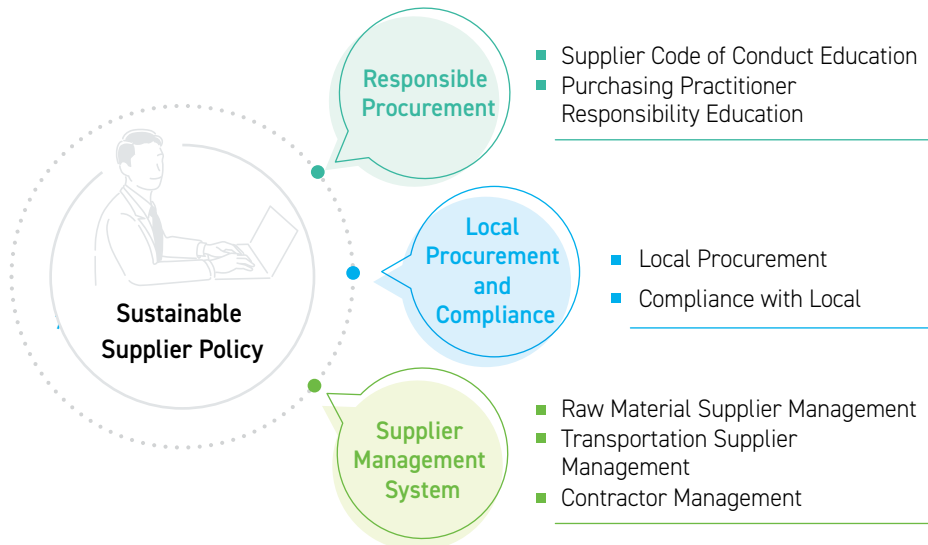
Customer Privacy Management

Starting from 2023, TPCC has fully implemented the Group's ERP system, which has been certified by ISO 27001 for 10 consecutive years and is capable of safeguarding customers' privacy and information security. There were no violations of customer privacy or loss of customer information in 2023.

5. Supplier Management

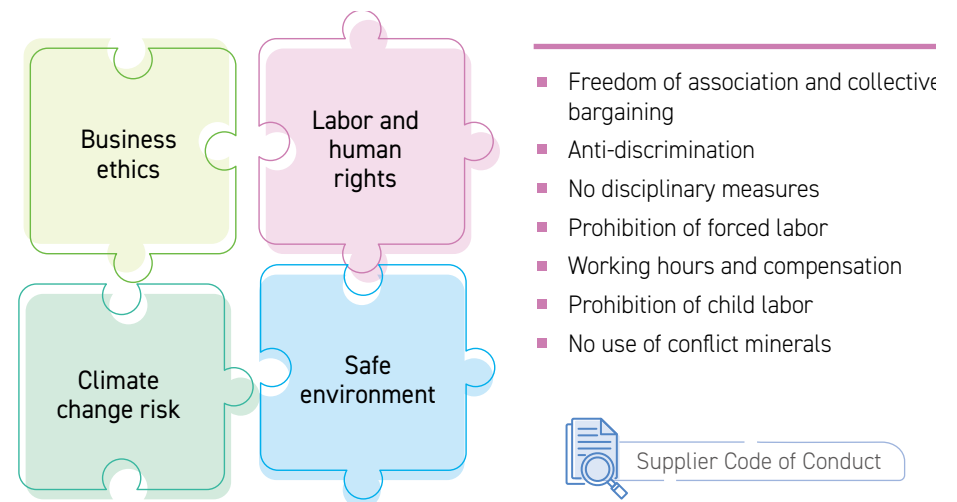
TPCC is committed to practicing responsible supply chain management, adhering to ethical standards and local regulations. With a core focus on sustainable development, we collaborate with supply chain partners to reduce labor rights, environmental, and safety risks within the supply chain, aiming to achieve sustainable business operations.

Sustainable Supplier Risk Management



Supplier Code of Conduct

To enhance the corporate social responsibility awareness of our supplier partners, TPCC promotes labor rights, human rights issues, and business ethics to all suppliers. We encourage three types of suppliers—key raw material suppliers, transportation suppliers, and contractors—to sign the Supplier Code of Conduct. The recognition of signing the code includes (1) suppliers announcing it on their website, (2) suppliers having their own version, or (3) signing TPCC's version. In 2023, TPCC had a total of 258 suppliers across these three categories, and all 258 suppliers completed the signing of the Supplier Code of Conduct, achieving a signing rate of 100%.





Risk Assessment of Suppliers' Social Responsibility

TPCC conducts a corporate social responsibility (CSR) risk assessment for key raw material suppliers. The assessment mechanism is as follows:

Evaluation Targets

- Suppliers are ranked based on the raw material procurement amounts from October of the previous year to September of the assessment year. Suppliers with a combined procurement amount exceeding 70% of the total raw material procurement amount are evaluated, excluding intra-group purchases within Chang Chun Group. If a supplier has not been procured from during the assessment year, they are excluded from the evaluation.
- Additional Criteria** If there are fewer than three suppliers after excluding intra-group purchases, suppliers with a raw material procurement share of 3% or more are included.

Evaluation content

- Stage 1:** Identify the public disclosure status of ESG or CSR information by key raw material suppliers. Suppliers who actively disclose ESG or CSR information and statements are classified as low risk.
- Stage 2:** For suppliers with low ESG or CSR disclosure in the first stage, a CSR risk questionnaire is distributed. The questionnaire investigates the suppliers' performance in quality, safety, environmental protection, human rights, and social aspects, along with supporting documents. Based on the questionnaire results, the CSR risk level of each supplier is determined.

Investigation Frequency

Once a year

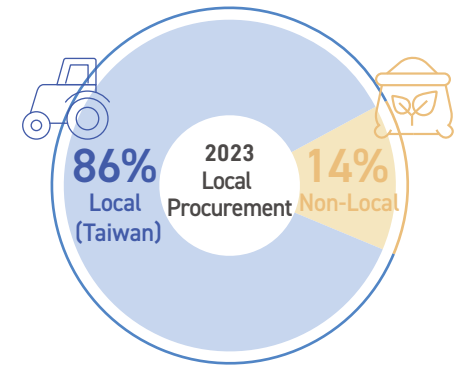
Evaluation and Disposition

After a two-stage assessment, suppliers identified as medium or high risk are scheduled for on-site audits within the following year. Through on-site visits and interactions, recommendations are provided, deadlines for improvements are set, and the effectiveness of these improvements is tracked.

TPCC conducted a "CSR Risk Assessment for Key Raw Material Suppliers" following the assessment mechanism. In 2023, six key raw material suppliers were evaluated, and all were found to be low risk.

Local Procurement

In the process of purchasing raw materials or contracting for projects, we try our best to prioritize the evaluation and procurement from local businesses, with a view to co-prosperity with local businesses under the premise of both quality and cost.

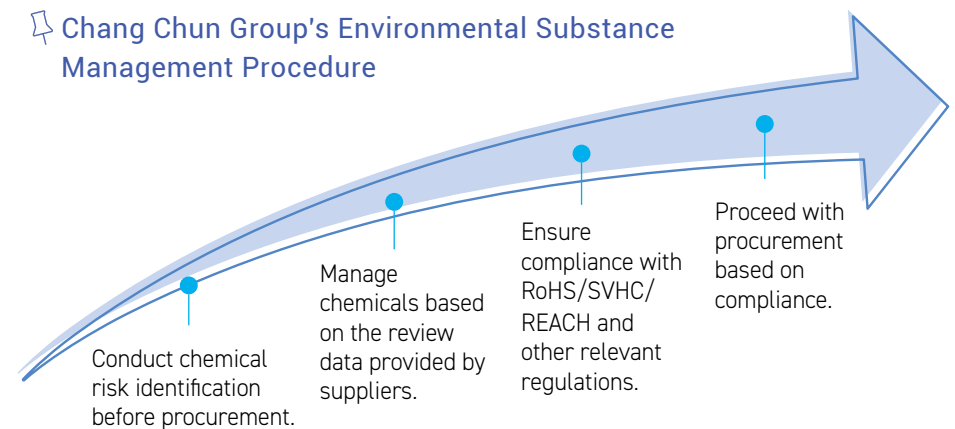


Compliance with Local Laws and Regulations

To comply with the EU regulations on REACH and RoHS and mitigate the impact of chemicals on ecosystems, TPCC has developed a chemical management mechanism based on the nature of its products. This mechanism involves reviewing the following information from raw material suppliers:

- ICP-AES test data for detectable substances or analysis reports from third-party certification bodies (such as SGS) for the 10 hazardous substances required by RoHS.
- Safety Data Sheets (SDS).

Chang Chun Group's Environmental Substance Management Procedure



ch4

Environmental Co-Prosperity

1. Sustainable Environmental Management
2. Water Management
3. Pollution Prevention and Control
4. Energy management and GHG Emission
5. Waste Management
6. Hazardous Substance Management

1. Sustainable Environmental Management



Chang Chun Group Environmental, Safety and Health, and Energy Policy Statement

Sustainable Environmental Management Policy

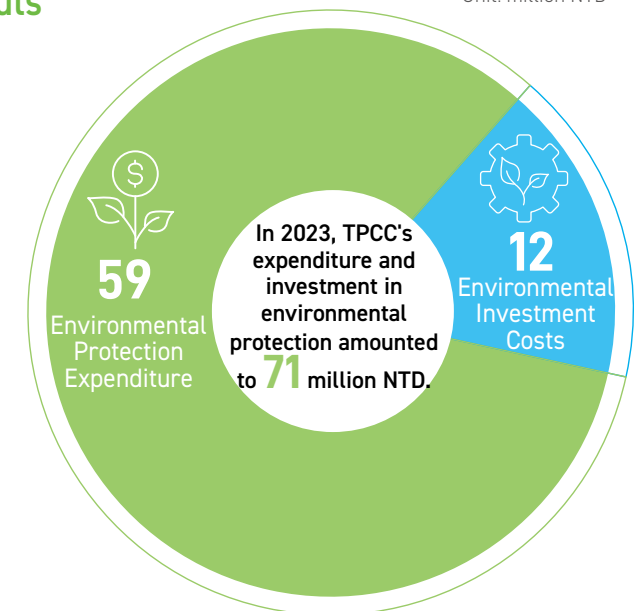
TPCC deeply recognizes that a company should not only pursue profits but also fulfill its corporate social responsibilities. Therefore, we prioritize "environmental protection" and firmly believe that good management systems can improve the environment and enhance quality of life.

TPCC's management goal is to meet or exceed legal standards and implement relevant environmental protection measures. We aim to improve waste recycling and production efficiency at all plants, invest in pollution control and process improvement equipment, and conduct maintenance, upgrades, and additions to equipment.

Environmental Cost Inputs

In line with Chang Chun Group's philosophy of sustainability, TPCC has been progressively increasing its environmental investments and expenditures, and improving resource productivity, with the aim of reducing the impact of the production process on the environment by taking precautionary measures to minimize the amount of business waste and conserve energy. In 2023, TPCC's expenditure and investment in environmental protection amounted to 71 million NTD.

Unit: million NTD





2. Water Management

TPCC recognizes the importance of water resources and therefore our water management policy includes the following:

- ✓ Water resource use and management must comply with regulatory requirements and meet environmental assessment commitments.
- ✓ Establish, implement, and maintain water resource efficiency.



Our management actions:

- (1) Achieve effective water recycling through reduction, replacement and reuse.
- (2) By implementing graded management at the source of wastewater, using biological and chemical treatments, recycling and reusing wastewater, and employing continuous monitoring systems for effluent (monitoring water temperature, conductivity, pH value, suspended solids (SS), chemical oxygen demand (COD), heavy metals, and other water quality parameters), we ensure that effluent meets regulatory requirements and reduce the volume of discharged wastewater.
- (3) Energy-saving and carbon-reduction meetings are held quarterly, chaired by the Chairman and President, to review progress towards targets (including water recycling rates, rainwater harvesting performance, etc.) and to supervise measurement management at each plant.

Water Management Information

Unit: Megaliters (thousand cubic meters)

Item		2022	2023
Water withdrawal	(+) Tap water	1,847	977
	(+) Reservoir water	-	-
	(+) River water	-	-
	(+) Groundwater	-	-
	(+) Rainwater	-	-
	(+) Purchased water	-	2
	Total water withdrawal (A)	1,847	979
Water recovery	Total water recovery (B)	910	3,080
Water recovery rate (B + rainwater) / (A + B)		33%	76%
Water discharge	(+) Surface water	-	-
	(+) Seawater	-	-
	(+) Third-party water	608	344
	Total water discharge (C)	608	344
	Total COD (kg)	41,053	15,153
Total water consumption (A-C)		1,239	635

Note 1: There is no seawater in the water withdrawal and no groundwater in the water discharge.

Note 2: Both water withdrawal and discharge items are fresh water with total dissolved solids (TDS) ≤ 1,000 mg/L.

Note 3: This table only presents data from Linyuan Plant.

Water Resources Risk Management

TPCC used the World Resources Institute's (WRI) Water Risk Assessment Tool to identify potential water stresses at the Linyuan Plant, which was rated as low to moderate. In 2023, although TPCC's Linyuan plant did not experience water shortages, given the limited national water resources and the increasing frequency of intense rainfall, we continue to review water management, and develop and implement water-saving projects to avoid operational impacts caused by water shortages. In 2023, three water-saving projects were completed, including the recycling of high-pressure steam condensate from the maleic anhydride process to the boiler deaerator tower, the recycling of steam condensate from the absorption chiller in the maleic anhydride process to the boiler deaerator tower, and the recycling of previously discharged steam condensate from the large tank area to the cooling tower, collectively saving 33.74 megaliters of water.



3. Pollution Prevention and Control

Impact Assessment

Pollution prevention and control is a material topic identified by TPCC. Due to the nature of the chemical industry, the scope of pollution prevention and control includes air pollution prevention and control, water pollution prevention and control, and waste treatment. Information on waste is described in detail in Chapter 4.5 Waste Management.

Properly managed pollution prevention and control will minimize the impact on the environment. Therefore, wastewater discharge from the process and exhaust emissions need to be properly treated before they are released or discharged. Without proper treatment, there will be negative impacts on the environment and on the health of employees and the community.

Management Approach for "Pollution Prevention and Control"

Significance of the Material Topic

TPCC is committed to creating a good living environment for everyone, ensuring that the public has clean and healthy surroundings. This dedication drives our ongoing efforts to improve water resources and reduce air pollution.

Policy and Commitment

TPCC closely monitors domestic and international regulatory requirements and implements self-monitoring and management. We adopt the approach of "effective reduction of pollution sources and optimization of control equipment" as the basic standard for improving air pollution emissions.

Responsible Departments

Business management departments, such as the Plant Director's Office, Utilities Department, and Safety and Health Department.

Communication/Complaint Mechanisms

If any environmental, safety, and health issues or injustices are discovered, employees can report them to the nearest safety and health supervisor. For comprehensive issues, reports can be made to the Taipei headquarters to ensure effective resolution.

Target

Key Performance Indicators (KPI): Percentage reduction of SOx, NOx, and VOCs.

Pollutant Factors	Baseline Year 2021 (tons)	2024 Target (reduction)	2025 Target (reduction)	2030 Target (reduction)
SOx	52	3%	3%	3%
NOx	124	3%	3%	3%
VOCs	39	10%	15%	20%

Action Plans

- Setting and reviewing technical feasibility and regulatory compliance.
- Convene and establish project teams at each plant to promote and implement the initiatives.
- Reviewing and tracking the progress and effectiveness of program improvements.
- TPCC has established a hierarchical management system at the source of wastewater to stabilize the treatment of wastewater at the wastewater treatment plant by controlling the quantity and quality of wastewater entering the plant from each process. After the wastewater treatment plant has effectively degraded the pollutants in the wastewater using biological and chemical decomposition methods, the plant continuously monitors the quality of the discharged water to ensure that it complies with regulatory requirements.

2023 Outcome

Key Performance Indicators (KPI): Percentage reduction of SOx, NOx, and VOCs

KPI	Pollutant Factors	2023 Target (reduction)	2023 Outcome (reduction)	2023 Outcome (tons)
TPCC	SOx	3%	78%	11
	NOx	3%	60%	50
	VOCs	5%	65%	13

Note: The main source of SOx emissions is boiler discharge. Since the fuel has been switched from heavy oil to natural gas, there is no further room for SOx emission reduction.



Pollution prevention and control is divided into water and air pollution prevention, which are described in the following two parts:

(1) WATER POLLUTION CONTROL:

TPCC has established a hierarchical management system at the source of wastewater to stabilize the treatment of wastewater at the wastewater treatment plant by controlling the quantity and quality of wastewater entering the plant from each process. After the wastewater treatment plant has effectively degraded the pollutants in the wastewater using biological and chemical decomposition methods, the plant continuously monitors the quality of the discharged water to ensure that it complies with regulatory requirements.

All wastewater discharged from the wastewater treatment plant is piped to the Kaohsiung Linhai, Linyuan & Dafa Industrial Parks Combined Wastewater Treatment Plant, and then discharged in the form of oceanic outfalls after being treated to meet the discharge standards. To strengthen the monitoring and active management of effluent discharge, the plant has installed an automatic continuous effluent monitoring system to monitor water quality items such as water temperature, conductivity, pH, suspended solids (SS), and chemical oxygen demand (COD). The staff of the combined wastewater treatment plant also enters the plant from time to time to take samples for random checks. There were no management indicators in the 2023 monitoring results that violate regulatory requirements.

2023 Compliance of TPCC Wastewater Discharge to the Combined Wastewater Treatment Plant

Main Managed Items	Combined Wastewater Treatment Plant Management Specification	Unit	2023 Linyuan Plant Inspection		
			Max.	Min.	Annual Average
Managed Volume	<2,880	Metric Tons	1564	407	956
Chemical Oxygen Demand (COD)	<90	mg/L	65.53	9.5	39.87
Suspended Solids (SS)	<25	mg/L	8.68	2.96	4.4

(2) Air Pollution Prevention and Control

Air Pollution Prevention and Control Actions

TPCC is committed to improving and reducing air pollution. We have installed control equipment based on the emission characteristics of our processes and have fully implemented the best available control technology (BACT) to properly handle exhaust gases. All emission points are regularly tested by third-party agencies and consistently meet or exceed the pollutant emission standards set by the government. To effectively prevent the leakage and diffusion of process gases and odors, gas detectors are installed around process equipment for real-time monitoring. Additionally, we conduct odor inspections, self-inspections of equipment components, and use GasFindIR infrared gas imaging leak detectors to monitor and prevent gas leaks.

Measures

Monitoring (inspection) operations management

Continuous Emission Monitoring Systems (CEMS) for flues and exhaust gas combustion towers, visual VOC gas detector management, regular inspection of emission pipes, infrared gas imaging leak detection (GasFindIR), self-inspection of equipment components, and routine internal and external inspections.

Best available control technology (BACT)

Low-NOx burners, thermal oxidation technology, catalytic combustors, and activated carbon adsorption systems.

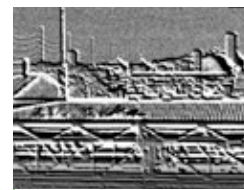
Benefits

By comprehensive monitoring (inspection) operations, we effectively grasp the status of air pollution emissions (leaks) inside and outside the plant. Through thorough preventive maintenance, training, and operations, we effectively control particulate pollutants, nitrogen oxides, sulfur oxides, volatile organic compounds, and hazardous air pollutants.

Preventive measures to enhance the stability of control equipment operation and reduce abnormalities include pre-installing gas-liquid separators at the front end of catalytic combustors to remove droplets in the exhaust gas and prevent catalyst damage.



Management of visual VOC gas detectors (CCP MAP) within the plant



Infrared gas imaging leak detection (GasFindIR)



Autonomous inspection of equipment components

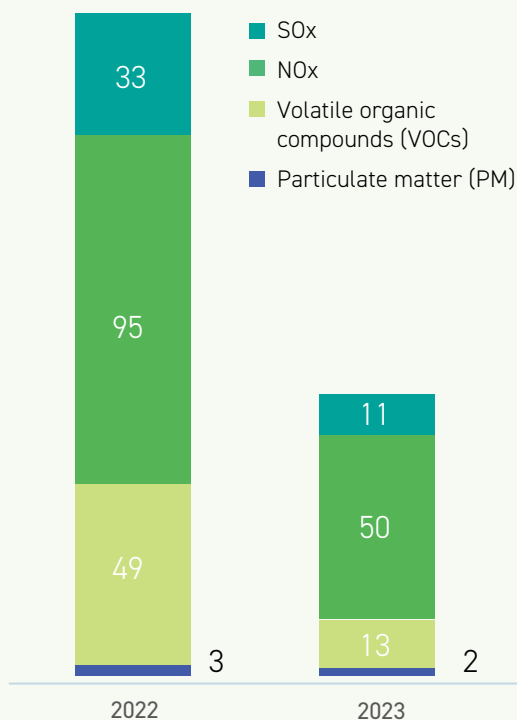


Gas-liquid separators at the front end of control equipment



2022-2023 Air Pollution Emission Statistics

Unit: Tons



4. Energy management and GHG Emission

Management Approach for “Energy Management and GHG Emission”

Policy and Commitment

Complying with government energy-related regulations, TPCC continuously promotes energy-saving and carbon reduction activities while advancing low-carbon energy transition and expanding the use of renewable energy. We support low-carbon design, procure energy-efficient equipment, and utilize effective technologies and management systems to monitor changes in greenhouse gas emissions. These efforts aim to reduce environmental impact and enhance energy performance.

Responsible Departments

Safety and Health Department

Communication/ Complaint Mechanisms

If any environmental, safety, and health issues or injustices are discovered, employees can report them to the nearest safety and health supervisor. For comprehensive issues, reports can be made to the Taipei headquarters to ensure effective resolution.

Target

Key Performance Indicators (KPI)	2024 Target	2025 Target	2030 Target
Reduction of Greenhouse Gases (Scope 1 and 2), with 2021 as the baseline: 271 ktCO ₂ e	7%	13%	30% By 2050: Achieve net-zero carbon emissions in line with government requirements
Water usage per unit	3.11 tons/ton	3.02 tons/ton	2.39 tons/ton
Steam usage per unit	1.84 tons/ton	1.79 tons/ton	1.41 tons/ton
Electricity usage per unit	0.32 thousand kWh/ton	0.31 thousand kWh/ton	0.25 thousand kWh/ton

Action Plans and Implementation Results

Quarterly review of the achievement of sustainability goals through the ESG Committee.

Carbon Reduction Strategies	Measures	Corresponding Section
Energy efficiency improvement	- Heat integration - Steam system improvement - Low-pressure steam recovery and utilization - Optimization and improvement of cooling towers	- Energy-saving pumps - Efficiency enhancement of process equipment - Utility equipment energy-saving
Circular economy	Sale of replaced process activated carbon to recycling companies Packaging material reduction	Chapter 4 Section 4: Energy management and GHG emission Chapter 4 Section 5: Waste management

Key Performance Indicators (KPI)	2023 Target	2023 Outcomes
Reduction of Greenhouse Gases (Scope 1 and 2), with 2021 as the baseline: 271 ktCO ₂ e	5%	49%
Water usage per unit	3.21 tons/ton	4.46 tons/ton
Steam usage per unit	1.90 tons/ton	2.01 tons/ton
Electricity usage per unit	0.33 thousand kWh/ton	0.41 thousand kWh/ton



Energy Management System

In 2022, TPCC implemented the ISO 50001 Energy Management System and obtained third-party certification. Through systematic energy management, we continuously improve energy usage and efficiency, reducing carbon emissions. In 2023, to enhance employee education, we offered the Chang Chun Group's ISO 50001 Energy Management online courses, which consist of six foundational management system courses, enabling employees to proficiently execute the management system.

2022-2023 Energy Consumption Statistics

Unit: Gigajoules (GJ)

Source of Energy		2022	2023
Fossil Fuels	Diesel	493	885
	Natural Gas	2,158,765	1,107,955
	Heavy Oil / Fuel Oil	0	0
	Coal	0	0
	Purchased Electricity	518,124	303,186
	Purchased Steam	208,692	6,165
	Sold Electricity	0	0
	Sold Steam	0	0
Renewable Energy	Renewable Energy Usage (including wind, solar, biomass, etc.)	0	0
Total Energy Consumption		2,886,074	1,418,191
Self-Generated Energy (Fossil Fuels)	Self-Generated Steam	1,531,084	764,859
	Self-Generated Electricity	0	0
Percentage of Renewable Energy		0	0
Percentage of Grid Electricity Consumption		18%	21%

Note 1: Total energy consumption = Diesel + Natural Gas + Heavy Oil / Fuel Oil + Coal + Purchased Electricity + Purchased Steam - Sold Electricity - Sold Steam + Renewable Energy.

Note 2: The conversion factors for calorific values are based on the Heat Content of Energy Products by the Bureau of Energy, Ministry of Economic Affairs.

Note 3: Percentage of renewable energy = Renewable Energy Usage / Total Energy Consumption.

Note 4: Percentage of grid electricity consumption = Purchased Electricity / Total Energy Consumption.

Note 5: This table only presents data from Linyuan Plant.

Note 6: TPCC Self-generated renewable energy in 2023: 0 GJ.

Note 7: Due to errors identified in the previous reporting period, adjustments have been made to the 2022 natural gas consumption, total energy consumption, and percentage of grid electricity consumption.

2022-2023 Energy Intensity

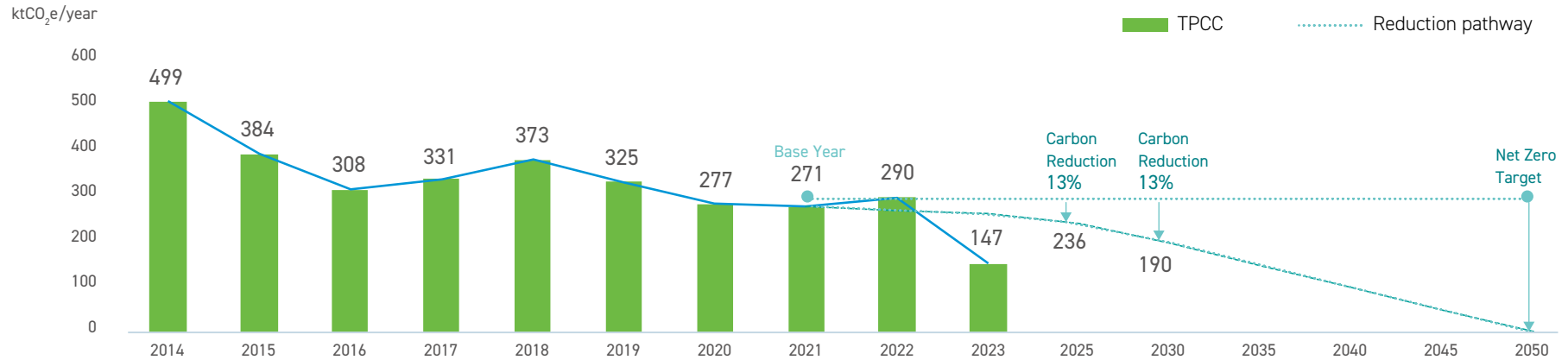
Year	2022	2023
Total Energy Consumption (GJ)	729,468	328,852
Total Product Production (Metric Tons)	600, 109	218,369
Energy intensity (GJ/Metric tons of production)	1.22	1.51

In 2023, TPCC completed several energy-saving projects, including the maintenance of two large compressors to restore their original efficiency, heat integration and recovery of front-end wastewater, replacement of tank-type pumps, reduction of electric heating wires for some tanks, and replacement of dehydrators. These efforts collectively reduced energy consumption by approximately 53,221 GJ. Additionally, TPCC has further developed and initiated multiple energy-saving projects, including pump selection and replacement, replacement of air compressors, optimization of control conditions, and replacement of old chillers. Upon completion, these projects are estimated to reduce annual energy consumption by 161,227 GJ, with a carbon reduction benefit of approximately 10,523 tCO₂e per year.

GHG Emissions Management

Short, Medium, and Long-Term Carbon Reduction Pathways

Using 2021 as the baseline year, TPCC has set carbon reduction targets of 13% by 2025 (short-term goal), 30% by 2030 (medium-term goal), and achieving net-zero carbon emissions by 2050 (long-term goal) in line with government requirements. To achieve these targets, various carbon reduction strategies will be continuously promoted.



TPCC conducts greenhouse gas inventories in accordance with regulations such as the Climate Change Response Act, the Greenhouse Gas Emission Inventory and Registration Management Regulations, the greenhouse gas emission inventory operation guidelines issued by the Ministry of Environment, and the latest regulations of the Mandatory Greenhouse Gas Reporting System. In 2023, overall emissions were reduced by 57.08% compared to 2022. Based on the 2023 carbon emission levels, TPCC has already met the 2030 reduction target. However, this was mainly due to reduced production capacity and energy consumption influenced by economic conditions. To gradually decouple business profitability from carbon emissions, TPCC will continue to promote energy-saving and carbon reduction activities to achieve reduction targets.

2022-2023 Greenhouse Gas Management Performance

Unit: ktCO₂e

Type of Greenhouse Gas Emission	2022	2023
Direct Greenhouse Gas Emissions (Scope 1)	202.228	105.400
Indirect Greenhouse Gas Emissions (Scope 2)	87.876	42.082
Other Indirect Greenhouse Gas Emissions (Scope 3)	345.924	137.489
Total Product Volume (kt)	600.109	218.369
Greenhouse Gas Emission Intensity (ktCO ₂ e/kt)	0.48	0.68

Note: The formula for calculating Greenhouse Gas Emission Intensity is (Direct Greenhouse Gas Emissions + Indirect Greenhouse Gas Emissions) / Total Product Volume.

Product Carbon Footprint Inventory Initiatives

In line with international climate initiatives and carbon reduction responsibilities, TPCC has initiated a product lifecycle carbon footprint inventory. This activity involves analyzing and calculating the carbon emissions generated from raw material extraction to the manufacturing process (including on-site waste treatment). In 2023, TPCC completed the self-inventory of the carbon footprint for five major product categories. To continuously enhance the reliability of the product carbon footprint, TPCC purchased SimaPro and Gabi lifecycle assessment software this year. Additionally, leveraging the auditing experience of third-party verification units, TPCC participated in related training activities organized by the group to improve its product carbon footprint inventory capabilities.



5. Waste Management

Waste Management

Management Approach for "Waste Management"

Policy and Commitment

Complying with government regulations on waste management, TPCC aims to enhance resource utilization efficiency in production activities, advocate for industrial waste reduction and sustainable resource use, and continuously develop waste resource recovery technologies. The goal is to build an environmentally friendly, green technology-based circular economy.

Responsible Departments

Safety and Health Department

Communication/Complaint Mechanisms

If any environmental, safety, and health issues or injustices are discovered, employees can report them to the nearest safety and health supervisor. For comprehensive issues, reports can be made to the Taipei headquarters to ensure effective resolution.

Action Plans

Quarterly review of the achievement of sustainability goals through the ESG Committee.

Autonomous waste inspection and audit

Taiwan plants conduct quarterly inspections of on-site waste storage conditions.

Evaluation of waste disposal, treatment, and recycling institutions

Taiwan plants perform at least one annual key waste contractor visit to understand the waste storage, disposal, treatment, and recycling operations.

Targets and Implementation Outcomes

Key Performance Indicators (KPI)

Total amount of waste

2023 Target

Reduced to 958 tons.

2023 Outcomes

Reduced to 733 tons.

2024 Target

Reduced to 929 tons.

2025 Target

Reduced to 901 tons.

2030 Target

Reduced to 771 tons.

Waste Environmental Impact Assessment

To ensure that factories comply with environmental regulations when handling waste, protecting the environment, and preventing pollution to avoid environmental impacts, TPCC follows the Chang Chun Group's management measures:

1

Business Waste Management Plan

Implement waste management operations according to the Business Waste Management Plan to ensure waste treatment meets legal standards.

2

Waste Management Measures

Formulate waste management measures to standardize waste management practices across all group factories.

3

Waste Removal and Treatment Agreements

Sign contracts with public and private waste removal and treatment agencies, entrusting them to carry out relevant operations to ensure waste removal and treatment comply with regulatory requirements.

4

Online Waste Transport Reporting

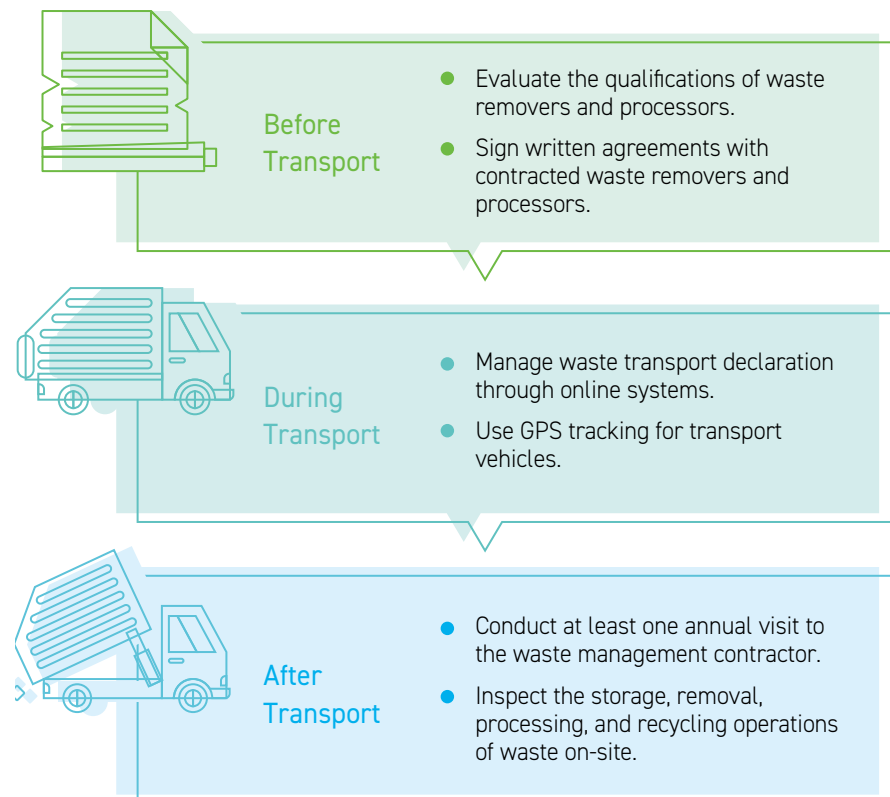
Regularly report waste transport through online transmission to ensure accuracy and timeliness, while tracking and confirming the final disposal status of the waste.



Waste Contractor Management and On-Site Audits

To fulfill the responsibility of managing waste entrusted for disposal, TPCC follows the group-established Waste Entrustment Disposal Inspection Form. By auditing waste vendors, TPCC accurately tracks on-site waste and resource storage practices, quantities, and flows to ensure compliance with legal regulations, thereby minimizing negative environmental impacts.

Waste Contractor Management Procedures



2022-2023 Waste Statistics

Unit: Metric Tons

Classification	2022	2023
General Business Waste Generation	989	733
Total Amount of Hazardous Waste	25	3
General Business Waste Recovery Rate	4%	11%
Percentage of Hazardous Waste Recycled	8%	0%
Waste Recovery Rate	4%	11%

2023 Waste Categorized by Disposal Methods

Unit: Metric Tons

Item		General Industrial Waste	Hazardous Industrial Waste
Recycled Waste Output	Recycled	83	0
	Landfill	41	0
Non-recyclable Waste Output	Incineration	392	3
	Other disposal methods	221	0

Note 1: Other disposal methods for general business waste: thermal treatment, curing treatment, physical treatment, chemical treatment, etc.

Note 2: Other disposal methods for hazardous business waste: thermal treatment, high-temperature wet oxidation treatment.

2023 Waste Categorized by Disposal Locations

Unit: Metric Tons

Item		General Industrial Waste	Hazardous Industrial Waste
On-site	Transferred disposal	0	0
	Direct disposal	0	0
Off-site	Transferred disposal	83	0
	Direct disposal	654	3

Note 1: According to GRI 306:2020 definitions, transferred disposal includes preparation for reuse and recycling. TPCC does not use preparation for reuse for waste.

Note 2: According to GRI 306:2020 definitions, direct disposal includes incineration (including energy recovery) and other disposal operations such as landfill.



2023 Process Gas & Fluid Energy Recovery

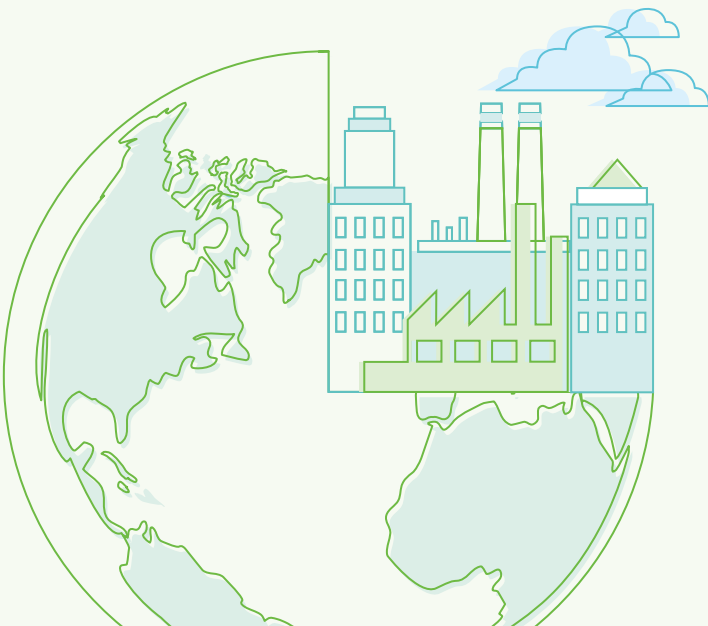
77,393

Metric Tons

Process Gas & Fluid Recovery

Note: Process gas & fluid recovery is the amount of fuel input for energy recovery within the process.

The Company has begun to plan for the recycling of packaging materials, such as flexible freight bag and pallets, with reference to the Group's practice, and will further fulfill its commitment to waste reduction in the future.



6. Hazardous Substance Management

TPCC is concerned about the potential impact of high-concern chemicals on human health and the environment. From early-stage product assessments and new product development, TPCC prioritizes reducing the use of high-concern chemicals. For existing products, the company seeks alternatives to replace these chemicals. When the use of high-concern chemicals is unavoidable, TPCC adheres to the regulations of the Toxic and Concerned Chemical Substances Control Act for proper management. This includes daily recording of operation quantities, monthly maintenance of monitoring and alarm equipment, annual application for toxic substance permits, and reporting of toxic substance release volumes. Compliance with these regulations is further ensured through internal audits or inspections by regulatory authorities. We have established a transportation declaration and product tracking system in accordance with the law for the toxic chemical products we produce. When selling our products, we shall confirm that domestic customers have export and sales permits before we can provide the products, while foreign customers are required to record the name of the company and the location of the shipment in order to grasp the flow of the products to avoid improper use and even environmental impacts.

Participated in the Kaohsiung Toxic and Concerned Chemical Substances Management Performance and Joint Prevention Organization Meeting

In 2023, TPCC was invited to participate in the "Kaohsiung Toxic and Concerned Chemical Substances Management Performance and Joint Prevention Organization Meeting" organized by the Environmental Protection Bureau. At the meeting, TPCC shared its joint prevention and toxic substance management practices at the Linyuan plant with the Environmental Protection Bureau and other attendees. The Deputy Director of the Environmental Protection Bureau publicly praised and acknowledged the positive changes TPCC has made since joining the Chang Chun Group.



ch5

Quality Workplace

1. Human Rights Policies
2. Workforce Diversity
3. Employee Benefits
4. Talent Development
5. Critical Incident Management and Response
6. Occupational Health and Safety
7. Staff Health Management

1. Human Rights Policies



Chang Chun Group
Human Rights Policy

Human Rights Policy and Commitment

TPCC adheres to the Universal Declaration of Human Rights (UDHR), the United Nations Global Compact (UNGC), the United Nations Guiding Principles on Business and Human Rights (UNGPs), the ILO Declaration on Fundamental Principles and Rights at Work, and the Responsible Business Alliance (RBA) Code of Conduct. Guided by the Chang Chun Group's human rights policy as the highest principle, TPCC commits to upholding corporate responsibility for fundamental human rights. This human rights commitment is deeply embedded in TPCC's core values and applies to all types of workers, business partners, suppliers, and contractors.

Human Rights Issue Management Mechanism

Staff

Daily human rights issues related to employees are managed by the Human Resources Department. They follow the collective agreement, work rules, and internal regulations such as the "Chang Chun Group Child Labor Prevention and Remediation Measures" and the "Chang Chun Group Prohibition of Forced Labor Measures" to ensure compliance with human rights policies and relevant legal standards.

Suppliers/Contractors

Chang Chun Group Supplier Code of Conduct

The Procurement Department formulates the "Chang Chun Group Supplier Code of Conduct" and requires suppliers to sign it, ensuring that they do not violate the provisions related to "Labor and Human Rights."





Staff

Human Rights Issues	Risk Assessment and Audit	Mitigation and Remedial Measures	Complaint Channel
Prohibition of Child Labor and Protection of Rights for Underage Workers	We regularly conduct labor and human rights risk assessments using ISO 45001 standards, and review potential risks and take corresponding measures based on the current internal and external environment and relevant legal regulations. Additionally, we ensure compliance with related issues and continuous improvement through regular internal audits.	● Chang Chun Group Child Labor Prevention and Remediation Measures	Complaint Email Address: CCPGHR@ccpgp.com Complaint Hotline: +886-2-7701-8936
Employment Freedom		● Implement Chang Chun Group's Prohibition of Forced Labor Measures ● Hold labor-management meetings to promote communication and understanding	
Working Hours, Wages, and Benefits		● Comply with laws related to working hours, and immediately rectify and review if any violations occur ● Strengthen labor-management communication and dialogue mechanisms ● Organize various hiking, recreational, and sports activities based on employee feedback ● Chang Chun good mood hotline ● Childbirth incentives and childcare subsidy measures ● New labor pension system self-contribution incentive scheme 6+1 project	
Humane Treatment		● Implement workplace sexual harassment prevention measures, complaints, and disciplinary procedures ● Sexual harassment prevention education and training	
Diversity and Anti-Discrimination		● Design a religious activity request form, allowing all employees to submit their needs ● Increase the total number of employees with disabilities every year ● Encourage departments to diversify their hiring to include talents from different ethnic groups	
Freedom of Association and Collective Bargaining		● Strengthen labor-management communication and dialogue mechanisms ● If changes to labor conditions are involved, separate coordination meetings shall be held.	
Occupational Health and Safety		● Occupational OH&S education and training ● On-site healthcare professionals to provide immediate health-related services ● Develop management tools to enhance real-time management ● Health management promotion plan ● Organize health seminars	

Contractors

Human Rights Issues	Risk Assessment and Audit	Mitigation and Remedial Measures	Complaint Channel
Occupational Health and Safety	● Regularly review potential risks and take corresponding measures through "Safety and Health Hazard Identification and Risk Assessment" and "Contractor Evaluation Procedures." ● Regularly conduct safety and health inspections to ensure compliance with regulations and continuous improvement. ● Require contractors to perform a Job Safety Analysis (JSA) before executing hazardous operations to identify and confirm operational safety risks.	● If unsafe conditions are found during safety and health inspections, immediate improvement or suspension of operations will be required. Work can only continue once improvements are completed. ● Hold regular contractor coordination meetings and conduct safety inspections before, during, and after daily operations, communicating environmental hazard factors and preventive measures. ● Establish an emergency preparedness and response plan to prevent and mitigate potential personnel, equipment, and property losses.	Complaint Email Address: CCPGHR@ccpgp.com Complaint Hotline: +886-2-7701-8936



Transportation Supplier

Human Rights Issues	Risk Assessment and Audit	Mitigation and Remedial Measures	Complaint Channel
Working Hours	Regularly review driver work reports and driving records to ensure compliance with labor laws	Require transport suppliers to implement the following measures: Install suggestion boxes and conduct regular communication, allowing drivers to report work arrangement issues at any time	Complaint Email Address: CCPGHR@ccpgp.com Complaint Hotline: +886-2-7701-8936
Occupational Health and Safety	- Require transport suppliers to monitor whether drivers have occupational diseases and regularly check on their physical and mental well-being - Inspect on-site to ensure personnel work environment safety complies with regulations	Require transport suppliers to implement the following measures: - Require drivers to follow up on health check-up reports as per medical advice and provide proof, which will be included in employee evaluations - Add rest rooms at work sites - Include additional inspection items and review mechanisms for personal protective equipment at depots and on vehicles - Install advanced driver assistance systems (ADAS) in vehicles - Equip vehicles with real-time tire pressure and temperature monitoring systems	

Suppliers

Human Rights Issues	Risk Assessment and Audit	Mitigation and Remedial Measures	Complaint Channel
Working Hours, Wages, and Benefits	Conduct ESG risk assessments for major raw material suppliers. After a two-stage evaluation, suppliers identified as medium or high-risk are subject to on-site audits. Through on-site visits and exchanges, recommendations are provided, improvements are required within a specified timeframe, and the effectiveness of these improvements is monitored.	- Regularly track deficiencies to ensure supplier improvements - Provide education and training on human rights issues related to child labor, forced labor, and conflict minerals, and enforce compliance requirements	Complaint Email Address: CCPGHR@ccpgp.com Complaint Hotline: +886-2-7701-8936
Prohibition of Child Labor and Protection of Rights for Underage Workers			
Occupational Health and Safety			

We work with our employees, business partners, suppliers, and contractors based on this principle, and we make our human rights policy public so that our suppliers are aware of our stance and requirements with regard to freedom of association and collective bargaining. The Company has established various channels for submitting concerns or complaints, which can be done anonymously or formally. Upon receiving such information, the relevant department will actively investigate and handle the matter. Based on the reported content, the company will review existing processes and continuously improve them. If a complaint is substantiated, the Company shall hold the parties concerned accountable in accordance with its internal regulations and relevant laws and regulations. We are also committed to ensuring that the identity of any person who asks or reports a concern or seeks assistance on a matter of this policy is treated in the strictest confidence. The Company strictly prohibits retaliation against persons who report in good faith potential or actual violations, or who participate in investigations of violations. TPCC had no human rights violations in 2023.

Aspect

Corporate Human Rights and Labor Conditions (including issues like child labor and forced labor, etc.)

Complaint Channel

Complaints via labor-management platform, union organization, telephone, fax, letter, or email
HR mailbox: CCPGHR@ccpgp.com

Handling Procedures

Upon receiving a complaint, the HR department will actively investigate and handle the matter. If the complaint is verified, responsibility will be pursued according to work regulations and relevant laws. If it is a false accusation or frame-up, the complainant will be disciplined according to work regulations.

Outcome

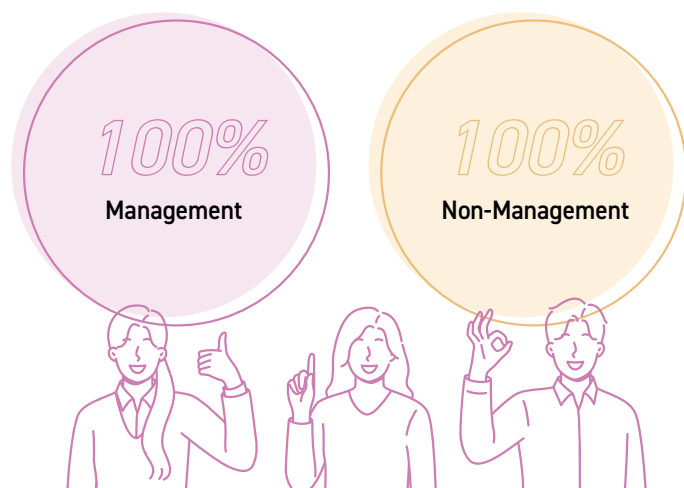
No complaints related to labor conditions were received in 2023.



Human Rights Training

To implement human rights policies, "Compliance and Human Rights Education and Training" is promoted as a mandatory annual course for employees. The completion rate for employees in 2023 reached 100%.

Percentage of Employees Completing Legal Compliance and Human Rights Education and Training in 2023



Note 1: Management - Including junior supervisors and above; Non-management - General staff.

Note 2: If there are new personnel who have not yet completed human rights-related education and training, such as those on unpaid parental leave, new employees, or those newly appointed as consultants, they will complete the training as their system access becomes effective.

2. Workforce Diversity

The inclusion of high-quality and diverse talent is fundamental for TPCC to respond to international competition. In 2023, TPCC participated in 12 university recruitment seminars, allowing more students to learn about the chemical engineering industry and TPCC's culture. This fully demonstrates TPCC's active efforts to attract and recruit outstanding talent.

TPCC employs 100% local Taiwanese employees and prioritizes local residents during recruitment, reflecting its commitment to local development. However, due to the nature of the chemical raw material manufacturing industry, the overall number of male employees is higher than that of female employees. The majority of employees are aged between 30 and 50, with an average age of around 40 years and an average service tenure of over 10 years. This represents a workforce rich in experience and vigor, with 100% of the management team rising from within the group.

2023 Local Employee Percentage

Number of Employees	Number of Local Employees	Percentage of Local Employees	Note
220	181	82.3%	Kaohsiung Region

2022-2023 Workforce Composition

Unit: Number of Employees

Contract Type		2022		2023	
		Male	Female	Male	Female
Fixed-term Contract Employees	Part-time Workers, Contract Drivers, Consultants	12	3	14	3
Open-ended Contract	Other Employees	164	14	192	11
Total		176	17	206	14

Note 1: Fixed-term contract employees listed in this table are considered temporary employees according to the GRI 2-7:2021 definition; open-ended contract employees are considered permanent and full-time employees according to the GRI 2-7:2021 definition.

Note 2: TPCC does not have part-time employees or zero-hour contract employees as defined by GRI 2-7:2021.



2022-2023 Distribution of Senior Management

Unit: Number of People

組別	2023
Total Number of Senior Management	3
Local Senior Management	3
Rate	100%

Note: Senior management includes deputy plant managers, managers, and above.

2022-2023 Employee Diversity Distribution

Unit: Number of People

Diversity Category	2022		2023	
	Management	Non-Management	Management	Non-Management
Persons with Disabilities	-	3	-	2

2022-2023 Employee Age Distribution

Unit: Number of People

Age Distribution	2022		2023	
	Management	Non-Management	Management	Non-Management
Aged Under 30	-	34	-	56
Aged 30-50	10	89	6	102
Aged Over 50	3	57	1	55
Total	13	180	7	213

Note: Management - Including junior supervisors and above; Non-management - General staff.

2022-2023 New Employee Age Distribution

Unit: Number of People

Age Distribution	2022		2023	
	Male	Female	Male	Female
Aged Under 30	8	3	11	-
Aged 30-50	-	-	8	-
Aged Over 50	2	-	1	-
Total	10	3	20	-

2022-2023 Employee Turnover Age Distribution

Unit: Number of People

Age Distribution	2022		2023	
	Male	Female	Male	Female
Aged Under 30	4	1	10	3
Aged 30-50	15	5	17	2
Aged Over 50	11	1	5	1
Total	30	7	32	6

Note: Employee turnover numbers include retirement, layoffs, deaths, expiration of part-time workers/consultant contracts without renewal, and intercompany transfers within the group.

2022-2023 Employee Job Level Distribution

Unit: Number of People

Grade	2022		2023	
	Male	Female	Male	Female
Executive Managers	-	-	-	-
Senior Managers	-	-	-	-
Mid-Level Managers	1	-	-	-
Junior Managers	9	3	6	1
General Staff	166	14	200	13
Total	176	17	206	14

2023 Number of Contractors

Unit: Number of People

Contractors **1,608**

Note: Calculated based on system entry records; the same person entering multiple times in the same year is counted as one.



Harmonious Labor Relations and Trustworthy Communication Channels

In 2006, TPCC established a labor union with an employee participation rate of up to 70.9%. Regular labor-management meetings are held every three months. To ensure smooth and transparent communication, and effective dissemination of significant event information, TPCC has established various labor-management communication channels to fully resolve differences and enhance employee rights. In addition to the annual regular union member representatives' meeting, union board of directors and supervisors' meeting, pension supervision committee, and labor-management meetings, communication can also be conducted through plant-level supervisors, union officials, via telephone, email, fax, or face-to-face. Employees can also express and propose various suggestions through the employee grievance channel. TPCC has not yet signed a collective agreement with the union. We will evaluate and discuss an appropriate collective agreement with union representatives.

TPCC 2023 Union Composition

Year Established	Number of Union Members	Percentage of Union Members
2006	156	70.9

3. Employee Benefits

Under the philosophy of sustainable and stable development, TPCC offers competitive salaries and benefits, a diverse range of employee assistance programs, and a worry-free retirement system, creating a happy life chapter for every TPCC employee.

"Bonus-related" Benefits

Salary Bonuses

- Mid-Autumn Festival, Dragon Boat Festival, Labor Day bonuses
- Red envelopes for the start of work after the Lunar New Year
- Attendance bonus for working during the Spring Festival
- Dividends
- Year-end bonus
- Annual salary adjustments
- Shift allowances
- Emergency call allowances

Special Awards and Grants

- Overtime pay calculation superior to Labor Standards Act requirements
- A commemorative gold coin awarded to employees with 20 years of service
- A commemorative gold coin awarded to retiring employees
- One month's full salary as a wedding gift for the employee
- Employee childbirth incentives and childcare subsidy
- Condolence payments for the death of the employee or their family members
- Interest-free salary advances for employee emergency assistance
- New labor pension system self-contribution incentive scheme 6+1 project

"Non-bonus-related" Benefits

Healthcare

- Labor insurance and pension contribution levels calculated based on full salary
- Group insurance for employees
- Free annual health check-ups
- Regular specialized health check-ups
- "Chang Chun good mood hotline" consultation and two free professional counseling sessions per year
- Paid vaccination leave for employees
- Various stress relief and fitness classes offered periodically
- Emergency overseas assistance services for employees
- In addition to existing life insurance, accident insurance, and occupational injury insurance, group medical and hospitalization insurance, as well as cancer insurance for employees and their families, was introduced in 2023.

Work Benefits

- Free uniforms and protective gear for employees
- Priority hiring for employees' children

Self-Growth

- Diverse internal training within the group
- External professional training
- Free English and Japanese online courses
- Online courses taught by internal instructors
- Courses for senior employees mentoring new hires
- Online courses for digital course material creation
- Presentation skills courses
- Chang Chun EMBA magazine online courses

Parent-Child Life

- Chang Chun Group family sports day
- Chang Chun Group ball games competition
- Chang Chun Group fun runs and healthy activities
- Chang Chun Group "Big Hand Holding Little Hand" beach cleanup event
- Chang Chun Group parent-child coloring and drawing event
- Discounts on tuition fees at partner kindergartens
- Group parent-child education seminars
- Unpaid parental leave

Enriched Life

- Establishment of an Employee Welfare Committee, allocating welfare funds in accordance with the law
- Two days of paid travel leave annually
- Subsidies for employee participation in various sports events and activities
- Subsidies for various club activities
- Subsidies for (retired) employee reunion activities



Retirement Security Assurance

A secure retirement life is a concrete and long-term manifestation of TPCC's commitment to employee care. The company strictly adheres to local government regulations to ensure the security of employees' retirement lives.

We have a "6+1 Project" incentive plan. If employees voluntarily contribute 6% of their salary to their pension, the company's statutory contribution rate will be increased from 6% to 7% as a reward.



Employees Under the New Labor Pension System



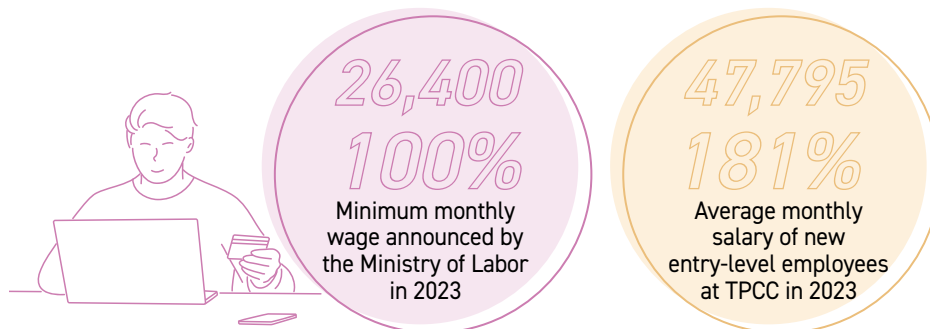
Employees Under the Old Labor Pension System

We have established the "Labor Retirement Reserve Fund Supervisory Committee" to oversee the use of employee retirement funds. The committee conducts regular actuarial calculations of retirement funds to ensure that the company's contributions are sufficient to cover employee pensions.

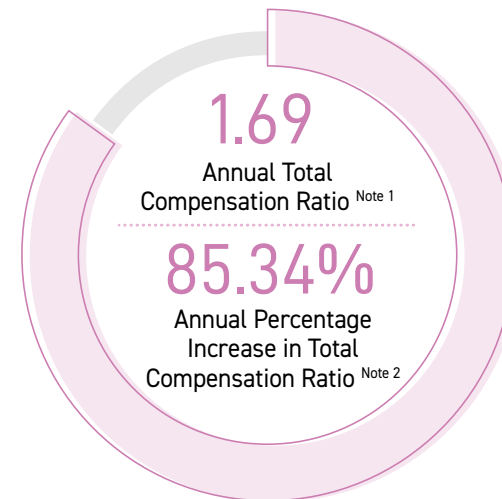
Compensation System

TPCC fully complies with local minimum wage standards. In 2023, the average monthly salary for new entry-level employees was 181% of the statutory minimum wage. The actual salaries are adjusted based on the individual employee's educational and professional background.

Unit: New Taiwan Dollars



TPCC has a salary survey and adjustment procedure. Each year, the adjustments consider the minimum living expenses published by the Central Bureau of Statistics, the minimum wage approved by the Executive Yuan, the CPI price index, industry conditions, company affordability, and employee performance assessments. Over the past ten years, employees have received an average annual salary increase of 3%. In 2023, there were 159 non-supervisory full-time employees, with a median annual salary of NT\$940,783.



Note 1: The highest-paid individual annual total compensation.
The median annual total compensation of other employees.

Note 2: Percentage increase in the highest-paid individual annual total compensation.
Median percentage increase in the annual total compensation of other employees.

Note 3: Other employees do not include the highest-paid individual.

Maternity Incentive and Parental Leave Policy

In line with the government's policy, the Company encourages childbirth by allowing employees to apply for unpaid parental leave with a 100% approval rate and 100% reinstatement to their original position. Additionally, a childbirth incentive and childcare subsidy policy has been established, offering a childbirth incentive of NT\$20,000 per child and a monthly childcare subsidy of NT\$3,000 until the child reaches 4 years old, providing full support to employees in their parenting journey. In 2023, childbirth incentives were granted 7 times, totaling NT\$140,000, and childcare subsidies amounted to approximately NT\$336,936.



2022-2023 Unpaid Parental Leave Analysis

Item	2022		2023	
	Male	Female	Male	Female
Number of Employees Eligible for Parental Leave in the Current Year (A)	14	1	21	1
Number of Employees Who Actually Applied for Parental Leave in the Current Year (B)	0	0	0	0
Number of Employees Due to Return from Parental Leave in the Current Year (C)	0	0	0	0
Number of Employees Who Actually Returned from Parental Leave in the Current Year (D)	0	0	0	0
Return Rate (D/C)	-	-	-	-
Number of Employees Who Returned in the Previous Year (E)	0	0	0	0
Number of Employees Who Stayed for One Year After Returning (F)	0	0	0	0
Retention Rate (F/E)	-	-	-	-

Note 1: Return Rate = Number of Employees Who Actually Returned from Parental Leave in the Current Year / Number of Employees Due to Return from Parental Leave in the Current Year.

Note 2: Retention Rate = Number of Employees Who Stayed for One Year After Returning / Number of Employees Who Returned in the Previous Year.

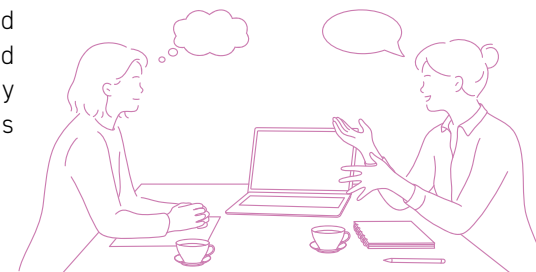


Employee Family and Physical and Mental Health Care

The Company is committed to creating a balance between work and family life through mental and physical health management and work-life balance, fostering a friendly work environment that strengthens employee loyalty and deepens their sense of belonging.

Chang Chun Good Mood

We encourage colleagues to develop a balanced mind, body, and spirit by introducing the group's "Chang Chun Good Mood Hotline" for consultation and services. Employees can contact professional psychological counselors via phone, LINE, or WeChat for various health, life, and work-related consultations. All consultation contents are kept confidential. In 2023, the group provided a total of 10 phone consultations and 8 psychological counseling sessions, assisting colleagues in resolving mental and physical issues and fostering a friendly and harmonious workplace.





Parent-Child Coloring and Drawing Event

To deepen the recognition of colleagues and their families toward the company, TPCC began participating in Chang Chun Group's parent-child coloring and drawing event in 2022. In 2023, the event theme was "Using Colors to Protect the Earth - Drawing a Sustainable Life," with a total of 20 submissions. All participating children expressed their understanding and emphasis on issues related to energy conservation, carbon reduction, and sustainable environmental protection through their drawings.



Kindergarten Group



Lower Grades Group



Middle Grades Group

Sports Activities

TPCC continues to promote various internal sports and club activities each year, highlighting the group's culture of health and its commitment to employee well-being.

SUPERACE Dark Horse Half Marathon

In 2023, the Linyuan Plant organized the Dark Horse Half Marathon, providing employees with an opportunity to exercise and strengthen their bonds outside of work. This event saw participation from over 70 employees.



4. Talent Development

The sustainable operation of TPCC relies on continuously accumulating and developing high-quality talent. We expect every TPCC employee to share a common cultural context, consistent behavioral standards, and aligned professional capabilities and work values. We adopt a three-pronged approach of "rooting downwards," "reserving upwards," and "cross-level training" for employee rotation, appointment, and development training.



Cross-Level Training

For those assigned to overseas management and promoted grassroots supervisors, provide early training necessary for new positions to build comprehensive management and professional capabilities.



Reserving Upwards

Develop management capabilities of supervisors at various levels, including foremen, section chiefs, department heads, and senior executives.



Rooting Downwards

Enhance overall professional quality of employees through rigorous work practice and a mentoring system.



Rooting Downwards

1. "New Employee Orientation"

Providing foundational cognitive training needed for new employees, promoting the "mentorship program" for new recruits by arranging more experienced colleagues from the same department to mentor new employees, helping them integrate into the Chang Chun Group family more quickly. In 2023, three colleagues were recognized as outstanding mentors.



New employee orientation



Chang Chun Group online course on the rights and obligations of new employees

2. "Professional Training for Current Employees"

In 2023, TPCC held over 330 courses. Each professional course was crafted by experienced colleagues, combining their professional knowledge and work experience, and converting it into in-person or digital courses for new employees to learn in a timely manner. The group also established the "Chang Chun Mentorship Award" to encourage the spirit of mutual teaching and learning. In 2023, three outstanding instructors and their materials were nominated. Additionally, the internal learning platform offered structured online learning channels covering various professional categories such as "Business Products Series," "Chemical Regulations," and "Quality Assurance Library." The company also fully subsidized employees with professional training needs to participate in external courses, with total subsidies exceeding 994,000 in 2023.



Mentorship award recognition



Course on common instruments in chemical plants

3. "Core Training for All Employees"

We expect every colleague to share a common cultural context, consistent behavioral standards, and aligned values. Focusing on various core competencies, we promote physical and digital course resources each year to deepen these core competencies as the collective DNA of the Chang Chun Group.

Communication and Coordination

Workplace communication-themed courses

Responsibility

Online course on employee rights and obligations in the Chang Chun Group

Teamwork

Workplace skills-themed courses for new employees in the plant

Quality Orientation

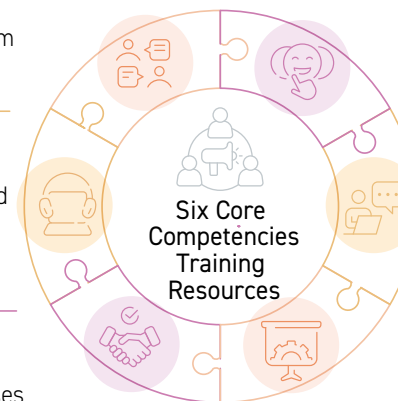
Workplace etiquette-themed courses for employees

Integrity

Legal compliance and integrity-themed courses

Self-Development

Chang Chun e-Academy self-learning platform



Online course on workplace etiquette for employees



Workplace communication course for new employees



Reserving Upwards

1. Management Training

For those in different managerial positions, we provide corresponding management competency training to equip them with the necessary management knowledge and skills for various work tasks, and enable them to demonstrate these in their personal management behavior, enhancing the management capabilities of supervisors and colleagues domestically and abroad.



Management Training for All Levels

Foremen

TWI foreman management training

- Job instruction
- Job improvement
- Job relations

Newly Appointed Section-Level Managers

Newly appointed section-level management training

- Management and leadership fundamentals
- Efficient execution
- Subordinate development and instruction
- Team building and cooperation

All Section and Department Managers

Systematic thinking and workflow

- Change in strategic thinking
- Implementation of goal management
- Execution tracking and implementation

Cross-Level Training

Reserve Engineer Training

Each year, Chang Chun Group arranges professional training courses related to their job categories for foremen with excellent job performance and a willingness to take on engineer positions, ensuring that they can be fully equipped for engineer-level roles in advance.



Average Training Hours per Employee in 2023

Unit: Hours



Note: Management - Including junior supervisors and above; Non-management - General staff.

Diverse Autonomous Learning Methods

The Chang Chun e-Academy online learning system integrates educational training databases from various factories, allowing historical courses to be collected, analyzed, and integrated as reference information for next year's educational training course planning. Currently, there are over 770 online courses, either self-produced or in collaboration with other units/institutions, and an app is available for employees to watch and learn in real-time.





5. Critical Incident Management and Response



Critical incidents are mainly caused by improper management or operation in the process, or failure to handle emergency situations due to unforeseen accidents. The reason why this topic is identified as a material topic is that from the perspective of risk management, we can effectively prevent the occurrence of major incidents through continuous refinement of process safety management.

Management Approach for "Critical Incident Management and Response"

Significance of the Material Topic

In the event of a major accident, an inadequate response plan can significantly impact public safety, the local economy, the image of the entire industry, and the environment and natural resources. It may even cause secondary disasters. Through personnel response training, incident analysis, and regular completion of emergency response drills under different scenarios, employees can become familiar with response techniques and correct procedures.

Policy and Commitment

We are committed to continuously improving our response strategies, equipment and manpower in compliance with the regulations of the competent authorities and international standards, and we implement this policy in the response behaviors of our plants, transportation, public pipelines and underground pipelines.

Responsible Departments

Safety and Health Department, Plant Affairs Department, and all process departments

Communication/Complaint Mechanisms

- Establish contact information for the Environmental Protection Bureau, fire departments, hospitals, and surrounding factories, as well as an active reporting mechanism for incidents. This ensures rapid external notification during the initial stages of an incident, allowing surrounding affected areas to immediately shelter in place or evacuate.
- TPCC Linyuan Plant proactively informs nearby community factories about production conditions and any abnormal situations to alleviate community and related unit concerns, maintain the living environment of the neighborhood, and uphold good community relations.

Target

Key performance indicator (KPI): Number of participants and hours invested in response training/drills

2024 Target	2025 Target	2030 Target
202 people	220 people	240 people
1,616 hours	1,760 hours	1,920 hours

Action Plans

- Conduct at least two emergency response trainings annually to establish a comprehensive response protection network that meets the requirements for toxic substances and hazardous chemicals of concern.
- Plan and organize training for all levels of professional response personnel from the Taipei headquarters, commissioning the Southern Taiwan Toxic Substance Emergency Response Training Center to conduct industrial fire and complex disaster training modules; 5-9 members are assigned for training annually. Increase response personnel's awareness in fire situations through practical training to reduce disaster spread.
- Conduct at least two combined fire drill situations annually to ensure that the self-defense fire brigade is familiar with handling equipment fires within the plant, improving the ability to extinguish early-stage fires and prevent the spread of flames.
- TPCC Linyuan Plant and Linyuan Service Center have established a joint defense organization for transportation. In the event of a chemical transport accident, nearby factories can be immediately dispatched for joint rescue to minimize damage and prevent secondary hazards.
- Conduct safety production manual drills, regularly practicing emergency procedures for rare but dangerous process events to prevent such situations from escalating into major accidents.

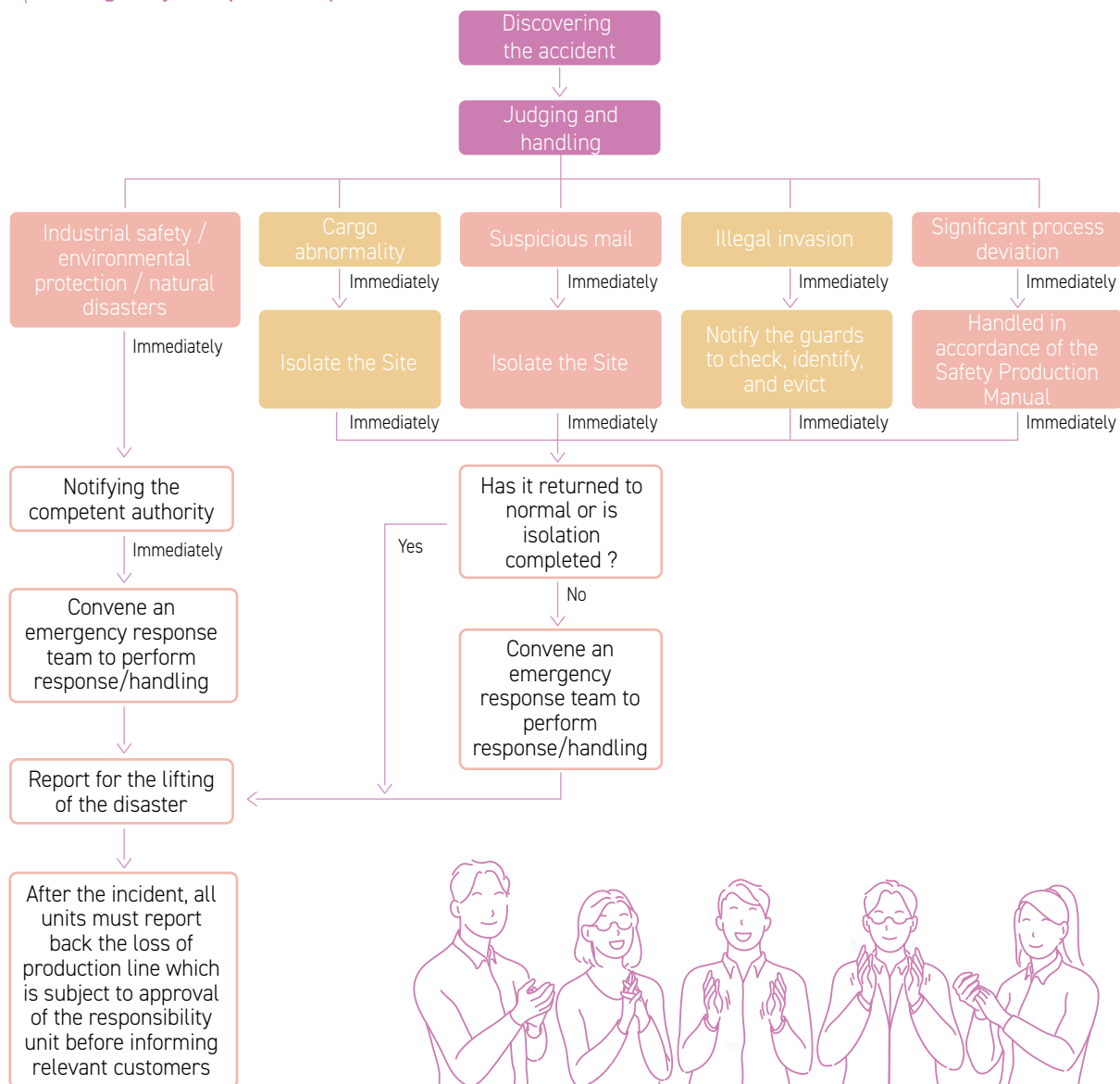
2023 Outcomes

2023 Target	2023 Outcome
217 people	217 people
1736 hours	1736 hours

- TPCC Linyuan Plant, along with CPC Linyuan Plant and Lu Shun Storage, jointly completed one emergency response drill fax test.
- TPCC Linyuan Plant participated in joint defense organizations with Oriental Union Chemical Corp. and UPC Technology Corp., each completing joint defense material support drills.
- TPCC Linyuan Plant and Oriental Union Chemical Corp. conduct two fire joint support drills annually.



Emergency Response Operation Process



Key Emergency Response Plans

Industrial Zone Defense

Fire drill training with Oriental Union (OUCC)



TPCC



OUCC

Road Transport Zone Defense

Nation-wide benzene toxic disaster response drill



Identify tanker leakage points



Confirm leak control effectiveness



Emergency Response Drills

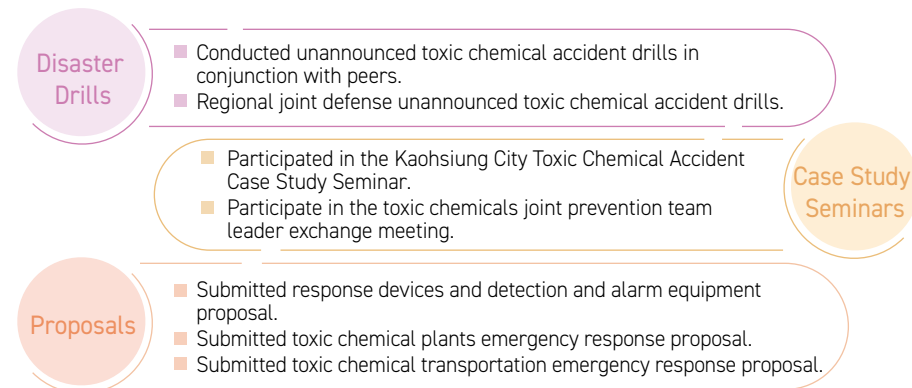
To ensure that employees have a comprehensive understanding of occupational safety and enhance their related skills, we regularly simulate various potential disaster scenarios and plan corresponding emergency response drills. These drills teach employees and on-site contractors how to respond correctly and practice operating various protective equipment, becoming familiar with all response procedures. In 2023, we held six emergency response drills for different unexpected events.

Type of Drill	Fire Protection	Toxic Chemical Substances	Evacuation and Escape
Number	2	3	1

Toxic Chemical Accident Contingency Management

In order to cope with unexpected accidents resulting in the leakage of toxic chemicals or disasters in the plant, we have formulated relevant contingency and disaster prevention management measures, regularly examined the functions of disaster protective equipment, strengthened emergency response training, reinforced personnel's knowledge of disaster prevention, and implemented mobile management and maintenance of the plant's detectors. At the end of each year, we evaluate the potential or existing incidents of leakage of toxic chemicals or disasters in the current year, and review the areas that can be further improved.

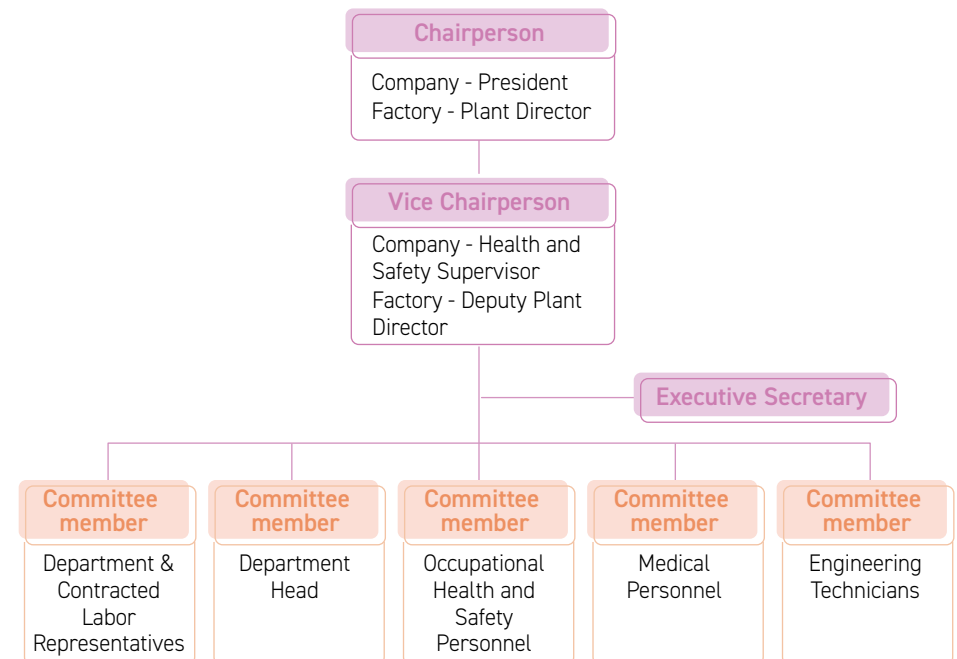
2023 External Toxic Chemical Accident Response Activities



6. Occupational Health and Safety

Occupational safety and health is a significant issue that cannot be ignored in the chemical industry. TPCC has fully implemented the Occupational Health and Safety Management System (ISO 45001), actively promoting Process Safety Management (PSM), and continuously improving management systems and response measures to achieve the goal of zero accidents. In addition, we are committed to optimizing manufacturing processes, improving protective facilities, promoting pollution prevention and preventing occupational hazards, and establishing a safe, healthy and comfortable workplace through a continuous review and improvement implementation strategy.

Occupational Health and Safety Committee





In 2023, the Occupational Health and Safety Committee comprised a total of 21 members, including 7 labor representatives, accounting for 33%. The committee is responsible for drafting, coordinating, and supervising environmental, safety, health, and hygiene-related matters at each plant. The committee holds quarterly meetings to ensure employee consultation and participation.

Topics discussed in the Occupational Health and Safety Committee meetings

- Occupational health and safety policy recommendations
- Coordination and recommendations for occupational health and safety management plans
- OH&S education and training action plans
- Monitoring of the working environment, results, and measures taken
- Health management, prevention of occupational diseases and health promotion
- Various health and safety proposals
- Automated inspections and safety and hygiene audits
- Preventive measures for hazards related to machinery, equipment, or raw materials
- Occupational accident investigation report
- Reviewing health and safety management performance
- Safety and health management for contracted work
- Other occupational health and safety management matters

Management of Special Health Hazardous Work Environments

TPCC is committed to identifying particularly hazardous working environments and has commissioned professional monitoring agencies to conduct tests in accordance with regulatory requirements. These tests ensure valid data for the execution, management, and effectiveness evaluation of short- and mid-term improvement plans. Furthermore, we have collaborated with teams of professors and experts from various universities, achieving the following results:

- 1 Implementation of a division of labor mechanism and outcome review for workplace environment monitoring. This includes the completion of audits for workplace environment monitoring plans, proposals, onsite sampling, monitoring, and reports, as well as evaluations of contractors conducting workplace environment monitoring, achieving a 100% implementation rate for the monitoring process.
- 2 Establishment of labor exposure parameters and results aggregation modules. These encompass the labor exposure survey report, physico-chemical sampling, sample analysis records, and statistical data analysis forms, with the completion of an operational manual for the module.
- 3 Verification of the effectiveness of improvements in high-risk areas of workplace environment monitoring (areas exceeding 1/10 of the permissible concentration standard) includes evaluating high-risk areas that require priority improvements, executing improvement plans, and completing onsite visits and inspections to assess the effectiveness of these improvements for 1 specific case.

Items and Frequency of Measurements in 2023

Item	Carbon Dioxide	Organic Solvents	Specific Chemical Substances	Noise	High Temperature Operations
Number of Measurements	2	2	2	2	1

High-Risk Operation Permission Management

High-risk operations are required to apply for a permit prior to operation, explaining the risks and protective measures for the operation, and the responsible unit shall confirm that the relevant protective measures have been completed before the operation is allowed. Since 2022, TPCC has made high-risk applications electronic and increased the number of inspections and audits during operations to ensure that all operations are carried out in accordance with the rules and regulations, and that protective measures are implemented to reduce the risk of hazards.



Machinery, Equipment and Instrumentation Management

TPCC implements qualified certificate management for hazardous machinery and equipment (such as boilers, Class 1 pressure vessels, and specific high-pressure gas equipment) and type certification (such as forklifts and explosion-proof electrical equipment). They have established the "Construction Machinery Inspection Measures" and "Safety and Health Automatic Inspection Operation Measures," carrying out automatic inspections, key inspections, and operational checks. This effectively controls the maintenance schedule and regular maintenance of machinery, conducts a comprehensive inventory of faulty instruments for replacement, improves instrument reliability, and ensures the normal performance and safety protection of machinery.

5S Maintenance of the Operating Environment

The group has always implemented the 5S maintenance of the workplace to the highest standards, continuously carrying out environmental beautification work with the belief that a good working environment boosts employee morale. In 2023, we completed painting the pipelines and equipment foundations in the process area and filling stations. Additionally, we improved the filling station's efficiency by using idle iron drum transport rollers to enhance the iron drum filling area.



Beautification of steel structures and equipment foundations within the plant



Clear labeling of pipeline contents and flow directions



Painting of steel structures at the filling station



Improving the iron drum filling area to enhance filling efficiency

Statistics on the Safety and Health Training Hours for Contractors

Each worker entering the factory for operations must undergo labor safety and health education courses. They are allowed to enter the factory for work only after completing the training. If they need to enter the factory again after the training's validity period, they must retrain. This practice effectively promotes safety awareness among supplier personnel and reduces the risk of accidents.

Item	2022			2023		
	Male	Female	Total	Male	Female	Total
Total Training Hours	757	84	841	1,091	87	1,178
End-of-Year Participants	757	84	841	1,091	87	1,178
Average Hours	1	1	1	1	1	1

Explanation of Work Injury Statistics

In 2023, TPCC experienced zero work injury accidents. However, there was a higher frequency of traffic accidents outside the factory, with a total of two traffic accidents occurring in 2023. The disabling injury frequency rate (FR) in 2023 was 4.74.

Note: Disabling Injury Frequency Rate(FR) = No. of disabling injuries / Total number of hours worked X1,000,000.

📌 Accident Prevention Measures

Traffic accidents

Create specialized instructional materials and continuously promote the following through departmental meetings and electronic media to reduce traffic accidents:

- Traffic accident cases
- Defensive driving concepts
- Commuting safety awareness

In-plant occupational injuries

Implement the following measures to prevent similar accidents from reoccurring:

- Enhance training on standard operating procedures.
- Ensure personnel consistently wear safety protective gear.
- Reevaluate the Job Safety Analysis (JSA).
- Develop optimal risk reduction measures.



2022-2023 Indicators for Work-related Injuries

Year	2022			2023		
Gender	Male	Female	Total	Male	Female	Total
No. of fatalities as a result of work-related injury	0	0	0	0	0	0
No. of high-consequence work-related injuries	0	0	0	0	0	0
No. of recordable work-related injuries	0	0	0	2	0	2
Rate of fatalities as a result of work-related injury	0.00	0.00	0.00	0.00	0.00	0.00
Rate of high-consequence work-related injuries	0.00	0.00	0.00	0.00	0.00	0.00
Rate of recordable work-related injuries	0	0	0	1.02	0	0.95
Total number of hours worked	390,396	34,530	424,926	391,521	30,642	422,163

Note 1: There were no occupational disease incidents from 2022 to 2023.

Note 2: Rate of fatalities as a result of work-related injury = No. of fatalities as a result of work-related injury / Total number of hours worked X 200,000*.

Note 3: Rate of high-consequence work-related injuries (excluding fatalities) = No. of high-consequence work-related injuries (excluding fatalities) / Total number of hours worked X 200,000*.

Note 4: High-consequence work-related injuries are defined as an injury that results in worker's inability to recover to the pre-injury state of health within six months due to occupational injury.

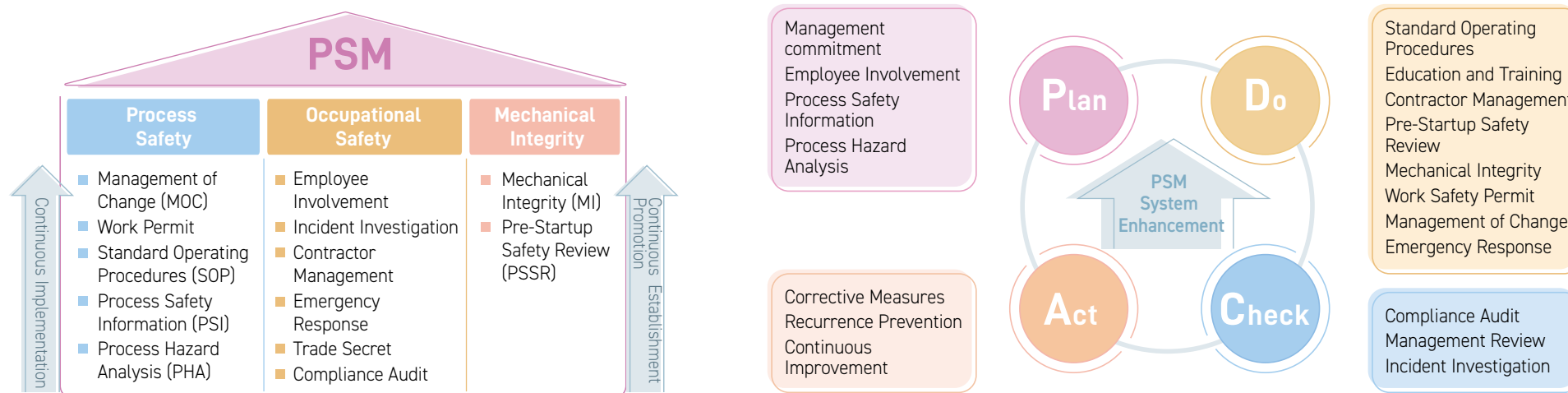
Note 5: Rate of recordable work-related injuries = No. of recordable work-related injuries / Total number of hours worked X 200,000*.

Note 6: Recordable work-related injuries are defined as the Occupational Accident Statistics reported monthly to the Occupational Safety and Health Administration, Ministry of Labor.

*: Refers to the rate per 100 employees for 50 weeks per year with 40 working hours per week.

Process Safety Management

Through the three main aspects of Occupational Safety, Process Safety, and Mechanical Integrity, 14 management units have been structured to integrate the group's Process Safety Management (PSM) platform. This platform incorporates overall PSM performance indicators, audits, management meetings, and related technologies into the management system. With the commitment of the senior management and the participation of all employees, we combine the elements of PSM to build a more comprehensive safety protection network, and make continuous improvements through the PDCA process.

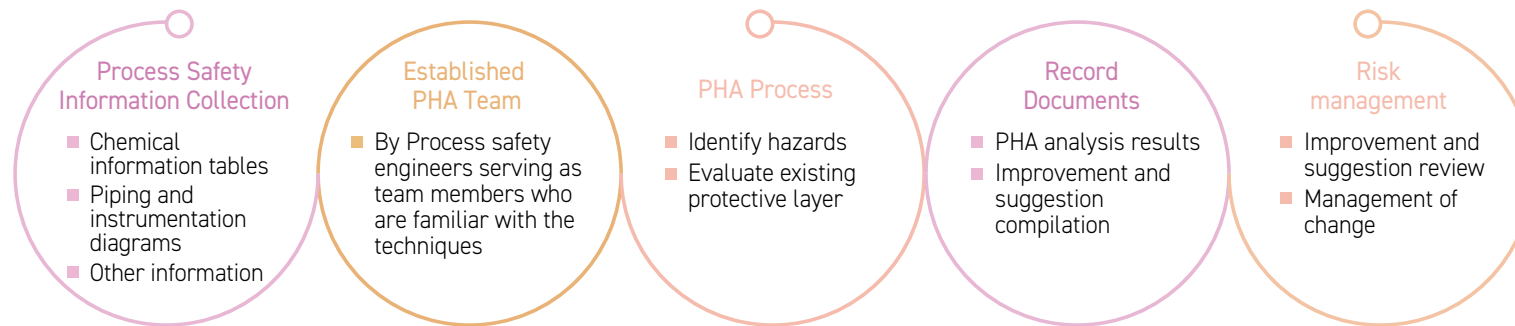




Process Hazard Analysis (PHA)

Process Hazard Analysis (PHA) is fundamental for enhancing process safety as it helps TPCC identify hazards early and make improvements in personnel training, operations, process improvements, equipment maintenance, and emergency scenarios. In 2023, a total of 5 process safety engineers were dedicated to promoting and implementing process safety management. PHA team members consist of professionals from process engineering, mechanical, instrumentation, and safety and health disciplines. Through collaborative brainstorming, they identify potential hazards in the process and manage them through a comprehensive risk management system.

Process Risk Management Procedure



Introduction of an Alarm Management System

According to the US CSB accident investigation report, one of the main causes of accidents is the control personnel overlooking alarms. Excessive non-critical alarms in the process can cause control personnel to miss crucial alarms, preventing timely decision-making based on standard operating procedures and past experiences. To reduce the impact of non-critical alarms on process safety, alarm management is conducted according to ISA-18.2. Departments integrate and categorize process alarms, and use an intelligent system to generate daily reports. Personnel can review these reports to reduce the number of non-critical alarms, with daily alarms per person decreasing from 2.04 every ten minutes to 1.30 every ten minutes. Additionally, an independent critical alarm panel has been established to prevent control personnel from ignoring key alarms, thereby enhancing process safety and emergency response capabilities.

Process Safety Performance Metrics

Monitoring and measuring process safety performance metrics can track the effectiveness of process safety management. In 2023, there were zero process safety incidents. For each process safety event and near miss, an incident investigation team is formed to conduct a thorough investigation, identify the root cause, and prevent recurrence.





2023 Process Safety Metrics

Tier 1 No. of Process Safety Events (PSE1)	0
Tier 2 No. of Process Safety Events (PSE2)	0
Tier 1 Process Safety Event Rate (PSER)(PSE1R)	0
Tier 2 Process Safety Event Rate (PSER) (PSE2R)	0.00
Tier 1 Process Safety Event Severity Rate (PSE1SR)	0.00
No. of Process Safety Near Miss	16

Note 1: The abbreviation here is CCPS (Center for Chemical Process Safety), which differs from SASB but has the same definition (PSE, PSE1R, PSE1SR are called PSIC, PSTIR, PSISR in SASB).

Note 2: Process safety event rate (PSE1R) = Annual number of Tier 1 process safety events X 200,000* / Total number of hours worked by workers (all employees and contractors).

Note 3: Process safety event rate (PSE2R) = Annual number of Tier 2 process safety events X 200,000* / Total number of hours worked by workers (all employees and contractors).

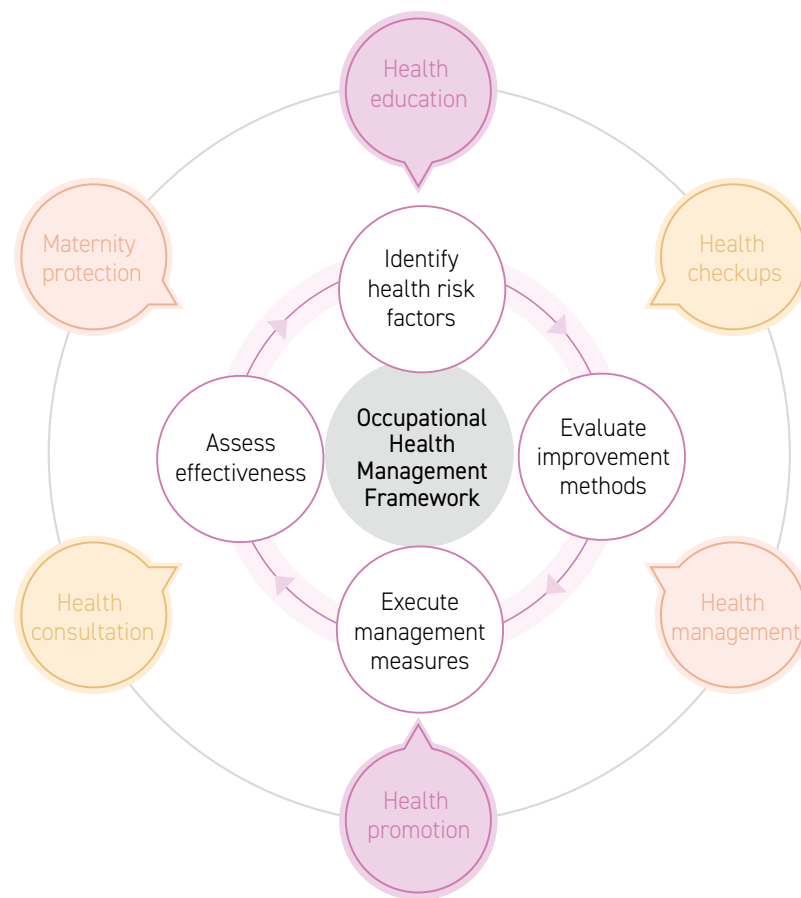
Note 4: Process safety event severity rate (PSE1SR) = Annual total score of Tier 1 process safety event severity X 200,000* / Total number of hours worked by workers (all employees and contractors) (the total score of annual process safety event severity is a classification of the number of process safety events through the process safety incident severity level).

*: Refers to the rate per 100 employees for 50 weeks per year with 40 working hours per week.



7. Staff Health Management

To implement a healthy workplace, a systematic occupational health management framework is established. This framework provides comprehensive management and execution standards, covering the identification of health risk factors, evaluation of improvement methods, execution of management measures, and assessment of effectiveness. It ensures a healthy working environment for employees and includes health-related operating procedures to implement employee health measures to achieve these goals.





Health Education

To implement the occupational health management framework, efforts are made to promote health education and training. Topics include health education promotion, prevention of ergonomic hazards, prevention of diseases triggered by abnormal workloads, prevention of occupational assaults, maternal health protection, CPR, and AED. Health education training is conducted through electronic health education information dissemination, irregular health lectures, and in-person courses.

Health Lectures



Smoking cessation health lecture



Emotional stress health lecture



Road Safety Lecture



First aid and triage education and training lecture

CPR+AED Training



Obtaining AED safety certified location badge



TPCC Linyuan Plant



Health Checkup

We prioritize the physical health of all employees, providing comprehensive health checkups annually and regularly monitoring their physical and mental health. In 2023, the health checkup rate reached 100%. Additionally, as required by law, special health hazard examinations are conducted annually for employees exposed to health hazards in the workplace. For employees with abnormal checkup results, recommendations from physicians are followed, such as improving the inherent risk sources and reassigning job positions. In 2023, TPCC's coverage rate for special health hazard examinations was 100%, with no significant abnormal findings.

Operations Requiring Special Health Checkups	Number of Participants
Ionizing radiation operations	1
Noise operations	55
n-Hexane operations	11
Chromic acid operations	11
Benzene operations	32
Total	110

Health Management

We have planned short-, medium-, and long-term health management plans for employees and contractors. The medium-term plan involves a comprehensive investigation and assessment of chemical hazard factors in employees' workplaces, with exposure levels regulated to be below 10% of the control value. The long-term plan aims to establish trend analyses for the top five high-prevalence diseases, allocating corresponding health management resources to address high-risk diseases and create a healthy workplace environment.



Employee Health Management System

The company's internal database (ERP) includes an employee health management system that tracks employees' historical health data, allowing them to monitor changes in their health status and stay informed about their well-being. Health check-up data is categorized and grouped for preliminary analysis against clinical standards to evaluate the effectiveness of health management.

Health Promotion

Numerous health promotion activities are organized, and in 2022, the company received the "Healthy Workplace Certification and Health Promotion Label" from the Health Promotion Administration. This certification, valid until December 31, 2024, acknowledges the company's planned efforts and notable achievements in workplace health promotion. The company plans to apply for an extension in 2024. The certification enhances the company's image as a friendly workplace and increases health protection for employees. It also allows industry peers, suppliers, and external assessment bodies to see the company's commitment to employee care, thereby strengthening the group's competitiveness.



Health Promotion Certification Badge



Government funded vaccination campaigns

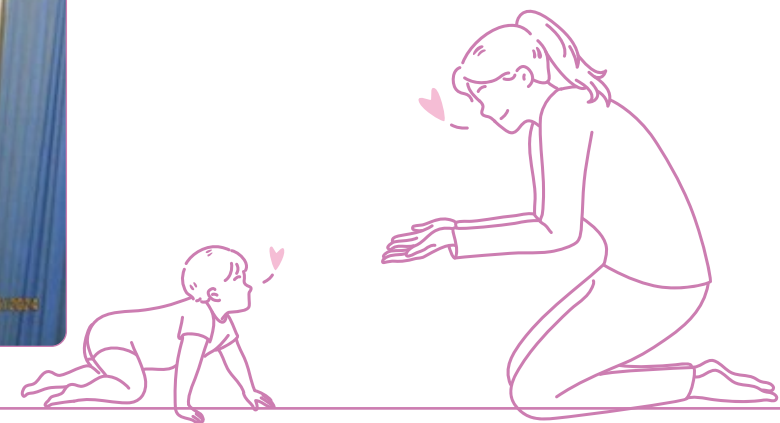
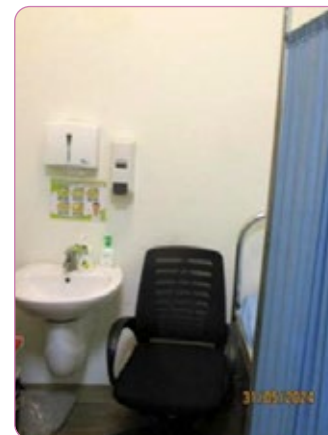
Health Consultation

Every month, an occupational medicine specialist conducts on-site services to manage employee health based on annual health check-up reports. Along with factory nurses, they provide health consultations to help employees understand their health status and suggested improvements. They offer medical assistance and regular check-up reminders. Based on risk levels, they provide health guidance, work risk assessments, and job adjustments to ensure comprehensive care and follow-up services.

Maternity Protection

The company has established a quality maternal health environment for female employees by setting up lactation rooms, offering a comfortable and private space for pregnant and breastfeeding employees, contractors, or visitors.

The company has implemented the group's "Female Workers' Maternal Health Protection Operational Procedures," which includes hazard assessments, control measures, and graded management for jobs posing potential maternal health risks. Particularly, tasks that might adversely affect embryo development or maternal/infant health during pregnancy/breastfeeding are managed with job adjustments or relocations based on assessments by on-site occupational physicians, ensuring ongoing care and health education.



ch6

Social Responsibilities

1. Social Care
2. Social Participation
3. Participation in External Associations

1. Social Care

Community Engagement and Maintenance

TPCC continues to proactively participate in local community activities based on community needs, bridging the gap with residents. We maintain diverse and smooth communication channels with neighborhood chiefs, community units, and residents, providing students and local residents with a good environment.

Local Community Communication and Management

Ensuring Neighborhood Safety

In the course of factory operations, the following measures are taken to ensure neighborhood safety:


Reducing
pollution
emissions

Minimize environmental impact as much as possible through the use of more environmentally friendly processes and technologies. Environmental protection procedures are established to ensure neighborhood safety, providing local residents with high-quality environmental standards.


Regular
inspection of
production
equipment

Conduct regular equipment inspections to ensure proper operation and timely repair of any damages or malfunctions, following relevant procedural documents to guarantee neighborhood safety. In 2023, TPCC reported no major equipment anomalies, effectively providing local residents with a safe living environment.



Ensuring Neighborhood Safety



Ensure production safety by offering necessary safety training to employees, ensuring adherence to best safety practices during operations, and preventing potential accidents. The "Chang Chun e-Learning" established by Chang Chun Group offers training courses in chemical processes, environmental protection, safety and health, instrumentation control, mechanical maintenance, and technical design for operators. Training progress is managed through individual learning maps, with regular notifications for retraining, assessments, and evaluations incorporated into HR evaluations.



Maintain ongoing communication with the government to understand local regulations and legal requirements, ensuring factory operations comply with local environmental and safety standards.



Keep communication channels open with local residents, actively responding to their questions and feedback to strengthen community trust in the factory, and understanding the needs and concerns of local residents. When handling abnormal information from community complaints, the discoverer or recipient of the information notifies the plant or relevant department via email or phone for immediate and appropriate action. Complaints from the public are handled, responded to, and recorded by the plant manager's office, management representative, and plant operations department.

Implementing Environmental Protection

Taiwan Prosperity Chemical is engaged in the manufacturing of chemical products, and its processes generate waste gas, wastewater, waste liquids and waste materials that need to be treated by environmental facilities. Evaluations indicate that potential impacts on the local community primarily occur in environmental aspects, including air pollution control and water pollution prevention. To implement environmental protection, regular environmental quality monitoring is conducted, and environmental monitoring stations are independently established. In the event of any anomalies, relevant units are immediately notified to take emergency response measures, effectively reducing the environmental impact during operational activities.

Regular environmental monitoring projects inside and outside the plant:



During factory operations, air and operational environment pollution are controlled in accordance with the Air Pollution Control Act, its enforcement rules, the Management Regulations for Installation, Operation, and Fuel Use Permits of Stationary Pollution Sources, and the Emission Standards for Stationary Pollution Sources, to comply with environmental regulations and reduce environmental and health impacts. During operation and maintenance, pollution sources and control equipment are regularly maintained, inspected, and operation records are kept in compliance with the law. For new processes or equipment, applications for new installation, modification, or changes to permits for stationary pollution sources are handled according to the aforementioned regulations.



The main sources of noise generated during plant operations are the air compressors and emergency generators. Noise reduction and soundproofing facilities have been installed around these equipment, effectively reducing noise and vibration. There were no significant noise and vibration anomalies in 2023, and the factory's surroundings were not affected.



TPCC has its own wastewater treatment plant and regularly performs maintenance and upkeep. During operation, water quality is regularly monitored to ensure it does not pollute surface water. The wastewater treatment plant is also equipped with an automatic continuous monitoring system to continuously monitor the quality of discharge water, ensuring that the water discharged to the joint sewage treatment plant meets the park's discharge standards. Additionally, TPCC regularly monitors the raw wastewater generated by each process. If abnormalities are detected at the wastewater source, immediate measures are taken to prevent impacts on the operation of the wastewater treatment plant.



Maintaining Neighborhood Relations



TPCC has long supported and sponsored local community activities, establishing good communication and interaction channels with the communities surrounding the plant.

Linyuan Petrochemical Industrial Area Neighborly Fund

TPCC has established the Linyuan Petrochemical Industrial Area Neighborly Fund, where the Company sponsors local activities through Linyuan District Office, with an aim to improve Linyuan Industrial Park's care for the health of the residents in the surrounding area, reward outstanding and disadvantaged students, and support community culture issues.

The size of the fund was NT\$40 million/year in expenditures, and we are increasing the size of the fund beginning in 2023 by NT\$1 million per year until the fund size is NT\$50 million/year.

5,000 million/year.

Fund size



2. Social Participation

TPCC has always been committed to social welfare and making positive contributions of resources and efforts to the community. Employees of the Company also participate in this endeavor, spreading their love and care to more people in need. In 2023, TPCC carried out various charitable activities, including sponsoring Linyuan Elementary School's participation in the RoboRAVE contest, participating in a fire prevention and disaster outlook event, and collecting second-hand paper and recyclable items, bringing warmth and care to the community and internationally.

1. Sponsoring Linyuan Elementary School's Participation in the RoboRAVE Contest

Linyuan Elementary School students focused on the topic "Pyrolysis of Waste Plastic to Oil" and represented Taiwan at the RoboRAVE contest in Houston, USA. TPCC sponsored the funds to help students participate in the competition, expanding their experience and vision.



2. Fire Prevention and Disaster Outlook Event

As a co-organizer for the Linyuan Fire Brigade, TPCC enthusiastically participated in local fire public affairs, strengthening good relations with surrounding community residents and elders, and promoting active community events.



3. Collecting Second-hand Paper and Recyclable Items

TPCC proactively collected and encouraged employees to participate in reducing waste production through actual actions, simultaneously promoting environmental awareness and increasing the recycling rate of second-hand items to be environmentally friendly.

4. Plastic Reduction Activities

TPCC actively supported the plastic reduction environmental activities in Wufu Village, where the factory is located, in the year 2023. The Wufu Village Volunteer Team regularly promoted the concept of plastic reduction to residents and shared relevant practical cases. Before the Mid-Autumn Festival, plant colleagues personally visited the Wufu Village office to support and sponsor the volunteer team.



5. Blood Donation Event

TPCC employees donated blood as an act of social responsibility. This year's activity collected a total of 36 bags of blood (9,000 c.c.), gathering everyone's enthusiasm to help those in need.



2023 Blood Donation Event

3. Participation in External Associations

In 2023, TPCC participated in a total of three industry associations and one other association. Additionally, it held significant positions in two organizations, actively engaging with external entities to greatly benefit the company's sustainable development.

Industry Associations	Description
Taiwan Responsible Care Association	President Chen Hou-Fu served as a member of council
Petrochemical Industry Association of Taiwan	Chairman Davy Cheng served as a member of council
Nature of Membership	
Taiwan Chemical Industry Association	
Importers & Exporters Association of Taipei	



Appendices

GRI Standards Comparison Table

SASB Standards Disclosure
Comparison Table

Third Party Assurance Statement

GRI Standards Comparison Table

General Disclosures

GRI Standard	Disclosure Items	Chapter	Page
Organizational Reporting and Practice			
GRI 2: General Disclosures 2021	2-1 Organizational details	Report Profile Chapter 1-1. Organization Overview	1 5
	2-2 Entities included in the organization's sustainability reporting	Report Profile	1
	2-3 Reporting period, frequency and contact point	Report Profile	1
	2-4 Restatements of information	Report Profile	1
	2-5 External assurance	Appendix: Third Party Assurance Statement	66
Events and Workers			
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	Chapter 1-2. Products and Value Chain	6
	2-7 Employees	Chapter 5-2. Employee Diversity All TPCC personnel adhere to the standard working hours stipulated by regulations and are not subject to the equivalent full-time calculation method.	38
	2-8 Workers who are not employees	Chapter 5-2. Employee Diversity All TPCC personnel adhere to the standard working hours stipulated by regulations and are not subject to the equivalent full-time calculation method.	38
Governance			
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	Chapter 3-1. Governance Structure	16
	2-10 Nomination and selection of the highest governance body	Chapter 3-1. Governance Structure	16



GRI Standard	Disclosure Items	Chapter	Page
Governance			
GRI 2: General Disclosures 2021	2-11 Chair of the highest governance body	Chapter 3-1. Governance Structure	16
	2-12 Role of the highest governance body in overseeing the management of impacts	Chapter 2-3. Material Topic Identification and Impact Management	12
	2-13 Delegation of responsibility for managing impacts	Chapter 2-3. Material Topic Identification and Impact Management	12
	2-14 Role of the highest governance body in sustainability reporting	Chapter 2-1. ESG Governance and Management Organization	9
	2-15 Conflicts of interest	Chapter 3-2. Ethical Management	18
	2-16 Communication of critical concerns	Chapter 2-2. Stakeholder Engagement	10
	2-17 Collective knowledge of the highest governance body	Chapter 3-1. Governance Structure	16
	2-18 Evaluation of the performance of the highest governance body	No disclosure due to company policy	-
	2-19 Remuneration policies	No disclosure due to company policy	-
	2-20 Process to determine remuneration	No disclosure due to company policy	-
	2-21 Annual total compensation ratio	Chapter 5-3. Employee Benefits	40
Strategies, Policies and Practices			
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategies	Chairman's Statement	3
	2-23 Policy commitments	Chapter 3-2. Ethical Management	18
		Chapter 4-1. Sustainable Environmental Management	25
		Chapter 5-1. Human Rights Policy	35
	2-24 Embedding policy commitments	Chapter 3-2. Ethical Management	18
		Chapter 4-1. Sustainable Environmental Management	25
		Chapter 5-1. Human Rights Policy	35
	2-25 Processes to remediate negative impacts	Chapter 2-3. Material Topic Identification and Impact Management	12
GRI 2: General Disclosures 2021	2-26 Mechanisms for seeking advice and raising concerns	Chapter 2-2. Stakeholder Engagement	10
	2-27 Legal Compliance	Chapter 3-3. Legal Compliance	19
	2-28 Membership associations	Chapter 6-3. Participation in External Associations	59
Stakeholder Engagement			
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	Chapter 2-2. Stakeholder Engagement	10
	2-30 Collective bargaining agreements	Chapter 5-2. Employee Diversity	38



Materials Topic

GRI Standard	Disclosure Items	Chapter	Page
Material Topic Disclosure			
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Chapter 2-3. Material Topic Identification and Impact Management	12
	3-2 List of material topics		
	3-3 Management of material topics		

Topic Guidelines

*Material topic

GRI 200: Economic topics

Topic	GRI Topic	Disclosure Items		Chapter	Page
Economic Performance	GRI 201: Economic Performance 2016	201-3	Defined benefit plan obligations and other retirement plans	Chapter 5-3. Employee Benefits	40
Market Presence	GRI 202: Market Presence 2016	202-2	Proportion of senior management hired from the local community	Chapter 5-2. Employee Diversity	38
Legal Compliance*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 3-3. Legal Compliance	19
	GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	Chapter 3-2. Ethical Management	18
		205-3	Confirmed incidents of corruption and actions taken	Chapter 3-2. Ethical Management	18

GRI 300: Environmental Disclosures

Topic	GRI Standard	Disclosure Items		Chapter	Page
Energy Management and Greenhouse Gases*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 4-4. Energy management and GHG emission	29
	GRI 302: Energy 2016	302-1	Energy consumption within the organization		
		302-3	Energy Intensity		
		302-4	Reduction of energy consumption		
		302-5	Reductions in energy requirements of products and services		



Topic	GRI Standard	Disclosure Items		Chapter	Page
Energy Management and Greenhouse Gases*	GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Chapter 4-4. Energy management and GHG emission	29
		305-2	Indirect (Scope 2) GHG emissions		
		305-3	Other indirect (Scope 3) GHG emissions		
		305-4	GHG emissions intensity		
		305-5	Reduction of GHG emissions		
Pollution Prevention and Control*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 4-3. Pollution Prevention	27
	GRI 303: Water and Effluents 2018	303-2	Management of water discharge-related impacts	Chapter 4-2. Water Management	26
		303-3	Water withdrawal		
		303-4	Water discharge		
		303-5	Water Consumption		
	GRI 305: Emissions 2016	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant gas emissions	Chapter 4-3. Pollution Prevention	27
Waste Management*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 4-5. Waste Management	32
	GRI 306: Waste 2020	306-2	Management of waste-related significant impacts		
		306-3	Waste generation		
		306-4	Waste disposal and transfer		
		306-5	Direct disposal of waste		

GRI 400: Social topics

Topic	GRI Standard	Disclosure Items		Chapter	Page
Employment	GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Chapter 5-2. Employee Diversity	38
		401-2	Benefits provided to full-time employees (excluding temporary or part-time workers)	Chapter 5-3. Employee Benefits	40
		401-3	Parental leave		



Topic	GRI Standard	Disclosure Items		Chapter	Page
Occupational Health and Safety	GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Chapter 5-6. Occupational Health and Safety	48
		403-2	Hazard identification, risk assessment and incident investigation	Chapter 5-6. Occupational Health and Safety	48
		403-3	Occupational health services	Chapter 5-7. Personnel Health Management	53
		403-4	Worker participation, consultation and communication on occupational health and safety	Chapter 5-6. Occupational Health and Safety	48
		403-5	Worker training on occupational health and safety	Chapter 5-5. Critical Incident Management and Response Chapter 5-6. Occupational Health and Safety	46 48
		403-6	Promotion of worker health	Chapter 5-7. Personnel Health Management	53
		403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Chapter 5-6. Occupational Health and Safety	48
		403-8	Workers covered by the occupational health and safety management system	Chapter 5-6. Occupational Health and Safety	48
		403-9	work-related injuries		
		403-10	Occupational diseases		
Training and Education	GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	Chapter 5-4. Talent Development	43
		404-2	Enhancing employee competencies and transition assistance programs		
		404-3	Percentage of employees receiving regular performance and career development reviews		
Diversity and Equal Opportunity	GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Chapter 5-2. Employee Diversity	38
Non-discrimination	GRI 406: Non-discrimination 2016	406-1	Discrimination incidents and improvement actions taken by the organization	Chapter 5-1. Human Rights Policy	35
Child Labor	GRI 408: Child Labor 2016	408-1	Significant risks of child labor at operational sites and suppliers		
Forced or Compulsory Labor	GRI 409: Forced or Compulsory Labor 2016	409-1	Operational sites and suppliers with significant risks of forced and compulsory labor incidents		
Supplier Social Assessment	GRI 414: Supplier Social Assessment 2016	414-2	Negative social impacts in the supply chain, and actions taken	Chapter 3-5. Supplier Management	23
Chemical Safety	GRI 416: Customer Health and Safety 2016	416-1	Assess the health and safety impacts of product and service categories	Chapter 3-4. Customer Relationship Management	20
	GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling		
Customer Privacy	GRI 418: Customer Privacy 2016	418-1	Substantiated complaints of violation of customer privacy or loss of customer data	Chapter 3-4. Customer Relationship Management	20

TPCC-Specific Topics

Topic	GRI Topic		Disclosure Items	Chapter	Page
Human Rights Policies*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 5-1. Human Rights Policy	35
Critical Incident Management and Response*	GRI 3: Material Topics 2021	3-3	Management of material topics	Chapter 5-5. Critical Incident Management and Response	46



SASB Standards Disclosure Comparison Table

Disclosure Topic	Code	Indicator	Corresponding Section	Page
GHG Emissions	RT-CH-110a.1	Scope 1 greenhouse gas emissions (tons CO ₂ e); percentage of scope 1 greenhouse gas emissions subject to carbon trading regulations (%)	Chapter 4-4. Energy management and GHG emission	29
	RT-CH-110a.2	Management strategies or plans for Scope 1 Greenhouse Gas Emissions, including long-term and short-term reduction targets, and performance.	Chapter 4-4. Energy management and GHG emission	29
Air quality	RT-CH-120a.1	Emissions of the following air pollutants: (1) Nitrogen Oxides (NO _x) (2) Sulfur Oxides (SO _x) (3) Volatile Organic Compounds (VOCs) (4) Hazardous Air Pollutants (HAPs)	Chapter 4-3. Pollution Prevention	27
Energy Management	RT-CH-130a.1	(1) Total energy consumed (GJ) (2) Proportion of grid electricity usage (%) (3) Proportion of renewable energy usage (%) (4) Self-produced energy (GJ)	Chapter 4-4. Energy management and GHG emission	29
Water Management	RT-CH-140a.1	(1) Water intake (2) Water consumption (3) Operational sites located in areas of "high" or "very high" water scarcity and percentage of (1) and (2)	Chapter 4-2. Water Management	26
	RT-CH-140a.2	Number of cases of non-compliance with water quality related discharge permits, standards and regulations	Chapter 3-3. Legal Compliance	19
	RT-CH-140a.3	Describe water management risks and strategies, and risk mitigation practices	Chapter 4-2. Water Management	26
Hazardous Waste Management	RT-CH-150a.1	Total amount and recycled percentage of hazardous business waste generated by the company	Chapter 4-5. Waste Management	32
Community Relations	RT-CH-210a.1	Discuss the process of engaging in the management of risks and opportunities related to community interests	Chapter 6-1. Social Care	56
Labor Health and Safety	RT-CH-320a.1	For direct and contract employees': (1) Total recordable incidence rate (TRIR) (2) Fatality rate	Chapter 5-6. Occupational Health and Safety	48
	RT-CH-320a.2	Description of the assessment and monitoring of health risks for direct and contract employees (to reduce exposure to long-term/chronic health risks)	Chapter 5-6. Occupational Health and Safety	48
Product Design for Improved Efficiency at the Utilization Stage	RT-CH-410a.1	Revenue from products that enhance resource efficiency at the utilization stage	No revenue from sustainable products, with 0% share.	-
Chemical Safety and Environmental Management	RT-CH-410b.1	Percentage of revenue from products containing chemicals classified as health and environmental hazards by GHS Hazard Classification 1 and 2 (%), and percentage of products for which hazard analyses were conducted (%).	There are currently no related statistics. For more information on Chang Chun's management of GHS chemical substances in products, please refer to Chapter 3-4. Customer Relationship Management.	-
	RT-CH-410b.2	Development strategies for chemicals of high concern and alternative products that can reduce human and environmental impacts.	Chapter 4-6. Hazardous Substance Management	34
Genetically Modified Products	RT-CH-410c.1	Genetically modified products as a percentage of overall revenue.	No use of genetically modified materials	-
Regulations and Policy Management	RT-CH-530a.1	The company's position on government regulation and policy planning for environmental and social issues.	Chapter 2-2. Stakeholder Engagement	10
Occupational Safety and Emergency Response	RT-CH-540a.1	PSIC, PSTIR, PSISR	Chapter 5-6. Occupational Health and Safety	48
	RT-CH-540a.2	Number of transportation incidents	No transportation incidents occurred in 2023.	-



Third Party Assurance Statement



安侯建業聯合會計師事務所
KPMG

台北市110615信義路5段7號68樓(台北101大樓)
68F., TAIPER 101 TOWER, No. 7, Sec. 5,
Xinyi Road, Taipei City 110615, Taiwan (R.O.C.)
電話 Tel +886 2 8101 8660
傳真 Fax +886 2 8101 8663
網址 Web kpmg.com/tw

Independent Limited Assurance Report

To Taiwan Prosperity Chemical Corporation:

We were engaged by Taiwan Prosperity Chemical Corporation ("TPCC") to provide limited assurance over the selected information attached as Appendix I ("the Subject Matter Information") on the 2023 Sustainability Report of TPCC ("the Report") for the year ended December 31, 2023.

Applicable Criteria of the Subject Matter Information

TPCC shall prepare the Subject Matter Information in accordance with applicable criteria required by Article 4 of Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies ("the Rules") as set forth in Appendix I.

Management's Responsibilities

TPCC is responsible for determining its objectives with respect to sustainable development performance and reporting, including the identification of stakeholders and material aspects, and using the applicable criteria to fairly prepare and present the Subject Matter Information. TPCC is also responsible for establishing and maintaining internal controls relevant to the preparation and presentation of the Subject Matter Information that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We performed our work in accordance with the Standard on Assurance Engagements TWSAE3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the Accounting Research and Development Foundation in Taiwan and to issue a limited assurance conclusion on whether the Subject Matter Information is free from material misstatement. Also, we have considered appropriate limited assurance procedures according to the understanding of relevant internal controls in the circumstances, but not for the purposes of expressing a conclusion as to the effectiveness of the internal control over the design or implementation of the Report.

Independence and Standards on Quality Management

We have complied with the independence and other ethical requirements of the Code of Professional Ethics for Certified Public Accountant in the Republic of China, which is founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior. In addition, we applied Standards on Quality Management. Accordingly, we maintained a comprehensive system of quality management, including documented policies and procedures regarding compliance with ethical requirements and professional standards as well as applicable legal and regulatory requirements.

~ 1 ~

KPMG, a Taiwan partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.



Summary of Work Performed

As stated in applicable criteria of the Subject Matter Information paragraph, our main work on the selected information included:

- Reading the Report of TPCC;
- Inquiries with responsible management level and non-management level personnel to understand the operational processes and information systems used to collect and process the Subject Matter Information.
- On the basis of the understanding obtained mentioned above, perform analytical procedures on the Subject Matter Information and if necessary, inspect related documents to gather sufficient and appropriate evidence in a limited assurance engagement.

The work described above is based on professional judgment and consideration of the level of assurance and our assessment of the risk of material misstatement of the Subject Matter Information, whether due to fraud or error. We believe that the work performed and evidence we have obtained are sufficient and appropriate to provide a basis of our conclusion. However, the work performed in a limited assurance engagement varies in nature and timing from, and is less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Inherent limitations

The Report for the year ended December 31, 2023 includes the disclosures of non-financial information that involved significant judgments, assumptions and interpretations by the management of TPCC. Therefore, the different stakeholders may have different interpretations of such information.

Conclusion

Based on the work we have performed and the evidence we have obtained, as described above, nothing has come to our attention that causes us to believe that the Subject Matter Information has not been properly prepared, in all material aspects, in accordance with the applicable criteria.

Other Matters

We Shall not be responsible for conducting any further assurance work for any change of the subject matter information or the criteria applied after the issuance date of this report.

The engagement partner on the assurance resulting in this independent auditors' report is Yu-Ting Huang.

KPMG

Taipei, Taiwan (Republic of China)
Aug 26, 2024

Notes to readers

The limited assurance report and the accompanying selected information are the English translation of the Chinese version prepared and used in the Republic of China. If there is any conflict between, or any difference in the interpretation of, the English and Chinese language limited assurance report and the selected information, the Chinese version shall prevail.

~1-1~



Appendix 1 : Summary of the Subject Matter Information

No.	Corresponding Section	Subject Matter Information	Applicable Criteria
1	Chapter 4 Environmental Co-Prosperity - 4. Energy management and GHG Emission	■ 2023 Energy Consumption Statistics ➢ Unit: Gigajoules (GJ) - Fossil Fuels • Diesel: 885 • Natural Gas: 1,107,955 • Heavy Oil/ Fuel Oil: 0 • Coal: 0 • Purchased Electricity: 303,186 • Purchased Steam: 6,165 - Renewable Energy • Renewable Energy Usage (including wind, solar, biomass, etc.): 0 - Total Energy Consumption: 1,418,191 - Percentage of Renewable Energy: 0% - Percentage of Grid Electricity Consumption: 21% ➢ Note 1: Total energy consumption= Diesel + Natural Gas + Heavy Oil/ Fuel Oil + Coal + Purchased Electricity + Purchased Steam - Sold Electricity - Sold Steam + Renewable Energy. ➢ Note 2: The conversion factors for calorific values are based on the Heat Content of Energy Products by the Bureau of Energy, Ministry of Economic Affairs. ➢ Note 3: Percentage of renewable energy = Renewable Energy Usage / Total Energy Consumption. ➢ Note 4: Percentage of grid electricity consumption = Purchased Electricity / Total Energy Consumption. ➢ Note 5: This table only presents data from Linyuan Plant. ➢ Note 6: TPCC Self-generated renewable energy in 2023: 0 GJ.	The Rules Appendix 1-2 No.1 Total energy consumption, percentage of purchased electricity, utilization rate (renewable energy/total energy), and total self-generated and self-use energy
2	Chapter 4 Environmental Co-Prosperity - 2. Water Management	■ Water Management Information ➢ Unit: Megaliters (thousand cubic meters) ➢ 2023 - Total water withdrawal: 979 - Total water discharge: 344 - Total water consumption: 635	The Rules Appendix 1-2 No.2 Total water withdrawn, total water consumption, mandatorily or voluntarily disclosed total wastewater (sewage) discharged
3	Chapter 4 Environmental Co-Prosperity - 5. Waste Management	■ 2023 Waste Statistics ➢ Unit: Metric Tons ➢ 2023 - Total Amount of Hazardous Waste: 3 - Percentage of Hazardous Waste Recycled: 0%	The Rules Appendix 1-2 No.3 Total quantity of hazardous wastes generated during the production process of products required to be disclosed under the law or to be disclosed voluntarily.

~ 2 ~



No.	Corresponding Section	Subject Matter Information	Applicable Criteria
4	Chapter 5 Quality Workplace -6. Occupational Health and Safety	■ The disabling injury frequency rate (FR) in 2023 was 4.74. ➢ Note: Disabling Injury Frequency Rate (FR) = No. of disabling injuries / Total number of hours worked x 1,000,000. ■ 2023 Indicators for Work-related Injuries ➢ Gender: Male - No. of recordable work-related injuries: 2 - Rate of recordable work-related injuries: 1.02 - Total number of hours worked: 391,521 ➢ Gender: Female - No. of recordable work-related injuries: 0 - Rate of recordable work-related injuries: 0.00 - Total number of hours worked: 30,642 ➢ Gender: Total - No. of recordable work-related injuries: 2 - Rate of recordable work-related injuries: 0.95 - Total number of hours worked: 422,163 ➢ Note: Rate of recordable work-related injuries = No. of recordable work-related injuries / Total number of hours worked x 200,000.	The Rules Appendix 1-2 No.4 Number of employees in and rate of occupational accidents
5	Chapter 6 Social Responsibilities - 1. Social Care	■ Implementing Environmental Protection Taiwan Prosperity Chemical is engaged in the manufacturing of chemical products, and its processes generate waste gas, wastewater, waste liquids and waste materials that need to be treated by environmental facilities. Evaluations indicate that potential impacts on the local community primarily occur in environmental aspects, including air pollution control and water pollution prevention. To implement environmental protection, regular environmental quality monitoring is conducted, and environmental monitoring stations are independently established. In the event of any anomalies, relevant units are immediately notified to take emergency response measures, effectively reducing the environmental impact during operational activities. Regular environmental monitoring projects inside and outside the plant: ➢ Air quality During factory operations, air and operational environment pollution are controlled in accordance with the Air Pollution Control Act, its enforcement rules, the Management Regulations for Installation, Operation, and Fuel Use Permits of Stationary Pollution Sources, to comply with environmental regulations and reduce environmental and health impacts. During operation and maintenance, pollution sources and control equipment are regularly maintained, inspected, and operation records are kept in compliance with the law. For new processes or equipment, applications for new installation, modification, or changes to permits for stationary pollution sources are handled according to the aforementioned regulations.	The Rules Appendix 1-2 No.5 Operations with significant actual and potential negative impacts on local communities.

~ 3 ~



No.	Corresponding Section	Subject Matter Information	Applicable Criteria
		➤ Noise and Vibration Monitoring The main sources of noise generated during plant operations are the air compressors and emergency generators. Noise reduction and soundproofing facilities have been installed around these equipment, effectively reducing noise and vibration. There were no significant noise and vibration anomalies in 2023, and the factory's surroundings were not affected. ➤ Water Monitoring TPCC has its own wastewater treatment plant and regularly performs maintenance and upkeep. During operation, water quality is regularly monitored to ensure it does not pollute surface water. The wastewater treatment plant is also equipped with an automatic continuous monitoring system to continuously monitor the quality of discharge water, ensuring that the water discharged to the joint sewage treatment plant meets the park's discharge standards. Additionally, TPCC regularly monitors the raw wastewater generated by each process. If abnormalities are detected at the wastewater source, immediate measures are taken to prevent impacts on the operation of the wastewater treatment plant.	



Taiwan Prosperity Chemical Corporation
[http : //www.tpcc.com.tw/](http://www.tpcc.com.tw/)