



2022 台達化學工業股份有限公司
Taita Chemical Company, Limited



ESG Report

About this report	02	Our Value Chain	09
Message from the Chairman	03	Stakeholder engagement	11
Sustainable Key Performance	05	Material topics management	16
Corporate Sustainability Vision	06	UN Sustainable Development Goals (SDGs)	20

CONTENTS

1 Establish Robust Governance

1.1	Corporate Governance	23
1.2	Economic Performance	35
1.3	Risk Management	37
1.4	Ethical Corporate Management	39

4 Foster an Inclusive Society

4.1	Talent Attraction and Retention	85
4.2	Talent Development	94
4.3	Occupational Safety and Health	98
4.4	Social Engagement	108

2 Build Innovative Supply Chains

2.1	Product Quality	42
2.2	Technology R&D	49
2.3	Supply Chain Management	51

Appendices

GRI Content Index	117
Chemical Industry SASB Index	122
Sustainability Disclosure Metrics-Plastics Industry	124
Climate-related Financial Disclosures	124
UN Sustainable Development Goals (SDGs) Content Index	127
External Assurance Statement	128

3 Create Friendly Environments

3.1	Eco-friendly Management	57
3.2	Climate Change and Energy Management	60
3.3	Water Resources Management	72
3.4	Air Pollution Control	76
3.5	Waste Management	80

: Material Topics in 2022



About this report

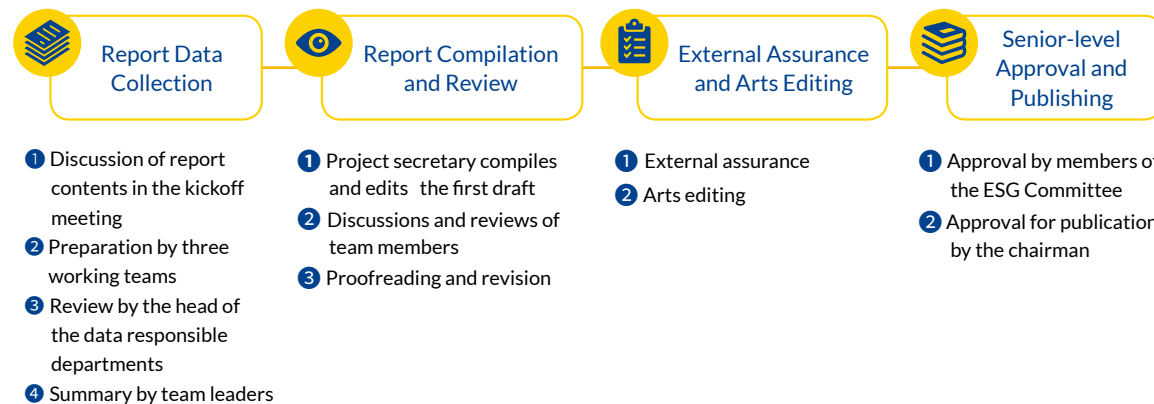
Reference Guidelines

For all stakeholders to understand our performance in relation to corporate social responsibility, we, Taita Chemical Company, Limited (TTC), have prepared this report in accordance with the GRI Sustainability Reporting Standards 2021 (GRI Standards:2021) published by the Global Reporting Initiative (GRI), disclosed the contents of the related sustainable issues with respect to the Sustainability Accounting Standards-Chemicals published by the Sustainability Accounting Standards Board (SASB) and “Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies,” as well as recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) and United Nations Global Compact to establish the reporting framework, to be lined with the objectives and action plans by the United Nations Sustainable Development Goals (SDGs).

Report Scope GRI 2-2,GRI 2-3

This report mainly covers Taita Chemical Company (TTC), including the Taipei head office, Qianzhen plant, Linyuan plant (including the Kaohsiung branch), Toufen plant, and two overseas subsidiaries—TTC Zhongshan and TTC Tianjin. In April 2019, the Tianjin plant temporarily halted production due to expected market shrinkage in the north, and staff were legally dismissed. Hence the Tianjin plant only discloses financial information. The report disclosure period is from January 1, 2022, to December 31, 2022. The report contents demonstrate TTC's environmental, social, and operational management and performance, and the financial information is consistent with the financial data certified by accountants. Some statistics are extracted from the TTC annual report, government department, and the open information of related websites.

Internal Audit and Editing Management Procedure for Report



External Assurance GRI 2-5

Report compliance with the GRI Standards: 2021 has been verified and assured by third-party certification body AFNOR Asia Ltd. with reference to the assurance standard of AA1000 V3 and the Moderate Assurance in Type 1 in the appendix to version 2018.

Publication Schedule

This sustainability report is regularly published annually:

- First publication: December 2015
- Previous publication: August 2022
- Current publication: June 2023
- Next publication: Scheduled for June 2024

You can download the report and other related documents through the “Sustainability” section of the TTC website at:

<https://www.ttc.com.tw/zh-tw/dirCSRnew/frmReport.aspx>

Contact Information GRI 2-3

If you have any comments or suggestions about the content of this report, please feel free to contact Mr. Li.

Address: No. 5, Gongye 1st Rd., Linyuan Dist., Kaohsiung City
 Phone: +886 7 7040988 ext.: 1343
 Fax: +886 7 6414544
 ESG email: esg-ttc@usig.com

Message from the Chairman

The impact of COVID-19 and the Russo-Ukrainian (Russia-Ukraine) War has caused a European energy crisis, which has also led to food supply disruption and global inflation. Additionally, the threats of climate change have also become a new global normal. Facing these risks, we uphold our vision to “create sustainable value for a sustainable society” and to be proactive in environmental, social, and governance (ESG), aiming to balance operational performance improvements and sustainable development practices.

Deployment for active carbon reduction

In 2020, apart from establishing the Green Power Team to proactively address and make plans for the national net-zero policy, we also continued to build solar PV installations and combined with the local agricultural economy to bring more possibilities for combining green power and industry. In 2022, the accumulative on-grid connection of solar PV installations reached 5.9MW to generate over 7 GWh of green power in estimation. In 2025 and 2027 we will complete solar PV installations with an installed capacity of 15MW and 20MW, respectively. In response to the 27% reduction target for 2030, we have mapped out the carbon reduction path towards 2030 and set annual targets and plans to review accomplishments each year.

Building a safe production environment

We request a high-standard of safety during production from all plants. Apart from continuously promoting the goal of safety and the environmental five zeros: zero pollution, zero emissions, zero occupational hazards, zero accidents, and zero failures, and implementing the process management system (PSM), we also hold plant technology exchange meetings and unannounced fire drills to optimize production environment safety so as to make all-round emergency responses and minimize hazards and damage.



Taita Chemical Company, Limited (TTC)

Quintin Wu, Chairman

Enhancing ESG implementation and human rights risk assessment

ESG implementation is promoted by the ESG Committee chaired by independent directors. It reviews the Company's ESG performance every six months. The in-depth ESG engagement of directors can enhance the promotion of ESG goals. Human rights risk is also our concern. By reviewing the risk condition of human rights issues in this report, we aim to ensure the perfect maintenance of human rights.

Promoting ESG makes our operations steadier while bettering the overall environment and society at the same time. We progressively integrate ESG targets into business operations, set various project targets and goals, and achieve them systemically with artificial intelligence (AI). On the road to sustainability, we need new concepts, new technologies, and the full collaboration of all employees to ensure smooth implementation. We also intend to do things the right way before we can extend our experience to others for the common good of the whole industry, supply chain, and society.

TTC will continue to implement and promote relevant environmental safety and health management systems, such as ISO 14001 and ISO 45001. Since March 2021, we've been implementing the Process Safety Management system (PSM). In terms of energy conservation and carbon reduction, each plant plans various energy-saving and power reduction measures to gradually meet the government's requirement of reducing electricity usage by 1% annually for large-scale users, as well as the goal of net-zero carbon emissions by 2050. We also continue to promote the ISO 50001 energy management system and ISO 14064-1 greenhouse gas inventory operations. Through the sustainability report, TTC aims to communicate with our stakeholders about the results of TTC's social engagement, hoping to become a sustainable enterprise. After all, promoting sustainable development, raising safety and environmental awareness, pursuing zero-target in safety and environment, achieving energy-saving and carbon-reducing targets, and continuously improving and enhancing process efficiency are the cornerstones of the company's pursuit of sustainable operations.



Taita Chemical Company, Limited (TTC)

Pei-Chi Wu, President

吳培基

Sustainable Key Performance



Governance

Top 5%

Ranked among the top 5% of companies in the 2022 Corporate Governance Evaluation for small and medium market capitalization

NT\$ 18.1 billion

in Revenue in 2022

NT\$ 410 million

Net operating profit in 2022

NT\$ 1.04

Earnings per share after tax in 2022

Gold Award for Taiwan Corporate Sustainability Report

in the TCSA 2022 Taiwan Corporate Sustainability Awards



Environmental

NT\$ 200 million

total environmental management expenses in 2022

NT\$ 9.09 million

total expenditure on energy-saving equipment in 2022

17.56%

greenhouse gas emissions in 2022 decreased by 17.56% compared to 2017

23.6%

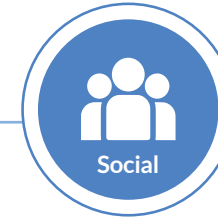
water consumption per unit product in 2022 decreased by 23.6% compared to 2017

Carbon Competitiveness 100

Selected as one of the top 100 companies in the Business Weekly's in 2022

Ministry of Economic Affairs Energy Saving Benchmark Award

Toufen plant was nominated for the 2022 Ministry of Economic Affairs Energy Saving Benchmark Award



Social

6.84 million hours

total work hours without disabling injuries accumulated across four plants in 2022

NT\$ 5 million

donated to the USI Education Foundation

NT\$ 2.02 million

total expenditure of Good Neighborliness Plan in 2022

Participated in Kaohsiung's Air Purification Zone Adoption

selected as an excellent adoption enterprise and received a certificate of appreciation

Energy Conservation and Carbon Reduction Guidance and Cross-Departmental Greenhouse Gas Cooperation Reduction

Responded to the Kaohsiung Environmental Protection Bureau's promotion of operation

Participated in the joint donation of epidemic prevention protective clothing organized by the Kaohsiung Environmental Protection Bureau, and received a certificate of appreciation

Corporate Sustainability Development Vision




1. Sustainability Vision and Management Strategy GRI 2-16,GRI 2-22,GRI 2-23,GRI 2-24

Based on the vision to “create and cohere sustainable value for a sustainable society,” we hope to constantly create and cohere sustainable value to contribute to social sustainability. Based on the sustainable vision, we have developed three core strategies: “R&D and innovation”, “steady operations”, and “social inclusion”, hoping to create value with stakeholders together. We extend the contents of the core strategies into seven key topics as the foundation for honest and reasonable partners to build visions.



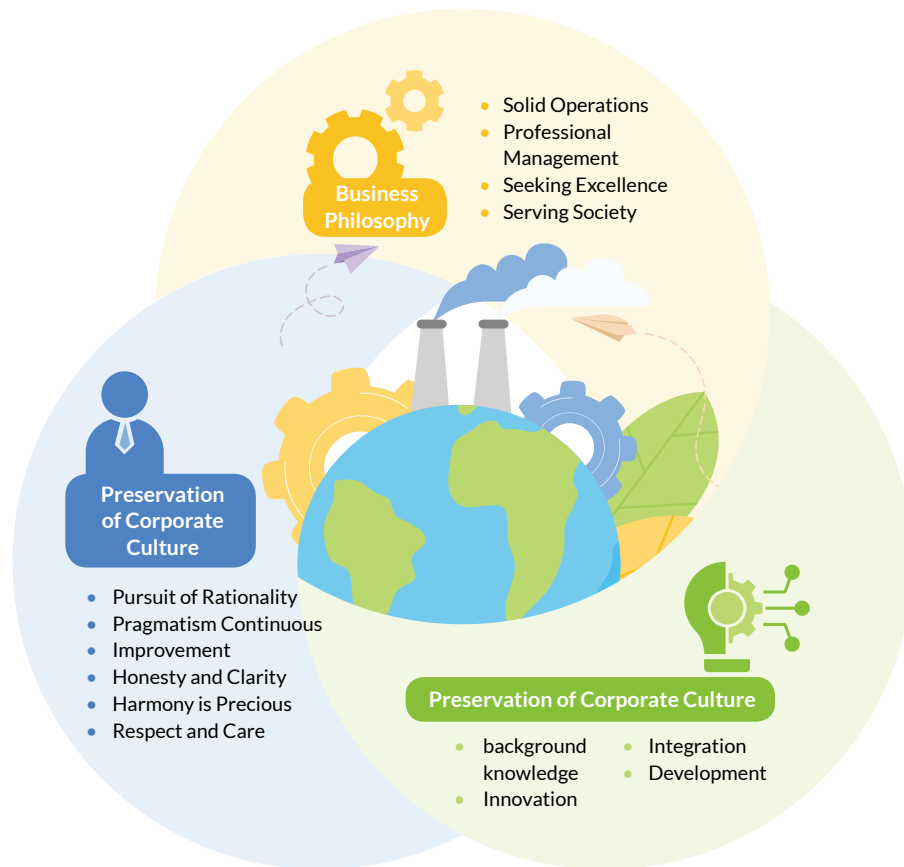
As a member of the USI Corporation, TTC will strive to uphold the group’s vision and establish four main sustainability principles: establish robust governance, creating an innovative supply chain, fostering a friendly environment, and fostering an inclusive society. We will link issues, and each year we review the consistency between the results of analyzing major issues and sustainable principles, as well as reviewing the status of annual progress achievements. TTC’s sustainability strategy and its plans to promote economic, environmental, and social aspects are as mentioned above:

Sustainability Strategy and Short/Medium to Long-term Plan

	Short term (2023)		Mid to Long-term
	Plan	Objective	
 <p>Governance</p>	<ul style="list-style-type: none"> Conduct production and sales budgeting Continually plan for capacity expansion Ongoing planning for bottleneck elimination Retain strong and eliminate weak sales to enhance market competitiveness and maintain profitability Improve the basic performance of general-grade ABS products Obtain BIS certification for ABS products in India Improve particle size concentration of EPS products 	<ul style="list-style-type: none"> 85% total production and total sales of ABS/SAN, 100% of GPS, 100% of EPS, 85% of Zhongshan EPS, and 100% of GW Expand Gulei factory ABS+12,000MT, EPS+4,200MT Maintain profitability annually Improve glossiness Comply with Indian BIS standards Three-layer concentration > 90% 	<ul style="list-style-type: none"> Understand customer needs for the product, integrate USI Corporation's functional technology, and develop products that meet customer requirements Retain strong and eliminate weak sales, adjust sales strategy, and strengthen sales of advantageous products Market development and expansion of product applications are jointly carried out by R&D personnel and business units The wooden floor glass wool sound insulation system is applied to new collective residential buildings by construction companies Improve basic performance of ABS products (rubber particle size concentration} Optimize EPS process
 <p>Environmental</p>	<ul style="list-style-type: none"> Environmental laws are becoming increasingly stringent, so work on industrial safety and environmental production can never be relaxed, with each factory's head acting as the person in charge of the factory area The Taipei head office and mainland companies have introduced the ISO 14064-1 greenhouse gas inventory Reduce the environmental impact of energy consumption Set energy-saving and carbon-reducing targets Reduce the impact of air pollution emissions on the environment and the health of residents Reduce the harm of waste to the environment and human health 	<ul style="list-style-type: none"> Assign responsibilities for industrial safety and environmental production at different levels The greenhouse gas inventory of the Taipei head office and mainland companies will complete external verification and certification before 3Q 2023 Reduce energy consumption per unit of product by 3% Electricity saving rate of 1%, the annual carbon reduction target achievement rate of 100% The number of fines for exceeding air pollutant emission limits is 0 The proper waste handling rate is 100% 	<ul style="list-style-type: none"> Energy consumption per unit of product is reduced by 5% compared to the 2017 baseline year The number of fines for exceeding air pollutant emission limits is 0 The proper waste handling rate is 100%
 <p>Social</p>	<ul style="list-style-type: none"> Guidance and training for Process Safety Management (PSM) Create a happy workplace, providing employees with a safe and enjoyable work environment Provide employees with comprehensive education and training Reduce occupational accidents Equal pay regardless of gender Sponsorship of social welfare 	<ul style="list-style-type: none"> Scheduled to complete the PSM system by February 2024 for Linyuan and Qianzhen factories Reduce the turnover rate to below 7.5% Average training goal is 18.5 hours per person Zero industrial accidents, zero incidents of disabling injuries No violations of labor laws and human rights 	<ul style="list-style-type: none"> Linyuan and Qianzhen factories continue to promote PSM Reduce the turnover rate to below 7.5% Average training goal is 20 hours per person Strengthen industrial safety inspections, zero industrial accidents Care for vulnerable groups, fulfill social responsibilities

2. Operating Philosophy and Strategic Goals

As part of the USI Corporation, TTC has inherited the group's operating philosophy of "prudence, professional management, pursuit of excellence, and service to society", and the corporate cultural characteristics of "pursuing rationalization, pragmatism, continuous improvement, honesty and fairness, harmony as the most precious, respect and care". By integrating efficient management methods of modern enterprises, TTC uses "knowledge", "innovation", "integration", and "development" as pillars to build its corporate territory, to achieve the goals of sustainable operation and continuous growth of the enterprise.



Operating goal | Provide customers with satisfactory operational quality

2022 Strategic Focus

- **Stage 1:**
Continue to optimize customer portfolio and product portfolio based on full production and sale. Increase the proportion of direct customers for ABS, increase the proportion of injection grade for GPS, increase the general grade proportion for EPS.
- **Stage 2:**
Breakthrough existing business model from the perspectives of technology/process/market/application/product/investment.

2023 Strategic Focus

Resilience + Flexibility

1. Production and Sales Budget: ABS/SAN all produced and sold 85%. GPS all produced and sold 100%. Qianzhen EPS all produced and sold 100%. Zhongshan EPS all produced and sold 85%. GW all produced and sold 100%
2. ABS/GPS developing non-mainland market
3. Continuing to add planned capacity (Gulei factory)
4. Continuous planning for bottlenecks: ABS + 12,000 tons; EPS +4,200 tons

Short-term goal

- Develop dominant markets, adjust sales strategies, and enhance sales of dominant products
- Implement the management of raw materials/finished products and supply chain
- Improve operational efficiency
- Improve customer service quality

Medium- & Long-Term Goals

- Collect information from the market in-depth, provide technical services to customers, conduct market development and expand product application fields
- Understand the current situation of global bulk raw materials, optimize supply chain management and profit opportunities from product sales
- Set target markets and customers, leveraging the existing market advantages of TTC to enhance overall operational efficiency and profitability
- Research and develop new and niche products that are friendly to the environment and customers, meet market and customer needs, improve technical research and development capabilities, and enhance company profits

Our Value Chain GRI 2-6

1. Main Products and Value Chain

The main products of TTC are ABS resin, AS resin, GPS, EPS, High Impact Polystyrene (referred to as IPS), glass wool and curved surface printing.



Industry Scale	
ABS	Production volume 100,000 tons/year, SAN products: Production volume 20,000 tons/year, exploring export markets in Southeast Asia/South America
GPS	Production volume 100,000 tons/year, mainly exported to South Africa/Egypt/Southeast Asia
EPS	Production volume 240,000 tons/year, applied to the packaging material market and anti-static packaging market, mainly exported to Central and South America/Southeast Asia/Canada/Australia

Raw material suppliers

- Butadiene
- Propylene
- Styrene
- Window glass, silica sand, metal oxides

TTC

- Polymerization and blending granulation process
 - Linyuan Factory | TAITALAC® ABS Resin
 - Linyuan Factory | TAITALAC® SAN Resin
- Qianzhen Factory | TAITALAC® GPPS Resin
- Qianzhen Factory/Zhongshan Factory | TAITACELL® EPS foam resin
- Qianzhen Factory | TAITAREX® HIPS Resin
- Toufen Factory | High temperature melting/spinning forming process

Processing plants/Clients

ABS	AS	GPS	EPS	IPS
Battery cases, safety helmets, pipes, bathroom accessories, and applications requiring flame retardant, etc.	Bathroom, packaging, fruit and vegetable boxes, and building materials, etc.	Home appliances, 3C accessories, light guide plates, food containers, and packaging boxes, etc.	Packaging, food containers, and building materials, etc.	Computer peripheral products, household appliances, pressing board products, wire reels, and floats, etc.

Glass wool
Rolls, boards, sheets, ceiling panels, insulation pipes, and covered glass wool, etc.

2. Company History and Operational Site Distribution GRI 2-1

2010~2022

- In April 2022, the curved surface printing at Toufen factory was temporarily suspended due to market factors, and production was halted.
- In April 2019, the Tianjin factory in China temporarily ceased production because the expected contraction of the northern market made it impossible to continue making a profit. Staff were subsequently legally dismissed.
- In the first quarter of 2014, the Linyuan factory completed the ABS debottlenecking project, increasing its annual production capacity to 100,000 tons.
- In 2012, the Tianjin factory completed the EPS debottlenecking project, enhancing its annual production capacity to 134,000 tons.

2000~2009

- In the third quarter of 2008, the Qianzhen and Zhongshan factories completed production line debottlenecking, increasing their annual production capacities to 66,000 tons and 180,000 tons, respectively.
- In September 2005, the Tianjin factory in China was established, initiating two EPS production lines with an annual capacity of 100,000 tons.
- In October 2004, the Zhongshan factory in China completed the third EPS production line, expanding its annual capacity to 150,000 tons.
- In November 2003, Taita Chemical (Tianjin) Co., Ltd. was established.
- In May 2001, the Qianzhen factory successfully launched the GPS/IPS NOVA new process with an annual capacity of 100,000 tons.
- In May 2000, the Zhongshan factory in China completed its first EPS production line and successfully launched production of 50,000 tons. In the same year, in October, it completed its second production line, expanding its annual capacity to 100,000 tons.

1990~1999

- In March 1999, Taita Chemical (Zhongshan) Co., Ltd. was established.
- In March 1997, BTRN Asia transferred all of its 51% stake in our company to an overseas holding company jointly indirectly invested by USI Corporation and UPC Corporation
- In March 1991, a glass wool factory was established in Toufen.

1960~1989

- In June 1987, a curved surface printing factory was established in Toufen.
- In December 1983, the production of Formica and phenolic resin was ceased.
- In August 1979, an ABS resin factory was constructed in the Linyuan Industrial Area in Kaohsiung.
- In March 1967, polystyrene and phenolic resin production equipment were added, both were firsts in the country.
- In April 1960, the company was established and set up a factory in Qianzhen, Kaohsiung, becoming the first factory in the country to produce Formica chemical raw materials.

TTC Company Profile	
Name of Company	Taita Chemical Co., Ltd.
Industry	Plastic Industry/Glass Wool/Curved Surface Printing
Headquarters location	12F, No. 37, Jihu Road, Neihu District, Taipei City
Capital	NT\$3.98 billion
Net income	NT\$18.1 billion
Numbers of employees	502



3. Participation in External Organizations

GRI 2-28

Communication is one of the proactive actions to promote professional growth. TTC participates in various professional groups, combining external forces to strengthen influence, and promoting technical and capability improvements in various fields through interactive sharing among public associations. We support public associations in publishing publications and organizing activities, jointly dedicated to promoting industry development.

TTC Participation in Major External Organizations in 2022

Name of Organization	Member	Committee member	Supervisor/Director
Petrochemical Industry Association of Taiwan	●	●	●
Taiwan Synthetic Resins Manufacturers Association	●		●
Taiwan Plastics Industry Association	●		
Taiwan Responsible Care Association (TRCA)	●	●	
Taiwan Composites Association	●		
Taiwan Fire Safety & Material Association	●		
The Curtainwall Technology Development Association of Taiwan	●		



Stakeholder Engagement GRI 2-29

1. Stakeholder Communication and Participation

Stakeholders are those who affect or are affected by an organization's operations or whom the company is responsible and of which it is obliged to respond. Through pro-active and extensive communication with stakeholders, we can adequately understand and respond timely to the concerns and topics raised by them. These can help us sustain our improvement and growth. The trust and support of the stakeholders make TTC push even more for sustainable development.

2. Categories of Stakeholders

<p>Employees Current employees and contracted staff</p>	<p>Non-profit organizations Industry associations, local representatives, environmental groups, labor rights groups, and others</p>
<p>Investors General shareholders and corporate shareholders</p>	<p>Peers Industry peers</p>
<p>Customers Existing customers and potential customers</p>	<p>Media Newspapers, radio stations, and magazines</p>
<p>Suppliers/Contracts Existing suppliers, existing contractors, potential suppliers, and potential contractor</p>	<p>Partners Corporate allies</p>
<p>Community residents Neighborhood communities, local groups, and local schools</p>	<p>Academic institutions Academic groups</p>
<p>Government agencies Local government authorities</p>	

Every two years, a survey is conducted with the Sustainability Development Committee's working groups, factory managers, and the group's common service department managers. The survey assesses stakeholders that they interact with or influence, such as the aforementioned 11 types of group organizations, based on the principles of responsibility, influence, dependence, tension, and diversity outlined in the AA 1000 SES (2015) (Stakeholder Engagement Standards, abbreviated as SES).

3. Core Stakeholder Identification Assessment

In December 2022, 61 evaluation questionnaires were collected and discussed by the Sustainability Development Committee's Project Secretary and three group leaders. According to the assessment score, six types of stakeholders were identified as core: (1) Customers, (2) Employees, (3) Suppliers/Contractors, (4) Government Agencies, (5) Investors, and (6) Community Residents. These core stakeholders are the basis for prioritizing communication with stakeholders at our company.



4. Stakeholder Communication Channels

Core Stakeholders	Contact Stakeholders	Phone No.
Employees	Administrative Department, Mr. Tsai	07-7040988 ext. 1308
Customers	Sales Department, Ms. Wu	07-7040988 ext. 6214
Investors	Spokesperson, Deputy CEO Yan	07-7040988 ext. 3278
Government agencies	Safety Office, Mr. Yeh	07-7040988 ext. 1328
Suppliers/Contractors	Procurement Division I, Ms. Shih	07-7040988 ext. 6725
Residents of local communities	Manager's Office, Mr. Li	07-7040988 ext. 1322



5. Key Stakeholder Concerns, Communication Channels and Implementation Status

TTC uncovers the concerned topics raised by stakeholders through various communication channels and use these as major references for the content of our CSR reports and future CSR development. We also rely on the CSR reports to communicate with core stakeholders and promote exchange between the company and stakeholders to pursue mutual progress and growth. The communication status with each key stakeholder will be reported annually at the Sustainable Development Committee meeting, and simultaneously reported to the Board of Directors.

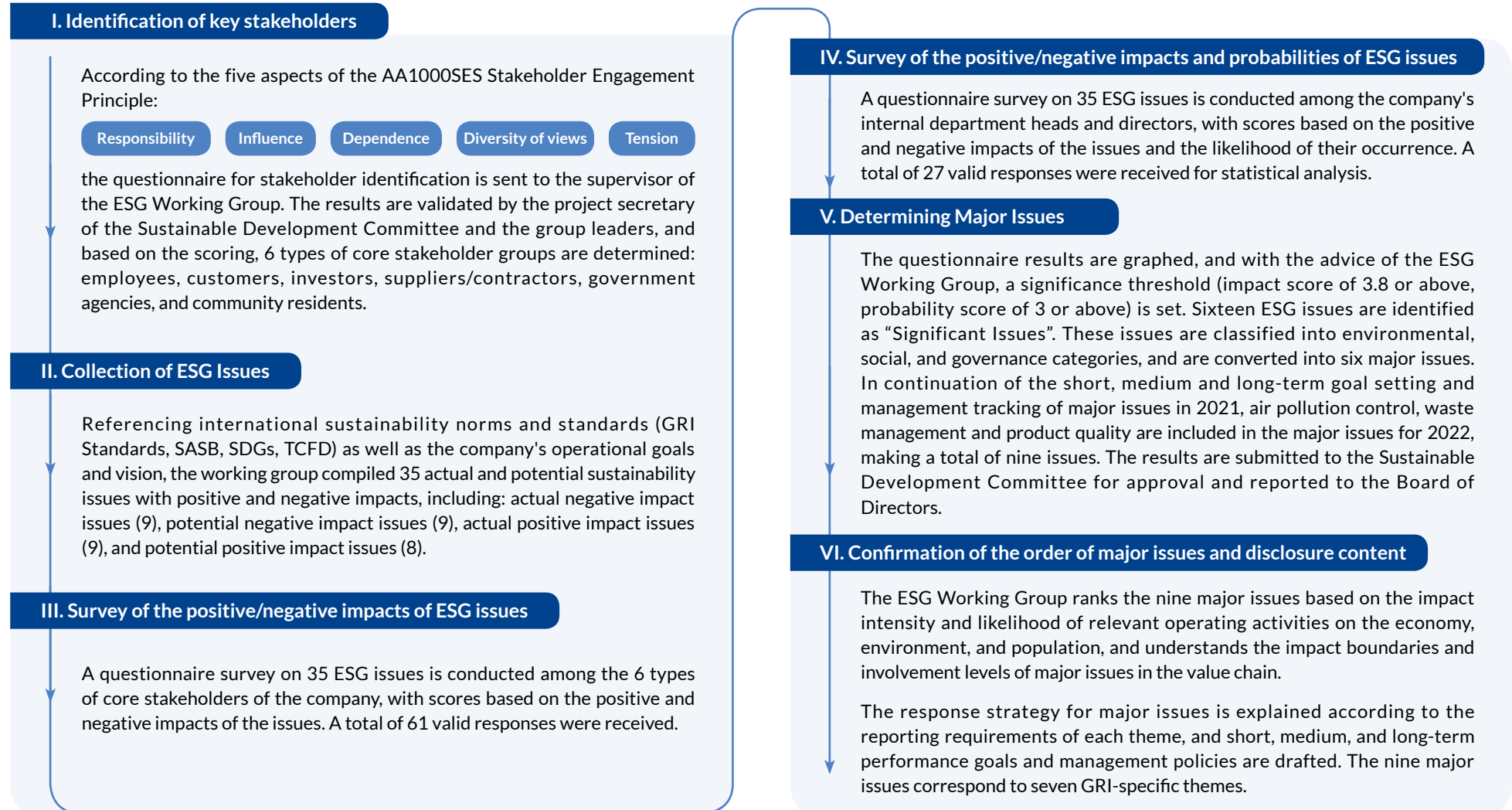
	Significance to Our Company	Communication Methods and Frequency	Concerned Topic	Our Company's Response	Communication Results
 Employees	<p>Employees are the most important assets of a company and are one of the key factors for successful operations. Our company employs people based on their talent and suitability, allowing employees to work with peace of mind, fully showcasing their expertise, and exerting their abilities to achieve the company's sustainability goals.</p>	<ul style="list-style-type: none"> HSE Management Committee meeting: Once every two months Union Board/ Occupational Safety and Health Committee/ Welfare Committee: Once per quarter Union Representative Conference: Once a year Employee Retirement Fund Committee: Once every half year Performance Review: Once a year Health Check-up Feedback Session and Group Insurance Information Session (including employees' families): Once a year Signing of Personal Data Protection/ Confidentiality Agreement: New employees sign upon arrival Educational Training (Specialized Training, Safety Training, and Job Instruction): Held anytime according to the plan Gender Equality Complaint Mailbox/ Employee Complaint Mailbox/ Suggestion System: Available anytime Club Activities: Irregularly 	<ul style="list-style-type: none"> Recruitment and retention Occupational Health and Safety Labor-management relations Employee benefits 	<ul style="list-style-type: none"> We aim to create a happy workplace by establishing comprehensive welfare measures to create a joyful and harmonious work environment. This allows employees to work peacefully, promotes employee stability, and reduces turnover. We continue to implement the ISO 45001 occupational health and safety management system to reduce safety and health risks and prevent and reduce occupational accidents through systematic management and the addition or updating of equipment. Every year, all our employees are entrusted to major qualified hospitals for health check-ups to protect their health. All factories in Taiwan have regular meetings of the Union Supervisory Board, and related company managers attend, communicating face-to-face with union leaders. There is also annual membership training, which union members enthusiastically participate in, to build mutual consensus and improve labor-management cooperation. The company allocates 0.15% of the monthly operating revenue as the activity fund for the Employee Welfare Committee, to reward the daily hard work of employees. We also periodically hold employee travel activities to relieve work pressure and enhance physical health, thereby increasing cohesion. 	<ul style="list-style-type: none"> Union board meetings 13 times Union general meetings 4times Labor-Management Meeting 8 times Employee Welfare Committee Meeting 9 times Employee Retirement Fund Committee Meeting: 4 times Group Insurance Explanation Session: 4 times HSE Management Committee meeting: 28 times Labor Safety and Health Committee Meeting: 12 times Post-health check-up feedback session: 3 times
 Customers	<p>Customers are crucial partners for the operation and development of our company. We aim to satisfy our customers through order fulfillment and product improvement. Customer quality requirements also impact our company's technological R&D and quality management.</p>	<ul style="list-style-type: none"> Credit visit loan amount: On-demand Professional institution evaluation: When setting loan amount Legal regulation/ Quality Assurance meeting review: Once a month International exhibitions and product explanation sessions: At least once a year Technical service/ Customer factory visits/ Customer visits: As needed or irregularly Customer satisfaction survey: At least once a year Execution of joint development of customized products: As needed Company website: Updating domestic and foreign product certification information anytime 	<ul style="list-style-type: none"> Product and service quality Technology R&D Business performance 	<ul style="list-style-type: none"> Our company values the opinions and suggestions of customers, which serve as a reference for internal operational improvement. We also conduct customer satisfaction surveys for our domestic and international customers at least once a year, carry out necessary corrective measures, and present review reports in management meetings to provide good customer service and gain customers' trust in our company. Our company collects information on market development and customer needs to develop environmentally friendly new products and niche products that satisfy the market and customer needs, enhancing our technological R&D capability and company profit. Currently, we are making great efforts to test the (1) wooden floor glass wool sound insulation system, (2) develop environmentally friendly energy-saving Low VOCs EPS for application in automobile materials, and (3) develop niche products. Our company focuses on product functions and features, conducting quality improvement, performance enhancement, new product development and verification, and developing high value-added products. And we establish long-term strategic partnership with raw materials suppliers and determine the safety stock based on materials preparation lead-time to ensure supply chain fluency, to keep surplus profits every year. 	<ul style="list-style-type: none"> Legal regulation/ Quality Assurance meeting review: 12 times Customer satisfaction survey: 1 time (2 times at Toufen Factory) International exhibitions, product explanation session: Participation in the 2022 Asia-Pacific Sustainability Action Expo from August 12, 2022, to August 14, 2022

	Significance to Our Company	Communication Methods and Frequency	Concerned Topic	Our Company's Response	Communication Results
<p>Investors</p>	<ul style="list-style-type: none"> Investors are important supporters of the company's survival and development, providing financial investments and corporate governance supervision to ensure sustainable development. Investors' social evaluation of the company can affect stock price fluctuations 	<ul style="list-style-type: none"> Public Information Observing Station: Immediate/ regular/ disclosure updates as required Annual Shareholders' Meeting: Once a year Corporate governance evaluation: Once a year Company website "Investor Services"/ Group joint stock affairs website: Disclosure at any time Hold shareholders' interim meetings: Irregularly 	<ul style="list-style-type: none"> Business performance Product and service quality Technology R&D 	<ul style="list-style-type: none"> Our company focuses on product functions and features, conducting quality improvement, performance enhancement, new product development and verification, and developing high value-added products. We establish long-term strategic partnership with raw materials suppliers and determine the safety stock based on materials preparation lead-time to ensure supply chain fluency, to keep surplus profits every year. The company values the opinions and suggestions of customers, using them as a reference for internal operation improvement. At least once a year, a customer satisfaction survey is conducted for both domestic and foreign customers, necessary corrective measures are implemented, and review reports are presented at management meetings to provide good customer service. The company collects information from market developments and customer needs to develop new products and niche products that are friendly to the environment and customers. We strive to meet market and customer needs, enhance technical R&D capabilities and company profitability, and actively conduct (1) wooden floor glass wool sound insulation system testing, (2) environmentally friendly energy-saving Low VOCs EPS development for application in automotive materials, and (3) niche product development. 	<ul style="list-style-type: none"> Holding of Annual Shareholders' Meeting: 1 time on May 27, 2022 Convening of the legal explanatory meeting: 1 time on May 18, 2022
<p>Suppliers/ Contractors</p>	<p>Excellent suppliers can provide quality and stable raw materials, while engineering contractors can provide professional construction or supplement the lack of factory construction manpower. TTC hopes to assist each other with vendors, work together, pay attention to quality, schedule, and sustainable management, and jointly complete the entrusted tasks</p>	<ul style="list-style-type: none"> Quality abnormality (supply & construction quality) tracking review meetings: Raised at any time Visits and interviews, communication review meetings: As needed Agreement organization meeting/issue hazard notice: Before work starts Contractor communication record/contractor/supplier evaluation: At least once a year Arrangement of safety training courses for workers entering the factory: Held regularly Occupational safety and health and environmental information collection/communication handling record/supplier questionnaire survey/provision of product substance data: Recorded at all times 	<ul style="list-style-type: none"> Supply chain management Strategic procurement Legal compliance 	<ul style="list-style-type: none"> The primary selection of suppliers for TTC are those with credibility or good reputation, certified and registered as qualified suppliers, or those with a good track record of supply quality or delivery. For sustainable development, the company carries out supplier and contractor evaluations every year to reduce and prevent potential risks. TTC's purchasing strategy prioritizes sourcing from local Taiwanese suppliers to promote stable economic development in Taiwan. The bulk raw materials, such as styrene, acrylonitrile, and butadiene, are under fixed contracts with local Taiwanese suppliers. According to market conditions, a portion is imported from abroad to maintain a steady supply of quality. TTC has drawn up a "Supplier Social Responsibility Commitment Letter" for long-term raw material suppliers, and is gradually promoting the signing process. The execution mainly focuses on soliciting supplier's willingness to sign in four aspects: labor rights, worker health and safety, environmental and ethical norms, with the aim of growing together. 	<ul style="list-style-type: none"> Evaluated 256 suppliers, 63 contractor evaluations

	Significance to Our Company	Communication Methods and Frequency	Concerned Topic	Our Company's Response	Communication Results
 Residents of local communities	<p>TTC adheres to the spirit of taking from society and giving back to the community, making every effort to care for community neighbors, local groups, and local schools, and provides job opportunities and continuous interaction with local community neighbors to maintain friendly relations, and to prosper the local economy</p>	<ul style="list-style-type: none"> • Company Website : Always Disclosed • Visiting local groups / moderately sponsoring local event expenses: Irregular • Environmental pollution monitoring station of the service center: Available anytime for inquiries • Friendly Competition: Occasionally held or co-hosted • Phone contact or visit: Irregular 	<ul style="list-style-type: none"> • Air pollution control • Waste management • Environmental impact complaint mechanism 	<ul style="list-style-type: none"> • TTC continuously implements ISO 14001 environmental management system, reducing pollutant emissions, and strictly controls the quality of flue gas emissions from the factory and enhances the self-management of Volatile Organic Compounds (VOCs). Moreover, "the number of penalties for exceeding emission limits of various air pollutants" and "the number of incidents of abnormal large emissions" are listed as important performance indicators. A review meeting is held annually to review and improve. • TTC continuously strives to reduce the impact of the waste it discharges on environmental pollution and human health, and through the addition of new equipment, updates, and recycling and reusing waste to reduce the amount of waste. The waste is entrusted to legal companies for clean-up, achieving a 100% proper treatment rate for waste. • External entities can make environmental, health and safety-related complaints by phone (07-7040988), verbally, or in writing. 	<ul style="list-style-type: none"> • In 2022, 59% of new hires at Taiwan factory were local talents • The company donated NT\$2.02 million to care for the local community in Linyuan District • "Air Quality Purification Zone Adoption" at Zhongyun Elementary School in Linyuan District of Kaohsiung City, received a letter of thanks from Zhongyun Elementary School • TTC's Linyuan factory responded to the Kaohsiung City Government's Environmental Protection Bureau's promotion of energy-saving and carbon-reduction guidance and cross-departmental greenhouse gas reduction work • Assisted Linyuan District in promoting local customs and marketing agricultural and fishery specialties • Participated in the Southern Public Welfare Softball Game of the group, sponsored the charity activity of ordering meals from the Children Are Us Foundation • Participated in a joint donation activity for epidemic prevention protective clothing with friendly factories such as USI Corporation and the Kaohsiung City Government's Environmental Protection Bureau • Regular visits to neighborhood heads in the community
 Government agencies	<p>Government agencies are important indicators for business development and market expansion. Complying with and responding to the regulations of government agencies is a basic principle of business operations</p>	<ul style="list-style-type: none"> • City/County Government Departments: Official document correspondence • Inspection as needed, on-site inspection, announcement • Government department briefings, public hearings, etc.: Participate irregularly • Public Information Observation Station: Disclosure as required • Toxic Chemical Substances Report System of the Environmental Protection Administration of the Executive Yuan: Reporting as required 	<ul style="list-style-type: none"> • Legal compliance • Energy Consumption and Management • Air pollution control • Waste management 	<ul style="list-style-type: none"> • Regularly review the latest legal information and assess the compliance of the Company Act. If any non-compliance is identified, immediate review and improvement are carried out. • Implement energy conservation and carbon reduction plans in accordance with the latest energy management policies of the government, and establish and plan the energy management system. • Follow legal regulations, report and record in accordance with the law, implement inspection and patrol of air pollution control facilities and measures. • Properly handle waste disposal. 	<ul style="list-style-type: none"> • Ranked among the top 5% of listed companies in the small and medium market cap group in the 2022 Corporate Governance Evaluation. • Regular communication and official correspondence with relevant departments of the local government.

Material Topics Management

1. Process for determining major issues GRI 3-1

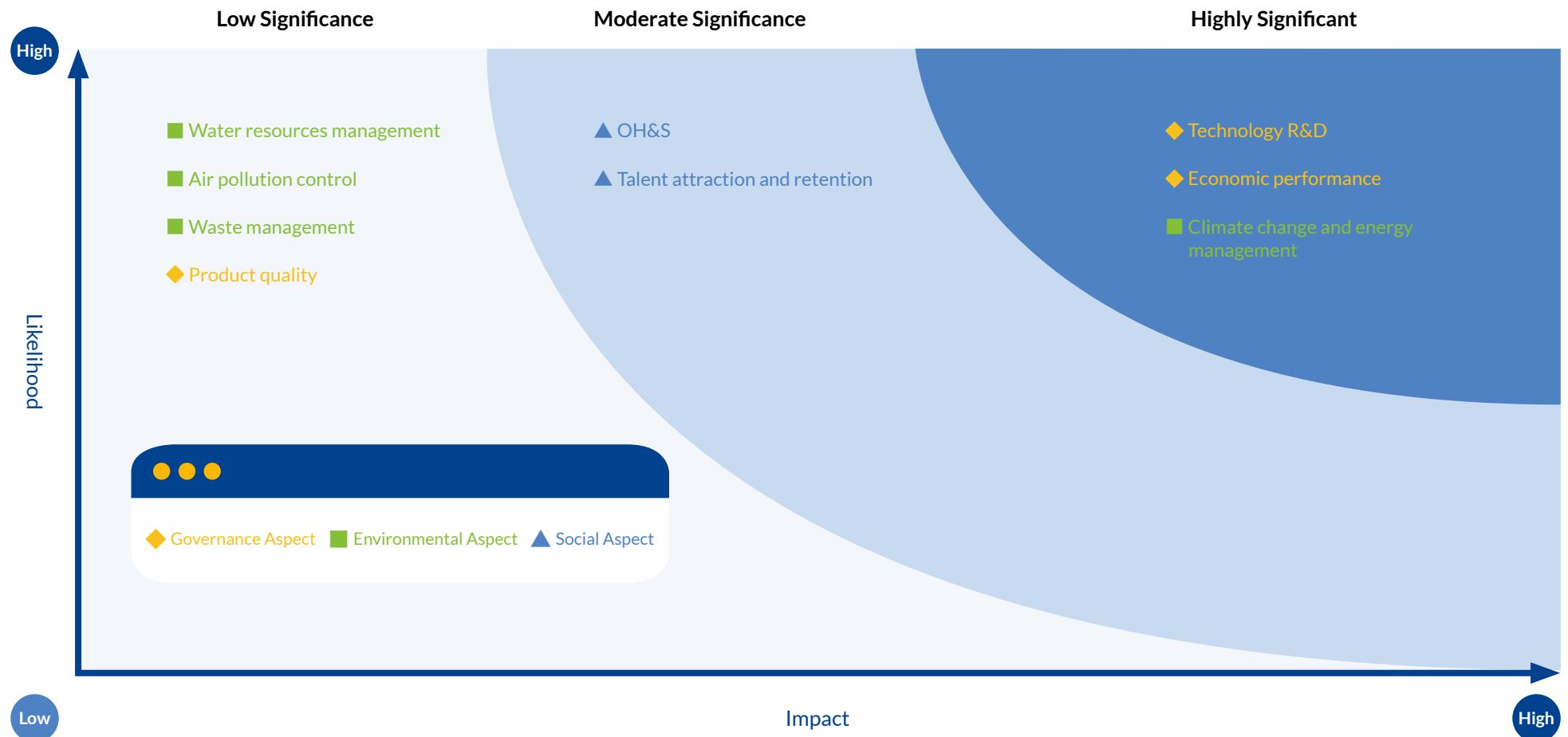


2022 List of Major Issues GRI 3-2

ESG Management Aspect	Material Topics	Consideration Aspect	Significant Impact Issues
 (E) Environmental Aspect	Climate Change and Energy Management (GRI 302 Energy)	Negative Impact	Insufficient electricity supply - Production disruption
		Positive Potential Impact	Development of carbon capture and storage technologies - Accomplished the carbon neutrality goal.
		Positive Potential Impact	Investment in renewables - Accomplished the green electricity goal.
	Water Resources Management (GRI 303 Water and Effluents)	Negative Impact	Insufficient water in reservoirs - Production disruption
	Air Pollution Control (GRI 305 Emissions)	Continuation of short, medium, and long-term goal setting for major issues in 2021, ongoing management tracking	
Waste Management (GRI 306 Waste)	Continuation of short, medium, and long-term goal setting for major issues in 2021, ongoing management tracking		
 (S) Social Aspect	Talent Attraction and Retention (GRI 401 Employment)	Negative Impact	Difficult talents recruitment - Insufficient workforces
		Positive Potential Impact	Achievement of a happy workplace business - Enhanced the organizational commitment of employees.
	Occupational Safety and Health (GRI 403 Occupational Health and Safety)	Negative Impact	Inexact safety management of manufacturing process - Causing accidents
		Positive influence	Building a friendly workplace environment - Reduced employee turnover rate and the occurrence rate of work-related accidents.
 (G) Governance Aspect	Economic Performance (GRI 201 Economic Performance)	Negative Impact	Rising energy costs - Increased electricity bills
		Negative Potential Impact	Levy of carbon fee - Increased production costs
		Negative Potential Impact	Tightened regulatory limitation on industry development - -Plant shutdown
		Negative Potential Impact	Levy of water conservation charge - Increased production costs
	Technology R&D	Positive influence	New product development and product diversity - Eco-friendly materials and entry into new industries.
		Positive Potential Impact	Implementation of AI and other advanced technologies - Enhanced efficiency and improved quality
		Positive Potential Impact	Manufacturing transformation - Ridded industry burdens towards the development of a high-quality, low-pollution industry.
		Positive Potential Impact	Success in the development of sustainable materials - Increased revenues.
Product quality	Continuation of short, medium, and long-term goal setting for major issues in 2021, ongoing management tracking		

Based on the results of the questionnaire survey in December 2022, statistical analysis, discussion, and identification were conducted for each issue in terms of 'stakeholder concern' and 'impact on TTC. This led to the completion of the 2022 Materiality Matrix for TTC, focusing on six major issues with high probability and high impact: Economic Performance, Technological R&D, Climate Change and Energy Management, Water Resource Management, Talent Attraction and Retention, and Occupational Health and Safety. In December 2022, after discussions within the ESG group, Product Quality, Air Pollution Control, and Waste Management were deemed important impact factors, hence they were added to the list of major issues. This resulted in a total of 9 items, which were prioritized for disclosure and response in the 2022 Sustainability Report.

The materiality analysis determined the nine major issues. Depending on the impact and the likelihood of occurrence, they were categorized into high, medium, and low levels of significance to determine the ranking of major issues, corresponding to specific GRI standard topics and topic boundaries:



3. Material Topics and Value Chain

Through the evaluation of the Sustainable Development Committee, major issues highly impacting corporate governance, environment, and society, and highly concerning stakeholders were identified. The corresponding GRI specific standard topics were identified, with priority given for response and explanation in the report.

Direct Impact Indirect Impact

Sustainable Principles	Material Topics	Significance and Major Reasons	GRI Standards Topic	Value Chain				Response
				Supply Chain	Operational	Product	Social	
Establish Robust Governance	Economic Performance	The company's operational performance is a significant factor supporting sustainable business development	GRI 201 Economic Performance: 2016					1.2 Financial Performance
Develop an innovative supply chain	Product Quality	Improve quality through efforts and innovative technologies to ensure that all product quality meets customer requirements and expectations	Self-defined Topics					2.1 Product Quality
	Technology R&D	The ability to develop new product technologies can grasp market trends and enhance market competitiveness, creating high value and sustainable operation for the company	Self-defined Topics					2.2 Technology R&D
Create a friendly environment	Climate Change and Energy Management	The dramatic climate changes caused by climate change and the increasing probability of extreme weather have a significant impact on operations	GRI 302 Energy: 2016 GRI 305 Emissions: 2016					3.2 Climate Change and Energy Management
	Water Resources Management	In recent years, due to global climate change, the risks of water shortage and flooding have increased. The use of water resources also involves the impact of production costs and wastewater emissions on the environment	GRI 303 Water and Effluents: 2018					3.3 Water Resources Management
	Air Pollution Control	1. Total air pollutant control has been implemented in the Kaohsiung and Pingtung areas, directly affecting Linyuan and Qianzhen factories 2. After the "Greenhouse Gas Reduction and Management Act" was implemented, it directly impacts each factory's energy-saving and carbon reduction planning and compliance with government regulations	GRI 305 Emissions: 2016					3.4 Air Pollution Control
	Waste Management	Existing waste landfill sites are becoming saturated, and it is not easy to find qualified waste treatment companies, impacting the treatment of industrial waste in various factories	GRI 306 Waste: 2020					3.3 Water Resource Management 3.5 Waste Management
Creating an Inclusive Society	Talent Attraction and Retention	Quality human assets are one of the key success factors for a company. Utilizing talent appropriately and providing a reassuring work environment allows employees to fully demonstrate their expertise and achieve their potential	GRI 401 Employment: 2016					4.1 Talent Attraction and Retention
	OH&S	A healthy and safe working environment is the primary labor condition requirement for workers	GRI 403 Occupational Health and Safety: 2018					4.3 Occupational Safety and Health

United Nations Sustainable Development Goals (SDGs)

TTC believes that as a member of the global community, sustainable development needs to start from core values and be combined with the United Nations Sustainable Development Goals. We have conducted SDGs relevance identification in three stages and have set related goals incorporated into our operational plan.

1. SDGs Identification Process

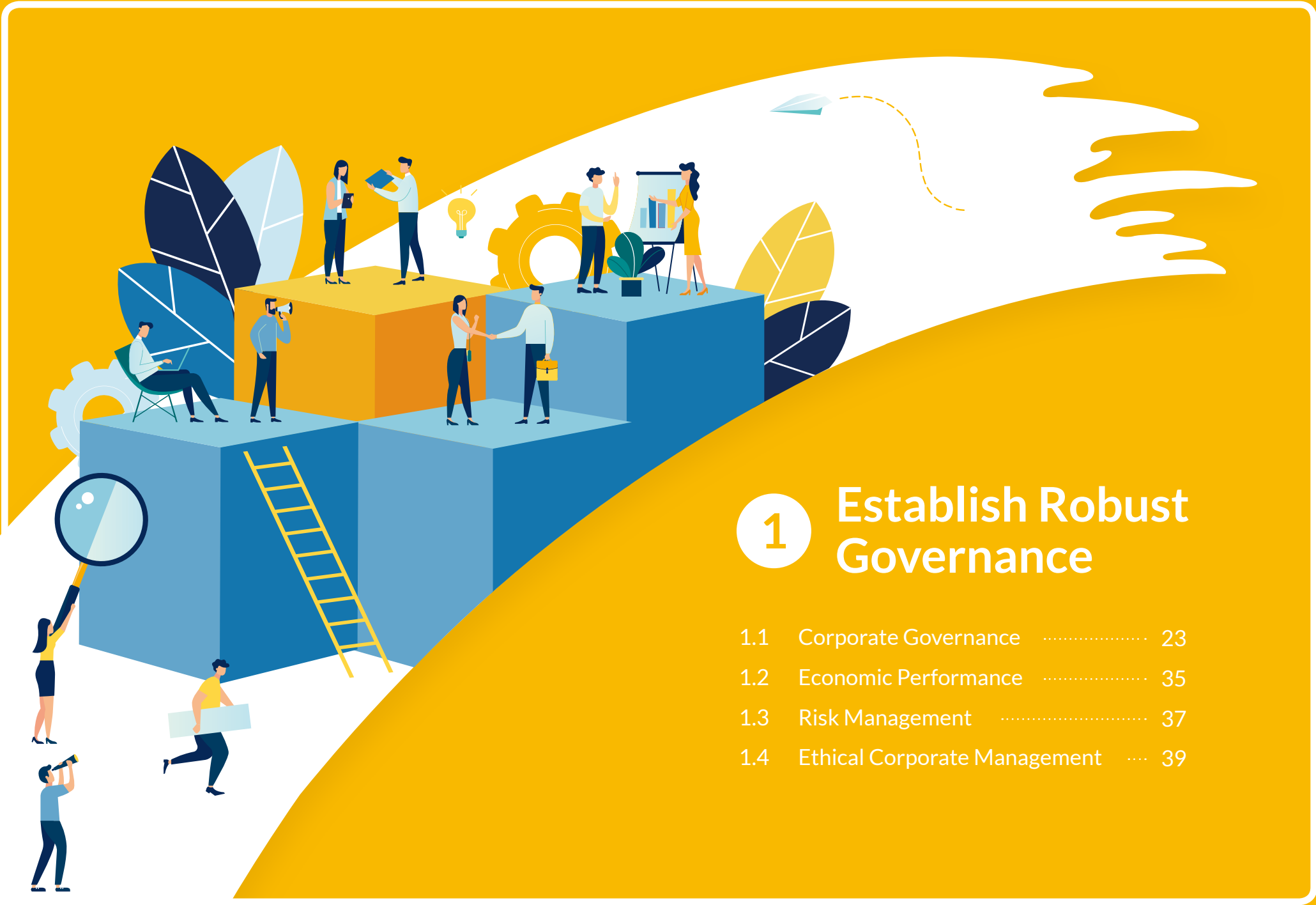


2. Linking Major Issues and SDGs

Aspects	Material Topics	SDG Targets	Detailed Indicators
Governance	Economic Performance	8 DECENT WORK AND ECONOMIC GROWTH	8.1, 8.3
	Technology R&D	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.4
	Product Quality	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2, 12.4
Environmental	Climate Change and Energy Management	13 CLIMATE ACTION	13.2, 13.3
	Water Resources Management	6 CLEAN WATER AND SANITATION	6.3, 6.4
	Air Pollution Control	11 SUSTAINABLE CITIES AND COMMUNITIES	11.6
	Waste Management	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.4, 12.5
Social	Talent Attraction and Retention	8 DECENT WORK AND ECONOMIC GROWTH	8.5
	OH&S	3 GOOD HEALTH AND WELL-BEING	3.9, 3.d

3. Linking SDGs and Corporate Sustainability Goals

SDGs	Detailed Indicators	2030 Goals	2022 Goals	2022 Goal Completion Status	Corresponding Section
	3.9	Number of disabling injuries:0	Number of disabling injuries:0	In 2022, the total number of disabling injuries in Taipei and all factories was 0, achieving the goal	Chapter 4.3
	6.3 6.4	1. Reduce water consumption per unit product by 10% 2. Discharge water quality meets the standard	1. Reduce water consumption per unit product by 3% 2. Discharge water quality meets the standard	1. In 2022, the water consumption per unit product was reduced by 23.6% or less, achieving the goal 2. In 2022, no water quality exceedance events occurred in all factories, achieving the goal	Chapter 3.3
	8.5	Maintain profitability every year	Maintain profitability every year	In 2022, the net operating profit reached NT\$410 million, maintaining profitability and achieving the goal	Chapter 1.2
	8.6	Reduce turnover rate, goal below 7.0%	Reduce turnover rate, goal below 7.5%	The actual turnover rate in 2022 was 10.75%, not achieving the goal. In 2022, the company made policy-based layoffs of some units, with 7 people handling severance or retirement and actual retirement of 19 people. If the above 26 people are deducted, the turnover rate is 5.57%, achieving the goal	Chapter 4.1
	9.4	1. Wood floor glass wool sound insulation system is applied to the new collective housing projects of construction companies 2. ABS product basic performance improvement (rubber particle size concentration) 3. EPS process optimization	1. Improve basic ABS performance, reduce high rubber powder content > 1.0% 2. Improve the preservation of fast-grade EPS, solve the problem of pre-foaming agglomeration	In 2022, all goals were achieved: 1. The general grade ABS can reduce high rubber powder content by 1.7%. The appearance of customer injection molded products is OK 2. Fast-grade EPS preservation improved > 5%, no problem of pre-foaming agglomeration	Chapter 2.2
	11.6	The number of fines for exceeding the limit of air pollutant emissions is 0	The number of fines for exceeding the limit of air pollutant emissions is 0	In 2022, the number of fines for air pollution was 1, Lin Yuan Factory had one, and the goal was not achieved	Chapter 3.4
	12.5	The customer satisfaction of Lin Yuan Factory and Qianzhen Factory products is $\geq 93\%$, the customer satisfaction of Zhongshan Factory EPS is $\geq 89\%$, and the customer satisfaction of Toufen Factory glass wool is $\geq 92\%$	The customer satisfaction of Lin Yuan Factory and Qianzhen Factory products is $\geq 93\%$, the customer satisfaction of Zhongshan Factory EPS is $\geq 86\%$, and the customer satisfaction of Toufen Factory glass wool is $\geq 90\%$	In 2021, the product customer satisfaction of Lin Yuan Factory and Qianzhen Factory was 93%; Zhongshan Factory was 89%; Toufen Factory glass wool was 94%, all meeting the target	Chapter 2.1
		Implementing waste reduction	Strengthen the waste patrol inspection system; The proper treatment rate of waste is 100%	In 2022, the waste patrol inspection system was strengthened, a total of 17 inspections were conducted, and the generation and proper treatment rate of waste counted by each factory was 100%, achieving the goal	Chapter 3.5
	13.3	1. Reduce energy consumption per unit product by 5% 2. Reduce greenhouse gas emissions by 27%	1. Reduce energy consumption per unit product by 3% 2. Greenhouse gas emissions reduced by 7.16% compared to the base year	1. In 2022, the energy consumption per unit product was reduced by 7.39%, achieving the goal 2. In 2022, greenhouse gas emissions were reduced by 17.56% compared to the base year, achieving the goal	Chapter 3.2



1

Establish Robust Governance

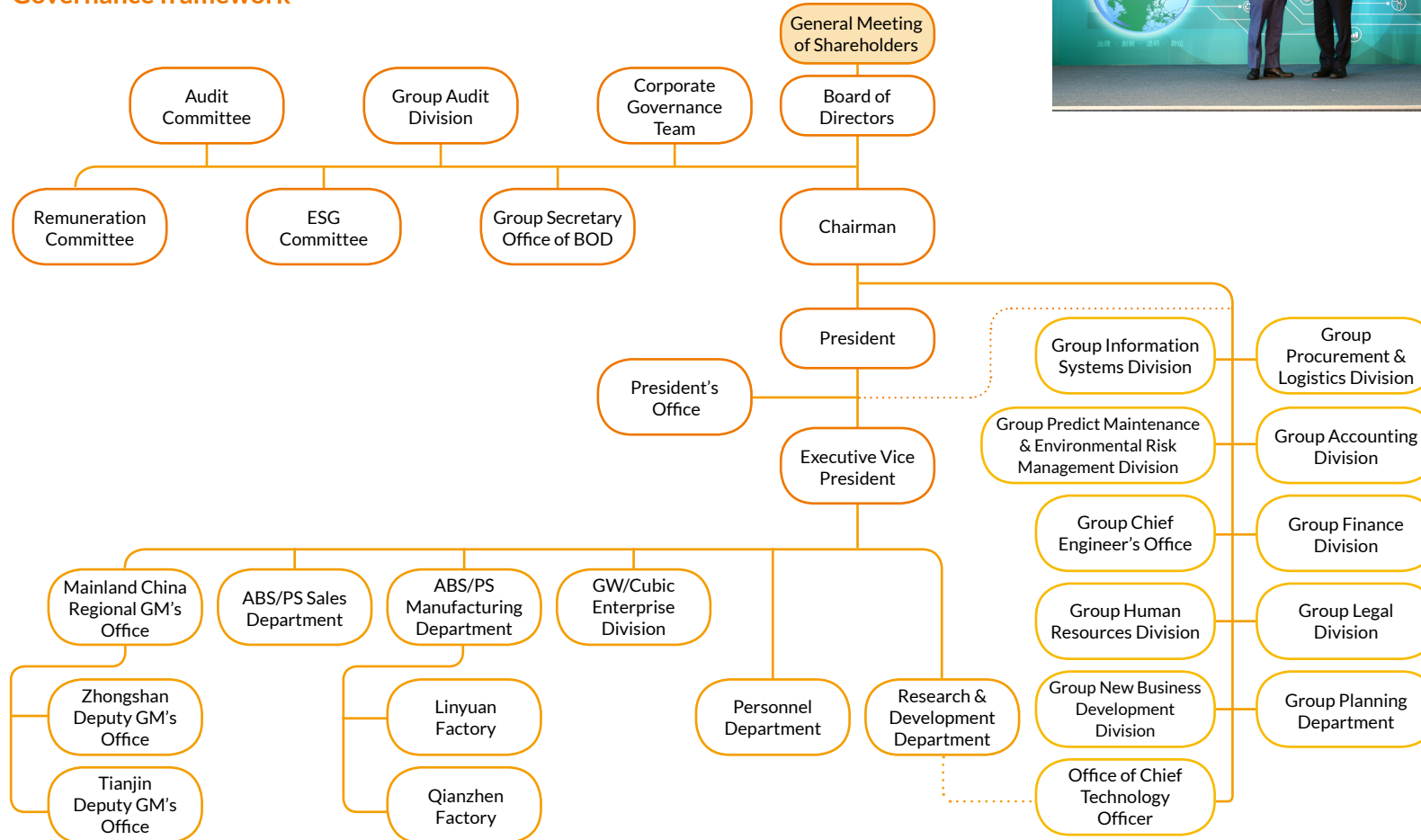
- 1.1 Corporate Governance 23
- 1.2 Economic Performance 35
- 1.3 Risk Management 37
- 1.4 Ethical Corporate Management 39

1.1 Corporate Governance

1.1.1 Governance framework

In the ninth annual 2022 corporate governance evaluation for listed companies, those with a market value of NT\$5 billion to NT\$10 billion are in the top 5%, while the evaluation results of listed companies are between the top 6% to 20%. TTC will continue to be committed to protecting shareholder rights, treating shareholders equitably, strengthening the structure and operation of the board of directors, enhancing information transparency, and implementing sustainable development. Additionally, the company will assist investors and businesses in understanding the effectiveness of the company's governance implementation.

Governance framework



1.1.2 Selection and Operation of the Board

GRI2-9~GRI 2-21

The Board of Directors (Board) is formed by nine directors, with rich experience in respective professional fields and 11% of directors are female. Four independent directors have been appointed among the board seats, with independent directors occupying 44% of the board's composition. The term of each director is three years, and each director is entitled to a second term. We adopt the candidate nomination system for the directorial (including independent directors) election. The Board along with shareholders holding over one percent of the total issued shares may propose the candidates to add to the List of Candidates for Directors and Independent Directors. After candidate qualification by the Board, the List of Candidates for Directors and Independent Directors is presented at the AGM for shareholders to vote on. In 2022, we held a total of six Board meetings, and the attendance of directors (including independent directors) was 98.15% (or 100% including proxy attendance).

Please refer to page 27 of TTC's 2022 Annual Report for detailed information on the how the board of directors operates.

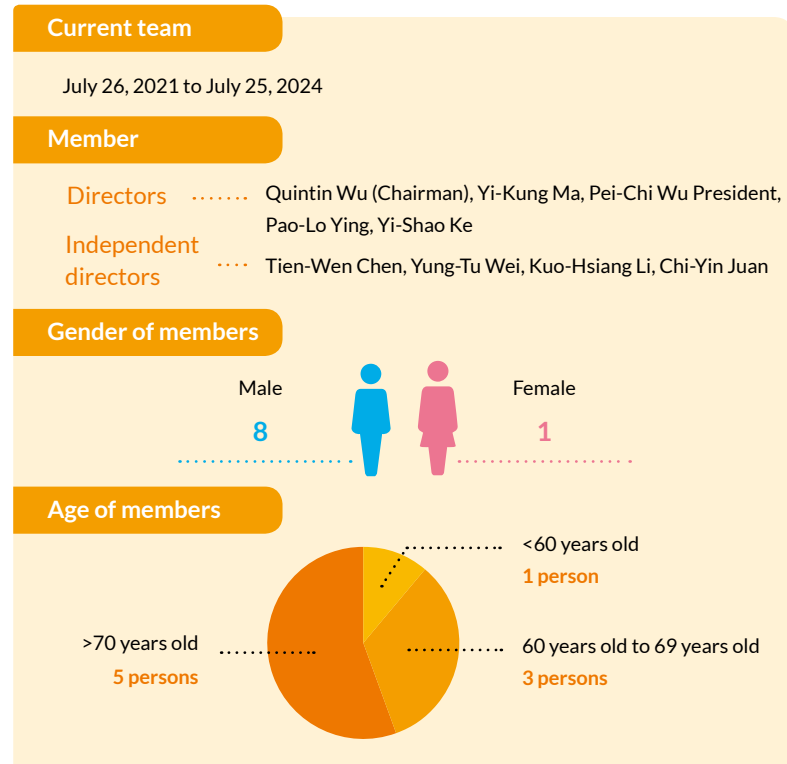
The chairman convenes and chairs at least one board meeting each quarter (please refer to [the Rules of Procedure of Meetings of Board of Directors](#)). Under the Board there are functional meetings including the Remuneration Committee, Audit Committee, and ESG Committee. Each committee holds committee meetings to report, discuss, and resolve proposals before referring them to the Board for report, discussion, and resolution.

Board proposal submission process flow



After the meeting, functional committees and the Secretary Office of the Board produce the meeting minutes containing the procedure and resolution of meetings. We have established the Secretary's Office under the Board to plan and prepare matters relating to the Board meeting so as to enhance the efficiency of board meetings and help implement Board resolutions.

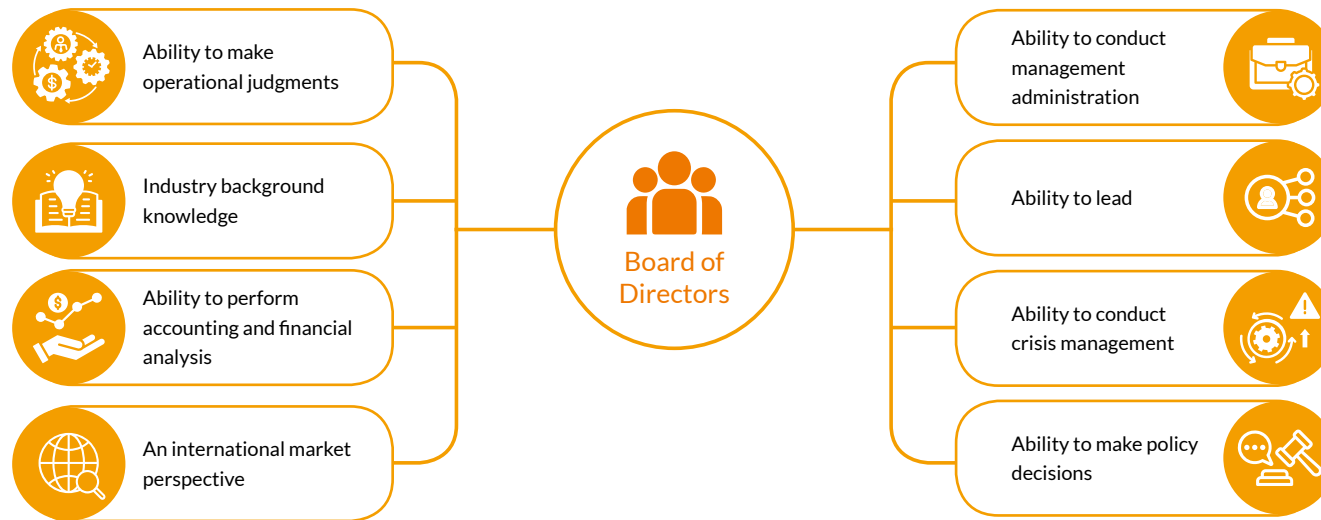
[Important Board resolutions](#) of 2022 (please visit our corporate [website](#) or refer to our [annual report](#)) (GRI 2-16)



Performance of the board member diversity policy GRI 2-10

I. Performance of the board diversity policy

According to Article 20 of the company's "[Corporate Governance Regulations](#)", the composition of the board of directors should be diversified. In addition to the knowledge, skills and experience required for performing their duties, current board members are equipped with expertise in accounting and finance, international market, law, and environmental protection. To achieve the ideal goal of corporate governance, the board of directors shall possess the following abilities:



In addition to the aforementioned eight required abilities, considering the growing global emphasis on corporate governance and environmental protection issues, it is hoped that the board members will possess expertise in the fields of "Law" and "Environmental Protection" to enhance board diversity. In addition to the knowledge, skills and experience required for performing their duties, current board members are equipped with expertise in accounting and finance, international market, law, and environmental protection.

II. Targets for management of board diversity

The current board of directors were elected on July 26, 2021. Among the two newly appointed director, Yung-Tu Wei, an independent director, holds a master’s degree in business management from Georgetown University in the US. He previously served as the president of Deloitte and possesses professional qualifications in accounting or relevant financial management expertise. Kuo-Hsiang Li, an independent director, holds a master’s degree in business management from the University of Chicago in the US. He currently serves as the chairman of Shiseido Taiwan. He possesses skills in business management, international markets, and leadership decision-making. Both new directors contribute to enhancing the quality of board review and meeting the objectives of implementing board member diversity. In the future, a director with professional experience in sustainability development will be the next target for board diversity. Such experience can help us realize the carbon reduction goal and implement the green power policy. A director specializing in operational risk control is another target to enhance our corporate competitiveness. With such an establishment, the Board functions will be more complete.

III. Performance of the board member diversity policy GRI 2-17

For details on the diversity of board members, please refer to the table below. Among them, Director Yi-kung Ma is female:

Name of Directors	Gender	Diversity of Core Competence									
		Operational judgments	Accounting finance	Management administration	Crisis management	Industry background knowledge	International market	Ability to lead	Ability to make policy decisions	Law	Eco-friendly
Quintin Wu	Male	●	●	●	●	●	●	●	●		
Yi-Kung Ma	Female	●	●		●				●		●
Pei-Chi Wu	Male	●		●	●	●	●	●	●		
Pao-Lo Ying	Male	●		●	●	●	●	●	●		●
Yi-Shao Ke	Male	●		●	●	●	●	●	●		
Tien-Wen Chen	Male	●	●	●	●		●	●	●		
Yung-Tu Wei	Male	●	●	●	●	●	●	●	●		
Kuo-Hsiang Li	Male	●	●	●	●		●	●	●		
Chi-Yin Juan	Male	●		●	●				●	●	

※ Currently, 22% of directors are also employees, and 44% of them are independent directors.

※ Five directors are over 70 years old, 3 are between 60 and 69 years old, and 1 is under 60 years old.

※ Four independent directors have not served more than three consecutive terms.



Professional competence enhancement of directors in 2022 GRI 2-17

To improve the professional competence of directors, we provided information of related further education courses for directors and assisted them with the registration. We arranged a total of six hours of internal continuing education courses, including the 3-hour “Risks and opportunities for corporate operations of climate change and the net zero emissions policy” course given by Director Tsai-Yi Wu of Taiwan Research Institute (TRI) on July 14, 2022 and the 3-hour “Takeover and Introduction to the Commercial Case Adjudication Act” course given by Yung-Chin Hsu, attorney-at-law and partner of PwC Legal, on October 13, 2022. In 2022 we arranged 58 hours of external continuing education courses for all directors and independent directors. All 9 directors (including independent directors) completed training for the length (hours) as stipulated in the Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies.

Please refer to pages 32–33 of TTC’s 2022 Annual Report for detailed information on the courses and their duration.



Avoidance of conflicts of interest of directors GRI 2-11, GRI 2-15

For directors to avoid conflicts of interest (including impact on the economy, environment, and people), the Board has established complete systems and measures, as following:

Systems and measures

1. System for avoidance of interest
 - (1) To ensure positive governance and for the Board to understand matters causing conflicts of interest with the organization so as to protect the rights and interests of investors, we have specified in Article 16 of the Rules of Procedure for Meetings of Board of Directors: "If a director or a legal person that the director represents is an interested party in relation to an agenda item, the director shall state the important aspects of the interested party relationship at the respective meeting. When the relationship is likely to prejudice the interest of this Corporation, that director may not participate in discussion or voting on that agenda item and shall recuse himself or herself from the discussion and the voting on the item and may not exercise voting rights as proxy for another director".
 - (2) To reinforce disclosures of directors' involvement in proposals or situations having interests in themselves, we have also specified in Article 17 of the Rules of Procedure for Board of Directors Meetings: "Discussions at a board meeting shall be recorded in detail in the meeting minutes, the name of director(s) involving a conflict of interest, an explanation of the important aspects of the relationship of interest, the reasons why the director was required or not required to avoid the conflict of interest".
 - (3) To develop sound corporate governance and independent director systems so that independent directors may demonstrate their functions on the Board and in corporate operations, we have established the "[Rules Governing the Scope of Powers of Independent Directors](#)" to stipulate that: "When an independent director expresses objections or reservations about any of the matters, they shall be recorded in the board meeting minutes", "the Company shall not obstruct, refuse, or avoid the actions of independent directors in business execution", and "as they deem necessary for business execution, independent directors may request the board to appoint relevant personnel or may hire by themselves professionals for assistance" to enable independent directors to carry out their duties so as to effectively enhance the efficiency of Board operation and improve the Company's operational performance.
2. Measures for avoidance of conflicts of interest: When discussing a proposal constituting a conflict of interest for one or more directors, the meeting chair shall remind such directors to recuse themselves from the discussion. If the chair should also be recused, she/he shall assign a director having no conflict of interest with the proposal to act as the chair.
3. The secretary unit of the Board has recorded contents involving conflicts of interest with directors in the board meeting minutes in accordance with Article 17, the Rules of Procedure for Meetings of Board of Directors.
4. To address the avoidance of conflicts of interest, the Board has established complete systems and measures (please refer to the Code of Ethical Conduct for Directors and Managerial Officers, Ethical Corporate Management Best Practice Principles, and Procedures for Ethical Management and Guidelines for Conduct).

Our performance in avoidance of conflicts of interest in proposals in 2022

Name of Directors	Proposal	Reasons for Avoidance	Participation in voting	Term for the Board of Directors
Quintin Wu Pei-Chi Wu	Proposal of abolition of non-compete restriction on directors.	Directors recusing themselves from the proposal were also the directors with non-compete restrictions.	Abstained from voting	First time in 2022
Quintin Wu Yi-Kung Ma Pei-Chi Wu	Donation to the USI Education Foundation	Directors recusing themselves from the proposal were also the directors of the Foundation.	Abstained from voting	
Quintin Wu	Equipment procurement from related parties.	Directors recusing themselves from the proposal were also the directors of those related parties.	Abstained from voting	Second time in 2022
Pei-Chi Wu	Non-compete behavior of managerial officers.	A conflict of interest with directors.	Abstained from voting	Fourth time in 2022
				Fifth time in 2022
				Sixth time in 2022



Board performance assessment GRI 2-18

I. Results of performance evaluation of the Board and directors in 2022

- In accordance with the “Regulations for Performance Evaluation of the Board of Directors” amended and passed by the Board in November 2019, the performance of the Board and directors Self-Evaluation or Peer Evaluation in the year should be evaluated after the end of each fiscal year.
- The Board Secretary Office conducts the performance evaluation of the Board and individual directors by means of self-assessment. The results of performance evaluation will serve as the reference of corporate reviews and improvements and the reference for the remuneration and nomination for election of individual directors.
- The company completed performance evaluation for the year 2022 in January 2023. The evaluation period was from January 1, 2022 to December 31, 2022. The results of evaluation are consolidated as follows:

	Aspect of Evaluation	Score*	Results of evaluation and supplementary notes
	Participation in the company's operations.	4.83	<ol style="list-style-type: none"> The results of the overall Board performance evaluation show that the average score of the five major aspects is 4.6, which means "good". The unstable international situations and the continuation of the Russo-Ukrainian War and pandemic in the last year all affected corporate operations. Facing the uncertain future political and economic conditions, the Board and management should keep close track on the various challenges and risks that the Company faces and supervise all responsible units to propose countermeasures. Additionally, to achieve corporate sustainable development, we will continue to implement carbon reduction and plan green power solutions to meet the international standards.
	Improvement of the decision quality of the board of directors.	5	
	Composition and structure of the board of directors.	5	
	Selection and continuing education of directors.	4.67	
	Internal control	5	
	Corporate targets and mission control	4.81	The results of director self-assessment show that the average score of all six major aspects is over 4.5, which means "good".
	Duty awareness of directors	4.83	
	Participation in the company's operations.	4.70	
	Internal relationship development and communication	4.56	
	Expertise and continuing education of directors.	4.74	
	Internal control	4.81	

*Score range: 0-5, 5 is the highest.

- The overall results of 2022 performance evaluation of the Board and individual directors were reported to the 2023 Q1 board meeting.

II. Performance Evaluation of the Audit Committee and the Remuneration Committee

The company completed a performance evaluation in January 2023, with the assessment period being from January 1, 2022 to December 31, 2022. The results of evaluation are consolidated as follows:

	Aspect of Evaluation	Score*	Assessment result
<p>Performance assessment of the Audit Committee</p>	Participation in the company's operations.	5	In the performance assessment of the Audit Committee, the average score of all major aspects is over 4.9, suggesting the performance is good.
	Duty awareness of the Audit Committee	4.95	
	Improvement of the decision-making quality of the Audit Committee	5	
	Composition and member selection of the Audit Committee	4.92	
	Internal control	4.92	
<p>Performance assessment of the Remuneration Committee</p>	Participation in the company's operations.	4.83	The results of performance evaluation of the Remuneration Committee show that the average score of all four major aspects is over 4.8, which means "good".
	Duty awareness of the Remuneration Committee	4.93	
	Improvement of the decision-making quality of the Remuneration Committee	4.95	
	Composition and member selection of the Remuneration Committee	5	

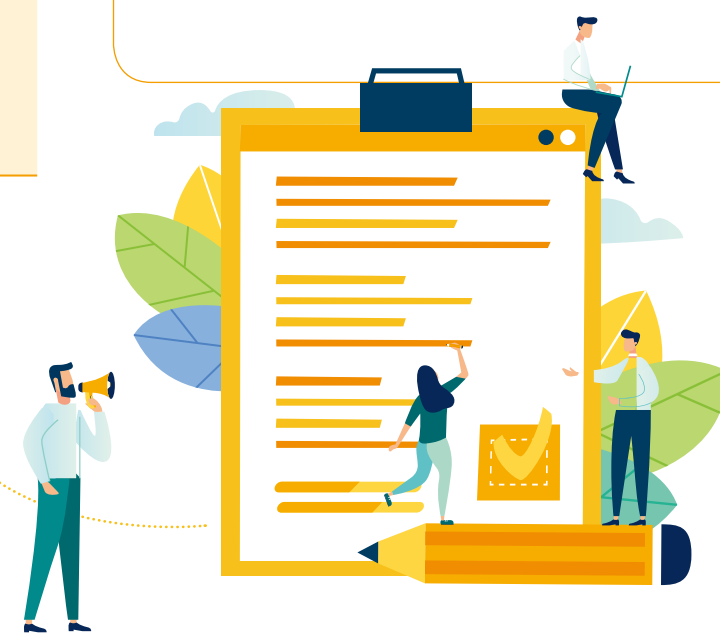
*Score range: 0-5, 5 is the highest.

1. The results of 2022 performance evaluation of functional committees were reported to the 2023 Q1 board meeting.

Recommendation and implementation

In view of the increasing global attention to ESG issues, we have substantively implemented various measures in accordance with the Corporate Governance 3.0 Sustainability Roadmap published by the competent authorities. We have also reported those measures to the ESG Committee meeting and Board meeting to explain to the directors, who have also made valuable suggestions to those measures.

Apart from continuously enhancing corporate governance, we have also planned carbon reduction targets and implemented carbon reduction and planned and implemented green power development strategies to meet the international standards so as to achieve the ultimate goal of corporate sustainable development.



Chief corporate governance officer

To protect the rights and interests of shareholders and improve the competence of the board of directors, the Board made a resolution on May 9, 2019 to assign Director of Legal Division, Erik Chen to be the Chief Corporate Governance Officer as the top officer of USI's corporate governance. Director Erik Chen has over seven years of experience serving in senior legal roles for publicly listed companies. His primary responsibilities include legally handling matters related to the board of directors' meetings and shareholders' meetings, preparing minutes for the board of directors' and shareholders' meetings, assisting directors in taking office and continuing education, providing directors with the necessary information for their duties, and helping directors comply with laws and regulations.

Key focus areas for the Chief Corporate Governance Officer for 2022

1. Assist directors in performing their duties, provide necessary information, arrange for director training, and handle liability insurance.
2. Manage the procedural aspects of board of directors' and shareholders' meetings and ensure resolutions comply with regulations.
3. Maintain investor relations.

In 2022, our Chief Corporate Governance Officer Erik Chen, who also serves as the Director of Legal Division, underwent 43 hours of training. Please refer to page 33 of TTC's 2022 Annual Report.



Functional Committees

Under the Board, we have established three functional committees: Audit Committee, Remuneration Committee, as well as the ESG Committee to establish and review policies that relate to the responsibility and authority of each committee in an effort to strengthen corporate governance.

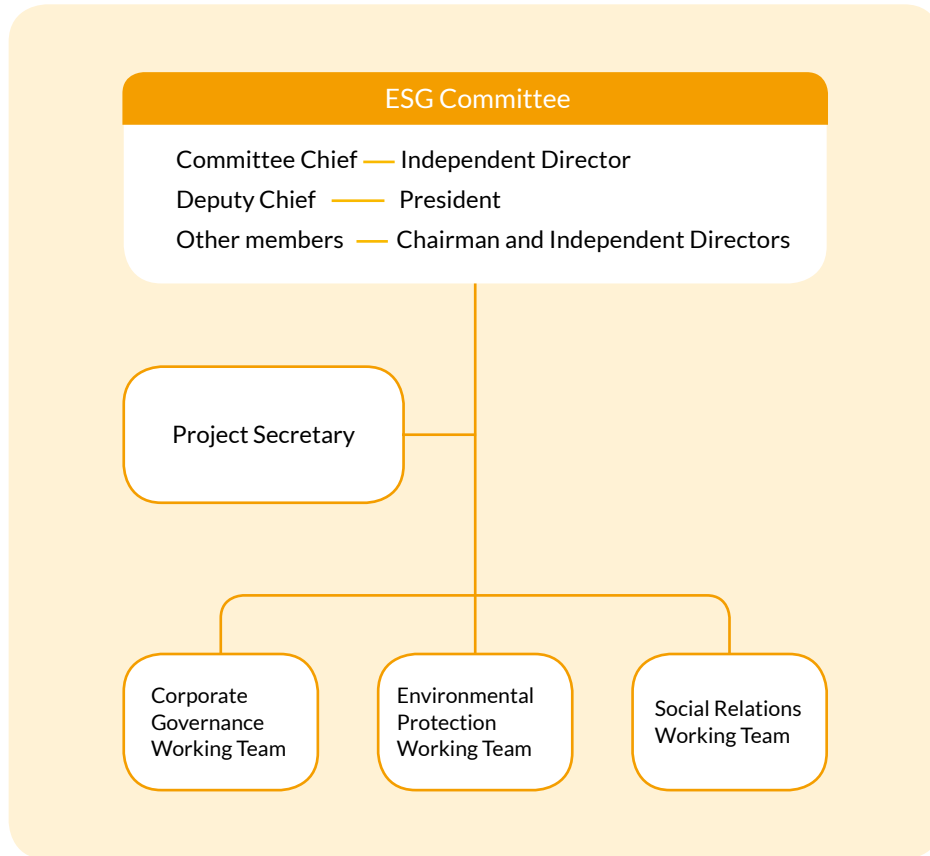
Title	Name	Audit Committee	Remuneration Committee	Approval by members of the ESG
Chairman	Quintin Wu	—	—	Committee
Director	Pei-Chi Wu	—	—	Deputy Chief
Independent Director	Tien-Wen Chen	Convener	Committee	—
Independent Director	Yung-Tu Wei	Committee	Convener	—
Independent Director	Kuo-Hsiang Li	Committee	—	Committee
Independent Director	Chi-Yin Juan	Committee	Committee	Chief

ESG Committee

GRI 2-13, GRI 2-14, GRI 2-16

To strengthen corporate governance, TTC, on December 22, 2017, with the approval of the board of directors, elevated the Corporate Social Responsibility Committee to a functional committee of the board of directors. The committee consisted of 4 members: the chairman, the general manager, and 2 independent directors, 1 of whom is a chief committee member. On March 9, 2022, the board of directors resolved to change the name of the "Corporate Social Responsibility Committee" to the "ESG Committee". The ESG Committee has set up three working teams for "Corporate Governance", "Environmental Protection", and "Social Relations", and has designated one project secretary.

TTC ESG Committee Organizational Chart



The ESG committee meets twice a year, with various units providing sustainability-related information (including stakeholder identification results, focal issues and responses, significant topics, ESG plans and execution results, and other sustainability-related matters) to the ESG team leaders for consolidation. The project secretary then reports to the ESG Committee and submits it for approval to the board of directors. The board of directors oversees and reviews the management and performance in governance, environmental, and social dimensions and provides guidance on strategy and direction for key pivotal issues.

For the board's actions on supervising sustainability performance: Please refer to page 54 of TTC's 2022 Annual Report.

ESG Committee Working Team's Annual Execution Highlights and Plans for the Following Year:

ESG achievements reported to the board in 2022:

1. Completed greenhouse gas inventory and verification operations for Linyuan, Qianzhen, and Toufen plants.
2. Promoted energy-saving and carbon reduction plans for the Linyuan, Qianzhen, and Toufen plants.
3. Awards: Selected as one of the top 100 enterprises for "Carbon Competitiveness" by Business Weekly in 2022, Toufen plant was shortlisted for the 2022 Ministry of Economic Affairs Energy-saving Benchmark Award, Received the Gold Award at the TCSA 2022 Taiwan Corporate Sustainability Reporting Awards, Qianzhen plant was awarded for achieving 4,000 safe working days in 2022 by USI Group.
4. Published the 2021 ESG Report in August 2022.



Work plan for 2023

1. Expand carbon inventory to Zhongshan and Tianjin plants included in consolidated financial statements.
2. Continue promoting energy-saving and carbon reduction plans across all plants.
3. Continue participating in corporate sustainability evaluation activities.
4. Continue involvement in community welfare activities.
5. Continue to implement various ISO systems.
6. The 2022 ESG Report is scheduled for release in June 2023.



Remuneration Committee GRI 2-19,GRI 2-20,GRI 2-21



1. The term of the current committee commenced on August 4, 2021 and will end on July 25, 2024. All three seats of the committee are taken by independent directors.

2. The Remuneration Committee holds at least two committee meetings each year. Three committee meetings were held in 2022, and the personal attendance rate of members was 100%. Please visit our corporate website, refer to our annual report, or visit the Market Observation Post System (MOPS) for the details regarding the operations of this committee.

3. Apart from periodically reviewing the
 - (1) performance evaluation and
 - (2) salary and remuneration policy, system, standard, and structure of directors and managerial officers, the Remuneration Committee also determines and assesses the salary and remuneration of directors and managers with reference to the median earnings in the industry; the duration of engagement, duty, and target accomplishment of each role; the salary and remuneration for the same role; achievement of the Company's short- and long-term sales targets; and the Company's financial condition; and submit the results to the Board for approval.

Salary and remuneration

The remuneration for directors covers remuneration, director profit sharing, and income for professional practice; and the compensation for managerial officers includes the monthly salary, fixed-amount bonuses, year-end bonus, employee profit sharing, annual special bonus, pension contribution and benefit payments by law. The profit sharing for directors and employees are subject to Article 25 of the articles of incorporation.

Total remuneration ratio for 2022: 9.72:1;
 The change rate of total remuneration for 2022: 60.75%.

Performance evaluation

The performance evaluation of directors covers the alignment with the corporate goals and missions, awareness of the directorial duties, development and communication of internal relationships, expertise and continuing professional development, and internal controls. The performance evaluation of managerial officers covers the finance (revenues, profits, and net income before tax), customers (customer satisfaction, service quality, and others), products (branding, quality innovation, and others), talents (talents development, potential development, and others), safety and profits (digital transformation, energy conservation and carbon reduction, circular economy, net zero emissions, and others), and medium- and long-term goals for corporate sustainable development.

Note 1: Total compensation ratio: The ratio of the total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual).

Note 2: Ratio of the percentage change in total compensation: The ratio of the percentage change in the total compensation for the organization's highest-paid individual to the median percentage increase in the total compensation for all employees (excluding the highest-paid individual).

Audit Committee



1. The committee is composed of 4 independent directors, appointed by the resolution of the board of directors, with one of them serving as the convener. In 2022, a total of 6 meetings were convened, with an actual attendance rate of 100%.



2. Duties:

- (1) Establish or amend internal control systems in accordance with Article 14-1.
- (2) Assess the effectiveness of the internal control system.
- (3) Adoption or amendment, pursuant to Article 36-1, of handling procedures for financial or operational actions of material significance, such as acquisition or disposition of assets, derivatives trading, funding to others, and endorsements or guarantees for others.
- (4) Matters involving the personal interests of directors.
- (5) Major transactions of assets or derivative commodities.
- (6) Significant lending of funds, endorsements, or guarantees.
- (7) Offering, issuance, or private placement of any equity-type securities.
- (8) Appointment, dismissal of and compensation for CPAs.
- (9) Appointment or discharge of financial, accounting, or internal audit officers.
- (10) Review annual financial reports signed or stamped by the chairman, managers, and chief accountants.
- (11) Other significant matters prescribed by the company or the competent authority.



3. Main items discussed:

- | | |
|--|--|
| (1) Endorsements and guarantees. | (6) Accountant remuneration. |
| (2) Annual financial statements and profit distribution. | (7) Assessment of the independence of the accountant and the appointment of an accountant. |
| (3) Distribution of dividends to shareholders as bonus shares or capital increase. | (8) Evaluation of the effectiveness of the internal control system. |
| (4) Modification of the internal control system. | (9) Interim financial reports. |
| (5) Proposal of abolition of non-compete restriction on directors. | (10) Accountant remuneration. |
| | (11) Audit plans. |



4. Please visit our corporate website, refer to our annual report, or visit the Market Observation Post System (MOPS) for the details regarding the operations of the committee in 2022.

Shareholder rights and interests and information transparency

As of April 1, 2023 (refer to the shareholder structure in the annual report), the shareholder structure of TTC is mainly composed of individuals and other legal entities. The names, shareholding amounts, and percentages of shareholders with a shareholding ratio of 5% or more, or those among the top ten in shareholding ratio, are disclosed in the company's publicly issued annual report.

We are committed to providing shareholders with transparent and timely corporate information. Apart from providing information to shareholders through one investor conferences, the AGM, MOPS, Investor Relations section of the corporate website, annual report, and ESG report, we constantly collected opinions from shareholders and sent them to the management team for the reference in decision-making in 2022.

Every year, we hold investor conferences and the AGM regularly to state the company's financial performance and business status. In addition, we post information regarding our business performance, financial information, and material information on TWSE's MOPS. We have also set up the "Investors" section on our Chinese and English websites to disclose information relating to the company's governance, business announcements, financial statements, investor conferences, as well as the latest news. We value the rights and interests of foreign investors and the trend of enterprise internationalization. Therefore, since year 2018, we began to enhance information disclosures in English in the annual report and on the MOPS and corporate website. Through various methods, we actively develop unfettered channels for two-way communication with shareholders to maintain their rights and interests.



TTC Shareholder Structure



IP Management Plan



Risk Management Policy and Procedure

1.2 Economic Performance GRI 3-3, GRI 201, 201-1, 201-4

- **Major Issues:** Economic Performance
- **Major reason:** The company's operational performance is a significant factor supporting sustainable business development
- **Impact Scope:** Directly affects the company and its employees, indirectly affects investors and suppliers.
- **Sustainability Principles and Corresponding SDGs :** Promote sound governance/SDGs 8 Employment and Economic Growth
- **Management approaches**



Policy Purpose	Enhance market competitiveness and achieve sustained profitability to ensure the sustainable development of the enterprise.
Goals	Maintain profitability every year
Management Plan	<ol style="list-style-type: none"> 1. We focus on product functions and features, conducting quality improvement, performance enhancement, new product development and verification, and developing high value-added products 2. We establish long-term strategic partnership with raw materials suppliers and determine the safety stock based on materials preparation lead-time to ensure supply chain fluency
Evaluation of the management	Consolidated Revenue Budget Achievement Rate
Assessment Mechanism	<ol style="list-style-type: none"> 1. Management Meeting 2. Production and Sales Coordination Meeting 3. Quality Meeting
Assessment result	<ol style="list-style-type: none"> 1. In 2022, the net operating profit reached NT\$410 million, maintaining profitability and achieving the goal 2. Disclose financial performance in the sustainability report, sharing the company's development results with stakeholders.
Negative Impact Remedies and Preventive Measures:	<ol style="list-style-type: none"> 1. Rising energy costs – Increase in electricity fees: Collaborate with the group's energy resource management department to review in-factory energy conservation and carbon reduction schemes. 2. Carbon tax imposition – Increase in production costs: Collaborate with the group's energy resource management department to review in-factory energy conservation and carbon reduction schemes. 3. Regulatory restrictions on industry development – Factory shutdown: Ensure ongoing compliance and continuous improvement with relevant laws and regulations, periodically review new legal updates to verify compliance. 4. Water consumption fee imposition – Increase in production costs: Collaborate with the group's energy resource management department to review in-factory water resource management schemes.
Grievance Mechanism	<ol style="list-style-type: none"> 1. General Meeting of Shareholders 2. Company website "Investor Services/Contact Point"

As of 2022, TTC had total assets of 9.2 billion, of which current assets were 6 billion, accounting for about 65% of total assets, and non-current assets were 3.2 billion, accounting for about 35% of total assets. The asset turnover rate for 2022 was 1.81 times.

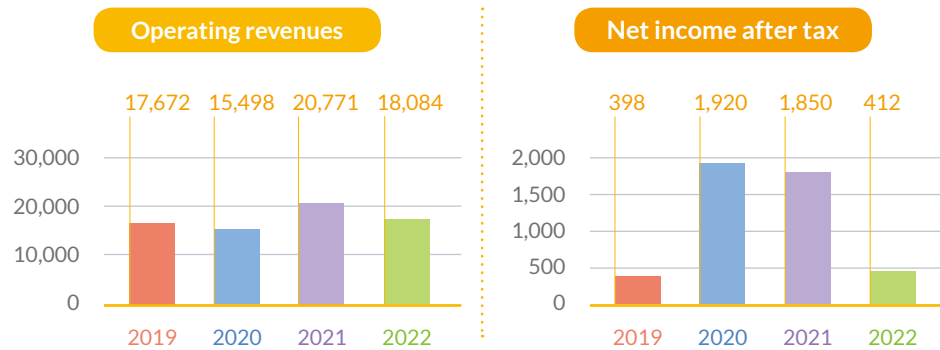
TTC Consolidated Financial Information Unit: NTD millions

Item	Basic Element	2019	2020	2021	2022
Direct economic value	Sales revenue	17,672	15,498	20,771	18,084
	Financial investment income	47	26	4	0
	Asset sales revenue	0	0	0	0
	Subtotal	17,719	15,524	20,775	18,084
Distributed economic value	Operating costs	16,674	12,867	17,902	16,640
	Compensations and benefits for employees	637	701	696	580
	Payment to investors	201	1,033	947	199
	Payment to the government expense	7	34	320	445
	Investments in community	3	2	7	7
	Subtotal	17,522	14,637	19,872	17,871
Economic value retained		197	887	903	213

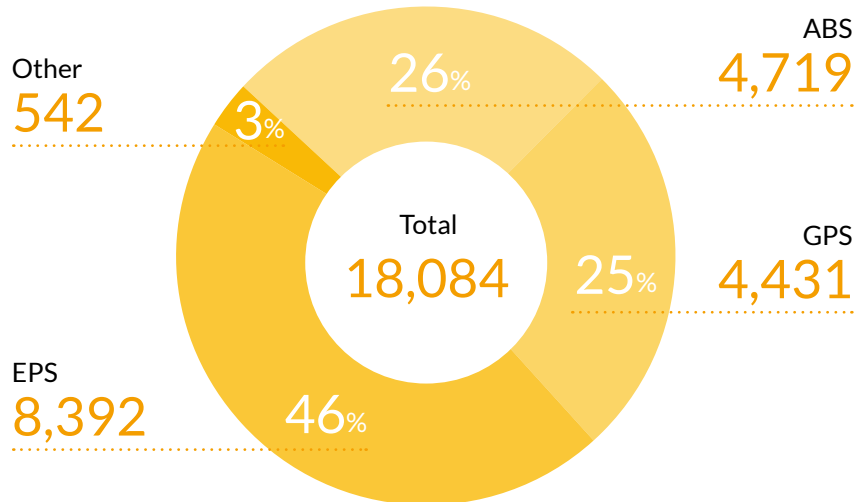


In 2022, the operating revenue was NT\$18.1 billion, of which revenue from the plastics sectors was NT\$17.5 billion (97%). Payable business tax amounted to NT\$140 million, accounting for 0.8% of the operating revenue.

TTC's revenue and net after tax over the past four years Unit: NTD millions



Distribution of operating revenue by product type for TTC in 2022 Unit: NTD millions



The cost of goods sold in 2022 was NT\$16.3 billion, accounting for about 90% of operating revenue, with raw material costs accounting for about 90% of total manufacturing costs. TTC made payments to the government totaling approximately NT\$445 million, which were tax contributions made according to the law. Welfare expenses for 2022 (including post-retirement benefits, salaries, insurance, and other) were NT\$700 million, accounting for about 4% of the total cost and expenses.

In 2022, the company's operational status continued to strengthen sales volume, committed to achieving full production and sales volume. However, due to market influences, the sales volume and price differences of subsidiaries were not as good as the previous year, resulting in an overall gross margin decrease compared to the previous year.

Please refer to the public information monitoring station and TTC's website (<https://www.ttc.com.tw>) for a consolidated financial report of 2022.



Financial subsidies received from the government in 2022: around **NT\$500,000**.



Annual Financial Reports



Annual Stock Price and Dividend



1.3 Risk Management

To fortify our corporate governance and mitigate potential operational risks, we're committed to ensuring the company's steadfast operation and ongoing growth. In line with this, the "[Risk Management Policy and Procedures](#)" were endorsed by the Audit Committee and the Board of Directors in December 2020. This comprehensive framework encompasses our risk management policy, organizational structure, processes, categories, and the mechanisms in place. This structure is designed to effectively navigate and control any risks emerging from our business activities. Furthermore, we present a detailed report on our risk management practices to the Audit Committee and the Board of Directors annually.

To streamline our risk management approach, we've integrated efforts from our Board of Directors, Audit Committee, senior executives responsible for routine operations, the audit department, specialized risk management teams, and our subsidiaries. Annually, we undertake systematic reviews of each risk management unit's operational scope. This ensures risks are consistently identified, evaluated, and managed.

The Audit Division audits risk management within the company, timely provides management with the information of inherent or potential risks under internal control to ensure compliance with existing regulations and control procedures.

1.3.1 Risk Management Process

Our structured risk management process encompasses: risk identification, risk evaluation, ongoing monitoring, comprehensive reporting and disclosure, followed by appropriate responses to identified risks.



1.3.2 Units Responsible for Managing Specific Risks

Item	Risk	Risk Management Unit
1	Financial Risk	Group Finance Division
2	Strategic and Operational Risk	President's Office
3	Materials Price and Supply Chain Risk	Group Procurement & Logistics Division
4	Occupational Safety Risk	Occupation Safety Room/Facility and Environment Division
5	Information Security Risk	Group Information Systems Division
6	Legal Risk	Group Legal Division
7	Human Resources Risk	Group Human Resources Division
8	R&D Risk	Sales Division/R&D Department
9	Climate Change and Environmental Risks	Engineering Department/Facility and Environment Division
10	Disaster and Accident Risk	Occupation Safety Room/Management Department/President's Office
11	Technology Risk	President's Office/Information Technology Division/Engineering Department
12	Other Risks	

1.3.3 Control Mechanisms and Detailed Operations of Various Risks in 2022

Our company's various departments manage risk assessments based on current operational conditions. We constantly monitor and control these risks to safeguard the interests of the company, its employees, shareholders, and stakeholders. Our goal aligns with our sustainable vision: "Creating Sustainable Value Together, Building a Sustainable Society."



For a detailed account of the operations of our risk management units in 2022, please refer to

1.3.4 Internal Control and Audit Mechanism

Our company has established an independent internal audit unit reporting directly to the Board of Directors. Its function is to assess the design and implementation of internal controls and to draft and execute annual audit plans. Our auditors, possessing international internal auditor certifications, adhere to principles of impartiality, independence, integrity, and honesty. They routinely attend meetings of the Board of Directors and the Audit Committee, presenting significant audit findings and monitoring subsequent improvements. The audit head is also responsible for the Audit Committee's dedicated mailbox and whistleblower hotline, handling reported matters.

In 2022, the internal audit unit completed its scheduled audits, producing 50 audit reports and 6 follow-up reports. All audit recommendations have been addressed, as summarized below:

Audit Name	Summary of Recommendations	Summary of Improvement Status
Production Cycle	Random inspections revealed inconsistencies and misuses in the onsite operation checklist.	Corrections were made to the reference values, and subsequent inspections found checklists to be filled out properly.
OH&S	Random checks at the Toufen factory contractor entry records found certain construction workers were not on the approved "Toufen Factory Contractor Entry Worker List" and their insurance details were missing.	Contractors have been instructed to provide accurate worker lists, and any worker not on the list is not allowed to enter for construction. Follow-up checks found all entries matched the approved list and had valid insurance details.
Subsidiary Audit – TTC Zhongshan	Inventory checks found some finished goods were tilted.	Immediate adjustments were made and warehouse staff were instructed to address any tilting issues promptly.



1.4 Ethical Corporate Management

1.4.1 Code of Conduct

Ethical Corporate Management Best Practice Principles

To instill in all our employees the company's culture of integrity and to enhance their professional ethics and conduct, we adopted the "Integrity Management Guidelines" and "Procedures and Behavior Guidelines for Integrity Management" based on the "Listed Company Integrity Management Guidelines" issued by the Taiwan Stock Exchange. These guidelines prohibit dishonest behaviors and apply to our directors, managers, employees, and those with significant control over the company. Unacceptable behaviors include offering, promising, demanding, or accepting any undue advantages and engaging in any dishonest or illegal actions or any actions that breach fiduciary duties for the purpose of obtaining or maintaining benefits. The Company's directors and President issue a Statement of Compliance with the Ethical Management Policy, and request employees to comply with the company's Ethical Management Policy in the employment terms.



Training for the Ethical Corporate Management Best Practice Principles

To ensure our colleagues understand our ethical standards, new employees must sign a pledge on their first day, which clearly outlines our integrity policies, and commit to adhering to them. Apart from making integrity-related regulations available on our website for employees, we also invite external scholars and experts to conduct annual integrity lectures and internal training, emphasizing our commitment, policy, preventive measures, and potential repercussions of breaches. In 2022, our company organized training related to integrity management. A total of 134 employees attended, clocking 353 training hours. Here are the details:

Course name	Course Duration	Total Attendees	Total Training Hours
Integrity Talk: Regulations and Case Studies on Fair Trade Act	3	82	246
Integrity Talk: Prevention of Workplace Violence (Bullying)	2	48	96
Integrity Talk: Online Copyright and Legal Software Use	2	1	2
Integrity Talk: Introduction and Case Analysis of the Trade Secrets Act	3	1	3
Integrity Talk: HR Personnel Labor Regulations Study	3	2	6
Total		134	353

Code of Ethical Conduct for Directors and Managerial Personnel

The Code is established in order to encourage the Company's directors and managerial officers to act in line with ethical standards when engaging in business activities ex officio for the Company, in order to prevent any unethical conduct and activities from injuring the Company's and shareholders' interest. The Code is applicable to the following: the Company's directors and managerial officers (including presidents, vice presidents, executive vice presidents, chief financial and chief accounting officers, and other persons authorized to manage affairs and sign documents on behalf of the Company). The standards' provisions include: safeguarding trade secrets, engaging in fair trade, abiding by laws and regulations, and the protection and appropriate use of company assets.

Work Ethics and Professional Conduct Guidelines

To maintain the reputation of our company's integrity and ethical business practices, we have incorporated work ethics and professional conduct into our employee training program. Any breaches will be reflected in the individual's performance review, and severe violations will be addressed in accordance with company rules. In 2022, there were no illegal or unethical incidents, and no related reports were received.



Internal Review of Regulatory Compliance GRI 2-27

In addition to our commitment to ethical business practices, our company also emphasizes adherence to relevant regulations. We engage renowned scholars, experts, and lawyers to conduct training sessions on related regulations. Through routine departmental meetings, we disseminate the latest regulatory updates, ensuring employees are informed about any new amendments or changes to the law promptly. The corporate governance officer, in compliance with regulations, periodically (at least once a year) reports to the board of directors. The most recent report on ethical business operations was presented at the board meeting on November 2, 2022, which included:

- Establish regulations to practically implement the ethical management policy according to the laws and regulations.
- Periodically analyzing and assessing the risk of unethical behaviors within our scope of operations – based on the "Unethical Behavior Risk Assessment Checklist". Upon assessment, there were no significant risks identified this year.
- Planning internal organization framework and designating monitoring mechanisms for business activities with higher risks of unethical behavior.
- Promoting and coordinating awareness and educational activities with respect to ethics policy.
- We have put in place a whistleblowing system to ensure its effective execution, and in 2022, no departments received any illegal reports.
- Assisting the board of directors and management in auditing and assessing whether the preventive measures for ethical management are effectively implemented, and preparing reports on the regular assessment of compliance with ethical management in operating procedures.

1.4.2 Violations, fines imposed, and rectifications

Details of reasons for penalties, amounts, and corrective actions taken by the company in 2022 are as follows:

Factory Area	Authority	Causes of Fine	Fine amount (NT\$10K)	Improvement
Linyuan Factory	Kaohsiung City Environmental Protection Bureau	On August 19, 2022, inspectors from the Kaohsiung Environmental Protection Bureau conducted a test for odor emissions from the RTO exhaust duct at our factory. The test results showed an odor concentration of 3,090, exceeding the emission standard of 2,000. In violation of Article 20, Paragraph 1 of the Air Pollution Control Act and Article 2 of the Standards for Air Pollutant Emission from Stationary Pollution Sources, a fine of NT\$120,000 was imposed on us.	12	<ol style="list-style-type: none"> 1. We subsequently commissioned a testing company to take samples and verify the results. We submitted the compliant report to the Environmental Protection Bureau for reference. The Bureau might also independently conduct another round of testing at our facility. Only after passing this test will the rectification be considered complete (rectification was completed on November 16, 2022). 2. We are conducting weekly tests for volatile organic compound concentrations in the RTO and ensuring operational parameters are within prescribed ranges and compliant with emission standards, thus confirming normal operation on-site.
Linyuan Factory	Kaohsiung City Environmental Protection Bureau	On September 15, 2022, the Environmental Protection Administration (Southern District Environmental Inspection Brigade) visited the Linyuan Factory to inspect dioxin emissions from the incineration furnace. A concurrent on-site audit was carried out, during which it was found that the waste filter bags produced by the baghouse dust collector of the incineration furnace were not reported in the waste disposal plan, violating Article 31, Paragraph 1, Clause 1 of the Waste Disposal Act. The case was transferred to the Kaohsiung Environmental Protection Bureau, and a penalty of NT\$6,000 was imposed as per Article 52 of the Waste Disposal Act.	0.6	In accordance with the Waste Disposal Act, we reported the waste filter bags from the baghouse dust collector in the waste disposal plan (a change application for the waste report was submitted to the Environmental Protection Bureau on October 19, 2022).

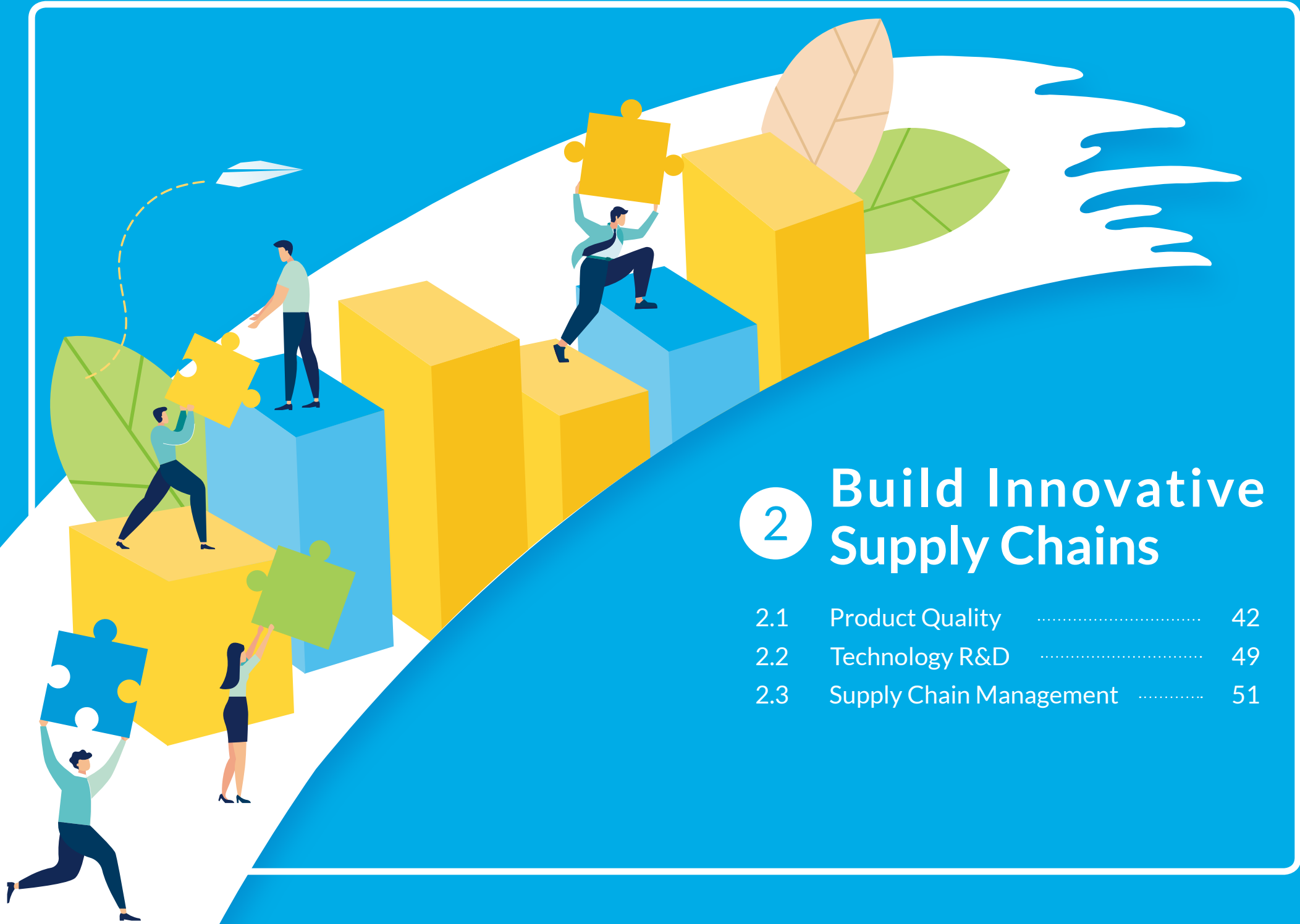


Reporting Channels GRI 2-26

TTC established the "Procedure for Handling Reports on Illegal, Unethical, or Untrustworthy Behaviors," which clearly defines both internal and external whistleblowing channels and handling systems. This is in line with our commitment to upholding the ethical behavior guidelines and business integrity standards we have set. Furthermore, it guarantees the legal rights and interests of the whistleblower and relevant parties. Whistleblowing Channels:

- Personal reporting: Face-to-face description.
- Phone reporting: 02-26503783.
- Correspondence reporting: Audit Division, 7F, No. 37, Jihu Road, Neihu District, Taipei City.

When receiving a personal or phone report, the case undertaker should take statements from the whistleblower and label the statement as "Confidential." We assure full protection of the confidentiality of informers, investigators and case contents to prevent them from unfair treatment or retaliation.



2

Build Innovative Supply Chains

2.1	Product Quality	42
2.2	Technology R&D	49
2.3	Supply Chain Management	51

2.1 Product Quality

- **Material Topics:** Product quality
- **Major reason:** Under the foundation of pursuing sustainable business practices, we aim to provide our clients with satisfactory quality and service. We aspire to grow in tandem with our customers and suppliers. Through persistent efforts and the adoption of innovative technologies, we strive to enhance the quality of our offerings, ensuring that all products meet and exceed our customers' expectations.
- **Impact Scope:** Only by maintaining consistent product quality can we ensure our customers' continued patronage, thereby enhancing performance and achieving sustainable business operations.
- **Impact Boundary:** Employees/Customers/Suppliers
- **Sustainability Principles & Alignment with SDGs:** Building an Innovative Supply Chain/SDGs Goal 12: Responsible Consumption and Production
- **Management approaches**



Policy Purpose	We collect information on market development and customer needs to develop environmentally friendly new products and niche products that satisfy the market and customer needs, enhancing our technological R&D capability and company profit.
Goals	2022 Goals 1. Enhancement of basic properties of standard ABS products (Improvement in appearance and air marks) 2. Improvement in preservation of fast grade EPS products
	Short-term goal in 2023 1. Enhancement of basic properties of standard ABS products (Enhancement in glossiness) 2. Certification of Indian BIS ABS products (Goal: Compliance with Indian BIS standards) 3. Enhancement in concentration consistency of EPS products (Goal: Concentration in three layers>90%)
	Medium- & Long-Term Goals in 2030 1. Enhancement of Basic Performance for Standard ABS Products (Piano Mirror Surface Products) 2. Optimization of the EPS Product Manufacturing Process (Shortening Polymerization Reaction Time)
Management Plan	Provide stable/outstanding product quality to enhance customer satisfaction
Evaluation of the Management	1. Enhancement of Basic Performance for Standard ABS Products (Improvement in Appearance and Air Marks) 2. Preservation Improvement for Fast-Grade EPS Products
Assessment Mechanism	1. Reduce high glue powder addition in standard ABS products, decrease VOCs content in the finished products, and improve appearance air marks. 2. Fast-Grade EPS Product Preservation Improvement, Rectifying Pre-foaming Clumping Issue (391 Fast Materials)
Assessment Result	Completion in 2022 1. Improved basic performance for ABS, reduced high glue powder content by >1.0%. Customer's injection molded product appearance without air marks is satisfactory. 2. Improve the preservation of fast-grade EPS, solve the problem of pre-foaming agglomeration, with cumulative sales amount of 1,780 tons.
Grievance Mechanism	If a customer is unsatisfied with product quality, the customer complaint process will be initiated.

Goal Description and Achievement Status

Improve the basic performance of general-grade ABS products

- **2022 Goals**
Use of composite additives, reduction in ABS high glue powder addition, Goal: >1.0%.
- **2022 Achievements**
The general grade ABS can reduce high rubber powder content by 1.7%. The appearance of customer injection molded products is OK
- **Explanation (including reasons for non-achievement)**
The goal has been achieved ✓

Improvement in preservation of fast grade EPS products

- **2022 Goals**
Enhanced preservation for Fast-Grade EPS, rectification of pre-foaming clumping issue.
- **2022 Achievements**
Fast-grade EPS preservation improved> 5%, with no problem of pre-foaming agglomeration and cumulative sales amount of 1,780 tons
- **Explanation (including reasons for non-achievement)**
The goal has been achieved ✓

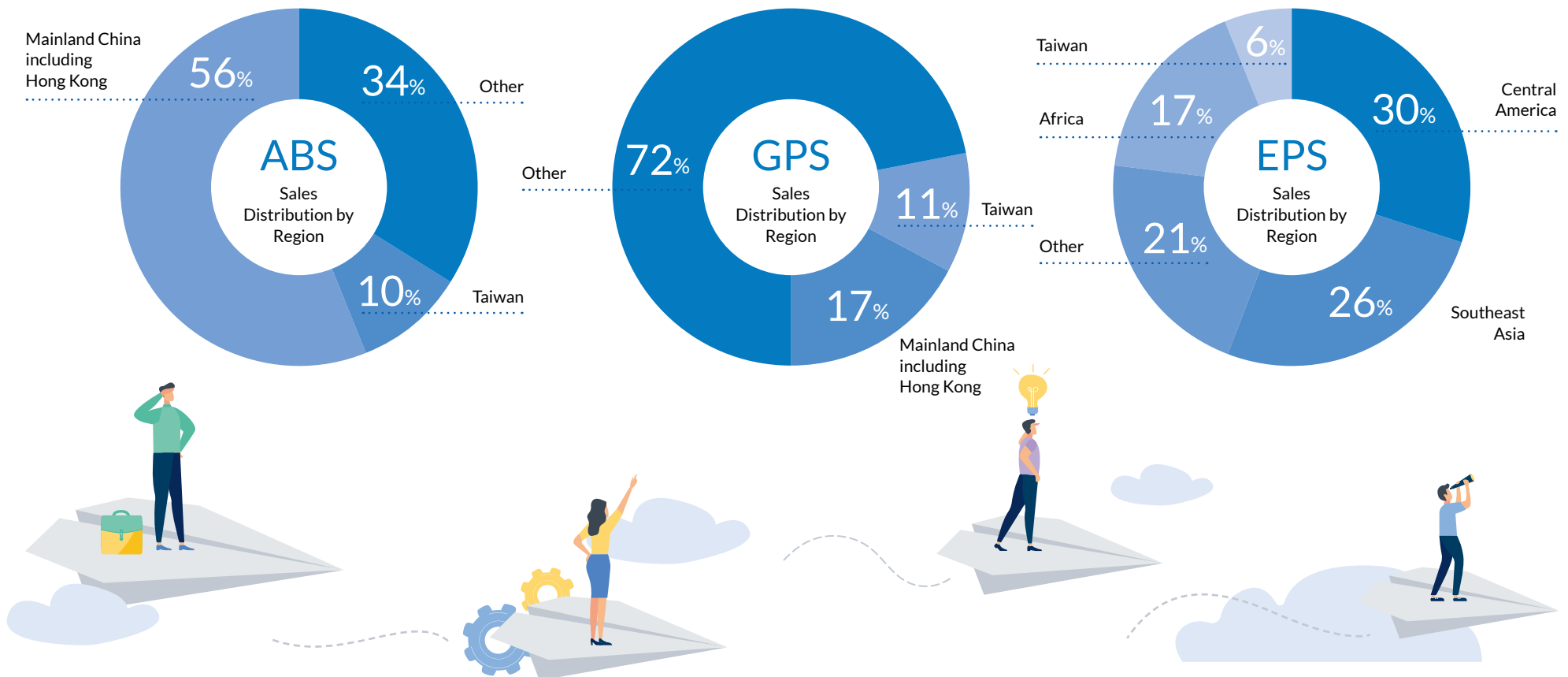


2.1.1 Sales Regions for Major Products

ABS/PS products manufactured at Linyuan and Qianzhen plants

Despite the continuing global impacts of the COVID-19 pandemic in 2022, sales volumes were not as robust as expected. The primary sales region for ABS remains Mainland China. However, the market sales distribution saw optimization with other regions' share rising from 20% to 34%. Sales in Mainland China decreased by 16%. The primary sales region for GPS shifted to other areas, with an increase from 34% to 72%, while there was a 35% reduction in Mainland China. EPS sales remain concentrated in Central and South America, and Southeast Asia. Sales in Africa continued to grow, moving from 11% to 17%. The Taiwanese market remained unchanged.

2022 Sales Distribution of Major Products by Region

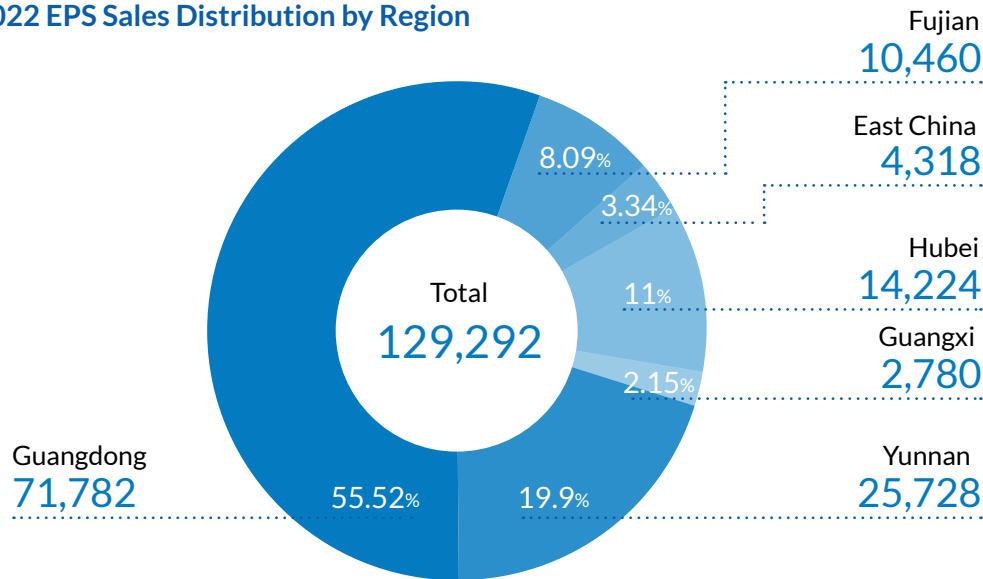


EPS produced by the Zhongshan plant

All sales from the Zhongshan Plant were directed towards Mainland China, targeting primary markets including electronic packaging, fruit and vegetable packaging, fish boxes, ceramics, pharmaceutical packaging, and exterior wall insulation boards. Given the plant's geographical location and to capitalize on shipping cost advantages, the primary sales markets are in the Guangdong and Yunnan provinces. To expand brand influence and coordinate with the Gulei plan, sales in Fujian have been intensified, and there were minor sales in fringe markets.

In early 2022, global economic downturns coupled with the prolonged pandemic curbed exports. The overall yearly demand dropped by approximately 40% to 50%. Efforts were channeled into stabilizing the existing customer base and actively exploring markets in Zhudong and Gulei. This was done to expand the customer group and mitigate the impacts of reduced demand. Meanwhile, product quality remained stable, with continuous improvements in particle size concentration and service awareness, enhancing competitiveness. Furthermore, in 2022, customers worldwide continued to make improvements under strict environmental policies. Due to intense competition in traditional industries, packaging molding customers mostly accepted orders at nearly cost prices. Panel customers, facing a severe shortage of orders, tried to minimize losses to maintain production. Clients had earlier adopted technological innovations and equipment upgrades, reduced energy consumption and enhancing production efficiency. Thus, low operating rates became even more pronounced. Additionally, because of competition within the industry, the total sales volume decreased compared to the previous year. It went down from 157,241 tons in 2021 to 129,292 tons in 2022.

2022 EPS Sales Distribution by Region

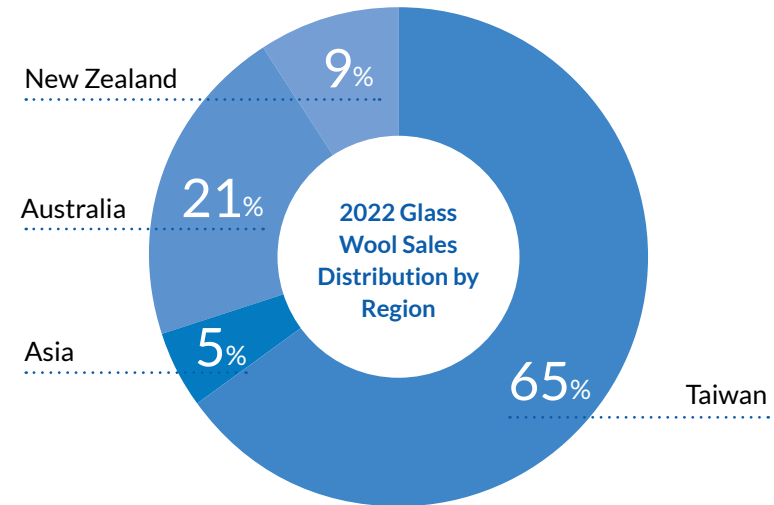


Unit: tons

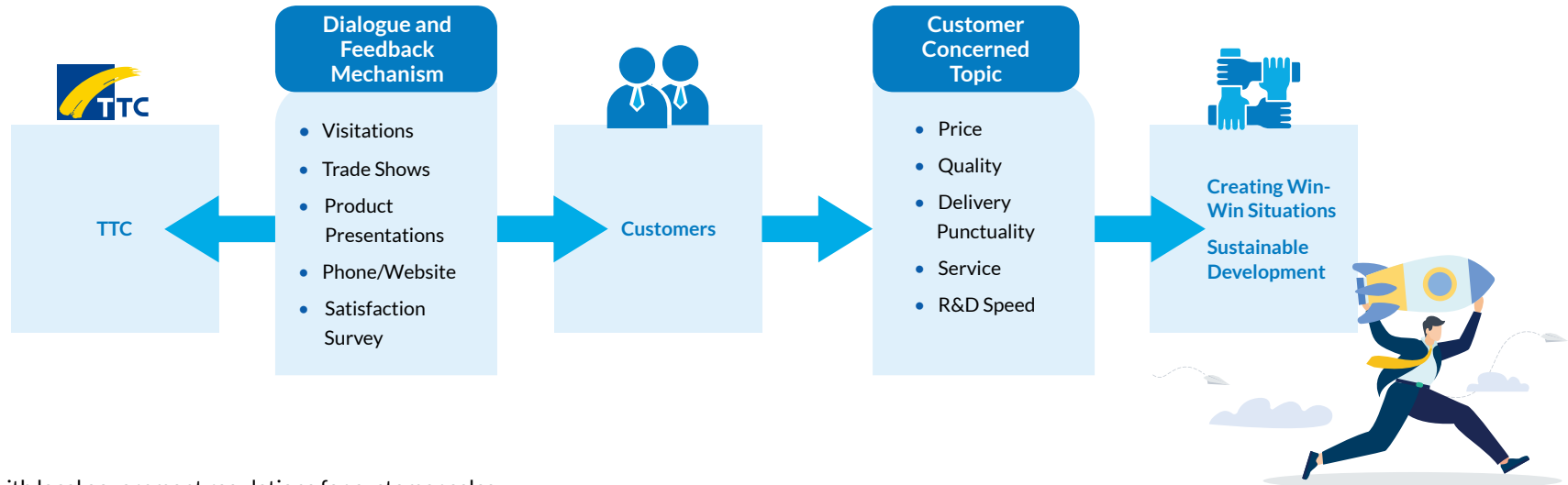
Glass wool and curve printing products from the Toufen plant

In 2022, domestic sales of glass wool products accounted for approximately 65%, while the remaining 35% were exported to New Zealand, Australia, the USA, South Africa, and various Southeast Asian countries. The domestic market for glass wool grew by 10% in 2022. Imports made up about 7% of the overall market, with India and South Korea as the primary importing countries, accounting for 92% and 6% of the imports, respectively. It's projected that the domestic market in 2023 will grow by approximately 1% compared to 2022. Export competition in the Southeast Asian market is fierce with low prices. The sales focus is on markets with higher prices, such as New Zealand and Australia. Despite the global rise in shipping costs in 2022, it did not deter our clients from maintaining their purchases from our company. The New Zealand and Australia markets have been successfully solidified, while efforts continue to explore opportunities in other markets, intensifying the scope and depth of our export market. It's anticipated that the domestic to export ratio in 2023 will be 64% to 36%.

Given the long-term and continuous contraction of the curved printing market, after extensive discussions, it was decided to temporarily halt production and business operations of the curved printing division starting April 1, 2022.



2.1.2 Customer Services



(1) Products comply with local government regulations for customer sales:

- For ABS/GPS/EPS/AS in accordance with EU regulations, we fully use materials that comply with the Restriction of Hazardous Substances (RoHS) Directive and the Registration, Evaluation, and Authorization of Chemicals (REACH).
- EPS, in line with EU and Japanese regulations, switched to using non-hexabromocyclododecane (non-HBCD) (321N) as a flame retardant for producing fire-resistant EPS.
- Curved printing and fiberglass insulation comply with RoHS, and formaldehyde-free products ensure indoor air quality.
- ABS/PS/EPS products' PSM process safety management, hardware equipment rectification, and process design are in line with ISO 50001 energy management and ISO 14064-1 greenhouse gas inventory standards.

(2) Improving product performance and customer satisfaction.

TTC, under the foundation of pursuing sustainable development, continuously strives to enhance product quality and performance. We have implemented the ISO 9001 quality management system and establish a quality policy. Our aim is: QP (Continuous improvement of product quality) + QS (Enhanced service quality) = Q (Operational quality satisfying the customer). Monthly quality assurance meetings are held to discuss product line quality, maintain stable product quality, track process capability and stability. Our objective is to provide superior and functional products, enhancing the customer's processing and production efficiency.

(3) Achievements in 2022 for Product Performance Improvement and Quality:

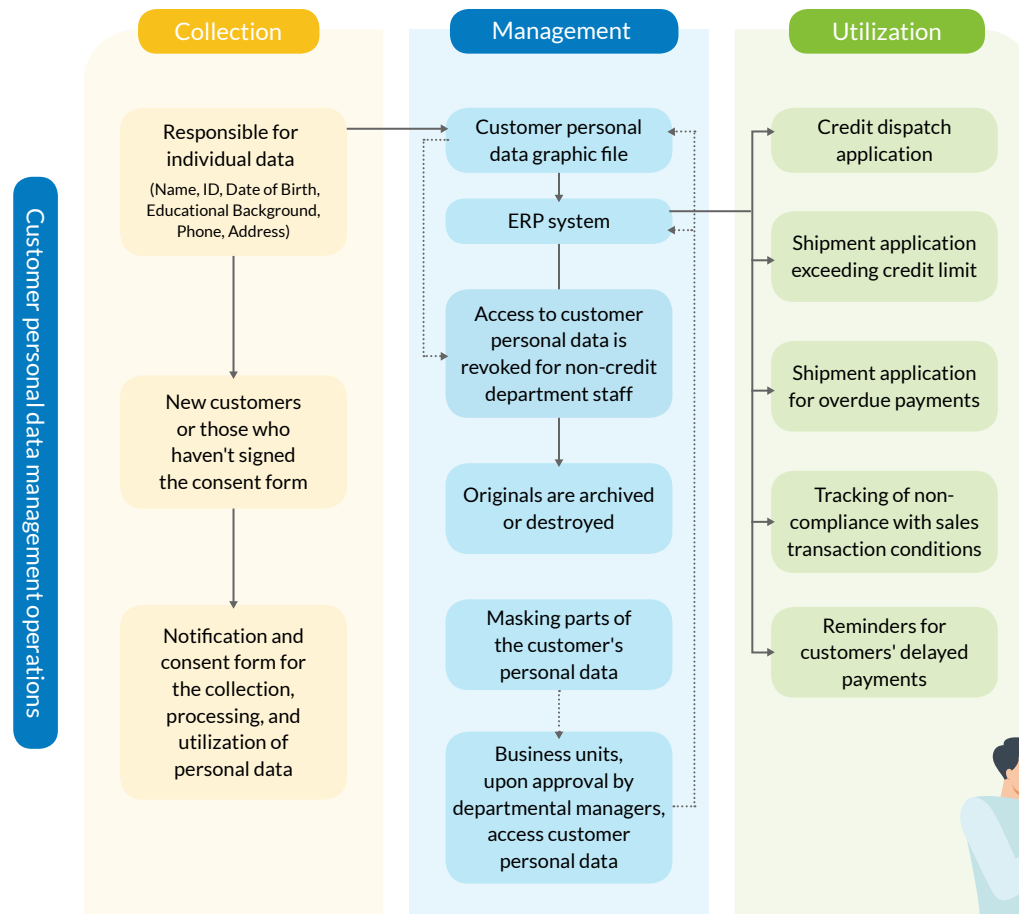
- General ABS product quality improved by using a composite additive formula, effectively reducing the addition of high glue powder, and reducing the VOCs content in finished products. This ensures that the appearance of the customer's injection-molded products is satisfactory.
- Improve the quality for the preservation of fast-grade EPS, solve the problem of pre-foaming agglomeration to increase the sales amount.

(4) Improved the preservation of fast-grade EPS in 2022, with cumulative sales amount of 1,780 tons.

(5) Objectives for 2023 in Product Performance and Quality Improvement:

- Improve the glossiness level of (of general ABS products)
- Indian BIS certification for ABS products (Goal: Comply with Indian BIS standards)
- Increase the particle size concentration of EPS products (Goal: Three-layer concentration > 90%)

(6) Customer Data Management and Protection:



2.1.3 Customer Satisfaction

TTC values customer feedback, collecting opinions and suggestions on various products and services for internal operational improvement. Aligning with ISO 9001's commitment to customer quality and emphasizing customer satisfaction, an annual customer satisfaction survey is conducted. In 2022, one survey was conducted, and corrective actions were taken for any customer dissatisfaction. These were reported in internal management meetings (e.g., production and sales meetings, business management meetings, management review meetings). Our goal is to provide excellent customer service, enhance product satisfaction, and gain trust from our customers.

Customer Satisfaction Survey Modes



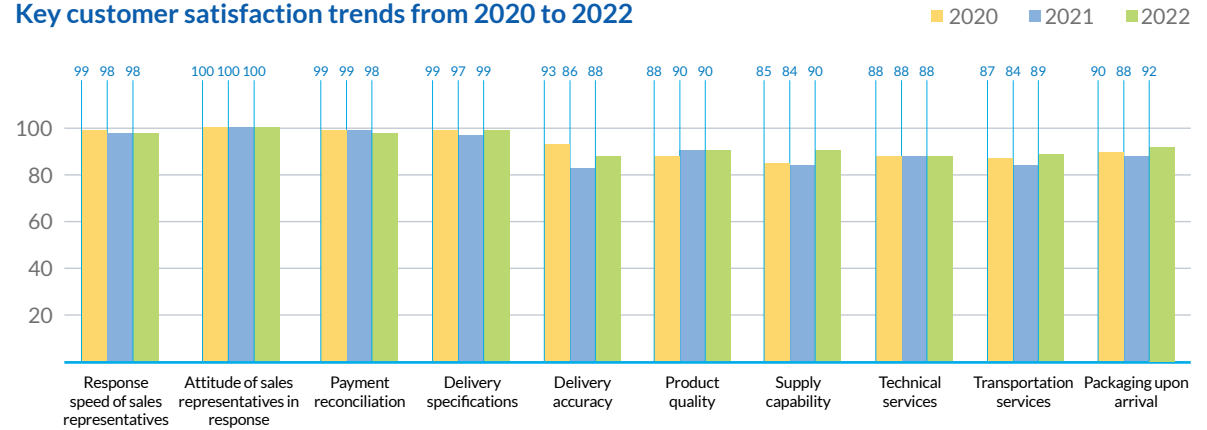
Trends in Key Customer Satisfaction Over the Last Three Years

ABS/PS Production at Lin Yuan and Qianzhen Plants

The customer satisfaction survey for ABS and Polystyrene (known as PS) products covers six areas: service quality of sales representatives, product quality, supply capability, technical service, transportation service, and the quality of packaging upon arrival. Each category holds a weight of 16.67% in the evaluation. The target audience for the customer satisfaction survey is determined by selecting clients who account for 70% of the total sales volume across both domestic and international sales divisions, which totals 110 companies.

In 2022, the average customer satisfaction rate was 93%. Due to the disruptions caused by the COVID-19 pandemic, shipping schedules became unstable. This impacted delivery dates, resulting in decreased satisfaction from customers concerning delivery timelines.

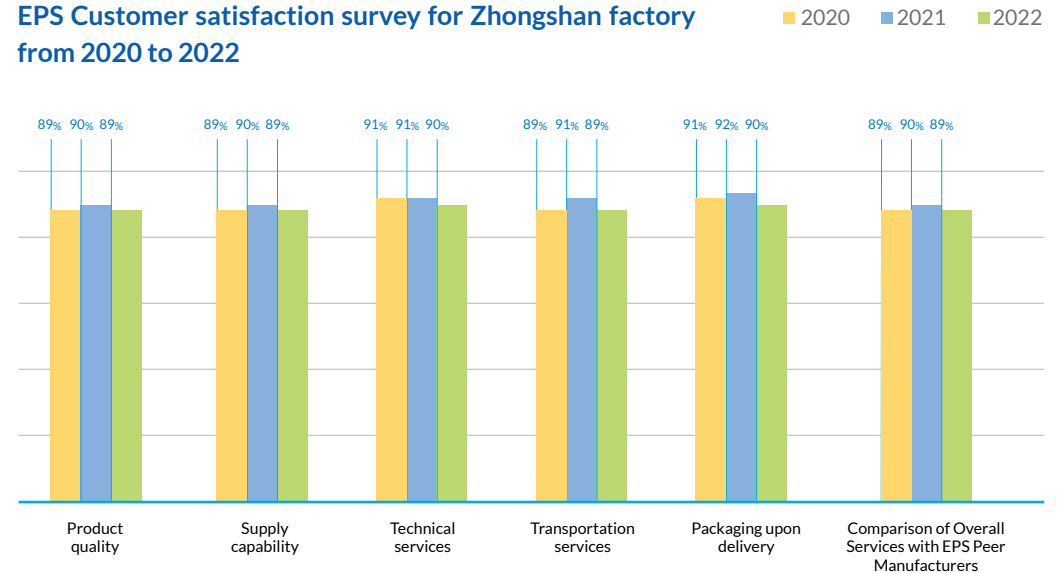
Key customer satisfaction trends from 2020 to 2022



EPS produced by the Zhongshan plant

The EPS product customer satisfaction survey covers: Product quality (30%), supply capability (30%), technical service (20%), transportation (10%), packaging upon arrival (5%), and overall service compared to other EPS manufacturers (5%). The survey audience is selected from customers representing 85% of total sales (153 companies in total). The average satisfaction in 2022 was 89%, achieving the set target. While product quality satisfaction remained stable, minor issues with grain size concentration and occasional small particle clumping were reported. Technical service satisfaction was consistent with the previous year. Satisfaction with packaging upon arrival remained stable, but there's room for improvement due to occasional mishandling during shipping leading to damaged packages and subsequent customer complaints. Transportation service satisfaction slightly increased thanks to enhanced billing efficiency and coordination. In the future, we aim to consistently improve grain size concentration, increase our competitive edge in the industry, and continually enhance transportation services to uplift the overall service quality.

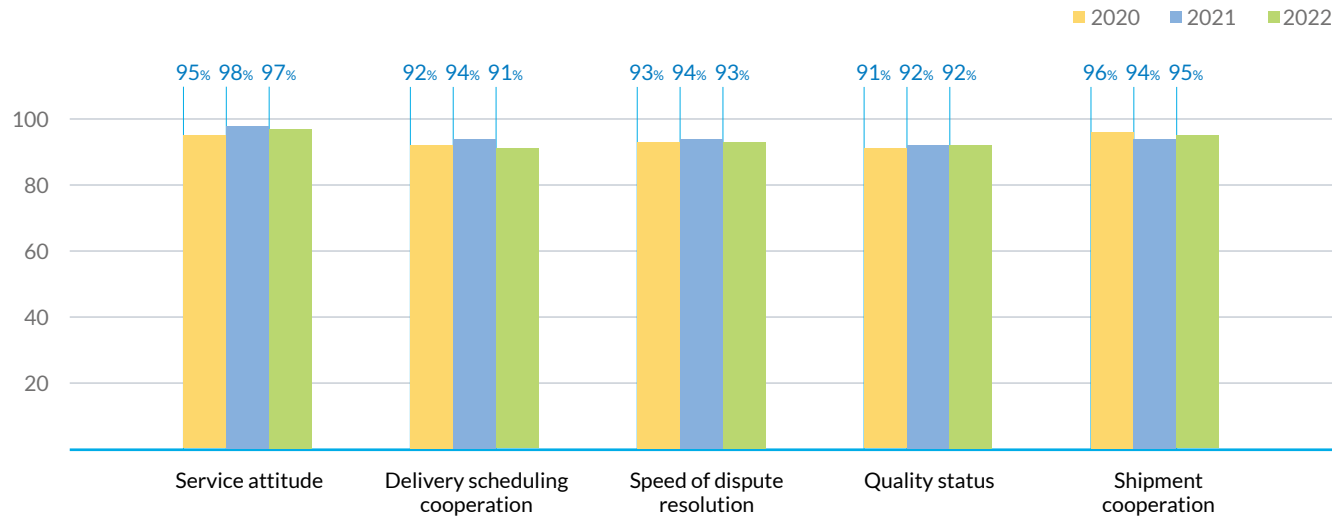
EPS Customer satisfaction survey for Zhongshan factory from 2020 to 2022



Glass wool and curve printing products from the Toufen plant

In 2022, the customer satisfaction survey for fiberglass insulation reached 94%, achieving the set goal of 90%. The customer satisfaction survey covers areas such as service attitude, delivery scheduling cooperation, speed of dispute resolution, quality status, and shipment cooperation. We conduct the customer satisfaction survey twice a year, targeting the main customers who contributed to the highest 70% of the previous year's revenue (with 36 companies surveyed in 2022). After collating customer feedback, we draft a customer satisfaction report that proposes improvement plans and their outcomes. In 2022, 7 improvement plans were proposed, all of which achieved a 100% completion rate. By providing excellent customer service, we aim to enhance customer satisfaction and win their trust in our company.

Key customer satisfaction trends for fiberglass insulation over the past three years is as follows:



2.2 Technology R&D

- **Main Issue:** Technology R&D
- **Major reason:** The ability to research and develop new product technologies enables us to grasp market trends and enhance our competitiveness. It's vital for business growth and continuity. With technical development capability, we can consistently generate high profitability and sustain the business in the long run.
- **Impact Scope:**
 Affected parties: Employees, customers, investors.
 The technical R&D capability affects product competitiveness, directly impacting company operations/ profit growth and customer development requirements.
- **Sustainability Principles and SDGs Alignment:** Building an innovative supply chain/ correlating with SDG 9 - Industry, Innovation, and Infrastructure
- **Management approaches:**



Policy Purpose	We collect information on market development and customer needs to develop environmentally friendly new products and niche products that satisfy the market and customer needs, enhancing our technological R&D capability and company profit.
Goals	<p>2022 Goals</p> <ol style="list-style-type: none"> 1. Promotion and Development of Wood Flooring Fiberglass Insulation Soundproofing System for Construction Companies 2. Heat-Resistant ABS Development Goals: HDT=100~102°C, Izod Impact=27 kg/cm², MI=9.0 g/10 min 3. Installation of an extrusion dewatering machine to enhance production capacity and improve VOC evaporation efficiency. Goal: Reduce the moisture content in high-glue powder from 30% to 15 ± 2%.
	<p>Short-term goal in 2023</p> <ol style="list-style-type: none"> 1. Continuous promotion and development visits to construction companies for the Wood Flooring Fiberglass Insulation Soundproofing System. Visit 18 potential clients per month to promote the system. 2. Development of heat-resistant ABS with client quality validation. 3. Enhancement of Extrusion Dewatering Machine: This is aimed at increasing the production capacity and improving the evaporation efficiency of VOCs in ABS products. Goal: Increase ABS production capacity and reduce VOC content.
	<p>Medium- & Long-Term Goals in 2030</p> <ol style="list-style-type: none"> 1. Wood floor glass wool sound insulation system is applied to the new collective housing projects of construction companies 2. ABS product basic performance improvement (rubber particle size concentration) 3. Development of specialized EPS products (impact-resistant grade/graphite grade)

Management Plan	Monitor product development progress according to the "Raw Material/ Formulation Amendment and On-site Test Operation Standard". Report and review R&D progress in monthly development meetings.
Evaluation of the management	<ol style="list-style-type: none"> 1. Monthly development meeting reports and review of R&D progress. 2. New product development progress is included in key performance indicator evaluations.
Assessment Mechanism	<ol style="list-style-type: none"> 1. Promotion and development of the Wood Flooring Fiberglass Insulation Soundproofing System for construction companies. 2. Development of heat-resistant ABS. 3. Installation of an extrusion dewatering machine to enhance production capacity (reducing moisture content in high-glue powder) and improve VOC evaporation efficiency.
Assessment result	<p>Completion in 2022</p> <ol style="list-style-type: none"> 1. Visited 8 potential clients per month to promote the Wood Flooring Fiberglass Insulation Soundproofing System. 2. Developed heat-resistant ABS with properties: HDT = 102°C, Izod Impact = 27 kg/cm², and MI = 9.0 g/10 min, meeting the objective. 3. Installed an extrusion dewatering machine, reducing the moisture content of high-glue powder from 30% to 15%.
Policy Adjustment	Gather comprehensive market information and leverage group/industry-academia R&D resources to shorten market promotion timelines and enhance market competitiveness.

Achievement Status and Descriptions

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Technical R&D Progress Tracking	Visited 8 potential clients per month to promote the Wood Flooring Fiberglass Insulation Soundproofing System.	Wood Flooring Fiberglass Insulation Soundproofing System Promotion: Achieved the objective by providing wood flooring fiberglass to engineering companies, applied in their office spaces, serving as a demonstration system for future promotions.	The goal has been achieved
	Heat-Resistant ABS Development	Heat-Resistant ABS Development: Achieved the objective with an HDT of 102°C, Izod Impact of 27 kg/cm ² , and MI of 9.0 g/10 min.	The goal has been achieved
	Extrusion Dewatering Machine Installation	Achieved the objective by testing on a trial machine and reducing the moisture content of high-glue powder from 30% to 15%.	The goal has been achieved

2.2.1 Technology R&D

For the R&D team at TTC, continuous development of new and niche products, and leveraging the collective R&D resources of the group, are essential to create high profitability and ensure sustainable operations.

Since its early market growth, TTC has been actively focusing on product functionality and features, undergoing a series of performance enhancements and new product developments to accelerate customer R&D progress. When customers face manufacturing issues or bottlenecks in process capability for their new products, the company provides superior technical services to speed up the mass production timeline for the client, enhance their production yield, and ultimately ensure that the newly launched products are competitive in the market.

Over the years, TTC has dedicated itself to technical R&D and has effectively developed environmentally friendly and customer-centric new and niche products, meeting market and customer needs, enhancing technical R&D capabilities, and increasing revenue. Their achievements are notable. In addition to improving manufacturing processes across all factories, they focus on establishing proprietary key technologies and enhancing differentiated innovation. The R&D expenditures for TTC in 2020, 2021, and 2022 were NT\$20.52 million, NT\$18.54 million, and NT\$15.31 million respectively. The decreasing expenses were mainly due to the impact of the pandemic, resulting in fewer business trips for product testing and a significant reduction in testing of new raw material samples.

2.2.2 Successfully Developed Technologies or Products

1. Passed the test for the Wooden Floor Fiberglass Insulation Soundproofing System and continue its promotion and development in the market.
2. Developed heat-resistant ABS products.
3. Trial of the extrusion dewatering machine led to a reduction of the adhesive powder moisture content from 30% to 15%.

2.2.3 Ongoing R&D Projects

1. The original thickness of the wooden floor fiberglass product is 8mm. Plans are underway to reduce it to 5mm and to test its sound insulation capabilities.
2. Heat-resistant ABS development and quality validation with clients.
3. Introduction of an additional extrusion dewatering machine to enhance production capacity and improve the evaporation efficiency of VOCs in adhesive powder.

	Project Name	Project Description	Sustainable Development
1	Promotion and Development of Wooden Floor Fiberglass Insulation Soundproofing System for Construction Companiesw.	Promote high-performance green building materials, improving sound and thermal insulation.	Installation of an additional extrusion dewatering machine to enhance production capacity (adhesive powder moisture content) and improve VOC evaporation efficiency.
2	Install an additional extrusion dewatering machine, reduce moisture content, improving VOC content during the subsequent extrusion molding process.	Add extrusion dewatering equipment to reduce moisture content, which is beneficial for improving VOCs content during the subsequent extrusion molding process.	Improve the product's VOCs evaporation efficiency, reducing the environmental content of volatile organic compounds.

2.3 Supply Chain Management

2.3.1 Supply Chain Sustainable Development

With the goal of long-term sustainable management, TTC is committed to establishing good communication channels with long-term suppliers and prioritizing the safety of operations at manufacturing sites. As a result, they've fostered stable, mutually trusting, and sustainable supply chain relationships, all aimed at growing together with respect for human rights, a focus on workplace safety, and an emphasis on environmental conservation.

(1) Objectives and Strategies for Sustainable Supply Chain Development



Establish smooth communication channels and foster long-term cooperation



Strengthen safety drills to create a safe working environment



Implement and uphold environmental protection and share sustainable development resources

(2) Implementation and planning for sustainable development of supply chain

TTC is committed to promoting sustainable operational development. Since 2018, we've introduced the "Supplier Social Responsibility Commitment Letter" for long-term raw material suppliers, requiring them to commit to human rights, workplace safety, hygiene, environmental protection, and conflict minerals. Plans for its implementation and future are as follows:

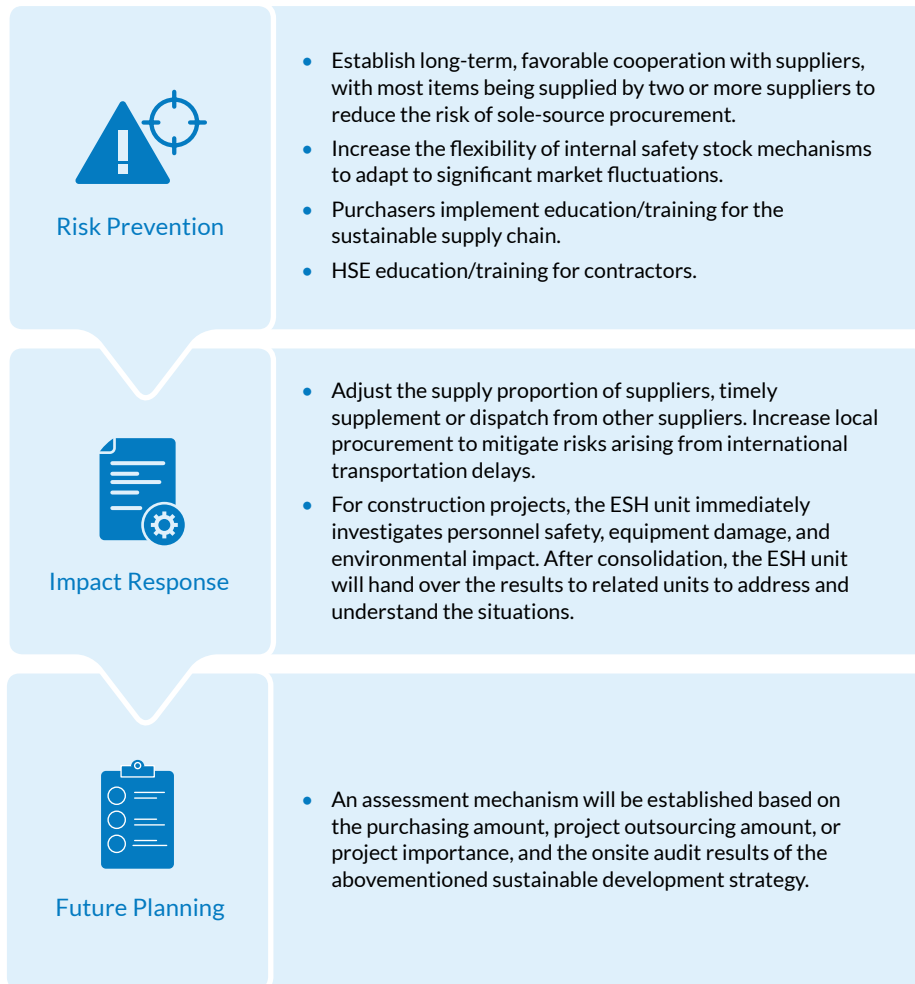


Note: The "Supplier Social Responsibility Commitment Letter" mainly seeks the supplier's commitment regarding labor rights, workplace safety, environmental concerns, and ethical standards.

Labor and human rights	No forced labor; no child labor; provision of due wages and benefits; guarantee for working hours and breaks; elimination of workplace sexual harassment, bully, and discrimination; and no conflict minerals.
Health and Safety	Measures required for occupational safety, emergency response, occupational health, protection against machinery injuries, public health, food and accommodation, and health and safety information.
Environment	Operation permit; pollution prevention and resource conservation; hazardous substances; effluents; non-toxic solid waste; noise; exhaust emissions; product and service limitation; energy/resource consumption; and GHG emissions.
Ethics and integrity	Ethical corporate management; respect for intellectual property rights; abidance by non-disclosure agreements; privacy protection; and avoidance of the conflict of interest.

(3) Supply Chain Risk Management

TTC has established a comprehensive electronic procurement process. Guided by the principles of fairness, impartiality, and transparency, the company staunchly prevents any procurement malpractices or favoritism. In addition, the company ensures smooth communication channels with its suppliers, aiming to reduce supply risks. As part of the sustainable supply chain risk assessment, prevention, and response measures, TTC collaborates with suppliers through the following action plans:



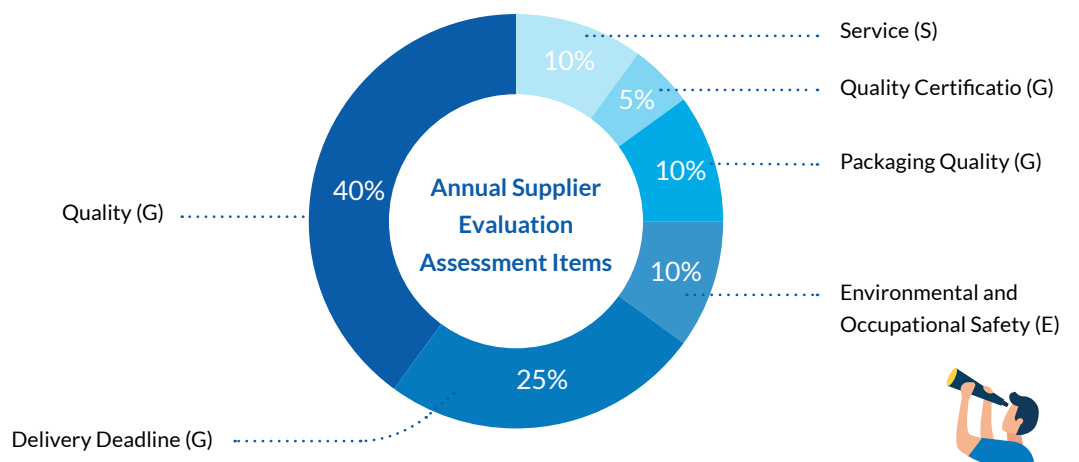
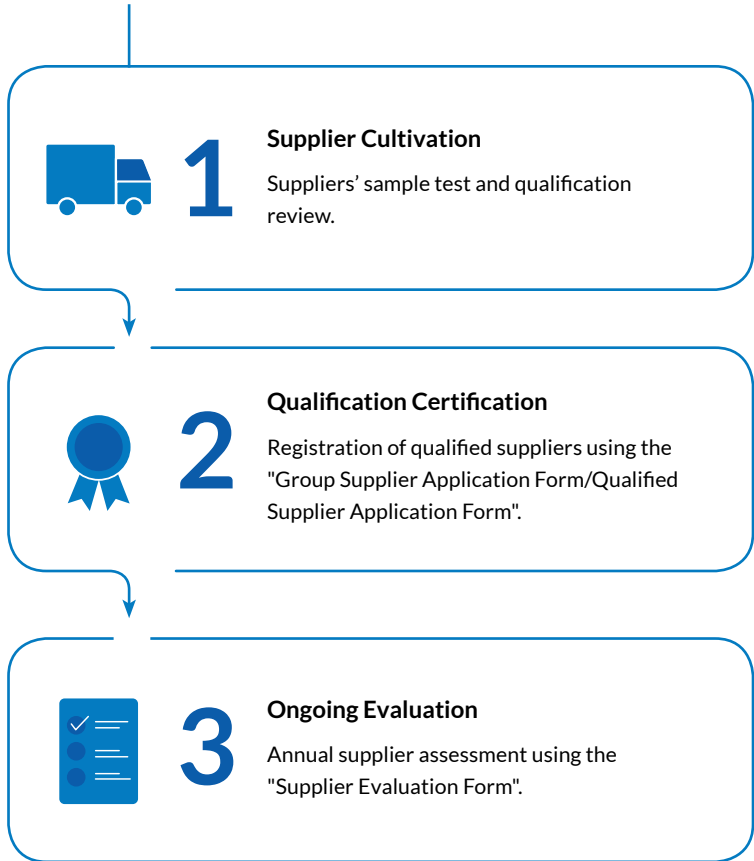
2.3.2 Supply Management Mechanism

To maintain sustainable business practices, TTC conducts regular supplier evaluations every year. We have established evaluation management mechanisms specifically for raw material suppliers and engineering contractors. This is designed to reduce and prevent potential risks. The management mechanism is divided into evaluations for raw material suppliers and engineering contractors.

(1) Evaluation and Management of Raw Materials Supplier Evaluation

TTC (Taiwan and Zhongshan) establish long-term strategic partnership with raw materials suppliers and determine the safety stock based on materials preparation lead-time to ensure supply chain fluency. In order to motivate suppliers to continually optimize and ensure that our company receives high-quality raw materials and services in a timely, appropriate quantity and at a reasonable price, we regularly conduct evaluations in line with our production, operational, and environmental policies each year. Evaluations are based on criteria like quality, delivery time, environmental and workplace safety, packaging, quality certification, and service. These evaluations are uniformly conducted by Procurement & Logistics Division of USIG. The detailed evaluation mechanism and process are outlined below:

- We select qualified suppliers of raw materials and OEM products based on one of or a combination of the following:
 - Suppliers with credibility or a good reputation at home and abroad.
 - Registered with a recognized certification body, such as ISO certifications (ISO 9001, ISO 14001, and ISO 45001), or compliance with the European Union's Restriction of Hazardous Substances Directive (RoHS).
 - Suppliers with a good quality or delivery record.
 - Suppliers designated by technology suppliers.
 - Exclusive suppliers of materials.
- For new suppliers of raw materials/outsourced products, provided samples undergo inspection and testing by the R&D department and other relevant units. After evaluation and trial, if the report meets requirements, it's confirmed in a product improvement meeting. The procurement unit will then add the supplier to the list of qualified suppliers. After approval by the respective plant manager and the President of TTC, this list is used as a reference for procurement.
- Documentation: Information related to qualified raw material/outsourced product suppliers is recorded in the Supplier Directory. A comprehensive record is maintained and reviewed periodically for updates.



※ The primary reference points for assessing environmental and occupational safety are ISO 14001 and ISO 45001.

※ (E), (S), (G) represent respectively environmental, social, and governance aspects.



For annual raw material supplier evaluations, the passing threshold is a score of 75 or above. Suppliers with scores consistently above 85 for three consecutive years are exempt from evaluation. In 2022, the qualification rate of raw material suppliers in all factories exceeded 100%, with the proportion of evaluated suppliers accounting for 100% of the suppliers transacted with in 2022.

Results of Raw Materials Supplier Evaluation 2020-2022

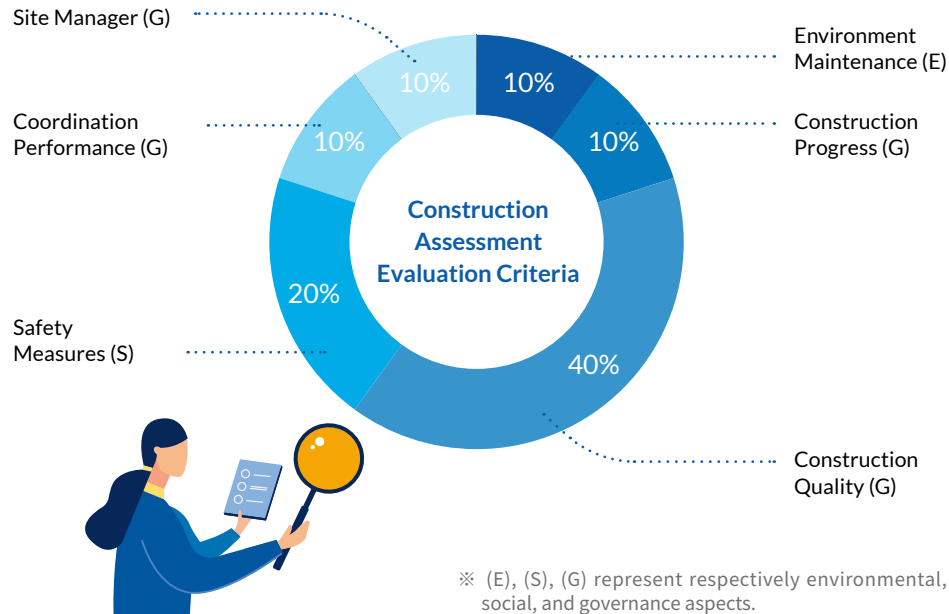
Year	2020	2021	2022
Number of Evaluations (Including Zhongshan Factory)	236	233	256
Pass Rate	100%	100%	100%

※ Suppliers scoring below 59 will, as per regulations, have their transactions either revoked or suspended.



(2) Contractor Evaluation Management

Our subcontracting policy primarily focuses on local contractors. Since 2009, our ABS factory expansion project in the Linyuan factory was fully entrusted to the Zhong Ding Engineering Company. During the construction process, the quality of the work relies on the supervision and management of factory onsite personnel. Management areas include environmental safety, occupational safety, human rights, and labor practices, with regular reports submitted to headquarters for updates.




- 1 Contractor Cultivation**
 Selection of new contractors - Distributing the "Contractor Survey Form".
- 2 Qualification Certification**
 Register qualified contractors - "Contractor Classification Directory".
- 3 Constant Update**
 Periodically updating contractor files - Adjustments for equipment, capabilities, expertise, etc.
- 4 Evaluation**
 Construction assessment - "Construction Evaluation Form".

For construction assessments of contractors, the passing threshold is a score of 50 or above.

In 2022, TTC's qualification rate for construction evaluations in all factories reached **100%**.

The proportion of evaluated contractors accounted for **100%** of the contractors transacted in 2022.



Construction Assessment Results from 2020 to 2022

Year	2020	2021	2022
Number of evaluations	138	137	63
Pass Rate	100%	100%	100%

2.3.3 Strategic Procurement

Under the framework of sustainable business management, TTC is steadfast in promoting oversight in quality, capability, service, and environmental and occupational safety. The company places high importance on ensuring the safety and health of its employees with the ultimate goal of establishing a stable, trust-based, and enduring relationship within the supply chain. TTC collaborates with esteemed suppliers, aiming for mutual growth.

Support for local procurement

TTC has bases in Taiwan and Zhongshan, China, with Taiwan serving as the primary headquarters for overall operations. Upholding the spirit of uplifting local industries in Taiwan, the company prioritizes purchasing from Taiwanese suppliers when product quality and procurement terms are comparable. By fostering strong cooperative relationships, TTC aims to bolster the stable development of Taiwan's economy. In 2022, the proportion of local procurement from the Taiwan factory was 90% of the total procurement amount, while the Zhongshan factory in China maintained a 100% local procurement rate.

The bulk raw materials, such as styrene, acrylonitrile, and butadiene required by TTC production, are under fixed contracts with local Taiwanese suppliers. According to market conditions, a portion is imported from abroad to maintain a steady supply. In 2022, the procurement of these bulk raw materials accounted for 92% of TTC's annual procurement total. There were 10 suppliers for these raw materials, of which 7 were Taiwanese.

Breakdown of 2022 Procurement for Key Raw Materials in Taiwan

Locations/Materials	Styrene	Acrylonitrile	Butadiene
Taiwan	92%	95%	97%
Foreign	8%	5%	3%
Source	2 Local Suppliers 1 Foreign Supplier	2 Local Suppliers 1 Foreign Supplier	3 Local Suppliers 1 Foreign Supplier

Breakdown of 2022 Procurement for Key Raw Materials in Zhongshan Factory

Locations/Materials	Styrene (Zhongshan)
China	100%
Non-China	0%
Source	2 Local Suppliers 0 Foreign Suppliers

Supply Chain Growth Together

In its commitment to sustainable development, TTC not only strengthens its existing supplier evaluation system but also emphasizes enhancing the stability of its supply chain. From 2023 onward, the company plans to establish a procurement personnel factory visit and assessment system for raw material suppliers. Through this comprehensive assessment mechanism, the company aims to nurture and consolidate partnerships with outstanding suppliers, while also reviewing and assisting those who don't meet standards.



The threshold for a passing score on the supplier visits assessment audit is 70 points or higher, with the related procedures as follows:

Suppliers scoring below 70 points

These suppliers will receive guidance on non-compliant items and be provided with ways to improve. There will be regular follow-ups to monitor their improvement status.

Suppliers scoring 70 points or higher

Both parties will organize exchange meetings to discuss and share best practices.



3

Create Friendly Environments


3.1	Eco-friendly Management	57
3.2	Climate Change and Energy Management	60
3.3	Water Resources Management	72
3.4	Air Pollution Control	76
3.5	Waste Management	80

3.1 Eco-friendly Management

Environmental protection and pollution prevention form an integral part of our corporate management strategy. Since June 1998, TTC has implemented the ISO 14001 Environmental Management System, providing a robust framework for environmental protection across all our factories. This approach not only controls and minimizes our environmental impact but also prevents accidents that might harm the environment, ensuring compliance with relevant regulations.

We have integrated the environmental management system with our occupational health and safety system, establishing a comprehensive environmental, health, and safety (EHS) policy. Regular EHS training sessions are conducted to cultivate a safe and healthy working environment.

TTC's Environmental, Health, and Safety Policy

<h3 style="color: #008080;">Corporate Promise</h3> <ul style="list-style-type: none"> Firm commitment to compliance with governmental regulations. Fulfill Corporate Social Responsibility 	
<ul style="list-style-type: none"> Effective implementation of management cycles. Preventative measures to mitigate hazards and reduce risks. 	
<ul style="list-style-type: none"> Emphasis on the concept of responsible care. Prioritizing the needs of employees and the public. 	
<ul style="list-style-type: none"> Continuous improvement to enhance performance. Ensuring sustainable business operations. 	

Depending on the importance of our products, TTC evaluates its production processes in terms of hazardous substance management, pollution prevention, energy conservation, water saving, and carbon reduction. The objective is to achieve high safety standards and low pollution in production. Moreover, we set our environmental goals and targets, and devise management plans or other improvement measures. These initiatives are continually implemented, reviewed, and monitored to ensure best practices are consistently followed.

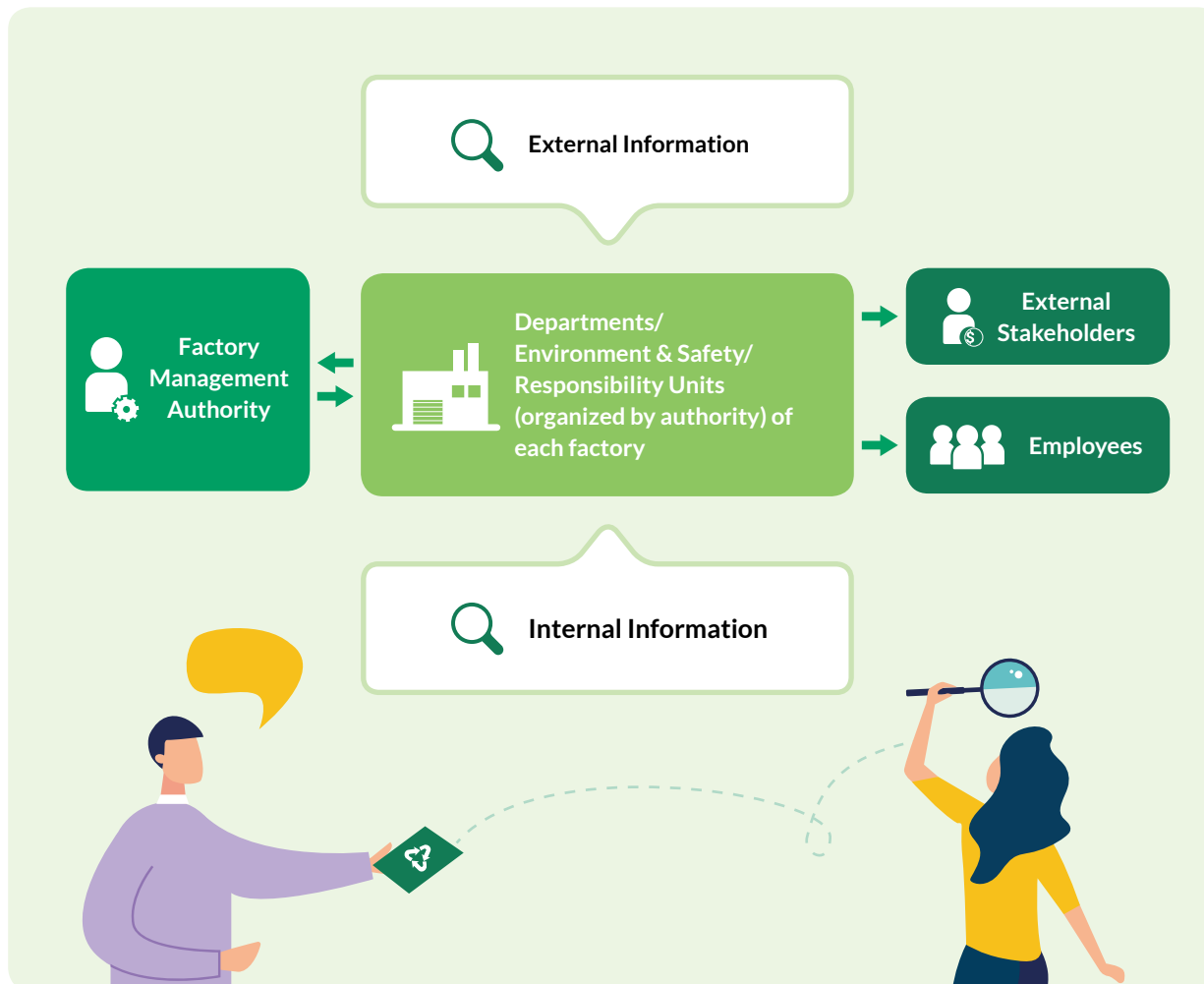
3.1.1 Environmental Management Organization

To effectively implement the environmental, health, and safety (EHS) management system and promote EHS awareness among employees, we have established the EHS Management Committee. The President serves as the chairman of this committee, and under its umbrella, there are EHS management sub-committees established at each factory. The EHS Management Committee convenes a management review meeting at least once a year. Meanwhile, the management sub-committees in each factory hold an occupational safety and health committee meeting at least once every three months and an EHS execution team meeting every two months. These meetings are dedicated to regular discussions and reviews of topics related to environmental, health, and safety issues.



3.1.2 ESH Grievance Channels GRI 2-25

The TTC has established, implemented, and maintained the Operation Regulations for Occupational Safety, Health and Environment Information Collection and Communication as channels and procedures for the communication, engagement, and consultation of environment-related topics for internal stakeholders (employees, employee welfare committee, labor/management meetings, occupational safety and health committee meetings) as well as external stakeholders (customers, suppliers, ESH competent authorities, community residents, and environmental groups).



Internal Complaint and Communication Procedures

1. Employees can consult and communicate on occupational safety, health, and environmental matters through channels such as the Occupational Safety and Health Committee meetings, Environmental and Safety meetings, and the employee complaint mailbox.
2. When employees have suggestions related to occupational safety, health, or environmental issues, they can also follow the proposal improvement system procedure.
3. If employees have complaints about occupational safety, health, or environmental concerns, they can address them through the administrative system or directly approach the Environment & Safety unit.

External Complaint and Communication Procedures

1. After receiving an HSE grievance from outside the organization over the phone (07-7040988), orally or in writing, TTC will refer the case to the responsible unit to verify the contents of the grievance and register it in the "Occupational Safety, Health and Environment Information Collection and Communication Form". After a case has been confirmed, a proper response will be made.
2. Information related to the EHS policy is available on the company's website for public access and consultation.

3.1.3 Environmental Investment

In 2022, the environmental expenditure of TTC totaled NT\$200 million, a 26.9% increase from 2021. The primary reason for this increase is due to the escalation of environmental protection improvement projects in recent years.

The expenditure categories associated with TTC's environmental management are as follows:

Environmental Management Expenditure Overview Table for the Last Three Years

Unit: NT\$10K

Category	2020	2021	2022
1. Cost for environmental management activities	2,750	4,074	3,267
2. Environmental-protection-related personnel expenses	1,788	1,862	1,919
3. Equipment maintenance cost	1,744	2,814	2,012
4. Environmental Improvement Project Costs	7,685	7,046	12,846
Total	13,967	15,796	20,043

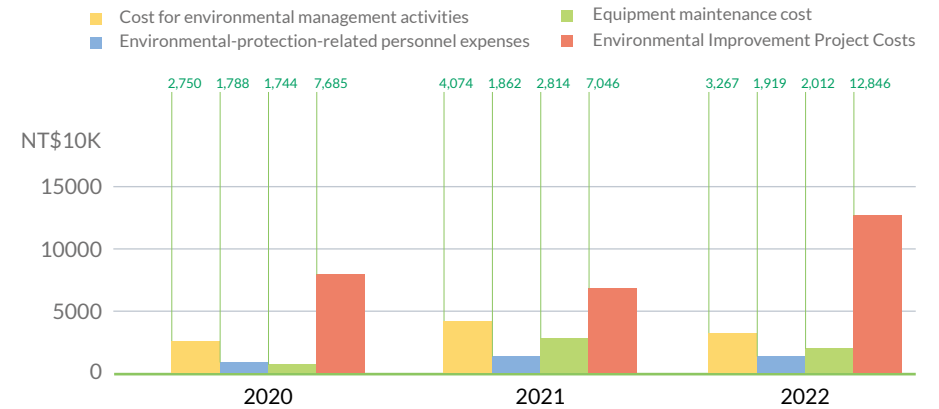
Note 1: Environmental Management Activity Costs: Includes costs related to air pollution control, water pollution control, waste disposal, noise control, and others (e.g., air pollution control expenses, soil and groundwater pollution control expenses, maintenance costs for setting up air quality monitoring facilities in the Linyuan Industrial Zone, etc.).

Note 2: Environmental-protection-related personnel expenses include personnel expenses and environmental protection-related training fees.

Note 3: Equipment Operation & Maintenance Costs: Encompasses expenses associated with the operation, maintenance, and upkeep of equipment for environmental protection and control.

Note 4: Environmental Improvement Project Costs: Covers the expenditure for projects related to environmental enhancements.

Environmental Management Expenditure Distribution for the Last Three Years



3.2 Climate Change and Energy Management GRI 3-3, GRI 302 (302-1, 302-3, 302-4), GRI 305 (305-1, 305-2, 305-4, 305-5)

- **Material Topics:** Climate Change and Energy Management
- **Major reason:** The global average temperature is on the rise due to climate change. This is closely linked to energy consumption. As TTC operates within an energy-intensive industry, the energy efficiency of our production processes is a primary focus. In addition to proactive management within our facilities, we continue to implement energy-saving and carbon-reducing measures. This is especially crucial as government agencies are stepping up their oversight of carbon emissions, preparing us to handle potential future impacts.
- **Impact Scope:** Impact Boundaries: Government agencies, partners, community, and employees
- **Alignment with Sustainability Principles and SDGs:** Create a Friendly Environment/SDGs 13 Climate Action
- **Management approaches**



Policy Purpose	Reduce the environmental impact of energy and greenhouse gas emissions, meeting both national regulatory requirements for reductions and the group's energy-saving and carbon reduction targets. With 2017 as the benchmark year, we have set short-, medium-, and long-term reduction goals. Benchmark Year: The year 2017 is chosen as the reference because it reflects a period where most of our factories operated at optimal capacity utilization.
Goals	2022 Goals 1. Reduce energy consumption per unit product by 3% 2. Greenhouse gas emissions reduced by 7.16% compared to the base year
	Short-term goals for 2023 1. Reduce energy consumption per unit of product by 3% 2. Greenhouse gas emissions reduced by 9% compared to the base year
	Medium- & Long-Term Goals in 2030 1. Reduce energy consumption per unit product by 5% 2. Greenhouse gas emissions reduced by 27% compared to the base year
Management Plan	1. Introduce or update equipment to decrease energy consumption. 2. Strictly monitor energy consumption in the factory. If anomalies arise, carry out maintenance or update equipment accordingly.
Evaluation of the Management	"Energy consumption per unit of product" and "annual reduction rate of greenhouse gas emissions" are set as key performance indicators. An evaluation report is presented to the management, and a review meeting is held annually to assess the performance of the previous year. This helps in proposing improvement measures and verifying their effectiveness.

Assessment Mechanism	1. Conduct monthly statistical analysis on energy consumption to systematically understand the reasons for any increases or decreases. 2. Establish monitoring, testing equipment, and forecasting methods to observe factory energy consumption and control and eliminate anomalies in real-time. 3. Continuously implement the ISO 14064-1 greenhouse gas verification system to systematically survey greenhouse gas emission situations and periodically review various energy-saving and carbon-reducing plans. 4. Persistently carry out the ISO 50001 energy management system to manage energy wastage systematically.
Assessment Result	1. Energy consumption per unit product 2. GHG emissions
Negative Impact Remedies and Preventive Measures	In case of power shortages leading to production interruptions: Plans have been made to install generators to ensure backup power is available during power outages.
Policy Adjustment	Proposals for improvements concerning unmet targets are presented and reviewed during management review meetings.
Grievance Mechanism	Details can be found in Section 3.1.2 under the ESH Grievance Channels.

Status and description for goal achievement

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Review and Follow-up of Energy-saving and Carbon Reduction Management Plan	Reduce energy consumption by 3%	Energy consumption decreased by 7.39%	The goal has been achieved
	Greenhouse gas emissions reduced by 7.16% compared to the base year	In 2022, greenhouse gas emissions amounted to 65,700 tons, which is a 17.56% reduction compared to the benchmark year	The goal has been achieved

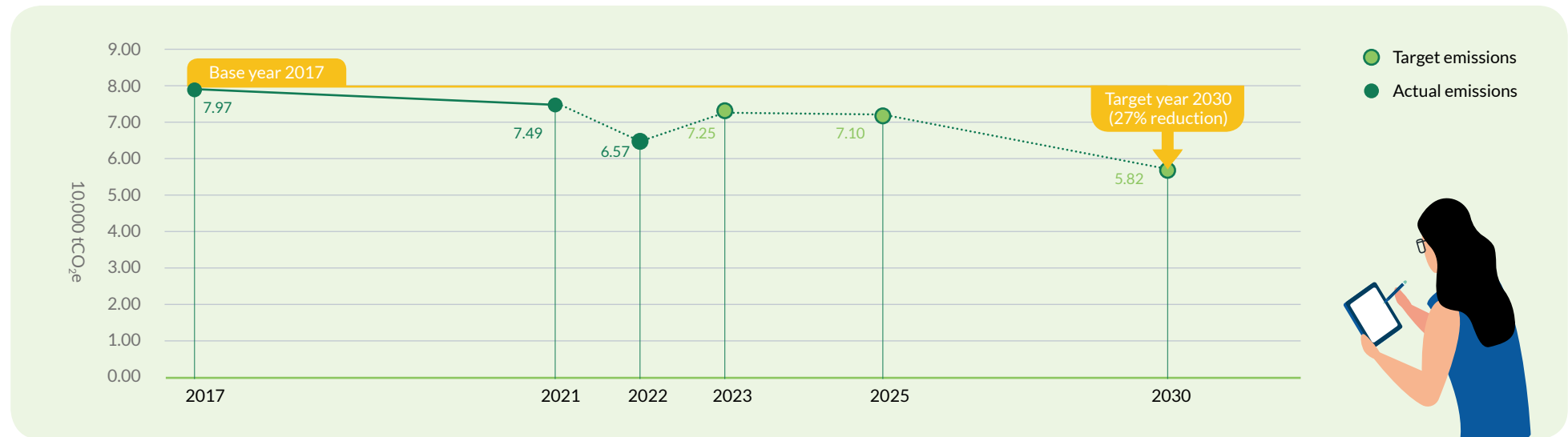
3.2.1 Climate Change

- Climate Change Risk Management

Climate change is a common challenge around the world. To keep up with the world and match the demand for sustainable development, Taiwan's legislature passed the Climate Change Response Act in January 10, 2023. Facing the impact of climate change, carbon reduction has become a global goal. To enhance carbon reduction, we set the 2030 carbon reduction target at "27% less than 2017 by 2030" in early 2022 to actively implement countermeasures and management mechanisms. Nine core businesses of the group will continue to implement ISO 14064-1 GHG inventory and verification and plan and implement carbon reduction programs. The group will also actively develop external renewables sites. By the end of 2022, the accumulative on-grid capacity of solar PV sites has reached 5.9MW.

Following the Group's 2030 carbon reduction targets, TTC has planned its path to carbon reduction. As of 2022, greenhouse gas emissions have decreased by 17.56% compared to the benchmark year (2017). In the future, we will be more proactive in implementing energy-saving and carbon-reducing schemes, enhancing energy-use efficiency, utilizing renewable energy, employing low-carbon fuels, actualizing our carbon reduction targets, and promoting sustainable development.

TTC's Taiwan Plant Carbon Reduction Pathway Targets Graph



Note: The data includes Linyuan Factory, Qianzhen Factory, and Toufen Factory, but excludes Zhongshan Factory.

At TTC, the ESG Committee is the highest governance body of climate change management. Chaired by independent directors, the committee reviews the Company's climate change strategies and targets every year, manages the actions and reviews the performance in climate change risks and opportunities, and reports to the Board. Based on the framework recommended by the Task Force on Climate-related Financial Disclosures (TCFD), we identify climate-related risks and opportunities, assess risks and opportunities from different departments, assess financial impacts and set responsive plans, plan overall assessment every three years, and review updates every year. The last assessment was completed in 2021.

Climate Change Management Framework

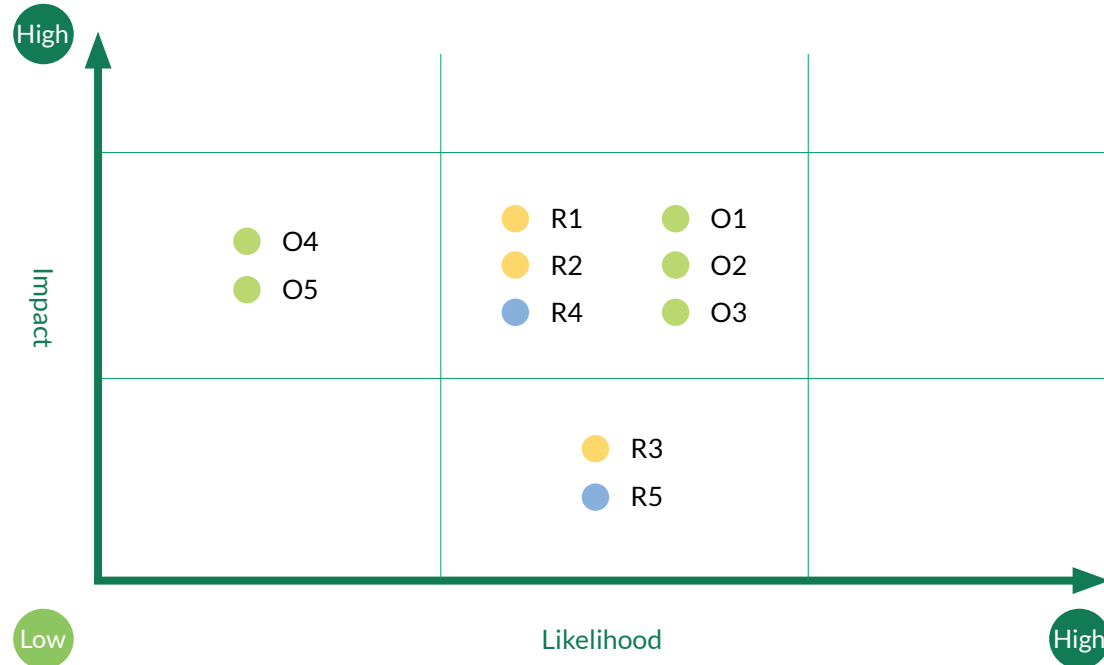
Management strategy and action

<p>Governance</p>	<ul style="list-style-type: none"> • ESG Committee: As the highest governance body of climate change management chaired by independent directors, it reports climate change planning, implementation and performance to the Board every year. • Operations Management Meeting: Chaired by the Board chairman, it plans and implements material policies for energy conservation and carbon reduction and reports the results from time to time. • Division of Equipment Preventive Maintenance and Environmental Risk Control Quarterly Meeting: As the highest governance body of the Group's energy management, it reports the planning and progress to the Group's chairman each quarter and makes decisions on energy management. • Group Green Power Team: As the Group's responsible unit for green power promotion, it reports the status of and future plans for green power development of the chairperson.
<p>Strategy</p>	<ul style="list-style-type: none"> • Identification of risks and opportunities: Identify material risks and opportunities based on their likelihood and impact. • Assessment of risks and opportunities: Assess the potential financial impacts of identified material risks and opportunities. • Scenario analysis: Set plans to achieve net zero emissions in different scenarios.
<p>Risk Management</p>	<ul style="list-style-type: none"> • Implementation of TCFD-recommended framework: Identify risks and opportunities based on the TCFD-recommended framework, communicate with all responsible units, and confirm by senior management. • Report of identification results: Include them in the annual risk assessment. The president reports the control measures and management performance to the Audit Committee and Board every year.
<p>Indicators and Targets</p>	<ul style="list-style-type: none"> • Under the overarching carbon reduction goal of the group, an energy management objective was established, setting 2017 as the benchmark year with a target of a 27% reduction in carbon emissions by 2030. • Climate change countermeasures: Equipment replacement, construction of renewables facilities, optimization of production scheduling, planning building aircon, energy management system, extreme weather events contingency plans. • GHG emissions disclosures: Disclose the data of Scopes 1 and 2 emissions in the ESG report every year and review the causes for changes periodically.

Identification of Climate Risks and Opportunities

The impact of climate change on TTC's operations has been increasing. To carefully tackle potential risks and capture potential new business opportunities, we have spared no efforts in implementing programs to enhance energy conservation and carbon reduction, improving production efficiency, and replacing old equipment with high-efficiency equipment. During operations, we have identified 5 major risks and 5 major opportunities with the TCFD-recommended methods and assessed and differentiated the duration of impacts. In the future, we will review our progress annually to foster a resilient culture adapted to climate change.

Climate-Related Risks and Opportunities Matrix Graph



Physical risk

- R1 Changes in precipitation patterns and extreme variability in weather patterns
- R2 Increased severity of extreme weather
- R3 Average temperature rises

Transition risk

- R4 Enhance GHG Emission Pricing
- R5 Enhance emission report obligation

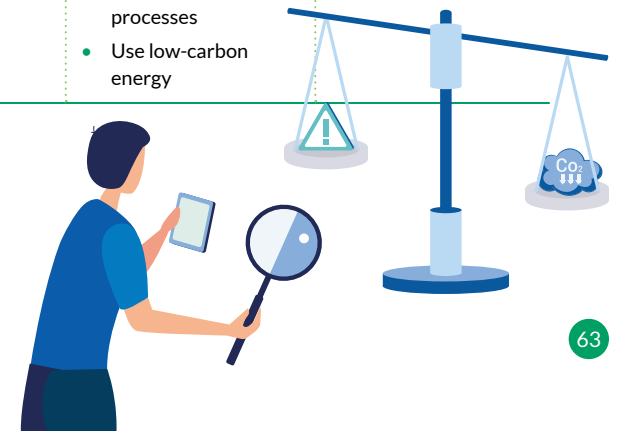
Opportunity

- O1 Recycling and reuse
- O2 Participation in renewables projects and adoption of energy conservation measures
- O3 Reduce water use and water consumption
- O4 Use of higher efficient production and distribution processes
- O5 Use low-carbon energy

The climate change risks and opportunities by the identified duration are tabulated below:

Overview Table of Short, Medium, and Long-Term Climate Change Risks and Opportunities

Type	Short-term (<3 years)	Medium-term (3-5 years)	Long-term (>5 years)
Physical risk	---	<ul style="list-style-type: none"> Increased severity of extreme weather events 	<ul style="list-style-type: none"> Changes in precipitation patterns and extreme variability in weather patterns Average temperature rises
Transition risk	---	<ul style="list-style-type: none"> Enhance GHG Emission Pricing Enhance emission report obligation 	---
Opportunity	---	<ul style="list-style-type: none"> Recycling and reuse Participation in renewables projects and adoption of energy conservation measures Reduce water use and water consumption Utilize more efficient production and distribution processes Use low-carbon energy 	---

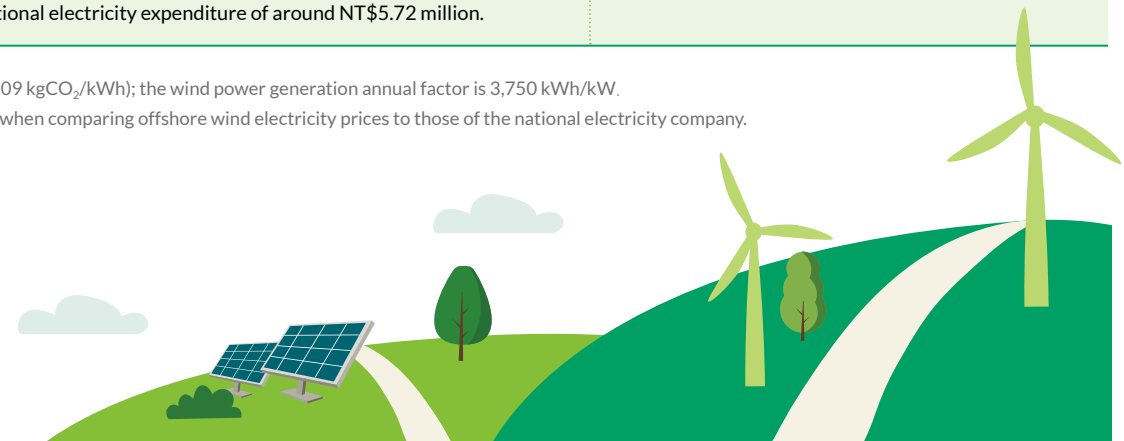


Overview Table of Potential Financial Impact of Risks and Opportunities and Countermeasures

Type	Climate-Related Risk	Potential Financial Risk	Company Description	Countermeasures
 Physical risk	Changes in precipitation patterns and extreme variability in weather patterns	Decrease in revenue	<ul style="list-style-type: none"> Changes in rainfall patterns, such as typhoons and flooding, will increase the probability of damage to factories and equipment, leading to potential business interruptions 	<ul style="list-style-type: none"> Install a water recycling system Phase out high-water-consuming equipment Plan for disaster insurance
	Increased severity of extreme weather events	Decrease in revenue	<ul style="list-style-type: none"> Prolonged periods without rain can lead to low reservoir levels, resulting in water rationing and shortages. Unexpected events such as typhoons and intense rain can lead to flooding, causing operational interruptions 	<ul style="list-style-type: none"> Build flood control and drainage measures Monitor water conditions and establish emergency response procedures Plan for alternative water sources
	Average temperature rises	Increase in operating costs	<ul style="list-style-type: none"> Events like seawater backflow and floods could disrupt company operations 	<ul style="list-style-type: none"> Raise the key equipment foundation Build flood control and drainage measures Assess potential flooding risks for new equipment sites
 Transition risk	Enhance GHG Emission Pricing	Increase in operating costs	<ul style="list-style-type: none"> This may elevate operational costs due to anticipated impacts from the Climate Change Response Act. The implementation of domestic carbon fee mechanisms may result in carbon fee payments 	<ul style="list-style-type: none"> Set a carbon reduction goal of 27% by 2030 The Group has established a green energy team, actively working on setting up and negotiating green energy solutions Upgrade and replace outdated equipment within the factory to improve energy efficiency
	Enhance emission report obligation	Increase in operating costs	<ul style="list-style-type: none"> Voluntary audits have been conducted for several years. Starting in 2022, the three Taiwanese factories have conducted audits and verification in accordance with the ISO 14064-1 standards 	<ul style="list-style-type: none"> Annual greenhouse gas inventory and verification activities are carried out The scope is gradually expanding to include consolidated report subsidiaries
 Opportunity	Recycling and reuse	Initial costs are high, but operational costs decrease over time	<ul style="list-style-type: none"> The recycling and reuse portion of general business waste accounts for 56.32%. Other reuse accounts for 21.75%, and sludge resource utilization is at 34.57% 	<ul style="list-style-type: none"> Recover product powder from the wastewater in the processing area for reuse Invest in sludge drying equipment to reduce sludge moisture content
	Participation in renewables projects and adoption of energy conservation measures	Initial carbon reduction technology costs are high, but operational costs decrease over time	<ul style="list-style-type: none"> Assess diverse power sources, replacing those with high carbon emissions 	<ul style="list-style-type: none"> Engage with the Renewable-Energy-Based Electricity Retailing Enterprise Develop self-built solar projects Monitor and participate in the power market
	Reduce water use and water consumption	Operating Cost Down	<ul style="list-style-type: none"> Save water and recycle wastewater through process improvements Include water usage in monthly key performance indicators monitoring. Statistical analysis and comparisons on water consumption are performed. If any anomalies in water usage are detected, an immediate cause investigation is conducted, followed by improvement measures 	<ul style="list-style-type: none"> Invest in wastewater reclamation equipment Improve process equipment and operation to reduce steam use Constantly develop water conservation programs

Type	Climate-Related Risk	Potential Financial Risk	Company description	Countermeasures
Opportunity	Utilize more efficient production and distribution processes	Increase in revenue	<ul style="list-style-type: none"> Increase production through proper equipment maintenance and operational optimization to improve the energy efficiency per product unit and reduce greenhouse gas emissions 	<ul style="list-style-type: none"> Implement an annual 1% electricity saving improvement plan by enhancing production methods and equipment to optimize energy efficiency
	Use low-carbon energy	Increase in operating costs	<ul style="list-style-type: none"> Assess diverse power sources, replacing those with high carbon emissions If the remaining carbon reduction gap at the Linyuan factory is met using green energy, it is estimated that there will be a need to increase the use of green energy by about 21.69 million kWh by 2030, accounting for 33% of the total electricity consumption. If solely using offshore wind energy, an installation capacity of approximately 5.79MW is required, leading to an additional electricity expenditure of around NT\$43.39 million. If the remaining carbon reduction gap at the Toufen factory is met using green energy, it is estimated that there will be a need to increase the use of green energy by about 2.86 million kWh by 2030, accounting for 16% of the total electricity consumption. If solely using offshore wind energy, an installation capacity of approximately 0.76MW is required, leading to an additional electricity expenditure of around NT\$5.72 million. 	<ul style="list-style-type: none"> The Group coordinates and plans to fulfill the regulatory obligation amount by 2025 through the purchase of green energy Develop self-built solar projects

Note: (1) It is assumed that the power emission factor in 2030 remains consistent with that in 2021 (0.509 kgCO₂/kWh); the wind power generation annual factor is 3,750 kWh/kW.
 (2) The increased electricity expenditure is estimated based on an additional NT\$2 cost per kWh when comparing offshore wind electricity prices to those of the national electricity company.



3.2.2 Energy Usage and Management

USIG's Energy Management Targets

USI Group (USIG) voluntarily set energy management targets in 2016 and began to make dynamic target reviews in accordance with the country's energy development policies and by keeping track on the internal trends and domestic laws and regulations. After measuring the internal and external factors, we set the 2030 carbon reduction target in early 2022. The 9 USIG core businesses began to implement the ISO 50001 energy management system and obtained the certificate on after another in 2018 to effectively manage energy performance and continuously improve energy conservation and carbon reduction, hoping to demonstrate USIG's influence and so to lower environmental impact.

Group Technical Exchange Meeting

Every year USIG holds the “plant technology exchange meeting” and several “northern/ Kaohsiung plants resource integration meetings” for plants to share resources and exchange technologies to improve performance in energy conservation and carbon reduction. In 2022 the “plant technology exchange meeting” was held in October. Case presentation with themes including “industrial safety and environmental protection”, “equipment preventive maintenance”, and “energy conservation and carbon reduction” were conducted through competitions. Through plan technology case submission and documentary review, a total of 7 cases entered the final. Senior USIG officers and plant representatives elected the three best cases. The USIG chairman presented the certificates and bonuses to winners. Through ratings and encouragement, sharing, and mutual learning, we aim to advance technology in the group.



TTC's Commitment to the Group's Energy Management Goals

TTC has actively invested in energy-saving and carbon reduction programs. The electricity savings rate over the past three years is listed in the table below. These achievements exceed the legal requirement, which mandates an average annual savings rate of 1% or more. In 2022, TTC continued its dedication to promoting energy-saving projects. Initiatives, such as boiler energy-saving measures and the replacement of outdated cooling water towers, are underway across all plants. These initiatives undergo periodic reviews, with the hope of further achieving the group's carbon reduction goals.

Electricity Savings Rate Achievement Overview Table for the Last Three Years

Annual Target		Performance		
		2020	2021	2022
Electricity Conservation (%)	1.0%	1.18%	1.05%	1.22%

Energy Usage Details

In 2022, the energy consumption calculation of TTC covered Linyuan Plant, Qianzhen Plant, Toufen Plant, and Zhongshan Plant, achieving a coverage rate of 100%. Compared to 2021, the energy consumption in 2022 decreased by 11.2%. Furthermore, regarding the energy consumption per unit of product, although the energy intensity increased at the Linyuan Plant and Zhongshan Plant due to decreased production capacity, TTC's overall average energy intensity decreased by 7.39% compared to 2017, achieving the goal of reducing energy consumption per unit product by 3%.

Energy Usage Overview Table for the Last Three Years

Energy Type	Unit	2020	2021	2022
Natural gas	GJ	241,886	242,997	222,644
Diesel	GJ	5,446	5,611	5,541
Steam	GJ	219,540	218,460	187,394
Electricity	GJ	391,915	402,607	356,458
Total consumption amount	GJ	858,787	869,676	772,036

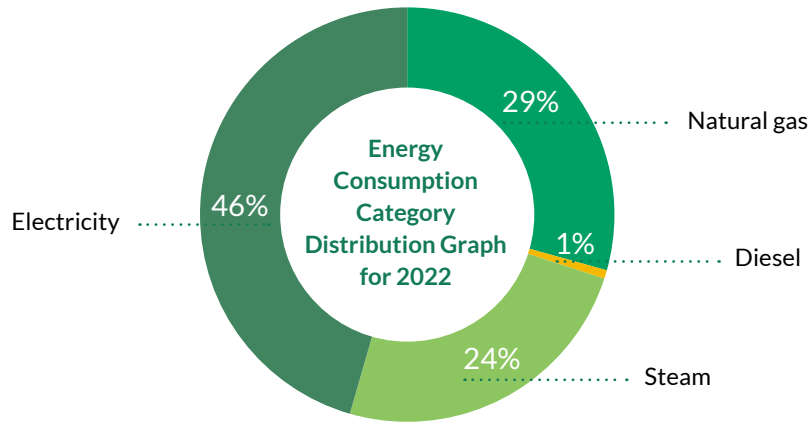
Note 1: Referring to the Energy Heating Value Per Unit Product Table announced by the Bureau of Energy, Ministry of Economic Affairs, the conversion factor of energy consumption of fuel oil, electricity, LPG, natural gas, and diesel is as follows: 9,600 Kcal/L, 860 Kcal/kWh, 9,700 Kcal/m³, and 8,400 Kcal/L; where 1 Kcal = 4.187 KJ. The calorific value of 1 ton of steam is 665,100 Kcal.

Note 2: The sources for data on the consumption of energy such as fuel oil, diesel, natural gas, steam, and electricity, as well as production quantity, come from on-site unit consumption reports.

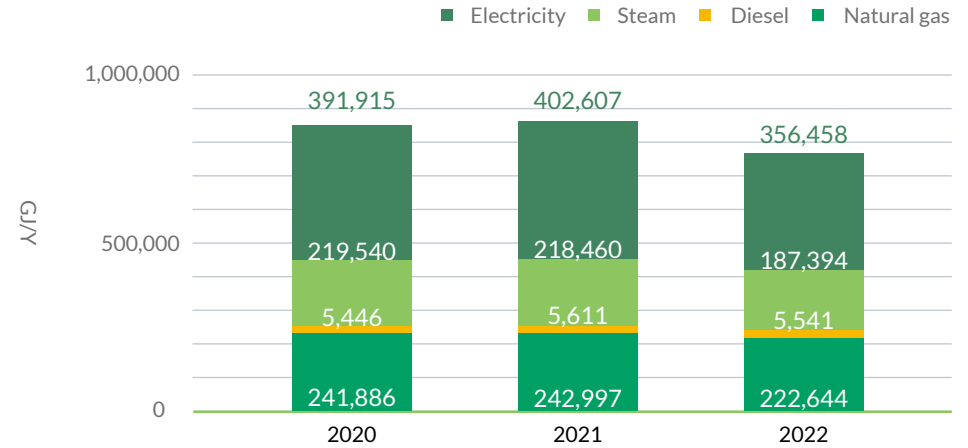
Note 3: Only non-renewables is used.

Note 4: Currently, TTC does not use any renewable energy fuel categories and does not sell electricity, nor does it provide heating, cooling, or steam.

Energy Consumption Category Distribution Graph For 2022



Energy Consumption by Type Graph for the Last Three Years



Energy Consumption per Unit of Product by Plant Overview Table for the Last Three Years

Plant	Product	Unit	2017 (Base year)	2020	2021	2022	Reduction Rate compared to Base Year	Achievement Status
Linyuan Factory	ABS + AS Resin	GJ/Ton of product	2.06	1.908	1.912	2.222	+7.7%	Not achieved
Qianzhen Factory	EPS + GPS Polystyrene	GJ/Ton of product	1.21	1.092	1.032	0.869	-28.14%	Achieved
Toufen Factory	Glass Wool + Curved Surface Printing	GJ/Ton of product	17.32	15.021	15.916	15.867	-8.38%	Achieved
Zhongshan Factory	EPS Polystyrene	GJ/Ton of product	1.09	1.107	1.147	1.232	+12.77%	Not achieved

Note 1: 2017 is the base year.

Note 2: Due to decreased production capacity, the Linyuan and Zhongshan plants experienced an increase in energy intensity.

3.2.3 GHG Management

TTC follows the 2030 carbon reduction goals set by the USIG. The company has set a carbon reduction target of 27% less than the 2017 baseline year for greenhouse gas emissions by 2030. This is reviewed regularly to ensure we meet annual emission targets. This goal is realized through the execution of various energy-saving initiatives and plans to reduce greenhouse gas emissions. Each factory has proposed measures like reducing process energy consumption, waste heat recovery and reuse, improving equipment efficiency, and energy management. There's also an integrated plan for energy and resource sharing across different factories to utilize waste heat steam efficiently and maximize resource use, further aiming to reduce greenhouse gas emissions.

TTC began promoting the adoption of ISO 14064-1 in 2021. In 2018, greenhouse gas inventory operations were carried out (Zhongshan and Tianjin subsidiaries in the TTC consolidated report will also complete their carbon inventory operations in 2023). Third-party guidance and verification are sought to ensure the accuracy and reasonableness of greenhouse gas emission data. In 2022, the overall emissions of the Taiwan plants decreased by 17.56% compared to the baseline year. The per-unit product carbon emissions in 2022, compared to the baseline year, increased slightly at the Linyuan plant but decreased at other facilities.

Overview Table of Achievement Rate of Carbon Reduction Pathway Emission Target

Unit: ten thousand tons CO₂e/year

Factory	Target emissions in 2022	2022 Verified Actual Emissions	Achievement Rate %	2023 Target Emissions
Taiwan Plants	7.398	6.571	112%	7.249

Note: The 2022 greenhouse gas emissions haven't been verified by a third party at the time of this report's issuance. Verification will be completed by July 2023.

Overview Table of Annual Greenhouse Gas Emissions Compared to the Baseline Year

Unit: tons CO₂e/year

Item	2017(Base)	2021	2022
Scope 1	18,551	15,153	15,220
Scope 2	61,149	59,745	50,492
Total emissions	79,700	74,898	65,712

Note 1: The coefficients are adopted from the EPA's Greenhouse Gas Emission Coefficient Management Table version 6.0.3 and the Intergovernmental Panel on Climate Change (IPCC) 2007 Fourth Assessment Report's Global Warming Potential (GWP) value.

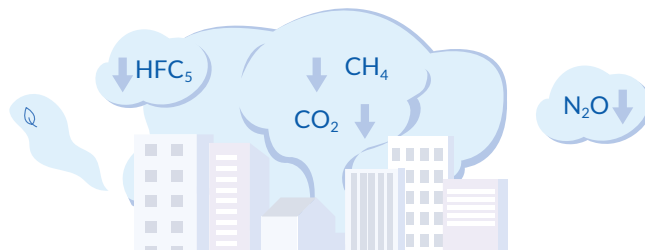
Note 2: The 2017 carbon emissions were recalculated without third-party verification. 2021 emissions have been audited and verified by a third party.

Note 3: The types of greenhouse gases include CO₂, CH₄, N₂O, and HFCs.

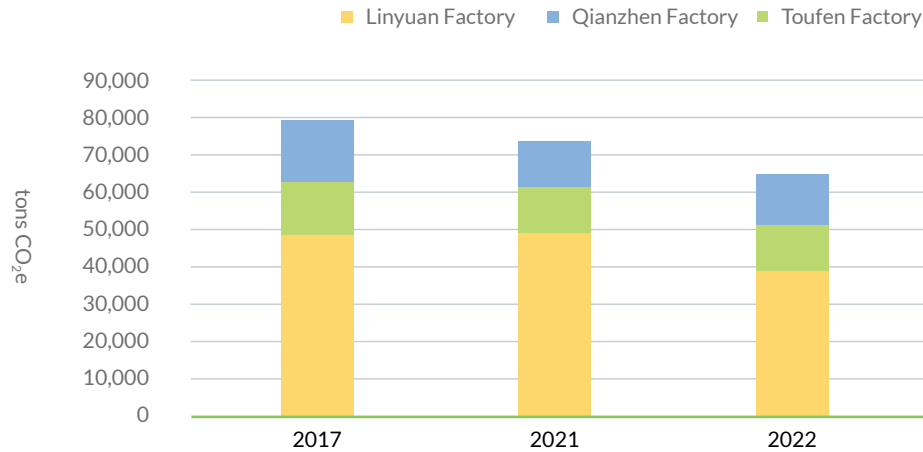
Note 4: In response to regulations from the Taiwan EPA and the Financial Supervisory Commission, the emissions data only includes Linyuan, Qianzhen, and Toufen plants. The mainland plants (Zhongshan and Tianjin) are excluded from this count.

Note 5: TTC's Taipei office's 2022 greenhouse gas emissions are 3.2015 tons CO₂e for Scope 1 and 35.1366 tons CO₂e for Scope 2.

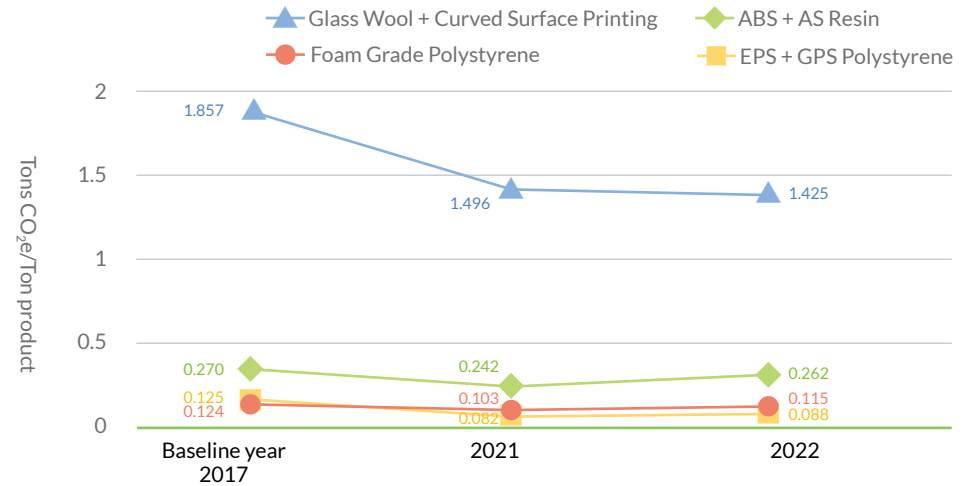
Note 6: TTC's (Taipei office, Qianzhen plant, Linyuan plant, and Toufen plant) Scope 3 emissions in 2022 amount to 114,224 tons CO₂e.



Total Greenhouse Gas Emissions in Recent Years Compared to the 2017 Baseline Year



Greenhouse Gas Emissions per Product Unit in Recent Years Compared to the 2017 Baseline Year



Overview Table of Carbon Emissions per Product Unit in Recent Years Compared to the Baseline Year

Plant	Product	Unit	2017 Baseline Year	2021	2022	Percentage change compared to baseline year
Linyuan Factory	ABS + AS Resin	Tons CO ₂ e/Ton product	0.270	0.242	0.262	+2.803%
Qianzhen Factory	EPS + GPS Polystyrene	Tons CO ₂ e/Ton product	0.125	0.082	0.088	-29.872%
Toufen Factory	Glass Wool + Curved Surface Printing	Tons CO ₂ e/Ton product	1.857	1.496	1.425	-23.250%

Note 1: The carbon emissions for the 2017 baseline year disclosed in this report were recalculated using external verification methods but were not audited by a third party.

Note 2: The carbon emissions for 2021 disclosed in this report are based on externally audited data. The data for 2022 will be verified in July 2023.

Plant	Product	Unit	2017 Baseline Year	2021	2022	Percentage change compared to baseline year
Zhongshan Factory	Foam Grade Polystyrene	Tons CO ₂ e/Ton product	0.124	0.103	0.115	-7.258%

Promotion of Energy-Saving and Carbon Reduction Initiatives

TTC has established energy-saving and carbon-reduction committees in all its Taiwan-based plants. They convene regular Energy Resource Integration Meetings to share experiences and collaboratively drive effective and pragmatic energy-saving and carbon-reduction initiatives. The plants set energy-saving and carbon-reduction strategies, as well as plant-wide reduction targets, and review the performance on a quarterly basis.

Every two months, each plant's Environmental, Health, and Safety (EHS) team convenes an EHS implementation meeting. This meeting tracks the progress of energy-saving and carbon-reduction initiatives, evaluates compliance with applicable regulations, and actively urges each plant to fulfill its energy-saving and carbon-reduction responsibilities.

In mainland China, the Zhongshan plant holds annual energy-saving and carbon-reduction meetings, aligning with the government's carbon-reduction policies. They establish strategies and targets for each unit, which are reported to the Zhongshan Development Zone government every year.

In 2022, all plants executed 24 energy-saving and carbon-reducing measures, collectively conserving about 1,089,600 kWh of electricity and reducing approximately 555 tons of CO₂e emissions. A summary of the implemented initiatives is presented in the table below:

2022 Performance Overview Table of Energy-Saving and Carbon-Reduction Measures

Factory Area	Measures	2022 Performance	
		Power Saved (kWh)	Carbon Reduction (tons CO ₂ e)
Linyuan Factory	<ol style="list-style-type: none"> Utility Area Cooling Water Pump P6210-3 Update Replaced the Fuxing 170HP (120KW) fixed-frequency centrifugal air compressor with a 120KW variable-frequency spiral air compressor Discontinued the use of the EB storage tank in Zone 25 and switched to using the EB storage tank in Zone 27 to support Zones 24 and 25 Replaced two 4kW water dispensers in the administrative building Downsized the equipment at P2719 in Zone 27 Upgraded the waste storage area's lighting by replacing the existing LED lights with lower wattage LEDs Replaced the box-type air conditioner (Tatung 5 tons) in the kitchen and dining area Replaced the styrene unloading pump P1101-2/3 	746,423	380
Qianzhen Factory	<ol style="list-style-type: none"> Upgraded 17 motors throughout the plant to the IE3 high-efficiency standard Installed a 100HP variable-frequency air compressor in the EPS public area to replace the old air compressor 	239,095	122
Toufen Factory	<ol style="list-style-type: none"> Upgraded 4 motors in the cooling tower to the IE3 high-efficiency standard Upgraded 7 motors on the fiberglass production line to the IE3 high-efficiency standard Replaced a 100HP blower motor in the public area with an IE3 high-efficiency motor Upgraded 2 motors at the furnace base to the IE3 high-efficiency standard 	104,092	53
Total		1,089,610	555

Note 1: Conversion factor: 1 kWh = 0.509 kgCO₂e

Note 2: The Zhongshan plant has not yet drafted plans, so it is not presented in this table.

For 2023, we plan to implement 22 energy-saving and carbon-reducing measures. These are summarized in the following table. We anticipate power savings of approximately 2.93 million kWh and a targeted carbon reduction of around 1,493 tons CO₂e.

Overview Table of Planned Energy-Saving and Carbon-Reduction Measures for 2023

Factory Area	Measures	2023 Goals	
		Power Saved (kWh)	Carbon Reduction (tons CO ₂ e)
Linyuan Factory	<ol style="list-style-type: none"> 1. Replaced cooling tower E6208C-1/2 in the public area with E6208E-3 2. Upgraded cooling tower E6208-1 in the public area 3. Replaced mercury lamps in Zones 11, 12, 13, 21, 22, and 25 (explosion-proof areas) with LEDs 4. Replaced the 1000KVA transformer in the public area with a high-efficiency model 5. Upgraded 3 Roots blowers in Zones 34, 26, and 82 to air-float blowers 	829,076	422
Qianzhen Factory	<ol style="list-style-type: none"> 1. Installed a 150HP variable-frequency air compressor in the public area to replace the old air compressor 2. Upgraded 3 motors of the NOVA 8 SILO blower to the IE3 high-efficiency standard 3. Replaced the old cooling tower used in the GPS process 4. Upgraded 3 motors in the EPS process reaction tanks and 2 mixer motors to the IE3 high-efficiency standard 5. Optimized the variable-frequency settings of air compressor C7210-2 in the public area to reduce power consumption during idling 6. Optimized the variable-frequency settings of the RTO blower to reduce constant power consumption 7. Upgraded the industrial water pump motor P7010 and the dryer motor M2125 to the IE3 high-efficiency standard 	2,017,593	1,027
Toufen Factory	<ol style="list-style-type: none"> 1. Upgraded 3 motors on the fiberglass production line to the IE3 high-efficiency standard 2. Upgraded 3 motors in the compressor room to the IE3 high-efficiency standard 3. Replaced 1 motor in the batching area with an IE3 high-efficiency motor 4. Upgraded 2 blower motors at the water wash pool to the IE3 high-efficiency standard 	86,993	44
Total		2,933,662	1,493



3.3 Water Resources Management GRI 3-3,GRI 303 (303-1,303-2,303-3,303-4)

3.3.1 Water Resources Management

- **Significance:** Water Resources Management
- **Major reason:** Water resources are essential for operational development. As the risks of water scarcity and water-related disasters increase, ensuring a stable water supply has become a crucial issue for our company. Wastewater discharge has exceeded the natural purification capacity of water bodies in recent years, leading to water pollution issues and affecting the use of water resources. In recent years, sewage discharge has exceeded the capacity of self-purification for water, resulting in water pollution issues that affect the use of water resources.
- **Impact Scope:** Affected Stakeholders: Government agencies, local communities, employees.
- **Sustainability Principles & SDGs Alignment:** Friendly Environment Creation / SDG 6: Clean Water and Sanitation
- **Management approaches:**



Policy Purpose	Reduce water consumption to lessen production costs and the environmental impact of wastewater discharge. Objectives are set with 2017 as the baseline year for short, medium, and long-term reduction.
Goals	2022 Goals 1. Reduce water consumption per unit of product by 3% compared to the baseline year. 2. Discharge water quality meets the standard
	Short-term goal in 2023 1. Reduce water consumption per unit of product by 3% compared to the baseline year. 2. Discharge water quality meets the standard
	Medium- & Long-Term Goals in 2030 1. Reduce water consumption per unit of product by 10% compared to the baseline year. 2. Discharge water quality meets the standard
Management Plan	1. Introduce or upgrade equipment, and reuse wastewater to reduce water consumption. 2. Strictly regulate water usage in the factory to prevent water wastage and increased wastewater discharge.
Evaluation of the management	Monitor "water consumption per unit of product" and "rate of exceeding water discharge quality standards" as key performance indicators. Present reports to management and conduct an annual review to assess the previous year's performance and suggest improvements.
Assessment result	1. Water Consumption per Unit of Product over the Last Three Years In 2022, water consumption per unit decreased by 23.6% compared to 2017%, achieving our goal. 2. Water Quality and Discharge over the Past Three Years In 2022, all factories of TTC met the regulatory standards for wastewater discharge.
Negative Impact Remedies and Preventive Measures:	Water Reservoir Shortage leading to Production Interruption: Participate in public sector water-saving plans and explore alternative water sourcing methods, such as water trucks.
Policy Adjustment	Proposals for improvements concerning unmet targets are presented and reviewed during management review meetings.
Grievance Mechanism	Details can be found in Section 3.1.2 under the ESH Grievance Channels.

Status and Description of Objective Achievement

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Water-saving and Wastewater Improvement: Plan Tracking	Consumption per unit compared to the baseline year decreased by 3%	Consumption per product unit decreased by 23.6%	The goal has been achieved
	Discharge water quality meets the standard	Discharge water quality of all plants meets the standard	The goal has been achieved

TTC leverages its existing technologies and expertise, adhering to principles of source management, waste reduction in processes, and end-point controls, to minimize water demand and reinforce water resource reuse and accelerated recovery processes. In 2022, the total water intake was 935 million liters, the total wastewater discharge was 607 million liters, and the total water consumption amounted to 328 million liters.

The scope of water resource management encompasses the Linyuan Factory, Qianzhen Factory, Toufen Factory, and Zhongshan Factory, achieving a coverage rate of 100%.

TTC employs the water risk assessment tool developed by the World Resources Institute (WRI). In conjunction with the water source distribution of each factory site, the company uses the Aqueduct Tool as its method for water risk assessment, pinpointing the water stress situation of each factory's water intake location. The analysis indicates that the Linyuan Factory and Qianzhen Factory are regions with relatively higher risk for TTC. Apart from utilizing the TCFD framework to assess the impact of climate change on water resources, the company continually enhances its in-factory water recovery rate, thereby bolstering its adaptive capacity in the face of risks.

Factory	Linyuan Factory	Qianzhen Factory	Toufen Factory	Zhongshan Factory
Primary Water Sources	Fengshan Reservoir	Fengshan Reservoir	Yonghe Mountain Reservoir	Hengmen Canal
Water Stress Situation	Moderate to High (20-40%)	Moderate to High (20-40%)	Low to Moderate (10-20%)	Low (<10%)

Note 1: The WRI (Water Resource Institute) Aqueduct Tool is used for water risk assessment. <http://www.wri.org/our-work/project/aqueduct/aqueduct-atlas>

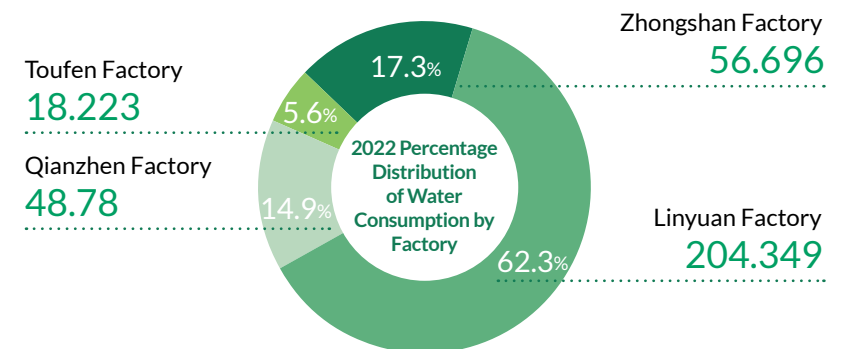
All Taiwanese factories source their water from municipal water plants. The Zhongshan factory, however, procures its supply from neighboring plants. In 2022, the water consumption amounted to 328 million liters, a decrease of approximately 16.32% compared to the baseline year of 2017. The water consumption per unit product has reduced by 23.6%.

Water Consumption and Per Unit Product Water Consumption Overview Table for the Last Three Years

Item	Base year is 2017	2020	2021	2022
Total Water Intake (Million Liters)	1,064	1,110	1,110	935
Total Water Consumption (Million Liters)	392	515	471	328
Water Consumption Per Unit Product (Ton/ Ton Product)	1.339	1.282	1.181	1.024

For the water consumption of products in each factory, the Linyuan factory's ABS+AS resin has the highest proportion, accounting for approximately 62.3%. Following this, the Zhongshan factory's foam-grade EPS resin accounts for about 17.3% of the water consumption.

2022 Water Consumption Distribution by Factory



Unit: million liters

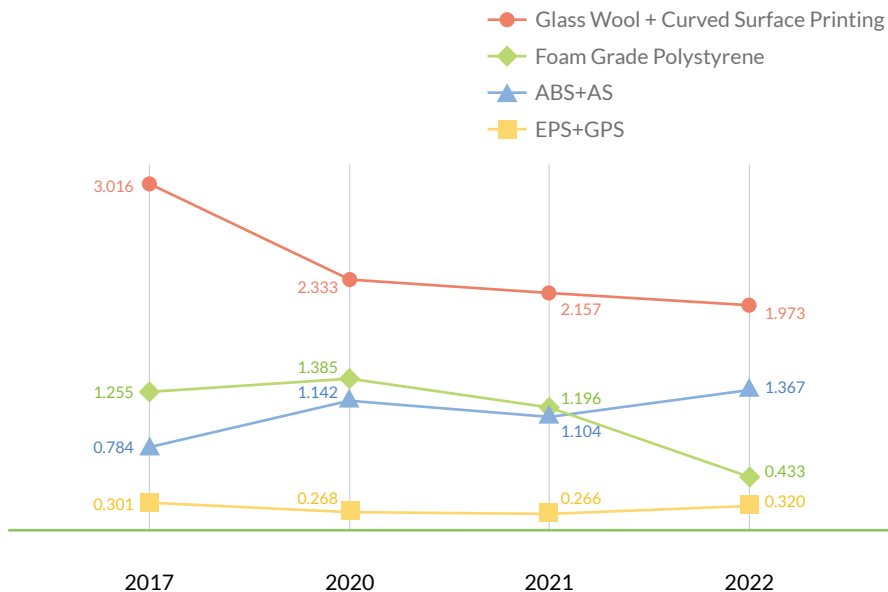
Water Consumption Per Unit Product for Various Products Overview Table for the Last Three Years

Plant	Product	Unit	Base year is 2017	2020	2021	2022	Increase/Decrease Rate Compared to Baseline Year 2022
Linyuan Factory	ABS + AS Resin	Ton/Ton Product	0.784	1.142	1.104	1.367	+74.37%
Qianzhen Factory	EPS + GPS Polystyrene	Ton/Ton Product	0.301	0.268	0.266	0.320	+6.46%
Toufen Factory	Glass Wool + Curved Surface Printing	Ton/Ton Product	3.016	2.333	2.157	1.973	-34.58%
Zhongshan Factory	Foam Grade Polystyrene	Ton/Ton Product	1.255	1.385	1.196	0.433	-65.46%

Note 1: The baseline year is set as 2017.

Note 2: After 2017, for the Linyuan and Qianzhen factories, the general-purpose polystyrene has seen a continuous increase in production capacity, resulting in a consumption rate higher than the set baseline year.

Comparison Graph Of Water Consumption Per Unit Product for the Last Three Years and the Baseline Year



Water-saving Measures

TTC actively manages water resources by achieving water-saving results through measures such as conserving water in processes, wastewater recycling and reuse, and rainwater collection and reuse.

Through improvements in water-saving processes and multiple schemes like wastewater recycling and reuse, there's a significant increase in the wastewater reuse rate. Beyond implementing water-saving plans, water usage has further been included in the monthly key performance indicator monitoring. Statistics and analysis are performed on water usage. If any anomalies in water consumption are detected, an immediate investigation into the cause is initiated, followed by necessary improvements.

TTC's Water Recycling and Reuse Percentage for 2022

Total Amount of Water Resource Recycling and Reuse **534,866 tons**

Percentage of Water Resource Recycling and Reuse **163%**

Note: Percentage of Water Resource Recycling and Reuse = (Annual Amount of Water Resource Recycling and Reuse) / (Annual Water Consumption) x 100%

Water Resource Improvement Plans for 2022~2023

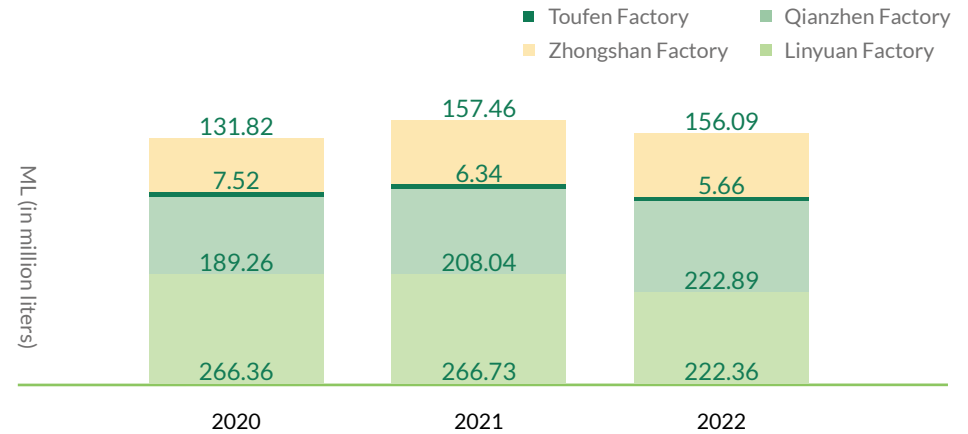
Factory Area	Improvement Measures
Linyuan Factory	Reduce the backwash frequency and duration of the side-stream filter in the public area.
Qianzhen Factory	Update the deteriorated 2B3T resin in the pure water system.

All the factories under TTC properly handle process wastewater and other wastewater. For wastewater discharge, each factory operates at standards that surpass regulatory requirements. The wastewater from Toufen Factory is treated by CGPC. In 2022, all the factories complied with regulatory discharge standards.

Factory Area	Wastewater Discharge Standard	Discharge Destination
Linyuan Factory	Secondary biological treatment up to the industrial area's joint wastewater treatment plant standard	Discharged via underground pipelines to the joint wastewater treatment plant and subsequently discharged into the ocean after treatment.
Qianzhen Factory	Secondary biological treatment up to the standard for water discharge.	Discharged to an external open drain and then discharged into the Kaohsiung port.
Toufen Factory	The fiberglass production process is an environmentally friendly process with no wastewater. Water used in the process is filtered and recycled. Rainwater is also filtered and used in the fiberglass production process. Wastewater generated from the curved printing process is treated by CGPC up to the water discharge standard.	Discharged jointly with CGPC into the Zhonggang River.
Zhongshan Factory	Treated in accordance with the national standard GB31572-2015 "Pollutant Discharge Standard for the Synthetic Resin Industry".	Discharged into the Hengmen Canal.

In 2022, TTC's total water discharge decreased by 4.94% compared to 2021. All the factories treated wastewater to standards higher than regulations. In addition to periodic reviews, improvement measures are set annually. In the last three years, all primary water quality tests met legal discharge standards.

Graph of Water Discharge by Each Factory Over the Past Three Years



Note: All the wastewater discharged by the factories of TTC, after treatment, is freshwater.

Self-tested Results on Main Water Quality Parameters by Each Factory Overview Table for the Last Three Years

Factory Area	Water Quality	2020	2021	2022	Emission Standard
Linyuan Factory	pH value	7.2	7.2	7.2	6~9
	COD (mg/L)	89.1	75.6	45.55	100
	SS (mg/L)	22.6	13.0	11.4	30
Qianzhen Factory	pH value	7.5	7.3	7.2	6~9
	COD (mg/L)	28.6	21.9	26.2	100
	SS (mg/L)	9.9	9.8	12.6	30
Zhongshan Factory	pH value	7.2	7.4	7.32	6~9
	COD (mg/L)	15.0	25.0	19.19	60
	SS (mg/L)	5.5	10.5	9.2	30

Note: The water quality test values are averaged from two tests conducted per year.

Wastewater Improvement Plans for 2022~2023



2022 Wastewater Improvement Measures

An additional PVA-Gel aeration biological treatment tank has been installed to enhance COD treatment efficiency and reduce sludge production in Zone 82.

2023 Planned Improvement Measures

- A fine screening machine has been added to reduce the quantity of suspended solids (SS) in the wastewater in Zone 82.
- Sand filtration equipment has been introduced to decrease the amount of suspended solids (SS) in the discharge water in Zone 82.



3.4 Air Pollution Control GRI 3-3, GRI 305 (305-7)

- **Material Topics:** Air pollution control
- **Major reason:** During their production processes, the factories of TTC emit key air pollutants, including particulate matter (referred to as Par), sulfur oxides (abbreviated as SO_x), nitrogen oxides (referred to as NO_x), and VOCs. Due to deteriorating air quality, government agencies at all levels emphasize monitoring emissions of air pollutants. The Kaohsiung-Pingtung area has also implemented total control on air pollutants, directly impacting the Linyuan and Qianzhen factories.
- **Impact Scope:** Impact Boundaries: Government agencies, local communities, and employees. The air pollutants emitted during the production processes have significant impacts on the environment and human health. In recent years, fine particulate matter has been identified to have a profound effect on human health. Nitrogen oxides appear reddish-brown in the air, contribute to acid rain, and can potentially lead to respiratory diseases in humans.
- **Sustainability Principle & Correspondence to SDGs:** Create a Friendly Environment/SDGs 11 Sustainable Cities and Communities



- **Management approaches:**

Policy Purpose	To mitigate the environmental impact of air pollution emissions and, during operations, minimize the factors endangering the health of employees and residents living near the factory areas.
Goals	Goal in 2022: The number of fines for exceeding the limit of air pollutant emissions is 0
	Short-term goal in 2023: The number of fines for exceeding the limit of air pollutant emissions is 0
Management Plan	1. Add or update equipment to reduce pollutant emissions. 2. Strictly control the emission quality of flue gases from factories and strengthen autonomous management of VOCs emissions.
Evaluation of the management	The "number of fines for exceeding air pollutant emission limits" and the "number of cases of abnormal mass emissions" are listed as key performance indicators. A review report will be presented to the management level. An annual review meeting is convened to assess the performance of the previous year, aiming to propose improvement measures and evaluate their effectiveness.
Assessment Mechanism	1. Continuously implement the ISO 14001 environmental management system for a systematic management of emissions. 2. Establish monitoring and testing equipment and forecasting methods to observe the concentration and volume of factory emissions, allowing for real-time control of emission scenarios and eliminating abnormalities.
Assessment result	1. Annual emissions of various pollutants over the last three years 2. Environmental-related fines
Grievance Mechanism	As explained in the "Environment, Safety, and Health Appeal Channels" section 3.1.2.

Status and description for goal achievement

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Review and Monitoring of Air Pollution Control Management	The number of fines for exceeding the limit of air pollutant emissions is 0	Air pollution fines: 1 case	Target not achieved

In 2022, the Linyuan factory of TTC had one incident of exceeding the air pollution limit. However, there were no over-limit incidents at the Qianzhen, Toufen, and Zhongshan factories, all of which complied with national emission standards.

TTC's main air pollutants include TSP(Par), SOx, NOx, and VOCs. The table below describes their primary sources. The changes in emissions of air pollutants at Taiwan factories from 2020 to 2022 were minimal. However, from 2021 onwards, the VOCs emissions from the Zhongshan factory were higher due to a change in the calculation method mandated by the environmental authority in the mainland area, which differs from the method used in Taiwan.

Overview Table of Main Air Pollutants and Their Sources in Each Factory

Factory Area	Main Air Pollutants	Primary Sources
Linyuan Factory, Qianzhen Factory	Particulates, Sulfur Oxides, Nitrogen Oxides	Emissions from thermal media boilers, incinerators, and Flare.
	Volatile organic compounds (VOCs)	Emissions from Flare, storage tanks, equipment components, process exhaust ducts, wastewater treatment plants, and Regenerative Thermal Oxidizer.
Toufen Factory	Sulfur Oxides, Nitrogen Oxides	Emissions from fiberglass formation and drying ovens.
Zhongshan Factory	Volatile organic compounds (VOCs)	Styrene emissions from the production process, which are annually tested by third-party contractors. The emission results comply with the "Pollutant Emission Standards for the Synthetic Resin Industry" (GB 31572-2015).

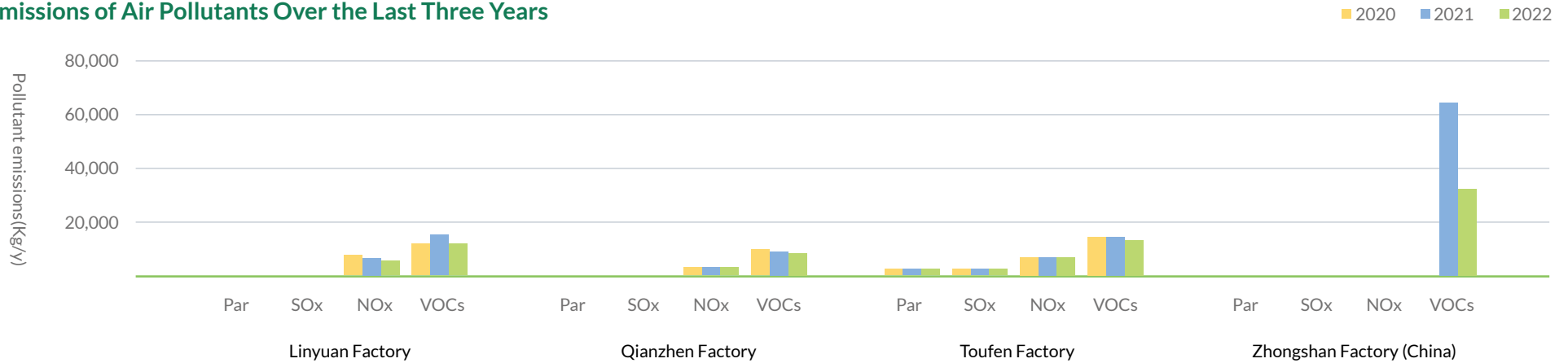
Emissions of Main Air Pollutants by Factory Overview Table for the Last Three Years

Factory	Type	Unit	2020	2021	2022
Linyuan Factory	Par	Kg	860	838	577
	SOx	Kg	838	755	557
	NOx	Kg	7,714	7,116	6,050
	VOCs	Kg	12,773	15,437	12,148
Qianzhen Factory	Par	Kg	152	125	136
	SOx Note 1.	Kg	209	0	0
	NOx	Kg	3,393	3,271	3,357
	VOCs	Kg	10,087	9,365	8,738
Toufen Factory	Par	Kg	2,977	2,903	3,056
	SOx	Kg	2,570	2,498	2,552
	NOx	Kg	6,528	6,606	6,868
	VOCs	Kg	14,888	14,472	13,567
Zhongshan Factory (China)	Par	Kg	0	0	0
	SOx	Kg	0	0	0
	NOx	Kg	0	0	0
	VOCs Note 2.	Kg	436	64,849	33,134

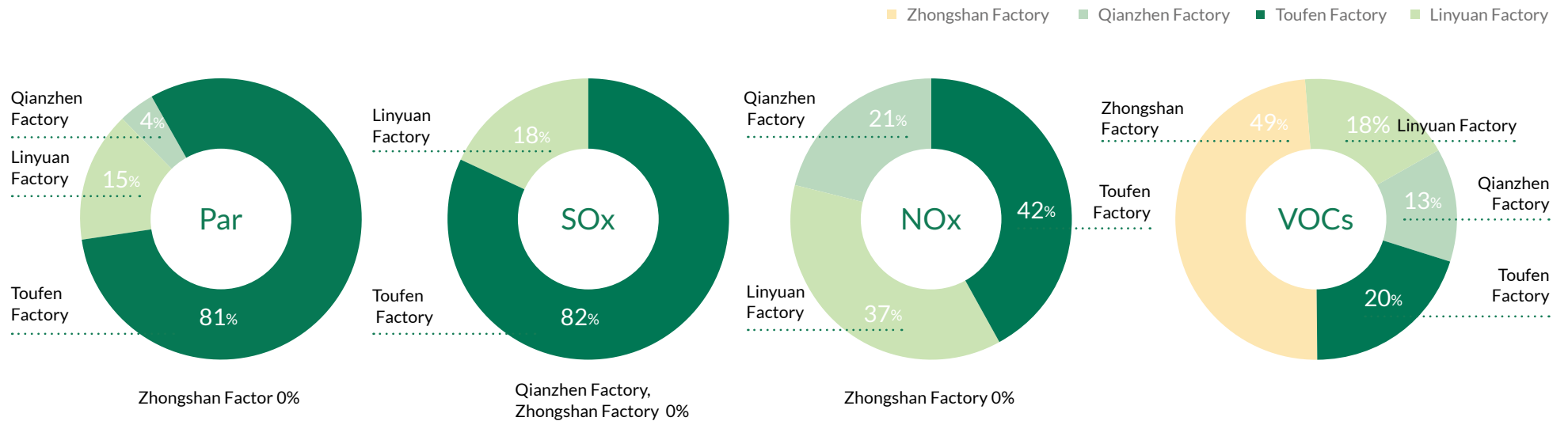
Note 1: The SOx emissions of the Qianzhen Factory decreased to 0 due to changes in the estimation emission coefficient.

Note 2: In 2021, as per the requirements of the local environmental authorities, the raw material data and pollution control equipment data were input into the system. The VOCs emission figures were then automatically generated by the government environmental agency's system. The method used for estimating these emissions differs from the one used in Taiwan.

Emissions of Air Pollutants Over the Last Three Years



Graph of Distribution of Various Air Pollutant Emissions in 2022



Note 1: Zhongshan Factory sources its heat from a neighboring factory by purchasing steam, thus it doesn't have its own boilers or incinerators. Consequently, it does not emit particulates, sulfur oxides, or nitrogen oxides. As for VOCs emissions, they are estimated according to local mainland regulations, which only consider emission channels. Emissions from other sources, such as equipment components, currently have no available data for estimation.

In 2022, TTC received one air pollution excess emission fine. Details of the violation and the corresponding corrective measures are presented in the table below.

Air Pollutant Emission Improvement Plan for 2022

Factory Area	Situation in 2022	Explanation (including reasons for non-achievement)	Improvement Plan for 2022
Linyuan Factory	1 Exceedance Case	On August 19, 2022, representatives from the Kaohsiung City Environmental Protection Bureau conducted an odor test on the RTO emission channel of this factory. The detected odor concentration was 3,090, exceeding the emission standard of 2,000. A penalty was imposed based on Article 20, Section 1 of the Air Pollution Control Act and Article 2 of the Fixed Pollution Source Emission Standards.	<ol style="list-style-type: none"> 1. We will commission a testing company for sample collection and verification. Once we have a qualifying report, it will be submitted to the Environmental Protection Bureau for review. They may then conduct another sampling test at the factory. The correction is considered complete only if the test results are satisfactory. (Re-tested and corrected on November 16, 2022). 2. We will conduct weekly self-tests on the RTO's volatile organic compound concentration and check if operational parameters are within the prescribed range and in compliance with emission standards, ensuring proper onsite operations.

Air Pollutant Emission Improvement Plan for 2023

Factory Area	Air Pollutant Emission Improvement Plan
Linyuan Factory	In 2023, we plan to add flue gas denitration control equipment (selective catalyst) to boilers to reduce the emission concentration of nitrogen oxides.
Qianzhen Factory	Regularly clean electrostatic precipitator (EP) equipment with steam to enhance particulate removal.
Toufen Factory	<ul style="list-style-type: none"> • Conduct regular maintenance on the electrostatic precipitator every year to ensure its opacity meets regulations. • We are planning improvements for pollution source equipment - drying ovens E007~9 to comply with SOx emission standards.



3.5 Waste Management GRI 3-3,GRI 306 (306-1,306-2,306-3,306-4)

- **Key Issue:** Waste Management
- **Major reason:** The government enforces strict requirements for the industry to ensure proper waste disposal and traceability. With the existing waste landfill sites nearing capacity, the prices for processing facilities are increasing. Qualified waste disposal companies are hard to find, which affects waste processing for various factories.
- **Impact Scope :** Impact Boundaries: Government agencies, communities, and employees
If waste produced during the manufacturing process isn't properly handled, it will impact the environment.
- **Sustainability Principle & Correspondence to SDGs:** Create a Friendly Environment/ SDGs 12 Responsible Consumption and Production
- **Management approaches:**



Policy Purpose	Comply with waste-related regulations, fulfill our duties with due diligence, and minimize waste generated during the production process.
Goals	Goal in 2022: Strengthen the waste patrol inspection system; The proper treatment rate of waste is 100%
	Short-term goal in 2023: Strengthen the waste patrol inspection system; The proper treatment rate of waste is 100%
	Medium- & Long-Term Goals in 2030: Implementing waste reduction
Management Plan	<ol style="list-style-type: none"> 1. Establish a waste audit management system. 2. Strictly control waste treatment in the factory and commission legitimate vendors for disposal. 3. With the addition or update of equipment, promote waste reduction plans to decrease the amount of waste.
Evaluation of the management	Measure the "Proper Waste Handling Rate" and present an assessment report to the management during the annual management review meeting. This allows for a review of the past year's performance and the formulation of improvement measures, as well as an evaluation of the effectiveness of those measures.
Assessment Mechanism	Continuously implement the ISO 14001 Environmental Management System to systematically manage waste treatment.
Assessment result	Annual waste generation and proper handling ratio.
Policy Adjustment	For unmet targets or proposed improvement plans, reviews and adjustments will be presented during the management review meeting.
Grievance Mechanism	Details can be found in Section 3.1.2 under the ESH Grievance Channels.

Status and description for goal achievement

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Waste management system Review and monitoring	Strengthen the waste inspection system	Number of inspections: 17 times	The goal has been achieved
	The proper waste handling rate is 100%	The proper handling rate is 100%	The goal has been achieved

TTC produces waste during production and processing stages of product manufacturing. In recent years, in response to increasingly strict standards imposed on waste disposal contractors, each facility, besides intensifying the advocacy of proper waste classification, storage, and labeling, also endeavors to reduce waste production. This ensures that waste disposal aligns with legal regulations.

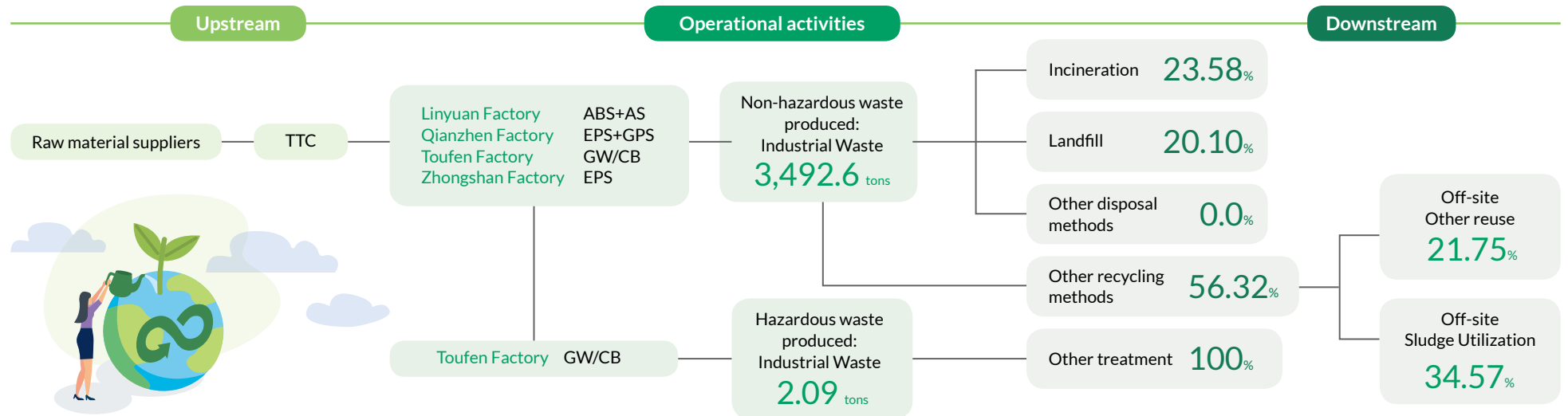
TTC adheres to waste management regulations, commissioning certified disposal organizations for waste treatment. We require these operators to provide proper handling documents, periodically check on the commissioned waste management status, and report on disposal volumes. Using the Global Positioning System (GPS) installed on waste disposal vehicles, we verify if the transportation routes align with the designated waste treatment facilities, conducting random vehicle inspections and establishing an autonomous waste inspection system to diligently fulfill our responsibilities. In 2022, a total of 17 inspections were conducted. The results complied with relevant legal stipulations, and each facility's waste generation and proper handling rate was 100% (Note: The proper waste handling rate indicates that all factory waste is properly treated by certified disposal contractors as per regulations). This aligns with our annual target.



Waste Generation and Disposal Process

In 2022, TTC's total waste generation was 3,494.7 tons, a 5.34% decrease compared to 2017. Most of the waste generated by the facilities was non-hazardous. However, due to the cessation and reorganization of the curved printing process at Toufen factory, 2.09 tons of hazardous waste were produced. The primary disposal methods for general industrial waste were incineration (23.58%) and landfill (20.10%). Other recycling operations included other reuse at 21.75% and sludge resource utilization at 34.57%. 100% of hazardous industrial waste was cleaned and directly disposed of by qualified contractors. The waste generation, transfer, and disposal volumes of each facility over the past three years are detailed in the table below.

Flowchart of Waste Generation for TTC



TTC's Waste Production, Transfer, and Disposal in the Last 3 Years

Unit: m.t.

Factory	Hazardous/Non-hazardous	Type of Disposal	Method of Disposal	2020	2021	2022	
Linyuan Factory	Non-hazardous waste	Direct Treatment of General Industrial Waste	Incineration (including non-recyclable waste)	674.7	690.8	542.9	
			Burial	5.1	0.0	0.0	
			Other treatment	0.0	0.0	0.0	
		Total weight of non-hazardous waste			679.7	690.8	542.9
		Other recycling operations	Other reuse	15.9	52.8	26.5	
			Sludge Utilization	849.0	938.3	914.6	
		Total weight of non-hazardous waste			1,544.6	1,681.9	1,484.0

Factory	Hazardous/Non-hazardous	Type of Disposal	Method of Disposal	2020	2021	2022	
Qianzhen Factory	Non-hazardous waste	Direct Treatment of General Industrial Waste	Incineration (including non-recyclable waste)	74.6	92.6	72.1	
			Landfill	0.0	0.0	0.0	
			Other treatment	0.0	0.0	0.0	
		Total weight of non-hazardous waste			74.6	92.6	72.1
		Other recycling operations	Other reuse	100.8	73.9	68.8	
			Sludge Utilization	273.4	324.2	292.8	
Total weight of non-hazardous waste			448.8	490.7	433.7		
Toufen Factory	Non-hazardous waste	Direct Treatment of General Industrial Waste	Incineration (including non-recyclable waste)	32.1	30.1	50.6	
			Landfill	0.0	0.0	0.0	
			Other treatment	0.0	0.0	0.0	
		Total weight of non-hazardous waste			32.1	30.1	50.6
		Other recycling operations	Other reuse	722.3	606.0	664.4	
			Sludge Utilization	0.0	0.0	0.0	
Total weight of non-hazardous waste			754.5	636.1	715.0		
Zhongshan Factory	Non-hazardous waste	Direct Treatment of General Industrial Waste	Incineration (including nonrecyclable waste)	219.0	203.0	157.9	
			Landfill	436.9	575.4	702.0	
			Other treatment	0.0	0.0	0.0	
		Total weight of non-hazardous waste			655.8	778.4	859.9
		Other recycling operations	Other reuse	0.0	0.0	0.0	
			Sludge Utilization	0.0	0.0	0.0	
Total weight of non-hazardous waste			655.8	778.4	859.9		

Note: The "Other Recycling Operations" refers to the resource recovery of sludge. This is carried out by qualified processing plants using a thermal treatment method, after which it is used as a supplementary material for cement (not a product of TTC).

Factory	Hazardous/Non-hazardous	Type of Disposal	Method of Disposal	2020	2021	2022
Toufen Factory	Hazardous waste	Direct Treatment of Toxic Industrial Waste	Other treatment	-	-	2.09
		Total weight of hazardous waste			-	-

Waste Management Operations

Linyuan Factory

Since 2018, wastewater sludge has been dehydrated using a plate-and-frame type dehydrator, with the addition of a dryer to further reduce moisture, achieving sludge reduction. Some secondary materials (coagulants) from the process are sold to manufacturers as raw materials, reducing waste coagulant production. ABS powder in the process wastewater is also recycled for reuse, reducing sludge waste. Plans are in place to further reuse and recycle waste plastic within the factory to improve the waste reuse rate.

Zhongshan Factory

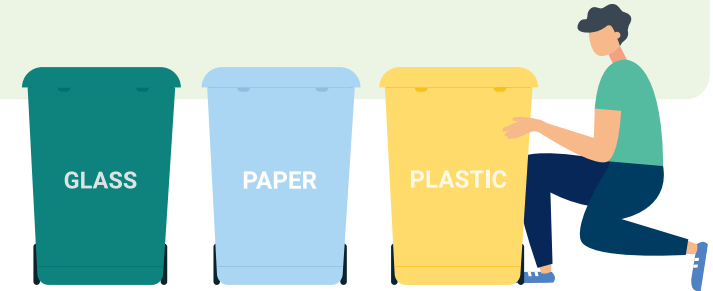
Waste wood generated is sold for incineration by a management unit. Regular household waste is collectively recycled and incinerated by government sanitation units. Sludge is landfilled by a third-party company, while hazardous waste, with the consent of the Zhongshan City Environmental Protection Bureau, is processed by qualified companies.

Toufen Factory

In 2015, they successfully developed a method to reuse waste glass wool, significantly reducing the need for waste landfilling. From 2016, through process waste reduction and repackaging of defective products, quality-inspected cotton that can be reused is sent back to the production line for packaging, reducing the handling of waste cotton. This has led to a continuous decrease in waste disposal. In 2022, the curved printing process was discontinued, reducing waste output.

Qianzhen Factory

Starting in 2018, wastewater sludge has been dehydrated using a plate-frame sludge dehydrator, reducing sludge weight. The sludge machine cleaning process was further optimized to improve efficiency. The factory plans to reuse its own waste to reduce waste generation.



Each factory's waste management and reduction plans are as follows:

Improvement Plans for Waste Management in 2022 and 2023

Factory Area	2022 Improvement Initiatives	2023 Planned Initiatives
Linyuan Factory	Addition of a PVA-Gel aeration biotreatment tank to the A line of wastewater treatment, aiming to enhance COD treatment capacity. It is estimated that the effluent COD will decrease by 20%, reducing sludge production by 108 tons/year.	Planning the processing method for in-factory waste (plastic) to improve the recycling volume.
Qianzhen Factory	Pallets attached to raw material shipments are discussed for recycling and reuse with interested manufacturers, maximizing resource utilization.	Opt for high-durability plastic pallets to reduce plastic waste by reusing multiple times.
Toufen Factory	Reduce process waste, repack defective products, and after quality control inspection, the usable cotton is returned to the production line, reducing waste cotton handling and continuously decreasing waste disposal.	Continuous promotion of the 2022 improvement plan.
Zhongshan Factory	<ul style="list-style-type: none"> Strengthen process management to reduce end-of-pipe treatment. Reuse EPS with non-standard particle sizes and periodically sell scrap to downstream manufacturers. 	Continuous promotion of the 2022 improvement plan.



4

Foster an Inclusive Society

- 4.1 Talent Attraction and Retention 85
- 4.2 Talent Development 94
- 4.3 Occupational Safety and Health 98
- 4.4 Social Engagement 108

4.1 Talent Attraction and Retention GRI 2-7, GRI 3-3, GRI 401 (401-1, 401-2, 401-3)

- **Material Topics:** Talent attraction and retention
- **Rationale:** Quality human assets are one of the key success factors for a company. Utilizing talent appropriately and providing a reassuring work environment allows employees to fully demonstrate their expertise and achieve their potential are the company's sustainability goals. Therefore, TTC is dedicated to creating a harmonious and stable work environment by offering various benefits, ensuring that employees can thrive without worries and grow alongside the company. If employees cannot work with peace of mind, not only will the company's performance suffer, but it also leads to a high employee turnover rate, adversely affecting the overall operational efficiency.
- **Impact Scope:** Boundary of Impact: Employees, investors, and partners.
- **Sustainability Principles & SDGs Alignment:** Fostering an Inclusive Society/SDGs 8: Decent Work and Economic Growth



- The management approach and components:

Policy Purpose	By offering various benefits, we ensure employees enjoy their workplace and can work with peace of mind.
Policy	A Great Place to Work
Commitment	Establishing comprehensive welfare measures to create a joyful and harmonious work environment. This promotes employee stability and reduces turnover.
Goals	2023 Goal (including temporary contract and retired employees): Turnover rate ≤7.5%
	Short-Term Goal for 2025: Turnover rate ≤7.5%
	Mid/Long-Term Goal for 2030: Turnover rate ≤7.0%
Management Plan	Employee benefits include bonuses, leaves, insurance, meals, transportation, and entertainment.
Negative Impact Remedies and Preventive Measures:	A shortage of manpower due to difficulty in employee recruitment: To stabilize the workforce and retain outstanding talents, apart from adjusting the pay for employees according to the consumer price index and personal performance of the employees every year, we participate in a compensation survey of the petrochemical industry to estimate pay standards in the market to make appropriate adjustments and planning. We also consider giving a special promotion to employees with outstanding performance to ensure that our pay is competitive with the market.
Grievance Mechanism	Corporate Union Communication Channel, Employee Complaint Hotline, Employee Suggestion Box

Status and description for goal achievement

Management Plan	2022 Goals	2022 Achievements	Descriptions
Turnover Rate (including fixed-term contract employees and retired employees)	≤ 7.5%	10.75%	In 2022, the company made policy-based layoffs in the Curved Surface Printing Unit, with 7 people handling severance or retirement and actual retirement of 19 people. If the above 26 people are deducted, the turnover rate is 5.57%.

Workforce Structure GRI 2-8

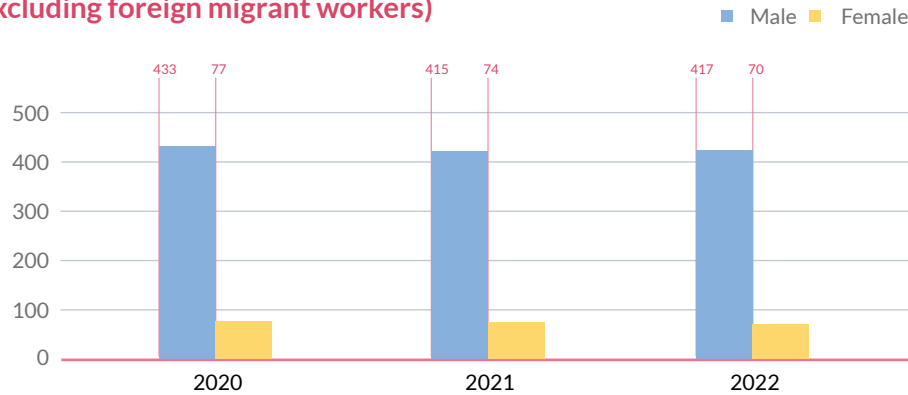
In 2022, the total number of employees at TTC was 502, of which 432 were male (accounting for 86.1%) and 70 were female (accounting for 13.9%). Due to the characteristics of the petrochemical industry, the proportion of male employees is higher than that of female employees. Furthermore, senior management at TTC is primarily recruited locally from Taiwan.

- In 2022, the number of local employees hired in Taiwan was 355 (70.7% of the total), spread across the Taipei headquarters, Toufen plant, Linyuan plant, and Qianzhen plant. Of these, 483 were on indefinite contracts (96.2% of total), 3 on fixed-term contracts (0.06% of total), and 15 were foreign migrant workers (2.98% of total). All the foreign workers, who were male, were employed on fixed-term contracts at the Toufen plant. In China, the company employed 132 local staff. 131 of these employees were on full-time indefinite contracts and worked at the Zhongshan plant. Only 1 was on a fixed-term contract, based in the Tianjin plant.

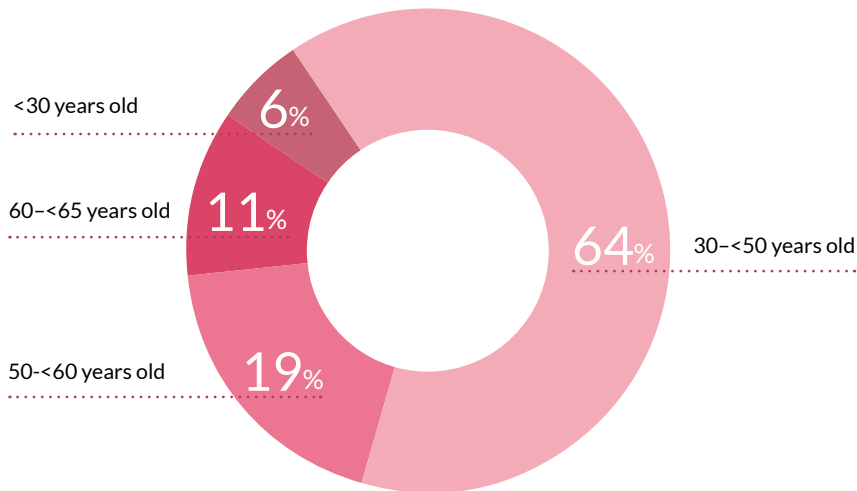
Employee Type Overview Table for the Last Three Years

Year	Type	2020		2021		2022	
		Numbers of person	Percentage	Numbers of person	Percentage	Numbers of person	Percentage
Non-fixed-term contract employees	Male	432	85%	414	85%	416	82.8%
	Female	74	15%	72	15%	67	13.3%
Fixed-term contract employees	Male	19	86%	19	90%	16	3.2%
	Female	3	14%	2	10%	3	0.6%
Total (No. of Employees)		528		507		502	

Employee Gender Distribution Over the Past Three Years (in number; excluding foreign migrant workers)



Age Distribution of Employees in 2022



Employees under 30 years of age constitute 5.95%. The age group of 30 to just under 50 years represents 64.27%. Employees from 50 years to just under 60 years constitute 19.09%. Notably, the proportion of employees who retired in the past five years (from 60 to under 65 years of age) is 10.67%. TTC has consistently maintained stability in its workforce structure over the years, focusing on recruiting and retaining outstanding

talents, while also implementing talent development programs. Conduct pre-employment training and internal job training for new employment in accordance with employee training regulations, to provide them with the skills required for their jobs, and we recruit excellent talents with a fair, open, and transparent recruitment system. In addition to maintaining diversity and equal opportunities, we do not engage in discrimination based on race, color, age, gender, sexual orientation, gender identity and expression, ethnicity or national origin, disability, pregnancy, religion, political affiliation, union membership or marital status in hiring.

- **Non-Employee Workers:** This mainly focuses on the count of contracted workers who impact production, operations, environment, and engineering maintenance. In Taiwan: 98 individuals. In China: 40 individuals.

Statistics on Non-Employee Workers (Contractual) in 2022

Nature of work involved	Linyuan Factory	Qianzhen Factory	Toufen Factory	Zhongshan Factory	Total
	Numbers of person	Numbers of person	Numbers of person	Numbers of person	
Container Transport	6	5	12		23
Finished Product Storage/ Container Loading for Shipment	16	9		8	33
Finished Product Packaging	8	11		11	30
Material Preparation/Mixing		7			7
Factory Cleaning	2	1		2	5
Construction and Maintenance	8			3	11
Environment maintenance				8	8
Equipment Inspection/ Dismantling and Assembly				6	6
Processing of Residual Materials	3				3
Assisting in Wastewater Treatment Operations		1		2	3
Incinerator	2				2
Civil/Insulation Engineering	7				7
Total	52	34	12	40	138
	Taiwan			China	
	98			40	

New Talent Intake

TTC's recruitment channels include newspapers, job websites, human resource management companies, educational institutions, and employment service centers. For vacancies within the factory premises, local community talents are given priority consideration, offering local employment opportunities as a way of giving back to the community. In 2022, 59% of new hires at Taiwan factory were local talents.

In 2022, TTC hired 49 new employees, representing 9.76% of the total workforce.

Gender Distribution Among New Employees Overview Table for the Last Three Years

Unit: Persons

Type	2020	2021	2022
Male	30	24	45
Female	1	3	4
Numbers of new hires	31	27	49
End-of-Year Employee Count	528	507	502
Annual Recruitment Rate	5.87%	5.32%	9.76%

Note 1: Includes both irregular contract employees and regular contract employees
 Note 2: Annual Recruitment Rate = Number of New Hires/End-of-Year Employee Count

2022 Overview Table of New Hire Distribution by Region and Age

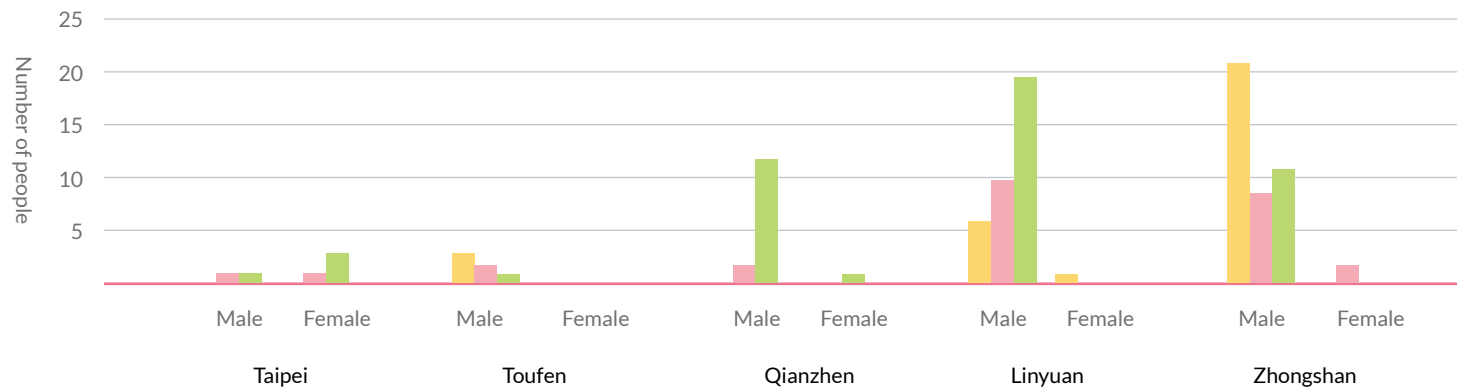
Unit: Persons

Regions		Taiwan		China	
Age Group	Gender	Male	Female	Male	Female
	<30 years old	4	2	4	0
	30-<50 years old	29	2	7	0
	≥ 50 years old	1	0	0	0
Year-end Total Number of Employees		370		132	
Annual Recruitment Rate		10%		8.33%	

Note 1: Includes both irregular contract employees and regular contract employees
 Note 2: Annual Recruitment Rate = Number of New Hires/End-of-Year Employee Count

Age Distribution of New Employees Over the Past Three Years

2020 2021 2022 Unit: persons



2022 Overview Table of Local Hiring for New Employees

Locations	Taipei		Toufen Factory		Qianzhen Factory		Linyuan Factory		Zhongshan Factory		Subtotal		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
Numbers of new hires	1	3	1	0	12	1	20	0	11	0	45	4	49
Number of employees hired locally	1	3	0	0	8	1	14	0	2	0	25	4	29
Percentage of new employees hired locally	100%	100%	0%	...	67%	100%	70%	...	18%	0%	56%	100%	59%

Note 1: Calculated based on the number of employees with indefinite contracts in the county or city where the factory is located.

Note 2: Due to the vast geographical expanse of China and the diverse origin of talents from various provinces, the percentage of local hires is relatively low.

Talent Turnover

All TTC's employees are entitled to the voluntary termination of employment by law. Their labor conditions are subject to local laws and regulations, including the minimum wage, working hours, overtime pay, Labor Insurance, National Health Insurance, and pensions. We also provide employees with group insurance and various employee benefits.

In 2022, the number of employees who left TTC totaled 54, representing a turnover rate of 10.75%.



Turnover Rate Overview Table

Unit: Persons

Type	2020	2021	2022
Male	41	41	45
Female	5	8	9
Number of Departures	46	49	54
End-of-Year Employee Count	528	507	502
Annual Turnover Rate	8.71%	9.66%	10.75%

Note 1: Annual Turnover Rate = Number of Departures / Total Year-End Employee Count

Note 2: Includes employees with indefinite contracts, definite contracts, and retired employees.

2022 Overview Table of Departures by Region and Age

Unit: Persons

Regions		Taiwan		China	
Age Group		Male	Female	Male	Female
Gender					
<30 years old		1	2	3	0
30-<50 years old		13	3	9	0
≥ 50 years old		19	4	0	0
Total		42		12	
Year-end Total Number of Employees		370		132	
Annual Turnover Rate		11.35%		9.09%	

Note: 1. Annual Turnover Rate = Number of Departures / Year-End Total Employee Count

Employee compensation plan

Upholding the belief to share profits with employees, TTC attracts, retains, cultivates, and encourages all kinds of outstanding talents and have established a comprehensive and competitive employee remuneration plan. All new employees are paid better than the statutory minimum wage. Allowances vary according to the position and educational attainment of employees. The monthly performance bonuses and year-end bonus is distributed according to the employees' performance. Most importantly, the base salary is equal regardless of gender.

To stabilize the workforce and retain outstanding talents, apart from adjusting the pay for employees according to the consumer price index and personal performance of the employees every year, we participate in a compensation survey of the petrochemical industry to estimate pay standards in the market to make appropriate adjustments and planning. We also consider giving a special promotion to employees with outstanding performance to ensure that our pay is competitive with the market.

Salary of non-management full-time employees

The term "Full-time Employees Not Holding Managerial Positions" refers to the total number of all company employees (or regular employees) after subtracting those in managerial roles, employees of overseas branches, part-time employees, and those who qualify for exclusion from the statistics. This count includes both domestic and foreign employees.

Salary Statistics Table for Non-managerial Employees Over the Last Three Years

Item	2020	2021	2022	Differences Between 2022 and the Previous Year
Number of non-management full-time employees	394	373	354	-19
Average salary of non-officer full-time employees (NTD thousands)	1,225	1,366	1,100	-266
Median wage of non-management full-time employees (NTD thousands)	1,142	1,280	1,039	-241

Employee Benefits GRI 201-3

TTC places a strong emphasis on the safety and well-being of its employees. In addition to legally mandated labor insurance, the company offers a group insurance plan for its employees. The company also covers the additional premium for the group life insurance. All insurance premiums are borne by the company.

Foreign workers at our Toufen plant are provided with dormitory accommodations that are managed by dedicated personnel. These accommodations include facilities such as a basketball court and an entertainment room. Regarding meals, a catering company supplies three meals a day, ensuring that our workers can focus on their jobs with peace of mind. We are committed to respecting the individual differences of each employee. Consequently, there have been no incidents of discrimination at TTC.

TTC greatly values employee benefits. Employees of TTC are entitled to the following benefits as outlined in the table below:

TTC Employee Benefits Overview

Bonus	Year-end bonus, regular bonus and performance bonus
Leave	Maternity leaves, pregnancy checkup leaves, parental, menstrual, family care, pregnancy checkup accompaniment, and paternity leaves.
Insurance	Labor insurance, health insurance, accident insurance, life insurance, group insurance for employees/families, employee condolences, business travel group injury insurance for employees, pension contributions
Food	Employee canteens and meal allowances.
Transport	Employee parking spaces and travel allowances
Entertainment	Employee Trip
Allowances	Subsidies for on-the-job training, domestic/overseas further education
Other benefits	Wedding/childbirth/funeral subsidies, employee maternity subsidies, employee tour subsidy, citation for senior employees, bonuses for three major folk festivals, children education allowance, periodic health checkups and healthcare plan.

2022 Statistics Table for Parental Leave Usage and Return-to-Work

Parental Leave Usage Statistics	Total number of employees entitled to parental leave	Total number of employees who actually took parental leave	Total number of employees who returned to work after the end of their leave	Total number of employees who remained employed 12 months after returning from leave	Percentage of employees who returned to work and remained employed
Male	6	1	1	-	-
Female	0	0	0	-	-

TTC strictly adheres to all labor and human rights regulations, treating all employees fairly. We establish work rules in accordance with government legislation, outlining the relevant labor conditions. The company has never engaged in the employment of child labor or forced labor. We maintain diversity and equal remuneration for employees regardless of age or gender and provide reasonable opportunities for remuneration, promotion, and transfer based on work performance and potential.

Human rights policy GRI 2-23

We establish the human rights policy applicable to TTC and USIG affiliates with respect to internationally accepted human rights standards that approved by the chairman of the company, such as the International Bill of Rights and the Declaration on Fundamental Principles and Rights at Work, in order to eliminate behavior prejudicing and violating human rights. Apart from providing employees with a reasonable and safe workplace environment, we ensure employees to enjoy reasonable and dignified treatments at TTC.

Identification and assessment of human rights risk

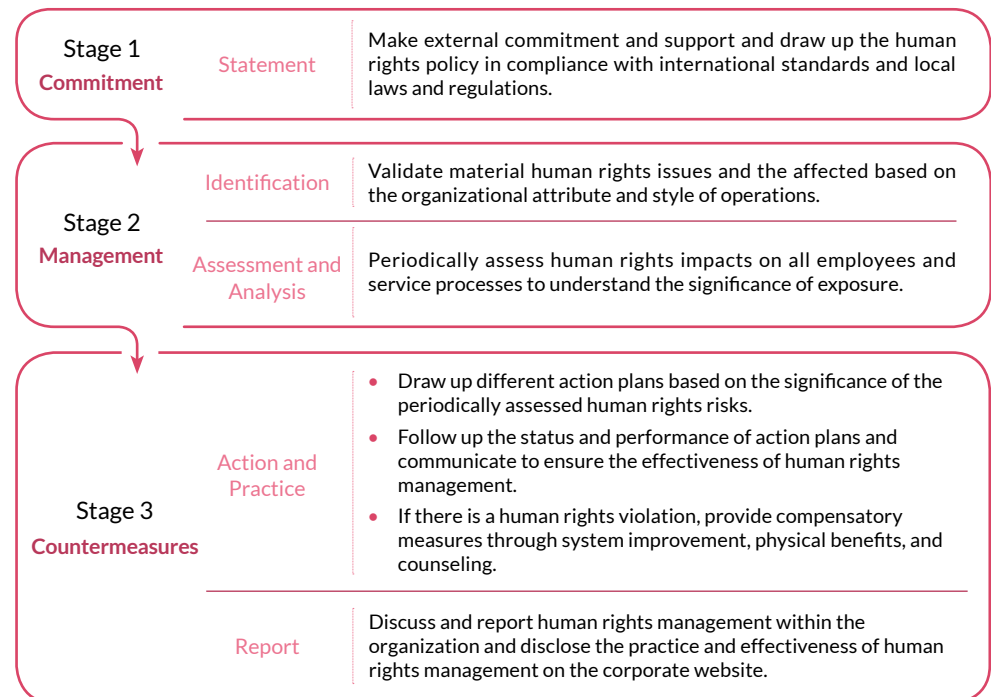
We identify human rights risks every year and perform compliance checks and assessment of concerned human rights issues. Based on the risk assessment results and defects found in internal and external audits, we adopt mitigation and corrective actions and make continual improvement to achieve the goal of risk management.

We establish the steps and processes for each stage of human rights management as the foundation for human rights maintenance and protection. They include:



Human rights issues involve different business departments and units. HRD runs due diligence of human rights and risk management on individual targets and human rights issues based on their different impacts.

Human rights due diligence process



Achievements in Human Rights Management 2022 GRI 2-24

This year, no significant non-compliance was reported. We will continue to arrange education and training on human rights. Please visit our corporate website for the details related to training for human rights. After identifying risks based on the approaches to implement the human rights policy, we included a total of 14 human rights issues in this year, including 8 issues of material concern, with risks covering “occupational safety management” (Please click [link](#) for more information). The implemented mitigation and impact compensation measures are as follows:

Mitigation and compensation measures of human rights management

Topic	Mitigation Measure	Compensation Measure
Occupational Safety Management	<ol style="list-style-type: none"> Continue to provide occupational safety and health education and training every year. Activate the occupational accident reporting and handling procedures Make timely job accommodation based on the physical and mental recovery state of employees. 	Actual impacts have been reported and handled according to the compensation measures and care and compensation have been given to employees.

We continuously concern ourselves with human rights protection and implement relevant training to raise the awareness of human rights protection and lower the likelihood of the relevant risks. In 2022, training sessions related to promoting human rights protection were conducted, with a total of 3,572 participants and an aggregate duration of 12,220 hours.

Grievance Mechanism GRI 2-25

We have established unfettered grievance channels for employees to report all internal problems to supervisors at all levels or the Human Resources Division. To maintain gender equality at work and provide employees and jobseekers with a work and service environment free of sexual harassment, we have established a dedicated mailbox and email for sexual harassment grievances. All information will be kept confidential during the investigation. Neither the name nor the data valid for identifying the complainant will be disclosed to ensure complainant protection.

Minimum Notice Periods for Operational Changes

Implemented in accordance with legal requirements, the company will provide notice in the event of the following operational changes

- Closure or transfer of operations;
- Financial losses or business contraction;
- Work suspension due to force majeure for more than one month;
- Changes in business nature necessitating workforce reduction and no suitable alternative roles available;
- Employees demonstrably not competent for their roles.

Notices will be issued based on the duration of employment

- For those employed for more than 3 months but less than 1 year, a 10-day advance notice will be provided.
- For those employed for over 1 year but less than 3 years, a 20-day advance notice will be given.
- For those employed for more than 3 years, a 30-day advance notice will be served.

Pension Contributions

TTC has established a set of retirement regulations for all full-time employees and contribute every month the employee pension reserves to the personal pension account at the Labor Insurance Bureau for each employee in accordance with the Labor Standards Act.

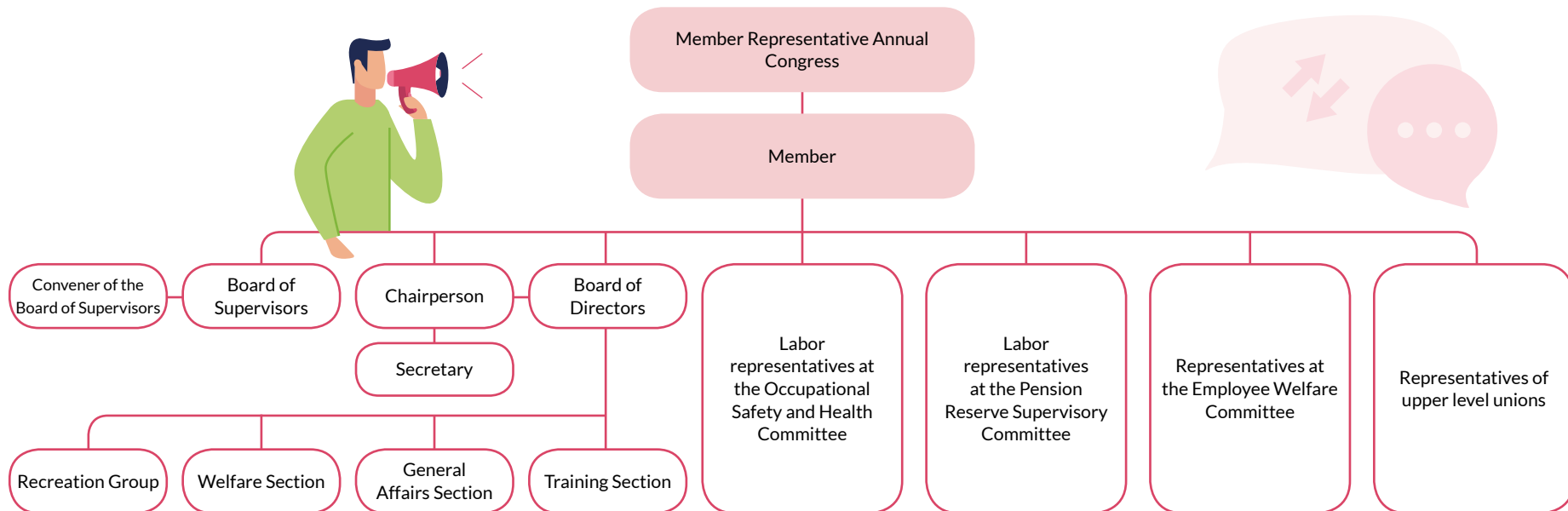
Item	Proportion of Contribution	Employee Participation in the Retirement Plan
Pension under the Labor Standards Act (old system)	Employer contribution: 12% of the employee's monthly wage, all of which have been regularly allocated in full.	100%
Pension under the Labor Pension Act	Employer: 6% of the monthly salary; Employee: 0-6% of the monthly salary. Currently, contributions are made as stipulated.	100%

Labor Union and Organization

TTC has established union organizations in its factories located in Toufen, Qianzhen, and Linyuan. However, there's no union in the Taipei head office or in the Zhongshan factory in China. Owing to the company's consistent and good communication with employees through the union and labor-management meetings, no specific collective agreement has been made between the two sides.

Factory	Union Membership			Total Employees	Percentage of Union Members to Total Employees
	Male	Female	Total		
Linyuan Factory	145	7	152	174	87%
Qianzhen Factory	77	6	83	91	91%
Toufen Factory	52	11	63	78	81%

During the regular board meetings of the unions at various factories in Taiwan, relevant company executives attend and communicate directly with union leaders. Every year, member education training is held with enthusiastic participation from union members, aiming to foster mutual understanding and promote collaboration between management and labor. Furthermore, representatives elected by both management and labor constitute various committees such as the "Pension Supervisory Committee," the "Employee Welfare Committee," and the "Occupational Safety and Health Committee." Regular meetings are convened to provide Channels of communication between management and labor are maintained to safeguard workers' rights.





Every year, the union holds an annual member representative assembly. The image above captures moments from the 2022 union member representative assembly.



To foster collaboration between management and labor and enhance communication, the company collaborates with the union to conduct labor education activities each year. Above are the visual records of the related activities for 2022.

Employee Welfare Committee

TTC allocates 0.15% of its monthly sales revenue for the "Employee Welfare Committee" activity fund. This fund encompasses benefits such as employee trips, birthday, childbirth, marriage, and funeral subsidies, scholarships for employees' children, and annual festival bonuses. These welfare initiatives serve as a token of appreciation for the employees' daily hard work. Periodic travel events are organized, allowing employees to relieve work stress, promote physical health, and foster mutual exchanges, thereby boosting team cohesion.

In 2022, due to the impact of the COVID-19 pandemic and in efforts to prevent its spread, some of the activities originally planned by the Employee Welfare Committee were postponed.

Employee Assistance Program

TTC has established the Employee Assistance Program Service Center (EAPC), aiming to improve the life quality, health, and happiness of employees. We persistently promote EAPC services by organizing various social activities such as Mid-Autumn Festival and Christmas parties and providing employee consultation and counseling services with internal and external resources of the group's head office, to provide comprehensive care and assistance for employees in psychological adjustment, career management, health promotion, and life quality improvement.

Employee Feedback Survey Report

TTC conducted an employee feedback survey in 2021, entrusting the task to an independent third-party organization. The goal of the survey was to gain comprehensive insights into employees' perspectives on the company's management and operations, identify key retention indicators, and pinpoint areas for improvement, leading to specific talent development initiatives. The survey covered both employee satisfaction and commitment to the job. Aspects evaluated included management, compensation, colleagues, job duties, growth opportunities, corporate culture, and organizational commitment. The overall satisfaction score was 4.3 out of 6. The company plans to conduct this survey once every two years.

Item	TTC
Target	Survey of All Staff Members
Categories	Seven main aspects evaluated across 28 dimensions: leadership, compensation, colleagues, job responsibilities, development, corporate culture, and organizational commitment.
Number of Respondents	124 people
Recovery	71%
Overall Satisfaction Score	4.3 out of 6
Survey Results	TTC's overall employee satisfaction is PR60, which is commendable within the industry. However, satisfaction in the areas of colleague relationships and development was found to be lower. Plans include initiating courses to enhance team collaboration, delegating team tasks, establishing a fair and effective performance management system, and providing appropriate training opportunities. A percentile ranking of 65 indicates that the company's performance is above the industry average.
Improvement Initiatives	TTC has not identified any high-risk areas currently. The company will continue to listen to employee feedback and promote measures for continual improvement.

The ongoing improvement initiatives and projects for 2022 include

- To invigorate the organization, stimulate creativity, and encourage a mindset of continuous improvement, we aim to cultivate a high-performance organizational culture. This will enhance the group's competitiveness. New proposal improvement methods have been introduced. For suggestions related to production, quality, R&D, maintenance, energy conservation, water conservation, and environmental protection that result in material, time, or labor savings, and pass review and implementation, rewards and a maximum bonus of NT\$3,000 are granted.
- To fairly evaluate employee commitment to the organization, job competence, performance, and contribution, we have established a performance appraisal system. This will serve as the foundation for holistic performance management and talent development. The results will guide employee promotions, salary adjustments, year-end bonuses, and other HR activities.
- To enhance the HR management benefits of cross-company/department project collaboration within the group and improve organizational agility and competitiveness, relevant audit and performance evaluation procedures have been set up. Matrix management methods have been established, detailing the rights and responsibilities of members of the matrix organization.
- We have launched the USIG EMBA, collaborating with prestigious institutions like National Taiwan University to provide senior executives with specialized courses.
- The introduction of PSM training aims to equip factory engineers and senior staff with management skills and safety operation awareness, ensuring a safe working environment for all employees.

4.2 Talent Development

To enhance the overall competitiveness of our colleagues and facilitate employees in acquiring the knowledge, skills, and certifications required for their positions, TTC offers a diverse educational and training system. We systematically and comprehensively design training courses essential for career development, further extending into the realm of lifelong personal learning. We have set a goal of an average training duration of 20 hours per person by 2025 and 25 hours by 2030.

Item	2022 Goals	2022 Achievements	Achieved: Yes/No
Average Training Duration Goal	18.5 Hours	41.1 hours	Achieved

Career Development

In continuing education and training for employees, we survey the employee training needs, draw up the education and training plans based on the needs of respective unit, and plan related budgets for each plant at Q4 each year. We also establish the e-learning platform to provide a channel for self-learning, organize regular employee competency training, management training, keynote speeches, health talks, and various seminars to improve the professional or management skills. TTC's employees can also enjoy the independent learning channels via the training and learning platform provided by the Group's, to balance the work, life, as well as mental and spiritual development of employees.

To enhance the overall competitiveness of employees, we provide a comprehensive education and training system according to the company's development strategy and the performance goals of respective departments, which is based on four parts: in-service (on-the-job) training, competency training, e-learning and self-growth learning. Training courses are planned and designed comprehensively and systematically according to the development needs of employees and connect with the lifelong perspective of employees.

On-the-Job Training	Functional Training Internal/External Training	Digital Learning	Self-Driven Learning and Growth
<ul style="list-style-type: none"> • Managerial On-the-Job Training 	<ul style="list-style-type: none"> • General Management Knowledge • Hierarchical Training • Professional Functional Training • Talent Development • Employee's Self-Improvement 	<ul style="list-style-type: none"> • Certification Courses for New Employees • Pre-employment Training • Multimedia Learning Platforms • Language training • CWLC 	<ul style="list-style-type: none"> • Book Clubs and Seminars • Wellness and Holistic Health Lectures


Cultivation of Talents for Digital Transformation

TTC is a subsidiary of the USIG. To align with the group's organizational development needs, enhance workforce quality, and cultivate company management talents, the group has established a program for elite personnel cultivation. Outstanding talents who meet the criteria are first arranged for interviews by the group's HR department. After being informed of the training process and assessing their willingness, the HR unit notifies the employee to prepare for registration to participate in designated local universities' MBA or EMBA programs. If accepted, upon presentation of the admission notice, the company offers course fee subsidies and grants leave for study.

The digital wave arose following the technology innovation in recent years. Pushed by the pandemic, digital transformation has become a heat in all industries, and there is no exception to USI. Besides engaging in industry-academia collaboration with academic units, we all invited professional instructors to give instructions to constantly transform toward smart manufacturing.

Besides the application of technology, we understand that digital transformation needs a new way of thinking in employees and a change in the organizational culture. Hence, we have actively implemented data-driven and process improvement in the organization through talents cultivation. All employees can access the group's training and learning platform and participate in digital lectures to enhance their cognitive thinking. In 2022, there were a total of 189 participants, accumulating 411 training hours. We also held workshops and AI training courses for seed members to practice digital transformation in real work to enhance promotion.

In 2022, as part of the digital transformation advocacy, there was one digital lecture and four digital newsletters (digital podcasts).

Digital Lecture	Digital Podcasts (one per season)
The Endgame of Digital Transformation	1 st season Endgame of Digital Transformation
The Counterattack of the Metaverse and Web3.0	2 nd season Cars: Horseless Carriages
	3 rd season What Does the Metaverse Have to Do with Me?
	4 th season Generative AI Will Change the World

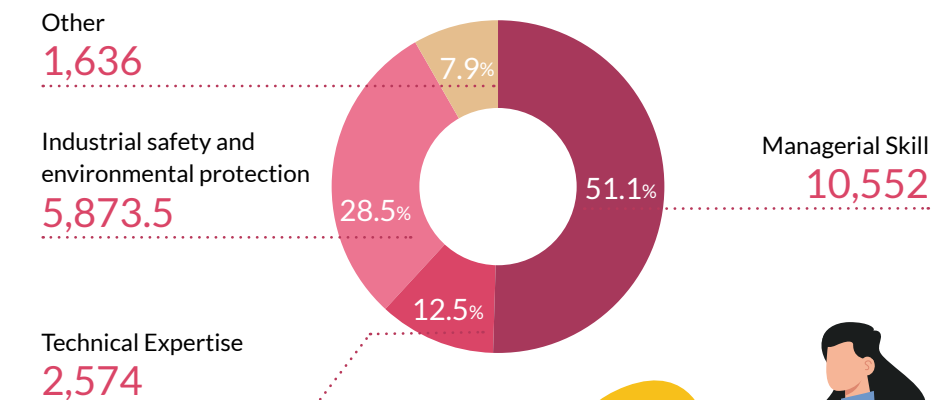
Performance Evaluation

TTC conducts employee performance evaluations annually in January. The evaluation covers non-regular contract employees who have been employed for at least three months. Evaluation criteria are based on 50% work performance and 50% individual competitiveness and efficiency. This performance evaluation is an essential reference for employee promotions, salary adjustments, and other HR operations. It assists managers and employees in career development planning, strengthening areas of inadequacy for employees, and offering incentives for those who exceed expectations. In 2022, 100% of TTC's employees at all operating locations participated in the evaluation, while regular contract employees were not included in the annual evaluation scope.

Diverse Training Programs and Achievements

In 2022, total employee training hours reached 20,636 hours, with an average of 41.1 hours per person, achieving the set target of 18.5 hours per individual. We sponsor employees with higher learning motivation and greater development potential to receive further education in universities at home and abroad and arrange duty adjustment to give them complete training and cultivate outstanding talents for the company.

Training Hours in 2022 Based on Course Type



2022 Overview Table of Training Hours by Location

Participation in Educational Training		Male	Female	Total
Supervisor	Average (hours/persons)	143.3	26.7	116.4
Direct Personnel	Average (hours/persons)	18.7	12.3	18.5
Indirect Personnel	Average (hours/persons)	93.3	29.2	76.0
Entire Company	Person	5,363	770	6,133
	Hours	18,310.5	2,325.5	20,636
	Number of Employees	432.0	70.0	502
	Average (hours/persons)	42.3	33.7	41.1

Note: 1. Direct personnel refers to workers, while indirect personnel pertain to staff members who are not in supervisory roles.

2. Due to varying departmental functional requirements, there might be disparities in training hours across genders.

3. A supervisor is defined as an individual of section chief level or above.

① On-the-Job Training

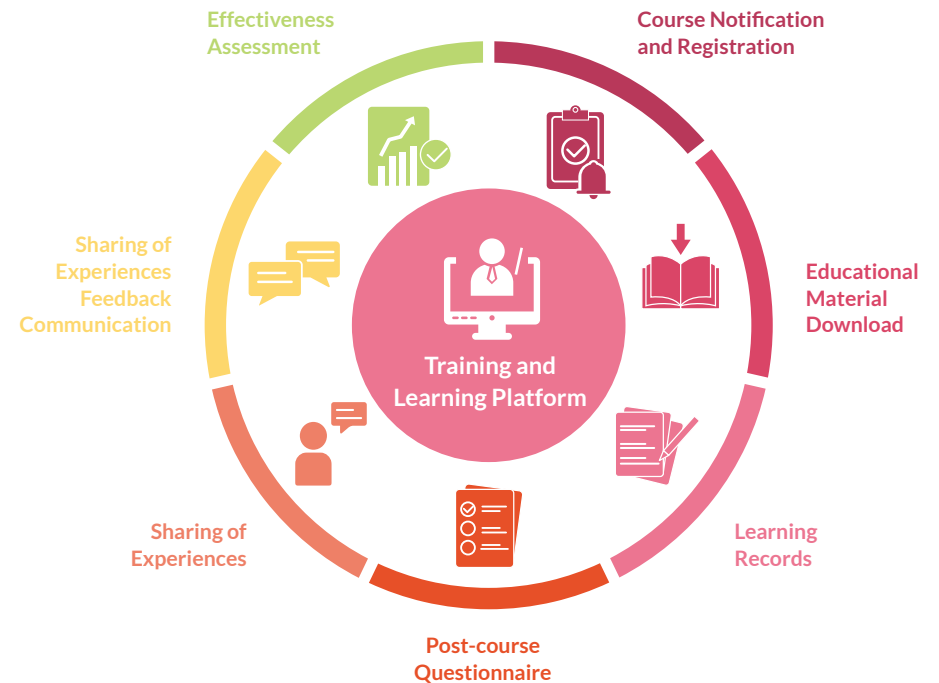
Each year, a diverse training plan is drafted. Various units submit additional training requests based on their needs. Training is conducted through various means such as in-house training, external courses, on-the-job instruction, and digital broadcasts. This training is provided by expert guidance from professional training institutions and selected in-house lecturers. The aim is to achieve certification, enhance knowledge and skills, acquire new management techniques, and understand occupational safety and environmental protection information.

Each unit within the factory area establishes necessary professional courses based on its function. As soon as an employee joins, they undergo mandatory training provided by supervisors and senior colleagues in a structured manner. This training involves reading technical manuals, lectures, on-site practical work, and a balanced approach to theory and practice, ensuring the transmission of technical knowledge and experience. Every unit continuously offers on-the-job instruction to its employees. Simultaneously, training is provided to employees who need certifications for their roles, enabling them to obtain specific project certifications.

② Internal Training

USIG’s HR department regularly organizes educational training courses. The diverse course content includes: Special lectures, humanities and intellectual seminars, health talks, IT training, reading groups, hierarchical training, outdoor learning activities, etc., offering holistic training opportunities. In addition to specialized training and outdoor learning activities, we offer comprehensive training opportunities.

Each factory regularly hosts technical seminars, facilitating inter-factory interdisciplinary learning and exchange. External speakers are occasionally invited or leveraged through electronic media. Beyond equipping factory colleagues with expertise in their primary fields, this also offers various insights into management, health, entertainment, humanities, and other multifaceted learning domains. To align with the digitization of training management, the company has established a “Training Management Platform”. This platform provides a diverse range of services including: training information, educational material downloads, online registration, glimpses into training events. Moreover, through the online feedback mechanism, course effectiveness is assessed from the participants' perspective, ensuring continuous enhancement and improvement of course quality.



③ External Training

Based on the business needs, supervisors will encourage subordinates to participate in external seminars and professional training courses to learn the latest professional technology and skills as well as management knowledge. Once employees complete their training, the Taipei headquarters gather feedback through the “Training and Learning Platform.” Simultaneously, factories collect feedback from trainees through surveys or reflective reports. This process helps to gather opinions from those who underwent external training, evaluate the effectiveness of such training, enhance the management of training materials and reflection reports, and broaden the sharing of outcomes from external training.

④ Digital Learning

To bolster the quality of physical courses and overcome the constraints of time and location associated with in-person sessions, the USIG has established the “Training and Learning Platform” for all group employees to access online courses.

Certification Courses for New Employees

The Group's “Training and Learning Platform” offers new employees a series of general courses on the essential knowledge, attitudes, and skills required in the workplace. The platform also integrates features like learning records, online quizzes, feedback surveys, and course management to assist employees in self-directed learning and enhancing their job competencies. For factory employees, upon their arrival, the Human Resources and Occupational Safety and Health departments immediately conduct orientation training. The course content covers company overview, environment, organizational regulations, benefits system, job safety and health-related rules, and concepts related to quality management, environmental and occupational safety and health management, and product quality assurance, among other training topics.

Pre-employment Training

Each department in the factory has designed specialized pre-employment training courses for their units. Once new employees arrive, the HR department details the necessary courses and hours in the “Employee Work Instruction Record.” The respective departments then implement the training and document it.



Video-based Learning

Through a comprehensive class mechanism, this platform offers employees a diverse range of online courses. Features include learning certifications, material downloads, online quizzes, and feedback surveys. These tools enhance the effectiveness of learning. Furthermore, through a learning community, the platform listens to employee feedback and adds new courses based on demand.



Language Training

To foster an English-learning culture among all affiliated enterprises of the group and elevate employees' everyday and business English skills, while also motivating more employees to learn, the group's HR department continues to collaborate with English digital learning platforms, offering online English course subsidies.



4.3 Occupational Safety and Health GRI 3-3, GRI 403 (403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9)

4.3.1 Occupational Safety and Health

- **Material Topics:** Occupational safety and health
- **Major reason:** A safe and healthy working environment is the primary labor requirement for workers. Thus, continuous efforts should be made to reduce safety and health risks, prevent and minimize occupational accidents, and consistently improve safety and health performance, underscoring our commitment to safety and health.
- **Impact range:** Government agencies, communities, and employees
Sustainability Principle aligned with SDGs: Shaping an Inclusive Society/ SDGs 3: Health and Well-being
- **Management approaches**



Policy Purpose	Continuously reduce safety and health risks, prevent and minimize occupational accidents, and promote employee health.
Goals	Goal for 2022: Zero disability injuries
	Short-term Goal for 2023: Zero disability injuries
	Medium to Long-term Goal for 2030: Zero disability injuries
Management Plan	Add or update equipment to reduce pollutant emissions to reduce the OSH-related risks
Evaluation of the management	Measure the "Number of injuries resulted in disability" every year and present an assessment report to the management during the annual management review meeting. This allows for a review of the past year's performance and the formulation of improvement measures, as well as an evaluation of the effectiveness of those measures.
Assessment Mechanism	Continuously implement the ISO 45001 OH&S management system for a systematic management.
Assessment result	Number of disabling injuries in the last three years
Negative Impact Remedies and Preventive Measures	Inadequate implementation of Process Safety Management (PSM) leading to accidents: Our company has integrated the PSM system, employing a systematic approach to prevent unforeseen incidents.
Grievance Mechanism	Details can be found in Section 3.1.2 under the ESH Grievance Channels

Goal Description and Achievement Status

Management Plan	2022 Goals	2022 Achievements	Explanation (including reasons for non-achievement)
Review and Tracking of Disability Injury Case Management	Number of disabling injuries: 0	Number of disabling injuries: 0	The goal has been achieved.

In 2022, the total number of disabling injuries in TTC's Taipei office and all factories was 0, achieving the goal.

TTC will adopt the following approaches to continually reduce occupational health and safety risks, aiming to achieve the set objectives:

Aligning with global trends, the company integrates the environmental management system with the occupational health and safety system. We have established a policy for occupational health, safety, and environment, detailed in Chapter 3 under Environmental Protection. The strategies for executing this policy include:

- Implementing PSM and the ISO 45001 standards. Through the institutionalized PDCA (Plan-Do-Check-Act) management cycle, we are committed to risk management, continuous improvements in safety, health, and environmental protection, disaster prevention, and giving priority to the mental and physical wellbeing of our employees.
- TTC's factories in Linyuan, Qianzhen, and Toufen have passed the ISO 45001 standard verification. While the Zhongshan factory has not been verified, it operates based on company regulations and policy mandates. Both internal and external audits involve all employees and contractors. In 2022, 502 employees and 113 contractors were covered by the Occupational Health and Safety Management System, representing 100% coverage.
- By adopting the best available techniques and management practices, we are committed to organization, waste reduction in processes, pollution prevention, and ensuring the health and safety of our employees, contractors, and neighboring communities.
- We emphasize continuous training, communication, and consultation with employees, encouraging everyone's participation. We also enhance communication with contractors and clients, ensuring they are fully informed of our occupational safety, health, and environmental policies.

Occupational Safety and Health Risk and Opportunity Assessment and Control Procedures

To prevent hazards from operations, activities, services, or facilities that might compromise the safety and health of personnel or result in financial losses to the company, early actions are taken to address opportunities for improving occupational health and safety performance. Post-risk assessment, the chosen control methods include (a) elimination, (b) substitution, (c) engineering controls and job reorganization, (d) managerial controls including training/signs/warnings/management controls, and (e) personal protective equipment. Controls are chosen based on a priority sequence from (a) to (e), identifying the most optimal method, and reducing risks to acceptable levels.

TTC has established a comprehensive occupational safety risk assessment process. All evaluators undergo risk assessment training, ensuring their competency and understanding. Assessment methods involve internal staff (including contractors) or external stakeholders. They can submit their findings to their respective supervisors. The executive team collates, reviews, and tracks the proposed improvements. Furthermore, by establishing internal and external communication procedures, employees are involved in incident investigations, hazard risk assessments, and decision-making on control measures. This ensures all relevant employees, contractors, suppliers, and stakeholders are timely informed about the company's occupational health, safety, environmental policies, and system requirements.

Performance Statistics for Hazard Identification and Risk Assessment

In 2022, a total of 17 measures were derived from the identification of unacceptable occupational health and safety risks.

Risk Level	Risks and Opportunities	Planned Actions
Risk Level 1	Unacceptable Risk	Plan for Improvement
Risk Level 2		
Risk Level 3		
Risk Level 4		
Risk Level 5-12	Tolerable risks, consider opportunities for improvement	Choose to improve

Performance Statistics Table for Occupational Health and Safety Over the Last Three Years

Item	2020	2021	2022
F.R.	0	0	0
S.R.	0	0	0
F.S.I.	0	0	0
TRIR	0	0	0

Note 1: Disabling injury frequency rate (F.R.) = Injury frequency × 10⁶ /total hours worked

Note 2: Disabling injury severity rate (S.R.) = Injury days lost × 10⁶/total hours worked

Note 3: Frequency severity index (F.S.I.) = √[(F.R×S.R.)/1000]

Note 4: Total Recordable Incident Rate (TRIR) = Number of injuries x 200,000/Total work hours



Employee Occupational Safety Performance Statistics

Given that “zero industrial accident” is TTC’s objective for occupational accident management, disability injury is one key indicator for evaluating occupational safety and health within an organization. As a result, each plant assigns personnel to regularly conduct various safety inspections and establishes an evaluation method for the performance of inspection personnel. Any inspection deficiencies are incorporated into the environmental and safety management platform for tracking and management, ensuring improvements are made and preventing recurrence.

In 2022, TTC had no safety incidents, achieving the goal of zero recordable injuries

As of December 31, 2022, the accumulated total work hours without recordable injuries for each plant are as follows:

Factory	Linyuan	Qianzhen	Toufen	Zhongshan
Total Accumulated Work Hours Without Recordable Injuries for Employees	1,403,078	2,317,911	1,047,474	2,076,333

Note 1: Work hours lost due to commuting accidents are not included in the recordable injury statistics.

Note 2: For contractors, the accumulated total work hours without recordable injuries in 2022 were 199,903 hours.

TTC's absentee rate in 2022 was **0.731%**

Note Absentee Rate = (Total Absent Days) / (Total Work Days) x 100%. The total number of absent days is based on the actual count by the Human Resources Department in 2022 (e.g., sick leaves and public injury leaves are used as the basis for counting absent days). The total work days refer to the actual working days in 2022.

Process Safety Management Performance

Process Safety Management Performance in 2022

Total Count of Process Safety Incidents (PSIC)	0
Process Safety Total Incident Rate (PSTIR)	0
Process Safety Incident Severity Rate (PSISR)	0

Note 1: Employees are only permanent employees. The total hours worked in 2022 was 1,094,611 hours.

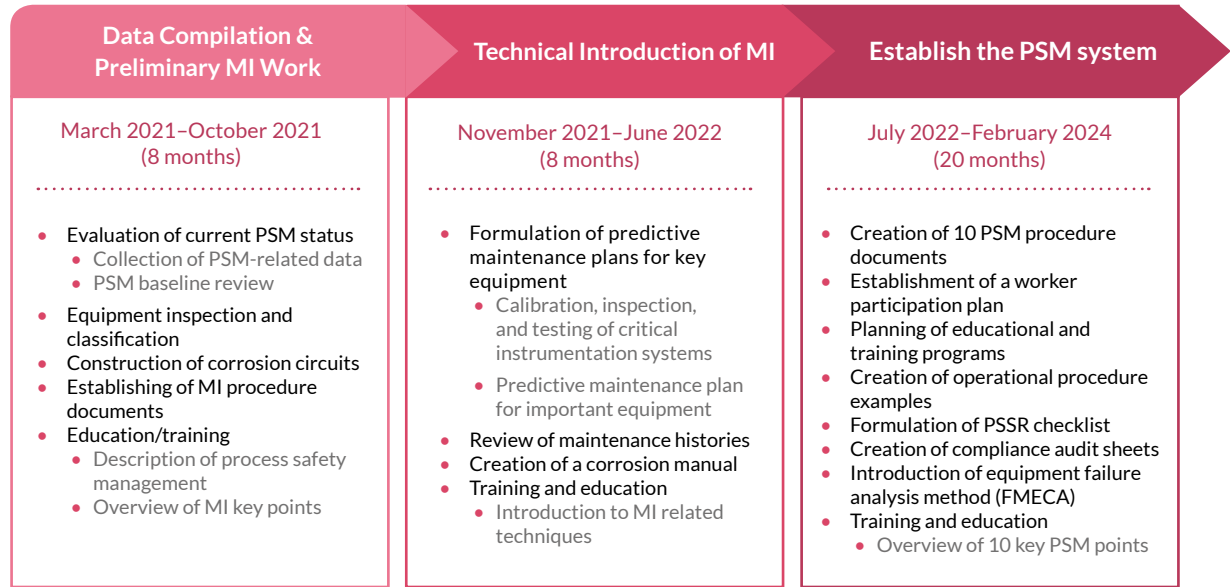
Note 2: PSTIR = The cumulative (annual) count of incidents x 200,000/total hours worked by workers
 Note 3: Frequency severity index (F.S.I.) = $\sqrt{[(F.R \times S.R.) / 1000]}$

Note 3: PSISR = The total severity score of process safety incidents x 200,000/total hours worked by workers

Implementing the Process Safety Management (PSM) System

TTC's Linyuan, Qianzhen, and Toufen plants began implementing the PSM (Process Safety Management) system in 2021. Through planning, execution, inspection, and improvement, they have progressively promoted the PSM system to strengthen process operational safety. The goal is to establish and implement a safety culture and system at the factory, spanning from top management to employees and from equipment to personnel.

The overall plan is led by TTC's President, who takes the lead and collaborates with all colleagues in introducing and executing PSM. External consultants and their teams have been hired to assist in the PSM guidance in a manner that combines academia and industry. This assistance covers the establishment of systems, technical methods, etc., managed through a project-based approach and introduced in three phases:



Type	Progress for Each Item
PSM Data Checklist to be Established	The 14 main categories have been subdivided into 171 items. The entire factory is compiling data and uploading it to the PSM electronic platform. Tracking progress is done monthly.
PSM Procedure Documents	Creation has been completed based on the 14 main categories.
MOC Electronic Platform for Process Improvement	An electronic platform has been established. Currently, the system is being optimized for future systematic management.
CMMS	1. Hardware has been set up. 2. Discussions are underway regarding software system development.
Reactivity Hazard Analysis	Currently, external academic units have been commissioned for experimental analysis.
Pipeline ISO Diagram Creation	The goal is to create about 3,000 diagrams. At present, 758 have been created.
Equipment-related Inspection	Non-destructive testing and vibration analysis are being conducted based on corrosion loops
PM Planning and Material Specification Creation	Currently, about 2,000 units have been planned, with planning ongoing.
Compliance Audit	In 2022, one group audit and two internal audits were completed.
Aging Management	Discussions regarding system development are currently ongoing with the group's IT department.

Care for Employee Health

Before entering the factory, new recruits are required to undergo health check-ups at medical institutions recognized and approved by government agencies. Every year, regular employees undergo health check-ups conducted by accredited major hospitals to ensure their well-being. Results, when necessary, are reported to the competent authorities for record. As of 2022, the health check-up participation rate across all factories reached 100%.

Upon completion of the health check-ups, employees receive a health report detailing their medical data over the past three years. This allows them to understand the fluctuations in various test results during this period. Additionally, we maintain an archive of each employee's annual health reports, which they can access for personal review. Employees engaged in tasks that pose particular health risks are required to undergo specialized health examinations. We have established a health management database and conduct tiered health management based on regulations. Depending on the examination results, health level, and physician's recommendations, employees with abnormal findings receive health education, follow-up examinations, treatments, or are managed by adjusting their job assignments to safer environments.

Overview Table of Job Types Requiring Special Health Check-ups Across Factories

Factory Area	Types of Jobs Requiring Special Health Examinations
Linyuan Factory	Operations involving noise, dimethylformamide, and laboratory work with potassium dichromate
Qianzhen Factory	Operations involving noise, ionizing radiation, and laboratory work with benzene
Toufen Factory	Operations involving noise and dust exposure
Zhongshan Factory	Noise operation



While the rate of unsatisfactory health examination results can be directly or indirectly related to factors such as age progression and individual lifestyle habits, we still place an emphasis on the promotion of employee health, especially for those with higher unsatisfactory rates. To this end, we draft an annual health promotion plan and implement various health promotion initiatives as follows:

- After each health examination, we invite hospital physicians to host an examination result briefing. This allows employees to understand their current health status, communicate face-to-face with the doctor, and receive suggestions regarding their post-examination health condition.
- For general health examination anomalies, individual employees receive health education. In 2022, our occupational health and medical staff provided health education sessions a total of 208 times.
- To ensure employees have the opportunity for physical and mental relaxation, factory welfare committees and unions organize tiered recreational trips annually. This ensures that all employees have a chance to participate, promoting overall well-being.



Prevention management of Work-Related Ill Health

Type	Hazard Factors	Potential Occupational Illness	Preventive and Management Measures
Physical	Noise	Occupational hearing loss	Establish a hearing protection plan, provide education and training, and supply protective equipment
	Work under Sunshine	Heatstroke, heat exhaustion	Install indoor cooling systems, air conditioning, fans, provide water dispensers, schedule work and rest periods
Chemical	Organic solvents	Live and key damage, dermatitis	Limit exposure time, set up local exhaust ventilation systems, supply protective equipment
	Dust	Respiratory irritation, occupational asthma	
Ergonomic	Heavy objects	HIVD	Develop a human-centered hazard prevention plan, limit duration of use, use machinery to replace manual work where possible, advocate for the correct working posture
	Poor posture	Neck and shoulder pain	
Social, physiological	Overwork	Cardiovascular diseases	Establish a plan to prevent illnesses caused by abnormal workloads, control working hours, advocate for the improvement of bad habits, promote correct posture
	Psychological stress	Occupational psychiatric disorders	Implement a prevention and management plan against unlawful infringements in the workplace, station doctors and nurses in the factory for consultation and counseling

Analysis of Work-Related Ill Health

TTC is dedicated to occupational safety and health. Based on the Occupational Safety and Health Act, the company has taken preventive measures for operations with health hazards.

Yearly Activities/Measures	Employees		Contractors	
	Male	Female	Male	Female
Number of cases of recordable work-related ill health	0	0	0	0
Number of fatalities as a result of work-related ill health	0	0	0	0

Health promotion

Beyond its commitment to business management, TTC places significant emphasis on the physical and mental well-being of its employees. Regular events, such as group travel and participation in charitable activities, are organized across all plants. Employees are encouraged to participate actively. Additionally, stationed doctors and nurses offer free medical consultations and health guidance on-site, helping employees understand potential physical or psychological health issues and promoting health management awareness and initiative.



OHS Organization and Operations



TTC's Linyuan, Qianzhen and Toufen Plant have established labor unions and the "Occupational Safety and Health Committee (OSHC)" have also established in accordance with the "Regulations for Occupational Safety and Health Management," with labor representatives elected or appointed by the union. The committee meets with management every quarter to discuss ESH topics on behalf of employees.

The Zhongshan plant has a dedicated Health and Safety Department responsible for the daily management of occupational health and safety. They hold monthly environmental safety meetings to review issues related to occupational safety management.

In terms of occupational safety committee representation, labor representatives account for 35% in the Qianzhen plant, while other plants have a representation of 33%. In 2022, there were a total of 124 proposals. Except for the Linyuan plant, where 3 items are still pending construction planning, all other items have been completed.

Workplace Safety and Health Operations

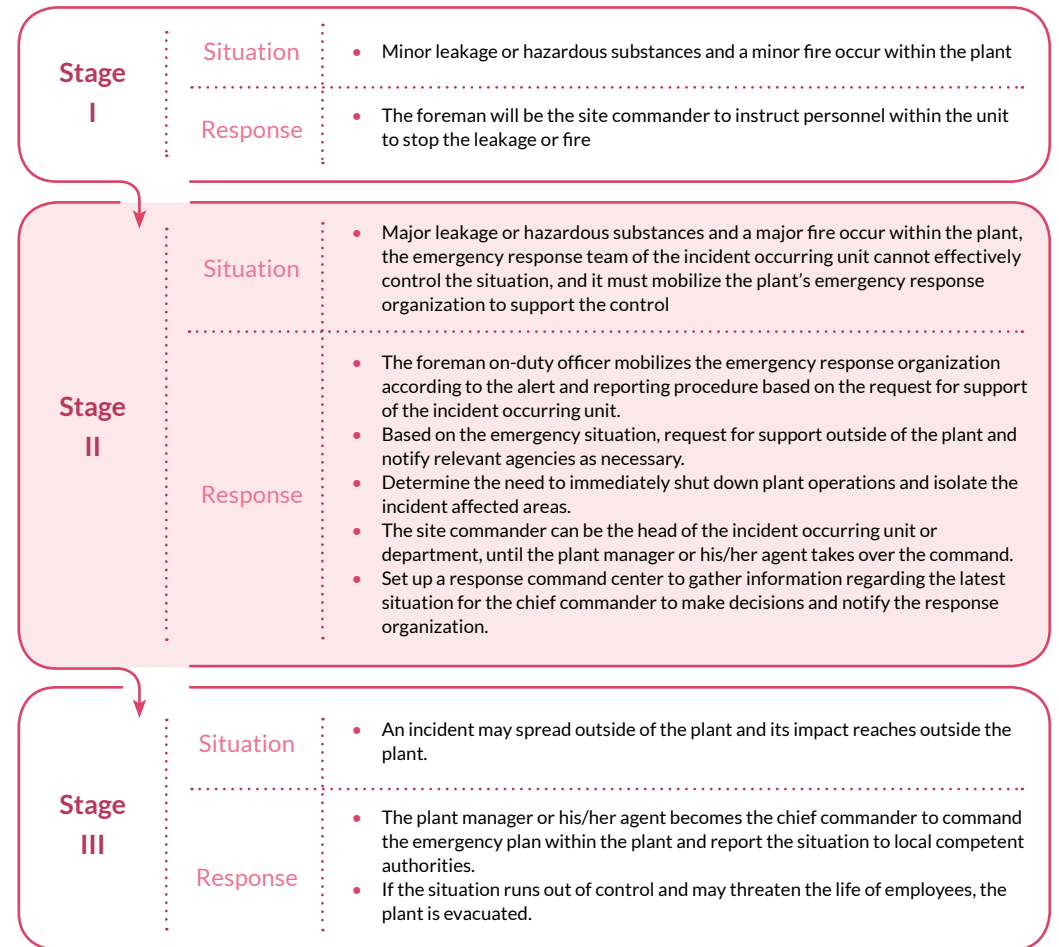


TTC's Linyuan and Qianzhen plants obtained OHSAS 18001 Occupational Health and Safety Management System certification in July 2001. By August 16, 2020, these plants, including the Toufen plant, successfully transitioned to the ISO 45001 standard. Each factory regularly designates personnel to conduct safety inspections and checks on a weekly basis. Additionally, the company has implemented the "Group Safety and Health Partner Regional Joint Defense" system. This system encourages affiliated enterprises within the group to supervise each other, share experiences, and conduct cross-audits. This approach further solidifies the implementation of safety and health management. In 2022, Qianzhen, Linyuan, and Toufen plants underwent a total of 8 ISO and group audits.

The Zhongshan plant has not yet adopted the ISO 45001 Environmental Health and Safety Management System. However, it still operates in accordance with relevant occupational safety regulations and the environmental and safety policies of TTC.

In response to the possibility of emergency procedures for raw materials (chemical) leakage, fire, explosions, and earthquakes. In addition, TTC has classified incidents into three levels and have planned different response stages. When the level of an incident rises, the stage of response also rises. The three stages of response are as follows. Each factory, in addition to participating in annual fire drills, also has a yearly emergency response drill plan. The goal is to continuously train staff to become familiar with the emergency handling procedures through regular drills.

The Three-stage Emergency Response Flowchart



In addition, plants across Taiwan collaborate with the Taiwan Responsible Care Association (TRCA), the Industrial Safety and Health Promotion Association, and the Pollution Prevention Coordination Group. Through mutual observation and learning in areas such as industrial safety, health, and environmental protection, they aim to enhance the safety and health protections of operational staff. They also annually hold regular emergency response, firefighting drills, and safety education training. In the fiscal year 2022, a total of 98 emergency response and fire drills, and education training sessions were conducted, benefitting 1,679 participants. This training nurtures employees' ability to respond to emergencies and self-manage their safety.

Photos Related to the Emergency Response Drills

Linyuan Factory



Linyuan Plant 2022 Emergency Response Exercise - AN & SM Monomer Pipeline Leak Fire Emergency Response Drill

Qianzhen Factory



Qianzhen Plant 2022 Emergency Response Exercise - Fire Safety Education Training

Toufen Factory



Toufen Plant 2022 Emergency Response Exercise - Ammonia Gas Leak Training

Zhongshan Factory



Zhongshan Plant 2022 Emergency Response Exercise - SM Pipeline Leak Incident Drill

HSE Education

Education, training, and publicity are the fundamentals for promoting HSE awareness to employees and contractors. By establishing relevant management regulations for each plant, TTC provides knowledge and skill training for different categories of employees and contractor personnel based on actual needs. For the fiscal year 2022, the total number of trainees reached 6,980, with a combined training duration of 24,799 hours.

Statistics Table for Environmental, Safety, and Health Training Hours for Different Personnel in 2022

Factory Type	Linyuan		Qianzhen		Toufen		Zhongshan	
	Person	Total hours	Person	Total hours	Person	Total hours	Person	Total hours
New employee training	17.0	1,982.0	12.0	440.0	1.0	3.0	7.0	182.0
On-the-job training	2,654.0	11,520.5	1,078.0	3,921.0	486.0	1,300.0	1,857.0	4,084.5
Contractor personnel	576.0	864.0	241.0	361.5	38.0	114.0	13.0	26.0
Total	3,247.0	14,366.5	1,331.0	4,722.5	525.0	1,417.0	1,877.0	4,292.5

Note: Employee on-the-job training courses include: management skills, professional techniques, industrial safety and environmental protection, and others.

Statistics Table for Hours of On-the-Job Employee Training Programs in 2022

Training Programs/ Total Duration	Linyuan Factory	Qianzhen Factory	Toufen Factory	Zhongshan Factory
Managerial skill	232.0	687.5	517.0	1,782.0
Technical expertise	1,454.0	6,895.5	244.0	1,038.5
Industrial safety and environmental protection	668.0	2,248.0	215.0	998.5
Other	300.0	1,689.5	102.0	102.0
Subtotal	2,654.0	11,520.5	1,078.0	3,921.0



Photos Related to Safety and Environmental Training

Linyuan Factory



HAZOP Hazard Analysis Practical Education and Process Safety Information (PSI) Training

Qianzhen Factory



Confined Space Operation Education Training and Traffic Safety Advocacy Education

Toufen Factory



Workplace Bullying Prevention Education and First Aid Training

Zhongshan Factory



Dual Prevention Training on Risk Identification and Hazard Exclusion, and Safety Education Training

Contractor Safety Management

TTC has set regulations for contractor management. These clearly stipulate that contractors must undergo safety education before entering the plant. They are informed about potential hazards to ensure a comprehensive understanding of the safety of the construction environment and safety measures. Only after this training are contractors allowed to work within the facility. Before commencing work, a safety check is implemented to guarantee the security of the work site, fulfilling the responsibility of occupational safety and health management. Random safety checks are conducted during operations. In case of any violation, the contractor is immediately asked to cease construction. They can only resume after necessary improvements are made. Additionally, meetings are held concerning contracted projects, emphasizing clear safety guidelines, precautions, and emergency response measures within the plant area. Through these meetings, bidirectional communication is facilitated to ensure the safety of all contracted operations, thereby reducing the occurrence of accidents.

In 2022, TTC reported **zero** accidents involving contractors.

4.3.2 Transportation Safety and Management

Transportation Safety Management for Raw Materials

① Tanker Truck Management

Each plant utilizes tanker trucks for the transportation of raw materials. Considering the safety of vehicle transportation, raw material storage, and unloading operations, each plant has established regulations as per their requirements. These regulations cover the transportation of chemical tankers and finished products, raw material storage management, unloading-related operations, and guidelines for operating procedures related to the unloading and storage of tanker or drummed raw materials.

In the past three years, there have been no accidents related to tanker transportation at the Linyuan, Qianzhen, Toufen, and Zhongshan plants. The transportation tankers are qualified tankers for transporting chemical substances; each contractor has good emergency response ability, and well-established emergency response plans. Transportation is implemented according to the relevant control regulations and management measures. Furthermore, due to the classification of acrylonitrile and butadiene as toxic chemicals announced by the Environmental Protection Agency, specific preventative and response plans for transporting these hazardous substances have been established. Additionally, the plants have joined a national cooperative organization that responds to disasters involving toxic chemicals, specifically focusing on acrylonitrile and butadiene.

② Pipeline management

Over the past three years, there have been no incidents related to pipeline transportation at the Linyuan, Qianzhen, Toufen, and Zhongshan plants.

Safety Management Measures for Above-ground and Underground Pipelines at Each Plant:

Linyuan Plant

The underground pipelines transporting butadiene and styrene are located within the Linyuan Industrial Zone, bypassing the Kaohsiung city area. The plant has established a “Raw Material Transportation Pipeline Management Standard” to regulate maintenance, daily inspections, and abnormality management for underground pipelines both within and outside the plant. Above-ground pipelines in the plant are also inspected and maintained based on related standards.

Qianzhen Plant

Styrene is transported directly from China General Terminal & Distribution Corporation's (CGTD) tanks to the Qianzhen plant processing area through above-ground pipelines. The entire transportation route is within the boundaries of both plants. A “Maintenance and Management Procedure for SM Transparent Pipes from CGTD to TTC Process” has been established. Staff from each shift use Personal Digital Assistants (PDAs) for inspections, checking for pipeline leaks. Pipeline thickness is measured annually to evaluate any thinning of the pipe walls. If any irregularities in the styrene transportation process are detected during production, both the Qianzhen plant control room and CGTD control room have monitoring screens and alarms. Immediate action is taken during abnormalities, and CGTD personnel will also provide on-site support.

Zhongshan Plant

Above-ground pipelines are inspected by tank area operators for any leaks. There is an underground pipeline between the storage tank area and the processing area that can transport styrene and pentane. According to the “Special Equipment Safety Inspection Regulations”, this underground pipeline is classified as a pressure pipeline. The Zhongshan Special Equipment Testing Institute conducts annual online tests on these pressure pipelines. Once thoroughly inspected and approved, a “Special Equipment Use Registration Certificate” is issued by the quality technical supervision department for legal use.



③ Product Transportation Safety Management

Linyuan Plant

Product transportation safety on roads is entrusted to contracted transporters. Vehicles entering the plant must adhere to related management regulations. Trucks entering the plant for loading are subjected to loading and unloading operations and safety management. Transport contractors must ensure their diesel vehicles have joined the Kaohsiung diesel vehicle self-management system and have obtained the smoke inspection qualification mark before they can operate within the plant.

Qianzhen Plant

The product is granular in appearance. Domestic transportation of bagged products uses standard trucks, while bulk transportation uses specialized tanker trucks. For overseas clients, containerized products are transported to the docks by trailers and then by sea shipping. There's an established "Finished Product Transportation Management Procedure Manual". Annually, audits are conducted on contracted transportation companies. Just like Linyuan, diesel vehicles must be part of the Kaohsiung diesel vehicle self-management system and possess a smoke inspection qualification mark to operate in the plant.

Toufen Plant

Product transportation safety on roads is entrusted to contracted transporters. Similar to Linyuan, vehicles entering the plant must adhere to related management regulations, and trucks coming in for loading are managed for safety during loading and unloading.

Zhongshan Plant

Finished product transportation primarily uses trucks. Detailed regulations and corresponding penalties ensure transportation safety. All vehicles entering the plant must follow entrance-related management regulations, register upon entry, undergo checks, and adhere to safety management for loading and unloading, ensuring safety within the plant premises.

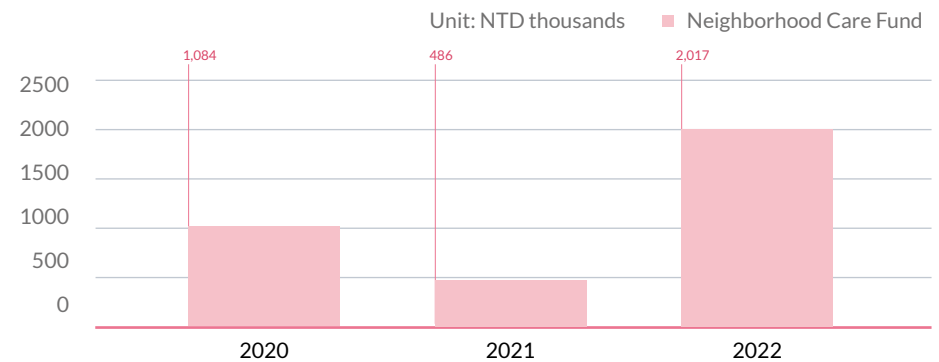
4.4 Social Engagement

TTC adheres to the spirit of "taking from society and giving back to the community," making every effort to care for community neighbors, local groups, and local schools, and continuous interaction with local community neighbors to maintain friendly relations. TTC, with its core capabilities in plastic manufacturing, focuses on three main pillars of social investment: "Neighborhood Care," "Community Organizations," and "Donations and Others." It continues to cooperate with the local elementary schools in Linyuan, implementing air quality improvement, carbon reduction plans, and hosting tennis and participating in softball sports events to enhance neighborhood interaction. Additionally, TTC actively participates in epidemic protection clothing support through joint defense organizations and environmental units and supports remote education and sustainable environmental public welfare through its foundation. The local community care sponsorship for the year 2022 amounts to approximately NT\$2,017 thousand.

- **Community support:** Community development associations, education and culture, environmental protection bureau, community groups, local folk festivities, emergency relief, and air quality purification zone.
- **Providing job opportunities:** Where appropriate, we hire local residents for job openings and encourage contractors to hire local residents.
- **Community involvement:** Community activities, group representatives, environmental protection groups, religious activities.

Care for the Local Community in Linyuan District

Summary Table of Local Contributions Over the Past Three Years



Expenditure on local contributions

Starting from 2022, the special fund for the Neighborhood Care Fund is used uniformly by the Linyuan District Office from the annual payment, and the total amount of TTC's Neighborhood Care Fund in 2022 is NT\$ **2,017** thousand.

Overview Table of Specific Activities and Implementation Results of Community Participation and Community Care in 2022

Type	Effect / Implementation Results
Neighborhood Care	Linyuan District neighborhood care celebrations or activities and fraternity training feedback
	Linyuan District community organization development association and various association study activities feedback
	In 2022, TTC's Linyuan factory, in cooperation with the Kaohsiung City Environmental Protection Bureau's "2021 Kaohsiung City Air Quality Purification Zone Management Plan," adopted the Air Quality Purification Zone and Clean Air Green Wall Base at Zhongyun Elementary School in Linyuan District, Kaohsiung City, for a one-year environmental and plant maintenance assistance, adoption period from 2022.06.08 to 2023.06.07
	Repairs to various public facilities in Linyuan District
	Promoting local customs and marketing agricultural and fishery specialties in Linyuan District
	TTC's Linyuan Factory responded to the Kaohsiung City Environmental Protection Bureau's promotion of energy-saving and carbon reduction guidance and cross-departmental greenhouse gas reduction operations, assisted Kaohsiung City Linyuan District Linyuan Elementary School in replacing the air conditioning equipment on the 1st and 2nd floors to reduce related energy consumption, reduce greenhouse gas emissions, and fulfill corporate social responsibility
Communities and Social Groups	Jointly hosted the USI Cup Tennis Championship, held on 2022.10.22, with 7 employees from the Linyuan factory participating
	In November 2022, Linyuan factory participated in the Group's Southern Charity Softball Game, sponsoring charity meals from the Xihaner Catering Kitchen, with the USI Education Foundation sponsoring NT\$26,400, and various factories donating NT\$3,500 each (totaling NT\$14,000 from four southern factories), using this activity to enhance Taiju Group's corporate responsibility towards society and allow employees to participate in charity
	Scholarships and grants for schools at all levels in Linyuan District
	Assistance to school facilities at all levels in Linyuan District
Donations and Others	Annual investment in the USI Education Foundation, assisting the foundation in investing more resources in remote education and sustainable environmental public welfare projects and activities
	Temple festival activities and other sponsorships
	Along with USI Group and other friendly factories, participated in the Kaohsiung City Environmental Protection Bureau's epidemic protection clothing joint donation event, with TTC's Linyuan Factory sponsoring NT\$9,450 in total

Sponsored the USI Cup Tennis Tournament

Every year, the three factories in the Group's Linyuan area (TTC/APC/TVCM) have been continuously commissioned by the Linyuan Tennis Association to host the USI Group Cup Tennis Championship, with each company contributing NT\$100,000 each year to sponsor the Kaohsiung City Linyuan Tennis Association to organize the USI Group Cup Tennis Championship. As of 2022, there have been 20 sessions, promoting sports and fitness, and enhancing interaction with local neighbors and group colleagues. The 20th session was held on 10/22 in 2022 at Linyuan High School, with a total of 7 employees from Linyuan Factory participating.



Speech by Linyuan High School Principal Huang



Speech by USI Group Manager Huang

Participation in USI Group's Slow Pitch Softball Charity Game

In November 2022, TTC's Linyuan Factory participated in the Group's Southern Charity Softball Game, sponsoring a charity meal ordering event from Xihaner Catering Kitchen, sponsored by the USI Education Foundation for NT\$26,400, and each factory donated NT\$3,500 (a total of NT\$14,000 from four factories), through this activity to enhance USI Group's corporate responsibility towards society and let employees participate in public welfare activities.



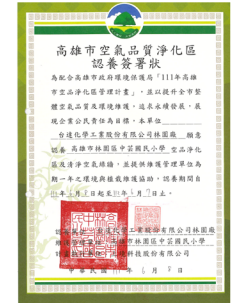
Participation in Kaohsiung City's Air Quality Purification Zone Adoption

- TTC's Linyuan Factory cooperated with the Kaohsiung City Environmental Protection Bureau to promote the adoption of the Kaohsiung City Air Quality Purification Zone, to enhance the overall air quality and environmental maintenance of the city, pursue sustainable development, and demonstrate corporate citizen responsibility as the goal. TTC's Linyuan Factory adopted the Air Quality Purification Zone and Clean Air Green Wall Base at Zhongyun Elementary School in Linyuan District, Kaohsiung City, and provided maintenance and management units for a period of one year, from June 8, 2022, to June 7, 2023.
- TTC was selected as one of the 37 excellent adopting enterprises by the Kaohsiung City Environmental Protection Bureau in 2021, and accepted the award on December 28, 2022. The medal is shown in the following picture.



Participate the Cross-Sector Collaborative GHG Reduction Program in Kaohsiung City

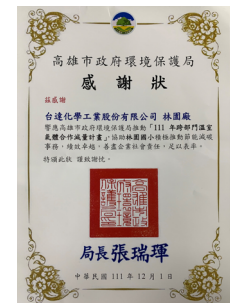
TTC's Linyuan Factory responded to the Kaohsiung City Government Environmental Protection Bureau's promotion of energy-saving and carbon reduction guidance and cross-departmental greenhouse gas reduction operations, assisting Kaohsiung City's Linyuan District's Linyuan Elementary School in replacing the air conditioning equipment on the 1st and 2nd floors to reduce related energy consumption, decrease greenhouse gas emissions, and fulfill corporate social responsibility.



Air Quality Adoption Certificate



Air Quality Meritorious Adoption Medal



Cross-Departmental Greenhouse Gas Cooperation Reduction Plan Certificate of Appreciation

Participated in a joint donation activity for epidemic prevention protective clothing with friendly factories such as USI Corporation and the Kaohsiung City Government's Environmental Protection Bureau

Each of the five factories of the USI Group sponsored 50 epidemic protection garments to the Kaohsiung City Environmental Protection Bureau (NT\$9,450), and the bureau issued a certificate of appreciation on 2022.03.02 by the Director's Secretary, expressing gratitude to USI Group for their enthusiastic public welfare contributions.



Sponsoring Subsidiaries CGPC and TTC Organize Coastal Clean-up

Taiwan, surrounded by the sea on all sides, is highly concerned with marine pollution issues, hoping to raise colleagues' awareness of marine environmental protection through annual beach cleaning activities. In support for the marine environmental protection policy of the Miaoli Environmental Protection Bureau, China General Plastics Corporation (CGPC), a USIG subsidiary, adopted 500m coast of Long Fong Fishing Port in Zhunan Town in 2017. The fifth coastal clean-up after the adoption took place on September 24, 2022. Under the leadership of CGPC VP Lin and with the support of TTC, a total of 200 employees participated in the cleanup.

The development of human civilization has brought many conveniences and business opportunities but has also produced a large amount of garbage, ranging from large discarded fishing nets to tiny plastic particles, which have seriously invaded the oceans, causing "severe marine pollution". Among them, "ghost fishing gear" has become a significant culprit poisoning the ocean. On the day of the beach cleaning, each participating colleague picked up a pair of tongs and an environmentally-friendly garbage bag. Shortly after the cleaning activity began, 750 kilograms of trash were collected, of which fishing nets and fishing gear accounted for approximately 300 kilograms. Through collective beach cleaning activities, besides raising awareness of the ecological crisis caused by marine garbage, reflections can be made on all aspects of life to reduce marine debris. The hope is that small actions can lead to significant changes and make our environment better.



Sponsored USI Education Foundation

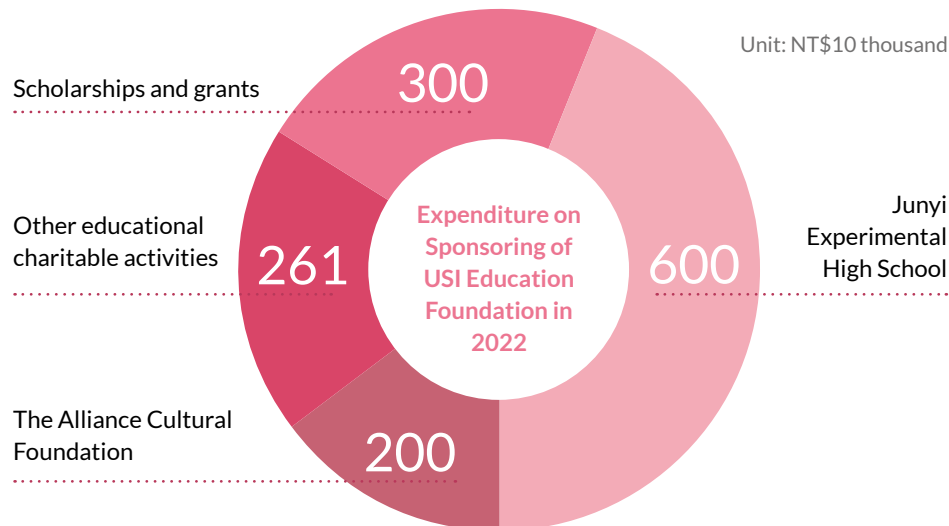
USI Educational Foundation

USI Educational Foundation was established on December 30, 2011 funded with donations from USI and APC. The foundation officially started operations in 2012 to promote educational charitable affairs, with a focus on the care for the education of the disadvantaged, education in remote areas, and environmental protection. The foundation advances its goals by establishing scholarships and grants, donating to charities, and sponsoring educational and charitable activities.

To further expand the scale of charity, CGPC and TVCM joined the foundation in 2017. In 2018, TTC also joined the foundation to enable investments of more resources in rural education and environmental sustainability in order to give back to society.

Charity Events

In 2022, USI Education Foundation sponsored various activities with a total amount of NT\$13.61 million, including NT\$3 million for scholarships and grants; NT\$2 million for the Alliance Cultural Foundation, NT\$6 million for Junyi Experimental High School in Taitung; and NT\$2.61 million for other educational and charitable activities.



Scholarships and Grants

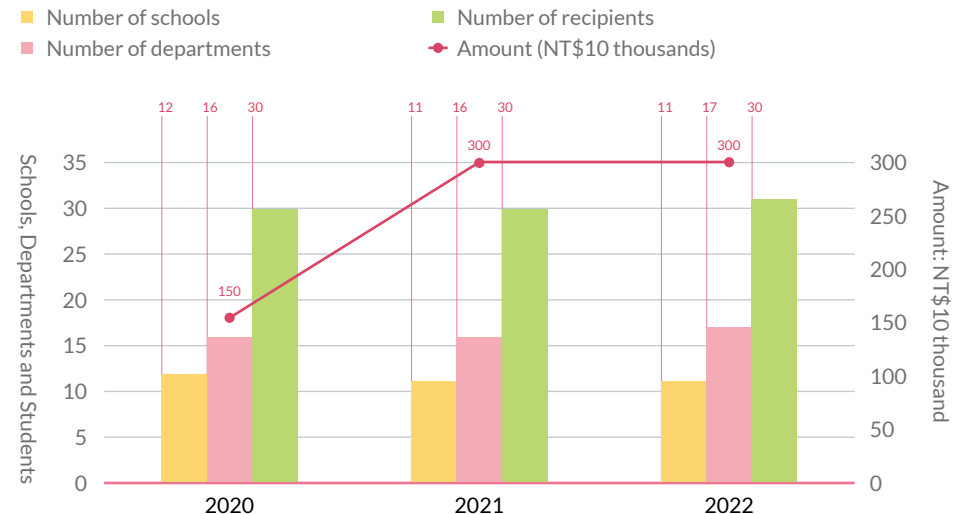
We offer scholarships to students from low-income families with outstanding performance and specializing in disciplines relating to chemical engineering, materials science, chemistry, and applied chemistry of 15 public and private universities to promote education and talent cultivation in related fields, encourage university students of related disciplines to study hard and cultivate outstanding industrial talents for society. 2022 marked the 11th anniversary of USI scholarships. Over the years, we have accumulatively granted scholarships amounting to NT\$17.1 million to 297 students.

In 2022, we offered scholarships and grants of NT\$3 million in total to 31 students from 17 departments of 11 public and private universities, including 10 from doctoral programs, 16 from master's programs, and 5 undergraduates - 23 of them were from low-income families. To encourage scholarship-winning students, the presentation and commendation ceremony was held at noon on December 9, 2022. USI officers attended the event to exchange opinions and experience with students, wishing them to keep studying in order to demonstrate positive influence and contribute to society.



Scholarship Presentation and Commendation Ceremony 2022

Distribution of Scholarships and Grants in Last 3 Years



The Alliance Cultural Foundation and Taitung Junyi Experimental High School

To invest more resources in rural education and the sustainable development of Hualien and Taitung, the foundation sponsors the Alliance Cultural Foundation and Junyi Experimental High School on a long-term basis. Established 13 years ago, the Alliance Cultural Foundation always has a blueprint: hoping that Junyi Experimental High School will become the base in Hualien and Taitung for developing future talents. It also helped building the Paul Chiang Art Center into an international cultural and art landmark in Taitung and even in Taiwan, while the Forest Culture Museum in Yingping, Taitung, and GS Forest in Fengbin, Hualien, are demonstrations of indigenous culture distributed in all parts of Taitung and Hualien.

The chairman of the Public Welfare Platform, Yan Changshou, proposed four stages of public welfare through his personal practice: the 1.0 version of public welfare is “almsgiving”, providing clothing and food for those in need, subsidizing scholarships, providing emergency assistance, etc., with many religious groups meeting this crucial basic need in society; the 2.0 version is “settling”, offering education or work environments, finding the meaning of life, the dignity of work; the 3.0 version is “excelling”, providing a mechanism for long-term care, similar to uniform schools from elementary to high school, vertically offering better learning environments, enabling capable people to change their fate and future; and the 4.0 version is “replication and dissemination,” combining government policies, or sharing experiences of success and failure, to teach others, and extend influence.

Currently, relief for the poor is the common practice of most charities. However, to accompany economically disadvantaged children to walk out of the bonds from their families and broaden their horizons for them to find their future development and eventually give back to society all the way round is what our society needs now.

At the current 3.0 stage, the teacher training program of the Alliance Cultural Foundation and Taitung Junyi Experimental High School continues to spread the experimental education model into a roadmap for government to modify the remote township’s policies, with the goal of “Public Welfare 4.0”. Additionally, they also invite more domestic and overseas key influencers to Taitung to translate what they see and feel into text, images, and other forms of creations and spread them in their hometowns or home countries. We believe that in the next three to five years, more substantiated achievements of the sustainable development of Hualien and Taitung will be spotted.

Taitung Junyi Experimental High School: Realization of Education for Remote Townships

According to international research, only 30% of people are good at exploring knowledge through reading or the traditional classroom learning model, while the other 70% are suitable for learning from doing to turn experience into knowledge. Although more and more people are working to transform Taiwan's education, many schools' educational methods are almost making 100% of the students cater to 30% who excel at academic exams, thus causing many young people to lack motivation in learning. Most people belong to the aforementioned 70% in rural areas. How to let students acquire knowledge from practice and application is what the current education system of Taiwan lacks. Conversely, it is the strengths of Hualien and Taitung and the direction for changing education in remote townships of the Alliance Cultural Foundation.

Taitung Junyi Experimental High School is on the right path, deeply cultivating Waldorf education in elementary school, integrating creative arts, handicrafts, bodily rhythm and movement, and music, with language, mathematics, nature, and social studies, nourishing children's life development; in middle school, the “exploration education” and “creative clusters” courses cultivate the essence of Junyi experimental education in “humanity, life, and work”.

To provide economically disadvantaged children with opportunities, the “Rural Education Seed Cultivation Plan” was established in 2012, supporting economically disadvantaged children in the Hualien-Taitung rural areas (also including Pingtung in recent years) to attend Junyi schools, offering 1/3 of the new seventh-grade quota and opening applications for tenth-grade new students each year. In 2022, this project entered the next decade, with a total of 210 students nurtured to date, coming from low-income, mid-low income, single-parent, grandparent-raised, or actively engaged in indigenous cultural work but unable to fully support tuition families. More than 80% of them are indigenous students, covering the Amis, Beinan, Bunun, Paiwan, Rukai, Tao, Taroko, Tsou, and Atayal tribes. They hope that each education seed can become youth with “good character”, “cultural and art” literacy, and “critical thinking” and a world citizen who embraces enthusiasm, self-confidence, and international perspective and return to indigenous communities to become the seeds that change indigenous communities.



Schoolchildren in remote townships with less resources need connection with the world more in order to create more possibilities for their hometowns. Hence, in 2017, the Alliance activated the “Innovation and Overseas Study Education Fund” to provide scholarships for students of Junyi Experimental High School to apply for overseas study at two-year community colleges, the United World College, or four-year universities as the start of connection with the point, develop specialties, and broaden their international perspective, so that they can become the power to change their communities and hometowns in the future. Since the project’s inception, 22 Junyi High School students have studied abroad in 6 countries. With the easing of the epidemic and more older student experiences shared and inspiring, students began to think and prepare more about studying abroad, including more serious English proficiency advancement. In 2022, the number of students studying abroad slightly increased, totaling 7.



The Waldorf education for the elementary school department and senior students participated in the “Mianshan School: Jiafeng Adventure 2-day 1-night Camp Course”



The “Creativity Module” of the senior high school department enables students to learn more about themselves through “exploration, inspiration, and achievement”.



Students of the “Creativity Module-International Hospitality” course of the senior high school department coordinates the Thanksgiving dinner.



The capstone project of students of the senior high school department presents the achievements of “self-learning” over the past three years.

Toufen Junior High School Music Program

By integrating with the Harvest 365 Music Program of the Harvest 365 Foundation (Harvest 365), The Alliance Cultural Foundation collaborated with Toufen Junior High School to introduce the Toufen Junior High School Music Education Program in September 2021. The professional choir instructors of Harvest 365 collaborated with the music teachers of Toufen Junior High School to form the Harmony Choir with 7th and 8th graders. Currently the choir has 25 members. Apart from the routine school club time, the choir also practices after class. It is hoped that vocal art can keep students in company through their growth and motivate students to perform on stage at the annual music festival so as to develop self-confidence in students.

The music program's philosophy is not to select students, not to sing for competition but to let every child learn happily, to sing for joy, and through choral classes, let every child sing with confidence, sing with the courage to challenge oneself, and cultivate good character and teamwork spirit. The choir's name, “Harmony”, is also to hope that children are not only competing alone, going on stage by themselves, but that everyone together shows unity and cooperation on stage. The students' real progress is not in musical skills but in understanding what “chorus” is. Everyone feels each other's strength, confidence, and happiness in the ambiance of music, and we hope that children can continue to showcase themselves in the future!



Harmony Choir of Toufen Elementary High School

Sponsoring Other Educational and Philanthropic Activities

Other major sponsorships in 2022 included BOYO Social Welfare Foundation, Teach for Taiwan Association, Education Support for Taiwan, Cloud Gate Culture and Arts Foundation, and Taitung Blue Ocean Daily.

1

Founded in 2002, BOYO Social Welfare Foundation provides free “remedial instruction” after-school club services for junior high school and elementary school students from low-income families in the belief that “education gives hopes for children living in poverty” so as to achieve its mission “End Poverty with Education”. Additionally, the foundation also provides “care guidance” to remedy learning instability for each child from vulnerable groups to receive an appropriate education environment, in order to develop their basic capacity and social competitiveness to end poverty in the future with their own ability. Since BOYO Social Welfare Foundation was established 20 years ago, each year it invests a large amount of labor and resources in curriculum design, develops remedial teaching materials, and trains parents in the community. Currently, there are 17 locations to provide after-school club service for over 2,000 students.

2

Founded in 2013, Teach for Taiwan (TFT) is a non-profit organization caring for “education inequity”, hoping to create equal opportunities in education for every child. Through training competent youth with a sense of mission to teach at elementary schools in low-income rural communities for at least two years, TFT resolves the long teacher shortage and high turnover rate problems in the rural area. Since 2014, it has sent over 300 quality talents to the rural areas, including Taitung, Tainan, Pingtung, Yunlin, Hualien, and Nantou, to help over 6,000 children from vulnerable groups.

3

Education Support for Taiwan was founded in 2019 to start services with school accompaniment. It is now in over 230 schools and regional groups in all cities and countries, including offshore islands, to help schools solve problems and find developmental advantages. In 2022 it began promoting the “No-License Substitute Teacher Support Program” starting from Taitung. By accompanying substitute teachers with “partner teachers”, they provide corresponding guidance and support based on the situation and needs.

4

Cloud Gate Culture and Arts Foundation is a non-profit business aiming to “promote cultural development and international exchange through creation, performance, and promotion of dance and other arts and cultural activities”. Apart from promoting domestic and overseas performance over time to enrich the cultural life of Taiwan and the world, it also engages in promoting community art education and citizen arts and cultural activities in Danshui.

5

Taitung Blue Ocean Daily is a brand-new Taitung-specific ocean culture exchange activity promoted by the Taitung County Government in 2022 for the first time. For two consecutive weekends between September 17-25, based on the slow travel and downshifting concepts, they launched the immersive ocean recreation life experience in Sanyuan Bay, Huosui Lake, Jinjun, and Green Island and combined with the Austronesian culture to provide ocean culture education and training and outrigger canoe experience for more citizens to understand the Austronesian island culture so as to progressively start connecting Taitung’s recreation development with the world.

The teaching site for accompanying and supporting children

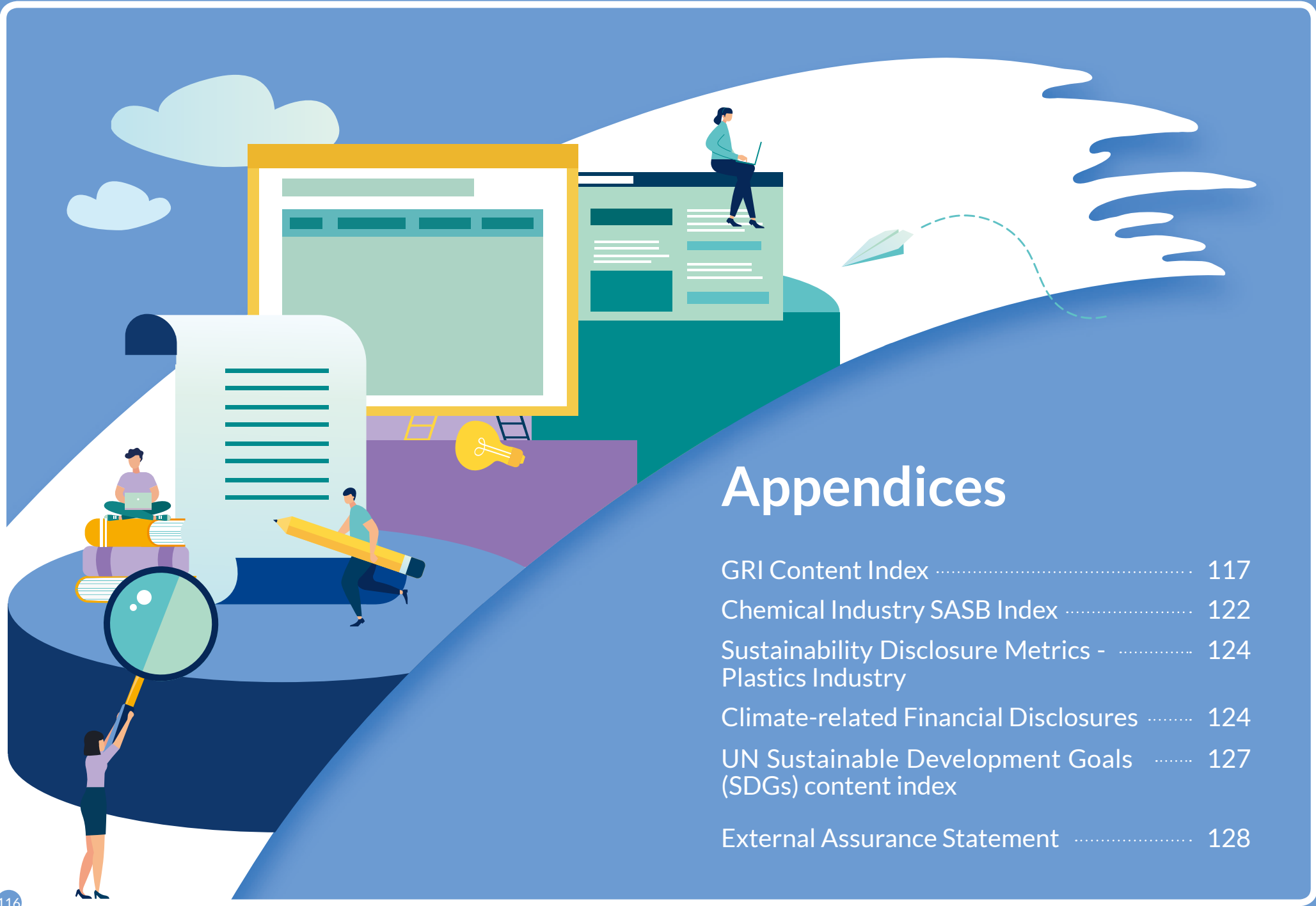


TFT 2022 Summer Training



Outrigger canoe cultural exchange





Appendices

- GRI Content Index 117
- Chemical Industry SASB Index 122
- Sustainability Disclosure Metrics - 124
Plastics Industry
- Climate-related Financial Disclosures 124
- UN Sustainable Development Goals 127
(SDGs) content index
- External Assurance Statement 128

GRI content index

Usage Statement	[TTC] has followed the GRI standards to report the content for the period [January 1, 2022, to December 31, 2022].
Used GRI	GRI 1: Foundation 2021

GRI 2: General Disclosures 2021					
GRI Standards	Disclosure Item	Chapter	Page	Annotations	
The organization and its reporting practices	2-1	Organizational details	Our Value Chain	10	
	2-2	Entities included in the organization's sustainability reporting	About this report	2	
	2-3	Reporting period, frequency and contact point	About this report	2	
	2-4	Restatements of information		--	No restatements of information for the year
	2-5	External assurance	About this report Appendix - External Assurance Statement	2 128	
Activities and workers	2-6	Activities, value chain and other business relationships	Our Value Chain	9	
	2-7	Employees	4.1 Talent Attraction and Retention	85	
	2-8	Workers who are not employees	4.1 Talent Attraction and Retention	86	
Governance	2-9	Governance structure and composition	1.1.2. Selection and Operation of the Board	23	
	2-10	Nomination and selection of the highest governance body	1.1.2. Selection and Operation of the Board	24	
	2-11	Chair of the highest governance body	1.1.2. Selection and Operation of the Board	24	
	2-12	Role of the highest governance body in overseeing the management of impacts	1.1.2. Selection and Operation of the Board	24	
	2-13	Delegation of responsibility for managing impacts	1.1.2. Selection and Operation of the Board	24	

GRI 2: General Disclosures 2021					
GRI Standards	Disclosure Item	Chapter	Page	Annotations	
Governance	2-14	Role of the highest governance body in sustainability reporting	1.1.2. Selection and Operation of the Board	24	
	2-15	Conflicts of interest	1.1.2. Selection and Operation of the Board	27	
	2-16	Communication of critical concerns	Sustainable Vision and Business Strategy 1.1.2. Selection and Operation of the Board	6 24	
	2-17	Collective knowledge of the highest governance body	III. Performance of the board member expertise diversification policy	25	
	2-18	Evaluation of the performance of the highest governance body	1.1.2. Selection and Operation of the Board	29	
	2-19	Remuneration policies	1.1.2. Selection and Operation of the Board	33	
	2-20	Process to determine remuneration	1.1.2. Selection and Operation of the Board	33	
	2-21	Annual total compensation ratio	1.1.2. Selection and Operation of the Board	33	
Strategy, policies and practices	2-22	Statement on sustainable development strategy	Sustainable Vision and Business Strategy	6	
	2-23	Policy commitments	Sustainable Vision and Business Strategy 4.1 Talent Attraction and Retention	6 90	
	2-24	Embedding policy commitments	Sustainable Vision and Business Strategy 4.1 Talent Attraction and Retention	6 91	
	2-25	Processes to remediate negative impacts	Material topics management 3. Material Topics and Value Chain	16 35,60,72,85,98	

GRI 2: General Disclosures 2021					
GRI Standards	Disclosure Item	Chapter	Page	Annotations	
Strategy, policies and practices	2-26	Mechanisms for seeking advice and raising concerns	1.4.1 Code of Conduct	39	
	2-27	Compliance with laws and regulations	1.4.1 Code of Conduct	39	
	2-28	Membership of associations	Our Value Chain	11	
Stakeholder engagement	2-29	Approach to stakeholder engagement	Stakeholder engagement	11~15	
	2-30	Collective bargaining agreements	---	92	No collective agreement with the labor union

GRI 3: Material Topics 2021					
GRI Standards	Disclosure Item	Chapter	Page	Annotations	
Disclosure of material topics	3-1	Process to determine material topics	Material topics management	16	
	3-2	List of material topics	Material topics management	17	
	3-3	Management of material topics	Management of various material topics	35 42 49 60 72 76 80 85 98	

Topic-specific disclosures						
Material Topics	Management approach and disclosures				Page	Remarks
Category: Governance						
Economic Performance	GRI 201: Economic Performance 2016	Specific Theme	201-1	Direct economic value generated and distributed	35	
			201-2	Financial implications and other risks and opportunities due to climate change	63~65	
			201-3	Defined benefit plan obligations and other retirement plans	89~91	
			201-4	Financial assistance received from government	36	
Technology R&D		Self-defined Topics			49	
Product quality		Self-defined Topics			42	
Category: Environmental						
Climate Change and Energy Management	GRI 302: Energy 2016	Specific Theme	302-1	Energy consumption within the organization	66	
			302-2	Energy consumption outside of the organization	-	Data Unavailable
			302-3	Energy intensity	67	
			302-4	Reduction of energy consumption	66	
			302-5	Reductions in energy requirements of products and services	-	N/A
	GRI 305: Emissions 2016	Specific Theme	305-1	Direct (Scope 1) greenhouse gas (GHG) emissions	68	
			305-2	Energy indirect (Scope 2) greenhouse gas (GHG) emissions	68	
			305-3	Other indirect (Scope 3) GHG emissions	68	
			305-4	GHG emissions intensity	69	
			305-5	Reduction of GHG emissions	69~71	
Water resources management	GRI 303: Water and Effluents 2018	Specific Theme	303-1	Interactions with water as a shared resource	72~73	
			303-2	Management of water discharge-related impacts	74~75	
			303-3	Water withdrawal	73	
			303-4	Water discharge	75	
			303-5	Water consumption	73	

Topic-specific disclosures						
Material Topics	Management approach and disclosures				Page	Remarks
Air pollution control	GRI 305: Emissions 2016	Specific Theme	305-6	Emissions of Ozone-Depleting Substances	-	No relevant emissions in the process, not applicable
			305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	77	
Waste management	GRI 306: Waste 2020	Management approaches	306-1	Waste generation and significant waste-related impacts	80	
			306-2	Management of significant waste-related impacts	80	
		Specific Theme	306-3	Waste generated	81	
			306-4	Waste diverted from disposal	81~82	
			306-5	Waste directed to disposal	81~82	
Category: Society						
Talent attraction and retention	GRI 401: Employment 2016	Specific Theme	401-1	New employee hires and employee turnover	87~88	
			401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	89	
			401-3	Parental leave	90	
OH&S	GRI 403: Occupational Health and Safety 2018	Management approaches	403-1	Occupational health and safety management system	98	
			403-2	Hazard identification, risk assessment, and incident investigation	99	
			403-3	Occupational health services	101	
			403-4	Worker participation, consultation, and communication on occupational health and safety	102	
			403-5	Worker training on occupational health and safety	105	
			403-6	Promotion of worker health	102	
			403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	102	
		Specific Theme	403-8	Workers covered by an occupational health and safety management system	98	
			403-9	Work-related injuries	99	
			403-10	Work-Related ill health	102	

Chemical industry SASB index

SASB Indicators	Category	Code	2022	Corresponding Section and Page
Greenhouse Gas Emissions	Scope 1 GHG emissions (tCO ₂ e): Percentage (%) of Category 1 Greenhouse Gas Emissions Regulated by Emission Limitation Regulations	RT-CH-110a.1	(1) In the fiscal year 2022, Category 1: Emission 15,220 metric tons; TTC (Taiwan factory area) began conducting carbon inventory and third-party verification in accordance with ISO-14064 regulations starting in 2022. (2) Not regulated by emission limitation regulations.	3.2.3 GHG management P68
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets	RT-CH-110a.2	Through energy-saving improvements to reduce greenhouse gas emissions, various factories carry out improvements themselves, such as reducing process energy consumption, waste heat recovery and reuse, equipment efficiency enhancement, and energy management, and move towards cross-factory and cross-company energy and resource integration plans, and set short, medium, and long-term goals for self-reducing greenhouse gas emissions.	
Air Quality	Air emissions of the following pollutants: (1) NO _x ; (2) SO _x ; (3) Volatile organic compounds (VOCs); (4) Hazardous air pollutants (HAPs)	RT-CH-120a.1	Taiwan factory area air pollutant emission information: (1) NO _x : 16.274 tons (2) SO _x : 3.109 tons (3) Volatile Organic Compounds (VOCs): 34.453 tons (4) Harmful air pollutants: Compliance with emission limits, standard control values, and perimeter standards, regulations do not yet prescribe calculating their emissions.	3.4 Air pollution control P77
Energy management	(1) Total consumed energy (GJ); (2) Grid electricity usage ratio (%); (3) Renewable energy usage ratio (%); (4) Self-produced energy (GJ)	RT-CH-130a.1	(1) Total consumed energy: 772,036 GJ. (2) Grid electricity usage ratio: 46%. (3) Renewable energy usage ratio: No use of renewable energy. (4) Self-produced energy: No self-produced energy.	3.2.2 Energy usage and management P66
Water management	(1) Total water withdrawn (2) Total water consumed (3) Percentage of each in regions with high or extremely high baseline water stress and the proportion of (1) and (2)	RT-CH-140a.1	(1) Total Water Withdrawal: 935,065 tons. (2) Total Water Consumption: 328,048 tons. (3) No operating bases in areas with "high" or "extremely high" water scarcity.	3.3.1 Water resources management P73
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	RT-CH-140a.2	No violations.	
	Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CH-140a.3	Water resources are vital natural resources for business development, and the company's responsive strategies: (1) Introduce or upgrade equipment, and reuse wastewater to reduce water consumption. (2) Strictly regulate water usage in the factory to prevent water wastage and increased wastewater discharge.	

SASB Indicators	Category	Code	2022	Corresponding Section and Page
Hazardous Waste Management	Amount of hazardous waste generated; percentage recycled	RT-CH-150a.1	Toufen Plant's total output of hazardous industrial waste is 2.09 tons, 100% cleaned and directly disposed of by qualified contractors.	3.5 Waste management P81
Labor Health and Safety	(1) Total recordable incident rate (TRIR) (Number of Incidents x 200,000)/Total Hours Worked); (2) fatality rate for (a) direct employees and (b) contract employees	RT-CH-320a.1	(1) Total recordable incident rate (TRIR)=0 (2) No fatal incidents.	4.3.1 Occupational safety and health P99
	Description of efforts to assess, monitor and reduce exposure of employees and contract workers to long-term (chronic) health risks	RT-CH-320a.2	Measure the "Number of injuries resulted in disability" and "Health Checkup Failure Rate" every year and present an assessment report to the management during the annual management review meeting. This allows for a review of the past year's performance and the formulation of improvement measures, as well as an evaluation of the effectiveness of those measures.	
Safety & Environmental Stewardship of Chemicals	Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances; and the percentage (%) of related products underwent hazard analysis.	RT-CH-410b.1	None of our products contain GHS hazardous chemicals.	-
	Discussion of strategy to manage chemicals of concern and develop alternatives with reduced human and/or environmental impact	RT-CH-410b.2		
Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	RT-CH-410c.1	No genetically modified products produced by the company.	-
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	RT-CH-530a.1	TTC emphasizes adherence to relevant regulations. We engage renowned scholars, experts, and lawyers to conduct training sessions on related regulations. Through routine departmental meetings, we disseminate the latest regulatory updates, ensuring employees are informed about any new amendments or changes to the law promptly.	1.4 Ethical corporate management P39
Operational Safety and Emergency Response	Process Safety Incident Count (PSIC), Process Safety Incident Rate (PSTIR), Process Safety Incident Severity Rate (PSISR).	RT-CH-540a.1	Total Count of Process Safety Incidents (PSIC): 0 Process Safety Total Incident Rate (PSTIR): 0 Process Safety Incident Severity Rate (PSISR): 0	4.3.1 Occupational safety and health P100
	Number of transport incidents	RT-CH-540a.2	Number of transport incidents: 0	

Sustainability disclosure metrics - Plastics Industry

No.	Unit of Measure	CATEGORY	Annual Disclosure	Unit	Corresponding Section and Page
I	Total energy consumed, percentage grid electricity, percentage renewable, total self-generated energy	Quantitative	Total Energy Consumption: 772,036 Percentage of Purchased Electricity: 46% Percentage renewable: NA Total Self-generated and Consumed Energy: None	Gigajoules (GJ), Percentage (%), Percentage (%), kWh	3.2.2 Energy usage and management: P66
II	Total water withdrawn and total water consumed	Quantitative	Total water withdrawn: 935 Total water consumed: 328	MI	3.3.1 Water resources management: P73
III	Amount of hazardous waste generated; percentage recycled	Quantitative	Weight of Hazardous Waste: 2.09 Recycling Percentage: 100	m.t. (%)	3.5 Waste management: P81
IV	Number of employees in and rate of occupational accidents	Quantitative	Occupational Accident Count: 0 Rate: 0	persons, percentage (%)	4.3.1 Occupational safety and health: P99
V	Volume of major products by category	Quantitative	Linyuan Plant ABS: 74,613 Qianzhen Plant EPS: 59,441 Qianzhen Plant GPS: 92,938 Toufen Plant GW: 9,116 Zhongshan Plant EPS: 130,806	m.t.	NA

Climate-related financial disclosures

No.	Item	Implementation Status
1	Describe the board's oversight of climate-related risks and opportunities.	The ESG Committee supervised by the Board is the highest governance body of climate change management chaired by independent directors, it reports the climate change implementation planning and performance to the Board every year. The Operations Management Meeting is held monthly and chaired by the Board Chairman to report the planning and results of material energy conservation and carbon reduction plans.

No.	Item	Implementation Status		
2	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Based on the likelihood and impact of climate-related risks and opportunities, we identified 5 major climate-related risks and 5 major climate-related opportunities and assess the duration of impact and potential financial impacts as tabulated below:		
		Type	Related Item	Duration
		Physical risk	Increased severity of extreme weather events	Medium-term (3-5 years)
			Changes in precipitation patterns and extreme variability in weather patterns	Medium-term
			Average temperature rises	Long-term (>5 years)
		Transition risk	Enhance GHG Emission Pricing	Medium-term
		Opportunity	Recycling and reuse	Medium-term
			Participation in renewables projects and adoption of energy conservation measures	Medium-term
			Reduce water use and water consumption	Medium-term
			Utilize more efficient production and distribution processes	Medium-term
Use low-carbon energy	Medium-term			
3	Describe financial impacts of extreme weather events and transition actions.	The financial impacts of extreme weather events and transition actions are tabulated below:		
		Type	Related Item	Potential Financial Risk
		Physical risk	Changes in precipitation patterns and extreme variability in weather patterns	Decrease in revenue
			Increased severity of extreme weather events	Decrease in revenue
			Average temperature rises	Increase in operating costs
		Transition risk	Enhance GHG Emission Pricing	Increase in operating costs
			Enhance emission report obligation	Increase in operating costs

No.	Item	Implementation Status	
3	Describe financial impacts of extreme weather events and transition actions.	Opportunity	Recycling and reuse Initial costs are high, but operational costs decrease over time
			Participation in renewables projects and adoption of energy conservation measures Initial carbon reduction technology costs are high, but operational costs decrease over time
			Reduce water use and water consumption Operating Cost Down
			Utilize more efficient production and distribution processes Increase in revenue
			Use low-carbon energy Increase in operating costs
4	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Identify risks and opportunities based on the TCFD-recommended framework, communicate with all responsible units, and confirm by senior management every three years Include them in the annual risk assessment. The president reports the control measures and management performance to the Audit Committee and Board every year.	
5	When assessing the resilience taking into consideration different climate-related scenarios, state the input parameters, assumptions, and analytical choices for the scenarios used, and critical financial impacts.	No scenario analysis has been used for assessing the resilience in climate-related risks. We will include scenario analysis in two years.	
6	If transition plans are used in climate-related risk management, state the contents of such plans and the metrics and targets used to identify and manage physical risks and transition risks.	Promotion plans include: Equipment replacement and upgrade, construction of renewables facilities, optimization of production scheduling, planning building aircon, energy management systems, extreme weather events contingency plans. Please refer to Section 3.2 of this report for the details.	
7	If internal carbon pricing is the planning tool, state the basis of the pricing system.	No assessment tool for internal carbon pricing has been used.	
8	If climate-related targets are set, state the activities, scopes of GHG emissions, planning period, and annual targets. If the relevant targets are achieved with the renewable energy certificates (RECs), state the sources and quantity of the carbon credit of such RECs or the quantity of RECs.	We set 2017 as the base year and reduction by 27% by 2030 as the carbon reduction target. Every year we disclose the data of Scopes 1 and 2 GHG emissions in the ESG report and review the achievement progress periodically. No REC has been used for carbon reduction so far.	
9	GHG inventory and verification.	Please refer to Section 3.2.3 for the details of GHG management.	

UN Sustainable Development Goals (SDGs) content index

Material Topics		SDG Targets		Page	Corresponding Section
<p>Governance</p>	<p>SDGs 8 Decent Work and Economic Growth</p>	<p>8.2 Enhance economic capacity through diversification, technological upgrading, and innovation, including focusing on high value-added and labor-intensive industries.</p>	35	1.2 Economic performance	
	<p>SDGs 9 Industry, Innovation and Infrastructure</p>	<p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency, and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.</p>	49	2.2 Technology R&D	
	<p>SDGs 12 Responsible Consumption and Production</p>	<p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.</p>	42	2.1 Product quality	
<p>Environment</p>	<p>SDGs 13 Climate Action</p>	<p>13.3 Enhance education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.</p>	60	3.2 Climate change and energy management	
	<p>SDGs 6 Clean Water and Sanitation</p>	<p>6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.</p>	72	3.3 Water resources management	
	<p>SDGs 11 Sustainable Cities and Communities</p>	<p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, urban administration, and waste management.</p>	76	3.4 Air pollution control	
	<p>SDGs 12 Responsible Consumption and Production</p>	<p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.</p>	80	3.5 Waste management	
<p>Social</p>	<p>SDGs 8 Decent Work and Economic Growth</p>	<p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. 8.8 Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, particularly women, and those in precarious employment.</p>	85	4.1 Talent attraction and retention	
	<p>SDGs 3 Health and Well-being</p>	<p>3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution as well as other contamination.</p>	98	4.3 Occupational safety and health	

External Assurance Statement

Independent Assurance Statement

Taita Chemical Company, Limited Sustainability Report of 2022

AFNOR GROUP was established in 1926. We are the National Standardization Body of France, a permanent council member in ISO and one of the leading certification bodies in the world. This verification work was carried out by AFNOR ASIA LTD., a subsidiary of AFNOR GROUP. All the members of the verification team have professional backgrounds and have accepted AA1000 AS, AFAQ 26000, ISO 9001, ISO 14001, ISO 14064, ISO 45001, ISO 50001, and other sustainability-related international standard trainings. All assigned verifiers have been approved as the lead auditors or verifiers. AFNOR Group hereby provides a summary of Taita Chemical Company, Limited's Sustainability Report of 2022 (hereinafter referred to as "the Report") but was not involved in any way in its preparation.

AFNOR Group and Taita Chemical Company, Limited (hereinafter referred to as "TTC") are independent entities. AFNOR ASIA LTD., was commissioned by TTC to conduct the assessment and assure the Sustainability Report of 2022 was in accordance with AA1000 Assurance Standard (v3) and the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards).

SCOPE

The disclosure scope of the Report covers the economic, environmental and social activities and operational performance of the four operating bases in Taiwan and two overseas subsidiaries (Zhongshan Plant and Tianjin Plant; Tianjin Plant only covers financial information). AFNOR Asia is responsible for:

- According to the Type 1 of the AA1000 Assurance Standard (v3), evaluate TTC's compliance with the AA1000 Accountability Principle (2018). The reliability verification of the revealed sustainability performance information and data was not included. The verification scopes include sustainability issues, response mechanism, performance information, management systems of information, and the processes of materiality evaluation and stakeholder participation.
- In accordance with the GRI Standards, we verified the statement options and material topics disclosed in the Report compiled by TTC.

REFERENCES

The scope of the assurance includes an assessment of the source adequacy of specific performance information and an assessment of adherence to the following reporting criteria :

- AA1000 Accountability Principles (2018)
- GRI Standards

METHODOLOGY

- Review the process and management of the principles of inclusivity, materiality, responsiveness and impact described in the Report related to the AA1000 Accountability Principles (2018).
- The Report is reported in accordance with the GRI Standards, and the content of the Report is reviewed for general disclosures and specific topic disclosures that comply with the GRI Standards.
- Conduct interviews with the management team to confirm stakeholder communication and response mechanisms.
- The qualitative and quantitative information produced, collected, and disclosed by the Report was reviewed through a validated sampling plan.
- Interviews with members of the organization related to sustainable development management and report writing, including representatives of all levels and departments.
- The verification team inspected and reviewed the documents, materials and information related to the report by interviewing the responsible personnel of each group of TTC.
- Check the sufficiency and completeness of supporting materials and evidence for the content of the Report.

CONCLTTCON

◆ AA1000 Accountability Principles

Inclusivity

TTC has continued to implement a wide range of stakeholder engagement programs to identify and understand the important information generated by issues of concern to stakeholders. The report has fairly reported and disclosed economic, environmental and social information, which is sufficient to support appropriate plans and goals. Future reports may:


- sustaining corporate sustainable development strategies, effectively integrating internal and external resources, managing risks and opportunities, clearly setting program goals, and presenting sustainability-related performance that stakeholders are concerned about.
- continuously strengthen the existing mechanism for identifying stakeholders and materiality issues, collect and understand stakeholders' concerns, specific methods of participation, and reasonable expectations and interests.

Materiality

TTC has released relevant information on sustainable management to enable stakeholders to judge the company's management and performance, and develop and implement a decision-making mechanism for material issues to accommodate issues from all parties. Future reports may:

- expand the number of questionnaires and returns of stakeholders, continue to collect and disclose significant sustainable development information, and fully disclose significant sustainable development information.
- continue to strengthen the identification mechanism of positive and negative impacts, materiality considerations and related impacts, strengthen the risk and opportunity management and control of materiality issues, and implement them into the operating procedures of each department.

External Assurance Statement



Responsiveness

TTC has developed and implemented a stakeholder response mechanism and the comparison of SDGs, clearly declaring relevant policies and communicating with stakeholders, and responding to expectations and opinions from stakeholders. Future reports may:

- continue to strengthen the response and communication mechanism of various departments and stakeholders, strengthen the depth and breadth of disclosed data and increase their comparability.
- continue to compile the responses of stakeholders to this report as a reference for future refinement.

Impact


TTC has developed and implemented a process for understanding, measuring, evaluating and managing the impact of the organization, and provided the necessary capabilities and resources, and committed to making a comprehensive and balanced disclosure of the measurement and evaluation of the organization's impact on stakeholders and itself. Future reports may:

- continuously strengthen the risk and opportunity monitoring and measurement mechanism of various major sustainable actions and related impacts, and implement them into the operating procedures of various departments.

◆ **Global Reporting Initiative Sustainability Reporting Standards**

Based on the results of the review, we confirm that the Report complies with GRI reporting requirements in terms of general disclosure items and specific topic disclosures, including material topic management and disclosure items. Future reports may:

- continuously collect and disclose performance information that can be extended to other regions or operating bases in the future, and strengthen the depth and breadth of disclosed information, strengthen the content of management policy disclosure, and more completely present the context of sustainability and related sustainability performance.
- continuously collect major issues, risks and opportunities, strengthen management and control, practice results, and gradually implement various operations and management actions of subsidiaries in various operating bases, so as to expand the influence of enterprises on sustainable management.




ASSURANCE OPINION

In our opinion, the information and data presented in the Report by TTC provides a fair and balanced representation. We believe the focuses on economic, environmental, and social aspects of TTC in 2022 are well represented.

Afnor Group has developed a set of process for the Assurance of Sustainability Reports based on current practice guidance provided in the AA1000 Assurance Standard (v3) and GRI Standards. We believe that the evidence collected by onsite assessment has exhibited that TTC did follow the guidance of AA1000 Assurance Standard (v3) and GRI Standards, and their self-declaration in response to the Global Reporting Initiative.


ASSURANCE LEVEL

In accordance with the AA1000 Assurance Standard (v3), we verified this assurance statement corresponding to a moderate level. The scope and methods are as described in this statement.

LIABILITY

This assurance statement is intended for the use of Taita Chemical Company, Limited only. AFNOR is not responsible for any other uses. Our responsibility is only based on the scope and methodology described, and to provide stakeholders an independent assurance statement.

For and on behalf of AFNOR :




Trevor Wilmer
The Director for Certification and Assessment
MAY.17.2023



**AA1000
Licensed Report
000-84/V3-P5G06**

AFNOR Asia Ltd.—20F-2, No. 102, Chung Ping Rd., Taoyuan, Taiwan
Tel. : +886 3 2200066, Fax : +886 3 2207889, http://www.asia.afnor.org





台達化學工業股份有限公司
Taita Chemical Company, Limited

