台塑企業
FORMOSA PLASTICS GROUP

2022

Formosa Chemicals & Fibre Corporation

Sustainability Report

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About the Report

Overview

The sustainability report of Formosa Chemicals & Fibre Corporation (hereinafter referred to as FCFC) was the 8th issue, which disclosed relevant information from January 1, 2022 to December 31, 2022, and it is expected to issue one report every year. The contents of the Report are focus on Taiwan companies, and disclosed last four years information which also notices what is not in the interim. Please see official website to consult issued reports.

Report issue date

Initial release date: December 2015

Release date of the previous version: June 2021

Current version release date: May 2023

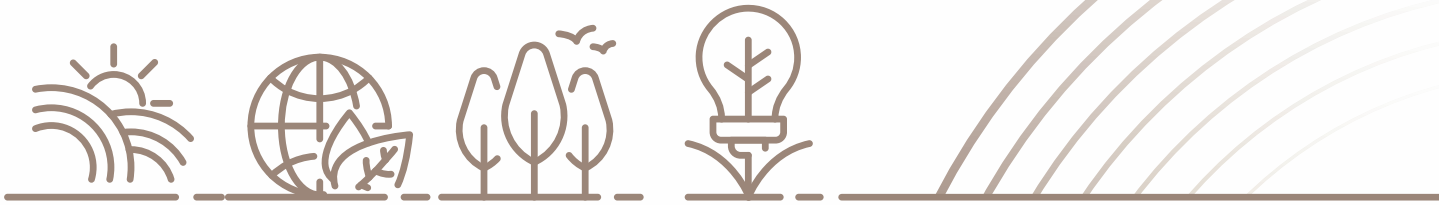
Release date of the next version: May 2024

Scope and Boundary of the Report

The Report mainly refers to FCFC and its domestic subsidiaries, which are the same as listed as the last report, listed in the consolidated financial statements, including Formosa Idemitsu Petrochemical Corp., Formosa BP Chemicals Corp., Formosa FCFC Carpet Co., Ltd., Chia Nan Industrial Co., Ltd., Formosa Biomedical Technology Corp., and Hong Jing Resource Co. Ltd. If the scope were any changed there would be specifically described in the Report.

Report Guideline

The report was prepared in accordance with the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by the Taiwan Stock Exchange. In addition, the report adopted the core option of GRI standards as the main frame of reference and the four principles of AA1000 AP (2018) (Account Ability Principle Standard) of materiality, inclusiveness, responsiveness and impact are written to expose the company's main sustainability issues, strategies, goals and measures.



Reference Architectures:

Global Sustainability Standards Board, GSS	GRI Universal Standards 2021 GRI topic standards 2016、2018 and 2020 (GRI Standards 2016、2018 and 2020)
Financial Stability Board, FSB	TCFD, Task Force on Climate-related Financial Disclosures
International Sustainability Standards Board, ISSB	(SASB, Sustainability Accounting Standards Board,) SASB Standards for chemicals industry
United Nation, UN	Sustainable Development Goals, SDGs)
Taiwan Stock Exchange, TWSE	• Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports • Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies • ESG information disclosure declaration • ESG information disclosure apply for correction • Corporate governance evaluation ESG index disclosure Items

Third Party Verification

In order to strengthen the comparability of performance and the essentiality of the report, all information published in this report has been verified by the AFNOR Asia Ltd. Verification is conduced according to AA1000 v3 assurance standards and No. 1 application type in the 2018 appendix. The AFNOR Independent Assurance Opinion Statement is detailed in Appendix VI. If there is an estimate, it will be indicated in each relevant chapter.

Contact Information

If you have any questions or suggestions about the contents of the Report, please contact us using the following information:

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SUSTAINABLE DEVELOPMENT GOALS

The company has come up with short projects and medium-and-long term goals for promise of promotion and fall into sustainable development. To reach these goals on the promise of sustainable development, the company will associate with stakeholders to create a win-win situation on governance, environment and society.

SDGs Processing Diagrams

The company's ESG Committee conducted deep identification of the company's relevant SDGs in 2021, and discuss the connection between major issues and detailed goals with the responsible personnel of each function group, as a blueprint for the direction of SDGs implementation in the company.

Identification process of SDGs of FCFC

Step 1: Get to know SDGs

Analyze relevant international sustainability trends and lock in the relevant research on the sustainability goals of the chemical industry. Refer to the SDGs given priority in the "Chemical Sector SDG Roadmap" released by WBCSD

Step 2: Integrate core functions

Connect the functions of the Taiwan Chemical Company, and interviewing and discussing with the responsible personnel of each function group, focusing on the 8 SDGs that the Taiwan Chemical Company has worked hard to practice

Step 3: Sort goals and responses

Take the major topics of FCFC to link the SDGs detailed objectives as the practice direction. The four cores and four sub-SDGs of the priority responses are sorted. Disclosure of actions and performance in the corresponding chapters on material topics

Target content		Detailed Objective	Major Issues	Corresponding Chapter
Core SDGs	3 Health and well-being	3.9	Water Use and Management	3.4
			Air Quality Management	3.5
	8 Employment and economic growth	8.2	Operating & Financial Performance	2.1.5
		8.8	Occupational Health and Safety	4.4
			Industrial and Public Safety	4.4.3
	11 Sustainable Cities	11.5	Industrial and Public Safety	4.4.3
		11.6	Air Quality Management	3.5
			Waste Management	3.6
	12 Responsible consumption and production	12.2	Corporate Governance	2.1
		12.4	Waste Management	3.6
		12.5	Circular Economy	2.3.3
Secondary SDGs	6 Water purification and sanitation	6.3 6.4	Water Use and Management	3.4
	9 Industry, innovation facilities	9.4	Energy Management	3.3
	13 Climate Action	13.1	Operational Risk Management	2.2
	14 Marine Ecology	14.1 14.2	Water Use and Management	3.4

Sustainable Practices in Action

Implementation status in 2022	Short-term goals (2023)	Mid-term goals (3-5 years)	Long-term goals (more than 5 years)	SDGs
Economic Impact				
• By leveraging inventory management software to analyze and optimize inventory scheduling, we aim to reduce inventory levels appropriately and decrease the procurement exception rate by an average of 0.1% compared to the previous year. • As of 2022, 214 AI projects have been completed, resulting in a cumulative annual benefit of NT 1.08 billion.	• By promoting case studies or developing auxiliary management programs every quarter, we aim to flexibly adjust seasonal production and sales, thereby reducing inventory levels. • We have planned to implement 227 projects, including 95 ongoing projects and 132 newly initiated projects. It is estimated that these initiatives will contribute to an increase in benefits of NT410 million.	• By increasing the development and application of digital vehicle programs, we aim to enhance the efficiency of dynamic inventory management. • We will continue to leverage AI technology to develop simulated factories and optimize dynamic operational management to maximize operational efficiency.	• Material and inventory rationalization • Accumulate AI-optimized management experience to innovate and establish the best operational procedures and practices. • Utilize AI to enhance the performance of operational risk assessment for potential risks.	
Environmental Impact				
• In 2022, we completed 288 energy-saving and carbon reduction improvement projects, resulting in an annual reduction of approximately 289,000 metric tons of CO_2. • In 2022, the sales volume of environmentally friendly recycled plastic particles reached 2,113 metric tons, while the total production of recycled nylon particles yielded 5,961 metric tons. • The sales revenue of green products accounted for 0.42% of the total sales in 2022.	• By 2022, GHG emissions had been reduced by over 10% compared to 2020, surpassing the target ahead of schedule. • The sales of post-consumer waste plastic converted into recycled particles account for 2% of the sales volume of hard plastic particles, and the production capacity for recycled nylon accounts for 5% of the total yield. • Increase the sales volume of green products to 1%	• The GHG emissions target for 2025 is a 10% reduction compared to 2020. • The sales of recycled plastic particles account for 4.5% of the sales volume of hard plastic particles, and the production capacity for recycled nylon accounts for 12% of the total yield. • Increase the sales volume of green products to 3%.	• The GHG emissions target for 2030 is a 25% reduction compared to 2020, and achieve carbon neutrality by 2050. • Increase the proportion of renewable energy consumption in total electricity consumption to 5% or higher by 2030. • Promote circular economy to achieve the zero-waste goal.	
Social Impact				
• In 2022, there were two cases of work-related disability among employees. • We held four regular labor-management meetings; six employees applied for leave without pay, and the reemployment rate reached 100%.	• The Local Talent Cultivation and Development Plan aims to feedback to the local community on our economic development achievements. • Promote local culture and environmental education to preserve and develop the ecological environment. • Continuously promote Process Safety Management (PSM) and Process Hazard Analysis (PHA) to enhance employees' awareness of workplace safety, ensure workplace safety, and reduce occupational accidents.	• Increase the proportion of residents employed in the factory area to the Company's workforce to over 50%. • Support the development of local traditional culture and ecological education activities, with a minimum participation of 1,000 individuals in each event. • Establish risk indicators and preventive mechanisms to ensure the number of work-related disability cases remains below two per year.	• The Company aims for a ratio of 40% or more of local residents serving as senior executives. • Promote sustainable social development based on the spirit of taking from and giving back to society • Setting zero occupational accidents and work-related injuries as our goals.	

Sustainability Highlights in 2022

Introducing Circular Economy

Recovered eco-friendly nylon pellets

2,978 tons

from recovered wasted nylon filaments

Recovered eco-friendly nylon pellets

5,961 tons

from recovered nylon aquatic products

Economy

Consolidated operating revenue

NT$ **379.9** billion

The Environment

CDP DISCLOSURE INSIGHT ACTION

Leadership level

A

Water safety questionnaire evaluatio

CDP DISCLOSURE INSIGHT ACTION

Leadership level

A

Evaluation of Climate Change Disclosure Questionnaire

Achievements of energy and water conservation improvement

- Amount of investment in water-saving improvement in 2022

  NT$ **40** million

- Amount of investment in energy conservation improvement in 2022

  NT$ **910** million

- Carbon dioxide reduction in 2022

  289 thousand tons

- Water savings in 2022

  1.02 million tons

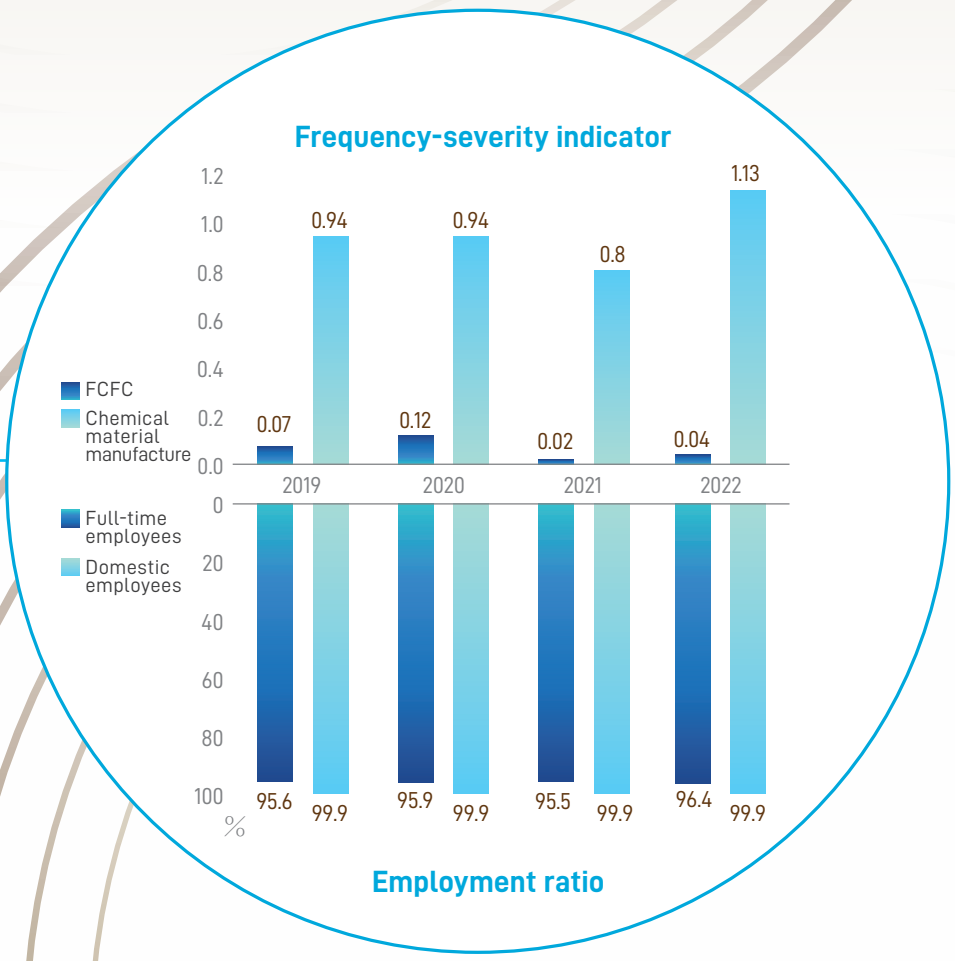
CO_2

2022 Greenhouse Gas Emission Reduction Excellent Plant Aromatic plant III

Green product sales

- Eco-friendly Nylon Filaments **4,000** tons
- Eco-friendly Yarn **4,365** tons

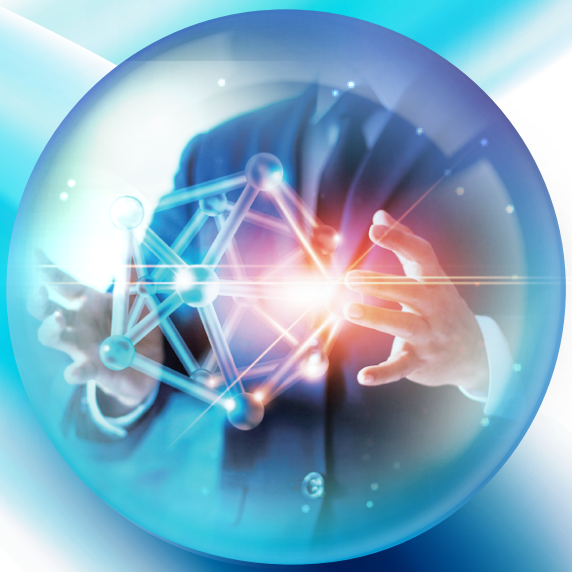
Social



Talent development plans

- Reinstatement rate of employees on maternity leave without pay in 2022 **100** %
- The completion rate of the training plan in 2022 **99.1** %

1 Operation Philosophy



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1.1 From the Management Team

In 2022, geopolitical turmoil hindered the provision of logistics, and oil prices experienced a rapid surge, leading to an increase in inflation. Central banks globally implemented a unified approach to swiftly raising interest rates to inhibit inflation and stabilize the economy. This led to a decline in consumer demand, reduced export volumes, and increased inventory levels. These unfavorable factors considerably elevated business operational risks and adversely impacted the Company's operations. Despite facing operational headwinds and lower-than-expected profitability in 2022, as the global economy gradually recovers and social functioning returns to normalcy, we anticipate a positive impact on overall economic conditions, contributing to the recovery of business operations in due course.

Despite the challenging external business environment, the Company remains committed to the principles of sustainable development, emphasizing the balance between economy and ecology. We actively construct a green supply chain, increase the amount of green procurement, and promote the sustainable development of the circular economy. As part of our commitment to a circular economy, we consistently drive the recycling and reuse of marine waste and plastic products, fostering an economic model that reduces waste by using recycled materials. Our dedication to environmental sustainability is evident in our utilization of AI processes to optimize water and energy-saving systems, implementing rainwater and process water recycling to promote reuse. Additionally, we are expanding the deployment of solar panels and augmenting the capacity of small hydroelectric power generation facilities. These initiatives are geared towards increasing the proportion of renewable energy generation and mitigating greenhouse gas emissions.

As of the end of 2021, the Company has installed a total capacity of 1,497 kWp of solar photovoltaic facilities to increase the proportion of renewable energy generation. In 2022, we added an additional 7,814 kWp of solar photovoltaic capacity, bringing the total capacity to 9,311 kWp by the end of 2022. It is estimated that the annual power generation will reach 4,000 MWh, fully supplying the internal needs of the facility and reducing approximately 3,693 metric tons of carbon dioxide emissions. Furthermore, we plan to install an additional 34,089 kWp of solar power generation facility by 2025, increasing the solar power capacity to over four times the current installed capacity. In addition, small-scale hydroelectric projects have been developed, utilizing flowing water to generate electricity without producing carbon dioxide emissions while providing a stable and secure power supply. In the Xingang Plant, a 75 kW water turbine generator set has been installed using existing water supply pipelines, which commenced operation in October 2022. It is estimated to generate approximately 57,000 kWh of electricity per year, resulting in a carbon reduction of approximately 29 metric tons annually. Moreover, participation in the pipeline-based small-scale hydroelectric power generation project with the Taiwan Water Corporation has led to the establishment of a small-scale hydroelectric power plant at the Shalu Water Distribution Center, estimated to generate approximately 5.72 million kWh of electricity per year, resulting in a carbon reduction of approximately 2,870 metric tons annually.

The Company is actively promoting an economic model of waste reduction, recycling, and reuse. In terms of water resource utilization, in 2022, we achieved daily water conservation of 2,793 metric tons, with a rainwater harvesting rate of 93.3%, marking an 11.8% increase compared to the previous year. At the Mailiao Industrial Park, every drop of water is reused 11.4 times, a 1-time increase from the previous year. The amount of harvested rainwater accounts for 7.1% of the total water usage, and we aim to continuously increase the rainwater harvesting volume to exceed 10% of the total water usage. In waste recycling, we have expanded the range of recycled products related to nylon ropes used for oyster farming, reducing marine waste residue. The construction of our nylon product recycling and regeneration plant in the Chiayi Xingang Plant utilizes solar energy for power generation. It is expected to commence operation in the middle of this year, with a

combined annual production capacity of 1,250 metric tons of recycled nylon particles from Vietnam and Taiwan. Additionally, we have achieved a 100% recycling rate for the defective products generated during the plastic manufacturing process, increasing from 91% in 2021. All process-related defective products are now completely recycled.

In 2022, the Company actively pursued the gradual establishment of a green supply chain through increased green procurement, aiming to promote the shared development of environmental sustainability. The total amount of green procurement in 2022 reached 120 million. Across our Taiwan factories, traditional lighting fixtures are being gradually replaced with more energy-efficient LED fixtures, resulting in an estimated electricity saving of 425,600 kWh in 2022. Additionally, to reduce carbon emissions from transportation, we have switched to energy-saving vehicle models for official vehicles and provided vehicle purchase subsidies to employees, encouraging the replacement of conventional fuel motorcycles with electric motorcycles. This initiative could reduce carbon emissions by approximately 15 metric tons annually, minimizing our environmental impact.

The Company upholds the principle of "taking from society and giving back to society" and remains committed to social welfare activities that contribute to balanced and harmonious development. We strive to achieve the goal of perpetual business operation while maintaining ecological balance. We have established community liaison groups in each factory location, serving as bridges for community care, environmental protection, and participation in local cultural activities. Regarding community care, we continue collaborating with charitable organizations to regularly visit and provide meal delivery services to senior citizens living alone. To promote environmental education, we have jointly organized the "Science Express Carnival" in the Mailiao Sixth Naphtha Cracker Complex, fostering a deep-rooted understanding of environmental education. Additionally, in promoting local culture, we have formed a long-term partnership with the Yilan County Government to promote the local ecosystem and cultural heritage of the Taiwan Round Snout in Longtan Lake, contributing jointly to establishing an eco-friendly environment.

Formosa Chemicals & Fibre Corporation

Chairman Fu-Yuan Hung Year 2023

1.2 About FCFC

1.2.1 Company Overview

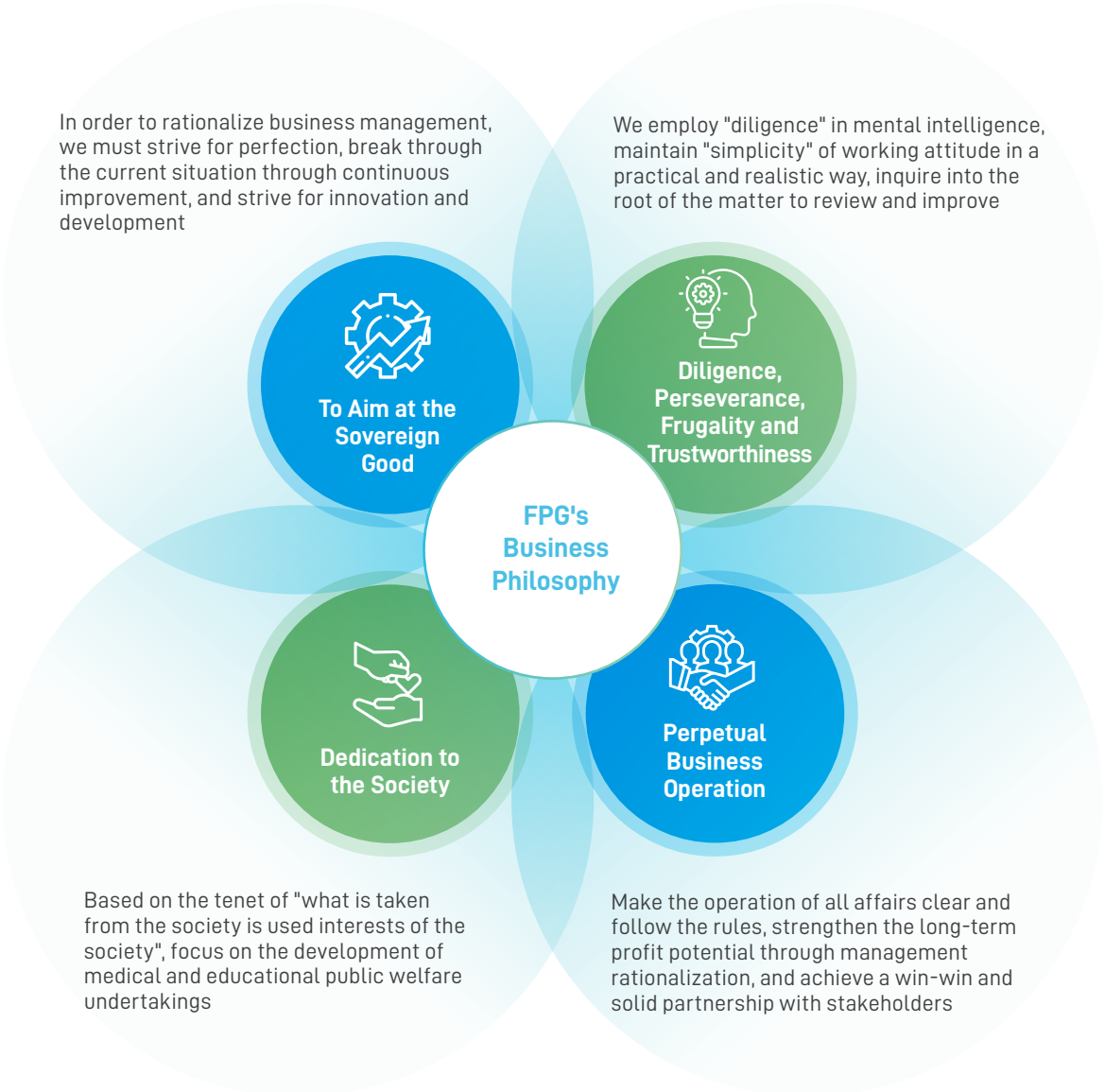
Location of the head office	Changhua County, Taiwan
Year Founded	1965
Consolidated turnover in 2021	NT$379.9 billion
Number of regular employee in Taiwan in 2022	5,166 people
Industry	Petrochemical, plastics, fiber, textile, and cogeneration

The company's main production bases are in Taiwan, the mainland and Vietnam, and its sales and services are spread across all continents. The domestic and mainland markets account for the highest sales, followed by Southeast Asian countries. For a detailed overview of the financial situation and production and sales, please refer to the section V of "2022 Annual Report" of the Investor Relations Company Annual Report section of the company's website, Operation Overview——Market and Production and Sales Overview.

1.2.2 Corporate Identity System

Among the companies of Formosa Plastic Group (FPG), the identification image of chain enterprises is taken as a common sign to express the meaning of vertical and horizontal connection, mutual cooperation, as well as harmony and integration. The Company's identification mark inherits the enterprise system, takes the upper half of the word "Si" from the two word radical "fiber", and transforms it into a hexagonal image, symbolizing the basic code of chemical construction. The Company takes two hexagon overlaps as the enterprise identification code, marking that the Company is an enterprise with petrochemical plastics and chemical fiber as the development core.

1.3 Management Philosophy



1.4 Stakeholder Identification and Communication

1.4.1 Stakeholder Identification Process

The Sustainability Reporting Team of the Company conducted internal discussions with managers from each department and took the five major principles of AA100 Stakeholder Engagement Standard (SES), including Dependency, Responsibility, Influence, Tension, and Diverse Perspectives, into consideration. The following 8 categories of stakeholders were identified.

FCFC Stakeholders

1.4.2 Stakeholder Communication Channels and Frequency

All units of the Company have established multiple and smooth communication channels with stakeholders. Through various effective communication channels, we can fully understand the ideas and needs of stakeholders, and obtain the issues of concern and feedback from stakeholders. The company provides a communication channel through email, and all issues reported are assigned to dedicated personnel, and each person in charge will report the processing results according to the internal approval authority. The communication with key stakeholders in 2022 is as follows:

The importance of stakeholders to FCFC	Frequency and Methods of Communication	2022 Negotiation results and performance	Topics of Concern
Residents in Operating Areas As community friendliness has been an important subject for our business operation, we consider local residents while establishing our annual business strategies and objectives.	**Occasionally, at least 3 times/year** ● Community relations teams regularly participate in village or communal gatherings and visits nearby residents. ● Organize various seminars or conferences ● Designated "Good Neighbor" 24-hour hotline for residents to provide opinions on environmental protection issues ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● Providing emergency salvation for 14 people of the plant neighbors ● Caring for a total of 200 elderly people living alone at the end of the year ● Participated in the community residents' conference to understand the opinions of residents for 5 times	● Corporate Governance ● Energy Management ● Operational Financial Performance ● Air Quality Management
Government Sectors In addition to following related laws and regulations, FCFC also communicates with government sectors to promote sustainable business operation.	**Occasionally, at least 4 times/year** ● Participate in public hearings and briefings on laws and regulations held by the competent authority, and communicate with the business promotion situation ● Respond to government for review and amendment through various industry associations to protect the rights and interest of the industries ● Explain the implementation status of the Sixth Cracker Industry of Mailiao Industrial Complex related plans and EIA commitments in the Sixth Cracker Industry EIA Supervision Committee every quarter ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● Designate business personnel to participate in the legal briefings organized by the Financial Management Committee, etc., and relay them to the employees after the meeting. ● Explain the impact of exchange rate rise and depreciation on the industry through the associations and safeguard the development of the industry	● Energy Management ● Operational Financial Performance ● Corporate Governance ● Air Quality Management ● Occupational Health and Safety
Experts and Scholars We continue to communicate with experts and scholars and remain committed to implementing sustainable development goals by following their recommendations regarding safety, health, and environmental sustainable topics	**Occasionally, at least 3 times/year** ● Discuss and communicate environmental protection issues with external associations ● Organize an annual conference to present outstanding improvements in energy conservation and carbon reduction or environmental protection and discuss possible refinements with professionals ● A safety, health and environment (SHE) section has been made available on our official website to provide a communication channel for SHE issues. ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● Attending poison disaster defense arrangement meeting held by TRC ● Attending a meeting discussing carbon emission standards of petrochemical industry held by CIER ● The company website provides a place to exchange environmental ideas	● Corporate Governance ● Energy Management ● Operational Financial Management
Environmental Protection Groups We value environmental sustainability topics as much as the environmental conservation groups, and collaborate with them toward environmental sustainability through exchanging ideas and opinions.	**Occasionally, at least 3 times/year** ● Appropriate explanations and communications during various meetings, and related personnel are invited to visit our plants when necessary ● Annual conference for energy conservation and carbon reduction or outstanding improvements in energy conservation is organized and environmental conservation groups are also invited to join. ● A safety, health and environment (SHE) section has been made available on our official website to provide a communication channel for SHE issues. ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● In response to the Chiayi County Environmental Protection Bureau, the Xingang Plant established a river patrol team in the Zhongyang Industrial Zone to implement water environmental protection, and arranged monthly cleaning and inspections of the Puzixi river bank. ● Participate in World Environment Day activities and promote environmental awareness with environmental groups ● The company webpage provides a place where to show the company's environmental protection implementation status and group protection concept exchange area	● Corporate Governance ● Energy Management ● Operational Financial Management

The importance of stakeholders to FCFC	Frequency and Methods of Communication	2022 Negotiation results and performance	Topics of Concern
Shareholders and Investors FCFC continues to seek long-term benefits for our shareholders and investors based on credible business operations and sustainable development.	**Shareholders' Meeting once/year** **IR conference 2 sessions / year** **Other meetings organized occasionally at least once/year** ● The stock affairs section of Finance Department under FPG's Group Administration is in charge of answering questions and needs from shareholders. ● A spokesperson is appointed to serve as the contact between FCFC and institutional investors. ● Holding IR conference to provide investors with information on company operations ● Contact channel: Mr. Liu, President's Office ● Contact email: u127129@fcfc.com.tw	● Holding a legal person presentation meeting twice a year to report the operating results of the company ● Company website provides shareholders, interested parties and other contact window, with a dedicated person to reply ● Report the company's operating conditions from time to time	● Corporate Governance ● Energy Management ● Operational Financial Management ● Occupational Health and Safety ● Industrial and Public Safety
Customers Customer support is the key factor to our sustainable development, and customer feedback is the motivation behind our constant improvement; providing customers with stable and quality products is our responsibility.	**Occasionally, at least once/year** ● Occasional meetings or visits to customers to understand customer needs ● "Customer Opinion and Feedback Form" and "Customer Satisfaction Survey" are used to understand customer needs and suggestions. ● A hotline and website are set up to instantly interact and communicate with customers. ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● On average, each customer visited at least 1 time in 2022 ● In response to a total of 3 customer complaints concerning quality, we actively assisted customers to their satisfaction. ● The average customer satisfaction in 2022 is 4.5 points out of 5 points	● Corporate Governance ● Energy Management ● Operational Financial Performance ● Occupational Health and Safety ● Air Quality Management
Suppliers and Contractors Suppliers and contractors provide stable and quality products and services and establish a credible supply chain.	**Occasionally, at least 3 times/year** ● FPC Electronic Trading System Customer Service Center ● Supplier Conferences are organized. ● E-mail addresses are provided on the main page of FPG's official website to receive and handle suppliers' and contractors' suggestions. ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● Assist supplier to answer the system operation questions ● One event was held in 2022 due to the COVID-19 pandemic ● One project submissions had been accepted and handled in 2022	● Corporate Governance ● Energy Management ● Occupational Health and Safety ● Operational Financial Performance ● Air Quality Management ● Industrial and Public Safety
Employees Employees are our most valuable assets and the basis of corporate competitiveness. By providing comprehensive training and a friendly working environment, we strive to improve employees' cohesiveness.	**Occasionally, at least 4 times/year** ● Divisional meetings are regularly organized within the plants to interact and communicate with employees. ● Physical and online opinion mailboxes are established and "799" hotlines are set up in each plant with designated personnel to receive responses. ● Employees are encouraged to join the labor union or the Employee Welfare Committee to participate in regular meetings to communicate with the attendant management. ● Contact channel: Mr. Chien, President's Office ● Contact email: fcfc@fcfc.com.tw	● Having weekly office, group, class meetings to provide communication between colleagues ● Convene labor management meetings every quarter to provide employee opinions ● Specialized person to promptly respond to employees' opinions and feedback	● Corporate Governance ● Energy Management ● Operational Financial Performance ● Occupational Health and Safety ● Air Quality Management

1.5 Identification of Material Topics

The company communicates with our 8 types of stakeholders through various communication channels, and aggregates the issues that the stakeholders are concerned about, and convenes related departments to discuss the issues that the stakeholders value, and after consensus was reached, it was used as the reference basis for the disclosure of the report. Stakeholders' concerns are reviewed by the company's general manager's office, safety and health office, accounting office, plant management office and business department representatives and members of the ESG Committee, and organized based on their experience in communicating with stakeholders, reported the main stakeholders concerns issues according to the internal decision making authorization, and discuss and decide on the subject of the report and the order of the issues in early 2022. Once the Report is completed, these issues are reviewed by the President and the Chairman to ensure their consistence with the stakeholders' needs.

1.5.1 Procedures of Identifying Material Topics

Phase 1 Understanding Organizational Sustainability Context

Phase 2 Assessing the Actual and Potential Impacts of Identified Issues

Phase 3 Assessing the Significance of Impacts

Phase 4 Disclosing and Reporting of Material Topics

1 Step — Identification of Stakeholders

We referenced the five major principles of the AA1000 Stakeholder Engagement Standard (SES) principles, including Dependency, Responsibility, Influence, Tension, and Diverse Perspectives, and examined the operational business activities in the context of sustainability to identify eight categories of stakeholders.

8 Categories of Stakeholders

2 Step — Collection of Corporate Impact Issues

After referring to the GRI Standards, SASB, TCFD, the Corporate Social Responsibility Best Practice Principles for TWSE/TPEx Listed Companies, the ISO 26000 Guidance on Social Responsibility, MSCI ESG industry issues, the United Nations SDGs, domestic and foreign industry issues, global trends, and related media reports, we identify the impact areas and assess the positive and negative effects on the business, and compiled a list of 98 impact issues.

98 Impact Issues

19% in industrial trend
4 % in domestic law policy
53% in international sustainable framework
23% in news event

3 Step — Integration of Corporate Impact Topics into Sustainability Topics

We categorized the impact issues and consolidated them into key sustainability issues for the ESG Steering Committee to discuss and formulate. Subsequently, a list of 26 annual minor sustainability issues is compiled and subjected to further classification and identification.

26 Sustainable Issues

8 issues in relation to	8 issues in relation to	10 issues in relation to
E	S	G

4 Step — Analysis and Prioritization of Material Topic

Electronic surveys were distributed with assistance from the functional department of the President's office, the accounting department, the health and safety department, and various business units. Subsequently, a high, medium, and low-intensity analysis was conducted based on the "level of stakeholder concern" and the "impact on company operations" to determine their importance.

979 Questionnaires

35 questionnaires response form management	944 questionnaires response form stakeholders

5 Step — Assessment and Discussion of Issue Impacts

Utilizing the GRI 3 Double Materiality Analysis Principles, we assessed the financial impact and likelihood of occurrence for high and medium-level issues. Subsequently, we cross-referenced the material topics with the GRI Topic Standards, identifying 15 material topics, of which eight will be continuously monitored.

13 material topics

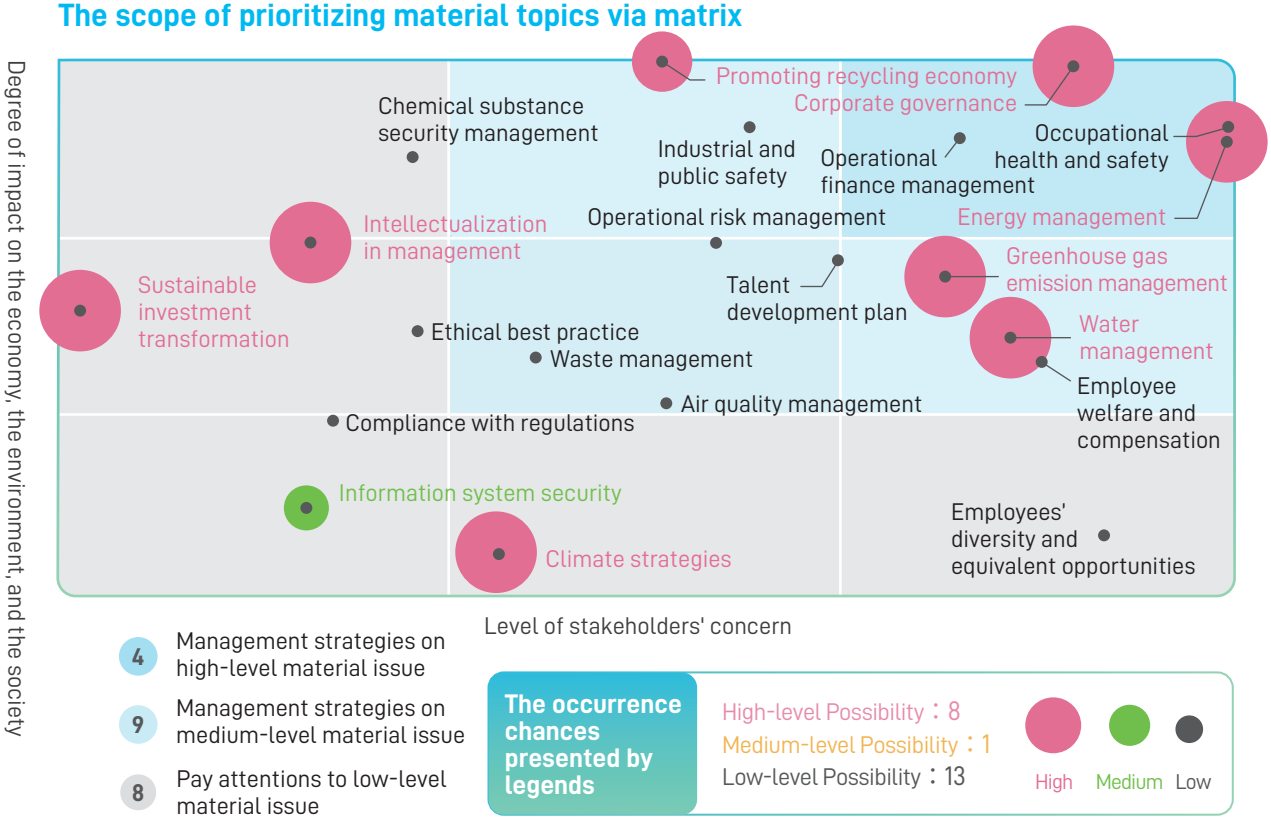
3 topics in relation to	6 topics in relation to	4 topics in relation to
E	S	G

6 Step — Establishment of Material Topics

Based on the analysis, we have identified 13 material topics as the focal points for disclosure in this report. We have also developed a policy for managing these topics. We will continue to assess the significance of various sustainability topics in the future, respond to stakeholder concerns, and ensure transparency, reasonableness, and balance in the content disclosed in our reports.

1.5.2 Prioritizing Material Topics

The scope of prioritizing material topics via matrix



4 Management strategies on high-level material issue

9 Management strategies on medium-level material issue

8 Pay attentions to low-level material issue

The occurrence chances presented by legends

High-level Possibility：8
Medium-level Possibility：1
Low-level Possibility：13

High Medium Low

1.5.3 Description of changes in major topics

2022 Questionnaire Issues	Importance of the issue		Notes on changes in issues
	2022	2021	
Operating & Financial Performance	High	Medium	There have been operational impacts due to current international situations and price fluctuations, leading to increased stakeholder concern. These issues have become important focus areas for our overall stakeholders.
Energy Management	High	Medium	This issue is of utmost concern to the Company's most important stakeholders, the "employees," and it is also an essential disclosure item for international assessments. Effective management and reduction of energy consumption will lead to cost reduction and increased competitiveness for the Company.
GHG Emissions Management	Medium	Low	In response to the Company's vision of achieving carbon neutrality by 2050, domestic and international regulatory requirements, as well as disclosure items for international assessments, we are actively promoting a carbon emissions reduction initiative and formulating targets and strategies to decrease carbon emissions, enhance energy resource efficiency and minimize carbon emissions.

Increased concern

2022 Questionnaire Issues	Importance of the issue			Notes on changes in issues
	2022	2021		
Employee Compensation and Benefits	Medium	Low	Increased concern	This is an important issue for the overall stakeholders of the Company. By providing a comprehensive compensation and benefit system, we aim to enhance our employees' good health and well-being.
Integrity in Business Operations	Low	Outside the Matrix		The Company proactively discloses its Code of Conduct, aligning with global expectations for corporate governance, accountability, and transparency. It responds to disclosure requirements from international assessments such as DJSI and MSCI, enhancing the credibility of ethical business practices.
Employee Diversity and Equal Opportunities	Low	Outside the Matrix		The Company values employee diversity and implements equal opportunity policies, strengthening our talent pool and contributing to a positive corporate image. This commitment aligns with the disclosure requirements of the DJSI Chemicals industry questionnaire.
Chemical Safety Management	Low	Outside the Matrix		The Company belongs to the chemical industry, in which Chemical Safety Management is a critical issue that requires special attention. We aim to address the disclosure requirements of international assessments such as SASB, DJSI, MSCI, and other relevant frameworks pertaining to the chemical sector.
Information Security	Low	Outside the Matrix		In response to the growing concern over global information security risks, we have increased our focus on this issue and addressed the disclosure requirements outlined in the DJSI Chemical Industry Questionnaire.
Industrial and Public Safety	Medium	High	Declined concern	The level of stakeholder concern regarding this issue has slightly decreased, but we continue to address the disclosure requirements of international benchmarks. Nonetheless, it remains an important issue that is valued by our corporate management. We will continue to monitor the changing significance of this issue.
Smart management	Low	High		This represents the Company's long-term management direction in response to industry trends. However, there has been a decrease in stakeholder concern regarding this matter.
Regulatory Compliance	Low	Medium		The Company adheres to relevant regulations and has not experienced any significant workplace accidents, thereby enhancing trust in the Company and reducing the level of attention required.
Climate Strategy	Low	Medium		The level of stakeholder concern in the Company has decreased for this topic. In response to international trends and disclosure requirements, we will continue to monitor the impact of this issue.
Sustainable Investment Transformation	Outside the Matrix	Low		As the level of stakeholder concern decreases, the Company will continue to monitor the impact of the issues.

1.5.4 DESCRIPTION OF MAJOR ISSUES TO THE VALUE CHAIN

After discussion and confirmation by the internal supervisors, the company identified the five major value creation processes of the company, namely "R&D and improvement", "raw material procurement", "manufacturing", "product sales" and "after-sales service and consulting" " The processes will be the boundaries of impacts and influences of major issues. The Company's product attributes are located in the mid-stream of the traditional petrochemical industry chain. It connects the upstream raw materials for refining and processing and then sends them to the downstream to produce petrochemical raw materials or finished products. Therefore, stable production and sales can maintain the company's operations. Good after-sales services can increase sales and promote the expansion of the company's market. Coupled with the

long-term and stable contracted procurement of raw materials, the services are conducive to stabilizing the source of materials. In order to improve product quality, the company has long invested in product research and development and process optimization. Through research and development, high value-added products are produced to increase output value; continuous optimization of production processes, reduction of energy consumption, and friendly impact on the environment, the company further evaluates 16 major items The impact of the issue on the value chain, as well as the stakeholders affected by the material issue, respond to the company's economic, environmental and social response actions in the corresponding chapters. The management of the company is responsible for planning and implementing issues related to the economy, environment and society. It has established an ESG Committee, which has an environmental sustainability organization under its jurisdiction to manage water resources and waste disposal. For corporate governance issues, such as stakeholder communication, workplace safety operation management, etc., the "ESG Committee" is responsible. For details on the ESG Committee and its operations, please refer to "ESG Committee" in Chapter 2.1.2 of this report.

The schematic diagrams impacted by FCFC

Dimension	Major Issues	GRI Topic Standards	Impact of major issues on the value chain			Stakeholders impacted by the issues	Responser by company	Corresponding Chapter
			Raw Material Procurement	Manufacturing and production	Product sales and consultation			
Economic	Corporate Governance	GRI 205 Anti-corruption 2016	x	x	x	Shareholders, customers, and employees	Business operational analysis unit	2.1
	Operational Financial performance	GRI 201 Economic performance 2016 GRI 202 Marketing position 2016	x	x	x	Shareholders and employees	Business operational analysis unit	2.1.5
	Operational risk management	—	x	x	x	Shareholders and employees	Business operational analysis unit	2.2
The Environment	Energy management	GRI 302 Energy 2016			x	Employees	Digital ane energy transformation unit	3.3
	Greenhouse gas emission	GRI 305 Emission 2016	x	x	x	Shareholders, customers, and employees	Digital ane energy transformation unit	3.3.3
	Water resource use and Management	GRI 303 water 2018			x	Employees	Digital ane energy transformation unit	3.4
	Waste Management	GRI 306 Waste 2020			x	Employees, suppliers and contractors	Safty and hygiene unit	3.6
	Air pollutants management	GRI 305 2016			x	Employees	Digital ane energy transformation unit	3.5
	Promoting Circular Economy	—	x	x	x	Shareholders, customers, and employees	Digital ane energy transformation unit	2.3.3
Social	Talent development plan	GRI 404 Training and education 2016	x	x	x	Employees	Personnel unit	4.3
	Employees' emoluments and benefits	GRI 401 Relation in between labor and capital 2016	x	x	x	Employees	Personnel unit	4.2
	Occupational Health and Safety	GRI 403 Occupational Safety and Health 2018	x	x	x	Employees, suppliers and contractors	Safty and hygiene unit	4.4
	Industrial and Public Safety		x	x	x	Employees, suppliers, contractors, and government agencies	Safty and hygiene unit	4.4.3

2 The value of the innovation economy

2.1	Corporate Governance and Performance	24
2.2	Operation Risk Management	31
2.3	Product Sustainable Responsibility	34
2.4	Transformations of Research, Innovation, and Digital and Energy Source	39
2.5	Excellent Customer Service	42
2.6	Procurement and Supply Chain Management	45

2.1 Corporate Governance

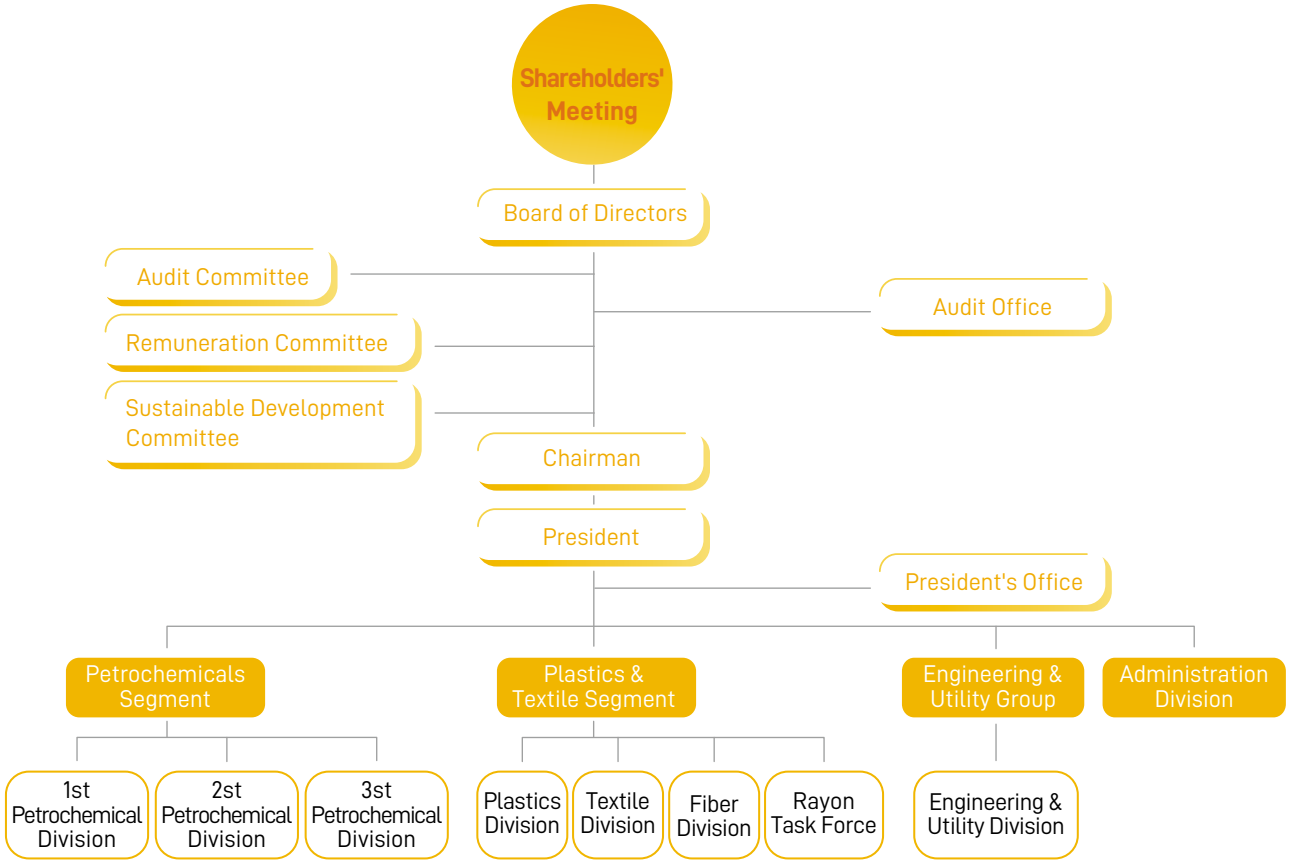
Material Topic: Corporate Governance

Material Topic

Description	The Company has always adhered to government regulations in its operations, and our internal control system is sound. There have been no instances of non-compliance with laws and regulations.	
Policy Commitments	Adhere to the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and relevant legal regulations to enhance corporate governance effectiveness.	
Management Actions	Preventive and mitigation actions	The Company's corporate legal department regularly reviews newly introduced government regulations, and our corporate governance policies are updated in accordance with legal requirements.
	Action plan	The Board of Directors is the highest governance body and is responsible for drafting and executing the governance system.
Performance Tracking	Internal auditors conduct audits on corporate governance matters, including the Board of Directors, the Audit Committee, the Compensation Committee, and the internal control system. They review and revise the internal control systems based on identified deficiencies and their root causes to improve the situation.	
Stakeholders Engagement	The Company regularly holds corporate briefings to explain our corporate governance policies, operational performance, and business objectives. We have a designated company spokesperson, a contact e-mail, and a phone line to ensure open communication channels with stakeholders.	

2.1.1 Corporate Governance Profile

Corporate Governance Structure Chart



Operation of Board of Directors

The Board of Directors is the highest governance body as well as the center of operational decision-making at FCFC. In addition to the resolutions of the shareholders meeting, it also follows the relevant regulations of the company law, securities exchange law, company articles of association, and board of directors, and stipulates " "The Code of Ethical Conduct for Directors and Managers". All relevant personnel are required to adhere to ethical standards when performing their duties to prevent behaviors that harm the interests of the company and shareholders. The Articles of Incorporation of the Company clearly stipulate the nomination and selection procedures for directors. The election of directors adopts the candidate nomination system. The selection and appointment of directors are handled in accordance with the Company Act and the regulations of the securities competent authority. The Board of Directors is concerned about the impact of climate change on environmental ecology, society and economic security, and has adopted and formulated the "Corporate Social Responsibility Best Practice Principles". Please refer to the Company's website for the operations of the Board of Directors.

Role of the Board of Directors

Principles of the Board of Directors

Formulate the Company's long-term operating policy and business objectives, and synchronize economic growth with environmental sustainable development

Vision of Sustainable Development

Promote environmental sustainability, economic growth and social progress

Operating Strategies and Policies

Propose strategies and policies according to potential changes in the external business environment and the utilization of internal resources, and evaluate the plans and implementation performance of the management team

Composition of a diverse Board of Directors

Currently there are 15 Directors. All of whom are experts in their respective fields with ample industry management experience. In order to deepen the independence and diversity of corporate governance, 3 independent directors and 1 female director were elected. The Chairman comprehensively manages the business of the whole company, and assigns dedicated personnel to be responsible for issues related to corporate sustainable development, such as economy, society and environment, as the basis for the promotion of ESG operations. Please refer to the "Board of Directors" section of the corporate governance of investor relations on the company's official website for the related Board of Directors operations.

Please refer to the "Board of Directors" section of the corporate governance of investor relations on the company's official website for the related Board of Directors operations.

Remuneration for the Highest Governance Body

The Company has set up a "Remuneration Committee" consisting of 3 independent directors to evaluate the Company's Directors' and managers' salary remuneration policies and systems, and make recommendations to Board of Directors to prevent the compensation policy from guiding Directors and managers in undertaking the Company's risk appetite conduct. Pursuant to the Remuneration Committee Charter, at least two meetings shall be convened in each year. In 2022, two meetings were convened. Please refer to the

Please refer to the "Remuneration Committee" section of the corporate governance of investor relations on the company's official website for the operations of the Remuneration Committee.

"Remuneration Committee" section of the corporate governance of investor relations on the company's official website for the operations of the Remuneration Committee.

Senior executives' annual compensation is mainly composed of salary, bonuses, and employee bonuses with pension and benefits properly allocated. For performance evaluations, the Chairman comprehensively evaluates and assesses the overall performance within the scope of the manager's responsibilities and the achievement of personal "annual work goals", which include environmental and social matters, linking the incentive system with individual performance and the Company's overall goals, and reporting to the "Remuneration Committee" for review.

Independent Audit Committee

In order to strengthen the supervisory function of the Board of Directors, the Company established an Audit Committee in June 2015. Through establishing an Audit Committee and a comprehensive auditing management system, we have construed an independent, professional supervisory mechanism. The Audit Committee is composed of 3 Independent Directors. Please refer to the "Remuneration Committee" section of the corporate governance of investor relations on the company's official website.

Please refer to the "Remuneration Committee" section of the corporate governance of investor relations on the company's official website.

Training Courses for Directors

To continuously facilitate in the enhancement of professional and legal knowledge of Directors and to actively implement the corporate governance system, the Company's Directors receive relevant studies and training in each year. Please refer to "Corporate Governance Status and Reasons for Deviations from the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" of the "2022 Annual Report".

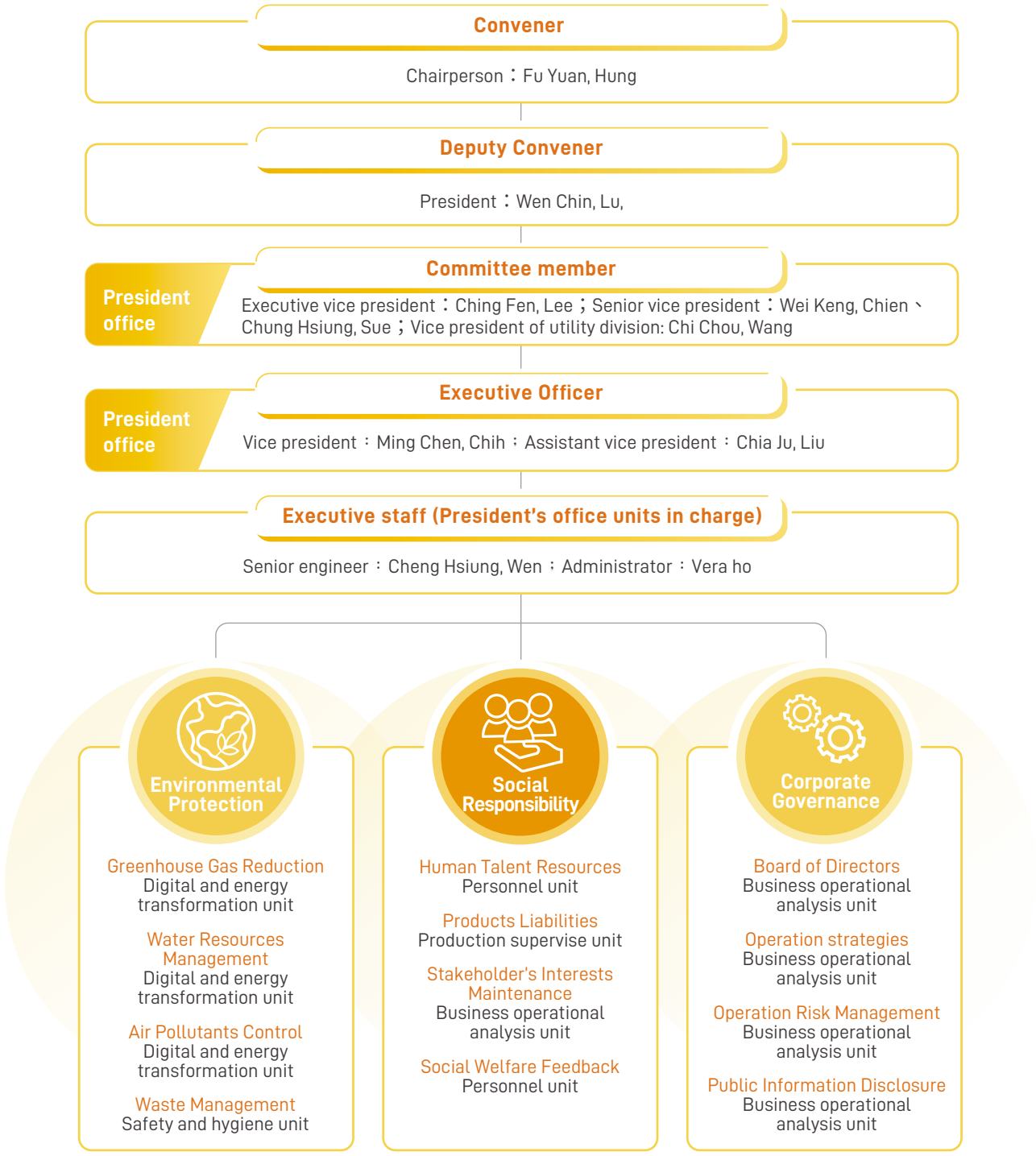
Please refer to the"2022 Annual Report"

2.1.2 Sustainable Development Work Promotion Organization SDG 12.2

The Chairman of the Company felt that the impact of climate change on the living environment is becoming more and more serious, and established a special "ESG Committee of Formosa Chemicals & Fibre Corporation" to respond to issues of concern to the society, such as climate change, economic impact and environmental protection. The Chairman acts as the convener and comprehensively handles the related matters, and assigns the President and executive vice-president as deputy conveners. Subordinate committee members and director generals are held by personnel of the senior vice president level, and three taskforces for environmental protection, social responsibility and corporate governance are established respectively. The taskforces are held by vice presidents and associate managers respectively, who work together with the ESG promotion organization of the General Management Office to carry out relevant operations. Regular meetings are held every month. The leaders of the relevant teams formulate various implementation plans, report the work progress and plan implementation results. Annual reports are submitted to the Board of Directors.

The Company has formulated the "Corporate Social Responsibility Best Practice Principles" to urge economic growth to keep pace with environmental sustainable development, reduce energy consumption and waste, increase resource recycling and reuse, and reduce environmental hazards. The Company has formulated implementation strategies and plans for greenhouse gas reduction. We are focused on the workplace safety of employees and the development of gender equality. Furthermore, we are invested in social welfare activities to promote social progress and achieve the goal of sustainable economic and social development. The ESG group organizational structure of Formosa Chemicals & Fiber Corp. is as follows:

Formosa Chemicals & Fibre Corporation (FCFC) Organization of the ESG Committee



2.1.3 Internal Control Mechanisms

The Company has established an audit committee for supervision, and has also established an audit office under the Board of Directors. The full-time internal auditors receive lectures from professional training institutions every year, and they submit audit reports to the Board of Directors. Internal audits are not only the responsibility of the independent audit department, but each production department also needs to conduct independent business inspections within a specified period for specific audit items. At present, there are 16 internal auditors, who have completed 12 hours of training according to regulations. The training situation in 2022 is as follows.

Training of Internal Auditors in 2022

How auditors become an enterprise operational diagnostic expert **2** events

Existing auditors **14** Number of Participants

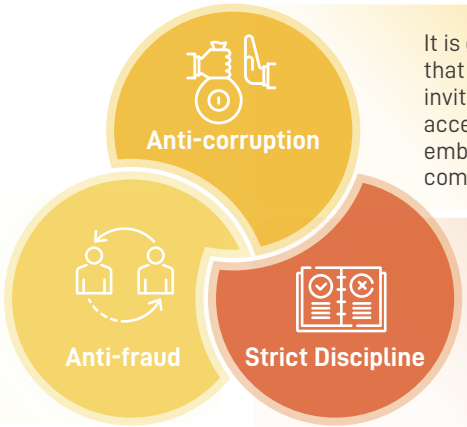
The audit in comply with the regulations to corporation social responsibility and sustainable report **2** events

Existing auditors **18** Number of Participants

2.1.4 Professional Ethics

The Company adheres to the core spirit of "diligence and simplicity", established codes of ethics and related standards, and signed self-discipline documents. Every year, the judicial department is invited to the Company to talk about the laws and regulations that enterprises should abide by and legal education related to economic crimes. Each plant has set up employee grievance channels and dedicated personnel to handle grievance cases. Employees can lodge grievances immediately. In addition, they can report internal illegal acts through channels such as trade unions, welfare committees, and labor-management meetings. The whistleblower is protected by dedicated personnel, and the reported incident shall be secretly investigated by dedicated personnel. The Company has not received any reported corruption cases from 2018 to 2022. Please refer to the "Important Company Rules" section of the corporate governance of investor relations on the company's official website.

Please refer to the "Important Company Rules" section of the corporate governance of investor relations on the company's official website.



It is clearly stipulated in the internal system that no entertainment or property gifts invited by the manufacturer should be accepted. Anyone who engages in fraud, embezzles public funds, accepts bribes, or commissions should be dismissed.

Employees working in sales, procurement, finished product warehousing, supervision, and budget divisions are required to regularly rotate their positions to avoid improper behavior with the manufacturers.

Employees who violate the regulations will not be tolerated once verified, and even together with their direct supervisors, they will also be punished jointly and severally depending on the circumstances in order to be vigilant and credible.

2.1.5 Operational financial performance SDG 8.2

Material Topic: Operational and Financial Performance

Material Topic

Description	Investors have a positive outlook on the future market demand growth, attracting many new investors. In the short term, supply surpasses demand, intensifying market competition and suppressing profit growth.	
Policy Commitments	Develop diversified and high-value products to diversify investment markets, mitigate operational risks, and strive to improve operational performance.	
Management Actions	Preventive and mitigation actions	Regularly review the implementation effectiveness of performance objectives, develop improvement plans, actively diversify sales markets, and establish market segmentation.
	Action plan	Investing in AI to optimize manufacturing processes, enhance production efficiency, and reduce costs. Research and develop high-value products to improve product competitiveness.
Performance Tracking	Monthly announcement of revenue; regular disclosure of quarterly or annual financial reports reviewed or audited by accountants.	
Stakeholders Engagement	The financial reports are available for public access on the TWSE MOPS Platform or the Company's website.	

Financial Performance

In the first quarter of 2022, energy prices surged due to geopolitical conflicts and the outbreak of war, resulting in a significant increase in production costs for the petrochemical industry. The rising energy prices also impacted consumer markets in Europe and America, leading to rapid inflation and weakening consumer purchasing power, resulting in reduced demand. The export of petrochemical products has been hindered, leading to a sharp decline in sales and intensified price competition. Despite our efforts to maintain market share and a slight increase in revenue, our profitability has been significantly suppressed compared to 2021. The table below presents key operational performance for the years 2021 and 2022. For detailed financial reports, please refer to the Company's official website.

Please refer to the Company's official website.

Currency unit: NT$

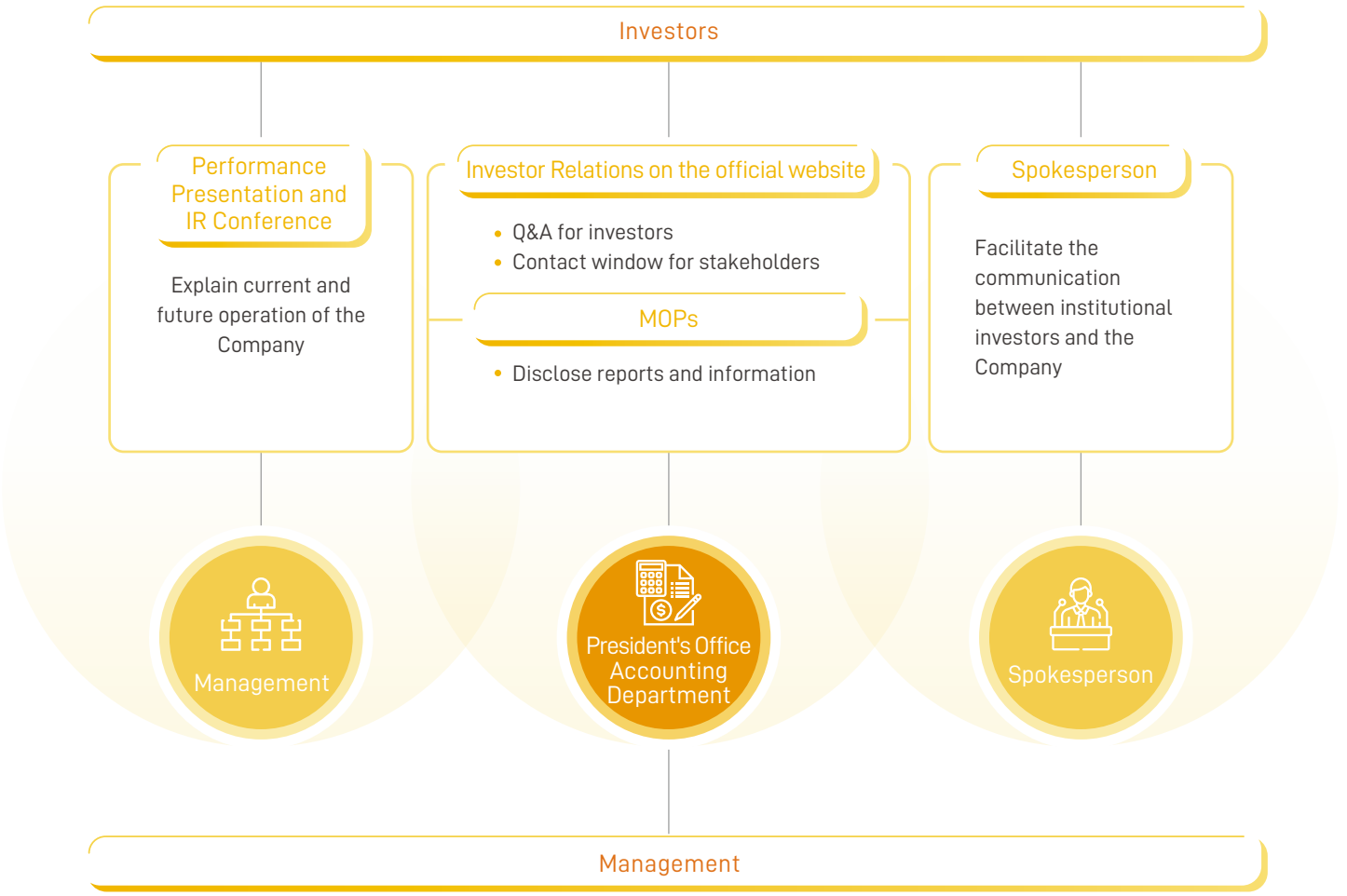
Year	2021	2022
Consolidated revenue (NT$100 million)	3,658	3,799
Consolidated interests (NT$100 million)	427	92
Parent company EPS (NT$)	6.56	1.26
ROE (%)	10.18	2.25
Cash dividends per share (NT$)	2.5	4.8

Note: See attached appendix of "ESG thematic performance" of the high light of the last four years of consolidated financial results.

Investor Relations

FCFC also maintains an section called Investor Relations on the official website to answer investors' inquiries. All statistics and relevant data are disclosed in MOPS. In addition, a spokesperson system was established to provide a window for dialogue between corporate investment institutions and the Company; monthly performance presentations and semi-annual IR conferences were held to establish face-to-face communication channels with investors.

Communication with Investors



2.2 Risk Management

The company has formulated the "Risk Management Measures" to explain the company's risk management policies, evaluation and measurement, control and supervision and other management procedures, to ensure the integrity of risk management, and to control risks within an acceptable range.

Material Topic: Operational Risk Management

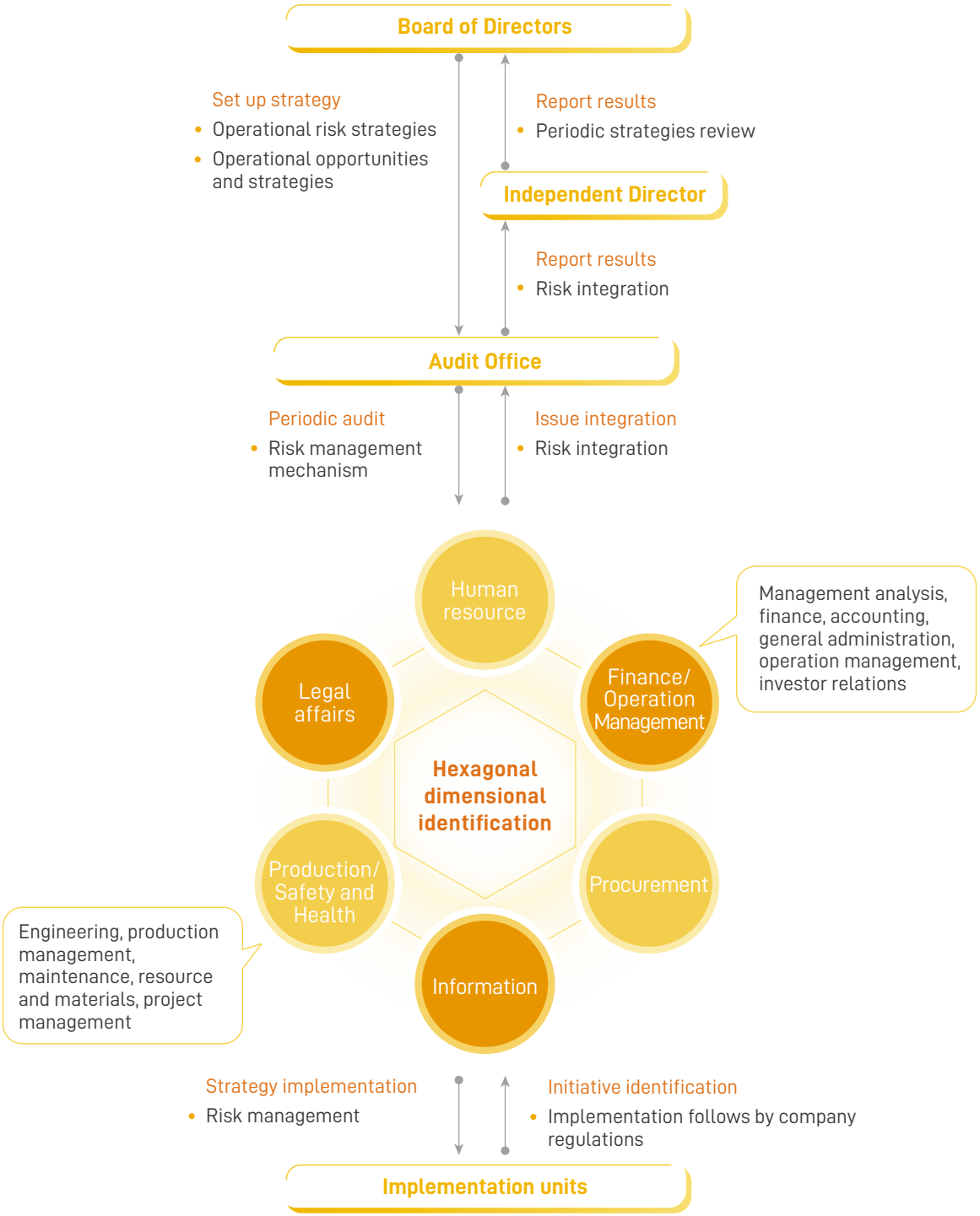
Material Topic

Description	The Company strictly adheres to legal and regulatory requirements while implementing robust internal control operations. We assess potential risk factors and propose improvement measures to mitigate the impact of short-term individual incidents. We monitor global economic fluctuations and establish risk assessment indicators to evaluate the significance and severity of potential risks. We devise strategies to minimize risks within tolerable thresholds, ensuring the stability of our operations and maintaining competitiveness.	
Policy Commitments	Operate with prudence, ensuring risk is kept within manageable limits and ensuring the integrity, reasonability, and optimal effectiveness of risk management.	
Management Actions	Preventive and mitigation actions	The Company's internal audit department conducts regular audits on significant operational risk areas, prepares audit reports, and submits them to the Audit Committee for review before presenting them to the Board of Directors.
	Action plan	Each relevant department assesses the identification and performance of its risk items. The audit department evaluates and audits the implementation status across six dimensions and assists in formulating and reflecting corresponding strategies.
Performance Tracking	The Company has not experienced any significant internal control failures that have impacted financial operations, indicating that the internal control assessment and management of potential risk factors have been well-controlled.	
Stakeholders Engagement	The Company holds regular Board meetings to disclose operational performance and provide relevant operational information. Stakeholders can access this information on the TWSE MOPS Platform, and they can also provide feedback to the Company.	

2.2.1 Risk Identification Procedures

By adhering to the existing functional system and internal control system, the Company actively faces and controls risks through the most cost-effective methods in six major aspects, namely HR, information, finance/operation management, legal, procurement, and production/safety and health, which shall be considered during management processes.

Each functional department operates based on the Company's regulations and systems, and actively identifies and reports risks out of line to each functional supervisor. Moreover, functional departments will also collaborate to identify risks in the aforementioned six aspects through relevant meetings from time to time. In addition, the Audit Office is in charge of reviewing risks in every aspect and whether risk management is carried out in accordance with regulations. Independent Directors will also communicate with Audit Manager in regards to auditing deficiencies and abnormal incidents from time to time, and report to the Board of Directors.


Board of Directors
Set up strategy
• Operational risk strategies
• Operational opportunities and strategies
Report results
• Periodic strategies review
Independent Director
Report results
• Risk integration
Audit Office
Periodic audit
• Risk management mechanism
Issue integration
• Risk integration
Human resource
Legal affairs
Finance/ Operation Management
Management analysis, finance, accounting, general administration, operation management, investor relations
Hexagonal dimensional identification
Production/ Safety and Health
Procurement
Information
Engineering, production management, maintenance, resource and materials, project management
Strategy implementation
• Risk management
Initiative identification
• Implementation follows by company regulations
Implementation units

2.2.2 Risk matters and corresponding measures SDG 13.1

In 2022, the Company formulated the "Information Security Management Rules," "Information Security Management Measures," and "Information Security Management Guidelines" to address the rapidly changing environmental circumstances and the increasing potential risks faced by businesses. In addition, we formed a dedicated information security unit and assigned personnel to develop a risk management framework and implement policies for information security. This unit oversees the Company's internal information security management operations.

In implementing information security protection measures, we adopt multi-layered defense architecture. We have set up a web application firewall and implemented SSL digital certificate verification mechanism. Additionally, we conduct quarterly penetration testing on our system platforms to safeguard against malicious attacks from external networks. Internally, we conduct annual information security management audits and provide education, training, and assessments to enhance employees' awareness of information security risks. Furthermore, we have implemented control mechanisms for employee internet usage, e-mail communication, and data leakage prevention, thereby enhancing the overall security of the Company's information network.

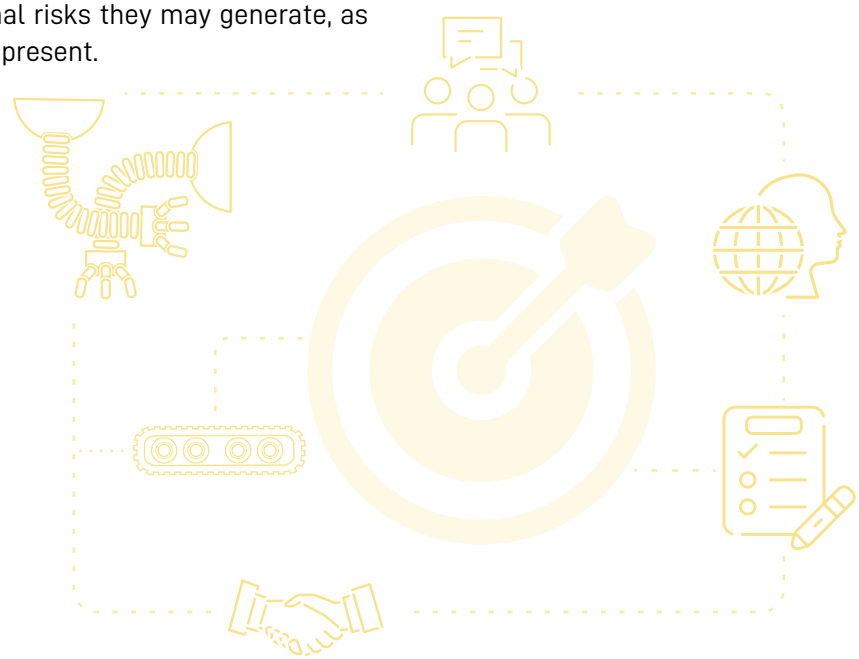
The Company's computer data center is located in Taisan, New Taipei City. In 2022, we actively participated in the certification process for ISO 27001 and successfully obtained the ISO 27001:2013 certificate in February 2023. Additionally, in 2022, 3,432 employees completed the online training course on AEO (Authorized Economic Operator) employee safety awareness, and no significant information security incidents occurred in 2022.

Please refer to the "Risk Management Policy" section under the Principles & Organization - Investor Relations section on the Company's official website. It provides detailed information on the corresponding risk management policies, organizational structure, and the scope of risk management on the potential risks we may face, the potential impact of these risks on the Company's finances, the operational risks they may generate, as well as the opportunities they may present.

2022, completed the online training course on AEO (Authorized Economic Operator) employee safety awareness

3,432 employees

Please refer to the "Risk Management Policy" section under the Principles & Organization - Investor Relations section on the Company's official website.



2.3 Product Sustainability

2.3.1 Upstream and Downstream Relationship of Company Products

The Company's products span petrochemical, plastic, fiber and textile categories. The Company has a steam and electricity co-generation plant to produce water, electricity and steam for use in the manufacturing process, and expands economic scale through vertical integration of upstream and downstream industries to reduce production costs, meet customer demand for raw materials, and enhance market competitiveness. For the product up-and-down relevance and use, please refer to Operation Overview - Industry Relevance of upstream, midstream and downstream and production and sales volume table in the FCFC "2022 Annual Report".

Please refer to Operation Overview in the FCFC "2022 Annual Report".

Use of Raw Materials

FCFC is a part of upstream and downstream integrated plants of FPG. Most of our raw materials are supplied by FPG companies or the upstream manufacturing process. The supply and demand are less affected by market fluctuations, which can stabilize the sources of raw materials and reduce the inventory. Please refer to the supply condition of main raw materials in the FCFC "2022 Annual Report".

Product Brands

The Company started with the production of textile products before gradually transforming. The production process design is built with environmental protection and safety as the priority, supplemented by a strict management system and with environmental friendliness as the goal. We are constantly improving product quality and process optimization to establish a trustworthy product brand. For example, some product lines of FCFC's carpet have obtained the Green Building Material Mark of the Ministry of the Interior and the American Carpet and Rug Institute (CRI) certification. The main brands of the Company are as follows:

Main Brand	QR Code link	Main Brand	QR Code link
台塑生醫		Dr's Formula 來自長庚專業團隊	
FORTE 來自長庚醫學團隊		DERMA FORMULA 美・肌・醫・生	
醫之方 MD Formula		FCFC carpet	

2.3.2 Main Products

Production Capacity

The high-value plastic material PP produced can be used in transportation and medical applications. The sales volume in 2022 was more than 10,000 tons, and the quality has been verified by Motors Ltd. Affirmed, and introduced into the automobile production chain, becoming the first non-Japanese PP material supplier in Kouzui Motors Ltd. history, breaking the monopoly of the supply chain by Japanese companies. For the production capacity of various petrochemical and plastic products of the Company, please refer to the production and sales value table in FCFC's "2022 Annual Report".

Please refer to the production and sales value table in FCFC's "2022 Annual Report"

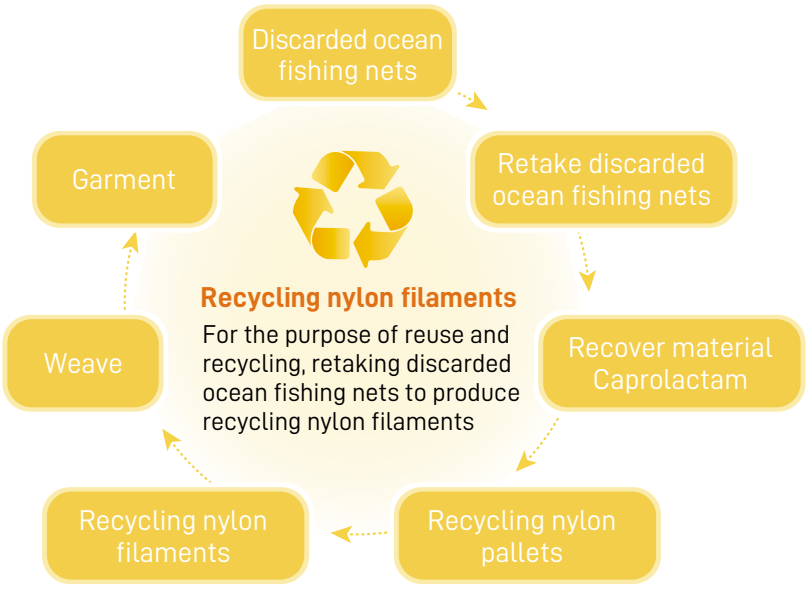
2.3.3 Circular economy - Reuse of recycled products

Material topic - Management Policies to Promote Circular Economy

Material Topic			
	Description	The global rise of environmental conservation and waste reduction concepts has facilitated the development of the circular economy. From the early stages of industrial development, the Company has actively invested in this industry, contributing to our perpetual business operations.	
	Policy Commitments	Continue to invest in the development and application of the waste recycling industry, focusing on converting waste into reusable products to reduce the consumption of natural resources.	
	Management Actions	Preventive and mitigation actions	Continue developing the application market for recycled nylon and environmentally friendly recycled plastic particles, leading to increased sales.
		Action plan	Continue to invest in recycling marine waste made from nylon, transforming it into recycled nylon particles and filament; 100% recycling of wastes generated during the manufacturing process of plastic particles to produce environmentally friendly recycled plastic particles.
	Performance Tracking	Increase in production yield of recycled, environmentally-friendly nylon and plastic particles.	
	Stakeholders Engagement	Positive market acceptance and increased sales volume from downstream customers.	

To promote the circular economy, the Company has achieved significant energy and water conservation results. We also focus on recycling and reusing waste gases and waste generated during manufacturing to promote sustainable resource utilization and produce green products. The Company is one of the few firms globally that has successfully recycled and transformed nylon waste into recycled regenerated nylon particles and recycled regenerated nylon filaments. We obtained the GRS environmental product certification in 2012. By 2023, the production capacity of recycled regenerated nylon particles in our Taiwan and Vietnam factories will increase to a total of 1,250 metric tons per month. Additionally, the environmentally friendly recycled plastic particles produced using 100% plastic process wastes have obtained third-party certification, ensuring that the quality meets customer requirements. In 2022, the sales volume of environmentally friendly recycled plastic particles reached 2,113 metric tons, with total annual sales revenue of NT$1.03 billion from green products.

1. The Company's Nylon Division operates a nylon polymerization plant that utilizes both leftover nylon waste yarn (chunks) generated during the production process and purchased recycled waste nylon materials, including fishing nets, cables, and oyster ropes, to produce recycled nylon particles. The recycling production process is as follows:



Department	Production Capacity	Future Objectives
Polymerization plant	Nylon waste yarn (chunks) and recycled fishing nets are recycled to produce recycled amide, which is then used to produce recycled nylon particles. In 2022, the nylon plant in Taiwan produced 2,978 metric tons of recycled nylon particles, which the spinning mills utilized to produce recycled nylon filament yarns.	The nylon recycling plant in Taiwan is expected to be completed in the second quarter of 2023 and will have a monthly production capacity of 750 metric tons of recycled nylon particles. Including the overseas production capacity of 500 metric tons per month, the total monthly production capacity will reach 1,250 metric tons per month.

2. The Company's Plastics Division recycles the production wastes in our PABS or PP plant. The waste materials are sorted first, then transformed into environmentally friendly recycled plastic particles. The simplified overview of the recycling process is as follows:

Department	Sales Volume	Future Objectives
Plastics Division	In 2022, the department sold 2,113 metric tons of environmentally friendly recycled plastic particles. These particles are produced using 100% third-party certified recycled PC, PP, and ABS.	The sales of recycled plastic particles constituted 4.5% of the overall sales of rigid plastic particles.

2.3.4 Product Safety and Health Responsibility

The Company has always attached great importance to the health and safety of its customers. In the improvement and development process of all products, the impact of each stage on the safety and health is evaluated in detail, and the production process is continuously improved. About 50% of the products are evaluated for health and safety, as shown below:

Product Responsibility Program	
Non-woven viscose raw material production	• Certified by SGS for "Forest Product Chain-of-Custody" verification • Compliant with FSC (Forest Stewardship Council) requirements for wood pulp
Related products of Viscose Rayons	• Certification of OEKO-TEX® STANDARD 100 • Certification of "Compostable Viscose Rayons" from Taiwan Environmentally Biodegradable Polymer Association • The product is free from harmful substances to human health. • The production and recycling processes are environmentally friendly.
Recycled Fishing Net Nylon Filament	[Performance of the Taiwan plant] • Application for an exclusive trademark for recycling fishing net nylon filament • Produced by the recycled fishing nets purchased under contract from the recycling company "BUREO" and can be labeled with the trademark "NET+," exclusively for the use of the brand "Patagonia." • Collaborating with King Chou Marine Technology, Maxxis International, Formosa Taffeta, and nine other county and city governments, we are jointly working on the implementation of recycling discarded fishing nets to produce bicycle tires. [Performance of Vietnam Plant] • The product has obtained certification from Control Union (CU) for Global Recycled Standard (GRS).

Improvement in Warehousing and Logistics Practices	
Production department and automated warehousing	Use eco-friendly plastic pallets
Utilization of pallets for exporting goods in containers	Compliance with quarantine regulations using a new type of composite wood pallet
All company logistics vehicles	Replacing them with vehicles that comply with the fourth-stage emission standards

Promoting Chemical Legislation for Product Assessment and Certification Authorization	
EU REACH	Registration of 11 products
UK REACH	Registration of 5 products: SM, Phenol, ACETONE, PTA, PIA
Korean K-REACH	Registration of 2 products: SM, Phenol
Turkish KKDIK	Registration of 3 products: SM, PTA, PIA
Indian BIS	Registration of 4 products: SM, ACETONE, PTA, ABS

Product Certification	
PCR Plastic Products	Certified PCR Plastic Products

- Sent to a third-party notary unit for testing to confirm compliance with EU RoHS requirements.
- Sent to a third-party notary unit for testing to confirm compliance with EU REACH SVHC (Substances of Very High Concern) requirements.
- The products have obtained TUV Recycled Content Verification.
- The products have obtained UL2809 Recycled Content Validation.

Note: The "REACH Regulation" is an EU legislation that encourages the substitution of hazardous chemicals with less hazardous ones and provides incentives for developing safe chemicals. It also aims to integrate ecological, economic, and social developments to achieve sustainable goals.

2.3.5 Participation in External Associations

The Company actively participates in several external associations and groups of related industries. Through our communication and interaction with these associations and jointly holding relevant seminars and international conferences, we have the opportunity to share and acquire knowledge of various market trends and technical information. This allows FCFC to contribute to provide the government pertinent experience and advice related to international industrial issues through various associations or unions.

Industrial associations			External environmental initiatives
Petrochemical Plastics	Fiber textile industry		
Petrochemical Industry Association of Taiwan	Taiwan Man-made Fiber Manufacturing Industries Association	Cross-Strait CEO Summit	CDP Evaluation of Climate Change and Water Disclosure Questionnaire
Taiwan Synthetic Resins Manufacturers Association	Taiwan Spinner's Association	—	TCFD supporter

2.4 Development, Innovation, and Digital and Energy Transformations

2.4.1 Product R&D and Innovation SDG 9.4

Through the industry vertical integration model, the company encourages its colleagues to accumulate rich professional capabilities and development experience in raw materials, product manufacturing and processing applications. Through cross-departmental cooperation and R&D management, it fully integrates and utilizes R&D resources, continues to invest in innovative ideas, and actively develops products demanded by the market

Intellectual Property Management

For the management of research and development projects such as new products and new production technologies, the company formulated the "Research and Development Management Measures" and set up related computer operations, and stipulated the rewards for key product development and patent authorization in the "Research and Development Achievement Award Measures for R&D Staff" to encourage R&D personnel to innovate and develop and actively research, thereby enhancing the company's competitiveness. In addition, in order to strengthen employees' awareness of intellectual property rights, all employees are required to issue a "Declaration of Respect for Intellectual Property Rights" and implement education and training courses on intellectual property rights laws and regulations. Please refer to the "Corporate Governance Operations" section of the Investor Relations Corporate Governance section on the Company's website for "Intellectual Property Management".

Examples of Development and Innovation

Lithium battery PP separating film and module shell material development

Development instructions

- The separating film is located between the positive and negative electrodes in a lithium battery to prevent the short-circuiting of electrode contacts, while allowing free lithium ions to pass through.
- The selected material must have a certain level of mechanical strength and meet the assembly requirements. The structure must have enough porosity to absorb electrolytic solutions to maintain high ionic conductivity. Therefore, the choice of separating film plays an important role in battery performance.

Benefits

- Because the PE separating film requires ultra-high molecular weight and low impurities, the production cost is high. The main material used for PP separating film in the market is high-crystalline HOMO PP. The department uses CHISSO production, which has an edge in the production of high-crystalline HOMO PP.
- The market development of EV has shown great potential, the sales volume was 1 million tons which grew up in 2022.

Future Plans

- The separating film is related to the safety of lithium battery terminal applications and has a long product certification period. The sales volume target in 2024 is 500 tons.

2.4.2 Digital and energy transformation and expert training

Establishment of a Digitalized Integrated Platform for Chemical Factories

Establishment of a Real-Time Production Management System (RTPMS) platform, which is categorized into seven functional areas: "Department Menu," "Process Management," "Quality Management," "Maintenance Management," "Health, Safety, and Environment," "Energy Management," and "Operations Dynamics Management." The platform integrates production data from on-site sensors through a factory information integration system. By utilizing analysis software, it provides real-time critical production information. In the event of deviations in process conditions, product quality, or equipment operation, proactive alarm alerts are utilized to enhance response speed and prevent abnormalities.

Management Professional Talent Training

The Company has established a digital and energy transformation project team to drive digital transformation across the entire organization, including AI talent training and industry-academia collaboration. The production plant and maintenance department have dedicated supervisors to drive AI applications, utilizing big data to construct dynamic operational management, manufacturing process optimization, energy-saving production, and intelligent management. Simultaneously, modules such as facility maintenance, occupational safety management, and energy-saving systems are implemented, following the principles of "point-line-plane" and transforming the organization comprehensively into an AI smart factory.

We continuously promote professional talent education and training to support the development of AI smart factories. We organize training courses based on various areas of expertise and collaborate with Taiwan AI Academy for training. Furthermore, we collaborate with academic institutions like the Ming Chi University of Technology and Chang Gung University to conduct internal education and training programs. In 2022, 11 participants completed the executive program, and 15 completed the technical program at the Taiwan AI Academy. Additionally, we conducted 5 internal education and training sessions, with 65 participants completing the training courses.

In 2022, technical program at the Taiwan AI Academy

Executive program	Technical program
11 Participants	15 Participants

Internal education and training sessions

5 Process 65 Participants

In 2022, engineering training sessions the training program.

12 Process 85 Participants

Industry-Academic Collaboration

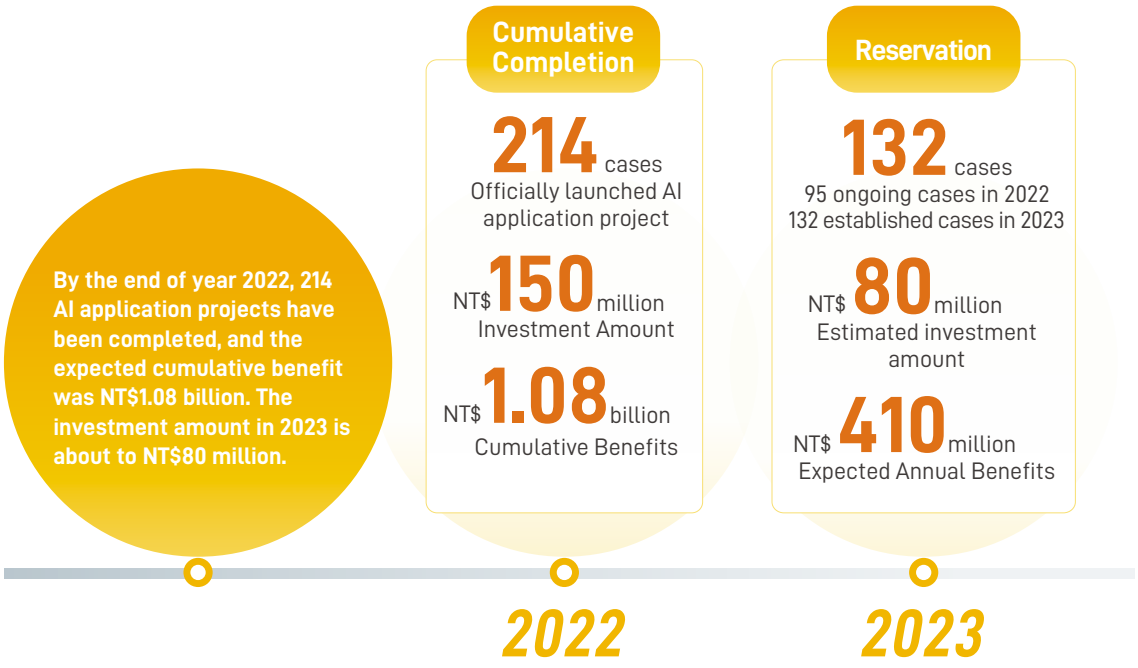
The Company collaborates with academic institutions such as Chang Gung University and Industrial Technology Research Institute (ITRI) to collect existing production data, analyze the information, and establish optimal production models. We are progressively establishing analytical management modules to enhance management capabilities and applications in various areas, such as manufacturing process optimization, energy conservation, carbon reduction, product quality prediction, defect identification, elimination control, raw material procurement, sales inventory, and factory safety management. We have conducted on-the-job training programs to enhance employees' professional skills. In 2022, we organized 12 process engineering training sessions, and 85 employees completed the training program.

Future Development Goals

We continuously recruit and train AI professionals to develop AI smart factories. We aim to maximize factory efficiency by simulating the four major applications of a factory and integrating operational dynamic management optimization. We also utilize AI technology to optimize internal operating processes and ensure factory safety. By seeking changes and innovations in operational models, we strive to achieve the Company's digital transformation goals.

Applications of AI Smart Factory

Applications	Analysis	Benefits
Process Optimization	Factors affecting manufacturing process stability are analyzed based on operational data, providing real-time optimized operation and energy-saving production guidelines.	• Minimize energy wastage and achieve real-time manufacturing process optimization control • Reduce raw material consumption • Maximize production efficiency
Equipment Monitoring and Management	Utilize data analysis to monitor equipment operation status and provide early warning for equipment adjustment, inspection, and maintenance to prevent unforeseen failures.	• Rotating equipment health warning • Rotating equipment bearing life prediction • Intelligent monitoring and early warning for abnormality and corrosion in pipeline equipment
Product Quality Improvement	Quantify the correlation between operational variables and quality to optimize manufacturing processes and enhance quality.	• Enhancing and stabilizing product quality • Quality prediction and early warning • Reducing product packaging abnormalities
Optimizing Factory Safety Management	To ensure personnel safety, we employ AI image recognition technology to supervise the proper use of protective equipment according to operational standards.	• Monitoring whether tanker truck unloading operators are properly equipped • Ensuring the personnel operating high-voltage switchboards in electrical rooms are properly equipped • Personnel SOP safety supervision
Optimizing Dynamic Operational Management	Integrate customer orders with production dynamics information to establish market trends and product profitability analysis modules, enhancing sales and production management and intelligent inventory and shipping management.	• Analysis of raw material price fluctuations • Sales, transportation, and inventory management • Comprehensive profitability analysis



2.5 Excellent customer service

2.5.1 Customer Relations

Customer first is our core value, and building a co-existing and prosperous cooperative relationship with customers is the Company's core belief. Sales reps facilitate the communication between customers and businesses. Good customer service and increasing customer satisfaction are not exclusive for sales department, but also a common, continuous goal for everyone in the Company. We attach great importance to the rights and interests of customers and their valuable advice. When the business of downstream customers is successfully promoted, it means supporting and affirmation for the company. We look forward to forming a virtuous circle, grow together with customers, and pursue win-win cooperation relationship.

Model of Positive Interaction

To achieve good positive relations, we visit our customers on a regular basis to discuss the development of existing and future products. We also take the initiative to form interactive and real-time channels of communication by organizing dealer conventions or participate in major trade shows every year to stay up to date on the latest market trends and to receive direct feedback from customers for existing and new products. Customer feedbacks are used as important references for operations and future improvements.

Stakeholder Engagement and Feedback Mechanism

Disclosure of Product Information

The Company can provide customers with information about the characteristics, uses, and quality specifications of the Company's related products at any time. Please refer to "Product Information" on the Company's website.

Please refer to "Product Information" on the Company's website.

Responses to Customer Feedback

The Company has established official channels for customers to give suggestions, voice complaints, exchange or return a product, and apply for reimbursement. Besides dealing with sales reps directly, customers can also voice their opinions on product sales service hotline and email inbox on our Company website.

When a customer complaint is submitted, the operations department where the incident has occurred will fill out a "customer complaint form." To ensure that customer complaints are properly handled, the complaint form will be processed into the computerized management system to keep track of progress after the accountability and improvement plan are confirmed by the head of the responsible department, and to ensure that various returns, concessions, and/or reimbursements are made. In 2022, we received 3 customer complaints, mostly attributable to product quality failing to meet customer needs. All cases were handled and resolved.

Charter of responses to Customer Feedback

Compliance and Customer Privacy

The company has formulated the "Personal Data Management Measures", and require all relevant departments to be listed as one of the independent inspection items. For employee or customer data, except for those with authority, if it is confirmed that due to business needs, the "application form for personal data collection, processing and utilization" must be signed, which can be provided only after relevant procedures are reviewed and confirmed to comply with laws and regulations, and the way of use must be strictly limited. In 2022, there were no data privacy violations.

2.5.2 Customer Satisfaction Survey

In order to collect customers' opinions and suggestions on the products and services provided by the Company, as a reference for the improvement of internal operation, and to meet the ISO 9001: 2015 quality management system, the quality commitment to customers and the spirit of customer satisfaction has been paid with attention. At present, the Company conducts customer satisfaction surveys for its domestic and export customers at least once a year. The questionnaire content contains eight major sections, and the survey results will be refered to improve internal exercising instructions.

The results of the 2022 customer satisfaction survey showed that the overall performance is higher than the "satisfaction" indicator. The recommendations by customers are included in the Company's operating policies, which are continuously reviewed and improved. The average customer satisfaction in 2022 was 4.5 points out of 5 points.

unit: Score

Year	2019	2020	2021	2022
Average	4.4	4.4	4.5	4.5

2.6 Procurement and Supply Chain Management

2.6.1 Overview of supplier procurement

The Company regularly holds supplier briefings, and uses the "open bidding" method to strengthen two-way communication and promotion, in order to build a harmonious atmosphere for buying and selling between the two parties, and achieve the goal of establishing an open, fair and just procurement and contracting mechanism. The Company also provides price enquiry, quotation, price negotiation, order, delivery, payment progress and other operational functions online through the electronic procurement platform of FPG to the suppliers and contractors. In addition, through a sound partnered supplier management mechanism, she can eliminate bad suppliers and cultivate long-term excellent suppliers.

The procurement and outsourcing policies mainly revolve around local vendors. She only sources goods from overseas and allows bidding from abroad as local suppliers are unable to meet the needs. The rate of local procurement in 2022 was 76%. To reduce carbon emissions from shipping vehicles, the Company has been collaborating with KERRY TJ Logistics Co. Ltd. in which the two enterprises jointly launched "Internet-based Purchasing Supplier Centralized Delivery Procedures." According to statistics, as of 2022, the supplier's centralized delivery rate reached 97%. In addition, the company has fully issued electronic invoices to replace traditional paper invoices. At present, the percentage of electronic invoices issued by manufacturers has reached 87%.

The rate of local procurement in 2022 **76** %

2022 the supplier's centralized delivery rate reached **97** %

The percentage of electronic invoices issued by manufacturers has reached **87** %

FCFC Supplier Classification

Raw Materials	Equipment	Construction
Manufacturers and dealers	Manufacturers and distributors	Contractors for construction, machinery and electrical equipment

Green Procurement

The company preferentially purchases environmentally friendly products that comply with renewable materials, recyclable, low-pollution or energy-saving environmental protection labels and the second category of environmental protection products. The main green products purchased include 264 products, namely recyclable plastic boards, energy-saving consumer electronics, recycled paints, and toner cartridges. Total procurement of green products in 2022 amounted to NT$120 million.

Total procurement of green products in 2022 amounted **264** Products

NT$ **120** million

2.6.2 Management mechanism

Supply chain CSR

FPG adheres to the spirit of sustainable operation and abides by the principle of fair trading, and requires the cooperating suppliers to meet the needs of environmental protection, work safety and human rights. In order to let the vendors understand the Company's concept of continuing to promote social responsibility and jointly promote the implementation, since October 2019, the "Supplier/Contractor Social Responsibility Commitment" and "Supplier/Contractor Social Responsibility Questionnaire" have been added. When the vendor logs in to FPG's electronic trading market or after ordering, a letter will be sent to ask the vendor to sign and reply, and abide by the relevant regulations.

In 2022, 2,118 local traders out of total 2,138 signitured the social responsibility commitment letter that the response rate reached 99%. In the other hand, there were 2,065 signitured the social responsibility commitment questionnaire survey, with a response rate 96.6%. At the same time, in order to ensure that the suppliers actually comply with the laws and regulations and avoid illegal activities such as bid rigging, bribery, favoritism, etc., the Company provides the "Formosa Plastics Group Integrity and Confidentiality Commitment for Suppliers". Suppliers who have responded are listed as preferred procurement suppliers.As of 2022, 2,115 companies have responded, with a response rate of 99%.

In 2022 local traders signitured the social responsibility commitment letter **99** %

In 2022 local traders signitured the social responsibility commitment questionnaire survey **96.6** %

In 2022 local traders the Company provides the "Formosa Plastics Group Integrity and Confidentiality Commitment for Suppliers" with a response rate **99** %

Supplier procurement regulations

All business activities and contents on investment agreements of the Company are carried out in accordance with local and national laws and regulations. In addition, contracts and agreements with suppliers, contractors and other business partners are all handled in accordance with national human rights laws, and it is also required to comply with the relevant regulations of the government on labor and occupational safety. The company's project contracting instructions for external bidding specify that the contractor must employ workers over the age of 16; therefore, in 2022, the company's contractor did not find any cases of employing child labor or violations of forced labor.

Supplier evaluation

Suppliers which intend to work with FCFC are required to be qualified with written and on-site references. FCFC only accepts those that pass the qualification test. If there are subsequent delivery (construction) overdue, poor quality, and violation of safety regulations, the supplier will automatically go through contractor evaluation. Only high-quality partners will have long-term cooperation with the Company. For each purchase, the requisition department shall check the delivery conditions according to the purchase requirements of different materials, including RoHS qualification, national relevant manufacturer's work safety qualification, ISO qualification, etc. Those who have ticked them are printed in the "Inquiry Form" and "Order Notice" to ask the supplier to cooperate with them. In addition, the aforementioned form explains that the company attaches great importance to sustainable operation and requires manufacturers to meet the requirements of environmental protection, work safety and human rights. To encourage suppliers abide by good work norms, once the suppliers are rated as excellent after evaluation are listed as priority procurement subjects to enhance their willingness to fulfill their social responsibilities.

Grievance mechanism for suppliers and contractors

The Company's electronic trading market is equipped with a professional customer service center, which provides suppliers with 24-hour complete consulting services for various problems during operation of the online quotation platform. In addition, a response and complaint platform has been set up in the electronic trading market system. After receiving feedback, dedicated personnel will review and reply to the feedback. In 2022, 79 cases of supplier feedback were received, which mainly inquired about the content of procurement cases, accounting for 55.6% of all cases.

In 2022 supplier feedback were received **79** cases

Mainly inquired about the content of procurement cases accounting **55.6** %

Vendor Classification Management System

The Company conducts preliminary investigations into its manufacturing capabilities and product quality to effectively manage our collaborating suppliers and contractors. We established a vendor classification management system based on the collaboration between each department and the supplier. This system includes specific evaluation criteria to track our partnerships' performance effectively and also serves as a basis for future supplier selection.

Suppliers

According to the inquiry, quotation data, and delivery records of the vendors who have delivered more than (inclusive) 3 pieces of goods in the past two years, we calculate scores to grade the vendors and provide a reference for price comparison and purchasing decisions.

Evaluation Criteria

- Price competitiveness: 15%
- Delivery delay rate: 35%
- Quality anomaly rate: 50%

Rating Grades: Six Grades from A to F

A, B	• Suppliers have the priority of price negotiations • Designated suppliers for important materials
C, D, E (Qualified)	Regular suppliers
F (Disqualified)	Blacklisted suppliers

Contractors

Relevant data is collected for various professional engineering contractors, including assessments of their factories, construction sites, equipment, capabilities in construction site safety management, technical expertise, and track record of contracts.

Evaluation Criteria

- Gather relevant information
- Assess factories and construction sites
- Examine construction equipment and machinery
- The capability of Construction Site Safety Management
- Technical Capability
- Construction Quality
- Project Schedule Management
- Legal Contracting
- Contracting Performance

Rating Grades: Six Grades from A to F

A, B	Contractors have construction capabilities with better quality and the ability to undertake larger-scale projects
C, E	Contractors with general construction capabilities and scale, or newly introduced contractors who are yet to be assessed
D, F	Blacklisted suppliers

3 The value of a good environment

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The Company is committed to formulating a policy on safety, health, and environmental protection, strongly emphasizing environmental preservation, maintaining ecological balance, and promoting community safety. We strive to provide a safe working environment for our employees and aim to achieve the vision of perpetual business operations aligned with environmental conservation.

Long-Term Goals of FCFC	Connecting Environment Goals
Develop renewable energy sources to reduce environmental impact, increase production and sales of green products, and minimize waste generation. ● Actively participate in the development of small-scale hydropower projects ● Expand solar power installations ● Recycle and reutilize discarded fishing nets from the ocean ● Recycle and reutilize industrial and consumer plastic waste	● Achieve an equipment capacity of 23 MW by 2030 ● Achieve an equipment capacity of 49 MWp by 2030 ● Achieve a product volume manufactured from recycled wastes that account for 12% of the total production volume starting from 2023. ● Achieve a sales volume of 4.5% with post-consumer recycled plastic particles in the category of rigid plastic particles.
Zero work injuries, zero disasters, and zero pollution	Promote "people-oriented" "essential safety management" for the goal of perpetual business operation

3.1 Mission in Maintaining Safety, Health, and Environmental Protection

We firmly believe that environmental protection and industrial development are equally important. Ensuring product safety and ensuring the safety of employees, contractors, factories and communities are our corporate social responsibilities and parts of corporate competitiveness. All employees must continue to develop their expertise, make safety, health and environmental protection the core of their work, and make continuous progress to become the best operating model in the industry.

3.1.1 Organization and Strategy of Safety, Health and Environment

Organization and Responsibility of Safety, Health and Environment (SHE)

In order to strengthen the Company's safety, health, and environmental protection management and sustainable operation needs, each plant has established a safety and health department directly under the president's office, which integrates the Company's safety, health and environmental protection policies, formulates and revises relevant management measures and implements them accordingly. The department promotes safety, health and environmental protection in the plants. The "Safety and Health Committee" meeting is held quarterly in the Company's plants. Senior managers, plant operation managers, plant managers, safety, health and environmental personnel, and employees conduct communication and review. It is hoped that the management of safety and environmental protection can achieve "zero workplace injuries, zero disasters, and zero pollution" goals. In addition, the "Energy Conservation and Emission Reduction Circular Economy Review Meetings" and "ESG Review Meetings" are held regularly every month to review various response goals, review the implementation results, and adopt a rolling review to revise the goals immediately.

Safety, Health and Environmental Management System

FCFC has systematized SHE management, including the SHE regulations, a management information system, and an office automation system, for employees and contractors to follow. In addition, in order to bring the safety, health and environmental management practices into line with international standards, a total of 20 production plants in 3 areas, including Yunlin Mailiao, Chiayi Xingang, and Yilan Longde, have obtained ISO 14001 Environmental Management System and CNS 45001 Occupational Safety and Health Management System certification.

Strategies and Actions for Environmental Protection

Establishing Goals

Holding true to the mission of aiming at the sovereign good, the Company actively promotes various environmentally- friendly improvements and establishes annual goals. We also regularly understand and review the progress of goal implementations.

Reinforced coaching is implemented for plants falling to keep up with preset goals, and rewards are given for plants with good performance in order to enhance employee participation and sense of accomplishment.

Adoption of Advanced Processing Equipment

We adopt the most advanced manufacturing processes and pollution control equipment based on the concepts of best available technology (BAT) and best available control technology (BACT) from the beginning of the plant design stage.

Review and Improvements

We care about the quality of air, soil, groundwater, ocean and public health in nearby areas by strictly controlling water resources and consumption of energy as well as through performing constant reviews and improvements.

3.1.2 Energy Conservation, Carbon Reduction and Pollution Control Organization

Energy Conservation, Carbon Reduction and Pollution Control Organization

The Company established the "ESG Committee of Formosa Chemicals & Fibre Corporation" with the Chairman as the convener to promote water conservation, energy conservation and carbon reduction, and coordinate the Company's water conservation, energy conservation and pollution prevention. The Committee formulates the environmental protection implementation strategies and projects such as waste resource recycling and process waste reduction. The investment amount in 2022 reached NT$910 million.

The investment amount in 2022 reached

NT$ **910** million

3.1.3 Environmental Costs

Introducing the environmental accounting system and grasping environmental expenditure information can prevent the impact on the environment caused by operational activities and serve as a reference for improving the efficiency of resource use. Total environmental expenditure in 2022 was NT$1.49 billion.

Total environmental expenditure in 2022

NT$ **1.49** billion

FCFC's 2022 Environmental Cost Statement

Unit: NT$ million

Type	Item	Sum
Environmental Costs	Operating Costs	1,067
	Costs Associated with Suppliers and Customers	27
	Management Costs	289
	Social Event Costs	8
	Fees and Energy Taxes	97
	Total	1,488

Note:The operating costs listed above include green procurement expenses, product recycling and reproduction expenses, and expenses derived from product services for environmental protection.

3.1.4 Clean energy investment

Renewable Energy Facility Generation and Carbon Reduction in 2022

Types of Renewable Energy Facilities	Energy Generation in 2022 (thousand kWh/year)	Carbon Reduction in 2022 (metric tons/year)
Hydropower Generation	63,547	31,901
Solar Power Generation	4,000	3,693

Newly Added Renewable Energy Facilities and Cumulative Installed Capacity in 2022

Types of Renewable Energy Facilities	Newly Added Equipment Capacity in 2022	Cumulative Equipment Capacity in 2022
Hydropower Generation	75kW	22,541kW
Solar Power Generation	7,814kWp	9,311kWp

In addition to actively improving the process energy conservation and carbon reduction projects, the Company also cooperates with the government's renewable energy policy investing in renewable facilities. Chia Nan Industrial Co. Ltd., jointly invested by the Company and Chia Nan Irrigation Association, invested in the construction of three hydraulic plants in Tainan City, namely Wushantou, Xikou and Batian. In recent years, the Company has invested in hydroelectric power generation equipment in line with the energy transition trend. By utilizing the water pressure from the water supply pipelines within the factory, we installed a 75kW water turbine generator set in the Lantan water supply pipeline at the Xingang plant site. This project was designed, installed, and is being operated and maintained by the Company. It was put into operation in October 2022, marking a successful entry into the small hydropower generation field.

Power plant site and small hydraulic	Power generation Equipment	Equipment capacity (kW)	Power generation in 2022 (kWh)	CO_2 reduction tons/year
Wushantou	Hydraulic	8,750	26,879	13,494
Xikou	Hydraulic	2,196	29,459	14,788
Batian	Hydraulic	11,520	7,152	3,590
Xingang	Solar energy	75	57	29
Total	—	22,541	63,547	31,901

The Company actively shares the development technology of small-scale hydropower generation and participates in pipeline-type small-scale hydropower projects with Taiwan Water Corporation. We have been contracted to construct a small-scale hydropower plant at the Shalu Water Distribution Center, which includes a tour room for observation and education purposes. In addition, in collaboration with landscape design, the factory building is adorned with colorful artwork that incorporates the characteristics of renewable energy. The plant is scheduled to commence operations in February 2025. Upon completion, it is estimated that the annual power generation will reach 5,720 MWh, resulting in an annual carbon reduction of approximately 2,870 metric tons.

The Company has an experienced design and construction team that can maximize and optimize small-scale hydropower generation while ensuring safe and stable operation. We are dedicated to making a contribution to small-scale hydropower generation in Taiwan. We will continue developing suitable small-scale hydropower plants to position small-scale hydropower as the third-largest renewable energy source in Taiwan.

Project at the Shalu Water Distribution Center

Conceptual Design Illustration of the Artistic Mural on the Shalu Small Hydropower Plant Building

In the aspect of solar power development, the Company had installed 1,497kWp of solar power generation equipment in the Xingang plant site in 2018. In addition, the same plant site added 7,814kWp of solar power generation equipment in 2022, the total power generation equipment reached 9,311kWp which would annually generate 4,000MWh electric power with reducing 3,693 tons of CO_2. To raise the capacities of solar power generation, additional 34,089kWp solar power generation equipment is on-going, and the total installed capacities of solar power generation will reach 43,400kWp by 2025, growing more than four times as current capacities.

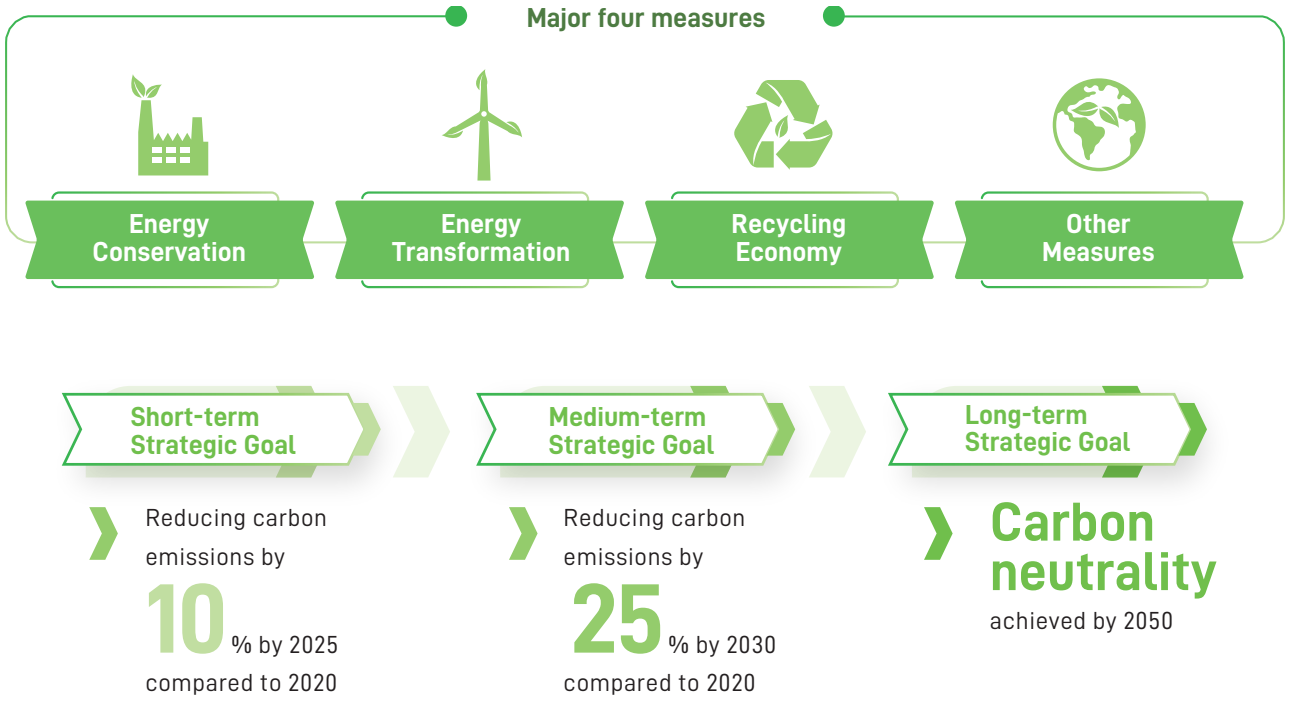
Power plant site and small hydraulic	Power generation Equipment	Equipment capacity (kW)	Power generation in 2022 (kWh)	CO_2 reduction tons/year
Xingang and Mailiao Plant Sites	solar power	9,311	4,000	3,693

3.2 Mitigation and adjustment of climate change

To mitigate the potential impacts of climate change, the Company has established an ESG Promotion Organization. We have formulated various environmental protection policies and emission standards for relevant departments to follow and implement. Additionally, we hold monthly "Energy Conservation, Emission Reduction, and Circular Economy Review Meetings" as well as "ESG Review Meetings" to set policy objectives, review implementation outcomes, and continuously revise targets through a rolling review process.

The Company adopts a proactive approach to address the risks and opportunities associated with climate change topics. In response to the global ESG development trends and goal number 13 - Climate Action of the United Nations Sustainable Development Goals (SDGs), we have set a carbon neutrality target for 2050. The Company has established a sustainable development pathway, setting short, medium, and long-term goals. We have also devised four major implementation strategies: 1. Energy efficiency improvement, 2. Energy transition, 3. Circular economy, and 4. Other's measures.

3.2.1 Corresponding strategies for climate change risk



Since four major improvement measures completed in 2022, the total carbon emission reduction was equivalent to 811.2 thousand tons.

I. Energy Conservation: To optimize manufacturing processes for raise energy utilization efficiencies, carbon emission reduction was equivalent to 289 thousand tons.
II. Energy Transformation: By use of increasing utilization of renewable energy, carbon emission reduction was equivalent to 503 thousand tons.
III. Recycling Economy: Recycling ocean discard and plastic wastage, carbon emission reduction was equivalent to 14.2 thousand tons.
IV. Other Measures: Pursuing paperless practice in office and using green products, carbon emission reduction was equivalent to 5 thousand tons.

Task Force on Climate-related Financial Disclosures, TCFD

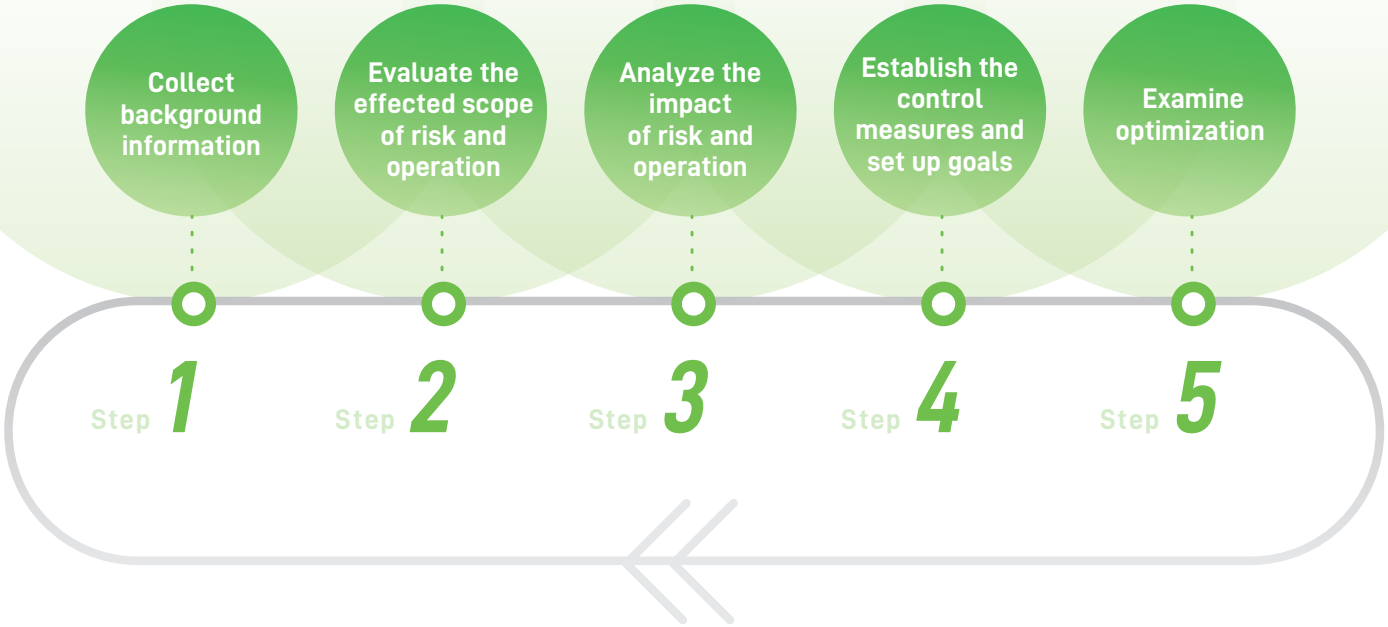
	Governance	Strategy	Risk Management	Index and targets
Management strategy and action plan	Responsible unit: ● Digital and energy transformation project team ● ESG Promotion Organization The way the organization works ● The Board of Directors follows the principle of convening meetings at least once per quarter and discussing the progress of ESG initiatives at least once annually. ● Expansion of Renewable Energy Generation	● Assess and determine the scope of risks related to climate change impacts on factors such as finance, business reputation, global energy supply, economic trends, and regulatory compliance. Then, formulate operational strategies to report to the Board of Directors. ● Develop short, medium, and long-term strategies based on scenarios such as RCP2.6, RCP4.5, RCP6.0, RCP8.5, and INDC to serve as environmental assumptions and aiming to reduce greenhouse gas emissions with a target of limiting global warming to 2° C.	ISO 14001 Environmental Review Practice Guidelines	● We continue to conduct greenhouse gas inventories and verification in accordance with the ISO 14064-1 standard, and we aim to have renewable energy account for 5% or more of the total electricity consumption by 2030. ● Establish goals based on the Science-Based Targets initiative's (SBTi) principles.
Implementation	● Hold a monthly review meeting on energy conservation and emission reduction circular economy. ● Hold monthly ESG review meetings.	● Energy Efficiency Improvement: We have achieved a carbon reduction of 289 kilotons of CO_2e by optimizing our manufacturing processes and enhancing energy efficiency in 2022. ● Energy Transition: Promoting the reduction of coal usage and increasing the use of renewable energy sources resulted in a carbon reduction of 503 kilotons of CO_2e in 2022. ● Circular Economy: Promoting the recycling and reuse of marine and plastic waste, resulting in a carbon reduction of 14.2 kilotons of CO_2e in 2022. ● Other Measures: We have implemented paperless offices and green products, contributing to a carbon reduction of 5 kilotons of CO_2e in 2022.	● Regularly analyze and consolidate climate change, energy risk and opportunity information to assess the associated risks and opportunities. ● In accordance with the ISO 14001 assessment process, identify environmental risks and opportunities annually and develop corresponding strategies to address each risk and opportunity	● With reference to the adoption of the SBTi principles, we will continue to drive carbon reduction initiatives. Our goal is to achieve a 22.5% reduction in carbon emissions by 2027, compared to the levels in 2018. ● Based on the 2020 baseline, we aim to reduce carbon emissions by 10% by 2025, reduce 25% by 2030, and achieve carbon neutrality by 2050.
Related Links	3.2.1 Corresponding Strategies for Climate Change Risk	3.2.2 Climate Change Risk and Opportunity Management	3.2.2 Climate Change Risk and Opportunity Management	Sustainable Development Goal 3.2 Mitigation and Adaptation of Climate Change

3.2.2 Climate change risk and opportunity management

The Company conducts climate change risk identification procedures by referring to the Risk and Opportunity Matrix of ISO 14001 Environmental Review Operational Guidelines to identify procedures and assess climate change-related risks and opportunities, as well as plan response measures in advance for possible potentially high-risk events. The Company aims to reduce financial impacts and reduce loss through risk mitigation or risk avoidance and by reducing the number of risk occurrences.

Climate Change Risk Issue Analysis Process

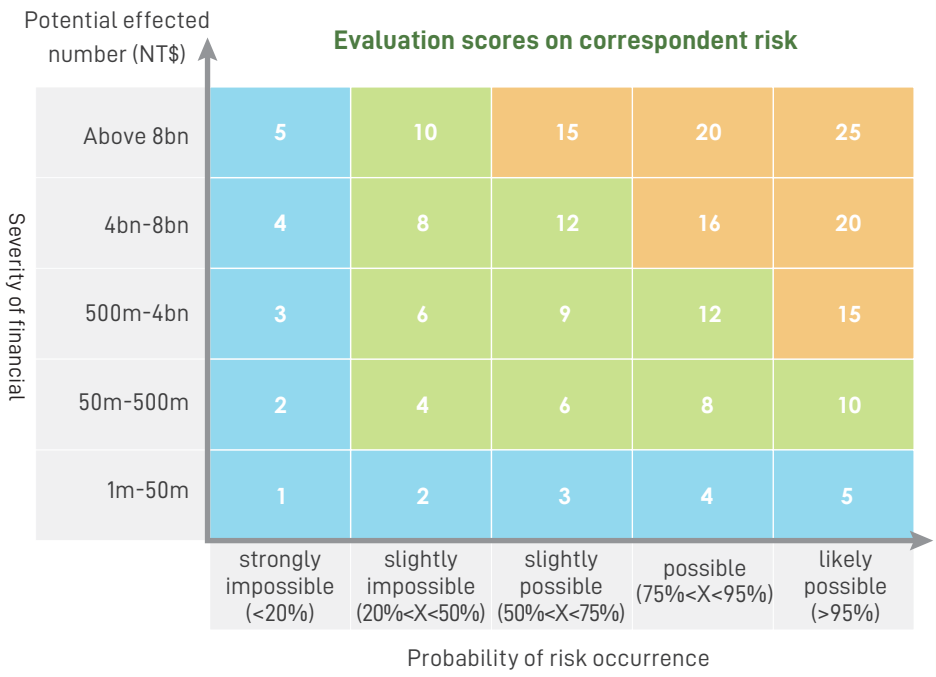
Based on the information collected, the Company analyzes the financial and non-financial impacts of climate-related risks, assesses business opportunities, and discusses strategies and measures to address and respond. Analyze and assess the physical and transition risks associated with climate scenarios, and analyze the impacts on the Company's market, technology, business reputation, finance, and operations in the future. The following table summarizes the list of climate risks, opportunities, and financial impacts.



Analysis results of climate change risk issues

Based on the matrix scores, the Company divides climate change-related risk scores into three levels, with 1-5 as low risk, 6-12 as medium risk, and 15-25 as high risk. The corresponding risks management is dealt with in sequence which divided into three categories: eliminating risks, reducing risks, and taking risks, and defines the financial impact of more than NT$1 million as a material impact, which is included in the risk and opportunity matrix assessment. Relevant response plans and management work implementation are included in the assessment and supervision or combined with the management methods of the environmental management system (ISO 14001), and imported into the Company-wide environment-related risk management system.

Climate change risk matrix



15-25 points:
high risk and opportunity
Prioritize the generation of corresponding management solutions

6-12 points:
moderate risk and opportunity
No action is currently required, keep monitoring changes, discussed main issues are as follows.
1. Impose carbon emission tax,water rate and CBAM
2. Potential impacts on high carbon emission products
3. Impacts on harmful reputation or image
4. Water flood or shortage at plant sites

1-5 points:
low risk and opportunity
Acceptable risk, discussed main issues are as follows.
1. Recycling renewable materials and applications diversification
2. Develop renewable energy
3. Produce low carbon emission products

Risk / Opportunity Issue List

Issue Number	Risk / Opportunity Issue	Description	Degree of Impact (High / Medium / Low)
1	Risk / Policy and Regulation	The government plans to collect carbon fees in the future to respond to climate change.	Medium
2	Risk / Policy and Regulation	The government announced the amendment to the Water Act in February 2023, imposing a "water consumption fee" on high-volume water users.	Low
3	Risk / Policy and Regulation	Starting in 2027, the European Union will fully implement the "Carbon Border Adjustment Mechanism," which initially regulates the direct carbon emissions of five major industrial products: electricity, cement, chemical fertilizers, steel, and aluminum. This mechanism involves imposing a carbon fee on these products.	Medium
4	Risk / Market	Increased awareness of green consumption and growing demand for environmentally friendly products have led to increased requirements. Consequently, considering the product life cycle and value chain, high-carbon products may adversely impact the Company.	Medium
5	Risk / Business Reputation	Financial or investment institutions evaluate clients' performance in ESG when assessing financing or investment opportunities. Meeting ESG sustainability requirements has a positive impact on the Company.	Low
6	Physical Risk / Acute	Considering the impacts of climate anomalies such as strong winds or typhoons, the factory premises must have a designated safe parking area to prevent manufacturing process hazards. Similarly, in heavy rainfall or floods, the factory premises may need to halt operations due to waterlogging, leading to the risk of downtime losses.	Low
7	Physical Risk / Chronic	Based on the data from 1986 to 2005 as the baseline period, it is estimated that in the near future (2016 to 2035), the climate conditions in the factory area will experience two months each year of water scarcity or drought. Because of that, there is a risk of operational losses due to work stoppages.	Medium

Issue Number	Risk / Opportunity Issue	Description	Degree of Impact (High / Medium / Low)
8	Opportunity / Technology	Promote sustainable resource utilization by recycling raw materials and repurpos-ing marine waste for product manufacturing.	Medium
9	Opportunity / Re-source Efficiency	The customer wishes to sell products that contain post-consumer recycled materials, and the Company's technology meets the market demand.	Medium
10	Opportunity / Re-source Efficiency	The Company has established renewable energy systems, such as solar and hydro-electric power, in compliance with the requirements of the "Renewable Energy Development Act."	Medium
11	Opportunity / Technology	In response to the demand for renewable energy policies, we are implementing green energy and energy storage facilities to develop applications for renewable en-ergy equipment products.	Medium

The Financial Impact of Risk Issues

Issue Number	Risk Category / Risk Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up- stream	Operation	Down-stream	Description	Potential Finan-cial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
1	Policies and Regulations / Carbon Fee Collection	Medium		V		To address climate change, the government plans to implement carbon fees or carbon taxes in the future.	The Company's greenhouse gas emissions are approximately 8.5 million metric tons. Based on a rate of NT$300 per metric ton, we will be required to pay an annual carbon fee of NT$2.55 billion, resulting in increased expenditure.	1. We developed 14 energy-saving and carbon reduction initiatives to promote energy efficiency improvements and energy transition to reduce greenhouse gas emissions. 2. Implementing internal carbon pricing
2	Policy and Regulation / Water Consumption Fee Collection	Low		V		The government announced the amendment to the Water Act in February 2023, imposing a "water consumption fee" on high-volume water users.	When exceeding the allocated water volume during the drought period, the excess water will be charged at NT$3 per cubic meter, resulting in a total water consumption fee of NT$37.386 million. By the end of 2024, the fee collection will be reduced by half to NT$19 million.	1. Improve the recycling rate of each factory within the Company to exceed industry standards. 2. Conduct a water footprint assessment utilizing AI technology to enhance the overall water conservation efforts within the entire Company.
3	Policy and Regulation / EU Carbon Tariffs	Medium		V		The European Union (EU) will fully implement the "Carbon Border Adjustment Mechanism" starting in 2027. High-carbon products imported into Europe will be subject to declaration and carbon tariffs.	Based on the estimated export value of NT$1.64 billion to the European Union (EU) in 2022, considering a cost increase of 10%, the expenditure is expected to increase by NT$164 million.	1. Promote energy efficiency initiatives of manufacturing processes to reduce carbon emissions. 2. Promote energy transition and circular economy practices.
4	Market / Customer's Request for Carbon Reduction	Medium	V	V	V	Certain textile clients are requesting that over 90% of finished products be made from recycled materials by the end of 2030.	With an estimated selling price of environmentally friendly yarn at NT$15,574 per piece and a projected annual production capacity of 28,270 pieces, the goal for 2026 is to account for over 50%, resulting in an annual impact of NT$220 million.	Implement the circular economy concept by utilizing recycled waste as raw materials. Develop high-value, low-carbon products to reduce the carbon footprint of our products.

Issue Number	Risk Category / Risk Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up- stream	Operation	Down- stream	Description	Potential Finan-cial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
5	Risk / Business Reputa-tion	Low		V	V	Financial or investment institutions evaluate clients' performance in ESG when assessing financing or investment opportunities.	Based on the estimated total liabilities of NT$182.18 billion from the consolidated financial statements for 2022, for every 1% increase in financing costs, interest expenses would increase by NT$18.2 billion.	1. Participate in carbon disclosure initiatives such as CDP, TCFD, and SBTi to showcase the effectiveness of carbon reduction efforts. 2. Obtain preferential interest rates through the "Sustainable Linked Loan" program the Bank of Taiwan offers.
6	Acute Physical Risks / Floods and Waterlogging	Low		V		Factory shutdown due to heavy rainfall or flooding caused by climate anomalies	Based on the estimated revenue of NT$247.35 billion in 2022, the business would incur a daily revenue loss of NT$678 million for each day of operation suspension.	1. Conduct monthly monitoring of water consumption at each factory site. 2. Implement comprehensive measures such as raising the height of drainage ditches and levees, and installing additional waterproof barriers and pumping stations.
7	Chronic Physical Risks / Water Scar-city	Medium		V		Water scarcity caused by climate anomalies will result in production reduction measures across each manufacturing process during periods of water rationing. Periods of severe water scarcity will result in production reduction or shutdown.	According to the water scarcity contingency measures devised by the Company for the Mailiao plant, in the event of a 10% water rationing, priority will be given to reducing production at the PTA plant and PC plant. Based on the estimated revenue of NT$40.65 billion in 2022, the business would incur a daily revenue loss of NT$110 million for each day of operation suspension.	1. Implement emergency water conservation measures to promote water reuse. 2. Establish a seawater desalination plant with a daily capacity of 100,000 metric tons at the Mailiao plant.

The Impact of Opportunity Issues on Finances

Issue Number	Opportunity Category / Opportunity Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up- stream	Operation	Down- stream	Description	Potential Finan-cial Impact	Corresponding Management Strategy
1	Technology / Circular Economy	Medium	V	V	V	Promote sustainable resource utilization by recycling raw materials and repurposing marine waste for product manufacturing.	Introduce circular economy practices, and enhance the recycling of marine waste or nylon scraps to produce recycled products. By 2023, after the completion of the Taiwan factory's expansion, the total monthly production capacity will reach 1,250 metric tons per month.	Introduce circular economy practices, and develop recycled and regenerated materials to reduce the consumption of petrochemical raw materials.
2	Resource Ef-ficiency / Waste Reutilization	Medium	V	V	V	Customers desire to incorporate post-consumer recycled materi-als in the prod-ucts for sale, and the Company excels in ad-vanced technol-ogies to meet this requirement.	In 2022, the sales volume of environmentally friendly recycled plastic particles reached 2,113 metric tons, re-sulting in an ap-proximate rev-enue impact of around NT$70 million.	Utilize recycled plastic materials as manufacturing process inputs to enhance the efficiency of waste resource utilization.

Issue Number	Opportunity Category / Opportunity Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up- stream	Operation	Down- stream	Description	Potential Finan-cial Impact	Corresponding Management Strategy
3	Resource Ef-ficiency / Renewable Energy	Medium		V		According to the amendment of the "Renewable Energy Devel-opment Act," starting from 2021, a con-tractual capacity of 10% for re-newable energy will be estab-lished within five years.	Based on an es-timated photo-voltaic capacity of 43,123 kWp, the annual ben-efit is projected to be NT$100 million. Addi-tionally, with an estimated hy-droelectric ca-pacity of 23,256 kW, the annual benefit is pro-jected to be NT$150 million, resulting in a to-tal of NT$250 million.	1. Install solar photovoltaic and hydropower generation equipment as planned. 2. Invest in small-scale hydropower generation.
4	Technology / Diverse Ap-plications of Products	Medium		V		In accordance with national policies, we aim to add over 3,000 MW of renewable ener-gy storage ca-pacity by the end of 2025.	By 2026, the business oppor-tunity for plastic materials used in solar panel racking systems, energy storage cabinets, and electric vehicle charging stations is estimated to reach NT$580 million.	1. We will collaborate with industry peers to continuously develop related products in response to market demand. 2. Develop microgrid systems to integrate renewable energy sources and enhance operational efficiency.

3.2.3 Climate risk scenario analysis

The Company uses the national public platform TCCIP (Taiwan Climate Change Projection Information and Adaptation Knowledge Platform), and refers to government agencies to conduct "Intended Nationally Determined Contribution" (INDC) The goal is to use the model of scenario analysis to simulate the RCP online scenario of the Company's plant area, and simulate the four scenarios of RCP2.6, RCP4.5, RCP6.0 and RCP8.5, and predict the temperature and rainfall during the period from 2022 to 2040. Change the situations that each plant area may face, include the plant area and main upstream and downstream supply chains in the situation analysis, analyze the climate change and rainfall under different conditions, and estimate the impact on water resources under different situations.

Plant Site	Longde Plante	Mailiao Plan	Xingang Plant	Changhua Plant
Scenario analysis	Estimate the scenarios of RCP2.6, RCP4.5, RCP6.0, RCP8.5, etc., and use the RCP 8.5 scenario to carry out the risk assessment of extreme climate			
Sea level rise	Partially affected	Affected	Not affected	Not affected
Lower than the flooding levels of 2050	Not affected	Affected	Partially affected	Not affected
Total rainfall	1,085mm	1,085mm	1,085mm	1,085mm
Maximum storm strength	Maximum consecutive days of rain is 7.5 days	Maximum consecutive days of rain is 7.5 days	Maximum consecutive days of rain is 7.5 days	Maximum consecutive days of rain is 7.5 days
Maximum temperature rise (℃)	2.66	2.59	2.57	2.6

Plant Site	Longde Plante	Mailiao Plan	Xingang Plant	Changhua Plant
Waterflooding risk	High risk	Medium-and-low risk	High risk	Medi-um-and-low risk
Drought risk	Medium-and-low risk	Medium-and-low risk	Medium-and-low risk	Medium-and-high risk

The predicted risk evaluation results from flood damage and weakness (based on RCP 8.5 scenario analysis)

The rank of evaluated water flooding risk

Evaluated water flooding risk at each plant site is to apply strategic plans.

Two sites are ranked medium-and-low risk, accounting for 50%.

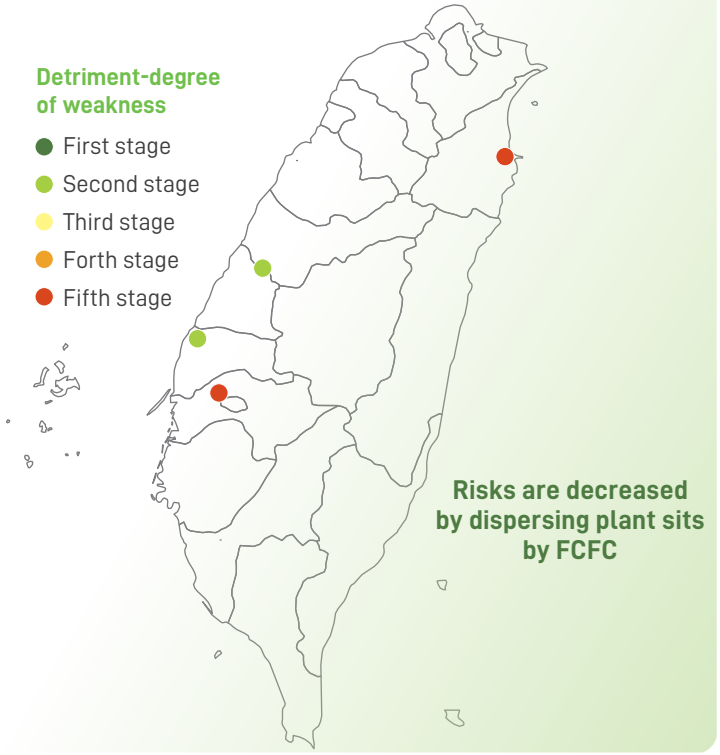
Non-site is ranked medium-and-high risk.

Two sites are ranked medium-and-high risk, accounting for 50%.

Medium-and-low risk

Medium-and-high risk

High risk



The rank of evaluated drought risk

Evaluated water flooding risk at each plant site is to apply strategic plans.

Three sites are ranked medium-and-low risk, accounting for 75%.

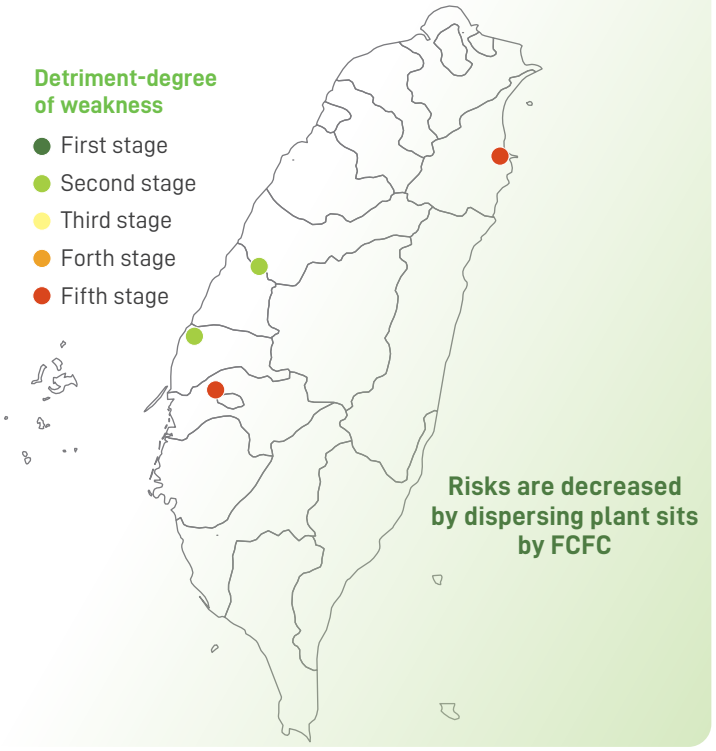
One site is ranked medium-and-high risk, accounting for 25%.

Non-site is ranked medium-and-high risk.

Medium-and-low risk

Medium-and-high risk

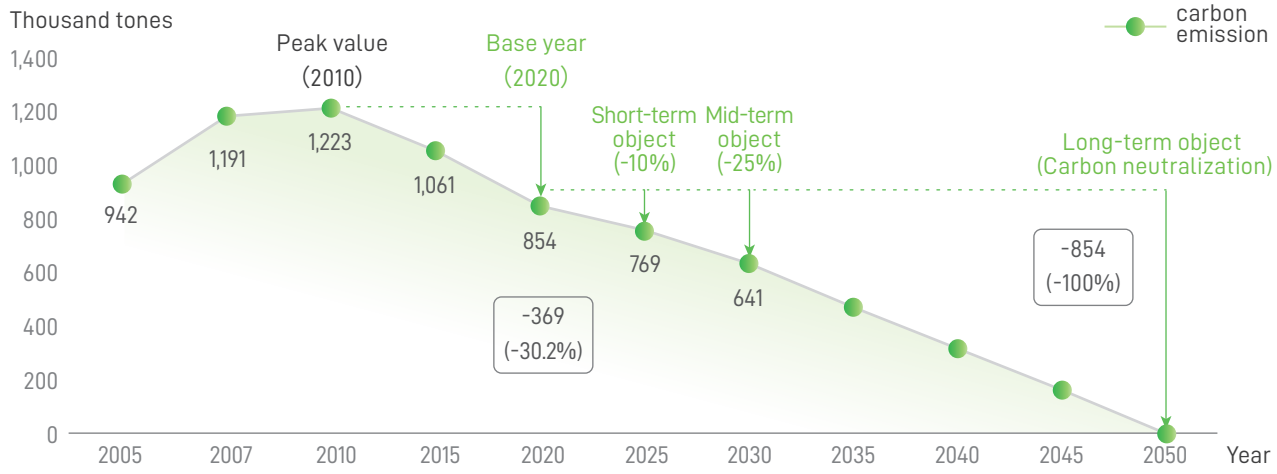
High risk



3.3 Greenhouse Gas Emissions and Energy Management

3.3.1 Carbon Neutrality Roadmap

Route of carbon emission reduction (including Formosa INEOS Chemicals Corporation)



The Company has set up the dating route, and declared the year 2020 as a base year to plan to reduce carbon emissions. The carbon emissions in 2020 already decreased by 30.2% compared with 2010, and carbon neutrality will be achieved by 2050. The short-term goal is to reduce carbon emissions by 10% by 2025 compared to 2020; the medium-term goal is to reduce carbon emissions by 25% by 2030 compared to 2020. After the renewal numbers of equipment and the transformation of energy use, if the production efficiency of the equipment reaches the expected goal, the actual reduction of carbon emissions is expected to be higher than the goal number. The Company will also join the Science-Based Reduction (SBTi) goal initiative, aiming for a temperature rise of no more than 2° C. The carbon reduction goal in 2027 will be compared with the base year of 2018 to achieve a carbon reduction goal of 22.5%.

3.3.2 Performance of energy conservation and carbon emission reduction in plant

In 2022, total 288 energy conservation and carbon emission reduction improvement cases were completed with annually carbon emission reduction about 289 thousand tons, and the total investment was NT$ 910 million with annually investment returns NT$ 130 million. From 2016 to 2022, completed improvement cases of energy conservation and carbon emission reduction had reached 2,840 with annually carbon emission reduction about 1,632 thousand tons, and the total investment was NT$ 7.08 billion with annually investment returns NT$ 5.29 billion.

FCFC (including Formosa INEOS Chemicals Corporation) Energy Conservation from 2016 to 2022

Item \ Year	Accumulation (2016 to 2021)	2022	Accumulation (2016 to 022)	Ongoing	Total
Number of Improvement Cases	2,552	288	2,840	320	3,160
Steam Saved (Tons/Hour)	399.7	100.2	499.9	461.2	961.1
Power Saved (kWh/Hour)	54.3	7.3	61.5	15.3	76.9
Fuel Saved (Tons/Hour)	6.1	0.5	6.6	6.3	12.9
CO_2 reduction (Thousand tons/year)	1,343	289	1,632	1,315	2,947
Amount Invested (NT$100 Million)	61.7	9.1	70.8	92.2	163.1
Investment Returns (NT$100 Million/Year)	39.9	13.0	52.9	44.7	97.6

Notes: The improvement case includes Mailiao, Changhua, Longde, Xingang plant sites and Formosa INEOS Chemicals Corporation

Summary Sheet of the 14 Dedicated Promotion Items for Energy Conservation and Carbon Reduction in Taiwan Plants from 2021 to 2022

Unit: tons/year

Project Category		Completed improvements in 2021 (carbon emission reduction)			Completed improvements in 2022 (carbon emission reduction)		
		Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total suppression amount (ton/year)	Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total suppression amount (ton/year)
1	Wastewater recycling/water reduction improvements	-	404	404	-	810	810
2	Rainwater storage and reuse improvement system	-	-	-	-	-	-
3	Improvement of cooling water system and refrigeration and air conditioning systems	-	718	718	-	1,466	1,466
4	Distillation tower optimization and improvement	4,340	30,394	34,734	-	15,791	15,791
5	High and low order energy recycling improvements	-	28,569	28,569	-	85,155	85,155
6	Steam piping system, equipment insulation and drainer improvement	-	26,060	26,060	-	2,497	2,497
7	Combustion equipment improvement	7,613	3,529	11,142	6,910	4,810	11,720
8	Improvement of rotating equipment (including pumps, windmills, compressors, and mixers) and conveyor systems	-	22,444	22,444	-	20,635	20,635
9	Air compressor improvement	-	6,117	6,117	-	1,306	1,306
10	Power system and lighting system improvements	-	567	567	-	2,790	2,790
11	FLARE recycling improvement	-	-	-	-	-	-

12	Process and equipment improvement (energy efficiency improvement)	-	145,368	145,368	1,972	136,313	138,285
13	Establish renewable energy facilities	-	-	-	-	598	598
14	Intelligentized manufacturing process	-	16,074	16,074	186	7,636	7,822
Total		11,953	280,244	292,197	9,068	279,807	288,875

Note 1: The project type is cases closed in 2022.

Note 2: Greenhouse gas types: The gas inventory includes carbon dioxide, methane, nitrous oxide, hydrofluoro carbon, perfluorocarbon, and sulfur hexafluoride.

Note 3: Statistical method: When the project is ended, the relevant carbon reduction effect is calculated.

Noes 4: The improvement case includes Mailiao, Changhua, Longde, Xingang plant sites and Formosa INEOS Chemicals Corporation.

3.3.3 Greenhouse gas emissions management

Material Topic - GHG Emissions Management

Material Topic

Description	As the average temperature rises, it leads to sea-level rise and changes in rainfall patterns, amplifying the generation of extreme weather events. This increase in market uncertainty due to changing produc-tion and operational patterns raises potential operational risks.	
Policy Com-mitments	1. Full disclosure of climate-related financial disclosure reports, declaring a 10% reduction in carbon emissions by 2025, a 25% reduction by 2030 based on the 2020 baseline, and achieving carbon neutrality by 2050. 2. Join the CDP Carbon Disclosure Project, which includes climate change and water security. Establish science-based carbon reduction targets and participate in the Science Based Targets initiative (SBTi).	
Management Actions	Preventive and Mitigation Actions	To reduce greenhouse gas emissions, we are promoting various energy-saving and emission-reduction measures, including energy transition to reduce carbon emissions, installing green energy facilities to increase the use of renewable energy, and optimizing production efficiency.
	Action Plan	1. Establish an ESG promotion organization and hold energy and water conservation meetings chaired by the Chairman monthly to review the initiatives' progress and effectiveness. 2. Establish unit carbon emission annual targets for each product and conduct monthly energy-saving performance evaluations across all facilities. Review the achievement rate of performance every month. 3. Introduce new high-efficiency production equipment or technologies to reduce carbon emissions.
Performance Tracking	1. Participated in the 2022 CDP Climate Change Disclosure Survey and achieved a "Leadership A" ranking. 2. Longde Plant and ARO-3 Plant were recognized as top-performing companies in greenhouse gas reduction for 2022.	
Stakeholders Engagement	1. Shareholders and customers: Regular shareholder meetings and briefings are held to explain the impact and response strategies related to this issue. Shareholders can also provide feedback and opinions through the Company's website. 2. Government agencies: We adhere to the Climate Change Response Act and Securities and Exchange Act. We conduct annual greenhouse gas inventories and verification operations and report them to the regulatory authorities.	

The Company has established self-guided management procedures in carbon emission inspection for controlling progresses of energy conservation improvement cases and evaluating investment returns. Among the plant sites of the Company, the Yunlin Mailiao Complex committee was verified by the British Standards Institution (BSI), and the Changhua, Chiayi Xingang and Yilan Longde plant sites were verified by the Taiwan Inspection Technology Company (System & Serviced Certification, SGS). The last two years of greenhouse gas emissions of each plant area are disclosed in the following table. Before the publication of this report, the data for 2021 is still under verification.

Greenhouse Gas Emissions Formosa Chemicals & Fiber Corp. Year 2020

Unit: tons CO_2e

Plant Site	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,006,580	1,338	2,468,056	1,784,610	5,260,584
Scope 2	2,600	28,671	8,915	3,238,218	3,278,404
Total	1,009,180	30,009	2,476,971	5,022,828	8,538,988
Scope 3	18,725,825				

Greenhouse Gas Emissions Formosa Chemicals & Fiber Corp. Year 2021

Unit: tons CO_2e

Plant Site	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,309,470	1,580	2,213,660	1,873,507	5,398,217
Scope 2	135	26,362	66,967	3,171,649	3,265,113
Total	1,309,605	27,942	2,280,627	5,045,156	8,663,330
Scope 3	18,701,610				

Note 1: 2021 inventory report based on SGS and BSI verification agency

Note 2: GHG emission factors used in the GHG inventory are quoted from the Greenhouse Gas Emission Factor Table Version 6.0.4 (updated on January 17, 2018) published by the Environmental Protection Administration, Executive Yuan. The inventory is location based.

Note 3: Calculations are based on the Global Warming Trends data from Intergovernmental Panel on Climate Change's Fourth Evaluation Report published in 2007.

Note 4: The data of the 2020 greenhouse gas inventory report comes from the greenhouse gas inventory provided by Formosa Plastics; the 2021 inventory report is expected to obtain the greenhouse gas inspection statement in December 2022.

Note 5: For the method of consolidating the scope of greenhouse gas inventory, the Company adopts the control right method when defining the organizational boundary, except that it needs to change the boundary defined by the "equity holding method" due to special conditions.

Note 6: The Scope 1, Scope 2 and 3 gas inventory of FCFC includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbon, perfluorocarbon, sulfur hexafluoride, and nitrogen trifluoride

Note 7: Scope 3 inventory items: purchased products and services, capital goods, fuel and energy related activities (not included in Scope 1 or Scope 2), upstream transportation and distribution, business waste output, business travel, employee commuting, downstream transportation and distribution, processing of sold products, use of sold products, and final disposal of sold products. The target base year is expected to be set in 2022.

Note 8: The emission Scope 1 and Scope 2 of Mailiao plant site contain Formosa INEOS Chemicals Corporation.

Scope 1 and Scope 2 of Formosa Chemicals & Fiber Corporation
Summary table of main greenhouse gas emission sources and energy consumption
Year 2020 and 2021

Item	2020			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	9,807,997	—	25,396,704	—
Fuel Oil	16,056	123	431,119	1,740,989
Fuel Steam	127,761	272	5,437	27,092,568
Purchased Internal Power	—	—	—	6,248,653
Purchased Internal Stem	—	—	—	16,899,156
Purchased External Power	18,394	202,857	63,076	—
Purchased External Steam	—	—	—	—
CO_2e Percentage emission (%)	93.6	95.6	99.1	93.9
Total Energy Consumption(GJ)	9,970,208	203,252	25,896,336	51,981,366
	88,051,162			

Item	2021			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	12,584,832	—	21,711,072	-
Fuel Oil	23,018	—	332,298	1,965,799
Fuel Steam	156,027	179	238,569	30,147,543
Purchased Internal Power	—	—	—	6,598,687
Purchased Internal Stem	—	—	—	17,641,884
Purchased External Power	968	189,117	480,420	—
Purchased External Steam	—	—	—	—
CO_2e Percentage emission (%)	95.5	94.5	99.1	94.5
Total Energy Consumption(GJ)	12,764,845	189,296	22,762,359	56,353,913
	92,070,413			

Note: 1. FPG Greenhouse Gas Inventory Database
2. Joule (abbreviated as J); 1KJ=1,000J; 1GJ=10^9J.
3. The Mailiao plant site contains Formosa INEOS Chemicals Corporation

Formosa Chemicals & Fiber Corporation Summary table of greenhouse gas emission and energy intensity Year 2020 and 2021

Item	2020	2021
Sales (NT$100 million)	1,641.82	2,530.35
Total greenhouse gas emission of Scope 1 and Scope 2 (CO_2e tons)	8,538,988	8,663,330
Greenhouse gas emission intensity (CO_2e tons/NT$100 million)	5,200.93	3,423.77
Total energy consumption (GJ)	88,051,162	92,070,413
Energy consumption intensity (GJ/NT$100 million)	53,630.22	36,386.44

Note: 1. Data source is form FPG Greenhouse Gas Inventory Database.

2. Statistics includes all plant sites of the Company, and the Scope 1 and Scope 2 data of Mailiao plant site contains Formosa INEOS Chemicals Corporation
3. Greenhouse gas emission intensity (CO_2e tons / NT$100 million) =Total greenhouse gas emission (CO_2e tons)/ Sales (NT$100 million)
4. Energy consumption intensity (GJ/NT$100 million) =Total energy consumption (GJ)/ Sales (NT$100 million)

According to the company's greenhouse gas inventory examined results in Scope 1 and Scope 2 in 2021 that includes Formosa INEOS Chemicals Corporation, the total greenhouse gas emissions were 8,663,330 metric tons of CO_2e, and the total energy consumption of the main emission sources was about 92,070,413GJ. Based on the total turnover of NT$253.035 billion in 2021, the Company's energy consumption intensity was 36,386.44 GJ/NT$100 million, and the scope 1 and 2 greenhouse gas emission intensity was 3,423.77 CO_2e tons / NT$100 million.

To compare greenhouse gas emission intensity and the energy consumption intensity for the last two years, the total greenhouse gas emission of Scope 1 and Scope 2 in 2021 was 8.663 million tons, increased 124 thousand tons with 1.46% compared to 2020. The total returns of 2021 was NT$253.035 billion, increased NT$88.853 billion with 54.1% compared to 2020, therefore the greenhouse gas emission intensity decreased to 3,423.77 CO_2e tons/NT$100 million. The total energy consumption in 2021 was 92,070,413 GJ, increased 4,019,251 GJ with 4.56% compared to 2020. The energy consumption intensity decreased to 36,386.44GJ/ NT$100 million because of the increase of sales in 2021.

Carbon footprint verification

The company promoted the third-party verification of product carbon footprint to conduct ISO 14066:2013. In 2018, Yilan Longde and Chiayi Xingang plants completed 6 products; in 2019, Yunlin Mailiao completed 19 products; the PC and PP products completed in 2020, thus there were totally 27 products were verified.

2013-2020 promoted the third-party verification of product carbon footprint

27 products

3.3.4 Energy Management

Material Topic - Energy Management

Material Topic

Description	1. To align with the goal of reducing carbon emissions in production, we made efforts to increase the proportion of renewable energy usage. However, there is currently a shortage of renewable energy supply, which hinders meeting the production demands in the short term. 2. Evaluate the possibility of converting coal-fired power units to natural gas as part of the business's energy transition. However, there is a short-term inadequacy in the supply of natural gas, necessitating the use of coal-fired power units to supplement electricity generation.	
Policy Commitments	1. Develop other forms of renewable energy, such as solar and hydroelectric power, to increase the proportion of renewable energy usage. 2. Implement manufacturing process integration and adopt high-efficiency equipment or technologies to enhance energy utilization efficiency.	
Management Actions	Preventive and Mitigation Actions	To enhance energy efficiency, we actively promote various energy-saving measures to reduce energy consumption, including installing green energy equipment to increase the usage of renewable energy sources and optimizing production processes to improve production efficiency.
	Action Plan	1. Establish an ESG promotion organization and hold energy and water conservation meetings chaired by the Chairman monthly to review the initiatives' progress and effectiveness. 2. Establish unit energy consumption annual targets for each product and review the achievement rate of performance every month. 3. Introduce new high-efficiency production equipment or technologies to reduce energy consumption.
Performance Tracking	1. In 2022, we added 7,814 kWp of solar power and 75 kW of hydroelectric power. 2. In 2022, we completed 288 energy-saving improvement projects, reducing 100.2 metric tons/hour in steam consumption, 7300 kWh/hour in electricity consumption, and a decrease of 289 thousand metric tons of CO_2e in carbon emissions.	
Stakeholders Engagement	1. Shareholders and customers: Regular shareholder meetings and briefings are held to explain the impact and response strategies related to this issue. Shareholders can also provide feedback and opinions through the Company's website. 2. Government agencies: Comply with the Climate Change Response Act and Energy Administration Regulations, and submit annual reports on energy consumption and energy-saving improvement results.	

Decreasing unit steam consumption of per unit output

Fuel steam is one of the important energy sources in the manufacturing processes. Recycling waste heat made by manufacturing processes to decrease the consumption of unit production is one of the important measures of energy management and one of the indicators to evaluate energy management. The average fuel steam consumption per unit output was 0.711 tons/ton, decreased 0.012 tons/ton with 1.66 compared to 2021. Fuel steam consumption per unit output had appeared down trends for the last four years, and the cumulative improvement of the implementation results of energy conservation presents in the appendix "ESG topic performance".

FCFC average unit steam consumption of per unit output in 2021 and 2022

Unit: tons/ton

Year	2021				2022			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Fuel steam consumption per unit output	0.712	-	0.150	0.802	0.720	-	0.130	0.780
	0.723				0.711			

Note: The statistics in Mailiao plant site contains Formosa INEOS Chemicals Corporation

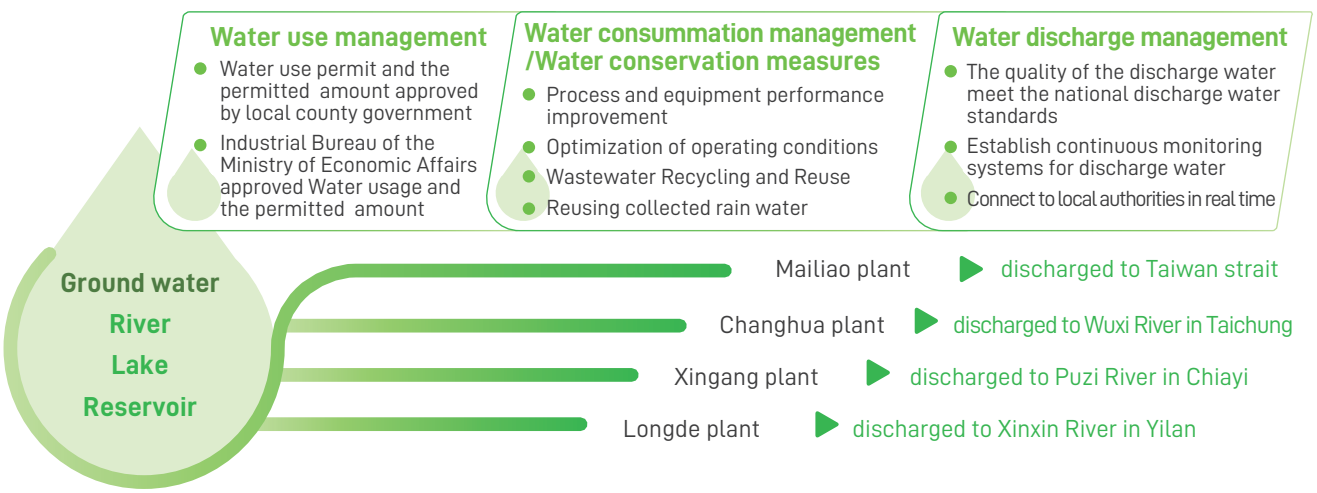
3.4 Utilization and management of water resources

Material Topic - Water Resource Utilization and Management

Material Topic

Description		1. The impacts of climate change have led to an increased frequency of extreme weather events, resulting in unstable water resource availability and heightened challenges in water resource utilization. 2. During drought periods, a policy prioritizes the water supply for domestic use, reducing the available water quantity for industrial use.
Policy Commitments		1. Actively improve manufacturing processes, strengthen water stewardship, and enhance water efficiency. 2. Enhance the recycling of process wastewater and rainwater, promoting the reuse of water resources.
Management Actions	Preventive and Mitigation Actions	1. Continuously promote various water conservation measures and adopt high-efficiency equipment. 2. Enhance wastewater and rainwater recycling for efficient reuse.
	Action Plan	1. Establish an ESG promotion organization and hold energy and water conservation meetings chaired by the Chairman monthly to review the initiatives' progress and effectiveness. 2. Establish unit water consumption annual targets for each product and review the achievement rate of performance by conducting monthly water and energy conservation performance evaluations. 3. Introduce new high-efficiency production equipment or technologies to reduce consumption.
Performance Tracking		1. In 2022, we completed 87 water conservation improvement projects, resulting in a daily water saving of 2,793 metric tons. 2. The Company's PC plant participated in the Water Resources Agency's Water Conservation Excellent Enterprise Selection organized by the Ministry of Economic Affairs in 2022 and received the A class award. 3. Participated in the 2022 CDP Water Security Survey and achieved a "Leadership A" ranking.
Stakeholders Engagement		1. Shareholders and customers: Regular shareholder meetings and briefings are held to explain the impact and response strategies related to this issue. Shareholders can also provide feedback and opinions through the Company's website. 2. Government agencies: We plan our water usage according to the government's water supply status indicators, report and pay fees in accordance with the Regulations on the Water Conservation Charge.

The Company pursues water source management with affiliate companies in Mailiao plant site, and other plants correspond with measures through acquirement、consumption、saving and discharge to pursue the vision of water recycling.



3.4.1 Water resource risk management

The water resource scenario simulation tool established by the World Resources Institute (WRI) shows that Changhua, Yilan, and Yunlin plants are all medium and high risk areas. The current water supply is sufficient for production processes, but for the security of a stable water supply, a desalination plant with a daily output of 100 thousand tons will go into operation by the end of 2023.

Recycled rainwater in Mailiao Industrial Complex accounted for 7.1% of total consumption in 2022

In 2022, the CDP Water Safety Disclosure Questionnaire was evaluated and won "Leadership A"

In 2022, each drop of water in Mailiao Industrial Complex was reused 11.4 times

Contingency measures for water

Water condition signal	FCFC Water Contingency Measures	Occurrence in 2021	Occurrence in 2022	Comparison
Normal supply of water	• Continue to promote water-saving measures • Rainwater recycling and reuse	• Regular production	• Regular production	• The same
Water supply is tight	• Continue to promote water-saving measures • Reduce non-essential water use	• Reduce plant watering	• No occurrence	• Regular supply
Pressure reduced water supply	• Continue to promote water-saving measures • Improve water usage efficiency of the production process • Requisition the water supply of the standby water tanks in the plant	• Improve the concentration ratio of cooling water towers • When water is supplied at a lower pressure, the standby water tanks in the plant are requisitioned to support the water supply without affecting production.	• No occurrence	• Regular supply
Volume reduced water supply	• Continue to promote water-saving measures • Improve water usage efficiency of the production process • Adjust the production processes	• In line with the reduction of water supply, the Synthetic Phenol Plant, the SM Plant, Haifeng and the PP Plant will be shut down during annual holidays starting in March to reduce water consumption.	• No occurrence	• Regular supply
Zoned/fixed point water supply	• Continue to promote water-saving measures • Improve water usage efficiency of the production process • Adjust the production processes	• No occurrence	• No occurrence	• Regular supply

3.4.2 Water resource access management

Water source

The water mainly comes from ground water such as rivers, lakes and reservoirs, and water use permit and the permitted amount are through the local county government communicates with relevant stakeholders to obtain permission. To advance the self-sufficient ability of water supply in the dry season, the Company that had obtained permission by relevant government offices has being built a desalination plant with a daily output of 100 thousand tons of fresh water, and will put into operation by the end of 2023 . The actual water consumption in 2022 is shown in the table below:

Annual water use table of FCFC in 2021 and 2022

Unit: million liters

Year	2021				2022			
Type	Plant Site				Plant Site			
	Longde Site	Changhua Site	Xingang Site	Mailiao Site	Longde Site	Changhua Site	Xingang Site	Mailiao Site
Surface Water (A)	10,149.6	159.1	7,409.2	14,379.0	7,738.4	136.6	5,776.9	14,245.4
Groundwater (B)	146.0	-	-	-	149.5	-	-	-
Third-party Water (C)	24.7	4.7	30.9	45.4	21.8	5.4	26.1	88.3
Subtotal (A)+(B)+(C)	10,320.3	163.8	7,440.1	14,424.4	7,909.7	142.0	5,803.0	14,333.7
Water Use Quantity	32,348.6				28,188.4			

Note: 1. The water drawn from each source category in the table above belongs to fresh water with total dissolved solids (TDS) content of 1,000 mg/L or less.
2. The third party water is tap water.
3. The statistics of Mailiao's water consumption include the important subsidiary Formosa Idemitsu Petrochemical Corporation and Formosa INEOS Chemicals Corporation.

Use of Water from the Jiji Weir

According to the "Monthly Report on Agricultural Water Consumption of Jiji Dam for Industry and Public Water Use" by the Industry Bureau of the Ministry of Economic Affairs", the annual water supply of Jiji Dam in the past four years (2019~2022) is 3.09 billion tons. The 4-year average industrial water consumption was 94.93 million tons, accounted for 3.1% of the total water supply. The 4-year average transfer agricultural water consumption was 31.63 million tons, accounted for 2.0% of the total agricultural water consumption. It is assumed that the water intake in Mailiao Industrial Complex has no significant impact on the water source of Jiji Dam. The records of water consumption are summarized below:

Water Supplied by the Jiji Dam from 2019 to 2022

Unit: Ten thousand tons

Year	Inflow (A)	Agriculture Average use Water volume (B)	Industry			
			Average use Water volume (C)	Percentage (C)/(A)	Transfer farming water(D)	Percentage of agricultural water use Total ratio(D)/(B)
2019	5,100,062	1,897,782	98,404	1.9%	32,714	1.7%
2020	1,750,730	1,261,937	95,450	5.5%	31,392	2.5%
2021	2,847,142	1,359,894	97,258	3.4%	32,199	2.4%
2022	2,660,556	1,699,174	88,597	3.3%	30,208	1.8%
Average	3,089,622	1,554,697	94,927	3.1%	31,628	2.0%

Source: The Annual Report of the Jiji Weir Operations from Central Region Water Resource Office, Water Resource Agency, Ministry of Economic Affairs

3.4.3 Water resource discharge management

The industrial wastewater produced from each plant of the company is treated properly by wastewater treatment facilities based on the characteristics of the source of the waste water, The quality of the discharge water can meet the national discharge water standards, in accordance with the Water Pollution Prevention and Control Law and the location of the plant.

Annual discharge table of Formosa Chemicals & Fiber Corporation in 2021

Unit: million liters

Year	2021				2022			
Discharge volume is based on the terminal point	Plant Site				Plant Site			
	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Ground Water (A)	6,786.2	132.8	2,113.0	-	5,960.1	119.1	2,099.4	-
Sea water (b)	-	-	-	5,632.0	-	-	-	5,541.1
Sum (A)+(B)	6,786.2	132.8	2,113.0	5,632.0	5,960.1	119.1	2,099.4	5,541.1
Water Discharge Volume	14,664.0				13,719.7			

Note: 1. The drainage at each discharge endpoint in the above table is all fresh water with a total dissolved solids (TDS) content equal to or less than 1,000 mg/L.

2. The Mai Liao plant contains Formosa INEOS Chemicals Corporation.

The Yunlin Mailiao, Chiayi Xingang and Yilan Longde plants are equipped automatic continuous monitoring systems for discharge water. Monitor water volume, water temperature, pH, chemical oxygen demand (COD), suspended solids (SS) and other items 24 hours a day, and connect to local authorities in real time. Each wastewater treatment plant reduces COD and adjusts the pH value through biological aeration treatment. In addition, the sludge dryers are also installed in the Longde, Mailiao and Xingang plants, which can reduce the moisture content of the original sludge from 85% to less than 50%, greatly reducing the amount of sludge produced.

Statistics on control of discharged water quality in 2022

Plant Site	Water Volume (CMD)		pH			COD(mg/L)			SS(mg/L)		
	Permissible Volume	Emissions	Statutory Requirements	Internal Control Value	Permissible Volume	Emissions	Statutory Requirements	Internal Control Value	Permissible Volume	Emissions	Statutory Requirements
Longde	26,280	16,556	6~9	6.5~8.5	8.1	100	80	33.5	30	24	11.5
Changhua	3,522	326	6~9	6~9	6.9	100	80	48.0	30	25	7.8
Mailiao	29,191	15,174	6~9	6.8~8.7	8.2	100	80	35.9	30	18	6.3
Xingang	10,648	6,103	6~9	6.5-8.5	7.6	100	90	36.0	30	25	5.3

Note: The Company's wastewater discharge test value is far lower than the national discharge standard, and there were no fines issued by the competent authority in 2022.

Wastewater treatment SDG 6.3

As of 2022, the company had completed 473 wastewater discharge improvement projects with total investment NT$8.011 billion. In 2022, 3 out of 8 improvement projects were completed which included removing villaumite form wastewater at FGD apparatus, enlargement of pre heat machine at wastewater stripper and temperature drop for discharge flow, the others are on-going proceeding with estimated investment NT$45 million.

- As of 2021, the total investment was NT$7.979 billion
- Investment in 2022 was NT$11 million
  - Wastewater improvement project in Longde plant was removing villaumite form wastewater at FGD apparatus.
  - Wastewater improvement project in Mailiao was the enlargement of pre heat machine at wastewater stripper at second series of PC plant.
  - Wastewater improvement project in Xingang was temperature drop for discharge flow at ABS plant.
  - Waste water recycling projects totaled 3.
  - Estimated accumulated total investment NT$8.011billion.
- Estimated investment NT$45 million in 2023.
  - Estimated 5 projects executed in 2023.
  - Total investment NT$45 million in 2023.

As of 2021, the total investment

NT$ **7.997** billion

Investment in 2022

NT$ **11** million

Estimated investment in 2023

NT$ **45** million

Influences of Discharge on Ecology: Mailiao Industrial Complex Marine Ecology Evaluation

Please visit the website of the Beauty of Mailiao Eco-industrial Park

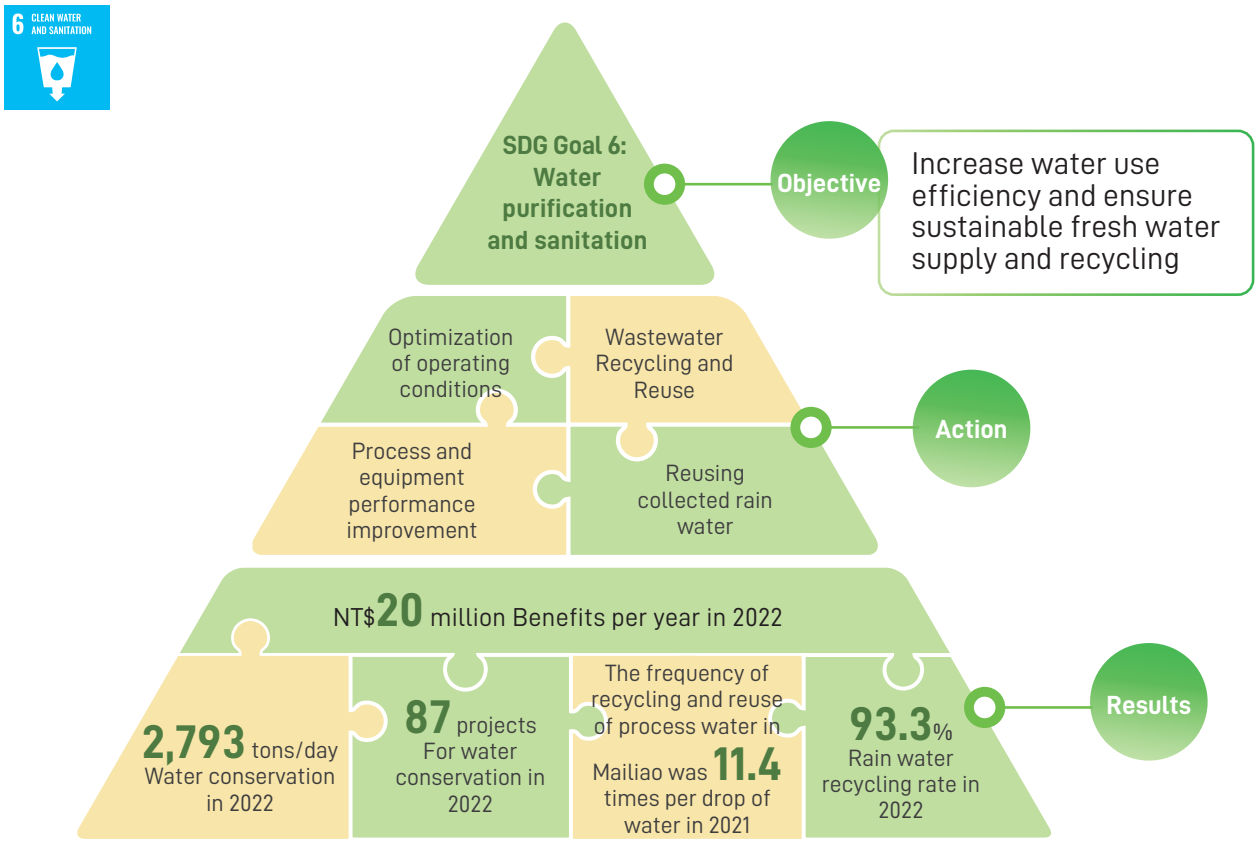
In response to the impact of the discharge water from Mailiao Industrial Complex on the ecology, FPG jointly established the "Assessment and Advisory Committee of FPG's Mailiao Industrial Complex Discharge Water Ecological Impact on Marine Ecology", and commissioned a professional organization to investigate. The organization pointed out that Mailiao Industrial Complex has no detectable impact on the water quality of the surrounding waters, ecology, aquaculture period, fishery resources, beach maintenance, etc. We will continue to monitor the situation. If perceivable impacts prevail in the near future, FCFC will plan to reduce the severity of impacts through countermeasures proposed by the professional counseling committee to secure the living standards of local residents and the sustainability of local marine ecology. For more research results on the ecological impact of the discharged water from the Mailiao Industrial Complex, please visit the website of the Beauty of Mailiao Eco-industrial Park.

Influences of Discharge on Ecology: Study on the Chinese White Dolphins

Please visit the website of the Beauty of Mailiao Eco-industrial Park

The Chinese White Dolphin was declared as Critically Endangered by the Red Book of the International Union for Conservation of Nature in August 2008. According to domestic studies, the sea area where it is active in Taiwan is the area of habitat from Miaoli to 3 kilometers off the coast of Tainan. In order to understand the areas where Chinese white dolphins inhabit and forage, FPG has commissioned professional institutions to carry out project plans since 2008. The results of the study show that the operation of Mailiao Industrial Complex has no impact on the ecological schedule of Chinese white dolphins. For more information on the study of the ecological impact of the sea area of Mailiao Industrial Complex and the Chinese White Dolphin, please visit the website of the Beauty of Mailiao Eco-industrial Park.

3.4.4 Water Resource Consumption Efficiency



Statistics of FCFC Water Consumption in 2021 and 2022

Unit: million liters

Year	2021				2022			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Water Consumption	3,534.1	31.0	5,327.1	8,792.4	1,949.6	22.9	3,703.6	8,792.6
Total Water Withdrawal by Source	17,684.6				14,468.7			

Note 1. The statistic of water consumption in MaiLiao plant contains Formosa INEOS Chemicals Corporation.
2. Water consumption is equal to water use minus water discharge volume.

FCFC Water Conservation Performance in Recent Years

Item \ Year	2016 to 2021	2022	Accumulation 2016 to 2022	Ongoing	Total
Number of Improvement Projects	549	87	636	54	690
Volume Saved (Tons/Day)	17,059	2,793	19,853	2,620	22,472
Amount Invested (NT$100 Million)	2.6	0.4	3.0	10.7	13.8
Investment Benefit (NT$100 Million/Year)	1.1	0.2	1.2	0.1	1.3

The Company actively implements water-saving improvements and improves water use efficiency through rainwater recycling and reuse, process wastewater recycling, process optimization and reduction of water use, and process waste heat recycling to reduce cooling tower evaporation losses. In 2022, the average amount of rainwater recovered in Mailiao Plant was 2,765 tons per day, and the recovery rate is about 93.3%.

In 2022 the average amount of rainwater recovered

2,765 tons

Recovery rate

93.3 %

3.5 Air Pollutant Management

Material Topic: Air Quality Management Policy

Material Topic

Description		During winter, the southern region of Taiwan experiences higher levels of PM2.5 pollution due to seasonal wind patterns and pollution sources originating from overseas.
Policy Commitments		We adhere to domestic emission regulations and standards and comply with the international convention of the "Montreal Protocol" by refraining from using substances or equipment that deplete the ozone layer during manufacturing.
Management Actions	Preventive and Mitigation Actions	1. We established the "Evaluation and Counseling Committee for Mailiao Industrial Complex's Air Quality Impact" to evaluate the air quality in Yunlin's Mailiao Industrial Complex. 2. Continuously promote waste reduction and recycling improvement at the source, aiming to achieve the "zero pollution" goal.
	Action Plan	1. Implement the best available control technologies for production to minimize emissions. Install continuous automatic monitoring systems to monitor air pollutant emissions in real-time. 2. Comply with the Company's maintenance policy and select water-based paints to reduce VOC emissions. 3. To reduce VOC emissions, the "Equipment Component Simplification Project" was initiated in 2022, with a target of streamlining components by 5%.
Performance Tracking		All emissions are better than regulation standards, and there have been no incidents of non-compliance.
Stakeholders Engagement		1. Employees: The Company's website features a dedicated section on occupational health, safety, and environmental matters, providing a channel for feedback and suggestions. 2. Environmental organizations and shareholders: They can raise discussions on various environmental issues during academic conferences or seminars. 3. Government agencies: Real-time monitoring systems are in place to track emissions of various air pollutants.

3.5.1 Emissions and Prevention

The Company controls the discharge of harmful air pollutants according to the proposed "Standard Pollution Source Hazardous Air Pollutant Emission Standards" announced by the Environmental Protection Agency. In air pollution control, the Company constantly seeks to make improvements by way of FTIR infrared sensors and Gas Find IR have been installed to monitor leaks of process gas. Since 2007, certified institutions have been authorized by the co-generation coal-fired unit twice a year to make sure that our plants' dioxin emissions meet national standards. As of 2022, the total amount of investment in air quality improvement has reached NT$11.748 billion. In 2022, NT$529 million is expected to be spent on ongoing waste gas improvement cases. The Company pursues special projects for equipment components right sizing with a goal of cut down 5% that 34,655 equipment components would be reduced with the annually reduction of 4.26 tons of VOCs emission.

Air Pollutant Emissions Table for 2021-2022

Unit: Ton/Year

Type \ Year / Plant Site		2021				
		Longde	Changhua	Xingang	Mailiao	Total
Air Pollutant Emission Management	SOx	92.87	0	187.68	149.31	429.86
	NOx	158.19	0	1,145.84	340.80	1,644.83
	Volatile Organic Compounds (VOCs)	107.92	4.71	459.18	83.45	655.26
	Total Suspended Particles (TSP)	19.22	0	58.89	38.83	116.94

Unit: Ton/Year

Type \ Year / Plant Site		2022				
		Longde	Changhua	Xingang	Mailiao	Total
Air Pollutant Emission Management	SOx	95.94	0	125.50	122.00	343.44
	NOx	155.41	0	1,108.11	310.00	1,573.52
	Volatile Organic Compounds (VOCs)	83.02	0.47	449.03	73.00	605.52
	Total Suspended Particles (TSP)	6.60	0	48.22	32.00	86.82

Note: 1. In 2022, there were two environmental violations. The first violation occurred in the SM Plant's Mailiao EB Energy-saving and Emission Reduction Construction Project. They neglected to pay the construction air pollution fee prior to commencing the project, resulting in a penalty of NT$100,000. The second violation occurred at the ARO-3 Plant, involving the spill from the control and relief valves, surpassing the legal limit of 10,000 ppm. This violation also incurred a penalty of NT$100,000.

2. Source: The air pollution, wastewater, and waste filing website of the Environmental Protection Administration

Air Quality Impact Monitoring and Analysis at the Mailiao Industrial Complex

Formosa Plastics hopes to establish a complete environmental monitoring network through rigorous scientific monitoring and research, provide air emission analysis results, and report detailed air quality indicators. In September 2011, FPG established the "Assessment and Advisory Committee on the Impact of Mailiao Industrial Complex on Air Quality" and referred to the local geographical environment of Mailiao. FPG set up eight layers of internal and external intensive monitoring and control stations, which report detailed scientific data in real time, in order to ensure local air quality. For relevant environmental monitoring and analysis results, please visit the CSR "Environmental Protection and Safety" section of the Formosa Plastics website.

Please visit the CSR "Environmental Protection and Safety" section of the Formosa Plastics website

3.6 Waste and Controlled Chemical Substance Management

3.6.1 Management Policy of Waste Management

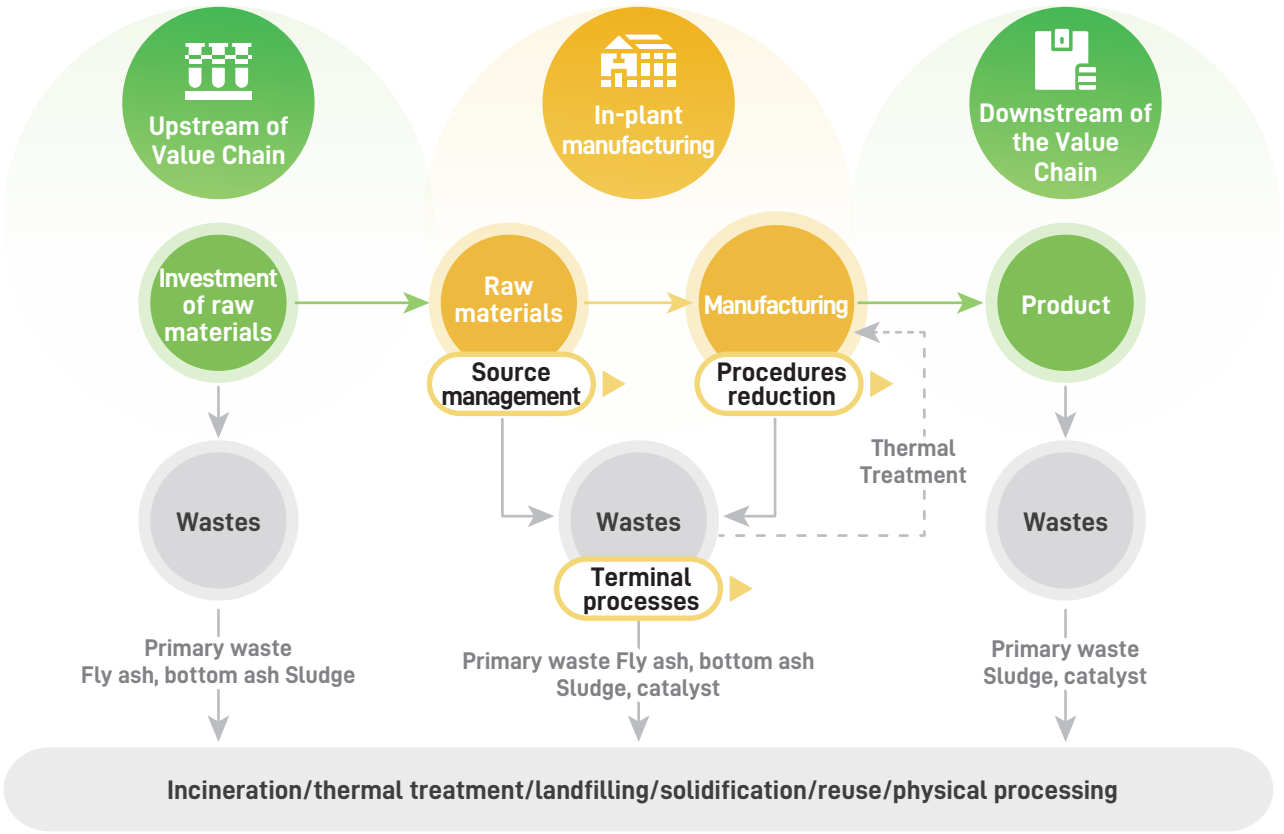
Material Topic - Waste Management

Material Topic			
	Description	Improper waste disposal negatively impacts the Company's reputation.	
	Policy Commitments	The Waste Management Policy is implemented in accordance with government regulations and the "Business Waste Management Measures" established by the Company, as required by the Waste Disposal Act.	
	Management Actions	Preventive and Mitigation Actions	Select waste disposal and treatment companies with qualified environmental protection permits are hired to handle the waste.
		Action Plan	1. Promote a circular economy by transforming waste into recycled materials. 2. Comply with legal regulations to implement waste management, oversee proper waste disposal by contracted companies, and prevent dumping or improper disposal, ensuring environmental friendliness.
	Performance Tracking	All processing procedures are conducted in accordance with legal standards, and no compliance violations have occurred.	
	Stakeholders Engagement	1. Shareholders: The Company's website features a dedicated section on occupational health, safety, and environmental matters, providing a channel for feedback and suggestions. 2. Environmental organizations: They may raise discussions based on publicly available information in appropriate settings. 3. Government agencies: They have the authority to conduct regular inspections to verify the waste disposal procedures and their implementation at any time.	

Waste management strategy

For waste and controlled chemical substances, the Company reduces the generation of waste through prevention, reduction, recycling and reuse, etc., and properly manages waste and chemicals in an environmentally sustainable manner, reducing the impact on human health and harm, negative impact on the environment. The Company has formulated the "Industrial Waste Management Regulations" in accordance with the relevant government waste disposal laws and regulations. Each plant has established independent audit control measures for waste disposal, and selected and obtained qualified environmental protection licenses according to the implementation content of the waste disposal plan approved by the competent authority. To ensure that the waste removal process is properly handled, there was no abnormal disposal of waste by cleaning and transportation companies in 2022.

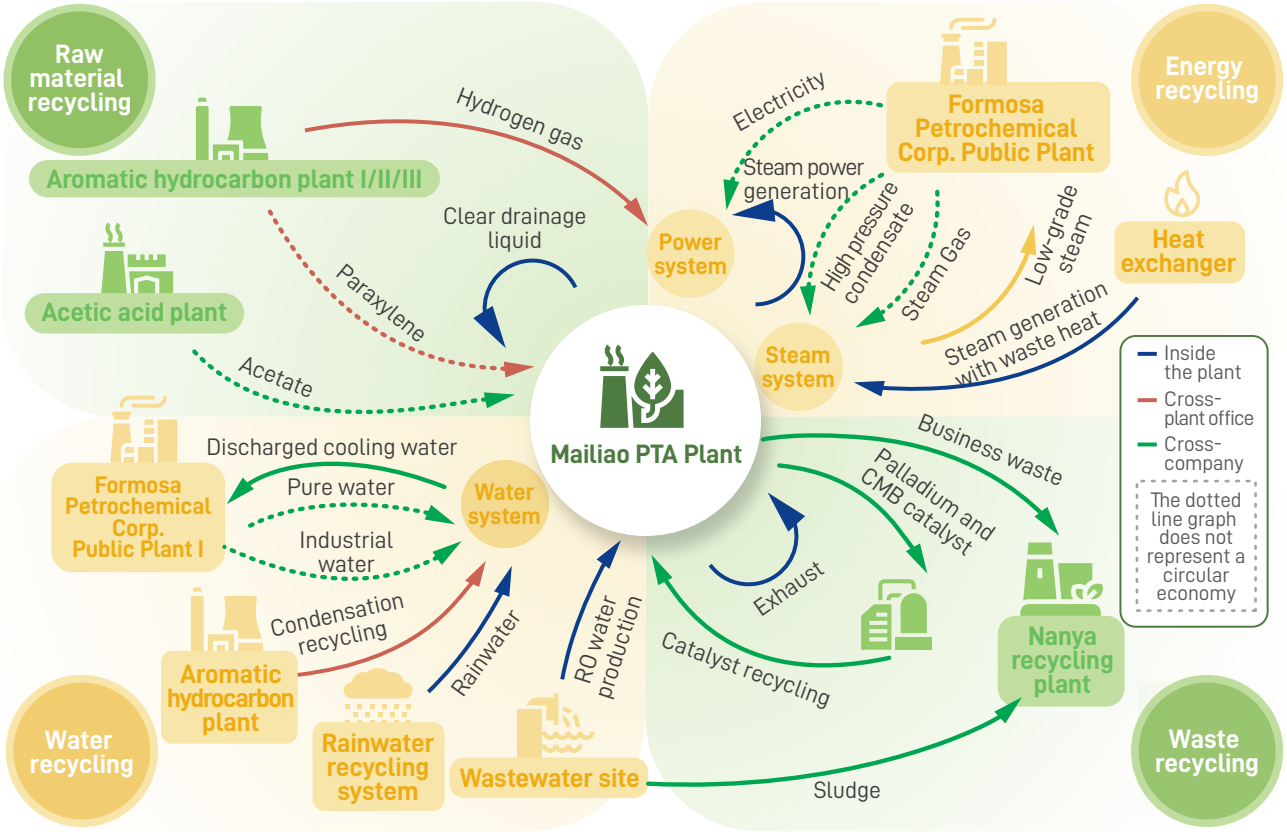
The process of waste generation and treatment in the Company's value chain is shown in the figure below. The waste in the value chain is treated according to legal requirements. Waste management and process reduction can reduce the environmental impact caused by waste, and grasp the waste in real time. Potential impact on the environment due to the amount produced and the clean-up process.



Waste produced from procedure

Process	Resources	Procedure	Waste
Item	Source management	Waste reduction in the production process	End point disposal
Handling method	Industrial waste plastic recycling and reuse within the plants to reduce raw material use	Continue to implement energy conservation improvement projects, add anaerobic systems, and reduce sludge volume	Civil engineering and construction wastes are outsourced for physical treatment and then reused as materials for public works and civil engineering
Reduction and management goals	Decrease coal use, increase renewable energy	Decreasing wastewater sludge because of drying improvement was equipped in 2020	Reduce amount of waste for landfills and increase recycling and reuse by physical disposal
Effectiveness	The recycling of failed plastic products completely recovered since 2002	Obtained verification by the third party for 100% of failed plastic products completely recovered	The landfilled amount was average monthly reduced by 150 metric since 2021

In 2006, the Company promoted the establishment of the "Energy Conservation and Emission Reduction Promotion Team" to actively promote energy conservation and emission reduction and set goal management to integrate raw materials, energy (steam, electricity) and waste across companies and plants.



Waste source management

To reduce processing waste, the Company decreases waste from original production processes, and increases waste recycling and reuse. The amount of waste generated was 223,315 tons in 2022, decreased 63,690 tons with 22.2% compared 2021.

The Company classified waste by composition in 2021

Unit: Tons

Year	2021			2022		
Waste composition and components	Amount generated	Disposal and transfer amount	Direct disposal amount	Amount generated	Disposal and transfer amount	Direct disposal amount
Toxic hazardous waste (class B)	—	—	—	—	—	—
Waste with hazardous properties (class C)	61	—	61	73	—	73
General business waste (class D)	22,883	5,821	17,062	23,716	8,546	15,170
Announce the waste that should be recycled or reused (Class R)	264,061	264,061	—	199,526	199,526	—
Total amount of waste	287,005	269,882	17,123	223,315	208,072	15,243

Note: The composition of waste is based on the waste statistics reported to the EPA in 2021-2022, and is classified according to the categories compiled by the EPA

Waste reduction in the production process

Waste transferred from disposal by recycling operations of FCFC in 2021

Unit: Tons

Year	2021			2022		
廢棄物分類	Onsite (self-processing)	Offsite (outsourced processing)	Total amount	Onsite (self-processing)	Offsite (outsourced processing)	Total amount
Hazardous Waste	-	61	61	-	73	73
Other recycling processes	-	-	-	-	-	-
Total amount		61	61	-	73	73
Ratio of hazardous waste recycling		0%			0%	
Non-hazardous waste	-	22,883	22,883	-	23,716	23,716
Reuse preparation	-	-	-	-	-	-
Recycling and reuse	-	264,061	264,061	-	199,526	199,526
Total amount	-	286,944	286,944	-	223,242	223,242

Note 1: All the wastes transferred from disposal by the Company according to the recycling operation are outsourced. Hazardous wastes are not prepared for recycling or reuse. All non-hazardous wastes are prepared for recycling or reuse

Note 2: Hazardous waste recycling ratio = the amount of hazardous wastes that has been recycled / the total amount of hazardous waste * 100%

Note 3: Hazardous waste is classified as Class C waste

Note 4: Non-hazardous waste is classified as Class D General Waste

Note 5: Other recycling operation waste is classified as Class D General Recycling Waste

Note 6: Recycling waste is the waste that should be recycled or reused as stated in the announcement (Class R)

Waste treatment method

Regarding waste outsourcing, the business waste generated in each plant is sent to domestic legal disposal institutions for proper disposal, and no export is made abroad. In order to reduce waste generation, the Company implemented waste reduction improvements. The total investment amount reached NT$490 million as of 2022.

Data related to waste processing in 2021

Unit: Tons

2021							
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	792	7,593	5,029	9,469	61	264,061
Percentage (%)	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	0.28	2.65	1.75	3.30	0.02	92.01

Unit: Tons

2022							
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	–	–	–	–	–	–
	Offsite (outsourced processing)	4,668	5,578	3,878	9,592	73	199,526
Percentage (%)	Onsite (self-processing)	–	–	–	–	–	–
	Offsite (outsourced processing)	2.09	2.50	1.74	4.30	0.03	89.35

Source: The Industrial Waste Report and Management System, Environmental Protection Administration

3.6.2 Controlled Chemical Substance Management

To ensure the safe management and control of hazardous chemicals in their production, use, storage, and transportation, the Company has established management and operational standards that comply with relevant regulations. We have also developed corresponding self-management and disaster response measures to ensure operational safety and security. The three-stage management measures for controlling hazardous chemicals include regulatory compliance, management measures, and disaster response operations as follows:

Regulatory Compliance

1. Ensure the regular operation of workplaces and facilities.
2. Obtain the necessary approvals and permits from the authority for controlled chemical substances in compliance with regulations.

Self-Management Measures

1. Establish self-management measures for the control of hazardous chemicals.
2. Conduct regular occupational and environmental safety assessments.

Disaster Response

1. Draft "Emergency Response Procedures" by referencing the "SDS (Safety Data Sheet)."
2. Conduct at least two unannounced testing drills annually.
3. Conduct an annual comprehensive drill of hazard prevention and emergency response plans.
4. Cooperate with the authorities in large-scale observation exercises.

3.7 Compliance with Environmental Protection Regulations

The Company's primary focus in all production activities is to adhere to environmental laws and regulations, and then strive to exceed the spirit of environmental regulations. To ensure compliance with laws and regulations, the Company has established environmental supervision and management measures, and designated dedicated departments to monitor newly issued environmental laws and regulations to meet the latest legal requirements. We evaluate the effectiveness of our operations and establish inspection procedures in accordance with the spirit of the ISO 14001 Environmental Management System. In cases where inspection results do not meet regulatory requirements and immediate improvement is not feasible, we develop improvement measures and implementation plans. These cases are documented and closely monitored for proper control and tracking.

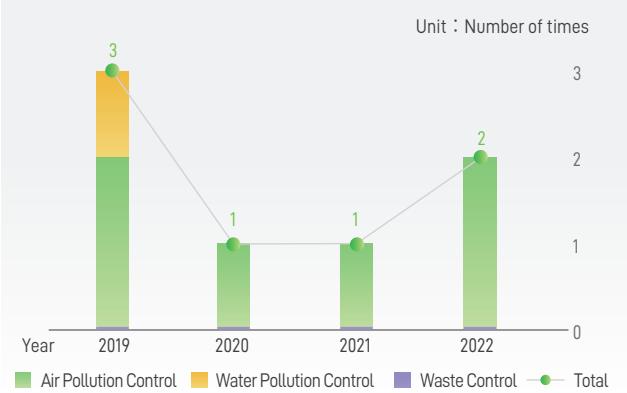
In 2022, there were two environmental violations. The first violation occurred in the SM Plant's Mailiao EB Energy-saving and Emission Reduction Construction Project. They neglected to pay the construction air pollution fee prior to commencing the project, resulting in a penalty of NT$100,000. The second violation occurred at the ARO-3 Plant, involving the spill from the control and relief valves, surpassing the legal limit of 10,000 ppm. This violation also incurred a penalty of NT$100,000.

Statistics of Environmental Protection Violation from 2021 to 2022

Unit：Number of cases

Year	2021	2022
Air pollution control	1	2
Water pollution control	0	0
Waste control	0	0
Total	1	2

The last four years of Statistics of Environmental Protection Violation



4 The value of sustainable talents

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4.1 Employee Human Rights Protection

The Company supports basic human rights and the local laws and regulations of the manufacturing locations in the stipulation of the Company's human rights policy. FCFC's employee rules have clearly stipulated that no employee shall be subjected to discrimination because of union membership. All male and female employees are protected by the rules. The Company also strictly prohibits the use of child labor and any incident that violates human rights or discrimination rules. In order to strengthen and implement human rights protection, the company has formulated a human rights protection policy based on international human rights conventions. The chairman of the board has signed the "Formosa Chemicals & Fiber Corp. Human Rights Policy" to require all departments to fully implement the human rights guarantees and regulations. Please refer to the "human rights policy" in the occupational safety area of social responsibility of the company's official website.

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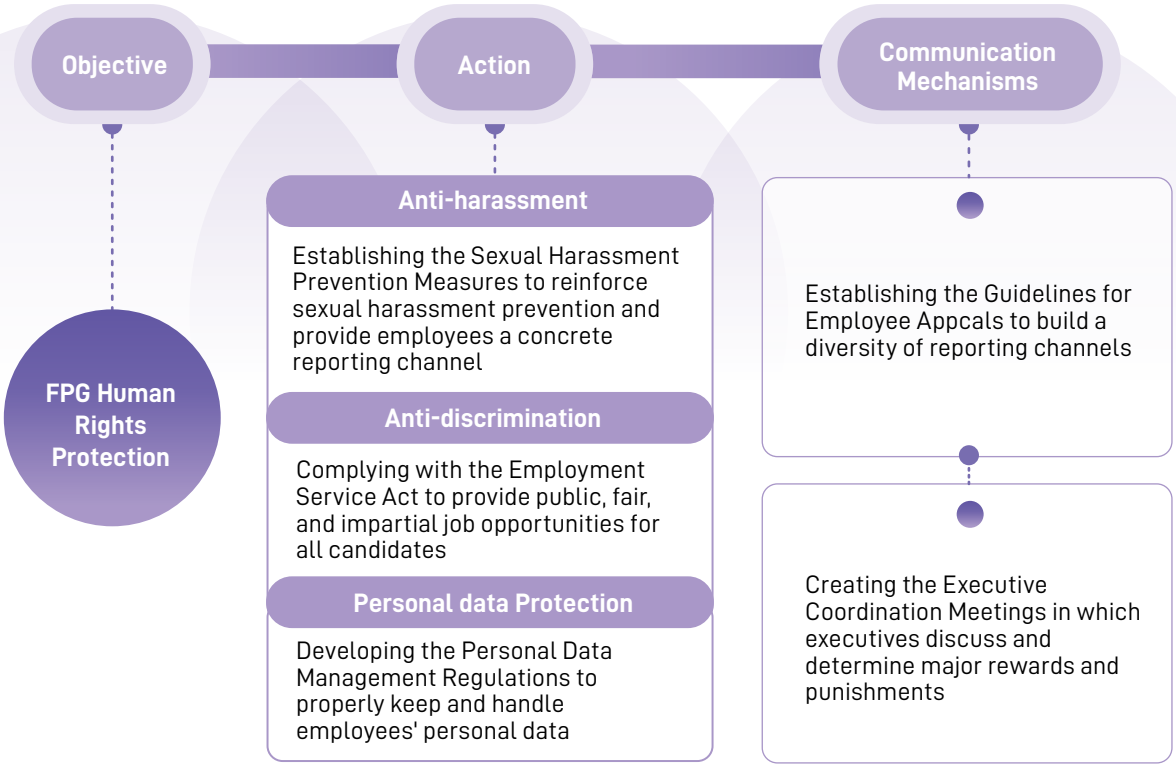
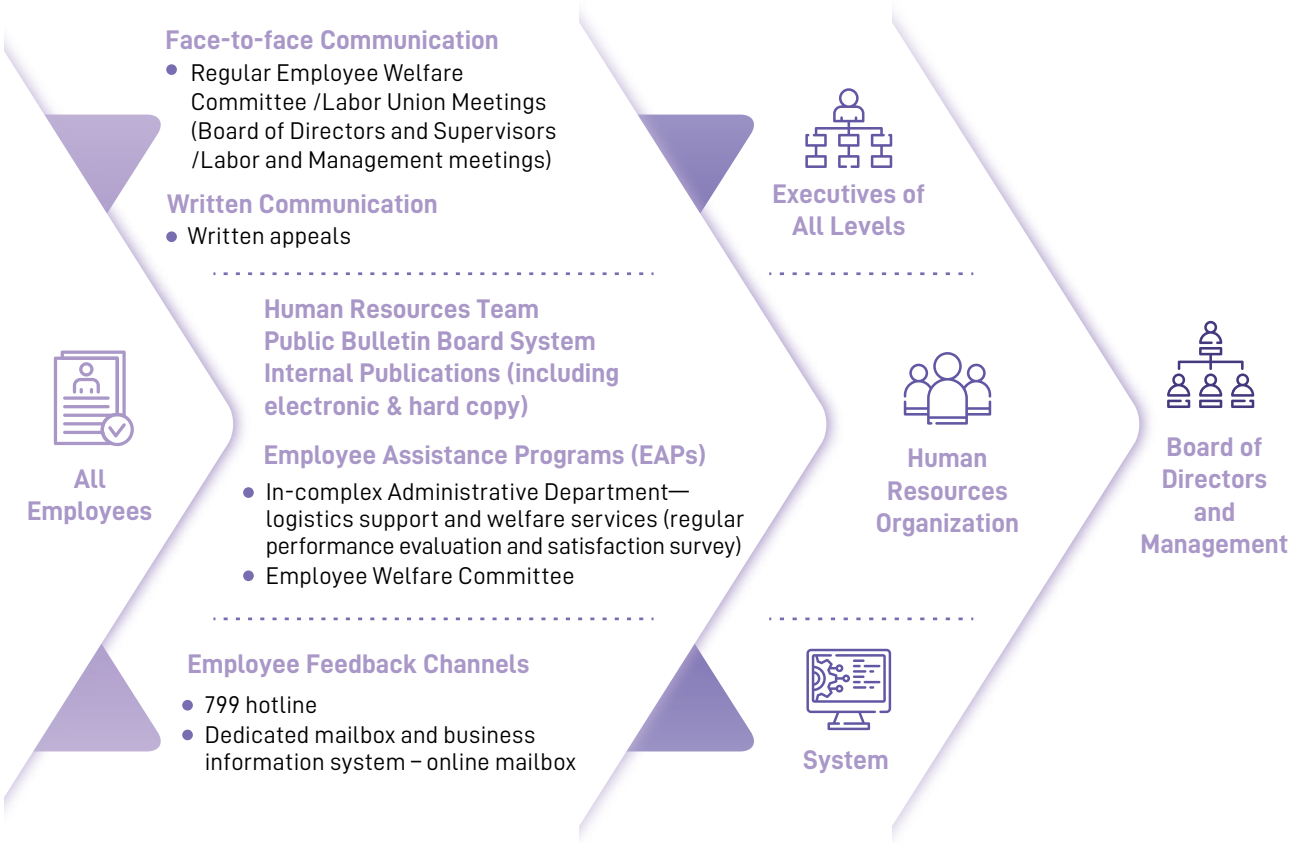


4.1.1 Employee Opinions and Feedback

The employees of the Company can communicate fully in regular meetings through the labor union, quarterly welfare committee and other organizations. For material labor issues, government laws and regulations shall be prioritized for compliance. All employees shall be equally protected by the labor-management agreements. The Company established a comfortable atmosphere and effective communication channels to provide a conductive work environment. We have dedicated counselors to assist new employees in adapting to the work environment, aiming to enhance departmental productivity collectively.

Project	Target	Approach	Performance
Mentorship and Support Program	Newly hired college management associates	• Assist in resolving various issues	• We conducted 295 interviews in 2022 and achieved a score of 8.97 out of 10 in the satisfaction survey.
Leadership and Management Training Course for Newly Appointed Supervisors	Newly Appointed Supervisors	• Not conducted due to the impact of the pandemic.	• Not conducted due to the impact of the pandemic.
Employee Engagement Survey	Employees	• Conduct the Employee Engagement Survey	• We distributed questionnaires to 4,255 individuals with a response rate of 45.2%. The main survey items include: Work vitality Job engagement Corporate Identification Retention Intention • The survey's main purpose is to understand employee satisfaction with the Company, and the level of employee identification with the Company is above 60%.

FCFC Internal Communication Channels



4.1.2 Employee Profile

The total employees were 5,166 in 2022, which full-time employees 4,981 were accounted for 96.4% and non-regular employees 185 were accounted for 4.1%, including consultants, fixed-term contract personnel, and working students.

FCFC Manpower Structure in 2022

Unit: Person

Employee Hiring Job Openings	Gender			Location			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
Number of Employees	714	4,452	5,166	1,101	2,422	1,168	475
Number of Permanent Employees	599	4,382	4,981	961	2,389	1,157	474
Number of Temporary Employees	115	70	185	140	33	11	1
Number of Employees without Guaranteed Hours	—	—	—	—	—	—	—
Number of Full-time Employees	713	4,452	5,165	1,100	2,422	1,168	475
Number of Part-time Employees	1	—	1	1	—	—	—

Note 1: Permanent Employees: Full-time or part-time employees who have signed an indefinite-term contract.

Note 2: Temporary Employees: Employees who have signed a fixed-term contract. The contract expires at the specified time or concludes upon completing a specific task or event with an evaluation schedule.

Note 3: Employees without Guaranteed Hours: Employees who are not guaranteed a minimum or fixed number of working hours per day, week, or month but may be available for work as needed, such as temporary employees, zero-hour contract workers, or on-call employees.

Note 4: Full-time Employees: Employees are defined based on the respective country's laws and practices regarding working hours.

Note 5: Part-time Employees: Employees whose working hours per week, month, or year are less than those of full-time employees.

4.1.3 Employee job security

The recruitment operations of the Company adhere to the principles of fairness, impartiality and openness, and is handled in accordance with the provisions of the Labor Standards Act. The admission depends entirely on the individual's professional ability and experience, and the promotion, assessment, training, rewards and punishments after the employment are all handled fairly in accordance with the rules and regulations of the enterprise. Based on the spirit of giving priority to protecting employees' working rights and interests, we have established a manpower integration mechanism to arrange suitable positions and work according to the employee's wishes, expertise, and development potential. If the Company needs to reorganize the organization due to operational needs, the reorganization must comply with labor laws.

Regarding those who have reached retirement age or have applied for early retirement, their personal wishes and job abilities will be respected, and they will be included in the human resource database for contracted project personnel. They will be given priority when being recommended for rehiring by units in need to continue their service. Regarding employees who have been let go according to the law, the Company shall provide severance according to the law and refer them to the local government employment center for career counseling or professional training according to their wishes, in order to help them in their career change. The resignation rate (including retirement) of employees in 2022 was 4.64%, among which, retirement accounted for 50%. The resignation rate raised 1.04% in 2022 compared to 2021.

Overview of new employees and resignations in 2021-2022

Unit: Person

Type		2021				2022			
Age		New Employees		Employee Turnover		New Employees		Employee Turnover	
		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 2)	Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 2)
Age	Under 29 Years Old	136	2.75	38	0.77	145	2.91	39	0.78
	30-39 Years Old	26	0.53	38	0.77	69	1.39	55	1.10
	40-49 Years Old	4	0.08	9	0.18	9	0.18	13	0.26
	50-59 Years Old	2	0.04	33	0.67	1	0.02	52	1.04
	Over 60 Years Old	0	-	60	1.21	0	-	72	1.45
Total		168	3.40	178	3.60	224	4.50	231	4.64
Gender	Male	148	2.99	149	3.01	162	3.25	195	3.92
	Female	20	0.40	29	0.59	62	1.25	36	0.72
Total		168	3.40	178	3.60	224	4.50	231	4.64
Regional	Northern Taiwan	26	0.53	54	1.11	83	1.67	59	1.18
	Central Taiwan	61	1.23	59	1.22	55	1.10	70	1.41
	Southern Taiwan	58	1.17	41	0.85	55	1.10	54	1.08
	Eastern Taiwan	23	0.46	24	0.50	31	0.62	48	0.96
Total		168	3.40	178	3.60	224	4.50	231	4.64

Note 1: Ratio on Total Employees = New (Male) Female Employees / Total Regular Employees at the End of the Reporting Period
Note 2: Ratio on Total Employees = (Male) Female Turnover / Total Regular Employees at the End of the Reporting Period

Percentage of Local Recruits as Senior Managers

The Company actively gives back to the local area. Residents in the operating locations shall be given priority for recruitment as entry-level employees. We are also actively training local employees to be excellent senior managers. In 2022, the total senior managers were 670 persons accounted for 38%, decreased one person with dropped 0.4% compared to last year.

Table of local residents serving as senior managers in the last 2 years

Year	2021	2022
Number of persons	671	670
Proportion (%)	38.4	38.0

Note: Senior managers refer to those who are higher than entry level managers, have more than 5 years of service, and have the birthplace identical with the workplace.

4.2 Employee Emoluments and Benefits

Material Topic: Employee Emoluments and Benefits

Material Topic

Description	Significant inflation has resulted in rapid growth in employee compensation and benefits expenditure.	
Policy Commitments	With the spirit of "equal pay for equal work," we provide excellent benefit measures and a conductive workplace environment, maintaining a competitive remuneration system.	
Management Actions	Preventive and Mitigation Actions	Strengthen in-service professional training to enhance employee productivity and implement a reasonable salary adjustment system.
	Action Plan	We adjust salaries annually based on operational performance and the fluctuation of prices to maintain competitive compensation.
Performance Tracking	Salary adjustment was 3.83% for 2021 and 4.5% for 2022. The average adjustment rate over the past five years is 3.34%.	
Stakeholders Engagement	1. Employees can express their opinions through quarterly welfare committee meetings where management and labor engage in constructive discussions and reach mutual agreements through negotiations. 2. Government Agencies: Adherence to the Labor Standards Act and relevant regulations.	

4.2.1 Employee Emoluments

The emoluments standard for new employees in the Company is based on the qualifications required for a position, which includes the basic salary, various allowances, efficiency bonuses, holiday bonuses, supervisor incentives, etc. The overall emoluments combine the employee's professional knowledge and skills, performance, work quality and timeliness, ability for innovation, and planning capabilities. The reasonable and competitive emoluments structures have been stipulated according to the salary survey. The Company conducts overall evaluations of the operating goals, operating performance, and potential impacts in future on operating environments to adjust salary. The average salary adjustments rates and year-end bonuses shall be issued for all employees are according to the overall operating performance in each location every year. Because of price inflation surged, the salary adjustment rates increased in 2022, and the average salary adjustment rates for the last five years was 3.34%. The salary adjustment rates table for the last two years is bellow.

Type	Salary adjustment rates in 2021	Salary adjustment rates in 2022
Level 2 Managers or Above	3.83% plus perks NT$10,000	4.5%
Entry Level Managers or Below	3.83% plus perks NT$10,000	4.5%

Notes: The salary adjustment rates are conducting to the operating performance every year and the rates adjustment by competitors that the adjusted rates shall be superior to competitors.

Average salary Ratios for employees from 2021-2022

Unit: %

Year	2021			2022		
Type	Female	Male	Male to female ratio	Female	Male	Male to female ratio
Level 2 Managers or Above	100	105	105	100	109	109
Entry Level Managers or Below	100	131	131	100	130	130

Notes: Male to female ratio is equal to average salary for male employees divided by average salary for female employees

The company adheres to the concept of "equal work for equal work" which the basic salary ratio for males and females in the same position and of the same rank is 1:1. Each employee's salary adjustment ratio is based on the working performance, years of service, and year-end bonus by annually operating performance of the Company. Female employees' salary below the entry level managers (inclusive) is lower than that of male employees, mainly because most female employees at the entry level act as operators or clerks. Most of them do not need to work shifts and do not receive shift related allowances. Male employees at the entry level work shifts and do receive shift related allowances.

The following table indicates the number non-managerial full-time employees and their median and average salary from 2021-2022

Year	2021 (B)	2022(A)	Previous year Comparison (A-B)
Number of non-managerial full-time employees (people)	4,503	4,489	-14
Average salary of non-managerial full-time employees (NT$/person)	1,527,548	1,408,932	-118,616
Median salary of non-managerial full-time employees (NT$/person)	1,435,164	1,283,494	-151,670

Note: The number of non-managerial employees is the average number of employees (excluding subsidiaries) at the end of each month, and who have been paid by FCFC for more than six months (inclusive) in the current year and excluding managers.

The following table indicates the ratio of maximum emoluments to median employee emoluments from 2021 to 2022. Compared with last two years, in 2022, the ratio of maximum emoluments compared to median employee emoluments was increased and the salary growth rate was decreased because the salary adjustment ratio and numbers of month of year-end bonus issued were both less than that in 2021.

The ratio of employee's emoluments for maximum to median in 2021 and 2022

Year	2021	2022
Ratio of maximum emoluments to median employee emoluments	15 times	17 times
Percentage of salary growth (Note 2)	55.7%	-9.7%

Note: 1. Ratio of maximum emoluments to employee salary = Disclosed annual total emoluments of the highest paid individual (A)/ median annual emoluments of all employees (minus the annual salary of the highest paid individual) (B).

2. Salary growth rate = Disclosed total income growth rate for the highest salary in the organization/median growth rate for all employees (minus the annual salary of the highest paid individual).

Regarding retirement protection, the Company makes monthly contributions to employees' pension funds based on the new or old pension plan selected by the employees so that FCFC is able to provide pensions to employees when they meet the statutory conditions of retirement.

2021-2022 FCFC Pension System Overview

Year	2021		2022	
Descriptions	Number of Applicable Employees	Allotment Percentage	Number of Applicable Employees	Allotment Percentage
Old pension plan	1,272	2% monthly appropriation of the Company-wide salaries	1,204	2% monthly appropriation of the Company-wide salaries
New pension plan	3,885	Withholding 6% of employees' salary every month	3,777	Withholding 6% of employees' salary every month

Note: 1. Please refer to the accounting items related to "Pension" in the 2021 Consolidated Financial Statements for FCFC's pension recognition.
2. The number of people using the new pension system includes 209 non-regular employees.

4.2.2 Employee Benefits

Each plant has established employee welfare committees to implement employee benefits and enact regulations in accordance with the law to handle employee-related welfare. Each plant has a sound accommodation and leisure facilities that are better than the legal requirements. For the details of the benefits, please refer to the "Company Annual Report 2022" section, Operation Overview-Labor Relations under the Company Annual Report of Investor Relations on the company's official website.

Please refer to the "Company Annual Report 2022" section, Operation Overview-Labor Relations under the Company Annual Report of Investor Relations on the company's official website.

Insurance Benefits:

In addition to employees' labor insurance and national health insurance, the welfare committees of each plant also insure employees' accident insurance, medical insurance, etc., or provide employees with various group insurance policies options.

Club Funds:

Subsidy clubs to handle all kinds of activities such as travel hiking, sports competitions, art exhibitions, life lectures and other activities.

Retirees' Association:

In order to thank retired employees for their contributions, the Company has established the Retirees' Association, with 3 branches in Yilan, Changhua, and Chiayi. The Company allocates funds for social activities each year to connect with the retirees. As of the end of 2022, there are 1,117 members.

Unpaid parental leave

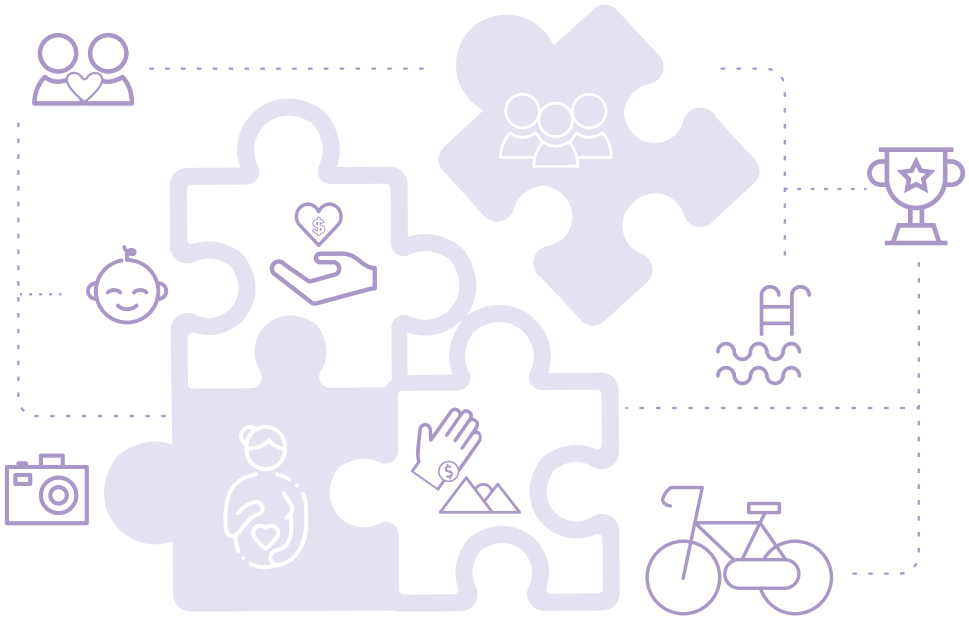
The Company provides a parental leave without pay system. Employees may apply for the leave according to their needs. In 2022, a total of 10 employees applied for the leave. Applications for leave in the past 2 years are shown in the table below:

FCFC Application for Unpaid Parental Leaves and Reinstatement

Year	2021			2021		
Item	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	16	149	165	15	273	288
Number of Employees Applying for Unpaid Parental Leaves	6	3	9	8	2	10
Number of Employees Expected to Reinstate in the Year (A)	7	3	10	6	3	9
Number of Employees Applying for Reinstatement in the Year (B)	7	0	7	6	3	9
Number of Employees Having Reinstated for over a Year (C)	5	0	5	6	0	6
Reinstatement Rate (%) (B/A)	100	0	70	100	100	100
Retention rate (%) (C of the current year/B of the previous year)	83	0	83	86	0	86

Note: 1. " -" indicates no numeric value.

2. According to the Company's parental leave without pay system, employees may declare the number of children they have on their own.
3. According to the Company's parental leave without pay system, employees may apply for parental leave without pay on their own.



4.3 Talent Cultivation Programs

Material Topik: Talent Cultivation Programs

Material Topic

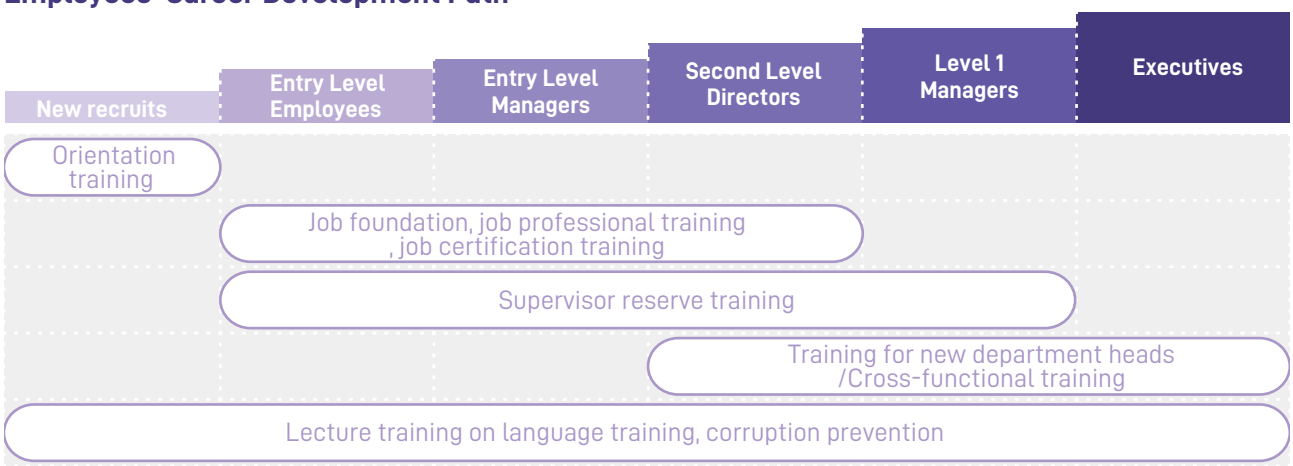
Description	In the era of AI advancements, new technologies and knowledge emerge, leading to increased competitive pressures.	
Policy Commitments	In accordance with the "Training Management Measures," we provide a comprehensive career development and educational training system, ensuring all-round talent development.	
Management Actions	Preventive and Mitigation Actions	Arrange employees to participate in AI-related training, encouraging them to acquire new knowledge and consider how to apply it to their work.
	Action Plan	Organize in-house AI education courses and collaborate with external artificial intelligence academies for training. Job promotions require passing an AI general competency assessment.
Performance Tracking	In 2022, 257 employees participated in the Company's AI-related training courses, accumulating a total training duration of 2,682 hours. Additionally, 32 individuals attended training at an artificial intelligence academy, with a total training duration of 329 hours.	
Stakeholders Engagement	Employees can provide feedback on training courses through physical and online suggestion boxes, dedicated phone lines, labor unions, welfare committees, and other organizational meetings.	

In addition to providing high-quality compensation and benefits, the Company also attaches great importance to the career development of employees. Appropriate training plans have been formulated for each stage, from new recruits to managerial positions. In addition, for technical positions that require professional skills, competency training and certification systems have been implemented to strengthen the professional skills of employees.

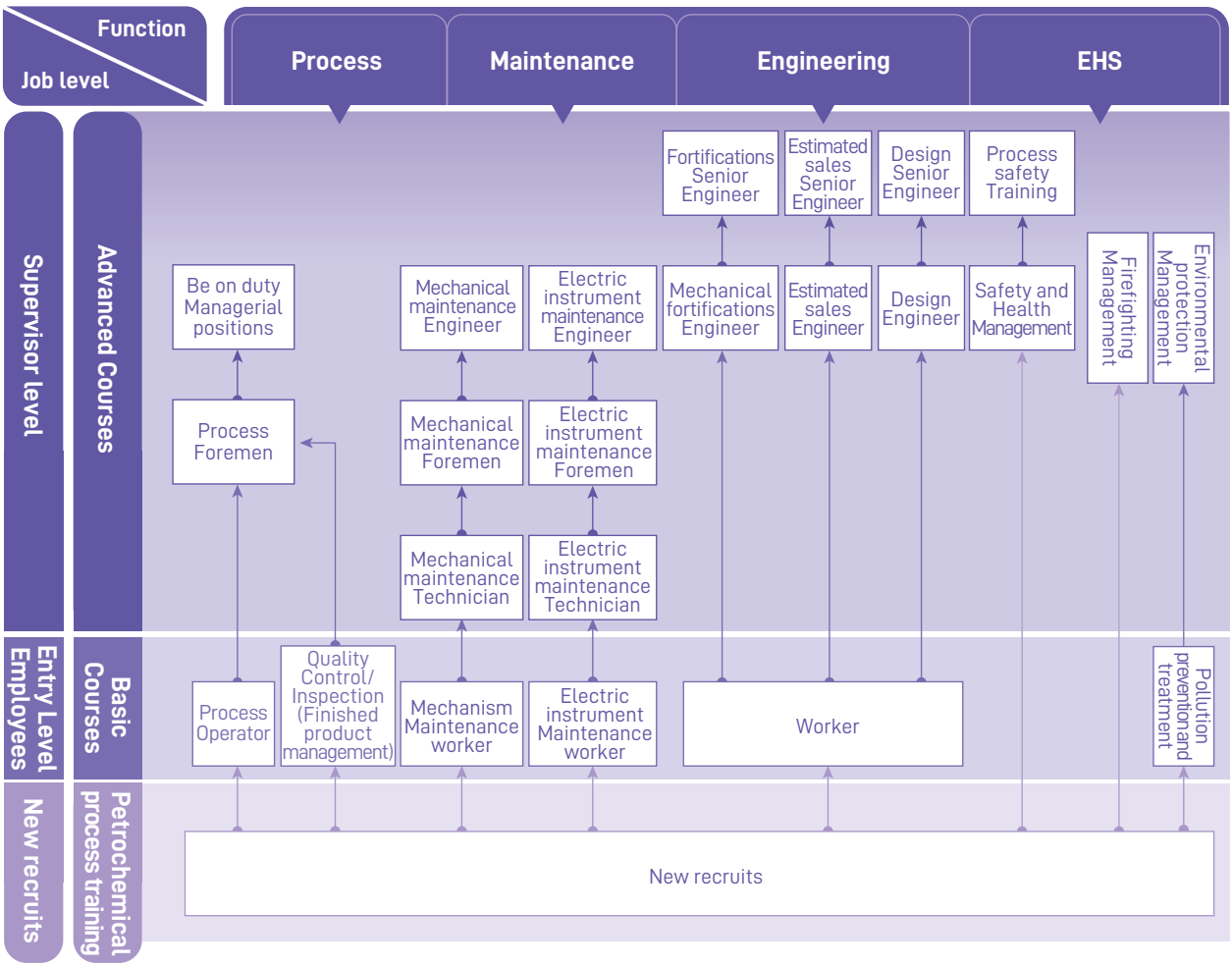
4.3.1 Employee Career Development Management

In order to implement talent cultivation, the Company has formulated "Training Management Measures" and used ERP system for computerized management. It regularly reminds the organizer to arrange training to achieve the goal of employee training and retention.

Employees' Career Development Path



Professional and technical job training system



In addition to the training courses, we also review the appropriateness of employees' duties and implement performance evaluations on a regular basis to examine employees' career development and to motivate our employees to improve their performance.

FCFC Evaluation Mechanism

Employee Category	Frequency
Level 2 Managers (inclusive) or below	Monthly performance evaluation
Level 1 Managers	Quarterly performance evaluation
All Employees	Annual year-end evaluation

In addition to informal personnel (such as: consultants, contract personnel, work-students), all formal employees are required to undergo job evaluation. The evaluation is conducted through face-to-face meetings between the manager and their subordinate to discover their talents, which shall be used as reference for future training and job transfers In 2022, the overall average inspection ratio of each categories was 95.9% that increased 0.5% compared to last year. The mainly reasons were that informal personnel were not required ranking in evaluation, and reduced 24 persons.

In 2022, the overall average inspection ratio of each categories

96.4 %

Percentage of Employees Receiving Regular Performance and Career Development Evaluations in 2022 and 2021

Unit: %

Year	2021		2022	
Employee Category	Male	Female	Male	Female
Executives	68.6	14.3	71.8	12.5
Level 1 Managers	99.5	100.0	99.5	100.0
Second Level Directors	100.0	100.0	99.9	100.0
Entry Level Managers	100.0	100.0	100.0	100.0
Entry Level Employees	97.3	79.1	97.8	81.7
Total	95.9		96.4	

Note: 1. The percentage of executives receiving evaluations was rather low due to a higher percentage of temporary consultants.
2. The total evaluation ratio was less than 100% due to informal personnel were not ranked in evaluation.

4.3.2 Employee Professional Training and Development

In addition to arranging employees to receive training at all levels, in accordance with the nine functional categories of employees' positions, FPG's "Technical Training Center" was commissioned to develop employee job certification and technical training courses to enhance employee job professionalism. In addition, a cross functional learning course is designed for the supervisor's position to improve the breadth of supervisor management knowledge and ability; there are regulations on additional points for promotion level and advance by professional certificate to encourage employees to learn from multiple sources, cultivate their second specialty, learn foreign language and transfer training, and to hold various subject study courses from time to time to promote employees' lifelong learning.

9 Functions of Professional Training

Statistics of Job certification exam for employees in 2021-2022

Year	2021		2022	
Training Type	Number of people who passed (participants)	Courses with the Most Number of Participants	Number of people who passed (participants)	Courses with the Most Number of Participants
Job certification exam	805	Safety Supervisor Certification Course	850	Manufacture Procedures Certification Course
Professional job training course	1,533	Firefighting technical training for entry-level personnel	2,317	Safety Supervisor Retrieved Training Course

In 2022 employees presented job certification exam and professional job training course increased respectively 45 persons and 784 persons compared to 2021, because the Company enhanced training courses due to the pandemic of COVID-19 became moderation in the half of 2022.

Statistical table of cross-functional training for supervisor positions in 2021 and 2022

Year	2021		2022	
Type of Manager	Number of Participants	Training Hours	Number of Participants	Training Hours
Middle to Senior Managers	167	571	13	65

The Company conducted one training course in 2022 due to the pandemic of COVID-19, thus the number of participants and training hours were much fewer than that in 2021.

To promote employees' awareness of human rights and occupational safety, we organize occasional courses on Occupational Safety and Health Act, the Labor Standards Act, the Sexual Harassment Prevention Act, and the Act of Gender Equality in Employment in addition to the orientation where employees receive training related to evaluation, appointment, employee benefits, attendance and plant access control. In addition, in order to strengthen the legal concept of employees, in 2022, the company arranged "ethical management" legal training courses for internal sales personnel and supervisors, and government legal units were invited to promote common corporate economic crime cases and regulations. A total of 84 people participated in the course, with total training hours of 168 hours. An "insider trading prevention" course was held for current directors, managers, and related employees. A total of 168 people participated in the course, with total training hours equaling 84 hours.

In 2022, each employee received an average of 40.3 hours of training (20.5 hours for senior managers; 56.8 hours for entry level managers; and 42.4 hours for entry level employees). The training projects completed ratio was 99.1% in 2022, the same as that in 2021.

In 2022 promote common corporate economic crime cases and regulations

84 people

Training hours of

168 hours

In 2022 each employee received an average of training

40.3 hours

2022 training projects completed ratio

99.1 %

FCFC Employee Training over in 2021 and 2022

Unit: hour

Rank \ Year	2021		2022	
	Male	Female	Male	Female
Middle to senior level Managerial positions	16.0	5.3	21.2	3.1
Entry level Managerial positions	37.6	9.9	59.0	23.7
Entry level Personnel	37.9	19.2	49.3	17.3
Average training hours per person	31.9	17.4	44.0	17.0

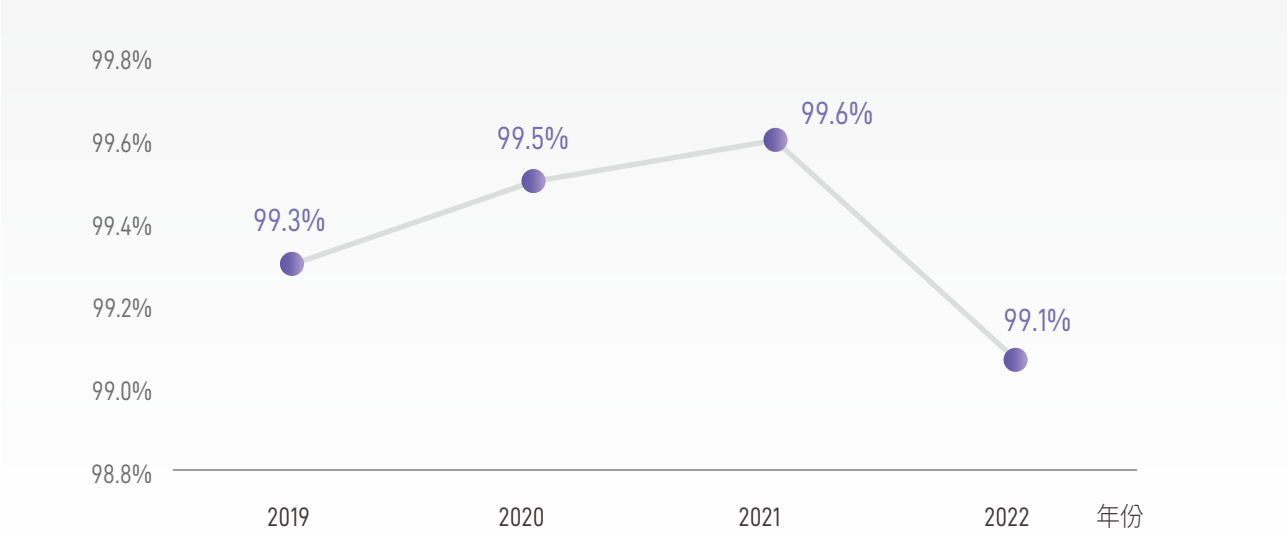
Note: Middle to senior managers (or higher) refer to executives, first level directors and second level directors.

Training Completion Rate of the Company in 2021 and 2022

Year	2021	2022
Training completion rate (%)	99.6%	99.1%

Note: The completion rate refers to the ratio of completed training courses which should be completed in the year.

Training Completion Rate of the Company for the Last Four Year



Note: 1.The completion rate refers to the ratio of completed training courses which should be completed in this year.
2. Because of COVID-19 pandemic, training courses were cancelled resulted in low completion rate

4.4 Healthy and Safe Working Environment

Material Topic: Healthy and Safe Working Environment

Material Topic

Description	Due to the high prevalence of high-altitude work in the on-site work environment or construction sites, there is an increased risk of severe injuries resulting from work accidents, leading to talent loss.	
Policy Commitments	In compliance with the Occupational Safety and Health Act's relevant regulations, personnel must adhere to standard work guidelines to achieve zero workplace injuries.	
Management Actions	Preventive and Mitigation Actions	Establish a health management system to assess potential risks in the work environment and prevent accidents from occurring.
	Action Plan	Conduct workplace safety inspections and provide construction notifications to ensure employee protection through measures such as wearing protective equipment.
Performance Tracking	In 2022, we had an average value of 0.04 on the overall injury index, significantly lower than the industry average of 1.13.	
Stakeholders Engagement	1. Employees: We hold monthly occupational health and safety committee meetings, allowing employees to propose revisions to occupational health and safety management practices. 2. Contractors: Conduct workplace safety inspections and hold construction safety briefings, allowing relevant personnel to provide suggestions for improving the work environment.	

4.4.1 Employee Health Management

To continuously promote employee health self-management, the Company has established a health promotion organization, which collaborates with the welfare committee and medical office to jointly encourage employee health promotion activities. Medical personnel are stationed in each factory site to provide individual health guidance and consultation, enhance employee health awareness, and collaborate with Chang Gung Hospital to provide medical and healthcare services, promoting preventive medicine and disease prevention. In 2022, we held 27 health seminars with 753 participants. To enhance on-site emergency response capabilities, the Company has gradually increased the number of automated external defibrillators (AEDs) to 75 units. The various health management activities are as follows:

- Acquire real-time employees' follow-up examination data
- Integration of measurement devices such as blood pressure monitors and blood glucose monitors
- Provide individual health guidance

Regular employee health examinations

- Comply with regulations and FPG management policies
- Regular health examination frequency exceeds regulatory requirements
- Conduct general and specialized health examinations for production operators

i-Care Health Station

Comprehensive CPR and AED training for all personnel

- Promote training for all personnel across different factory sites
- The employee training rate in 2022 has reached 99%, aiming to achieve 100%.
- In 2022, we introduced Smart Annie (with a built-in scoring mechanism and mobile app management) to quantify training outcomes.

Comparison between FCFC Frequency of Health Examinations and Statutory Requirements

Age	Statutory Requirements	Formosa Chemicals & Fiber Corporation
Under 29 Years Old	Once/5 years	Once/5 years
30-39 Years Old	Once/5 years	Once/3 years
40–44 Years Old	Once/3 years	Once/3 years
45–64 Years Old	Once/3 years	Once/2 years
Over 65 Years Old	Once/1 year	Once/1 year

[I-Care Healthy Care Station]

Promote CPR+AED training for all employees in 2021 and 2022

Year	Plant Site					
	Longde	Xingang	Changhua	Mailiao	Taipei	Total
2021	98%	87%	92%	99%	97%	95%
2022	99%	99%	92%	100%	98%	99%

4.4.2 Promoting a Healthy Workplace in Cooperation with Government Agencies

In order to promote a friendly and safe workplace, the Company continues to organize self-weight loss for health, TABATA exercise activities, and expand the health and care services to cover high risk contractors. The Company received the "Annual Excellent Healthy Workplace - Healthy Management Award", "Annual Excellent Healthy Workplace - Healthy Senior Citizen Award" and "Healthy Workplace Certification - Health Promotion Label.

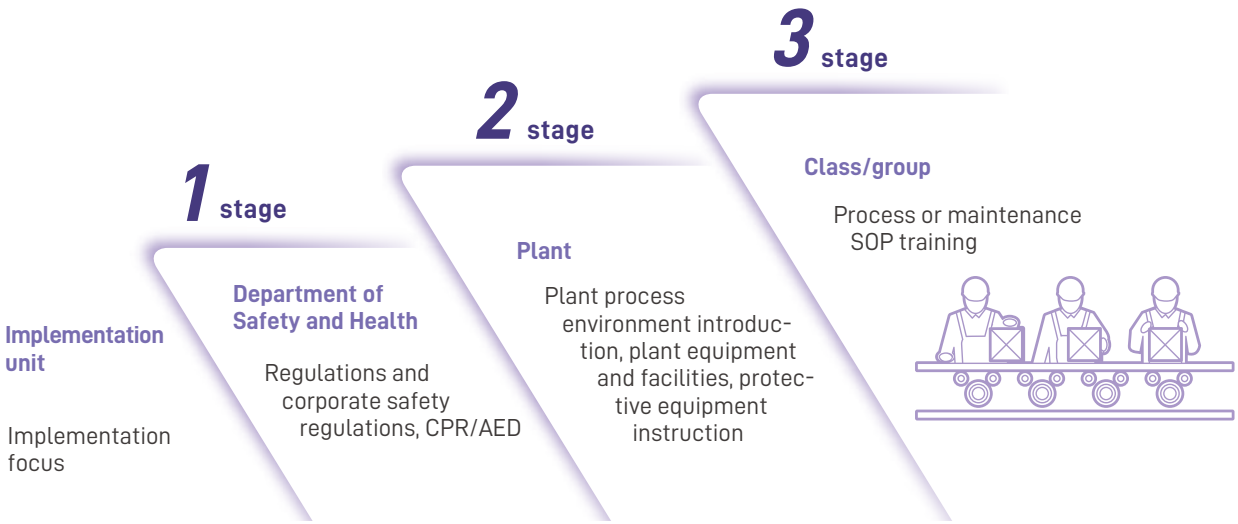
4.4.3 Workplace Safety Management

Material Topic: industrial and public safety

Material Topic

Description	Major accidents resulting in property damage and endangering personnel safety will severely impact the Company's reputation.	
Policy Commitments	The Company adheres to the relevant regulations of the Occupational Safety and Health Act and strives towards zero accidents and zero occupational injuries objectives.	
Management Actions	Preventive and Mitigation Actions	Establish management systems to identify potential high-risk areas, conduct regular inspections, and implement disaster drills to prevent accidents.
	Action Plan	Besides conducting comprehensive investigations, develop countermeasures and revise regulations and systems for identified abnormalities.
Performance Tracking	Utilize the PDCA cycle model and incorporate key performance indicators (KPIs) to track implementation results.	
Stakeholders Engagement	1. Employees: We hold monthly occupational health and safety committee meetings, allowing employees to propose revisions to occupational health and safety management practices. 2. Contractors: Conduct workplace safety inspections and hold construction safety briefings, allowing relevant personnel to provide suggestions to improve the work environment. 3. Government agencies: Conduct equipment safety inspections in accordance with government regulations and promptly report relevant production data to government agencies through real-time online connections.	

To secure the safety and health of all workers and stakeholders, the Company conducts the Occupational Safety and Health Act and the requirement of ISO 45001 Management System. All employees and non-employees within the plants shall comply with the related requirements and accept the management of the Company's safety supervision personnel. In order to strengthen the safety awareness of new recruits and implement the SOP, "Detailed Rules for Safety Education and Training for Newcomers", the Company conducts three-stage training at the company level, plant level, and class level.



Each plant convenes the Occupational Safety and Health Committee every quarter that labor representatives account for more than one-third of committee members. All members can make suggestions, coordination, and explanations on the working environment, occupational safety and health policies and management plans etc., in the meeting.

Plant	Number of Occupational Safety and Health Committee Members	Number of Labor Representatives	The proportion of labor representatives (%)
Mailiao Plant	7	3	42.9
Xingang Plant	16	9	56.3
Changhua Plant	8	3	37.5
Longde Plant	10	3	33.3
Topics for Discussion	1. Examine health management, occupational disease prevention, and health promotion matters. 2.Examine various safety and health proposals. 3.Regularly review the performance of occupational safety and health management and initiate post-incident follow-up actions. 4.Coordination matters related to contractor management. 5.Automated self-inspections or other safety and health audit improvement matters in each department. 6.Other matters required by the Occupational Safety and Health Act.		

The Company complies with the Occupational Safety and Health Act to reduce injuries resulted from employees violating SOPs or unsafe personnel behaviors. Each segment examined SOP/JSA once a month by way of small group, and managerial measures were established for SOP/JSA working activities approaching exercise by learning actual practices to reduce unsafe personnel behaviors in 2022. The Longde and Xingang plant sites were awarded "An Excellent Segment on Occupational Safety and Hygiene Award" in 2022.

The Longde plant sites were awarded "An Excellent Segment on Occupational Safety and Hygiene Award"

1 Process Safety Management (PSM)

- The Company complies with the US OSHA regulations and establishes a total of 69 dedicated PSM personnel at each rank to assist each department to coordinate and launch the 14 key PSM tasks.
- The Company continues to appoint personnel for professional training. To date, a total of 159 people have received "production process safety evaluation" certification.

2 Management of Change (MOC)

- The Company actively implements process hazard analysis to ensure that any design, equipment, raw materials or operating conditions change will not cause harm to the process.
- The Company arranges MOC counseling evaluation schedules and experience sharing every year.
- The Company involves equipment or operating contents changes which could cause internal corrosive environments must be inspected by specially assigned person.
- If a plant has any concerns about equipment repair, they may actively submit the case to the equipment security team for professional and technical review.

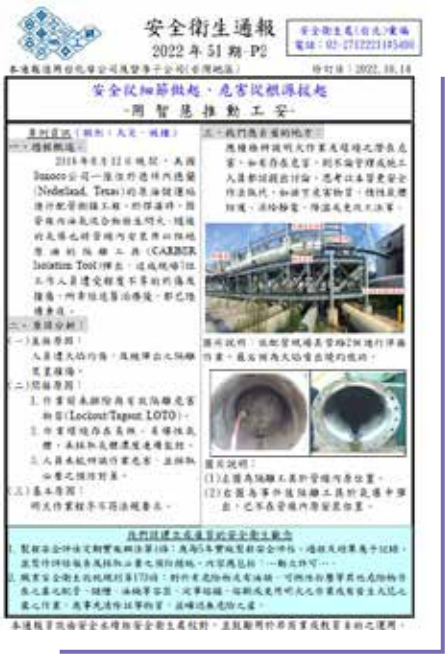
3 Work safety analysis

- The Company establishes the "Risk and Opportunity Assessment Operating Guidelines" to specially assigned person in plant to evaluate operating processes and identify risks.
- Improvement measures are drew out according to the levels of risk to further reduce operational dangers.
- Each specially assigned team in each segment should examine SOP/JSA operating processes once a month.

4 Promotion of disaster prevention drill enhancement

- The Company rests on scientific manner stimulating real situations and sketches out alternative counter strategies.
- The Company introduced the ALOHA spread simulation analysis and GOOGLE EARTH in 2021 to plan safety evacuation routes according to the degree of spread.
- The Company exercised disaster prevention 228 times in 2022.

The safety and health department periodically compiles accidents that occur in the industry at home and abroad into cases to stipulate "Safety and Health Bulletins" which are announced through the company's OA system to promote the consciousness. The total periodicals were 51by 2022, with total 457 notices. Parallel improvements had been implemented for external accidents and 5 accident investigations were implemented in 2022.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4.4.4 Statistics of Occupational Injuries

The Company primarily produces petroleum plastics raw materials and products related to "benzene and its derivatives". Based on the nature of our production processes, personnel have increased risk exposure to chemical substances. Therefore, after the special employees' health checkup has been conducted in each year in accordance with "Guidelines for Tiered Health Management Recommendation for Workers' Special Health Checkup," the Company will submit any abnormal results to occupational doctors for subsequent review and diagnosis. To ensure employees' safety at work, work of related employees will be adjusted subsequently, or the results will be served as reference for reducing work environment risks.

In 2022, no major occupational accidents resulted in more than six months of lost workdays. The statistics for various occupational injuries are presented in the following table. The overall injury index, with an average value of 0.04 for both males and females, slightly increased compared to the previous year but remained lower than the industry average of 1.13 (note). There were no major occupational disasters or accidents where the number of lost days was more than 6 months in 2022. The statistics of various industrial accidents of FCFC is as follows. In terms of the total injury index, the average male and female injury index is 0.04, which is a few higher than that of last year but lower than the average, 1.13, of the chemical raw material manufacturing industry (Note).

FCFC Occupational Injuries in 2021 and 2022 (By Gender)

Year	Disabling Injury Rate		Disabling Injury Severity Rate		Frequency-severity indicator		Absence Rate		Occupational Disease Rate	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
2021	0.22	0	5	0	0.03	0	0.28	0.46	0	0
2022	0.34	0	12	0	0.07	0	0.35	0.57	0	0

Note 1: Industry information comes from the 2021-2022 Frequency-severity Indicators by Sector published by the Occupational Safety and Health Administration, Ministry of Labor.

Note 2: Disabling injury rate: Number of disabling injuries*1000000/total working hours

When comparing the Company with the chemical raw materials manufacturing industry, our recent occupational safety and health performance has been lower than the average value announced by the Ministry of Labor, excluding work injuries caused by traffic accidents. However, the statistical values for occupational injuries (excluding traffic accidents) slightly increased in 2022 compared to the previous year. This indicates that although the contractor's safety management has been effective, there has been an increase in the proportion of injuries among the Company's employees. In 2023, our primary goal will be to reduce unsafe behaviors among personnel. Compared with the chemical raw material manufacturing industry, the company's work-related safety performance in recent years showed that the total injury index of employees excluding traffic accidents was lower than the average announced by the Ministry of Labor in the last four years. In 2022, only the occupational injury index which excluded traffic incidents was a few higher compared to previous year that resulted from good contractor and supplier management. But the employee injuries index rose, so that the Company will promote unsafe personnel behaviors at workplace to reduce occupational injuries in 2023.

FCFC Occupational Injuries in 2021 and 2022

Year	Disabling Injury Rate	Disabling Injury Severity Rate	Frequency-severity indicator	Absence Rate	Occupational Disease Rate	Working Hours (Thousand)
2021	0.17	3	0.02	0.30	0	11,970
2022	0.21	7	0.04	0.38	0	14,082

Note 1: Working hours = number of employees*working days in a given year*8 hours + overtime hours - hours of leave

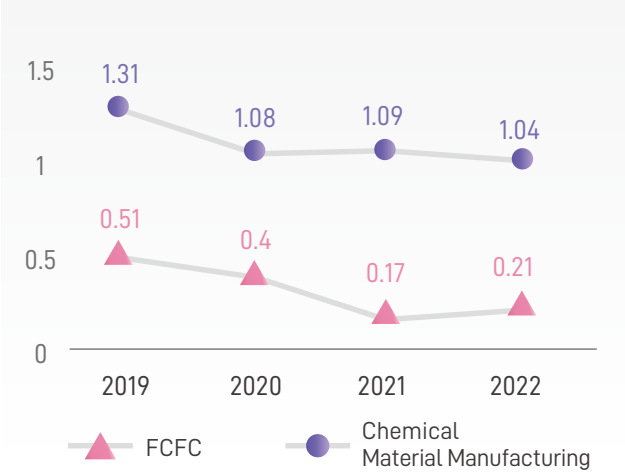
Note 2: Statistics on the number of occupational accidents do not include the number of occupational accidents for employees.

Note 3: Disabling injury rate: Number of disabling injuries*1000000/total working hours

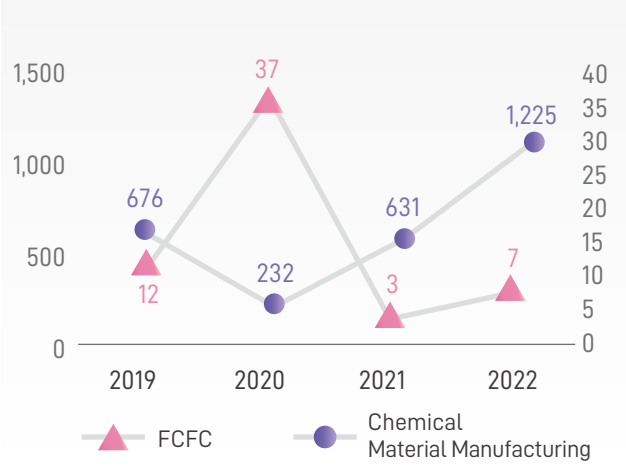
Note 4: Disabling injury severity rate: Number of days lost due to disabling injuries*1000000/total working hours

Statistics of Disabling Injury Rate and Disabling Severity Rate

Disabling Injury Rate



Disabling Severity Rate



Statistics of Contractors Injury for the Last Four Years

Year	Disabling Injury Rate	Disabling Severity Rate	Working Hours (Thousand)
2019	-	-	11,308
2020	0.22	26	13,087
2021	0.09	1	10,153
2022	0	0	10,437

Note 1: The absence rate and the occupational disease rate of contractors were unavailable; thus, the working hours were estimated through the access system. Hours of absence include hours of sick leave and work-related injuries.

Note 2: Disabling injury rate: Number of disabling injuries*1000000/total working hours

Note 3: Disabling injury severity rate: Number of days lost due to disabling injuries*1000000/total working hours

Note 4: Working hours = number of contractors during the reporting period*250 working days*8 hours

Note 5: The number of working hours from 2019 to 2020 is much greater than in previous years, mainly due to the restoration of the ARO3 plant.

In 2022, most occupational accidents were caused by injuries during the abnormal personnel exclusion processes. Compared to the previous year, the number of such incidents has decreased. However, it is still primarily attributed to personnel engaging in unsafe behavior and violating standard operating procedures (SOP). The Company will continue strengthening its educational training programs, prioritizing personnel safety, and emphasizing that personnel adhere to workplace safety regulations and norms. In 2022, most occupational accidents occurred due to unsafe personnel behavior that violated SOPs. The Company will continue to strengthen people-oriented safety education and training and emphasize the importance of complying with work safety regulations.

2021-2022 FCFC Abnormal Incidents and Occupational Injuries at Each Plant

Year	2021					2022				
Plant Site	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description
Longde	0	0	0	0	-	0	0	1	1	Jammed by equipment
Changhua	0	0	0	0	-	0	0	0	0	-
Xingang	0	0	2	2	-	0	0	0	0	Contact with high temperature pipe
Mailiao	0	0	0	0	Collision with equipment	0	0	1	1	-
Total	0	0	2	2	-	0	0	2	2	-

Note: 1.Serious occupational disasters are based on the definitions of major occupational disasters stipulated by the Ministry of Labor, which refers to the following: 1. Occurrence of death. 2. Disasters involving more than 3 victims. 3. Leakage of ammonia, chlorine, hydrogen fluoride, phosgene, hydrogen sulfide, sulfur dioxide and other chemical substances that causes the hospitalization of more than one worker.

2.Recordable occupational hazards refer to general occupational hazards.

3.Total fine was NT$160 thousand for accident incidents in 2022.

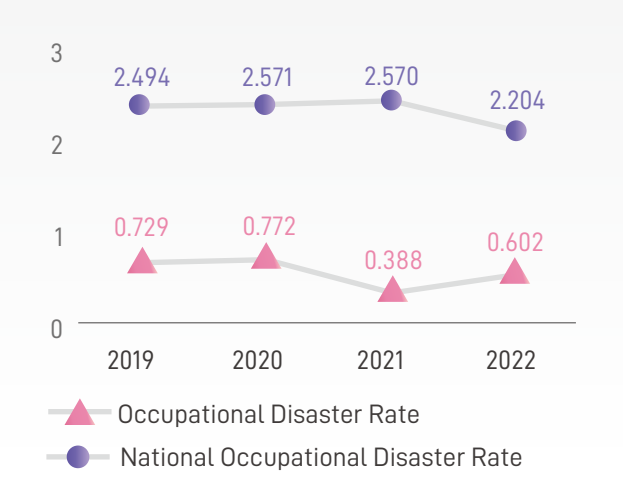
4.Total fine was NT$100 thousand because of one case of construction jack fall.

Overview of Occupational Disasters

The Company's occupational disaster rate (persons per thousand) in 2021-2022 was lower than the national average. It also had showed down trends for the last three years, although the rate in 2022 was a few higher than that in 2021.

2021-2022 Occupational Disasters Rate (Persons per thousand)

Item	2021	2022
Number of Occupational Disabilities	2	2
Occupational Disaster Rate (Persons per Thousand)	0.388	0.602
Number of Occupational Fatalities	-	-
Number of Major Occupational Disasters (Contractors)	-	-
Number of Occupational Fatalities (Contractors)	-	-
National Occupational Disaster Rate (Persons per Thousand)	2.570	2.204



Considering the higher potential risks associated with the Company's factory characteristics, we established strategies and operational procedures to control accident risks before, during, and after accidents. According to the Regulations Governing Accident Handling and the Regulations Governing Emergency Responses, in the event of an accident, the Company initiates the three-stage emergency response procedures by grouping the employees at section, plant, or complex levels based on the accident's severity. Each team handles the accident according to its duties.

Before the accident :

Reduce the risk of accidents

- Improve equipment reliability
- Improve workplace safety
- Establish reporting and contingency mechanisms

During the accident:

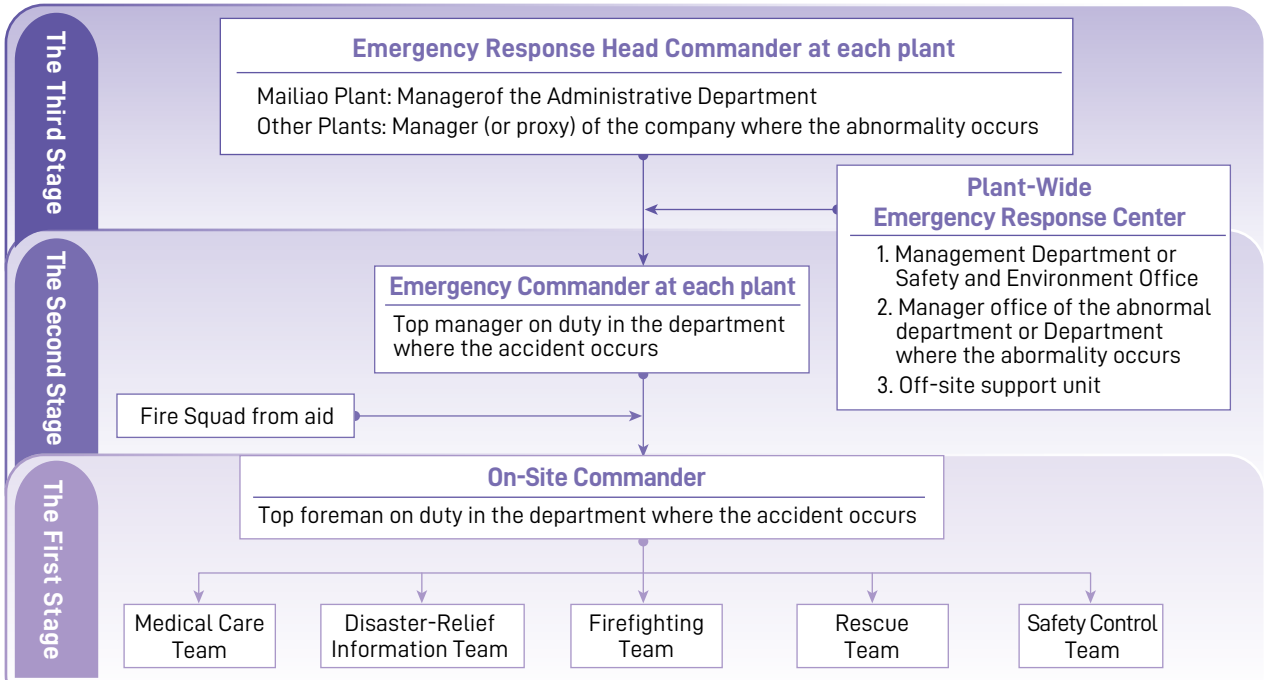
Emergency response measures for accidents

- Immediately report to regulatory authorities and Company supervisors
- According to the Company's regulations, form emergency response teams and initiate a three-stage response procedure
- Computerized operation for reporting accidents or abnormalities and real-time SMS system

After the accident:

Accident cause investigation procedures

- Post-accident review and approval by regulatory authorities
- The Company will initiate an investigation process to clarify the cause of the incident, conduct a thorough review, and identify and implement improvement measures.



4.4.5 Contractor and Supplier Management

Construction Safety Management for Contractors

To ensure effective management, the Company invites contractors to hold pre-work coordination meetings before inspections to provide detailed information about the work environment. We also established the "Safety, Health, and Environmental Data Management Platform" for this purpose. After each scheduled inspection, we invite contractors to participate in an "Abnormal Counseling and Improvement Symposium" to collect and analyze data on the types of abnormalities and deficiencies, develop improvement measures, revise the occupational accident prevention plan, and implement educational training to prevent the recurrence of irregularities.

Before the scheduled inspections

- We will gather the factory (department), supervisory department, and contracting parties to provide a report on the primary types of hazards identified during the previous and current inspections.
- Use the "Safety, Health, and Environmental Data Management Platform" to analyze past abnormalities and deficiencies to highlight management priorities during the inspection.

During the scheduled inspection

- Ensure completion of Pre-Startup Safety Review (PSSR) procedures for pre-operation safety checks.
- Assist contractors in jointly reviewing and implementing immediate improvements when abnormalities occur.

After the scheduled inspection

- Invite contractors to attend a post-inspection abnormality counseling and communication meeting to review the causes of abnormalities and incorporate them into the occupational accident prevention plan to prevent recurrences. We conducted eight meeting sessions in 2022.
- We will document the abnormal records in the "Safety, Health, and Environmental Data Management Platform" and provide guidance and consultation to contractors.

Construction Safety Management for Contractors		
Regular Meetings	• Agreement Organizational Meeting	• We conducted 252 sessions in 2022.
Before Entrance	• Pre-entry education and training for businesses • Two-tier access control teaching materials • 3-hour safety education and training for on-site construction personnel	• 248 trainees were qualified in 2022.
After Scheduled Inspections	• Abnormal Counseling and Improvement Symposium	• We held eight sessions in 2022.
Daily Operations	• Establish the "Safety, Health, and Environmental Data Management Platform" to collect data. • Establish "Abnormal Resumes" to guide and assist contractors in improving.	• All negligence cases by responsible contractors in 2022 have been registered and provided with guidance for improvement.
Contractor Transportation Safety Management		
Annual Evaluation	• Promote participation in the Safety & Quality Assessment System (SQAS) for transportation safety assessment.	• 16 companies passed the assessment in 2022.
Daily Operations	• Promote the installation of satellite positioning systems in transportation vehicles to monitor their driving conditions and routes.	• We conducted 358 random inspections in 2022 with no major abnormalities.

Carrier Transportation Safety Management

To enhance transportation safety, in addition to actively participating in the Safety & Quality Assessment System (SQAS) implemented by the Company for transportation carriers, we also incorporate customer-managed transportation safety into SQAS management. We conduct SQAS assessments once a year. Furthermore, we promote vehicle satellite positioning and monitoring management. Monitoring spot checks are carried out on transportation carriers twice a month. We conducted 358 spot checks in 2022 and found no significant abnormalities or deficiencies.

Contractor (Carrier) Reward System

The Company ranks the contractors each year according to their scale and number of personnel. Awards and prizes are awarded by the Company's President to contractors (carriers) with excellent performance, in order to encourage contractors (carriers) to further enhance their safety and health.

Contractor Health Care

The Company considers contractors as part of our workforce and cares for them as if they were a part of the Company. Contractors with more than 50 employees are included in our care system. Following the guidelines of the Occupational Safety and Health Administration's "Workplace Health Service Management System (we-Care)," we conduct a "10-Year Cerebrovascular and Cardiovascular Risk Assessment" to identify and provide care for high-risk cases. During the pandemic, we proactively provide our healthcare support for contractors. A total of 642 individuals within our contractors met the criteria for care, and after screening and analysis, we identified 47 high-risk cases. Our healthcare management staff reached out to each individual through telephone consultations to provide personalized health guidance.

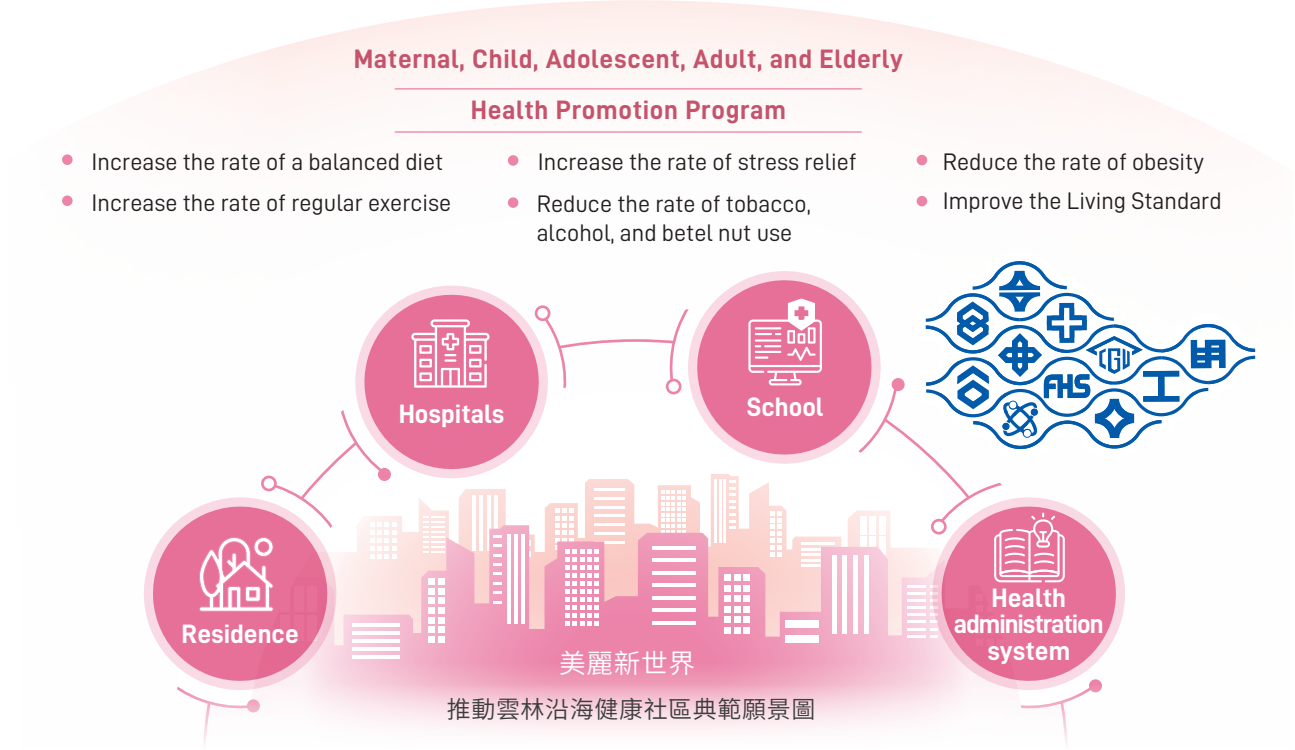
5 The value of social mutual prosperity

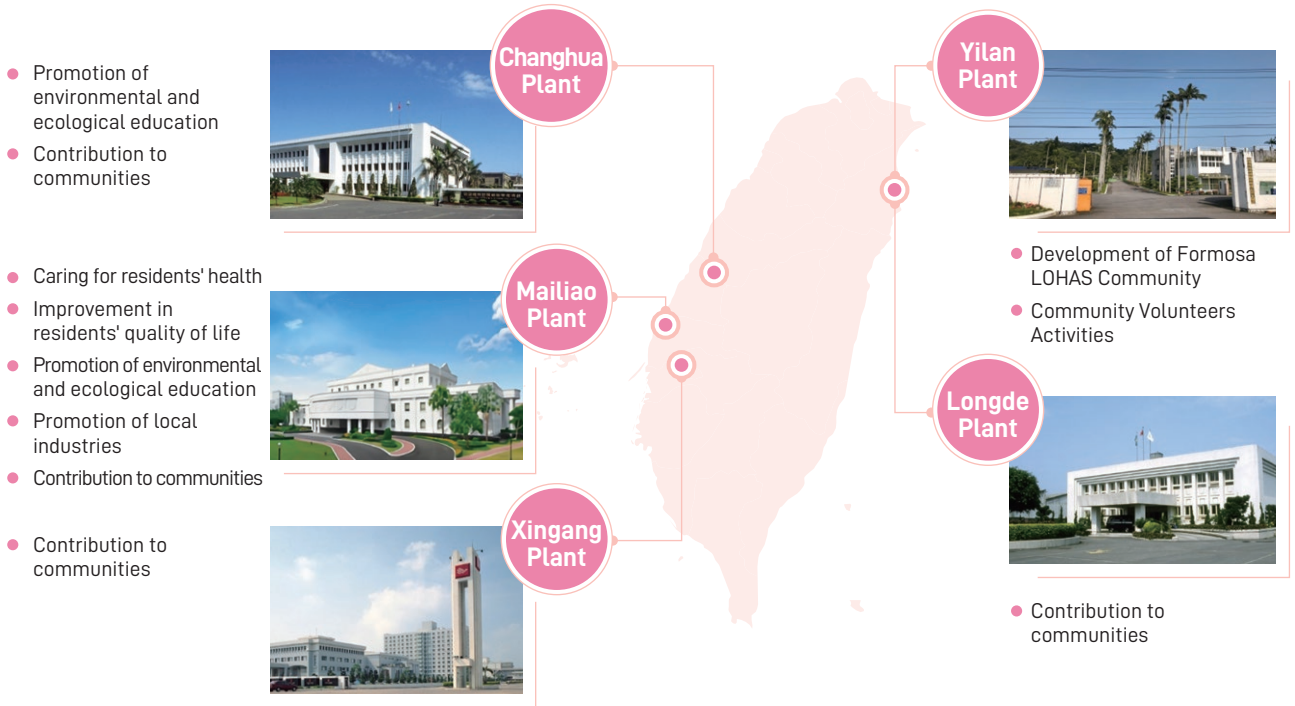
5.1 Community Engagement 109

5.2 Feedback to Society 115

The operations of the Company are built on the basis of taking from and giving back to society. We are dedicated to participating in various charitable events and contributing to society in the hope of creating common prosperity in the neighboring communities.

5.1 Community Engagement

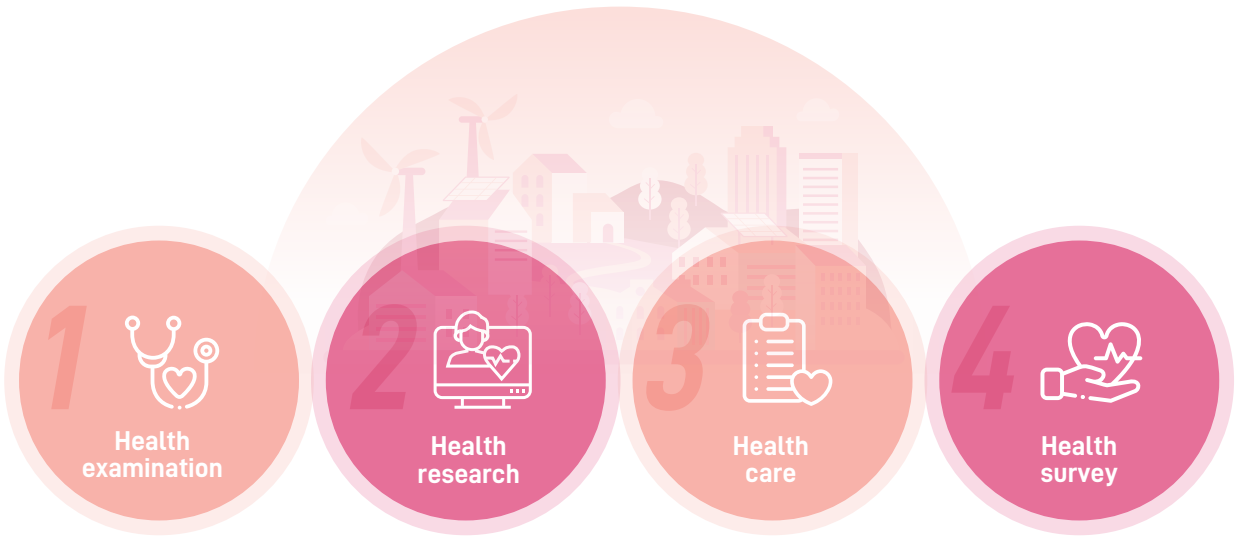




5.1.1 Care for Community Residents' Health

The Company has being promoted health care due to its close relationship with residents in the operating areas. For related promotion results, please refer to the "ESG" section on the official website of Formosa Plastics Group.

Health Promotion Plan for Residents near the Mailiao Industrial Complex



- Abnormal listed & management
- Increase the return rate
- Diagnosis treatment
- Annual tracking

- Establishment and maintenance of health database
- Health data analysis
- Implementation results sharing

- Medical quality improvement
- Resident health improvement
- Work together with public and private organization

- Resident health trends
- Residents and social health concerns
- Care promotion measures

Child care for community residents

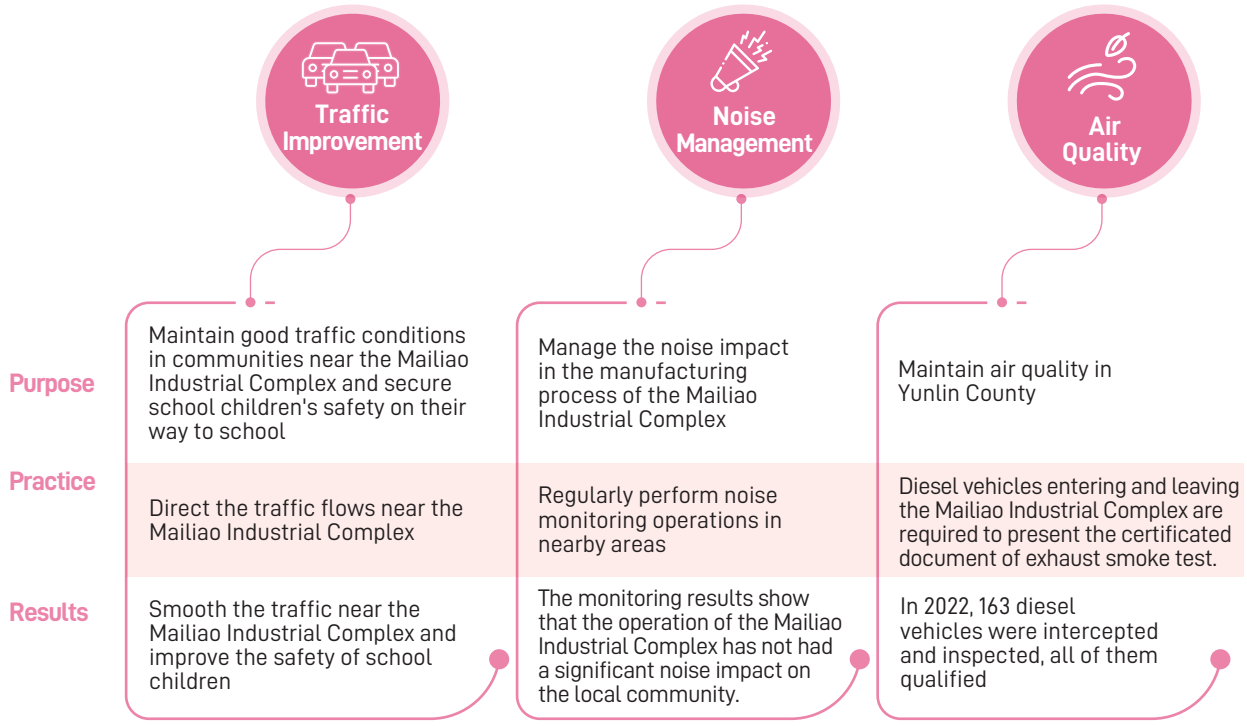
In order to ensure that employees can go to work with peace of mind, in 2000, the "Sun Kindergarten" was established in the family dormitory community of the Chiayi plant to take care of the employees' children and take care of the children's development with comprehensive of physical and mental. The Company expanded child care services and provide preferential access to preschool children aged between 2 and 6 in neighboring communities to have a safe growth space.

Fieldtrips for local culture

Christmas activities

5.1.2 Enhancement of the quality of life of community residents

In order to promote the living quality and community environment nearby the plant area for neighbors, the Company is consistent in the inspection of air quality and noise caused by the traffic of plant operation, and applies specific improved projects as well.



From 2021 to 2022, the inspection operations were carried out on the adjacent roads entering and exiting of the Mailiao Industrial Complex with diesel vehicles, and all of them are qualified. Inspection results over the years are indicated below:

The statistic table of vehicle inspected operation at Mailiao Industrial Complex in 2021 and 2022

Year	Amount of vehicles (A)	Number of intercepted vehicles (B)	Number of examined vehicles (C)	Number of qualified vehicles (D)	Number of passing rate (D/C)
2021	1,470	167	84	84	100%
2022	1,341	163	82	82	100%

Note: 1. Number of amount vehicles checked refers to the amount of diesel vehicles checked in the roadside by the Environmental Protection Administration of Yunlin Province.
2. Number of intercepted vehicles refers to the number of diesel vehicles intercepted in the roadside by the Environmental Protection Administration of Yunlin Province.
3. Number of vehicles inspected refers to the number of diesel vehicles emitting black smoke among the diesel vehicles checked in the roadside inspections.
4. Number of qualified vehicles refers to the number of diesel vehicles inspected and meeting the statutory requirements for exhaust smoke and opacity.

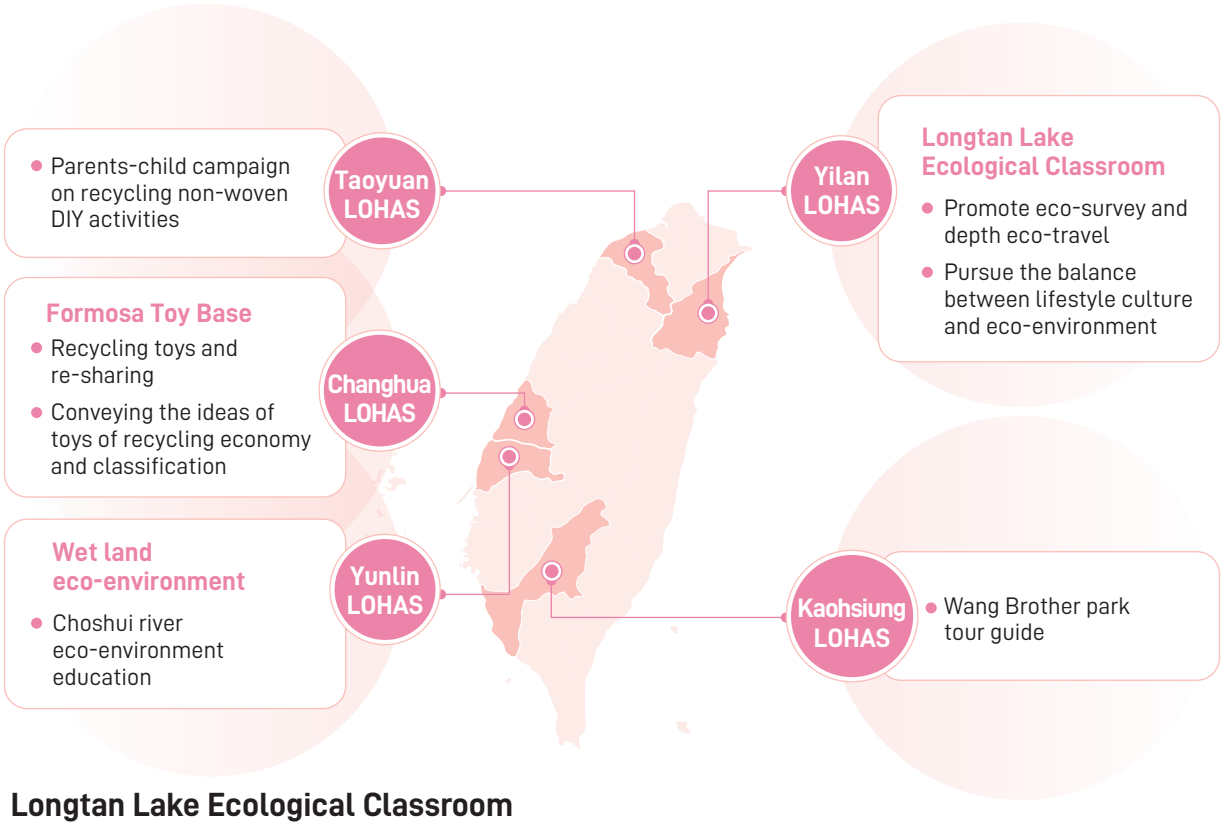
5.1.3 Formosa LOHAS Circle

NT$ **1.47** million Investment funds for Lohas Circle activities in 2022	**16** events The number of events held in the Lohas Circle in 2022	**4,850** people Number of participants in the Lohas Circle activities in 2022	**8** companies Number of Lohas Circle Event Partners in 2022

In recent years, the Company has been actively collaborating with affiliated enterprises in various locations, such as Yilan, Taoyuan, Yunlin, and Kaohsiung, focusing on social engagement and promoting environmental sustainability. Together with local community residents, businesses, and government agencies, we have been jointly promoting the Formosa LOHAS Circle, deeply rooted in environmental conservation and appreciation of local historical and cultural heritage.

Events held in the Formosa LOHAS Circle in 2022

	Changhua LOHAS Circle Toy Base Project	Yilan LOHAS Circle Longtan Lake Junior Guide Family Camp	Yilan LOHAS Circle Longtan Lake Phase 2 Volunteer Training Course
	Concept Plastic toy recycling and educational promotion - "Plastic Recycling, Circular Economy."		
Collaboration Partners	• Taiwan Toy Library Association	• Longtan Community Development Association • Yilan County Government • Local schools	• Longtan Community Development Association • Yilan County Government • Local schools
Achievements	• Volunteer Training and Service Program - 48 sessions • Community and Rural Care Program - 6 sessions • Educational Promotion (Toy Curriculum) - 22 sessions • Toy recycling reached 11,030 kilograms • Love Distribution with Toys (Toy Distribution) - 54 units, 2,817 kilograms • Toy Visit and Exchange Program - 11 units	• Lake circumambulation events • Round snout courses • Plant-related courses • Guided tour presentation • Birds-related Courses	• Local cultural heritage and historical understanding • Professional courses on plants and birds • Learn about lake-surrounding plants • Professional courses on frogs • Nighttime nature observation



Longtan Lake Ecological Classroom

Since 2020, Yilan Lohas Circle continued using Longtan Lake Ecological Classroom as its base. It established a fixed location on the shores of Longtan Lake to explain ecological information and the beauty of nature to the general public. Yilan Lohas Circle worked closely with the Longtan Community Development Association, related government organizations, and local schools to invest in ecological improvements to trim non-indigenous living being for distoechodon tumirostris and help promote the conservation of the fish through environmental education. As of cumulative participants over 4,850 persons and in 2022, a total of 229 participated in the activities.

Yilan Lohas Circle was invited by the Yilan County Government to participate in the "Water Conservation Fun - Playing in the Mountains and Waters" water protection event. The event aimed to promote environmental protection and activities related to the Longtan Lake Ecological Classroom to the general public. The event had 229 participants. The public, participating organizations, and organizers agreed with the ideals of the Longtan Lake Ecological Classroom and actively invited the Longtan Lake Ecological Classroom to participate in related environmental events, in order to do our part for the environment together.

Participated in "Water Conservation Fun - Playing in the Mountains and Waters" organized by the government to promote environmental education

The Luodong Forest District Office visited the Longtan Lake Ecological Classroom for volunteer exchanges and visits. Together with the Longtan Community Development Association, the organization visited the distoechodon tumirostris ecological park to hold ecological lectures

Changhua LOHAS Circle

Starting in 2020, the Company has worked with the Taiwan Toy Library Association to establish the "Formosa Toy Base" brand. We established a second hand toy logistics center in the Fuli Building of Changhua plant to recycle toys from the central region. As of 2022, the center has recycled 11,030kg of used toys and has shared the toys with 54 social welfare organizations and disadvantaged family, allowing more children to share this joy and enrich their childhoods. The toy base also designed diverse toy courses for all ages, teaching children how to disassemble and rebuild toys. Through education and promotion, we aim to convey the types of plastics, recycling classification, and correct usage ideas, allowing the concepts of a recycling economy to be implemented in every aspect of life. For senior citizens, the Company combines health care actions with health promotion to convey health lifestyle ideas.

Children

- Toy disassembly and reassembly course
- Creating toy specimens after disassembling toys

As of 2022, we have conducted

22 sessions **2,615** participants

Seniors

- Combine healthcare initiatives with health education information dissemination
- Utilize toys to lead senior individuals in group games, enhancing focus, muscular endurance, and social engagement.

As of 2022, we have conducted

6 sessions **715** participants

5.2 Social feedback SDG 14.2

5.2.1 Social Welfare Donations

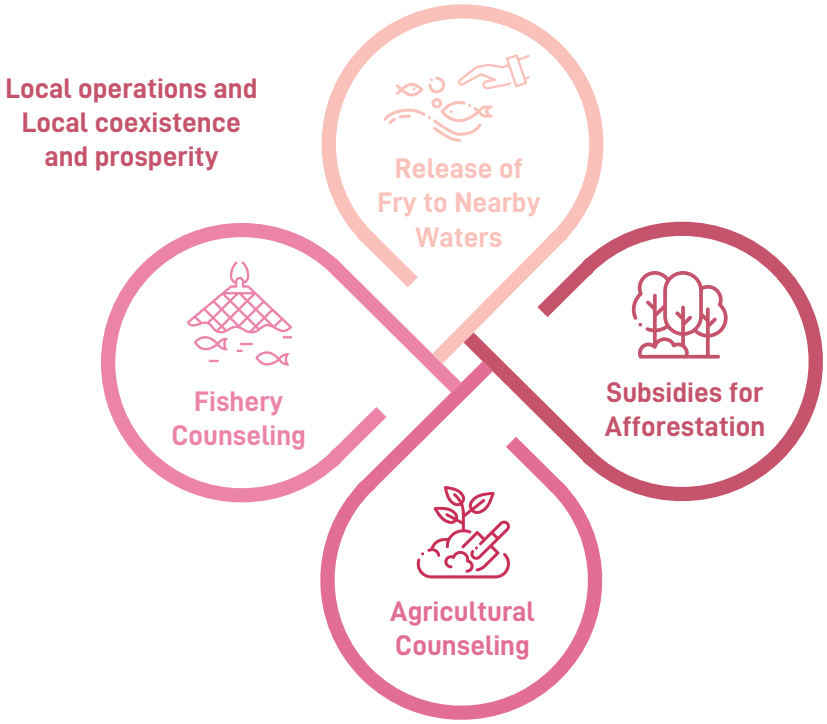
In order to implement the concept of the two Founders, the Company actively cooperates with the government and civil society organizations to deeply understand social needs, and care for and assist vulnerable groups. Over the years, the total expenditure of the Company and companies within the group on social welfare undertakings such as education, medical care, and social welfare has reached NT$101.23 billion, and we continue to lend a helping hand to those in need in society. Social participation includes education, medical care, care for disadvantaged groups, environmental care, elderly care, disaster relief, culture, sports, health research, and local feedback, etc. It is planned by the headquarters of Formosa Plastics Group and promoted and implemented by the companies in the enterprise. For more information, please refer to the "Co-prosperity with Communities" section of corporate social responsibility on the official website of Formosa Plastics Group.

Please refer to the "Co-prosperity with Communities" section of corporate social responsibility on the official website of Formosa Plastics Group

5.2.2 Promoting Local Industries

The sixth cracker project built by Formosa Plastics Group started in 1994 and put into operation in 1998. The Company has the vision that prosperity shall develop with community, and shall be co-existence and sustainable. The Company proposed four industrial upgrading action plans to fully assist the development of agriculture and fishery to fulfill company vision. For related promotion results, please refer to the "Co-prosperity with Communities" on the official website of Formosa Plastics Group. Four major upgrading action plans are briefly as follow:

Please refer to the "Co-prosperity with Communities" on the official website of Formosa Plastics Group



5.2.3 Enhancing Relationships between FCFC Plants and Local Communities

The Changhua Plant, Longde Plant, and Xingang Plant, and Mailiao Plant hold activities that enhance the relationships between the plants and communities every year. Furthermore, the corporate volunteers also actively visit and communicate with local caring organizations, participate in local activities, and care for disadvantaged groups. Please visit the corporate website of FPG for more information.

Please visit the corporate website of FPG for more information

Corporate volunteer services

- Activity: Organizing a beach cleaning event
- Performance: In the 2022 volunteer activities, 65 participants contributed 195 hours.

Volunteers worked together to clean up fishing nets and oyster ropes on the beach.

Corporate volunteers participated in beach cleaning events.

Participating in Local Events

- Participation in Activities: Organized two community senior appreciation events and two visits to nursing homes.
- Performance: In 2022, 6 individuals participated and invested 18 hours in local events.

Volunteers assisted the elderly in receiving their senior citizen allowances and presented them with products from the Company.

Corporate volunteers
Village senior appreciation events (Sanjian Village, Zhongyang Village)

Caring for the Disadvantaged

- Projects: Regular visits to senior citizens living alone and assist villagers facing emergencies.
- Performance: In the 2022 caring activities, 228 individuals were cared for.

Corporate volunteers visiting the seniors at Ren'ai Home in Chiayi City.

Corporate volunteers visiting disabled people at One Heart Orphanage in Chiayi County.

Appendix

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I. ESG Performance of Material Topics

Aspect of economic governances (G)

[Consolidated Revenue, After-tax income, EPS and Return on Equity From 2019-2022] 2.1.5

Unit：NT$ hundred million

Year	2019	2020	2021	2022
Consolidated Revenue	3,154	2,533	3,658	3,799
Consolidated Profit	344	216	427	92
Parent Co. EPS(NT$)	4.89	3.34	6.56	1.26
ROE(%)	8.18	5.36	10.18	2.25
Dividends per share(NT$)	6.2	3.8	2.5	4.8

Aspect of environment governances (E)

[Summary table of the 14 dedicated promotion items for energy conservation and carbon reduction in Taiwan plants from 2019 to 2022] 3.3.2

Unit: tons/year

Project Category		Completed improvements in 2019 (carbon emission reduction)			Completed improvements in 2020 (carbon emission reduction)		
		Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total CO_2 suppression amount (ton/year)	Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total CO_2 suppression amount (ton/year)
1	Wastewater recycling/water reduction improvements	-	10,930	10,930	-	282	282
2	Rainwater storage and reuse improvement system	-	-	-	-	-	-
3	Improvement of cooling water system and refrigeration and air conditioning systems	-	1,063	1,063	-	1,792	1,792
4	Distillation tower optimization and improvement	1,454	23,202	24,656	-	36,672	36,672
5	High and low order energy recycling improvements	-	38,963	38,963	-	27,247	27,247
6	Steam piping system, equipment insulation and drainer improvement	-	8,173	8,173	-	7,963	7,963
7	Combustion equipment improvement	3,113	13,774	16,887	-	4,868	4,868
8	Improvement of rotating equipment (including pumps, windmills, compressors, and mixers) and conveyor systems	-	21,318	21,318	-	49,178	49,178
9	Air compressor improvement	-	41	41	-	7,036	7,036
10	Power system and lighting system improvements	-	109	109	-	125	125
11	FLARE recycling improvement	-	-	-	-	-	-
12	Process and equipment improvement (energy efficiency improvement)	-	32,312	32,312	2,528	80,521	83,049
13	Establish renewable energy facilities	-	-	-	-	-	-
14	Intelligentize manufacturing process	-	-	-	-	14,679	14,679
Total		4,567	149,885	154,452	2,528	230,363	232,891

[Summary table of the 14 dedicated promotion items for energy conservation and carbon reduction in Taiwan plants from 2019 to 2022] 3.3.2

Unit: tons/year

Project Category		Completed improvements in 2021 (carbon emission reduction)			Completed improvements in 2022 (carbon emission reduction)		
		Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total CO_2 suppression amount (ton/year)	Scope 1 CO_2 suppression amount (ton/year)	Scope 2 CO_2 suppression amount (ton/year)	Total CO_2 suppression amount (ton/year)
1	Wastewater recycling/water reduction improvements	-	404	404	-	810	810
2	Rainwater storage and reuse improvement system	-	-	-	-	-	-
3	Improvement of cooling water system and refrigeration and air conditioning systems	-	718	718	-	1,466	1,466
4	Distillation tower optimization and improvement	4,340	30,394	34,734	-	15,791	15,791
5	High and low order energy recycling improvements	-	28,569	28,569	-	85,155	85,155
6	Steam piping system, equipment insulation and drainer improvement	-	26,060	26,060	-	2,497	2,497
7	Combustion equipment improvement	7,613	3,529	11,142	6,910	4,810	11,720
8	Improvement of rotating equipment (including pumps, windmills, compressors, and mixers) and conveyor systems	-	22,444	22,444	-	20,635	20,635
9	Air compressor improvement	-	6,117	6,117	-	1,306	1,306
10	Power system and lighting system improvements	-	567	567	-	2,790	2,790
11	FLARE recycling improvement	-	-	-	-	-	-
12	Process and equipment improvement (energy efficiency improvement)	-	145,368	145,368	1,972	136,313	138,285
13	Establish renewable energy facilities	-	-	-	-	598	598
14	Intelligentize manufacturing process	-	16,074	16,074	186	7,636	7,822
Total		11,953	280,244	292,197	9,068	279,807	288,875

[FCFC greenhouse gas emissions from 2018 to 2021] 3.3.3

Year	2018				
	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,579,037	1,327	2,178,075	1,875,303	5,633,743
Scope 2	404	32,857	36,666	3,529,829	3,599,756
Total	1,579,441	34,184	2,214,741	5,405,132	9,233,498
Scope 3	—				
Year	2019				
	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,270,124	1,315	2,352,166	1,600,534	5,224,139
Scope 2	1,049	29,419	13,903	3,256,994	3,301,365
Total	1,271,173	30,734	2,366,069	4,857,528	8,525,504
Scope 3	21,838,422				

[FCFC greenhouse gas emissions from 2018 to 2021] 3.3.3

Year	2020				
	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,006,580	1,338	2,468,056	1,784,610	5,260,584
Scope 2	2,600	28,671	8,915	3,238,218	3,278,404
Total	1,009,180	30,009	2,476,971	5,022,828	8,538,988
Scope 3	18,725,825				
Year	2021				
	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site	Subtotal
Scope 1	1,309,470	1,580	2,213,660	1,873,507	5,398,217
Scope 2	135	26,362	66,967	3,171,649	3,265,113
Total	1,309,605	27,942	2,280,627	5,045,156	8,663,330
Scope 3	18,701,610				

Note 1: 2021 inventory report based on SGS and BSI verification agency

Note 2: GHG emission factors used in the GHG inventory are quoted from the Greenhouse Gas Emission Factor Table Version 6.0.4 (updated on January 17, 2018) published by the Environmental Protection Administration, Executive Yuan. The inventory is location based.

Note 3: Calculations are based on the Global Warming Trends data from Intergovernmental Panel on Climate Change's Fourth Evaluation Report published in 2007.

Note 4: The data of the 2020 greenhouse gas inventory report comes from the greenhouse gas inventory provided by Formosa Plastics; the 2021 inventory report is expected to obtain the greenhouse gas inspection statement in December 2022.

Note 5: For the method of consolidating the scope of greenhouse gas inventory, the Company adopts the control right method when defining the organizational boundary, except that it needs to change the boundary defined by the "equity holding method" due to special conditions.

Note 6: The Scope 1, Scope 2 and 3 gas inventory of FCFC includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbon, perfluorocarbon, sulfur hexafluoride, and nitrogen trifluoride

Note 7 : Scope 3 inventory items: purchased products and services, capital goods, fuel and energy related activities (not included in Scope 1 or Scope 2), upstream transportation and distribution, business waste output, business travel, employee commuting, downstream transportation and distribution, processing of sold products, use of sold products, and final disposal of sold products. The target base year is expected to be set in 2022.

Note 8 : The emission Scope 1 and Scope 2 of Mailiao plant site contain Formosa INEOS Chemicals Corporation.

[Scope 1 and Scope 2 of Formosa Chemicals & Fiber Corporation, Summary table of main greenhouse gas emission sources and energy consumption from 2018 to 2021] 3.3.3

Item	2018			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	15,805,697	-	22,511,040	-
Fuel Oil	26,377	213	471,156	2,438,384
Fuel Steam	79,064	202	5,815	31,215,129
Purchased Internal Power	-	-	-	6,623,514
Purchased Internal Stem	-	-	-	19,919,700
Purchased External Power	2,628	213,591	238,348	-
Purchased External Steam	-	-	-	-
CO_2e Percentage emission (%)	94.7%	96.1%	99.0%	94.6%
Total Energy Consumption(GJ)	15,913,766	214,006	23,266,359	60,194,727
	99,548,858			

[Scope 1 and Scope 2 of Formosa Chemicals & Fiber Corporation, Summary table of main greenhouse gas emission sources and energy consumption from 2018 to 2021] 3.3.3

Item	2019			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	12,635,747	-	24,172,680	-
Fuel Oil	23,691	49	463,780	2,406,369
Fuel Steam	105,852	355	5,500	24,383,688
Purchased Internal Power	-	-	-	5,867,060
Purchased Internal Stem	-	-	-	17,035,780
Purchased External Power	7,422	208,150	98,370	-
Purchased External Steam	-	-	-	-
CO_2e Percentage emission (%)	95.2%	95.8%	99.1%	94.4%
Total Energy Consumption(GJ)	12,882,712	208,554	24,740,330	49,692,897
	87,414,493			
Item	2020			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	9,807,997	-	25,396,704	-
Fuel Oil	16,056	123	431,119	1,740,989
Fuel Steam	127,761	272	5,437	27,092,568
Purchased Internal Power	-	-	-	6,248,653
Purchased Internal Stem	-	-	-	16,899,156
Purchased External Power	18,394	202,857	63,076	-
Purchased External Steam	-	-	-	-
CO_2e Percentage emission (%)	93.6%	95.6%	99.1%	93.9%
Total Energy Consumption(GJ)	9,970,208	203,252	25,896,336	51,981,366
	88,051,162			
Item	2021			
Emission Source(GJ)	Longde Plant Site	Changhua Plant Site	Xingang Plant Site	Mailiao Plant Site
Coal	12,584,832	-	21,711,072	-
Fuel Oil	23,018	-	332,298	1,965,799
Fuel Steam	156,027	179	238,569	30,147,543
Purchased Internal Power	-	-	-	6,598,687
Purchased Internal Stem	-	-	-	17,641,884
Purchased External Power	968	189,117	480,420	-
Purchased External Steam	-	-	-	-
CO_2e Percentage emission (%)	95.5%	94.5%	99.1%	94.5%
Total Energy Consumption(GJ)	12,764,845	189,296	22,762,359	56,353,913
	92,070,413			

Note: 1. FPG Greenhouse Gas Inventory Database
Note: 2. Joule (abbreviated as J); 1KJ=1,000J; 1GJ=10^9J.
Note: 3. The Mailiao plant site contains Formosa INEOS Chemicals Corporation

[FCFC Summary table of greenhouse gas emission and energy intensity from 2018 to 2021] 3.3.3

Year	2018	2019	2020	2021
Sales (NT$100 million)	2,805.5	2,037.1	1,641.82	2,530.35
Total greenhouse gas emission of Scope 1 and Scope 2(CO_2e tons)	9,233,498	8,525,505	8,538,988	8,663,330
Greenhouse gas emission intensity (CO_2e tons/NT$100 million)	3,291.17	4,185.16	5,200.93	3,423.77
Total energy consumption (GJ)	99,548,858	87,414,493	88,051,162	92,070,413
Energy consumption intensity (GJ/NT$100 million)	35,482.96	42,911.66	53,630.22	36,386.44

Note:1. Data source is form FPG Greenhouse Gas Inventory Database.
Note:2. Statistics includes all plant sites of the Company, and the Scope 1 and Scope 2 data of Mailiao plant site contains Formosa INEOS Chemicals Corporation
Note:3. Greenhouse gas emission intensity (CO_2e tons / NT$100 million) =Total greenhouse gas emission (CO_2e tons)/ Sales (NT$100 million)

[FCFC Fuel steam consumption per unit output from 2019 to 2022] 3.3.4

Unit: tons/ton

Year	2019				2020			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Fuel steam consumption per unit output	0.966	-	0.114	0.870	0.882	-	0.159	0.851
	0.786				0.775			
Year	2021				2022			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Fuel steam consumption per unit output	0.712	-	0.150	0.802	0.720	-	0.130	0.780
	0.723				0.711			

Note 1: The statistics in Mailiao plant site contains Formosa INEOS Chemicals Corporation
Note 2: Fuel steam consumption per unit output in 2022 was lower 0.012 tons/ton than that in 2021.

[Annual water use table of FCFC from 2019 to 2022] 3.4.2

Year	2019				2020			
Plant Site / Type	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Surface Water (A)	12,975.2	202.8	7,918.6	13,741.7	9,297.3	197.7	8,102.6	13,920.7
Groundwater (B)	225.9	—	—	—	152.5	—	—	—
Third-party Water (C)	23.4	9.2	32.7	56.6	20.0	6.0	35.7	48.0
Subtotal (A)+(B)+(C)	13,224.5	212.0	7,951.3	13,798.3	9,469.8	203.7	8,138.3	13,968.7
Water Use Quantity	35,186.1				31,780.5			

[Annual water use table of FCFC from 2019 to 2022] 3.4.2

Unit: million liters

Year	2021				2022			
Plant Site / Type	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Surface Water (A)	10,149.6	159.1	7,409.2	14,379.0	7,738.4	136.6	5,776.9	14,245.4
Groundwater (B)	146.0	—	—	—	149.5	—	—	—
Third-party Water (C)	24.7	4.7	30.9	45.4	21.8	5.4	26.1	88.3
Subtotal (A)+(B)+(C)	10,320.3	163.8	7,440.1	14,424.4	7,909.7	142.0	5,803.0	14,333.7
Water Use Quantity	32,348.6				28,188.4			

Note: 1. The water drawn from each source category in the table above belongs to fresh water with total dissolved solids (TDS) content of 1,000 mg/L or less.

Note: 2. The third party water is tap water.

Note: 3. The statistics of Mailiao's water consumption include the important subsidiary Formosa Idemitsu Petrochemical Corporation and Formosa INEOS Chemicals Corporation.

[FCFC Annual discharge table from 2019 to 2022] 3.4.3

Unit: million liters

Year	2019				2020			
Plant Site / Discharge volume is based on the terminal point	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Ground Water (A)	9,879.7	172.1	2,375.9	—	6,704.9	145.1	1,908.4	—
Sea water (b)	—	—	—	5,660.8	—	—	—	5,750.9
Sum (A)+(B)	9,879.7	172.1	2,375.9	5,660.8	6,704.9	145.1	1,908.4	5,750.9
Water Discharge Volume	18,088.5				14,509.3			
Year	2021				2022			
Plant Site / Discharge volume is based on the terminal point	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Ground Water (A)	6,786.2	132.8	2,113.0	-	5,960.1	119.1	2,099.4	-
Sea water (b)	-	-	-	5,632.0	-	-	-	5,541.1
Sum (A)+(B)	6,786.2	132.8	2,113.0	5,632.0	5,960.1	119.1	2,099.4	5,541.1
Water Discharge Volume	14,664.0				13,719.7			

Note: 1. The drainage at each discharge endpoint in the above table is all fresh water with total dissolved solids (TDS) content equal to or less than 1,000 mg/L.

Note: 2. The Mai Liao plant contains Formosa INEOS Chemicals Corporation.

[Statistics of FCFC water consumption table from 2019-2022] 3.4.4

Unit: million liters

Year	2019				2020			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Water use (a)	13,224.6	212.0	7,951.3	13,798.3	9,469.8	203.7	8,138.3	13,968.7
Water Discharge (b)	9,879.7	172.1	5,660.8	2,375.9	6,704.9	145.1	1,908.4	5,750.9
Water Consumption (a)-(b)	3,344.9	39.9	2,290.5	11,422.4	2,764.9	58.6	6,229.9	8,217.8
Total water Consumption	17,097.7				17,271.2			
Year	2021				2022			
Plant Site	Longde	Changhua	Xingang	Mailiao	Longde	Changhua	Xingang	Mailiao
Water use (a)	10,320.3	163.8	7,440.1	14,424.4	7,909.7	142.0	5,803.0	14,333.7
Water Discharge (b)	6,786.2	132.8	2,113.0	5,632.0	5,960.1	119.1	2,099.4	5,541.1
Water Consumption (a)-(b)	3,534.1	31.0	5,327.1	8,792.4	1,949.6	22.9	3,703.6	8,792.6
Total water Consumption	17,684.6				14,468.7			

Note 1. The statistic of water consumption in MaiLiao plant contains Formosa INEOS Chemicals Corporation.
Note 2. Water consumption is equal to water use minus water discharge volume.

[FCFC air pollutant emissions table form2019 to 2022] 3.5.1

Unit: Ton/Year

Year		2019					2020				
Type	Plant Site	Longde	Changhua	Xingang	Mailiao	Total	Longde	Changhua	Xingang	Mailiao	Total
Air Pollutant Emission Management	SOx	106.69	0	333.86	151.65	592.20	76.02	0	207.41	180.87	464.30
	NOx	166.16	0	1,432.76	274.24	1,873.16	129.10	0	1,116.92	380.43	1,626.45
	Volatile Organic Compounds (VOCs)	114.42	6.58	553.18 5	59.47	733.65	98.97	5.18	476.13	67.94	648.22
	Total Suspended Particles (TSP)	36.29	0	79.69	40.06	156.04	23.00	0	54.86	47.52	125.38

[FCFC air pollutant emissions table form2019 to 2022] 3.5.1

Unit: Ton/Year

Year		2021					2022				
Type \ Plant Site		Longde	Changhua	Xingang	Mailiao	Total	Longde	Changhua	Xingang	Mailiao	Total
Air Pollutant Emission Management	SOx	92.87	0	187.68	149.31	429.86	95.94	0	125.50	122.00	343.44
	NOx	158.19	0	1,145.84	340.80	1,644.83	155.41	0	1,108.11	310.00	1,573.52
	Volatile Organic Compounds (VOCs)	107.92	4.71	459.18	83.45	655.26	83.02	0.47	449.03	73.00	605.52
	Total Suspended Particles (TSP)	19.22	0	58.89	38.83	116.94	6.60	0	48.22	32.00	86.82

Note: 1. In 2022, there were two environmental violations. The first violation occurred in the SM Plant's Mailiao EB Energy-saving and Emission Reduction Construction Project. They neglected to pay the construction air pollution fee prior to commencing the project, resulting in a penalty of NT$100,000. The second violation occurred at the ARO-3 Plant, involving the spill from the control and relief valves, surpassing the legal limit of 10,000 ppm. This violation also incurred a penalty of NT$100,000.

Note: 2. Source: The air pollution, wastewater, and waste filing website of the Environmental Protection Administration

[FCFC classified waste by composition from 2019-2022] 3.6.1

Unit: Tons

Year	2019			2020		
Waste composition and components	Amount generated	Disposal and transfer amount	Direct disposal amount	Amount generated	Disposal and transfer amount	Direct disposal amount
Toxic hazardous waste (class B)	0	0	0	0	0	0
Waste with hazardous properties (class C)	9	0	9	7	0	7
General business waste (class D)	29,094	2,400	26,694	28,084	1,751	26,333
Announce the waste that should be recycled or reused (Class R)	197,939	197,939	0	201,892	201,892	0
Total amount of waste	227,042	200,339	26,703	229,983	203,643	26,340

Year	2021			2022		
Waste composition and components	Amount generated	Disposal and transfer amount	Direct disposal amount	Amount generated	Disposal and transfer amount	Direct disposal amount
Toxic hazardous waste (class B)	0	0	0	0	0	0
Waste with hazardous properties (class C)	61	0	61	73	0	73
General business waste (class D)	22,883	5,821	17,062	23,716	8,546	15,170
Announce the waste that should be recycled or reused (Class R)	264,061	264,061	0	199,526	199,526	0
Total amount of waste	287,005	269,882	17,123	223,315	208,072	15,243

Note: The composition of waste is based on the waste statistics reported to the EPA in 2021-2022, and is classified according to the categories compiled by the EPA

[FCFC waste transferred from disposal by recycling operations from 2019 to 2022] 3.6.1

Unit: Tons

Year	2019			2020		
Item	Onsite (self-processing)	Offsite (outsourced processing)	Total amount	Onsite (self-processing)	Offsite (outsourced processing)	Total amount
Hazardous Waste	-	9	9	-	7	7
Other recycling processes	-	0	0	-	0	0
Total amount	-	9	9	-	7	7
Ratio of hazardous waste recycling		0%			0%	
Non-hazardous waste	-	29,094	29,094	-	28,084	28,084
Reuse preparation	-	-	-	-	-	-
Recycling and reuse	-	197,939	197,939	-	201,892	201,892
Total amount	-	227,033	227,033	-	229,976	229,976

Year	2021			2022		
Item	Onsite (self-processing)	Offsite (outsourced processing)	Total amount	Onsite (self-processing)	Offsite (outsourced processing)	Total amount
Hazardous Waste	-	61	61	-	73	73
Other recycling processes	-	0	0	-	0	0
Total amount	-	61	61	-	73	73
Ratio of hazardous waste recycling		0%			0%	
Non-hazardous waste	-	22,883	22,883	-	23,716	23,716
Reuse preparation	-	0	0	-	0	0
Recycling and reuse	-	264,061	264,061	-	199,526	199,526
Total amount	-	286,944	286,944	-	223,242	223,242

Note 1: All the wastes transferred from disposal by the Company according to the recycling operation are outsourced. Hazardous wastes are not prepared for recycling or reuse. All non-hazardous wastes are prepared for recycling or reuse

Note 2: Hazardous waste recycling ratio = the amount of hazardous wastes that has been recycled / the total amount of hazardous waste * 100%

Note 3: Hazardous waste is classified as Class C waste

Note 4: Non-hazardous waste is classified as Class D General Waste

Note 5: Other recycling operation waste is classified as Class D General Recycling Waste

Note 6: Recycling waste is the waste that should be recycled or reused as stated in the announcement (Class R)

[FCFC annual waste processing relevant data from 2019 to 2022] 3.6.1

Unit: Tons

Year		2019					
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	2,400	8,942	7,443	10,309	9	197,939
Total volume		227,042					
Percentage (%)	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	1.06	3.94	3.28	4.54	0.004	87.18

Year		2020					
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	1,751	13,364	340	12,629	7	201,892
Total volume		229,983					
Percentage (%)	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	0.761	5.811	0.148	5.491	0.003	87.786

Year		2021					
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	792	7,593	5,029	9,469	61	264,061
Total volume		287,005					
Percentage (%)	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	0.28	2.65	1.75	3.30	0.02	92.0

Year		2022					
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
Amount processed	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	4,668	5,578	3,878	9,592	73	199,526
Total volume		223,315					
Percentage (%)	Onsite (self-processing)	—	—	—	—	—	—
	Offsite (outsourced processing)	2.09	2.50	1.74	4.30	0.03	89.35

Source:The Industrial Waste Report and Management System, Environmental Protection Administration

[Statistics of environmental protection violation from 2019 to 2022] 3.7

Unit：Number of cases

Year	2019	2020	2021	2022
Air pollution	2	1	1	2
Water pollution control	1	0	0	0
Waste pollution control	0	0	0	0
Total	3	1	1	2

In 2022, there were two environmental violations reported by the Environmental Protection Administration of Yunlin Province.

1. The first violation occurred in the SM Plant's Mailiao EB Energy-saving and Emission Reduction Construction Project. They neglected to pay the construction air pollution fee prior to commencing the project, resulting in a penalty of NT$100,000.
2. The second violation occurred at the ARO-3 Plant, involving the spill from the control and relief valves, surpassing the legal limit of 10,000 ppm. This violation also incurred a penalty of NT$100,000.

[Statistic of inspection of diesel vehicles operations table in Mailiao from 2019 to 2022] 5.1.2

Year	2019	2020	2021	2022
Amount of vehicles (A)	1,245	1,511	1,470	1,341
Number of intercepted vehicles (B)	438	597	167	163
Number of examined vehicles (C)	80	82	84	82
Number of qualified vehicles (D)	80	82	84	82
Number of passing rate (D/C)	100%	100%	100%	100%

Note: 1. Number of amount vehicles checked refers to the amount of diesel vehicles checked in the roadside by the Environmental Protection Administration of Yunlin Province.

Note:2. Number of intercepted vehicles refers to the number of diesel vehicles intercepted in the roadside by the Environmental Protection Administration of Yunlin Province.

Note:3. Number of vehicles inspected refers to the number of diesel vehicles emitting black smoke among the diesel vehicles checked in the roadside inspections.

Note:4. Number of qualified vehicles refers to the number of diesel vehicles inspected and meeting the statutory requirements for exhaust smoke and opacity.

Aspect of social governances (S)

[FCFC scores of customer satisfaction survey table from 2019 to 2022] 2.5.2

Unit: point

Year	2019	2020	2021	2022
Average point	4.4	4.4	4.5	4.5

[FCFC manpower structure from 2019 to 2022] 4.1.2

Unit: Person

Year	2019						
Type	Gender			Location			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
Number of Employees	716	4,774	5,490	1,170	2,459	1,283	578
Number of Permanent Employees	590	4,684	5,274	1,000	2,431	1,270	573
Number of Temporary Employees	126	90	216	170	28	13	5
Number of Employees without Guaranteed Hours	—	—	—	—	—	—	—
Number of Full-time Employees	715	4,774	5,489	1,169	2,459	1,283	578
Number of Part-time Employees	1	—	1	1	—	—	—

Year	2020						
Type	Gender			Location			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
Number of Employees	698	4,484	5,182	1,141	2,387	1,164	490
Number of Permanent Employees	566	4,385	4,951	958	2,355	1,152	486
Number of Temporary Employees	132	99	231	183	32	12	4
Number of Employees without Guaranteed Hours	—	—	—	—	—	—	—
Number of Full-time Employees	696	4,484	5,180	1,139	2,387	1,164	490
Number of Part-time Employees	2	—	2	2	—	—	—

Year	2021						
Type	Gender			Location			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
Number of Employees	693	4,464	5,147	1,091	2,394	1,178	494
Number of Permanent Employees	556	4,382	4,948	926	2,364	1,168	490
Number of Temporary Employees	127	82	209	165	30	10	4
Number of Employees without Guaranteed Hours	—	—	—	—	—	—	—
Number of Full-time Employees	692	4,464	5,146	1,090	2,394	1,178	494
Number of Part-time Employees	1	—	1	1	—	—	—

Year	2022						
Type	Gender			Location			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
Number of Employees	714	4,452	5,166	1,101	2,422	1,168	475
Number of Permanent Employees	599	4,382	4,981	961	2,389	1,157	474
Number of Temporary Employees	115	70	185	140	33	11	1
Number of Employees without Guaranteed Hours	—	—	—	—	—	—	—
Number of Full-time Employees	713	4,452	5,165	1,100	2,422	1,168	475
Number of Part-time Employees	1	—	1	1	—	—	—

Note 1: Permanent Employees: Full-time or part-time employees who have signed an indefinite-term contract.

Note 2: Temporary Employees: Employees who have signed a fixed-term contract. The contract expires at the specified time or concludes upon completing a specific task or event with an evaluation schedule.

Note 3: Employees without Guaranteed Hours: Employees who are not guaranteed a minimum or fixed number of working hours per day, week, or month but may be available for work as needed, such as temporary employees, zero-hour contract workers, or on-call employees.

Note 4: Full-time Employees: Employees are defined based on the respective country's laws and practices regarding working hours.

Note 5: Part-time Employees: Employees whose working hours per week, month, or year are less than those of full-time employees.

[FCFC overview of new employees from 2019 to 2022] 4.1.3

Unit : Person

Year		2019		2020		2021		2022	
Type		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)
Age	Under 29 Years Old	136	2.57	41	0.83	136	2.75	145	2.91
	30-39 Years Old	49	0.93	6	0.12	26	0.53	69	1.39
	40-49 Years Old	2	0.04	1	0.02	4	0.08	9	0.18
	50-59 Years Old	2	0.04	0	-	2	0.04	1	0.02
	Over 60 Years Old	0	-	0	-	0	-	0	-
Total		189	3.58	48	0.97	168	3.40	224	4.50
Gender	Male	166	3.15	40	0.81	148	2.99	162	3.25
	Female	23	0.43	8	0.16	20	0.40	62	1.25
Total		189	3.58	48	0.97	168	3.40	224	4.50
Regional	Northern Taiwan	30	0.57	12	0.24	26	0.53	83	1.67
	Central Taiwan	94	1.78	21	0.42	61	1.23	55	1.10
	Southern Taiwan	47	0.89	15	0.30	58	1.17	55	1.10
	Eastern Taiwan	18	0.34	0	0.00	23	0.46	31	0.62
Total		189	3.58	48	0.97	168	3.40	224	4.5

Note 1: Ratio on Total Employees = New (Male) Female Employees / Total Regular Employees at the End of the Reporting Period

[FCFC overview of employees resignations from 2019 to 2022] 4.1.3

Unit : Person

Year		2019		2020		2021		2022	
Type		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)
Age	Under 29 Years Old	50	0.95	61	1.23	38	0.77	39	0.78
	30-39 Years Old	42	0.80	32	0.65	38	0.77	55	1.10
	40-49 Years Old	28	0.53	34	0.69	9	0.18	13	0.26
	50-59 Years Old	67	1.27	125	2.52	33	0.67	52	1.04
	Over 60 Years Old	98	1.86	124	2.50	60	1.21	72	1.45
Total		285	5.41	376	7.59	178	3.60	231	4.64
Gender	Male	194	3.68	335	6.77	149	3.01	195	3.92
	Female	91	1.73	41	0.83	29	0.59	36	0.72
Total		285	5.41	376	7.59	178	3.60	231	4.64
Regional	Northern Taiwan	51	0.97	55	1.11	54	1.11	59	1.18
	Central Taiwan	59	1.12	102	2.06	59	1.22	70	1.41
	Southern Taiwan	110	2.09	149	3.01	41	0.85	54	1.08
	Eastern Taiwan	65	1.23	70	1.41	24	0.50	48	0.96
Total		285	5.41	376	7.59	178	3.60	231	4.64

Note 1: Ratio on Total Employees = (Male) Female Turnover / Total Regular Employees at the End of the Reporting Period

[Table of local residents serving as senior managers from 2019 to 2022] 4.1.3

Unit：Person

Year	2019	2020	2021	2022
Number of persons	687	679	671	670
Proportion (%)	38.9	38.9	38.4	38.0

Note: Senior managers refer to those who are higher than entry level managers, have more than 5 years of service, and have the birthplace identical with the workplace.

[FCFC Salary adjustment rates from 2019 to 2022] 4.2.1

Year	2019	2020	2021	2022
Type	Salary adjustment rates% (Note)	Salary adjustment rates% (Note)	Salary adjustment rates% (Note)	Salary adjustment rates% (Note)
Level 2 Managers or Above	3.37%	1.0% plus perks NT$3,300	3.83% plus perks NT$10,000	4.5%
Entry Level Managers or Below	3.37%	1.0% plus perks NT$3,300	3.83% plus perks NT$10,000	4.5%

Notes: The salary adjustment rates are conducting to the operating performance every year and the rates adjustment by competitors that the adjusted rates shall be superior to competitors.

[FCFC average salary Ratios for employees from 2019 to 2022] 4.2.1

Unit: %

Year	2019	2020	2021	2022
Level 2 Managers or Above	107	103	105	109
Entry Level Managers or Below	133	130	131	130

Notes: Male to female ratio is equal to average salary for male employees divided by average salary for female employees

[FCFC non-managerial full-time employees average salary from 2021 to 2022] 4.2.1

Year	2019	2020	2021	2022
Number of non-managerial full-time employees (people)	4,911	4,672	4,503	4,489
Average salary of non-managerial full-time employees (NT$/person)	1,366,832	1,319,672	1,527,548	1,408,932
Median salary of non-managerial full-time employees (NT$/person)	1,258,846	1,189,174	1,435,164	1,283,494

Note: The number of non-managerial employees is the average number of employees (excluding subsidiaries) at the end of each month, and who have been paid by FCFC for more than six months (inclusive) in the current year and excluding managers.

[FCFC the ratio of maximum emoluments to employee salary from 2019 to 2022] 4.2.1

Unit: %

Year	2019	2020	2021	2022
Ratio of maximum emoluments to median employee emoluments(Note 1)	—	—	15 times	17 times
Percentage of salary growth (Note 2)	—	—	55.7%	-9.7%

Note: 1. Ratio of maximum emoluments to employee salary = Disclosed annual total emoluments of the highest paid individual (A)/ median annual emoluments of all employees (minus the annual salary of the highest paid individual) (B).

Note: 2. Salary growth rate = Disclosed total income growth rate for the highest salary in the organization/median growth rate for all employees (minus the annual salary of the highest paid individual) .

[2019 to 2020 FCFC Pension System Overview] 4.2.1

Year	2019		2020		2021		2022	
Item	Number of Applicable Employee	Allotment Percentage	Number of Applicable Employees	Allotment Percentage	Number of Applicable Employee	Allotment Percentage	Number of Applicable Employee	Allotment Percentage
Old pension plan	1,477	2% monthly appropriation of the Company-wide salaries	1,320	2% monthly appropriation of the Company-wide salaries	1,272	2% monthly appropriation of the Company-wide salaries	1,204	2% monthly appropriation of the Company-wide salaries
New pension plan	4,013	Withholding 6% of employees' salary every month	3,862	Withholding 6% of employees' salary every month	3,885	Withholding 6% of employees' salary every month	3,777	Withholding 6% of employees' salary every month

Note: 1.Please refer to the accounting items related to "Pension" in the 2021 Consolidated Financial Statements for FCFC's pension recognition.

Note: 2.The number of people using the new pension system includes 209 non-regular employees.

[FCFC Application for Unpaid Parental Leaves and Reinstatement from 2019-2022] 4.2.2

Year	2019			2020		
Item	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	11	168	179	17	158	175
Number of Employees Applying for Unpaid Parental Leaves	10	0	10	6	0	6
Number of Employees Expected to Reinstate in the Year (A)	8	0	8	7	0	7
Number of Employees Applying for Reinstatement in the Year (B)	8	0	8	6	0	6
Number of Employees Having Reinstated for over a Year (C)	5	0	5	7	0	7
Reinstatement Rate (%) (B/A)	100	0	100	86	0	86
Retention rate (%) (C of the current year/B of the previous year)	83	0	83	88	0	88

Year	2021			2022		
Item	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	16	149	165	15	273	288
Number of Employees Applying for Unpaid Parental Leaves	6	3	9	8	2	10
Number of Employees Expected to Reinstate in the Year (A)	7	3	10	6	3	9
Number of Employees Applying for Reinstatement in the Year (B)	7	0	7	6	3	9
Number of Employees Having Reinstated for over a Year (C)	5	0	5	6	0	6
Reinstatement Rate (%) (B/A)	100	0	70	100	100	100
Retention rate (%) (C of the current year/B of the previous year)	83	0	83	86	0	86

Note:1. " -" indicates no numeric value.

Note:2. According to the Company' s parental leave without pay system, employees may declare the number of children they have on their own.

Note:3. According to the Company' s parental leave without pay system, employees may apply for parental leave without pay on their own.

[Percentage of Employees Receiving Regular Performance and Career Development Evaluations from 2019 and 2022] 4.3.1

Unit:%

Year	2019		2020		2021		2022	
Employee Category	Male	Female	Male	Female	Male	Female	Male	Female
Executives	66.7	11.1	65.8	14.3	68.6	14.3	71.8	12.5
Level 1 Managers	99.7	66.7	99.7	100.0	99.5	100.0	99.5	100.0
Second Level Directors	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0
Entry Level Managers	99.9	100.0	99.9	100.0	100.0	100.0	100.0	100.0
Entry Level Employees	97.2	81.0	96.6	78.6	97.3	79.1	97.8	81.7
Total	96.1		95.5		95.9		96.4	

Note:1. The percentage of executives receiving evaluations was rather low due to a higher percentage of temporary consultants.
Note:2. The total evaluation ratio was less than 100% due to informal personnel were not ranked in evaluation.

[FCFC Employee Training over from 2019 to 2022] 4.3.2

Rank \ Year	2019		2020		2021		2022	
	Male	Female	Male	Female	Male	Female	Male	Female
Middle to senior level Managerial positions	23.2	8.0	14.7	9.3	16.0	5.3	21.2	3.1
Entry level Managerial positions	41.5	25.6	32.8	19.3	37.6	9.9	59.0	23.7
Entry level Personnel	34.0	22.9	33.0	18.2	37.9	19.2	49.3	17.3
Average training hours per person	33.2	22.4	28.0	17.8	31.9	17.4	44.0	17.0

Note: Middle to senior managers (or higher) refer to executives, first level directors and second level directors.

[Training Completion Rate of the Company from 2019 to 2022] 4.3.2

Year	2019	2020	2021	2022
Training completion rate (%)	99.3	99.5	99.6	99.1

Note: The completion rate refers to the ratio of completed training courses which should be completed in the year.

[FCFC Promote CPR+AED training for all employees from 2019 to 2022] 4.4.2

Year	Plant Site					
	Longde	Xingang	Changhua	Mailiao	Taipei	Total
2019	77%	64%	62%	93%	53%	77%
2020	78%	81%	61%	99%	51%	84%
2021	98%	87%	92%	99%	97%	95%
2022	99%	99%	92%	100%	98%	99%

[FCFC Occupational Injuries from 2019 to 2022 (By Gender)] 4.4.4

Gender / Year	Disabling Injury Rate		Disabling Injury Severity Rate		Frequency-severity indicator		Absence Rate		Occupational Disease Rate	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
2019	0.42	0	10	0	0.07	0	0.30	0.45	0	0
2020	0.45	0	41	0	0.14	0.03	0.27	0.41	0	0
2021	0.22	0	5	0	0.03	0	0.28	0.46	0	0
2022	0.34	0	12	0	0.07	0	0.35	0.57	0	0

Note 1: Industry information comes from the 2021-2022 Frequency-severity Indicators by Sector published by the Occupational Safety and Health Administration, Ministry of Labor.

Note 2: Disabling injury rate: Number of disabling injuries*1000000/total working hours

[FCFC Occupational Injuries from 2019 to 2022] 4.4.4

Year	Disabling Injury Rate	Disabling Injury Severity Rate	Frequency-severity indicator	Absence Rate	Occupational Disease Rate	Working Hours (Thousand)
2019	0.51	12	0.07	0.32	0	10,506
2020	0.40	37	0.12	0.28	0	9,862
2021	0.17	3	0.02	0.30	0	11,970
2022	0.21	7	0.04	0.38	0	14,082

Note 1: Working hours = number of employees*working days in a given year*8 hours + overtime hours - hours of leave

Note 2: Statistics on the number of occupational accidents do not include the number of occupational accidents for employees.

Note 3: Disabling injury rate: Number of disabling injuries*1000000/total working hours

Note 4: Disabling injury severity rate: Number of days lost due to disabling injuries*1000000/total working hours

[Statistics of Contractors Injury from 2019 to 2022] 4.4.4

Year	Disabling Injury Rate	Disabling Severity Rate	Working Hours (Thousand)
2019	0	0	11,309
2020	0.22	26	13,087
2021	0.09	1	10,153
2022	0	0	10,437

Note 1: The absence rate and the occupational disease rate of contractors were unavailable; thus, the working hours were estimated through the access system. Hours of absence include hours of sick leave and work-related injuries.

Note 2: Disabling injury rate: Number of disabling injuries*1000000/total working hours

Note 3: Disabling injury severity rate: Number of days lost due to disabling injuries*1000000/total working hours

Note 4: Working hours = number of contractors during the reporting period*250 working days*8 hours

Note 5: The number of working hours from 2019 to 2020 is much greater than in previous years, mainly due to the restoration of the ARO3 plant

[FCFC Statistics of Abnormal Incidents and Occupational Injuries at Each Plant from 2019 to 2022] 4.4.4

Year	2019					2020				
Plant Site	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description
Longde	0	0	0	0	-	0	0	1	1	Cut
Changhua	0	0	0	0	-	0	0	0	0	-
Mailiao	1	0	4	5	Contact with high temperature pipe	2	0	5	7	Contact with high temperature pipe
Xingang	0	0	0	0	-	0	0	1	1	Falling
Total	1	0	4	5	-	2	0	7	9	-

Year	2021					2022				
Plant Site	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description
Longde	0	0	0	0	-	0	0	1	1	Jammed by equipment
Changhua	0	0	0	0	-	0	0	0	0	-
Mailiao	0	0	2	2	Collision with equipment	0	0	0	0	-
Xingang	0	0	0	0	-	0	0	1	1	Contact with high temperature pipe
Total	0	0	2	2	-	0	0	2	2	-

Note: 1.Serious occupational disasters are based on the definitions of major occupational disasters stipulated by the Ministry of Labor, which refers to the following: 1. Occurrence of death. 2. Disasters involving more than 3 victims. 3. Leakage of ammonia, chlorine, hydrogen fluoride, phosgene, hydrogen sulfide, sulfur dioxide and other chemical substances that causes the hospitalization of more than one worker.

Note: 2. Recordable occupational hazards refer to general occupational hazards.

[FCFC Occupational Disaster Rate (persons per thousand) from 2019 to 2022] 4.4.4

Item	2019	2020	2021	2021
Number of Occupational Disabilities	4	4	2	2
Occupational Disaster Rate (Persons per Thousand)	0.729	0.772	0.388	0.602
Number of Occupational Fatalities	-	-	-	-
Number of Major Occupational Disasters (Contractors)	-	-	-	-
Number of Occupational Fatalities (Contractors)	-	-	-	-
National Occupational Disaster Rate (Persons per Thousand)	2.494	2.517	2.570	2.204

II. Cross reference list of GRI Sustainability Standards

Announcement	FCFC follows GRI Standards to report correspondent contents in 2022
GRI 1	GRI 1：disclosures 2021
Compatible to sector standards	Inapplicable

GRI 2：General disclosures 2021

Disclosure item		Description	Referenced Section	Remark
The organization and its reporting practices	2-1	Organization details	About the report1.2.1	
	2-2	Entities included in the organization’ s sustainability reporting	About the report1.2.1	
	2-3	Reporting period, frequency and contact point	About the report	
	2-4	Restatements of information	4.4.4 appendix I	Typographical errors corrected in 2019 and 2020
	2-5	External assurance	About the report	
	2-6	Activities, value chain and other business relationships	1.5.4、2.6	
	2-7	Employees	4.1.2	
	2-8	Workers who are not employees	4.1.2	
Governance	2-9	Governance structure and composition	2.1.1	
	2-10	Nomination and selection of the highest governance body	2.1.1	
	2-11	Chair of the highest governance body	2.1.1	
	2-12	Role of the highest governance4 body in overseeing the management of impacts	2.1.1	
	2-13	Delegation of responsibility for managing impacts	1.5.4 2.1.2	
	2-14	Role of the highest governance body in sustainability reporting	2.1.2	
	2-15	Conflicts of interest	2.1.1	
	2-16	Communication of critical concerns		No relevant event in 2022
	2-17	Collective knowledge of the highest governance body	2.1.1	
	2-18	Evaluation of the performance of the highest governance body	2.1.1	
	2-19	Remuneration policies	2.1.1	
	2-20	Process to determine remuneration	2.1.1	
	2-21	Annual total compensation ratio	4.2.1	

Disclosure item		Description	Referenced Section	Remark
Strategies, policies and practices	2-22	Statement on sustainable development strategy	Sustainable development goals 1.1	
	2-23	Policy comments	Sustainable development goals	
	2-24	Embedding policy commitments	Sustainable development goals	
	2-25	Processes to remediate negative impacts	1.4.2 2.5.1	
	2-26	Mechanisms for seeking advice and raising concerns	4.1.1	
	2-27	Compliance with laws and regulations	2.6.2 3.7 4.1 4.4.4	
	2-28	Membership associations	2.3.5	
Stakeholder engagement	2-29	Approach to stakeholder engagement	1.4	
	2-30	Collective bargaining agreements		No collective agreement signed, but always refer the conclusion of trade union in compliance with laws and policy practices

Material topics

Disclosure item		Description	Referenced Section	Remark
GRI 3 : Material topics 2021	3-1	Process to determine material topics	1.5.1	
	3-2	List of material topics	1.5.4 Appendix II	
Governance				
GRI 3 : Material topics 2021	3-3	Management of material topics	2.1	
GRI 205 : anti-corruption 2016	205-1	Operations assessed for risks related to corruption	-	Evaluation 100%
	205-2	Communication and training about anti-corruption policies and procedures	2.1.4	
	205-3	Confirmed incidents of corruption and actions taken	2.1.4	
Economic Performance				
GRI 3 : Material topics 2021	3-3	Management of material topics	2.1.5	
GRI 201 : Economic performance 2016	201-1	Direct economic value generated and distributed	2.1.5	
	201-2	Financial implications and other risks and opportunities due to climate change	3.2.2	
	201-3	Defined benefit plan obligations and other retirement plans	4.2.2	
	201-4	Financial assistance received from government	-	Inapplicable
GRI 202 : Market presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	4.2.1	
	202-2	Proportion of senior management hired from the local community	4.1.3	

Disclosure item		Description	Referenced Section	Remark
Operation Risk Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	2.2	
Energy Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.3	
GRI 302 : Energy 2016	302-1	Energy consumption within the organization	3.3.3 3.3.4	
	302-2	Energy consumption outside the organization	-	Outside information unavailable
	302-3	Energy intensity	3.3.3	
	302-4	Reduction of energy consumption	3.3.2	
Greenhouse Gas Emission				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.3.3	
GRI 305 : Emissions 2016	305-1	Direct (Scope 1) GHG emissions	3.3.3	
	305-2	Energy indirect (Scope 2) GHG emissions	3.3.3	
	305-3	Other indirect (Scope 3) GHG emissions	3.3.3	
	305-4	GHG emissions intensity	3.3.3	
	305-5	Reduction of GHG emission	3.3.2	
Water Resource Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.4	
GRI 303 : Water and effluents 2018	303-1	Interactions with water as a shared resource	3.4.2	
	303-2	Management of water discharge-related impacts	3.4.3	
	303-3	Water withdrawal	3.4.2	
	303-4	Water discharge	3.4.3	
	303-5	Water consumption	3.4.4	
Waste Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.6	
GRI 306 : Waste 2020	306-1	Waste generation and significant waste-related impacts	3.6.1	
	306-2	Management of significant waste-related impacts	3.6.1 3.5.1	
	306-3	Waste generated	3.6.1 3.5.1	
	306-4	Waste diverted from disposal	3.6.1	
	306-5	Waste directed to disposal	3.6.1	
Air Quality Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.5	

Disclosure item		Description	Referenced Section	Remark
Air Quality Management				
GRI 305 : Emissions 2016	305-6	Emissions of ozone-depleting substances (ODS)	-	Emissions in compliance with dischargeable standards with no ODS materials
	305-7	NOx、SOx and other significant air emissions	3.5.1	
Circular Economy				
GRI 3 : Material topic 2021	3-3	Management of material topics	2.3.3	
Training and Education				
GRI 3 : Material topic 2021	3-3	Management of material topics	4.3	
GRI 404 : Training and education 2016	404-1	Average hours of training per year per employee	4.3.2	
	404-2	Programs for upgrading employees skills and transition assistance program	4.1.1 4.1.3 4.3.1 4.3.2	
	404-3	Percentage of employees receiving regular performance and career development reviews	4.3.1	
Salaries and Benefits				
GRI 3 : Material topic 2021	3-3	Management of material topics	4.2	
GRI 401 : Relationship between employer and employee 2016	401-1	New employees hires and employee turnover	4.1.3	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employee	4.2.1 4.2.2	
	401-3	Parental leave	4.2.2	
Occupational Health and Safety				
GRI 3 : Material topic 2021	3-3	Management of material topics	4.4 4.4.3	
GRI 403 : Occupational Health and Safety 2018	403-1	Occupational health and safety management system	4.4.3	
	403-2	Hazard identification, risk assessment, and incident investigation	4.4.4	
	403-3	Occupational health services	4.4.1	
	403-4	Worker participation, consultation, and communication on occupational health and safety	4.4.3	
	403-5	Worker training on occupational health and safety	4.4.3 4.4.5	
	403-6	Promotion of worker health	4.4.1 4.4.5	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.4.3 4.4.5	
	403-8	Workers covered by an occupational health and safety management system	4.4.5	Inapplicable
	403-9	Work-related injuries	4.4.4	
	403-10	Work-related ill health	4.4.4	

III. Sustainable Accounting Standards Board(SASB) Table

FCFC follows standards of SASB in contrast to Refining & Marketing business in Chemical industry as well as to sustainable issues in 2022.

Index code	Disclosure index	Corresponding disclosure					Sector comparison
		2018	2019	2020	2021	2022	
Disclosure theme:	**Greenhouse Gas Emissions**						
RT-CH-110a.1	Scope 1 total emissions (unit: tons CO_2e)	5,633,743	5,224,139	5,260,584	5,398,217	Completed by August 2023	3.3 Greenhouse Gas Emissions and Energy Management
	Emissions as a percentage of legal restrictions/ coverage of restrictions (unit: %)	The inventory should be conducted in accordance with the "Management Measures for the Inventory and Registration of Greenhouse Gas Emissions".					
RT-CH-110a.2	Long-term and short-term carbon reduction strategies or plans for Scope 1 greenhouse gas emissions and descriptions of the emission reduction goals and goal attainment	For the carbon reduction goals and strategies, carbon reduction goals have been formulated, with the aim of reducing carbon emissions by 10% by 2025 compared to 2020. The 1% annual reduction in the greenhouse gas reduction plan shall be achieved through production waste reduction and green product development to alleviate and adapt to the impacts of climate change					
Disclosure theme:	**Air Quality**						
RT-CH-120a.1	NOx	844.46	592.20	464.30	429.86	343.44	3.5 Air Quality Management
	SOx	2,180.34	1,873.16	1,626.45	1,644.83	1,573.52	
	Volatile Organic Compounds (VOC)	819.99	733.65	648.22	655.26	605.52	
	Hazardous Air Pollutants (HAPs)	49.99	148.41	85.84	75.37	86.82	
Disclosure theme:	**Energy Management**						
RT-CH-130a.1	Total energy consumption (unit: Giga Joule)	99,548,858	87,414,493	88,051,162	92,070,413	82,137,006	3.3 Greenhouse Gas Emissions and energy management
Disclosure theme:	**Energy Management**						
RT-CH-130a.1	Percentage of power usage from the grid (unit: %)	59.8 (including from State Taipower Corp. and Formosa Petrochemical Corp.)	56.5 (including from State Taipower Corp. and Formosa Petrochemical Corp.)	60.1 (including from State Taipower Corp. and Formosa Petrochemical Corp.)	64.1 (including from State Taipower Corp. and Formosa Petrochemical Corp.)	73.0 (including from State Taipower Corp. and Formosa Petrochemical Corp.)	3.3 Greenhouse Gas Emissions and energy management
	Percentage of renewable power usage (unit: %)	0.0101	0.0599	0.0687	0.0636	0.1382	
	Total energy of self-generation by FCFC (unit: GJ)	10,258,611 (including self-use and sales to other Corp.)	10,110,362 (including self-use and sales to other Corp.)	9,943,675(including self-use and sales to other Corp.)	9,588,974(including self-use and sales to other Corp.)	7,944,198(including self-use and sales to other Corp.)	

Index code	Disclosure index	Corresponding disclosure					Sector comparison
		2018	2019	2020	2021	2022	
Disclosure theme:	**Water Management**						
RT-CH-140a.1	Total amount of water acquired (unit: 1000m^3)	43,976	35,186.1	31,780.5	32,348.6	28,188.4	3.4.2 Water resource access management
	Percentage of water obtained from areas with high or extremely high water pressure (unit: %)	Not applicable to the current scope of disclosure					
	Total amount of water used (unit: 1000m^3)	26,100.3	17,097.7	17,271.2	17,684.6	14,468.7	
	Percentage of water used from areas with high or extremely high water pressure (unit: %)	Not applicable to the current scope of disclosure					
RT-CH-140a.2	Number of violations related to the water quality permit, water related standards, and relevant laws and regulations	The water pollution related environmental protection violations that occurred in 2018 to 2022 are as follows Unit: case					3.4.3 Water resource discharge management
		Year / Violation category	2018	2019	2020	2021	2022
		Water pollution	2	1	0	0	0
		Soil and groundwater	0	0	0	0	0
RT-CH-140a.3	Describe risk management strategies and actions related to water	Assessment of available water resources and withdrawal risk by using risk matrix ISO 14046 and WRI Aqueduct assessment tool. The Company plans to increase the amount of waste water recycling and seawater desalination equipment to reduce the impact					3.4.1 Water resource risk management
Disclosure theme:	**Hazardous Waste Management**						
RT-CH-150a	The total amount of hazardous waste generated (unit: metric tons)	9	9	7	61	73	3.6 Waste and Controlled Chemical Substance Management
	Recycling percentage of hazardous waste (unit: %)	0	0	0	0	0	
Disclosure theme:	**Community Relations**						
RT-CH-210a.1	Describe the evaluations and actions to enhance the interests of community groups and reduce risks faced by the community	Care for the urgent needs of society, donate social welfare expenditures, and provide scientific breeding technologies to local agricultural and fishery industries in partnership with academia to establish environmentally friendly management and increase output					5.1 Community engagement
Disclosure theme:	**Workforce Health & Safety**						
RT-CH-320a.1	Recordable injury rate (TRIR) and fatality rate of direct and contracted employees	Fatality rate: 0 TRIR : 0.15	Fatality rate:0 TRIR : 0.10	Fatality rate:0 TRIR : 0.08	Fatality rate:0 TRIR : 0.03	Fatality rate:0 TRIR : 0.04	4.4 Workforce Health & Safety
RT-CH-320a.2	Describe the management approach for reducing employee occupational health and injury risks	Fatality rate: 0 TRIR : 0	Fatality rate: 0 TRIR : 0	Fatality rate: 0 TRIR : 0	Fatality rate: 0 TRIR : 0	Fatality rate: 0 TRIR : 0	
Disclosure theme:	**Product Design for Use-phase Efficiency**						
RT-CH-410a.1	Revenue from low pollution, low energy consumption, high energy efficiency, and low carbon green material products	In 2022, green product sales reached NT$120 million					2.6.1 Green products purchase

Index code	Disclosure index	Corresponding disclosure					Sector comparison
		2018	2019	2020	2021	2022	
Disclosure theme:	**Safety & Environmental Stewardship of Chemicals**						
RT-CH-410b.1	Percentage of products classified as category 1 health and category 2 environmentally hazardous materials according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (unit: % by revenue)	99.6%	99.6%	99.6%	99.6%	99.6%	3.6 Waste and Controlled Chemical Substance Management
	Percentage of products that have undergone hazard assessment (unit: % by revenue)	100%	100%	100%	100%	100%	
RT-CH-410b.2	Describe the chemical management strategy	Implemented according to the Occupational Safety Act and Fire Services Act. Establish production methods that comply with environmental sustainability of a circular economy to reduce the impact on the environment					
	Describe the strategy for developing alternative products that reduce human and/or environmental impacts	Establish manufacturing methods of a circular economy					2.3.3 Circular economy
Disclosure theme:	**Genetically Modified Organisms**						
RT-CH-410c.1	Percentage of products containing genetically modified organisms (unit: % by revenue)	The Company does not produce products containing genetically modified organisms					
Disclosure theme:	**Management of the Legal & Regulatory Environment**						
RT-CH-530a.1	The organization identifies the risks and opportunities associated with environmental or social regulations and their financial impact	Tickets: 10; fines: NT$1.25 million	Tickets: 3; fines: NT$5.37 million	Tickets: 1; fines: NT$100 thousand	Tickets: 3; fines: NT$220 thousand.	Tickets: 5; fines: NT$460 thousand	3.7 Compliance with Environmental Regulations4.4.4 Statistics of Occupational Injuries
Disclosure theme:	**Operational Safety, Emergency Preparedness & Response**						
RT-CH-540a.1	Production Safety Incident Count (PSIC)	0	1	1	0	1	4.4 Healthy and Safe Working Environment
	Production Safety Incident Rate (PSTIR)	0	0.008	0.007	0	0.008	
	Production Safety Incident Severity Rate (PSISR)	0	0.144	0,021	0	0.024	
RT-CH-540a.2	Transportation incident (accident)	Transportation accident count in 2022: 1					
Disclosure theme:	**Production by reportable segment**						
RT-CH-000.A	Describe the types of products the organization produces (unit: tons)	Please refer to the production and sales volume table in the Company's 2022 Annual Report on the Company's website					2.3 Product Sustainability

IV. Corporate Governance Evaluation

ESG Index Disclosure Items

Item	Indicator items	Indicator descriptions	2022 Outcome Data	Remarks
Environmental Issues				
CPDC GHG Emissions	Amount of direct (Scope 1) GHG emissions	Tons CO_2	5,398,217	1. GHG emissions is based on 2021disclosured information 2. 2022 information will disclosure by August 2023
	Amount of energy indirect (Scope 2) GHG emissions	Tons CO_2	3,265,113	
	Amount of other indirect (Scope 2) GHG emissions	Tons CO_2	18,701,610	
	GHG emissions intensity	Tons CO_2/ turnover	3,423.77 tons/CO_2e/NT$ hundred million	
	Strategies, approaches and goals of GHG management	Qualitative description	3.3.3 Emissions and energy	
Energy Management	Renewable energy usage rate	Renewable energy/total energy	0.1382%	
	Energy usage efficiency	Qualitative description	3.3.4 Energy management	
	Renewable material use policy	Qualitative description		
Water	Water Consumption	ton	28,188,305	
	Water usage intensity	Water usage amount/unit product, service or turnover	11,140tons/NT$ hundred million	
	Water management or reduction goals	Qualitative description	3.4 Utilization and management of water resources	
Wastes	Amount of hazardous waste	ton	73	
	Amount of non-hazardous waste	ton	223,242	
	Total weight (hazardous + non-hazardous)	ton	223,315	
	Hazardous waste intensity	Amount of waste/unit product, service or turnover	90.28 tons/NT$ hundred million	
	Waste management or reduction goals	Qualitative description	3.6.1 Waste Management	

Item	Indicator items	Indicator descriptions	2022 Outcome Data	Remarks
Social Issues				
Human Development	Average employee salary	NTD/person	1,425,884	
	Average employee benefits	NTD/person	163,502	
	Average salary of full-time employees who are not in managerial positions	NTD/person	1,408,932	
	Median salary of full-time employees who are not in managerial positions	NTD/person	1,283,494	
	Percentage of female managers	Percentage (%)	4.63	
	Number of people involved in occupational disasters	Number of persons	3	
	Percentage of occupational disasters	Percentage (%)	0.06	
Governance Issues				
Board of Directors	Number of directors	Quantity	15	
	Number of independent directors	Quantity	3	
	Ratio of female directors	Percentage (%)	6.7	
	Attendance rate of directors in Board of Directors meetings	Percentage (%)	90	
	Ratio of continuing education for directors and supervisors that complies with the key points for continuing education	Percentage (%)	100	
Investors communication	Number of investor conferences held by the Company during the year	Session	2	

V. 「Corporation Rules Governing the Preparation and Filing of Sustainability Reports」 Particular Industry Disclosure Index-Plastic Industry

Item	Indicator items	Indicator category	Disclosure	Unit
1	Total energy consumption	Quantity	82,137,006	GJ
	Percentage of power usage from the grid	Quantity	73	Percentage %
	Percentage of renewable power usage	Quantity	0.1382	Percentage %
	Total energy of self-generation-self-use [Note1]	Quantity	16.5	GJ
2	Total amount of water acquired	Quantity	28,188.4	1000m^3
	Total amount of water used	Quantity	14,468.7	1000m^3
3	The total amount of hazardous waste generated	Quantity	73	ton
	Recycling percentage of hazardous waste	Quantity	0	%
4	Number of people involved in occupational disasters	Quantity	3	Number of persons
	Percentage of occupational disasters	Quantity	0.06	Percentage %
5	Sales volume of plastic products based on category [Notes 2]	Quantity	665.2	NT$100million

Note 1: The definition of total energy of self-generation-self-use is based on Renewable Energy Development Act, Implementation Regulations Governing Renewable Energy Certificates and other relevant subsidiary act.

Note 2: Sales volume of plastic products produced in Taiwan plants that include ABS、PS、PP and PC. Detail information see website of FCFC.

VI. Independent Assurance Opinion Statement

GRI 2-5

Independent Assurance Statement

FORMOSA CHEMICALS AND FIBRE CORPORATION 2022 SUSTAINABILITY REPORT

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 FORMOSA CHEMICALS AND FIBRE CORPORATION's Sustainability Report of 2022 (hereinafter referred to as "the Report") but was not involved in any way in its preparation.

AFNOR Group and FORMOSA CHEMICALS AND FIBRE CORPORATION (hereinafter referred to as "FCFC") are independent entities. AFNOR ASIA LTD., was commissioned by FCFC 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 Sustainability Report announced by FORMOSA CHEMICALS AND FIBRE CORPORATION covers the activities and operating performance related to the economic, environmental, and social aspects of FCFC and its subsidiaries in Taiwan.

AFNOR Asia is responsible for:

1. Evaluating the accordance of the Report with the Type 1 of AA1000 Assurance Standard v3 based on the AA1000 Accountability Principles (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.
2. In accordance with the GRI Standards, we verified the statement options and material topics disclosed in the report compiled by FCFC.

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

- The inclusivity, materiality, responsiveness, and impact in the Report were assessed according to the principles of management process against AA1000 Assurance Standard v3.
- The report is reported in accordance with the GRI Standards, and the content of the report is reviewed for general disclosures, sector standard indicators, and specific topic disclosures that comply with the GRI Standards.
- The mechanism of communication and response to the interest of stakeholders was verified through discussion and interview with the management team, however, the assessment team did not make any direct contact with external stakeholders.
- The qualitative and quantitative information produced, collected, and disclosed by the Report was reviewed through a validated sampling plan.
- By interviewing the members of each group of FCFC responsible for writing the report, and reviewing the documents, data and information related to the report.
- Interviews with members of the organization related to sustainable development management and report writing, including representatives of all levels and departments.
- Check the sufficiency and completeness of supporting materials and evidence for the content of the report.

CONCLUSION

◆ **AA1000 Accountability Principles**

Inclusivity

FCFC continues to implement an extensive stakeholder engagement program aimed at identifying and understanding stakeholders' interests and informational needs, which broadly includes issues from all parties. The report disclosed impartially the economic, social, and environmental message adequately to support planning and achieving targets. In the future, the sustainable development strategy of the organization will effectively integrate the internal and external resources of the enterprise, manage and control risks and opportunities, and evaluate and control strategic goals, clearly showing the sustainability-related performance that stakeholders are concerned about; continue to strengthen the existing mechanism for identifying stakeholders and materiality issues, and collect and understand the reasonable expectations and interests of stakeholders.

Materiality

FCFC has published relevant information on sustainable management so that stakeholders can judge the company's management and performance, and has developed and implemented a decision-making mechanism for material issues to accommodate issues from all parties. In the future, the organization can continue to strengthen the decision-making process of material themes and incorporate them into the company's management and operations, so that material issues can be updated in a timely manner and corresponding strategies developed.

Responsiveness

FCFC has developed and implemented a stakeholder response mechanism, clearly declared relevant policies and communicated with stakeholders, and implemented responses to expectations and opinions from stakeholders. In the future, the organization will continue to meet the demands and expectations of stakeholders to disclose the depth, breadth and context of sustainable development-related information.

Impact

FCFC has developed and implemented a process for understanding, measuring, assessing and managing the impact of the organization, and provided the necessary capabilities and resources, and is committed to the measurement and assessment of the organization's impact on stakeholders and itself, to make a comprehensive and balanced disclosure. In the future, the organization can continue to invest resources, participate in and introduce international environmental initiatives and standards, to meet the international environmental management trends, and fully demonstrate the organization's monitoring, analysis and management of its operational impact.

◆ **Global Reporting Initiative Sustainability Reporting Standards**

Based on the results of the review, we confirm that the report complies with GRI Standard reporting requirements in terms of general disclosures, sector standard indicators, and specific topic disclosures, including materiality topic management and disclosure items. Organizations can continue to introduce and combine other international disclosure requirements to highlight the organization's positive actions for sustainable development.

ASSURANCE OPINION

In our opinion, the information and data presented in the Report by FORMOSA CHEMICALS AND FIBRE CORPORATION provides a fair and balanced representation. We believe the focuses on economic, environmental, and social aspects of FCFC 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 FCFC 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 FORMOSA CHEMICALS AND FIBRE CORPORATION 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：

AA1000
Licensed Report
000-84/V3-0404O

Trevor Wilmer
The Director for Certification and Assessment
MAY.02.2023

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