



台塑企業
FORMOSA PLASTICS GROUP

2023

Formosa Chemicals & Fibre Corporation Sustainability Report

WE PRODUCE
WE RECYCLE



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About the Report

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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, 2023 to December 31, 2023, 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.

Initial release date: December 2015
 Release date of the previous version: May 2023
 Current version release date: June 2024
 Release date of the next version: June 2025

Scope and Boundary of the Report

This report aligns with the disclosure of information on FCFC and its affiliates, which are the same as listed in the last report, listed in the consolidated financial statements. If the individual revenue of affiliates accounts for less than 5% of the consolidated revenue, they will not be included. (Please refer to the "the latest report of consolidated financial statements") If the scope were any changed there would be specifically described in the Report.

Report Management and Information Compilation Process

The Company's "ESG Committee" is responsible for developing and implementing plans related to ESG. The sustainability report is disclosed in accordance with the principles of integrity and transparency. An impartial third party is responsible for verifying the sustainability report. Once the report is submitted to the Sustainable Development Committee and the Board of Directors, it is officially declared.

September to December, 2023	January to March, 2024	March to April, 2024	May 2024
Internal Audit	Internal Audit	External verification/validation	Internal Audit
Drafting Material Topics and Sustainability Report Preparation Plan	Compilation of Sustainability Report	Impartial third-party verification/validation	Final draft of the Sustainability 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:

Institution	Standards framework or regulations
Global Sustainability Standards Board, GSSB	<ul style="list-style-type: none"> ◆ GRI Universal Standards 2021 ◆ GRI Standards 2016, 2018 and 2020
International Sustainability Standards Board	<ul style="list-style-type: none"> ◆ Sustainability Accounting Standards Board, Standards for chemicals industry)
United Nation, UN	<ul style="list-style-type: none"> ◆ Sustainable Development Goals
Taiwan Stock Exchange, TWSE	<ul style="list-style-type: none"> ◆ 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 entrust the transparencies and credibility of the report, all information published in this report has been verified by the third party. If there is an estimate, it will be indicated in each relevant chapter.

Verification item	Universal Standards	Third Party
Sustainable report	According to AA1000 v3 assurance standards, No. 1 application type	bsi.
Financial management	Audited financial statements and Generally Accepted Auditing Standards	PwC Taiwan
Corporation operation and Customer relationship	ISO 9001:2015 product quality management system	SGS
Environmental management	ISO 14064-1:2018 Greenhouse gas inventories ISO 14001:2015 Environmental management verification system	SGS, bsi.
Occupational injury management	ISO 45001:2018 Occupational Safety and Health management system	SGS

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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Telephone: 886-2-27122211#5409

Fax: 886-2-27133229

Email: management@fcfc.com.tw

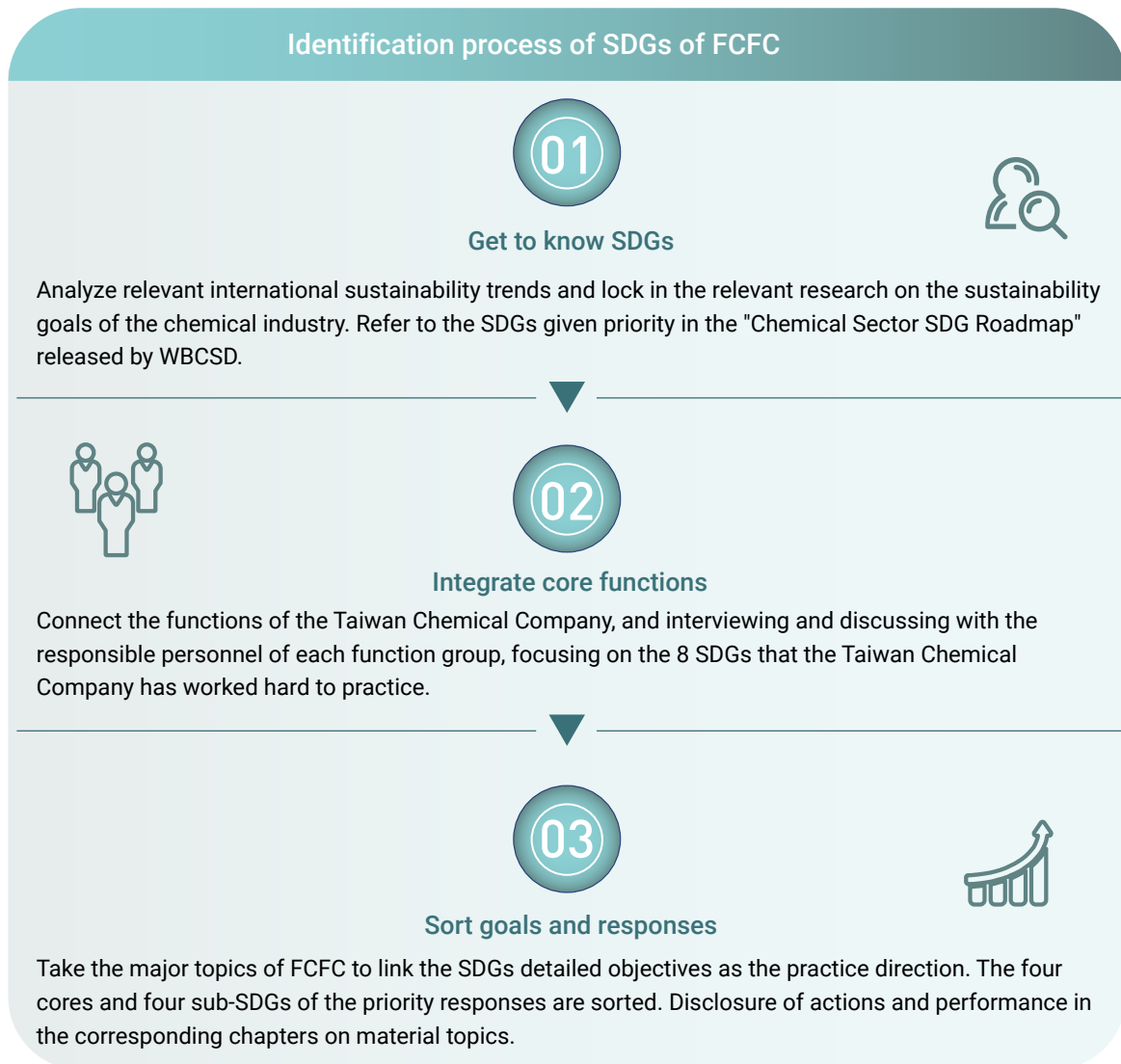
Website: <http://www.fcfc.com.tw/>

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 to response common issues in community, and set up a blueprint for the direction of SDGs implementation in the company.





	Target content	Detailed Objective	Major Issues	Disclosure Chapter
Core SDGs	3 Health and welfare	3.9	Air Quality Management Water Use Management	3.4 3.5
		8.2	Operational Financial Performance	2.1.5
	8 Employment and economic growth	8.8	Occupational Health and Safety Industrial and Public Safety	4.4.3
		11.5	Industrial and Public Safety	4.4.3
	11 Sustainable Cities	11.6	Air Quality Management Waste Management	3.5 3.6
		12.2	Corporate Governance	2.1
Secondary SDGs	12 Responsible consumption and production	12.4 、 12.5	Waste Management	3.6
		6.3	Water Resources Management	3.4
	6 Water purification and sanitation	6.4		
	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	Water Resources Management	3.4
		14.2		3.4

Sustainable Practices in Action

Implementation status in 2023	Short-term goals in 2024	Mid-term goals and commitments (in 3~5 years)	Mid-term goals and commitments (over 5 years)
Economic specifications: Corporate Governance, Operational Finance Performances, Operational Risk Management			
<ul style="list-style-type: none"> Continuously improve procurement anomalies through auxiliary management programs and coordinate inventory adjustments with production and sales to reduce turnover days. As of 2023, 61 AI projects had been completed, resulting in a cumulative benefit of NT\$ 140 million. 	<ul style="list-style-type: none"> In line with the company's initiative for paperless operations, we are accelerating the digitization of material processes. We are planning to implement 184 projects that is estimated cumulative benefits of NT\$ 280 million. 	<ul style="list-style-type: none"> By developing digital applications 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. 	<ul style="list-style-type: none"> Timely disclosure and management of inventory materials. Establish a smart plant to adapt to production and sales scheduling, simplifying operations, and increasing equipment efficiency.
			
Environmental specifications: Energy management, Greenhouse gas emission management, Water resources and use management, Waste management, Air quality management, Sustainable investment			
<ul style="list-style-type: none"> In 2023, we completed 259 energy-saving and carbon reduction improvement projects, resulting in an annual reduction of approximately 385,000 metric tons of CO₂. In 2023, the sales volume of environmentally friendly recycled plastic particles reached 2,900 metric tons. The sales revenue of green products accounted for 0.46% of the total sales in 2023. 	<ul style="list-style-type: none"> By 2023, 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 for recycled nylon filaments account for 5% of the total yield. The sales volume of green products raise up 1%. 	<ul style="list-style-type: none"> 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 filaments accounts for 12% of the total yield. Increase the sales volume of green products to 3%. 	<ul style="list-style-type: none"> The GHG emissions target for 2030 is a 25% reduction compared to 2020. By 2050 achieve carbon neutrality. Increase the proportion of renewable energy consumption in total electricity consumption more than 5%. Promote circular economy to achieve the zero-waste goal.
			
Society (Human rights): Workplace health and safety, Industrial and public safety			
<ul style="list-style-type: none"> In 2023, there were 3 cases of work-related disability among employees. We held four regular labor-management meetings; 9 employees applied for leave without pay, and the resumed rate reached 100%. 	<ul style="list-style-type: none"> The Local Talent Cultivation and Development Plan aims to feedback to the local community on economic 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. 	<ul style="list-style-type: none"> 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 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 2 per year. 	<ul style="list-style-type: none"> 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 2023

Economy



Consolidated
operating revenue

NT332.6
billion



Introducing Circular
Economy

Annual capacity of recycled
eco-friendly nylon filaments

9,000 tons



The Environment



Leadership **A**

Climate Change Disclosure Questionnaire Evaluation



Leadership **A**

Water Safety Questionnaire Evaluation

Achievements of energy and water conservation improvement

NT\$860 million

Amount of investment in water-saving improvement in 2023

102,000 metric tons

Water savings in 2023

NT\$1.64 billion

Amount of investment in energy conservation improvement in 2023

358,000 metyric tons

Carbon dioxide reduction in 2023



Green product sales

Eco-friendly Nylon Filaments **4,371** tons

Environmentally friendly plastic pellets **2,900** tons

Society



Talent development programs

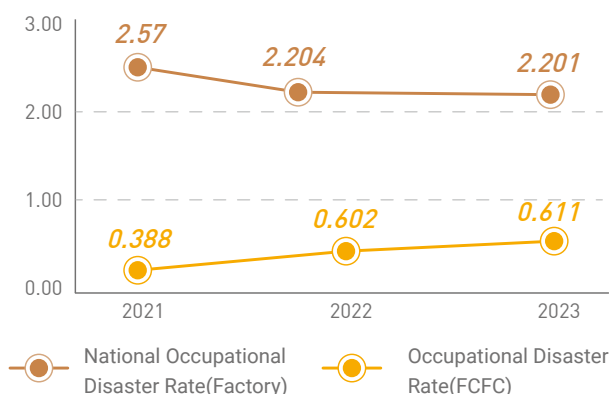
100%

Resumed rate of employees on maternity leave in 2023

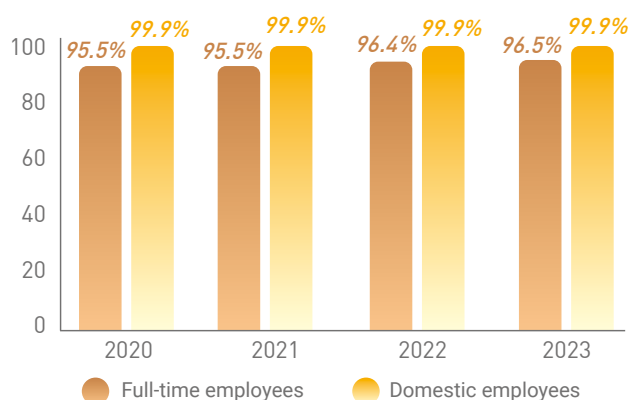
99%

The completion rate of the training programs in 2023

Occupational Disaster Rate (Persons per thousand) Table



Employment Ratio Table



ACHIEVEMENTS IN ESG SUSTAINABLE DEVELOPMENT

THE XINGANG PLANT WAS AWARDED THE "2023 NATIONAL SUSTAINABLE DEVELOPMENT AWARD - ENTERPRISE CATEGORY (MANUFACTURING INDUSTRY)" BY THE EXECUTIVE YUAN IN 2023.



Enterprise Category
(Manufacturing Industry)

THE XINGANG PLANT WAS AWARDED THE "2023 RESOURCE CIRCULATION EXCELLENCE ENTERPRISE - RESOURCE CIRCULATION GOLD AWARD" BY THE MINISTRY OF ENVIRONMENT IN 2023.



Resource Circulation
Gold Award

THE XINGANG PLANT WAS AWARDED THE "2023 FIVE-STAR AWARD FOR OUTSTANDING UNIT FOR IMPLEMENTATION OF OCCUPATIONAL SAFETY AND HEALTH" BY THE MINISTRY OF LABOR IN 2023.



Five-Star Award



Operation Philosophy

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1.1 FROM THE MANAGEMENT TEAM GRI2-22

Although the global supply chain is slowly returning to normalcy after the pandemic in 2023, major economies are still being impacted by global geopolitical conflicts. This has led to a sluggish economic recovery and an unforeseen and arduous recovery process. Due to insufficient consumer demand in the main European and American markets for Asian exports, production facilities are prioritizing inventory reduction and continuously adjusting production capacity by cutting output. This reduction in output has weakened energy demand. Energy prices have gradually declined since reaching a peak in mid-2022, with petroleum-related products reflecting the downturn in crude oil prices, fluctuating in a low range. Additionally, due to the substantial expansion of production capacity in petroleum-related products by counterparts in the Chinese market in recent years, newly expanded capacity came online in 2023, significantly increasing market supply. However, demand has not kept pace, leading to intense price competition and substantial compression of company profits. As a result, the Company's operations have been significantly impacted, experiencing a sharp decline compared to the previous year.

In 2023, the Company's PC product was subjected to anti-dumping duties when exported to mainland China. Furthermore, starting from 2024, the tariff concession for certain petrochemical products exported to mainland China will be discontinued. The product that will be most impacted by this change is p-xylene (PX). Mainland China is a crucial export market for the Company, and the discontinuation of tariff concession will diminish the competitiveness of our products. Although the external business environment poses challenges, the Company remains committed to differentiating our products in the sales market and developing customized solutions to enhance their value. Additionally, we have implemented a digital AI module project to improve energy efficiency and recycle waste heat in our production process. This initiative has not only reduced costs and increased market competitiveness but also minimized our impact on the market. At the same time, we are actively involved in energy transformation and increasing the utilization ratio of photovoltaic renewable energy. We have also made joint investments in energy storage battery production with affiliated companies, serving as a bridge between power supply and users in our efforts towards low-carbon energy transformation. Furthermore, we are continuously promoting the development of a circular economy by recycling plastic, waste fishing nets, and other wastes for reuse. These materials can be used as recycled raw materials for green products or textile clothing, thereby reducing the impact on the environment.

The Company is dedicated to reducing carbon emissions by developing a circular economy and transitioning to low-carbon energy. Our long-term goal is to achieve carbon neutrality by 2050. The planned carbon reduction project will continue to be implemented in 2023, resulting in a reduction of approximately 358,000 metric tons of carbon emissions at the plant. Furthermore, a comprehensive carbon emission monitoring and control system has been established. We can collect monthly statistics on carbon emissions and prepare in advance for carbon reporting and the implementation of carbon fees. As of 2022, the installed capacity of photovoltaic power generation has reached



9,312 kWp. In 2023, an additional 8,138 kWp of photovoltaic power generation capacity will be added, resulting in a total installed capacity of 17,450 kWp. In 2024, the installed capacity of photovoltaic power generation is projected to increase by 17,782 kWp, resulting in a 102% increase in power generation capacity. The Company has partnered with local government and non-governmental organizations to create a reclaimed program for discarded fishing nets. Through this initiative, we will repurpose these used fishing nets and oyster ropes into recycled and eco-friendly materials for production, thereby making our contribution to the preservation of the environment.

The Company actively plans for environmentally sustainable development projects, implementing development goals in a consistent, practical, and sustainable manner. As a result of its efforts, the Company has received multiple recognitions for its accomplishments. In 2023, the Company's Xingang Plant was awarded the "National Sustainable Development Award" by the Executive Yuan for its achievements in renewable energy development and energy transformation. It also received the "Resource Circulation Excellence Enterprise - Resource Circulation Gold Award" from the Ministry of Environment for its efforts in waste recovery, resource activation, and environmentally friendly practices. Additionally, the Company's occupational health and safety management system, along with the implementation of an AI disaster prevention technology risk management platform, have performed exceptionally well. As a result, the Xingang Plant was honored with the "Five-Star Award for Outstanding Unit for Implementation of Occupational Safety and Health" by the Ministry of Labor.

The Company upholds the business philosophy of environmental friendliness, guided by the principle of "take from society, give back to society." With a strong commitment to society, the company consistently invests in social welfare initiatives, aiming to promote social harmony and fulfill its corporate social responsibility. In 2023, the Lakeside Ecological Classroom at Herbelle in Yilan, in collaboration with Luodong Community University, will host an environmental ecology education exhibition. The exhibition will showcase valuable documentaries on animal and plant ecology, with a focus on protecting native species and preserving biodiversity. By fostering an understanding and appreciation of the local ecological environment, the exhibition aims to promote environmental conservation and foster sustainable development within the community. The Changhua Plant organizes a second-hand toy-sharing market in the Welfare Building located on the plant premises. This market is open to social welfare organizations and disadvantaged groups, with the aim of promoting the values of cherishing and sharing possessions, as well as giving back to society. The Xingang Plant has been actively engaged in community welfare activities and supporting disadvantaged groups for a long time. They recently organized a mountain hiking and cleaning event for employees and their parents in the hills behind National Chung Cheng University, with the aim of promoting the sustainable growth of forests. Additionally, they have been celebrating the Double Ninth Festival and regularly visiting elderly individuals living alone, providing care to child welfare institutions, and offering assistance to disadvantaged groups.

Formosa Chemicals & Fibre Corporation
Chairman Hung Fu-Yuan
Year 2024

1.2 About FCFC

1.2.1 Company Overview



Location of the head office	Changhua County, Taiwan
Year Founded	1965
Consolidated turnover in 2023	NT\$332.6 billion
Number of regular employees in Taiwan in 2023	5,085 people
Industry products	Raw petrochemical products, Plastics material pellets, Synthetic fibers, 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 "2023 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

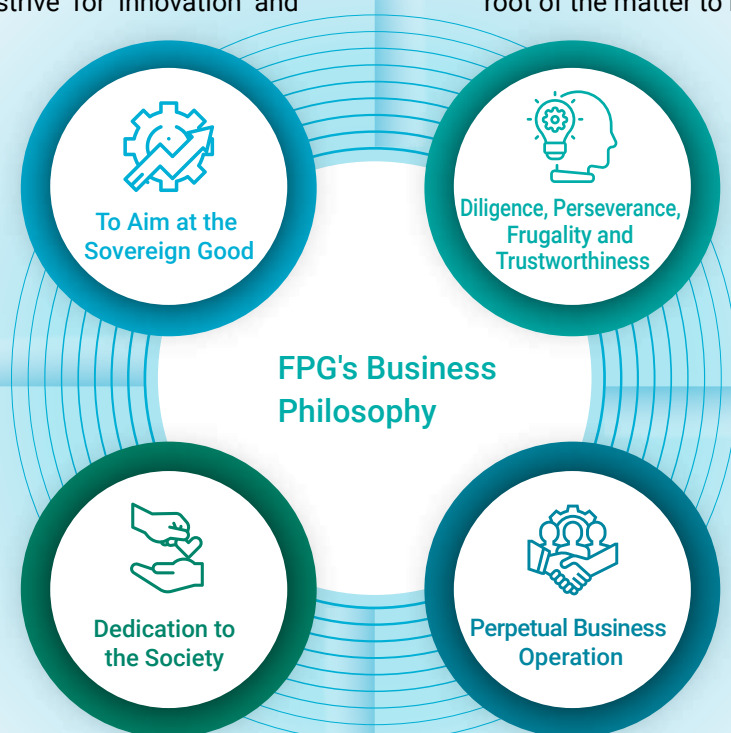
Among the companies of Formosa Plastic Group (FPG), the identification image of chain enterprises is taken as a common sign to express the meaning of vertical and horizontal connection, mutual cooperation, as well as harmony and integration. The Company's identification mark inherits the enterprise system, 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

In order to rationalize business management, we must strive for perfection, break through the current situation through continuous improvement, and strive for innovation and development.

We employ "diligence" in mental intelligence, maintain "simplicity" of working attitude in a practical and realistic way, inquire into the root of the matter to review and improve.



Based on the tenet of "what is taken from the society is used interests of the society", focus on the development of medical and educational public welfare undertakings.

Make the operation of all affairs clear and follow the rules, strengthen the long-term profit potential through management rationalization, and achieve a win-win and solid partnership with stakeholders.

1.4 Stakeholder Identification and Communication

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.

1.4.2 Stakeholder Communication Channels and Frequency GRI2-29

The Company has smooth communication channels with stakeholders. The communication with key stakeholders in 2023 is as follows:

Residents in Operating Areas	Purpose of Communication	Contact Department
Residents and organizations in the vicinity of operational sites	<ul style="list-style-type: none"> ◆ To maintain the vicinity of operational sites in health and safety, and enhance the quality of life for residents ◆ Maintain a good relationship with residents, ensuring the simultaneous growth of the company and the community 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 3 times in a year	
<ul style="list-style-type: none"> ◆ Air quality management ◆ Water resources management ◆ Waste management ◆ Sustainable investment ◆ GHG emissions management 	2023 Communication results <ul style="list-style-type: none"> ◆ Providing emergency salvation for 20 people of the plant neighbors ◆ Caring for a total of 180 elderly people living alone at the end of the year ◆ Participated in the community residents' conference to understand the opinions of residents for 3 times 	
Government Sectors	Purpose of Communication	Contact Department
A government department or institution is responsible for formulating and implementing laws, policies, regulations, and providing public services and regulatory functions	<ul style="list-style-type: none"> ◆ In order to comprehend government regulations and policies, and to collaborate in the revision of company management regulations 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 4 times in a year	
<ul style="list-style-type: none"> ◆ Sustainable investment ◆ GHG emissions management ◆ Occupational health and safety ◆ Air quality management ◆ Industry and public safety 	2023 Communication results <ul style="list-style-type: none"> ◆ 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 on the industry through the associations and safeguard the development of the industry 	
Experts and Scholars	Purpose of Communication	Contact Department
Scholars, experts or researchers with extensive experience in the relevant field	<ul style="list-style-type: none"> ◆ Learn from experts and scholars for suggestions on environmental laws and regulations, technological innovation, and sustainable development ◆ Maintaining market competitiveness and developing business models 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 4 times in a year	
<ul style="list-style-type: none"> ◆ Occupational health and safety ◆ Sustainable investment ◆ Operational financial performance ◆ GHG emissions management ◆ Industrial and public safety 	2023 Communication results <ul style="list-style-type: none"> ◆ Attending poison disaster defense arrangement meeting held by TRCA ◆ The company website provides a place to exchange environmental ideas 	

Environmental Protection Groups	Purpose of Communication	Contact Department
A non-profit organization or group dedicated to environmental protection, ecological conservation, and sustainable development	<ul style="list-style-type: none"> Enhance communication with environmental protection organization in the Company's progress in environmental protections Vision for promoting the balanced development of environmental ecology and corporate operations 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 4 times in a year	
<ul style="list-style-type: none"> Corporate governance Operational financial performance Energy management GHG emissions management Operational risk management 	2023 Communication results <ul style="list-style-type: none"> 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 	

Shareholders and Investors	Purpose of Communication	Contact Department
Individuals or institutional groups that hold shares of the Company	<ul style="list-style-type: none"> Connect with shareholders and investors who are concerned about the future development of the Company Understanding the expectations of shareholders and investors regarding the Company. 	Contact channel: Mr. Liu Contact email: U127129@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: General shareholder's meeting once a year IR conference 2 sessions and occasional operating results explanation sessions	
<ul style="list-style-type: none"> Operational financial performance Energy management Sustainable investment Occupational health and safety 	2023 Communication results <ul style="list-style-type: none"> Holding a yearly general shareholder's meeting and explaining operational performance periodically by chairman, moreover, occasionally apply operating results in newspaper Company website provides shareholders, interested parties and other contact window, with a dedicated person to reply 	

Customers	Purpose of Communication	Contact Department
Individuals or businesses that purchase products or services	<ul style="list-style-type: none"> Satisfy customer needs Encouraging the Company to continue making progress and development 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: At least 1 times in a year	
<ul style="list-style-type: none"> Corporate governance Occupational health and safety Waste management Air quality management Operational financial performance 	2023 Communication results <ul style="list-style-type: none"> Visiting every customer at least 1 time in 2023 In response to a total of 6 customer complaints concerning quality, we actively assisted customers to their satisfaction. The average customer satisfaction in 2023 is 4.5 points out of 5 points 	

Suppliers and Contractors	Purpose of Communication	Contact Department
A company that supplies raw materials, products, services or carries out specific projects	<ul style="list-style-type: none"> ◆ Stabilize the supply chain and ensure a steady flow of materials ◆ Stable production system 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 3 times in a year	
<ul style="list-style-type: none"> ◆ Energy management ◆ Occupational health and safety ◆ Waste management ◆ Industrial and public safety ◆ Water resources management 	2023 Communication results <ul style="list-style-type: none"> ◆ Assist suppliers and contractors to answer operation questions ◆ Two explanation events for suppliers and contractors were held in 2023 ◆ Two construction requests had been accepted and handled in 2023 	

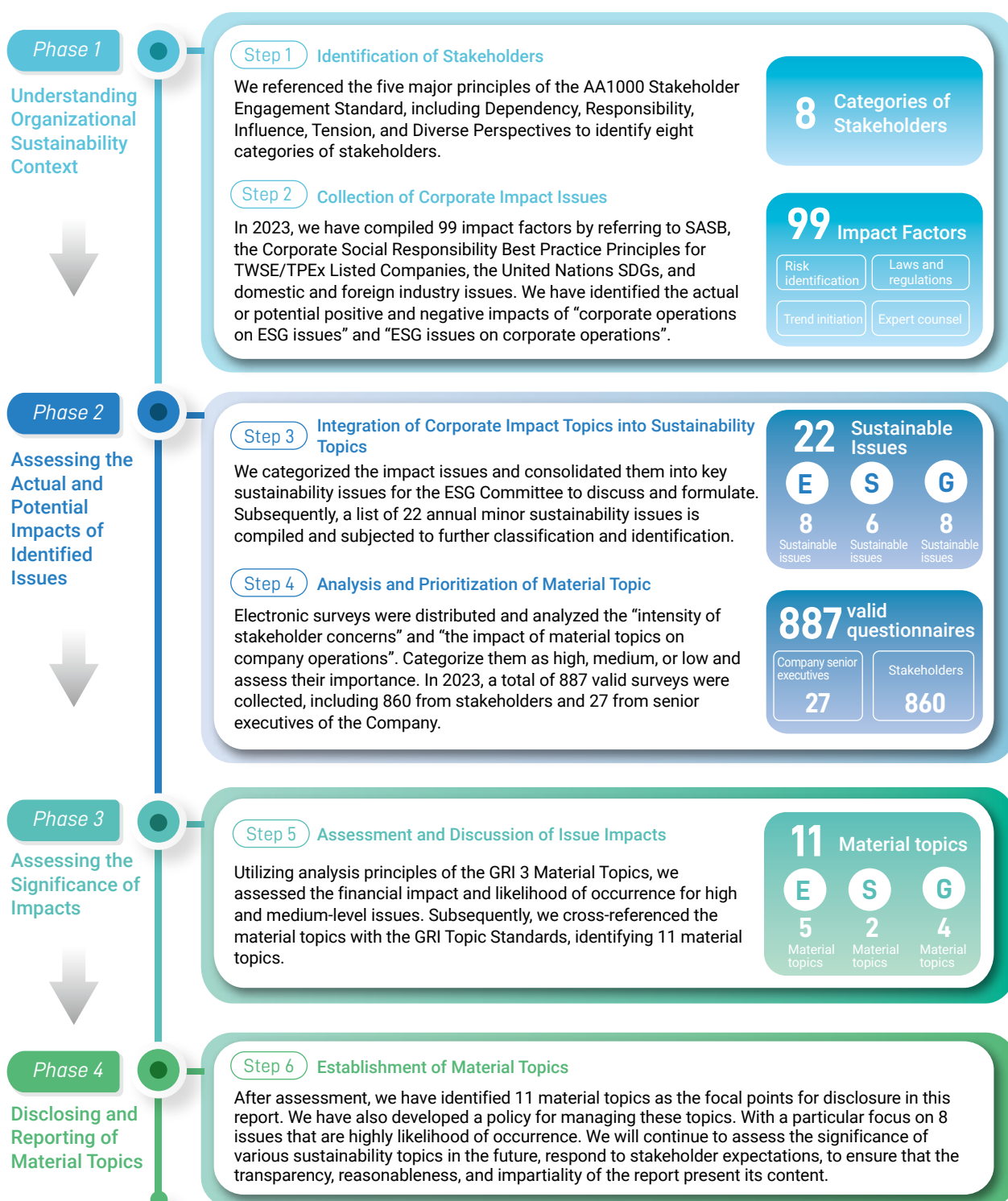
Employees	Purpose of Communication	Contact Department
Employee of the Company.	<ul style="list-style-type: none"> ◆ Establish communication channels to gain a better understanding of employee needs ◆ The involvement of employees in company operations has a substantial impact on the development of the Company. 	Contact channel: Mr. Chien Contact email: fcfc@fcfc.com.tw
Topics Concerned	Communication channels and frequencies: More than 4 times in a year	
<ul style="list-style-type: none"> ◆ Corporate governance ◆ Energy management ◆ Occupational health and safety ◆ GHG emissions management ◆ Air quality management 	2023 Communication results <ul style="list-style-type: none"> ◆ Having weekly class meetings to provide communication between colleagues ◆ Convene labor management meetings every quarter to provide employee opinions ◆ Designed person to promptly respond to employees' opinions and feedback 	



1.5 IDENTIFICATION OF MATERIAL TOPICS

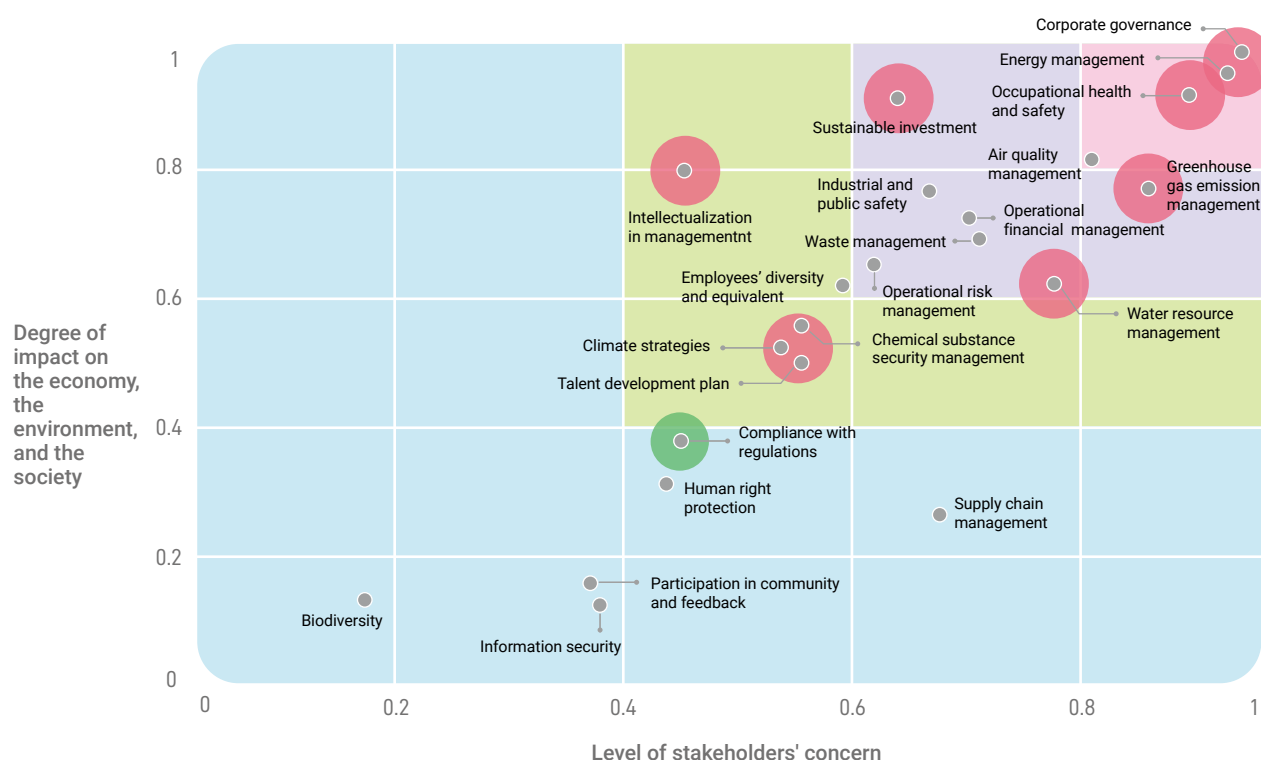
The identification and management of sustainability issues and stakeholders are crucial elements in implementing ESG development. The Company has implemented an information disclosure framework that is based on the AA1000:2018 Accountability Principles "inclusivity, materiality, responsiveness, and impact" and the GRI Standards. Through analyzing ESG issues for materiality, assessing potential risks, developing risk management strategies and implementation plans, and reviewing the results of implementation.

1.5.1 PROCEDURES OF IDENTIFYING MATERIAL TOPICS GRI3-1



1.5.2 Prioritizing Material Topics

► The scope of prioritizing material topics via matrix



Managerial strategies

- 4 Management strategies on high-level material issue
- 5 Management strategies on low-level material issue
- 7 Management strategies on medium-level material issue
- 6 Pay attentions to material issue out of matrix e

The occurrence of possibility

- 7 High-level Possibility (High)
- 1 Medium-level Possibility (Medium)
- 14 Low-level Possibility (Low)

1.5.3 DESCRIPTION OF CHANGES IN MATERIAL TOPICS

Material topics	Importance in 2023	Importance in 2022	Adjustment Method	Reason for Change	Response Chapter
Air Quality Management	High	Medium	Increase in importance	The development of clean energy has heightened the focus of employees and social groups on air quality management.	3.5 3.6.1
Sustainable Investment	Medium	Not in matrix		The global initiative promotes energy conservation, carbon reduction, and energy transition, with a strong emphasis on sustainable investment.	3.1.4
Operational Financial Performance	Medium	High	Decrease in importance	The slowing economic growth is a global phenomenon; therefore, the importance of the issue has slightly decreased.	2.1.5 2.7.1 3.2.2 4.2.1
Employee Recruitment and Talent Development	Low	Medium		The significance of the issue has diminished as a result of the active involvement of employees in the execution of talent acquisition, development, and relevant training programs.	4.2 4.3

1.5.4 Description of material topics to the value chain

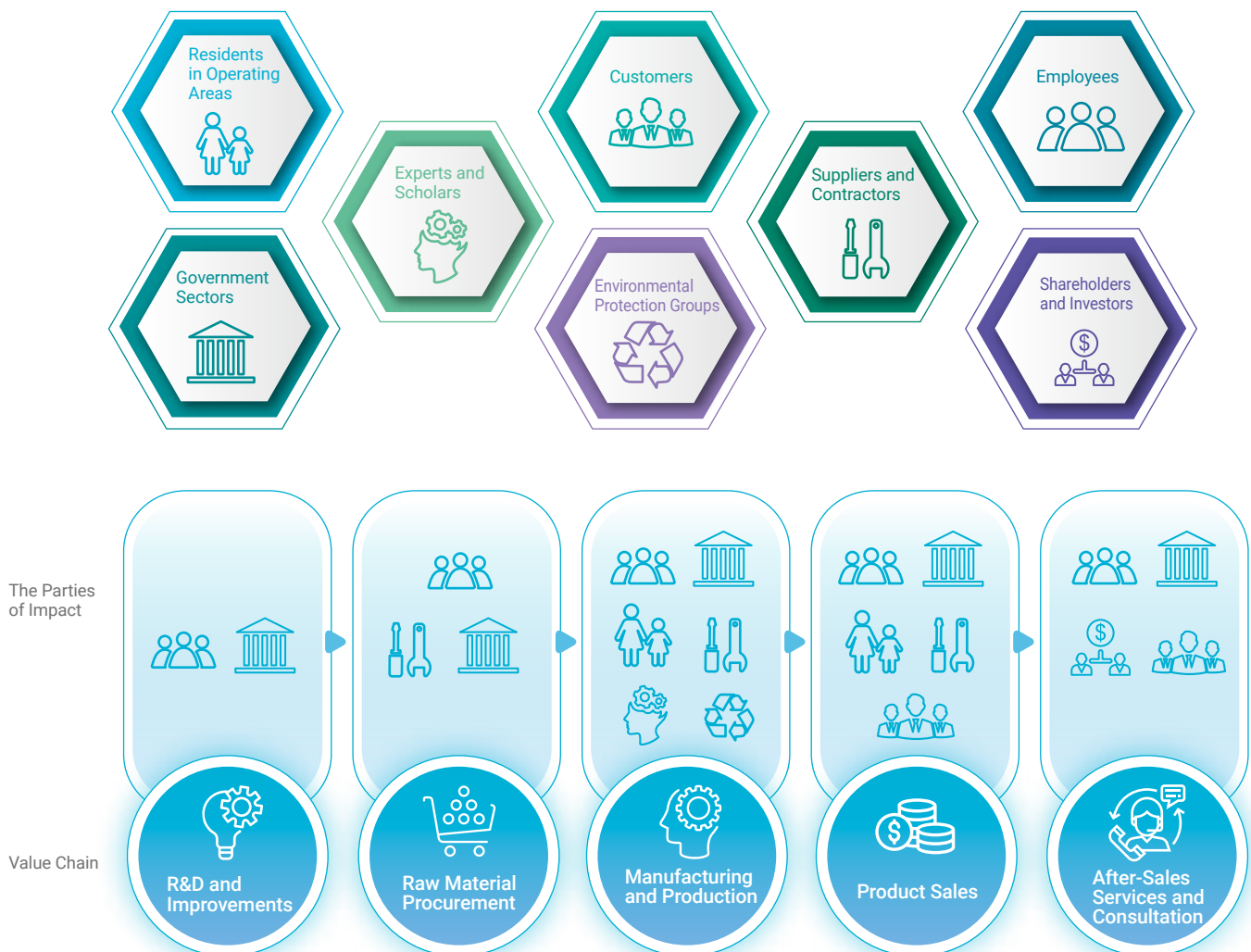
GRI2-6

GRI2-1

GRI2-2

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 downstream to produce petrochemical raw materials or finished products. This is in line with the information reported in the previous cycle. After identification of the five major value creation processes of the company operations, namely "process improvement", "raw material procurement", "manufacturing", "product sales" and "after-sales service and consulting". The processes will be the boundaries of impacts and influences of material topics. The Company has established the "ESG Committee" and has proposed solutions for the 11 material topics that are evaluated for their impact on the value chain. We have also addressed the material topics of concern to stakeholders in the corresponding chapter. For details on the ESG organization and its main areas of focus, please refer to "ESG Committee" in Chapter 2.1.2 of this report.

► Residents in Operating Areas



Material topics	GRI topic standards		Disclosure chapter				
			Manufacturing improvement	Raw material procurement	Processing	Sales and counseling	Disclosure chapter
Corporate governance	Customer material topics					▲	2.1
Energy management	GRI 302 : Energy 2016	302-1	●		●		3.3.2
		302-4					3.3.3
							3.3.4
Air quality management	GRI 305 : GHG Emissions 2016	305-7	●		●		3.5
	GRI 306 : Waste 2020	306-2 306-3					3.6.1
Occupational health and safety	GRI 403 : Occupational health and safety 2018	403-1 403-10			●		4.4
Sustainable investment	Customer material topics		●			▲	3.1.4
Operational financial performances	Customer material topics			●	●		2.1.5
							2.7.1
							3.2.2
							4.2.1
Operational risk management	GRI 201 : Economic performance 2016	201-2		●	●	▲	2.2
GHG emissions management	GRI 305 : GHG Emissions 2016	305-1	●		●		3.3.2
		305-5					3.3.3
Water resource management	GRI 303 : Water and effluent water 2018	303-1 303-5	●		●		3.4
	GRI 304 : Biodiversity 2016	304-1					
Waste management	GRI 306 : Waste 2020	306-1			●		3.5.1
		306-5					3.6
Industrial and public safety	GRI 403 : Occupational safety and health 2018	403-1 403-10			●		4.4

Notes 1: Cause (●): Consequences caused by organization itself.

Notes 2: Contribute to (▲): Consequences caused indirectly by another organization's activities.



The Value of the Innovation Economy

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2

Vision

Promote the circular economy by collecting and reusing discarded energy to alleviate environmental burdens. To promote the balanced development of society and the sustainable functioning of the ecological environment through business operations.



Policy and Commitment

In compliance with legal regulations, the Board of Directors functions as the highest governance body. They develop business strategies and enhance management systems to improve corporate governance performance and fulfill corporate social responsibilities.



2023 Economic Regulatory Compliance

The Company adheres 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.

Note: A significant abnormality is defined as a single event resulting in accumulated fines exceeding NT\$1 million.



► Material Topics (Custom Material Topics): Corporate Governance

Description

The Company adheres to government regulations in its operations, and our internal control system is sound. Furthermore, our internal control systems are regularly reviewed by third-party independent auditors. Enterprise procurement, sales, and other external trading activities, as well as financial and tax risk management, are all conducted in accordance with the Company's management regulations and systems, ensuring effective risk control. No illegal incidents occurred in 2023.

Actual

Potential

Positive

Negative

Management Actions	2023 Performance Tracking	Overview of Achievements	Short-term Goals (In 1-3 years)	Medium and Long-term Goals (Over 3 years)
The Company's regulations are being revised in accordance with government regulations.	Amended the "Guidelines for Sustainable Development".	Achieved	The Director Selection Procedure shall be coordinated in accordance with the revised regulations.	To ensure information security, it is important to strengthen the Company's information security management and education training.
Stakeholder Groups	Government Agencies  Shareholders and Investors 			
Pipeline and Effectiveness of Engagement	1. Government Agencies: Participate in various public hearings and briefings organized by the competent authorities and communicate the progress of business promotion. The relevant business personnel will then relay the information to company employees after the meetings. Attend at least four times per year. 2. Shareholders and Investors: The Company regularly communicates its operational status to stakeholders through various channels. This includes multiple announcements through the media, annual shareholder meetings, secondary corporate briefings, and several operational briefings. Report the implementation outcomes to stakeholders and thoroughly discuss the Company's operational status, business strategies, and philosophy.			

► Material Topics (Custom Material Topics): Operating & Financial Performance

Description

In recent years, Asian countries have greatly increased their petrochemical production capacity, which has led to an imbalance in the market between supply and demand and a decrease in product prices. As a result, the Company's profitability has declined. Regarding the government's imposition of carbon fees, increase in electricity prices, and water consumption fees for heavy water users, the Company will continue to implement energy-saving and carbon reduction projects to improve cost reduction.

Actual

Potential

Positive

Negative

Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

To maintain product prices, it is necessary to adjust production capacity.

Develop sales in niche markets and avoid the larger competitive market of mainland China.

Achieved

Diversify markets by selling plastic raw materials to Southeast Asian markets, aiming to increase the share to over 50%.

To enhance the production capacities of environmentally friendly recycled products and enhance the sales proportion of differentiated products.

Implement projects aimed at energy-saving, emission reduction, and water conservation improvement.

1. Increase the installed capacity of solar power to 8,138 kWp.
2. Approximately 358,000 metric tons of CO₂ emissions were reduced.
3. The plant saves 2,789 metric tons of water daily.

Achieved

1. Increase the installed capacity of solar power to 17,782 kWp in 2024.
2. In the base year 2020, we aim to reduce carbon emissions by 10% by 2025.

In the base year 2020, we aim to reduce carbon emissions by 25% by 2030; achieve carbon neutrality by 2050.

Stakeholder Groups

Shareholders and Investors



Pipeline and Effectiveness of Engagement

The Company regularly communicates its operational status to stakeholders through various channels. This includes multiple announcements through the media, annual shareholder meetings, secondary corporate briefings, and several operational briefings. Report the implementation outcomes to stakeholders and thoroughly discuss the Company's operational status, business strategies, and philosophy.

► Material topics: Operational risk management

Description

The "Personal Data Management Regulations" were established to protect the privacy rights of customers and employees, and there were no violations of privacy rights in 2023. The Company is not involved in the biotechnology industry.

Actual

Potential

Positive

Negative

Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

Established the "Personal Data Management Regulations".

There were no privacy violations.

Achieved

Added as a standard self-inspection item for every department.

Comply with regulatory updates to amend the "Personal Data Management Regulations."

Stakeholder Groups

Customers



Employees



Pipeline and Effectiveness of Engagement

1. Visit customers at least once a year or interact with them via phone, and provide a "Customer Opinion and Feedback Form" and "Customer Satisfaction Survey" are used to understand customer needs and suggestions.
2. Employees have the opportunity to voice their opinions through different channels, including labor unions and labor-management coordination meetings.
3. There were no privacy violations in 2023.

► Material topics: **Circular Economy** ► International Framework and Indicators: **Industry issues**

Description

The development of the waste recycling industry will contribute to the reuse of recyclable waste, thereby reducing resource consumption. Reclaimed marine waste containing nylon material to produce environmentally friendly nylon yarn; recovered 100% of plastic pellet manufacturing waste to produce environmentally friendly plastic pellets.

Actual

Potential

Positive

Negative

Management Actions	2023 Performance Tracking	Overview of Achievements	Short-term Goals (In 1-3 years)	Medium and Long-term Goals (Over 3 years)
1. Recycling of plastic production process scrap. 2. Recycling waste nylon fishing nets in the ocean.	1. The sales volume of environmentally friendly plastic pellets has increased by 27%. 2. The sales revenue from green products reached NT\$970 million.	Achieved	1. The sales of environmentally friendly plastic pellets constituted 4.5% of the overall sales of rigid plastic pellets. 2. The production of environmentally friendly nylon yarn accounts for 12% of the total production.	1. The sales of environmentally friendly plastic pellets constituted 5% of the overall sales of rigid plastic pellets. 2. The production of environmentally friendly nylon yarn accounts for 12% of the total production.

Stakeholder Groups

Shareholders and Investors



Experts and Scholars



Pipeline and Effectiveness of Engagement

1. The Company regularly communicates its operational status to stakeholders through various channels. This includes multiple announcements through the media, annual shareholder meetings, secondary corporate briefings, and several operational briefings. Report the implementation outcomes to stakeholders and thoroughly discuss the Company's operational status, business strategies, and philosophy.
2. Hold at least three environmental improvement case presentations each year to collectively discuss and explore ways to enhance improvement practices.

2.1 Corporate Governance

2.1.1 Corporate Governance Profile

GRI2-9

GRI2-10

GRI2-11

GRI2-12

GRI2-15

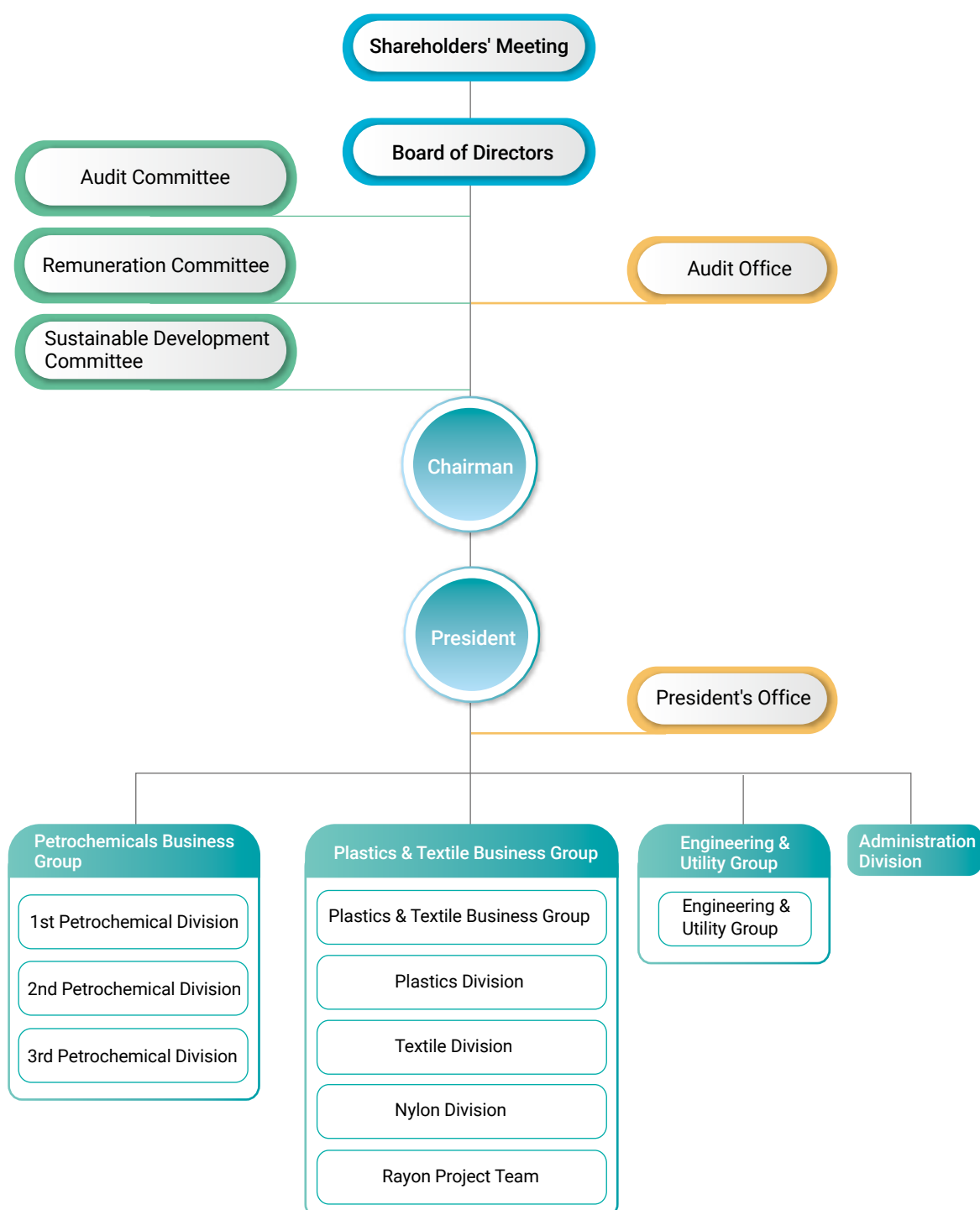
GRI2-17

GRI2-18

GRI2-19

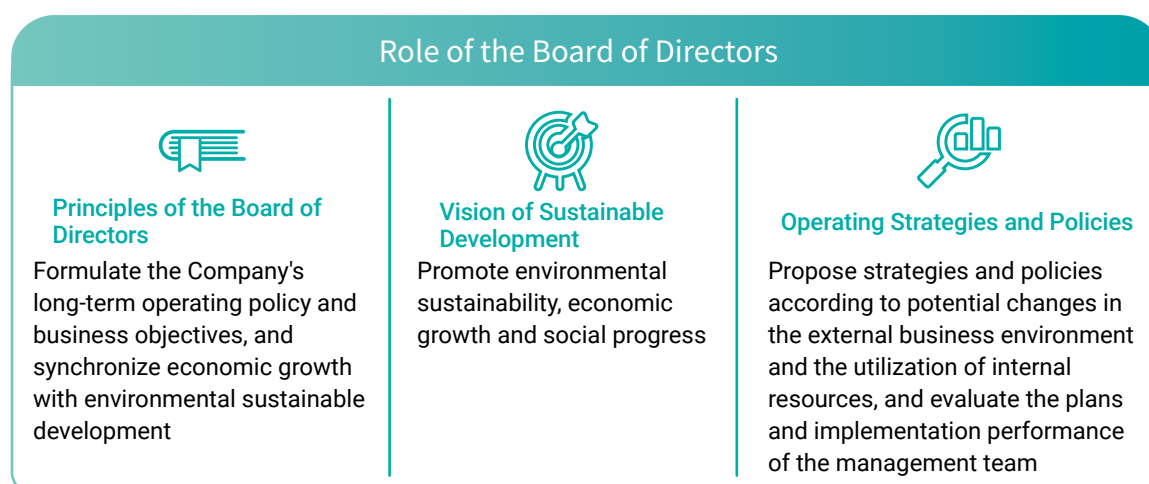
GRI2-20

► 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 laws, securities exchange laws, company articles of association, board of directors stipulates, and "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 set up a "Sustainable Development Committee", and has adopted and formulated the "Corporate Social Responsibility Best Practice Principles". The Board of Directors rates yearly performance goals by itself once a year. In 2003 there were no occurrences in relevant material events. Please refer to the Company's website for the operations of the Board of Directors.



► Composition of a diverse Board of Directors

Currently there are 15 Directors, including three independent directors and one female director. All of whom are experts in their respective fields with ample industry management experience, and have three-year service terms. 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, human right 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.

Board of Directors Selection Mechanism

The election of directors in the Company is carried out in accordance with the provisions of the Company's Director Election Regulations. It follows a candidate nomination system, where directors are chosen from a list of candidates nominated by the shareholders. The election includes both independent and non-independent directors. It is required that at least one of the elected independent directors possesses expertise in accounting or finance. Please refer to the "Important Company Rules" section of the corporate governance of investor relations on the Company's official website.

Board of Directors Conflict of Interest Principles

The Company has established the Board of Directors Regulations, which outline the guidelines for directors to be conflict out from voting on specific agenda items. Directors who have a personal or representative stake in the matters being discussed at the meeting should disclose the relevant details of their interests during the Board Meeting. If there is a potential risk to the Company's interests, they should be conflict out from participating in the discussion and voting. Additionally, they should not act as proxies for other directors when exercising their voting rights. Spouses, parents within the second degree of consanguinity, or companies with a controlling subsidiary relationship with the directors, who have a vested interest in the matters discussed in the aforementioned meeting, shall be considered to have a personal interest in those matters. Please refer to the section of the corporate governance of investor relations on the Company's official website.

Category of Conflict of Interest	Description
◆ Does the Board of Directors have any controlling shareholders?	◆ Yes
◆ Directorship status of Other Board of Directors	◆ Please refer to the "Corporate Governance Report" in the Company's "2023 Annual Report".
◆ Cross-shareholding situation with suppliers or other stakeholders.	◆ Please refer to the "Corporate Governance Report" in the Company's "2023 Annual Report".
◆ Situation of Stakeholder Groups and Their Relationships, Transactions, and Outstanding Balances	◆ Please refer to the "Financial Statement" in the Company's "2023 Annual Report" for the "Amount of Sales and Purchases with Related Parties Exceeding NT\$100 million or 20% of Paid-in Capital".

► 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. No stakeholder submitted recommendations to committee center last year. Pursuant to the Remuneration Committee Charter, at least two meetings shall be convened in each year. In 2023, two meetings were convened. 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.

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, social matters and human right protection 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 three Independent Directors. 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 "2023 Annual Report".



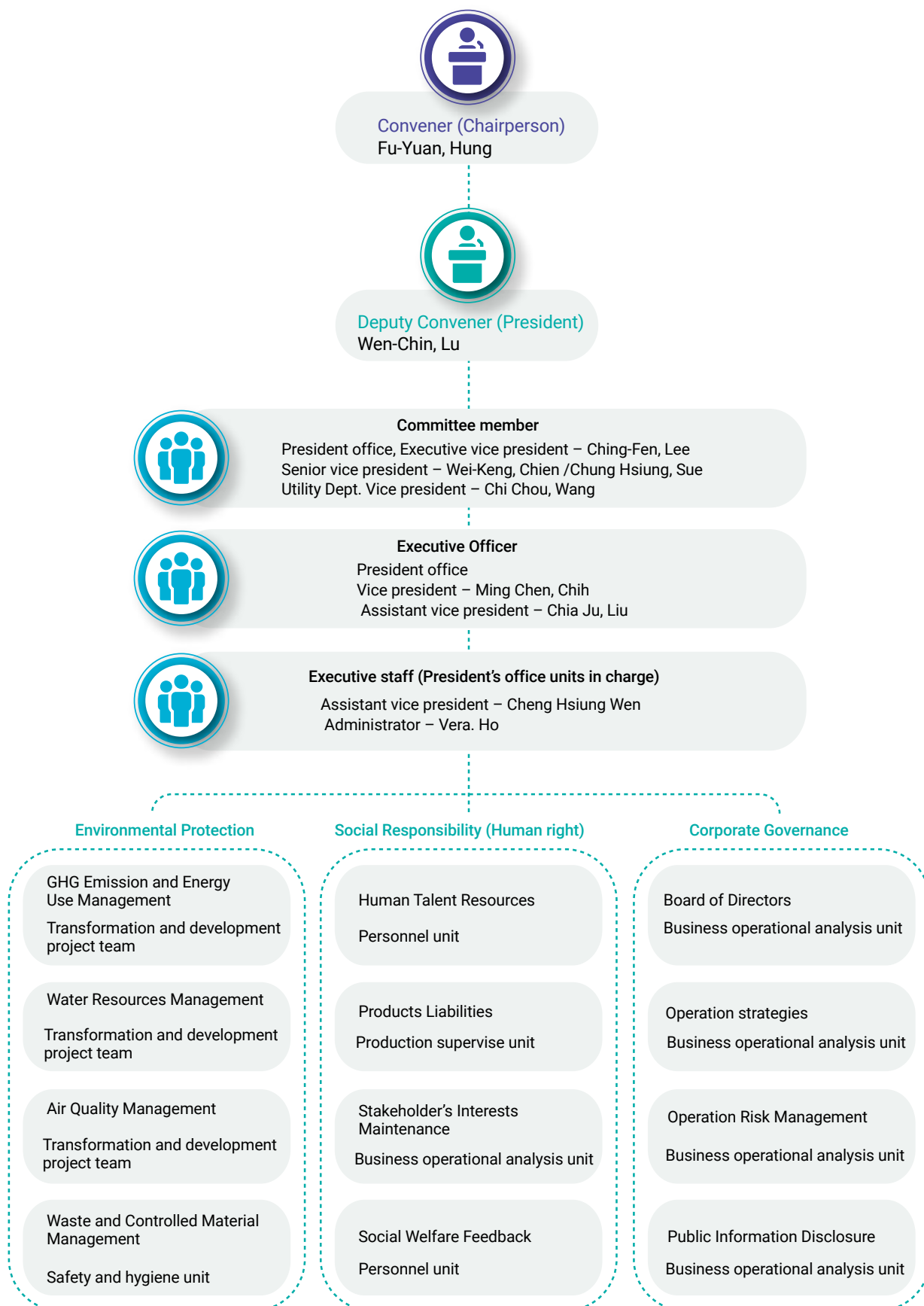
2.1.2 Sustainable Development Work Promotion Organization

SDG 12.2

GRI2-13

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:



Implementation Results of the ESG Committee

THE LIST BELOW IS THE PUBLIC SECTOR AWARDS RECEIVED IN 2023.

No.	Award Name	Awarding Unit
1	2023 National Sustainable Development Award - Enterprise Category (Manufacturing Industry)	Executive Yuan
2	2023 Five-Star Award for Outstanding Unit for Implementation of Occupational Safety and Health	Ministry of Labor
3	2023 Outstanding Unit for Implementation of Occupational Safety and Health	Ministry of Labor
4	2023 National Enterprise Environmental Protection Award - Nominee in the Manufacturing Category	Ministry of Environment
5	2023 National Enterprise Environmental Protection Award - Nominee in the Manufacturing Category	Ministry of Environment
6	2023 Resource Circulation Excellence Enterprise - Resource Circulation Gold Award	Ministry of Environment
7	2023 Excellent Healthy Workplace - Comprehensive Health Award	Ministry of Health and Welfare
8	2023 Outstanding Companies in Industry GHG Reductions	Ministry of Economic Affairs
9	2023 Outstanding Companies in Industry GHG Reductions	Ministry of Economic Affairs
10	2022 Green Chemistry Application and Innovation Award	Ministry of Environment
11	2022 Outstanding Units for Promoting Green Procurement by Private Enterprise Groups	Ministry of Environment
12	2022 Outstanding Units for Promoting Green Procurement by Private Enterprise Groups	Ministry of Environment
13	National Joint Defense Organization Cultivation Operation Award	Ministry of Environment
14	Regional Joint Defense Organization Operation Excellence Award	Ministry of Environment
15	Gold Award for Weight Loss Activity in the Business Category, Chiayi County	Chiayi Province Government
16	Workplace Health Promotion Excellent Unit Award	Yunlin Province Government
17	Changhua County Private Enterprises Green Consumer Outstanding Unit Award	Changhua Province Government
18	Chiayi County Private Enterprises Green Consumer Outstanding Unit Award	Chiayi Province Government
19	CPR/AED Peace of Mind Workplace Certification	Yilan Province Government



◀ "2023 NATIONAL SUSTAINABLE DEVELOPMENT AWARD - ENTERPRISE CATEGORY (MANUFACTURING INDUSTRY)" BY THE EXECUTIVE YUAN IN 2023.



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 seventeen internal auditors, including one initiative member. The training situation in 2023 is as follows.

Training of Internal Auditors in 2023



2.1.4 Professional Ethics GRI2-26 GRI205-2 GRI205-3

The Company establishes 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.

In 2023, the company arranged legal training courses for sales personnel and supervisors. A total of 52 people participated in the course, with total training hours of 104 hours. An "insider trading prevention" course was held for current directors, managers, and related employees. A total of 166 people participated in the course, with total training hours equaling 83 hours. The Company had no occurrence on employee's appeal case in 2023, also has not received any reported corruption cases from 2018 to 2023. Please refer to the "Important Company Rules" section of the corporate governance of investor relations on the company's official website.

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.



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

2.1.5 Operating & Financial Performance SDG 8.2 GRI201-1

► Financial Performance

In recent years, Asian countries have greatly expanded their production capacity of petrochemical products. However, the slow global economic recovery and the accumulation of inventory from downstream production plants have caused a decrease in demand for petrochemical raw materials. As a result, there is a market imbalance between supply and demand, leading to sluggish sales and suppressed product prices. Furthermore, the decline in oil prices has further weakened the support for petrochemical raw material prices, causing them to gradually decline. The Company's operations have been impacted, leading to a decrease in profits. Consolidated revenue has decreased by 12.5% compared to the previous year, and consolidated earnings have decreased by 16.3%. The following table discloses operational performances from the 2021 to 2023. For detailed financial reports, please refer to the Company's official website.

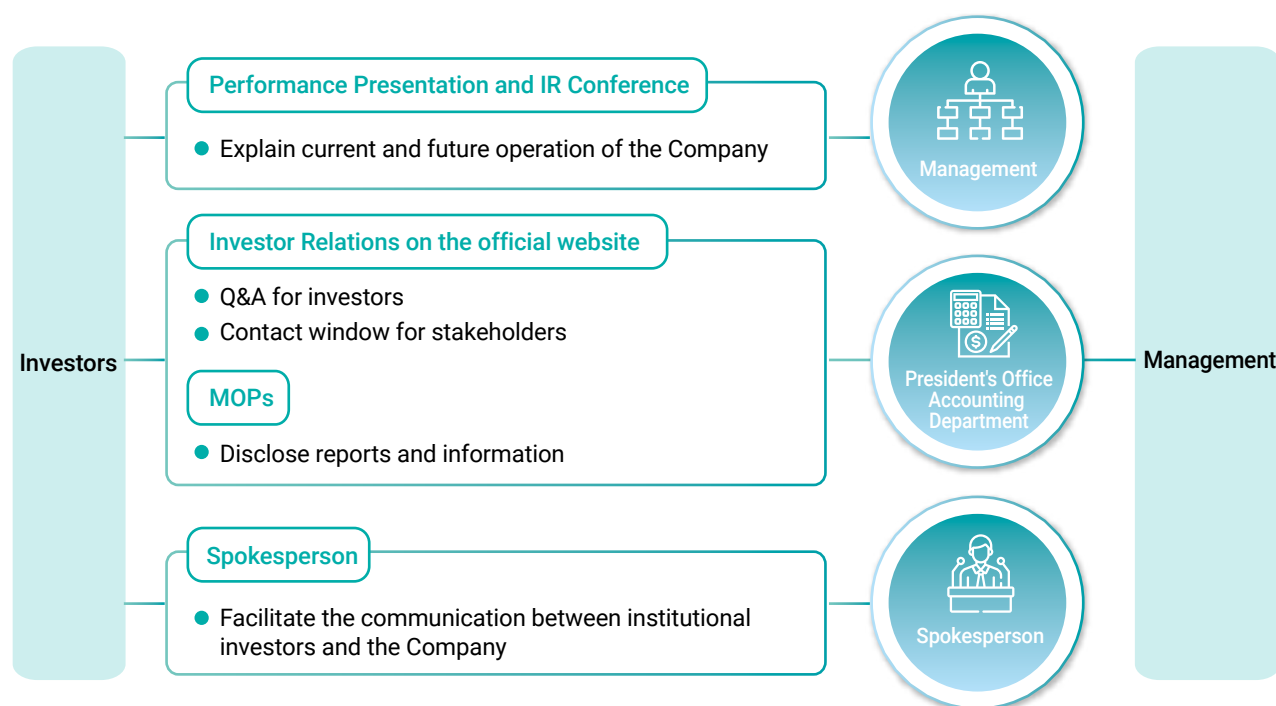
Currency unit: NT\$

Year	2021	2022	2023
Consolidated revenue (NT\$100 million)	3,658	3,799	3,326
Consolidated interests (NT\$100 million)	427	92	77
Parent company EPS (NT\$)	6.56	1.26	1.46
ROE (%)	10.18	2.25	2.04
Cash dividends per share (NT\$)	2.5	4.8	1.25

► Investor Relations

FCFC also maintains a 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.

2.2.1 Risk Identification Procedures

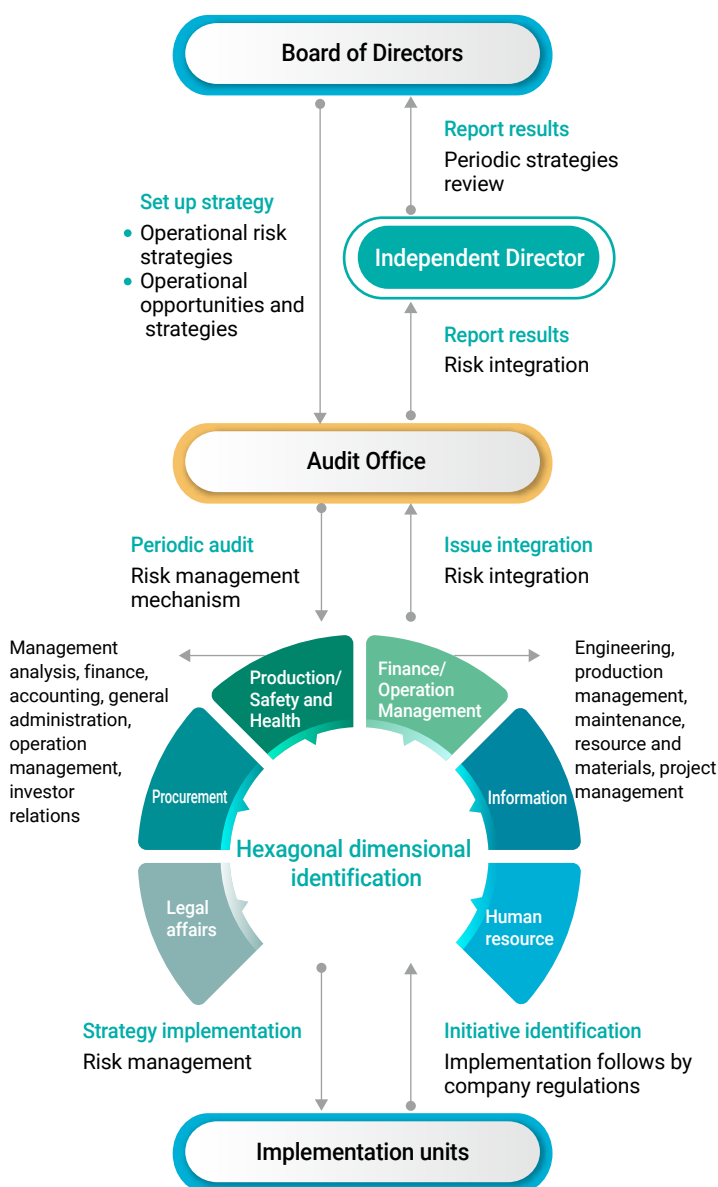
By adhering to the existing functional system and internal control system, the Company actively faces and controls risks through the most cost-effective methods in six major aspects, namely HR, information, finance/operation management, legal, procurement, and production/safety and health, which shall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

2.2.2 Risk matters and corresponding measures SDG 13.1

In 2023, 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 to enhance the definition of network layers and control the transmission interfaces of peripheral data, the information security unit should supervise the internal information security management operations of the Company.

In implementing information security protection measures, we adopt multi-layered defensive 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 computer data center of the Company, located in Taishan, New Taipei City, obtained the ISO 27001:2013 certificate in February 2023. Social engineering drills were conducted twice in 2023 for all employees, along with the completion of information security awareness training. Additionally, a total of 3,432 employees have completed the online training course on AEO (Authorized Economic Operator) employee safety awareness. In October 2023, the Company successfully completed the entire information security audit operation with no material information security deficiencies, and there were no material information security incidents in 2023.

We may confront 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. Please refer to the "Risk Management Policy" section under the Principles & Organization - Investor Relations section on the Company's official website that provides detailed information on the corresponding risk management policies, organizational structure, and the scope of risk management on the potential risks.

2.3 Product Sustainability

2.3.1 Integrated Production System of the Company


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 "2023 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 "2023 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
			
			
			
			

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 2023 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 "2023 Annual Report".

2.3.3 Circular economy - Reuse of recycled products

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. In 2023, Taiwan and Vietnam factories purchased waste fishing nets in a total 2,200 metric tons, and the production capacity of recycled regenerated nylon filaments reached 750 metric tons per month. In 2024, Taiwan nylon factory will expand the production capacity of recycled regenerated nylon filaments 500 metric tons per month, and the total production capacity of Taiwan and Vietnam factories will increase to a total of 1,250 metric tons per month. Additionally, the environmentally friendly recycled plastic particles made from post-consumer recycled materials have obtained third-party certification, ensuring that the quality meets customer requirements. In 2023, the sales volume of environmentally friendly recycled plastic particles reached 2,900 metric tons, with total annual sales revenue of NT\$970 million from green products.

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:

Nylon Division		
2021 Production Capacity	6,000	metric tons
2022 Production Capacity	9,000	metric tons
2023 Production Capacity	9,000	metric tons



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



Plastic Division		
2021 Sales Volume	2022 Sales Volume	2023 Sales Volume
14 metric tons	2,113 metric tons	2,900 metric tons

2.3.4 Product Responsibility Certification

The Company has always prioritized product quality. We carefully evaluate the improvement and development process of all our products and continuously enhance our production process. The specific areas of improvement and their corresponding results are presented in the list 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 Rayon

- ◆ Certification of OEKO-TEX® STANDARD 100
- ◆ Certification of "Compostable Viscose Rayon" 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 Filaments

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, Cheng Shin Rubber IND. CO., LTD., 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 **5** products: SM, Phenol, Acetone, PTA, PIA

Indian BIS

- ◆ Registration of **4** products: SM, Acetone, PTA, ABS



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 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

Product Certification

Product Certification

- ◆ 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




► 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".

2.4 Participation in External Associations

GRI2-28

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
Petrochemical Plastics	Fiber textile industry	<ul style="list-style-type: none"> ◆ CDP Evaluation of Climate Change and Water Disclosure Questionnaire ◆ Entering SBTi Proposal 
<ul style="list-style-type: none"> ◆ Petrochemical Industry Association of Taiwan ◆ Taiwan Synthetic Resins Manufacturers Association 	<ul style="list-style-type: none"> ◆ Taiwan Man-made Fiber Industries Association ◆ Taiwan Textile Federation ◆ Taiwan Spinner's Association 	

2.5 Digital and Smart Management

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: "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.

Industry-Academic Cooperation & Professional Talent Training

The Company has established the "Transformation and Development Project Team", which includes the "Digital Transformation Team" responsible for driving the Company's digital transformation. The implementation includes setting up a simulated plant, optimizing operational dynamics through digital management systems, and applying AI. Utilizing the PI system database and machine learning, we're constructing a smart plant to enhance process and equipment safety maintenance, increase production efficiency and product quality, and strengthen the security of our production and sales information exchange platform. These adjustments and upgrades are part of an innovative operational model aimed at achieving the Company's digital transformation goals.



We continuously promote professional talent education and training to support the development of smart factories. We organize training courses based on various areas of expertise and collaborate with academy for training. In 2023, 11 participants completed the executive program, and 21 completed the technical program at the Taiwan AI Academy, moreover, 4 specific courses for engineer and AI programs, with a total of 814 completed the programs. Additionally, we conducted 13 internal education and training sessions, with 465 participants completing the training courses, and entrusted academy with a total 14 AI programs completed.

► 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.	<ul style="list-style-type: none"> ◆ 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.	<ul style="list-style-type: none"> ◆ 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.	<ul style="list-style-type: none"> ◆ 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.	<ul style="list-style-type: none"> ◆ 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.	<ul style="list-style-type: none"> ◆ Analysis of raw material price fluctuations ◆ Sales, transportation, and inventory management ◆ Comprehensive profitability analysis

2023 (cumulative completion)

- ◆ **275** cases Officially launched AI application project
- ◆ NT\$ **200** million Investment Amount
- ◆ NT\$ **1.22** billion Cumulative Benefits

2024 (cumulative completion)

- ◆ **46** ongoing cases in 2023
- ◆ **138** established cases in 2024
- ◆ NT\$ **50** million Estimated investment amount
- ◆ NT\$ **280** million Expected Annual Benefits

2.6 Excellent customer service

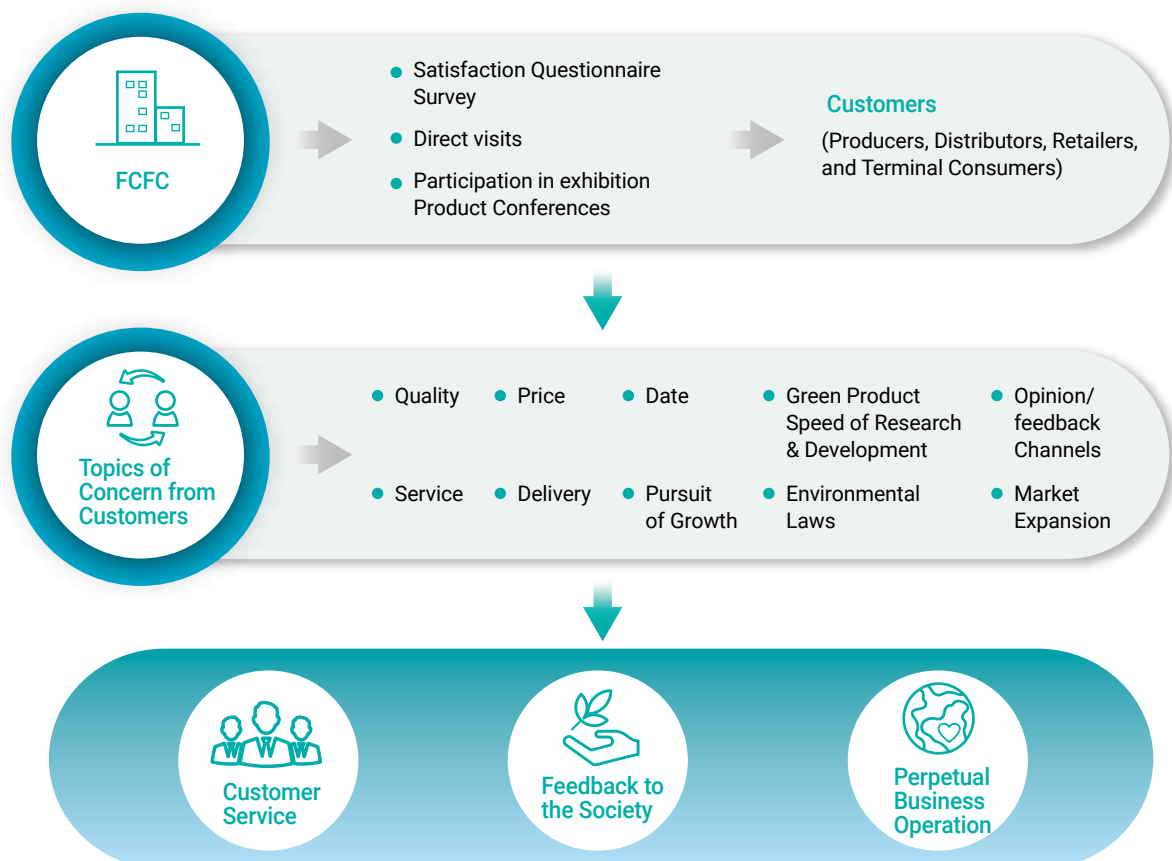
2.6.1 Customer Relations GRI2-25 GRI418-1

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



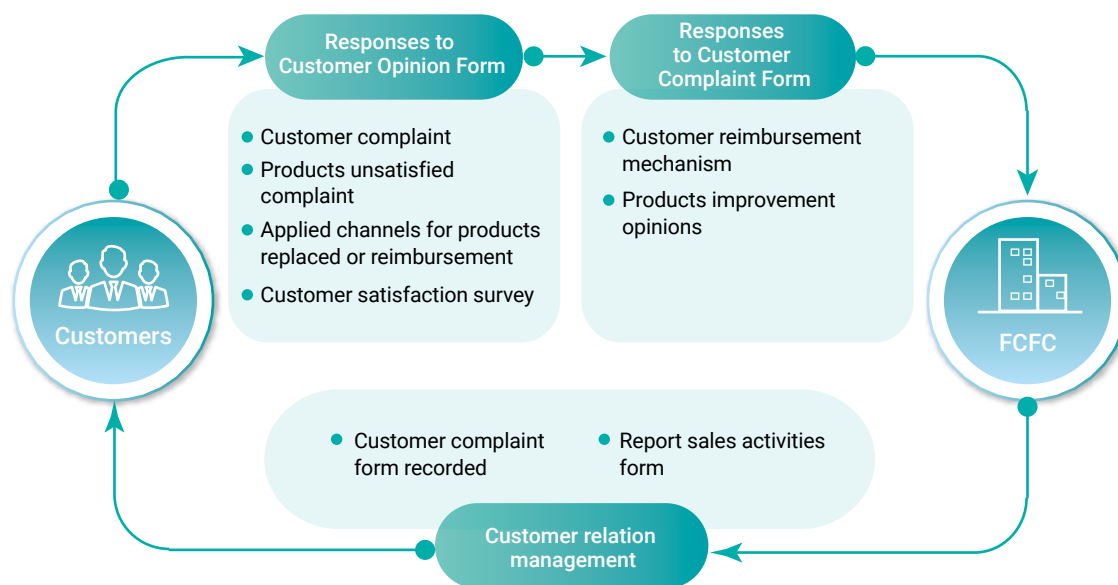
► Disclosure of Product Information

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.

► Responses to Customer Feedback

The Company has established official channels for customers to give suggestions, voice complaints, replace or return a product, and apply for reimbursement. 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 2023, we received 6 customer complaints, mostly attributable to product quality failing to meet customer needs. All cases were handled and resolved.

Charter of Responses to Customer Feedback

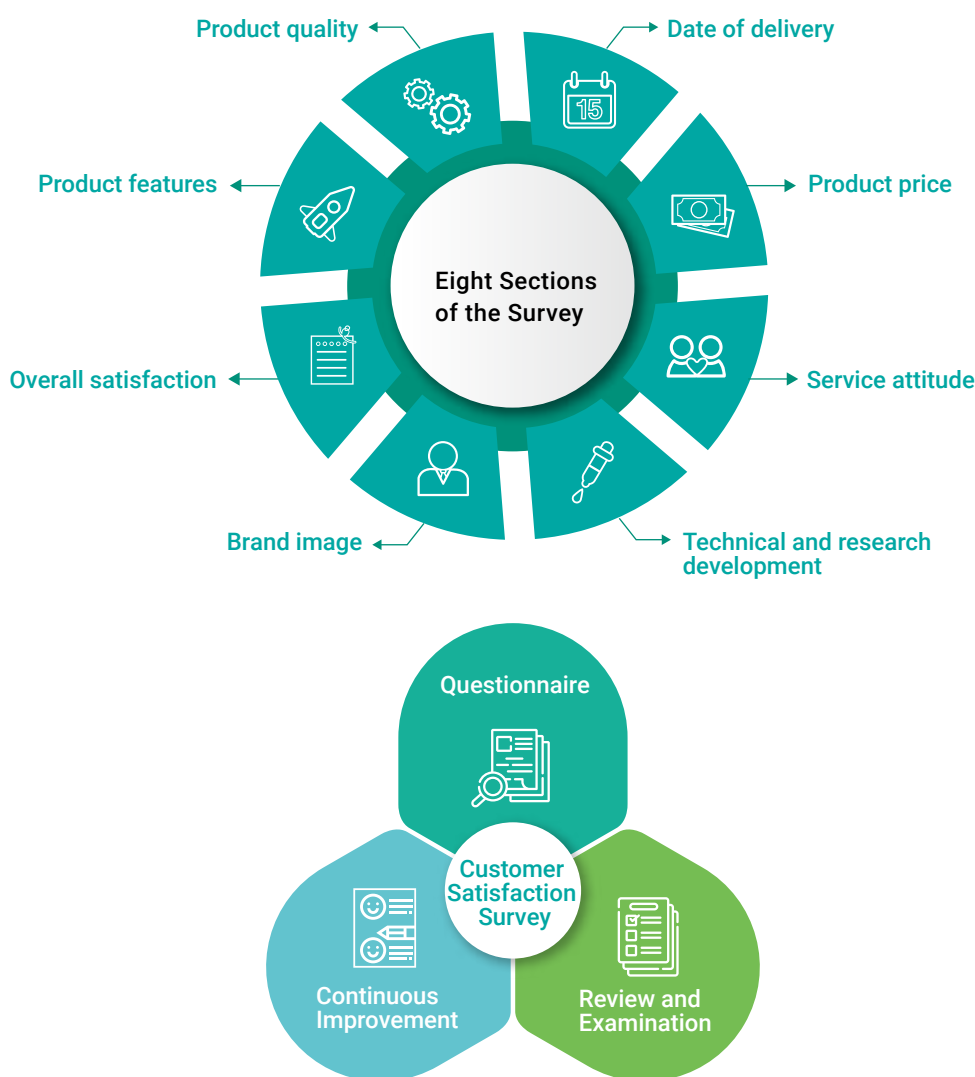


► Compliance and Customer Privacy

The company has formulated the "Personal Data Management Measures", and requires 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. The Company's attendance system utilizes employees' personal facial biometric data for workplace entry. The personal privacy data used in this system will only be used for the selection and appointment of new employees, in compliance with company regulations. In 2023, there were no privacy violations.

2.6.2 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 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 referred to improve internal exercising instructions.



The results of the 2023 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 2023 was 4.5 points out of 5 points.

Unit: point

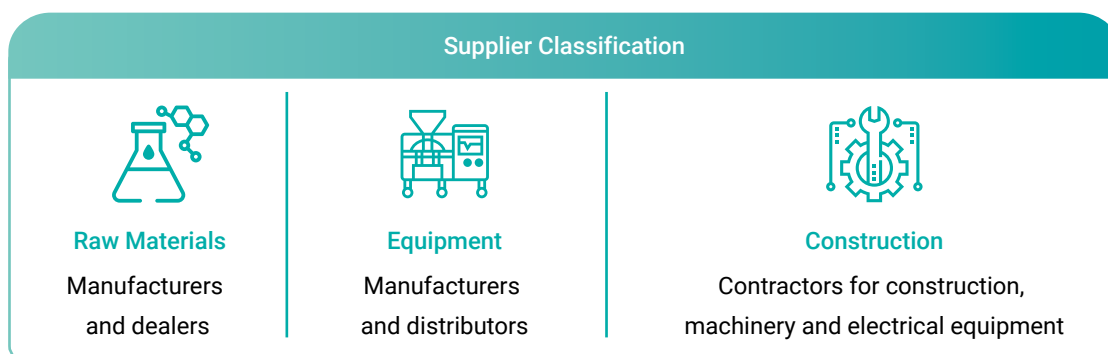
Year	2021	2022	2023
Average point	4.5	4.5	4.5

2.7 Procurement and Supply Chain Management

2.7.1 Overview of supplier procurement GRI2-6 GRI204-1

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 and the rate of local procurement in 2023 was 73%. 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%. She only sources goods from overseas and allows bidding from abroad as local suppliers are unable to meet the needs. 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 2023, the supplier's centralized delivery rate reached 96%.



► Green Products Procurement

The company preferentially purchases environmentally friendly products with environmental protection category products that include water-saving products, energy-saving products with energy level I or II label, green construction materials, GHG deduction or abroad environmental protection products with Ministry of Environment recognized. Total procurement of green products in 2023 amounted to NT\$85 million, increased NT\$19 million compared to 2022.

2.7.2 Management mechanism GRI2-6 GRI2-27 GRI414-1

► Social Responsibility of Supply Chain

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 2023, **1,757** local traders out of total **1,794** signitured the social responsibility commitment letter

response rate reached **97.9%**.
In the other hand

- ◆ there were **1,742** signitured the social responsibility commitment questionnaire survey,

with a response rate **97.1%**

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 2023, **1,758** companies out of total **1,794** have responded,

with a response rate of **98%**

► 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 2023, 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 2023, 72 cases of supplier feedback were received, which mainly inquired about the content of procurement cases, accounting for 36% of all cases.

► 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) three 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



The value of a good environment

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3

Vision

Propose environmental protection policies in response to the global ESG development trends and the 13 targets of the United Nations Sustainable Development Goals (SDGs). Emphasizing environmental protection, maintaining ecological balance, and ensuring community safety. Provide employees with a safe working environment and achieve the goal of sustainable business operations and environmental protection.



Policy and Commitment

Proposed four major implementation strategies for sustainable development pathway: 1. Energy efficiency improvement, 2. Energy transition, 3. Circular economy, and 4. Other measures. Establish an ESG Committee, implement various environmental protection norms and emission standards, actively address environmental and ecological issues, and proactively manage risks and opportunities. Set a target of achieving carbon neutrality by 2050, along with a 10% reduction in carbon emissions by 2025 compared to the base year of 2020, and a 25% reduction in carbon emissions by 2030 compared to the base year of 2020.



2023 Environmental Laws and Regulations Compliance

1. The construction project's wastewater runoff reduction plan was submitted late, which is a violation of water pollution prevention measures and testing declaration management regulations. The project plan was eventually submitted and the fine was paid in January 2024.
2. There were no significant abnormal events.

Note: A significant abnormality is defined as a single event resulting in accumulated fines exceeding NT\$1 million.



► Material Topics (Custom Material Topics): Sustainable Investment

Description

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. Utilize the idle space in the factory area to install solar power generation equipment, thereby increasing the proportion of renewable energy generation. Furthermore, consider investing in power storage equipment to optimize the utilization of renewable energy.

Actual

Potential

Positive

Negative



Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

Increase the installed capacity of solar power generation.

Increase of 8,138 kWp in 2023.

Achieved

Establish a contractual capacity of 10% for renewable energy.

Increase the proportion of renewable energy consumption in total electricity consumption to 5% or higher by 2030.

Stakeholder Groups

Government Agencies



Shareholders and Investors



Pipeline and Effectiveness of Engagement

1. Announce the Company's operational status several times a year through media releases. Annual shareholder meetings, twice corporate briefings, and several operational briefings a year. Report the operation outcomes to shareholders and investors and thoroughly discuss the Company's operational status, business management strategies and philosophy.
2. Comply with the regulations, and submit annual reports on energy consumption and energy-saving improvement results. No illegal incidents occurred in 2023.
3. Participated in CDP Climate Change Disclosure Survey and received "Leadership A" ranking.

► Material Topics: GHG Emissions Management

Description

1. The government has implemented carbon fees (taxes), which has led to an increase in operating costs.
2. Establish an ESG Committee, develop green power generation facilities, and enhance the utilization of renewable energy. In the base year 2020, we aim to reduce carbon emissions by 10% by 2025; reduce carbon emissions by 25% by 2030; achieve carbon neutrality by 2050.

Actual

Potential

Positive

Negative

Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

Establish an ESG Committee and conduct monthly energy and water conservation meetings to assess the effectiveness of energy conservation and emission reduction measures.

In 2023, the CO2 emissions at plants in Taiwan were reduced by approximately 358,000 metric tons.

Achieved

Continuously promote projects aimed at improving energy and water conservation, with the objective of reducing carbon emissions by 10% in 2025 compared to 2020.

Promote energy transition and increase the utilization of renewable electricity to achieve the objective of carbon neutrality by 2050.

Establish an energy efficiency performance evaluation and assess the performance of each department.

Each month, we evaluate the energy-saving and emission reduction performance of each department and reward outstanding plants.

Achieved

The department that failed to meet the target for energy-saving and emission reduction has submitted a report outlining their plans for improvement.

The department that failed to meet the target for energy-saving and emission reduction has submitted a strategy outlining their plans for improvement.

Stakeholder Groups

Government Agencies



Shareholders and Investors



Customers



Pipeline and Effectiveness of Engagement

1. Announce the Company's operational status several times a year through media releases. Annual shareholder meetings, twice corporate briefings, and several operational briefings a year. Report the operation outcomes to shareholders and investors and thoroughly discuss the Company's operational status, business management strategies and philosophy.
2. According to the "Management Measures for the Inventory and Registration of Greenhouse Gas Emissions", the relevant carbon emission data was reported regularly and there were no violations in 2023.
3. The company communicates its energy-saving and emission reduction policy, as well as its strategy to reduce product carbon emissions, through its business sales trades.

► Material Topics: **Energy Management**

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. The planes of converting coal-generated power facilities 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-generated power facilities to supplement electricity generation.
3. To improve the ratio of renewable energy usage, increase the use of solar and hydropower as renewable energy sources. Additionally, integrating processes and transitioning to high-efficiency equipment or technology can enhance energy efficiency.

Actual

Potential

Positive

Negative

Management Actions	2023 Performance Tracking	Overview of Achievements	Short-term Goals (In 1-3 years)	Medium and Long-term Goals (Over 3 years)
Establish an ESG Committee and conduct monthly energy and water conservation meetings to assess the effectiveness of energy conservation and emission reduction measures.	In 2023, saved 62.7 metric tons of steam, conserved 9100 kWh of electricity, and reduced fuel consumption by 6.2 metric tons per hour.	Achieved	The department that failed to meet the target for energy-saving and emission reduction has submitted a report outlining their plans for improvement.	The department that failed to meet the target for energy-saving and emission reduction has submitted a strategy outlining their plans for improvement.
To increase the installation capacity of renewable energy equipment, additional renewable energy equipment should be added.	In 2023, the newly added installed capacity of photovoltaic devices was 8,138 kWp.	Achieved	The cumulative target for photovoltaic installations by 2025 is 38,898 kWp, while the cumulative target for hydropower installations is 23,273 kW.	The target for the installed capacity of green energy by 2030 is 72,273 kW.
In order to reduce steam consumption, we will be implementing process waste heat recovery and cross-factory integration.	The Mailiao Plant Site steam consumption in 2023 is 634.5 metric tons per hour.	Achieved	The steam consumption target for the Mailiao Plant Site in 2025 is reduced to 595.2 metric tons per hour.	The steam consumption target for the Mailiao Plant Site by 2030 is reduced to 286.9 metric tons per hour.

Stakeholder Groups

Government Agencies



Shareholders and Investors



Employees



Pipeline and Effectiveness of Engagement

1. Announce the Company's operational status several times a year through media releases. Annual shareholder meetings, twice corporate briefings, and several operational briefings a year. Report the operation outcomes to shareholders and investors and thoroughly discuss the Company's operational status, business strategies, and philosophy.
2. According to the "Management Measures for the Inventory and Registration of Greenhouse Gas Emissions", the relevant carbon emission data was reported regularly. No illegal incidents occurred in 2023.
3. Convene monthly ESG Committee meeting to review performance.

► Material Topics: **Water Stewardship**

Description

1. Extreme weather results in unstable water resource availability and heightened challenges in water resource utilization.
2. During drought periods, prioritizes the water supply for domestic residential use, reducing the available water quantity for industrial use.
3. Actively improve manufacturing processes, strengthen water stewardship, and enhance water efficiency.
4. Enhance the recycling of process wastewater and rainwater, promoting the reuse of water resources.

Actual

Potential

Positive

Negative

Management Actions	2023 Performance Tracking	Overview of Achievements	Short-term Goals (In 1-3 years)	Medium and Long-term Goals (Over 3 years)
Establish an ESG Committee and conduct monthly energy and water conservation meetings to assess the effectiveness of energy conservation and emission reduction measures.	Saving water conservation 2,789 metric tons per day in 2023.	Achieved	The department that failed to meet the target for energy-saving and emission reduction has submitted a report outlining their plans for improvement.	The department that failed to meet the target for energy-saving and emission reduction has submitted a strategy outlining their plans for improvement.
Promote rainwater recovery.	In 2023, the Mailiao Plant Site recycles rainwater for 2,349 metric tons per day, achieving a recycling rate of 96.9%.	Achieved	Continuously increase the installation of rainwater recycling facilities to enhance the amount of rainwater recovery.	Continuously increase the installation of rainwater recycling facilities to enhance the amount of rainwater recovery.
Promote process wastewater recovery.	In 2023, the wastewater recovery in Mailiao Plant Sites was 2,993 metric tons per day.	Achieved	Continuously review the rationalization of process water usage in order to enhance wastewater recovery.	Continuously review the rationalization of process water usage in order to enhance wastewater recovery.

Stakeholder Groups

Government Agencies



Shareholders and Investors



Employees



Pipeline and Effectiveness of Engagement

1. Announce the Company's operational status several times a year through media releases. Annual shareholder meetings, twice corporate briefings, and several operational briefings a year. Report the operation outcomes to shareholders and investors and thoroughly discuss the Company's operational status, business strategies, and philosophy.
2. 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. No illegal incidents occurred in 2023.
3. Convene monthly ESG Committee meeting to review performance.
4. Participated in the CDP Water Security Questionnaire and received "Leadership A" ranking

► Material Topics: **Air Quality Management**

Description

During the winter, the southern region of Taiwan experiences higher levels of PM 2.5 pollutants due to seasonal air pollution from external sources, which has a significant impact on air quality. The Company is promoting source reduction, streamlining equipment components, and improving waste gas recycling operations in order to achieve the goal of “zero pollution”.

Actual

Potential

Positive

Negative



Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

Promote the “Equipment Component Simplification Project”.

The VOC emissions in 2023 decreased by 13 metric tons compared to 2022.

Achieved

Achieve a 5% reduction in equipment components.

Promote waste reduction and recycling at source.

Stakeholder Groups

Employees



Government Agencies



Environmental Organizations



Pipeline and Effectiveness of Engagement

1. The Company's website features a dedicated section on occupational health, safety, and environmental matters, providing a communication channel with employees.
2. They can discuss various environmental issues with environmental organizations during academic conferences or seminars.
3. Set up a continuous automatic monitoring system and connect it to government agencies for real-time monitoring of various air pollutants emissions.

► Material Topics: **Waste Management**

Description

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. It promotes a circular economy by classifying waste and reusing recyclable waste as recycled materials.

Actual

Potential

Positive

Negative



Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

Promote waste reduction and recycling.

The amount of waste generated in 2023 decreased by 53,968 metric tons compared to 2022.

Achieved

The factory achieves a 100% recycling rate for plastic waste.

Enhance the utilization of renewable energy sources while simultaneously minimizing the production of coal waste.

Stakeholder Groups

Shareholders



Government Agencies



Environmental rganizations



Pipeline and Effectiveness of Engagement

1. Announce the Company's operational status several times a year through media releases. Annual shareholder meetings, twice corporate briefings, and several operational briefings a year. Report the operation outcomes to shareholders and investors and thoroughly discuss the Company's operational status, business strategies, and philosophy.
2. Government agencies have the authority to conduct regular inspections to verify the waste disposal procedures and their implementation at any time.
3. They can communicate with environmental organizations on various issues during academic conferences or seminars.

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

GRI403-1

► 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 locations, including Yunlin Mailiao, Chiayi Xingang, and Yilan Longde, have obtained ISO 14001 Environmental Management System and ISO 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 Equipmen

- ◆ 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

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 2023 reached NT\$511 million.

► Compliance with Environmental Protection Regulations GRI2-23 GRI2-27

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. The construction project for the second phase of the nylon waste recycling at the Polymerization Plant in Xingang in 2023 was fined NT\$30,000 for delaying the submission of the construction project's runoff wastewater reduction plan, in violation of Article 10 and Article 46 of the Water Pollution Control Measures and Test Reporting Management Regulations. The project proposal supplement and fine payment were completed in January 2024.

Statistics of Environmental Protection Violations from 2021 to 2022

Unit: Number of cases

Year	2021	2022	2023
Air Pollution Control	1	2	0
Water Pollution Control	0	0	1
Waste Control	0	0	0
Subtotal	1	2	1

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 2023 was NT\$1.4 billion.

FCFC's 2023 Environmental Cost Statement

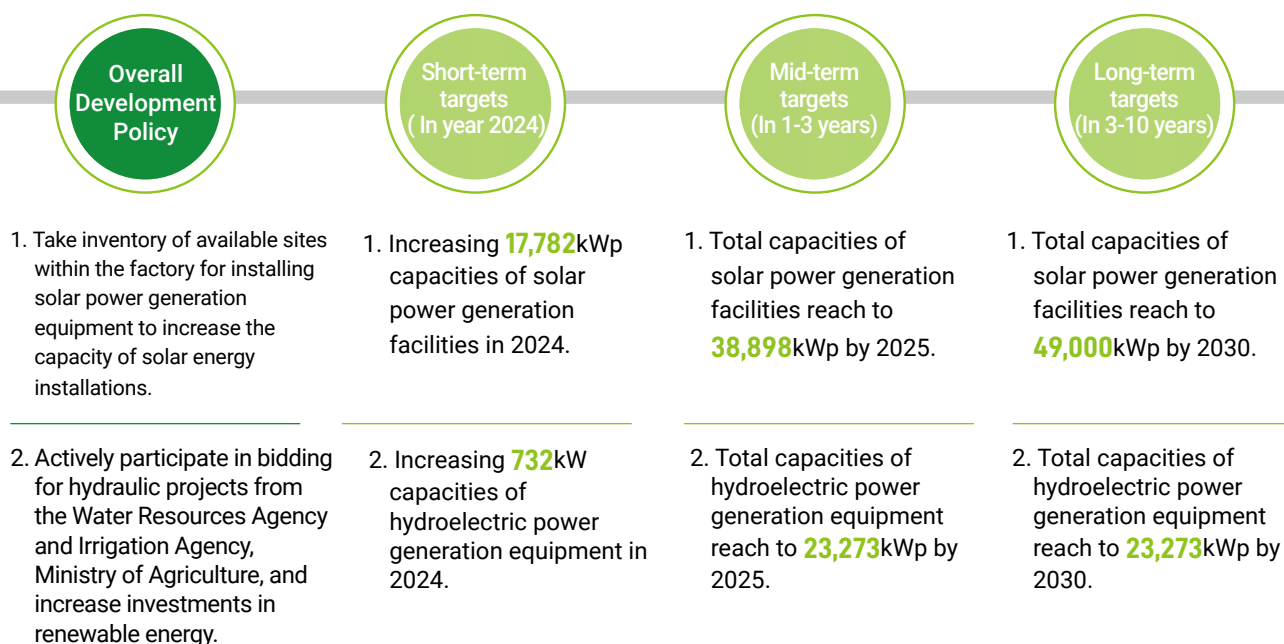
Unit: NT\$ million

Type	Item	Sum
Environmental Expenditures	Operating Costs	1,127
	Costs Associated with Suppliers and Customers	20
	Management Costs	237
	Social Event Costs	7
	Fees and Energy Taxes	22
	Total	1,413

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

The Company places significant emphases on the development of clean energy and has invested approximately NT\$698 million in the construction of solar power generation equipment. Additionally, it has formulated a comprehensive development strategy and established specific goals for each stage. Establish an ESG Committee that is responsible for promoting related businesses, providing monthly reports on achievements and promotion plans, and establishing an effective tracking and evaluation mechanism.



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. 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 8,138kWp of solar power generation equipment in 2023, the total power generation equipment reached 17,450kWp which would annually generate 13,986MWh electric power with reducing 12,635 tons of CO₂. To raise the capacities of solar power generation, additional 17,782kWp solar power generation equipment is on-going in 2024, and the total installed capacities of solar power generation will reach 35,232kWp by 2024, about two times as current capacities.

Renewable Energy Facility Generation and Carbon Reduction in 2023

Types of Renewable Energy Facilities	2023		2024 Estimated	
	Newly Added Equipment Capacity	Cumulative Equipment Capacity	Newly Added Equipment Capacity	Cumulative Equipment Capacity
Solar Power Generation	8,138	17,450	17,782	35,232
Hydropower Generation	0	22,541	732	23,273
Total	8,138	39,991	18,514	58,505

Newly Renewable Energy Facility and Accumulated Equipped Capacity in 2023

Types of Renewable Energy Facilities	Power generation in 2023 (kWh)	CO ₂ reductions in 2023(tons/year)
Solar Power Generation	13,986	12,635
Hydropower Generation	23,419	21,686
Total	37,405	34,321



◀ Newly solar generation facilities on the roof of plants in the Xingang plant site

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. 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 have been contracted to construct a small-scale hydropower plant at the Shalu Water Distribution Center. The plant is scheduled to commence operations in October 2024 which is estimated that the annual power generation will reach 5,720 MWh, resulting in an annual carbon reduction of approximately 2,870 metric tons. In the aspect of hydropower generation, the Company also invests in 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, that total generation capacity reaches to 22,466kW

Power plant and small-scale hydropower plant	Equipment capacity(kW)	Power generation in 2023 (kWh)	CCO ₂ reduction in 2023 (tons/year)
Wushantou	8,750	5,721	5,303
Xikou	11,520	10,296	9,534
Batian	2,196	7,170	6,639
Xingang- small-scale hydropower plant	75	226	209
Total	22,541	23,413	21,686



▲ Wushantou power plant



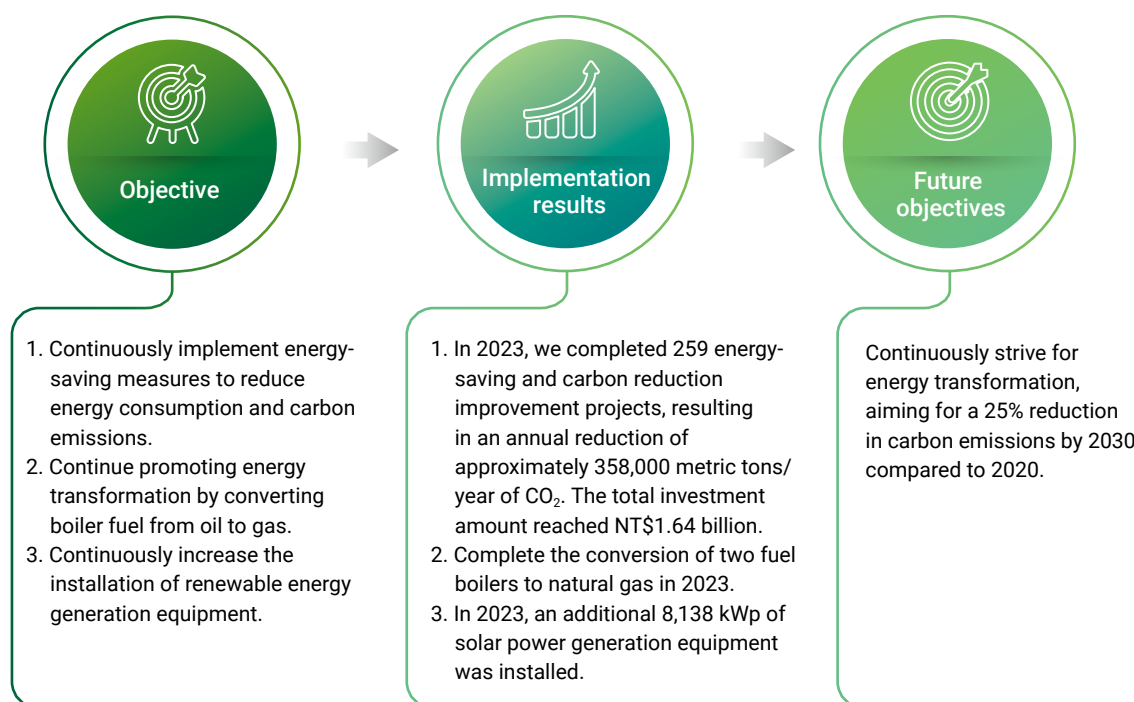
▲ Xikou power plant



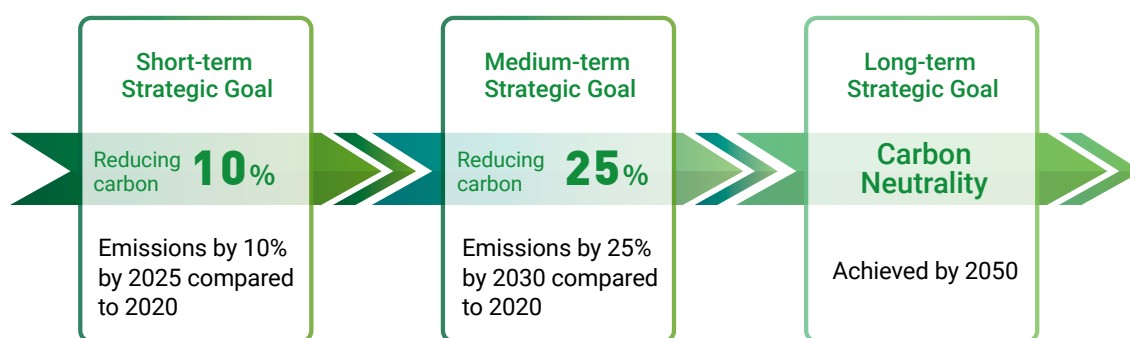
▲ Batian power plant

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. To align with the development trends of ESG, the Company has set a long-term target of achieving carbon neutrality by 2050



3.2.1 Corresponding strategies for climate change risk



► Since four major improvement measures completed in 2023, the total carbon emission reduction was equivalent to 410,000 metric tons/year.

- I. Energy Conservation: To optimize manufacturing processes for raise energy utilization efficiencies, carbon emission reduction was equivalent to 358,500 metric tons/year.
- II. Energy Transformation: By use of increasing utilization of renewable energy, carbon emission reduction was equivalent to 37,800 metric tons/year.
- III. Recycling Economy: Recycling ocean discard and plastic wastage, carbon emission reduction was equivalent to 12,900 metric tons/year.
- IV. Other Measures: Pursuing paperless practice in office and using green products, carbon emission reduction was equivalent to 8,000 metric tons/year.

► Scenario analysis on climate change

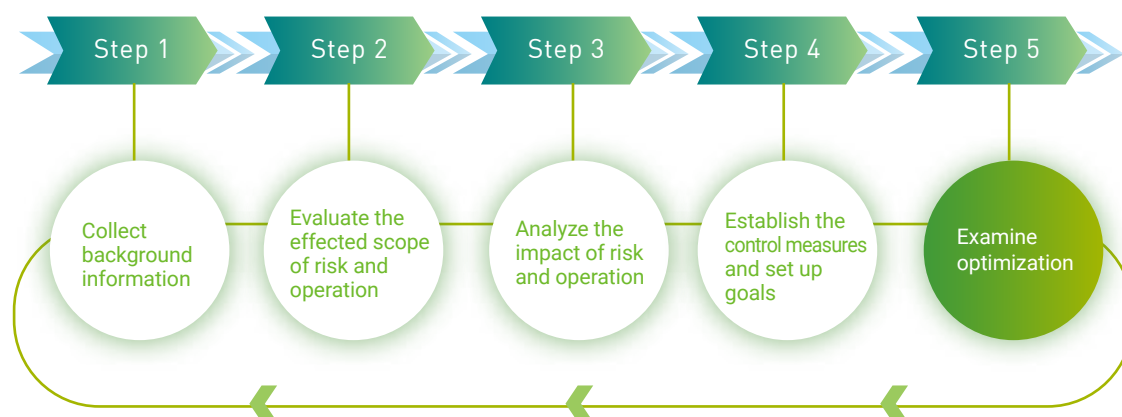
	Governance	Strategy	Risk Management	Index and targets
Management strategy and action plan	<ul style="list-style-type: none"> ◆ Responsible unit: ESG Promotion Organization ◆ The way the organization works <ol style="list-style-type: none"> 1. The Board of Directors follows the principle of convening meetings at least once per quarter and discussing the progress of ESG initiatives at least once annually. 2. Expansion of Renewable Energy Generation 	<ul style="list-style-type: none"> ◆ 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. 	<ul style="list-style-type: none"> ◆ ISO 14001 Environmental Review Practice Guidelines 	<ul style="list-style-type: none"> ◆ 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	<ul style="list-style-type: none"> ◆ Hold a monthly review meeting on energy conservation and emission reduction circular economy. ◆ Hold monthly ESG review meetings. 	<ul style="list-style-type: none"> ◆ Advancing Energy Efficiency : Energy efficiency improvement by optimizing manufacturing processes and enhancing energy efficiency ◆ Energy Transition: Promoting the reduction of coal usage and increasing the use of renewable energy sources. ◆ Circular Economy: Promoting the recycling and reuse of marine and plastic waste. ◆ Other Measures: We have implemented paperless offices and green products. 	<ul style="list-style-type: none"> ◆ 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. 	<ul style="list-style-type: none"> ◆ 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 GRI201-2

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, 6-14 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

Potential effected number (NT\$)		Evaluation scores on correspondent risk				
Severity of financial impact	Above 8bn	5	10	15	20	25
	4bn-8bn	4	8	12	16	20
	500m-4bn	3	6	9	12	15
	50m-500m	2	4	6	8	10
	1m-50m	1	2	3	4	5
		strongly impossible (<20%)	slightly impossible (20%<X<50%)	slightly possible (50%<X<75%)	possible (75%<X<95%)	likely possible (>95%)
		Probability of risk occurrence				

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

■ 6-14 points
moderate risk and opportunity
No action is currently required, keep monitoring changes, discussed main issues are as follows.
 1. Impose carbon emission ta, 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 demands 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.	Low
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
8	Opportunity / Technology	Promote sustainable resource utilization by recycling raw materials and repurposing marine waste for product manufacturing.	Medium
9	Opportunity / Resource 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 / Resource Efficiency	The Company has established renewable energy systems, such as solar and hydroelectric 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 energy 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 Financial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
1	Policies and Regulations / Carbon Fee Collection	Medium		●		The Ministry of Environment released the draft of the Carbon Fee Collection Measures in December 2023, with plans to implement the carbon fee starting in 2025. The carbon fee will target the electricity industry and manufacturing industry that have an annual emission of 25,000 metric tons or more.	The estimated carbon fee (tax) for 2024 is approximately NT\$450 million, calculated at NT\$100 per metric ton.	Promote energy transition to reduce greenhouse gas emissions.
2	Policy and Regulation / Water Consumption Fee Collection	Low		●	●	The government announced the amendment to the Water Act in February 2023, imposing a "water consumption fee" on high-volume water users.	During drought periods, it is projected that the excessive use of water will result in a cost of NT\$3.45 million in 2024, calculated at a rate of NT\$3 per cubic meter.	<ol style="list-style-type: none"> 1. Improve the recycling rate of each plant to meet industry standards and undergo third-party verification. 2. Plants that have recycling rates below the benchmark offer improved guidance and support. 3. Applying AI technology to enhance water conservation.
3	Policy and Regulation / EU Carbon Tariffs	Medium		●		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 export products to the European Union (EU) that most infected products include PIA, PTA, ABS, PS and PP.	<ol style="list-style-type: none"> 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	Low	●	●	●	Certain textile clients are requesting that over 50% of finished products be made from recycled materials by 2025.	With an estimated selling environmentally friendly yarn with benefits of NT\$5,000 per bundle, and a projected annual production capacity of 20,000 bundles, the goal for 2025 is to account for over 25%, resulting in an annual impact of NT\$24 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.
5	Risk / Business Reputation	Low		●	●	Financial or investment institutions evaluate clients' performance in ESG when assessing financing or investment opportunities.	Based on the total liabilities of NT\$11.36 billion from the parent company financial statements in 2023, for every 1% increase in interest rate, expenditure would increase by NT\$113 million.	<ol style="list-style-type: none"> 1. Participate in carbon disclosure initiatives CDP and SBTi Proposal to present the effectiveness of carbon reduction efforts. 2. Obtain preferential interest rates through the "Sustainable Linked Loan" program the Bank of Taiwan offers.

Issue Number	Risk Category / Risk Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up-stream	Operation	Down-stream	Description	Potential Financial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
6	Acute Physical Risks / Floods and Waterlogging	Low		●		Factory shutdown due to heavy rainfall or flooding caused by climate anomalies	Based on the estimate of sales of the Company in 2023, NT\$212.3 billion, the business would incur a daily sales loss of NT\$580 million for each day of operation suspension.	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 Scarcity	Medium		●		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 site, in the event of a 10% water rationing, priority will be given to reduce production at the PTA plant and PC plant. Based on the estimated sales of NT\$70 million	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 site.

► 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 Financial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
1	Technology / Circular Economy	Medium	●	●	●	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 2024, after the completion of the Taiwan factory's expansion, the production capacity increase 500 metric tons per month.	Introduce circular economy practices, and develop recycled and regenerated materials to reduce the consumption of petrochemical raw materials.
2	Resource Efficiency / Waste Reutilization	Medium	●	●	●	Customers desire to incorporate post-consumer recycled materials in the products for sale, and the Company excels in advanced technologies to meet this requirement.	In 2023, the sales volume of environmentally friendly recycled plastic particles reached 2,900 metric tons, resulting in an approximate revenue impact of around NT\$150 million.	Utilize recycled plastic materials as manufacturing process inputs to enhance the efficiency of waste resource utilization.

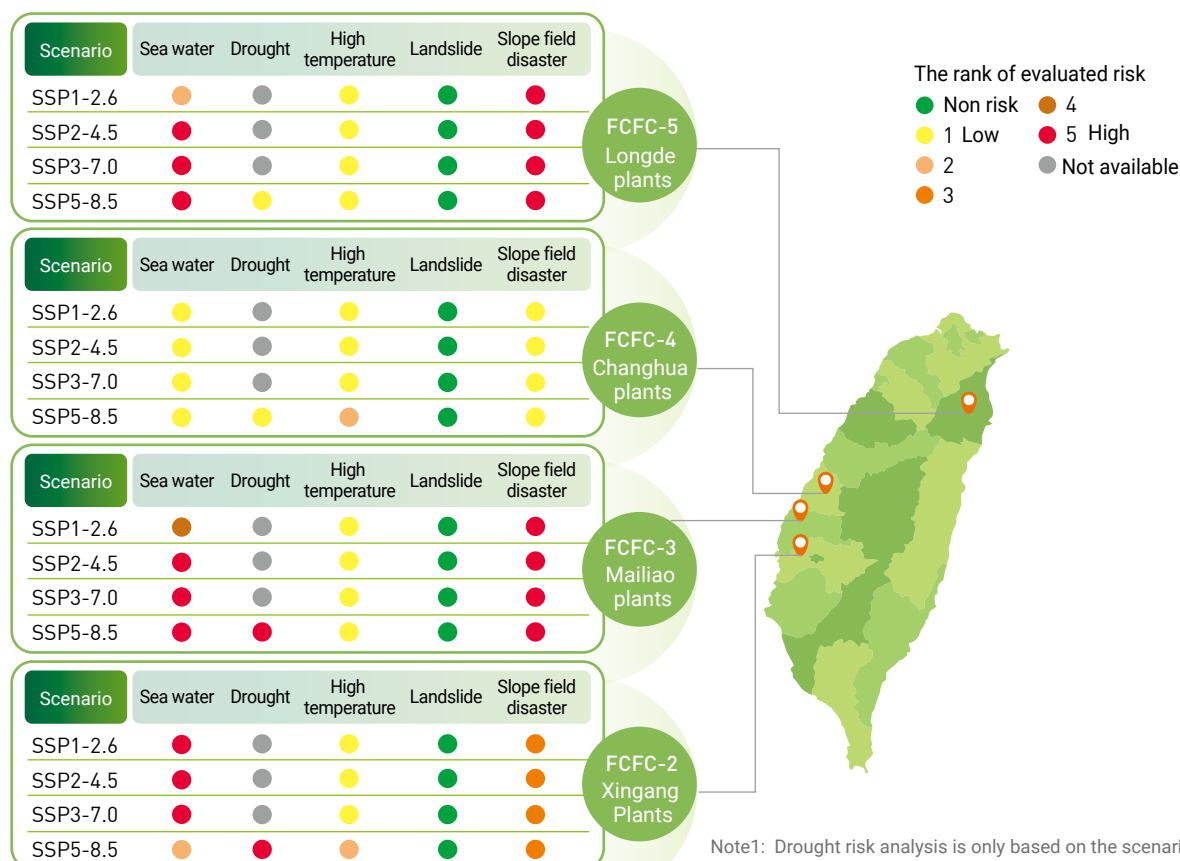
Issue Number	Opportunity Category / Opportunity Issue	Degree of Impact	Scope of Impact			Issue Analysis		
			Up-stream	Operation	Down-stream	Description	Potential Financial Impact	Management Measures (Risk Mitigation / Reduction / Acceptance)
3	Resource Efficiency / Renewable Energy	Medium		●		According to the amendment of the "Renewable Energy Development Act," starting from 2021, a contractual capacity of 10% for renewable energy will be established within five years.	Based on an estimated photovoltaic capacity of 38,898 kWp, the annual benefit is projected to be NT\$100 million. Additionally, with an estimated hydroelectric capacity of 23,273 kW, the annual benefit is projected to be NT\$150 million, resulting in a total of NT\$250 million.	Install solar photovoltaic and small-scale hydropower generation equipment as planned.
4	Technology / Diverse Applications of Products	Medium		●		In accordance with national policies, we aim to add over 3,000 MW of renewable energy storage capacity by the end of 2026.	By 2026, the business opportunity 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 utilizes the Shared Socioeconomic Pathways (SSP) outlined in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) to project future emission scenarios. The SSP takes into account future uncertainties and provides a comprehensive assessment, considering the potential impacts of greenhouse gas emissions, land use, and air pollutants on future climate. The four SSP emission scenarios we have adopted include: low emission (SSP1-2.6), which represents a slow global achievement of sustainable goals; medium emission (SSP2-4.5), reflecting the possibility that countries may focus more on internal economic and security issues in the context of regional competition while neglecting broader development needs; high emission (SSP3-7.0), considering an unequal world where environmental policies may only be implemented in middle- and high-income regions, and the global energy sector relies on carbon-intensive fuels; and very high emission (SSP5-8.5), which signifies emission scenarios in the absence of almost any climate policies, resulting in high greenhouse gas emissions.

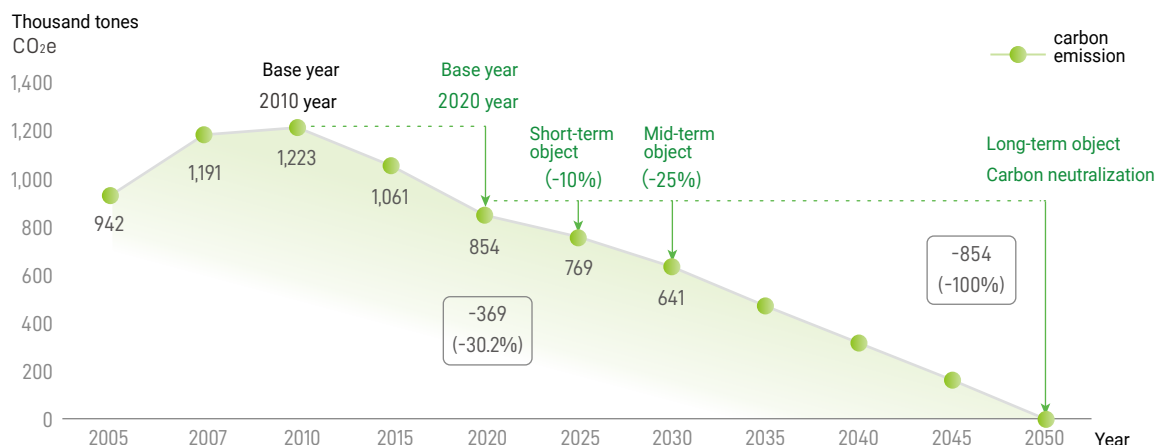
The Company has implemented the SSP and utilizes the "Taiwan Climate Change Projection Information and Adaptation Knowledge Platform" (TCCIP) for domestic climate change key indicator data. Detailed scenario analysis and climate risk assessment have been conducted for the company's plants located in various regions of Taiwan. This analysis is combined with disaster potential data from the National Science and Technology Center for Disaster Reduction (NCDR) to evaluate the potential risks of flooding, high temperatures, drought, and slope disasters under different scenarios. The primary focus is on the temperature increase in the 21st century compared to the period of 1850-1900, as well as the potential impacts of climate change in the mid-term (2041-2060).

Plant	Longde Plant	Mailiao Plant	Xingang Plant	Changhua Plant
Scenario analysis	The four SSP emission scenarios that were adopted, 1. Low emissions (SSP1-2.6) are hindering global progress towards sustainability goals; 2. In medium emissions (SSP2-4.5), countries prioritize internal economic and security issues, often at the expense of broader development needs; 3. High emissions (SSP3-7.0), with environmental policies implemented only in the upper-middle-income areas, and the global energy sector relying on carbon-intensive fuels; 4. Very high emissions (SSP5-8.5) in a scenario with minimal climate policies.			
Average Temperature (Temperature Change in Celsius)	1.6 °C (1.1 - 2.3°C)	1.6 °C (1.1 - 2.3°C)	1.6 °C (1.1 - 2.3°C)	1.6 °C (1.1 - 2.3°C)
Maximum daily temperature(Temperature Change in Celsius)	1.5 °C	1.5 °C	1.5 °C	1.5 °C
Heat Wave Duration Index (HWDI) (day)	70.7	70.7	70.7	70.7
Total rainfall(Change in rainfall rate %)	8.8 % (-18.5-38.3 %)	8.8 % (-18.5-38.3 %)	8.8 % (-18.5-38.3 %)	8.8 % (-18.5-38.3 %)
2060 Flood Water Level Overflow Risk	There are no direct locations in the flood-prone area, but there are nearby within a 500-meter radius.			
Risks Associated with Sea Level Rise and Flooding (2m)	There are no direct locations in the flood-prone area, but there are nearby within a 500-meter radius.			



3.3 Greenhouse Gas Emissions and Energy Management

3.3.1 Carbon Neutrality Roadmap



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. To reach the goals of mid-term carbon reductions, the Company had been invested NT\$7.3billion, and NT\$10.2billion investment projects are ongoing by 2030. After the renewal numbers of equipment and the transition 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 also joins the Science-Based Reduction (SBTi) goal initiative, aiming for a temperature rise of no more than 2°C. The reduction commitments for Scope 1 and Scope 2 carbon emissions are based on a target of 9.831 million metric tons of CO₂e in 2027, representing a 22.5% decrease compared to the base year of 2018, which was 12.685 million metric tons of CO₂e. The Company's carbon emissions in 2022 were 9.735 million metric tons of CO₂e, which is a reduction of 2.95 million metric tons of CO₂e compared to the base year of 2018, represents a 23.3% decrease.

Item	Base Year 2018	Year 2022		Target Year 2027	
	Carbon Emissions (metric tons of CO ₂ e)	Carbon Emissions (metric tons of CO ₂ e)	Reduction Ratio	Target Carbon Emissions (metric tons of CO ₂ e)	Target Reduction Ratio
Scope 1 & Scope 2	12,684,787	9,734,885	23.3%	9,830,750	22.5%

Note 1: The carbon emissions in Scope 1 and Scope 2 represent the combined total of emissions from Taiwan plants and Formosa Plastics Group Thermoelectric (Ningbo) Co., Ltd.

Note 2: The Company has provided data in the Target Validation Report, where the total carbon emissions reported for Scope 1 and Scope 2 for the base year 2018 were mistakenly recorded as 11.325 million metric tons of CO₂e. The correct total carbon emissions for Scope 1 and Scope 2 for the base year 2018 were 12.685 million metric tons of CO₂e.

3.3.2 Performance of energy conservation and carbon emission reduction in plant GRI302-4 GRI305-5

In 2023, total 259 energy conservation and carbon emission reduction improvement cases were completed with annually carbon emission reduction about 358,000 metric tons, and the total investment was NT\$1.64 billion with annually investment returns NT\$ 820 million. From 2017 to 2023, completed improvement cases of energy conservation and carbon emission reduction had reached 2,662 with annually carbon emission reduction about 1,736 thousand tons, and the total investment was NT\$ 7.4 billion with annually investment returns NT\$ 5.41 billion.

FCFC (including Formosa INEOS Chemicals Corporation) Energy Conservation Performances from 2017 to 2023

Item \ Year	Accumulation (2017 to 2022)	2023	Accumulation (2017 to 2023)	Ongoing	Total
Number of Improvement Cases	2,403	259	2,662	334	2,996
Steam Saved (Tons/Hour)	437.4	62.7	500.1	457.9	958.0
Power Saved (kWh/Hour)	53.8	9.1	62.9	10.9	73.8
Fuel Saved (Tons/Hour)	4.1	6.2	10.3	0.2	10.5
CO ₂ reduction (Thousand tons/year)	1,377	358	1,736	1,110	2,846
Amount Invested (NT\$100 Million)	57.5	16.4	74.0	82.7	156.7
Investment Returns (NT\$100 Million/Year)	45.9	8.2	54.1	35.9	90.0

Note: The improvement cases include Formosa INEOS Chemicals Corporation.

Summary Sheet of the 14 Dedicated Promotion Items for Energy Conservation and Carbon Reduction in Taiwan Plants from 2021 to 2023

Unit: tons/year

Project Category		Completed improvements in 2021(carbon emission reduction)			Completed improvements in 2022(carbon emission reduction)			Completed improvements in 2023(carbon emission reduction)		
		Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total
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	-	1,558	1,558
4	Distillation tower optimization and improvement	4,340	30,394	34,734	-	15,791	15,791	-	11,059	11,059
5	High and low order energy recycling improvements	-	28,569	28,569	-	85,155	85,155	-	49,295	49,295
6	Steam piping system, equipment insulation and drainer improvement	-	26,060	26,060	-	2,497	2,497	-	229	229

Project Category		Completed improvements in 2021(carbon emission reduction)			Completed improvements in 2022(carbon emission reduction)			Completed improvements in 2023(carbon emission reduction)		
		Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total
7	Combustion equipment improvement	7,613	3,529	11,142	6,910	4,810	11,720	151,409	-	151,409
8	Improvement of rotating equipment (including pumps, windmills, compressors, and mixers) and conveyor systems	-	22,444	22,444	-	20,635	20,635	-	28,501	28,501
9	Air compressor improvement	-	6,117	6,117	-	1,306	1,306	-	1,169	1,169
10	Power system and lighting system improvements	-	567	567	-	2,790	2,790	-	1,616	1,616
11	FLARE recycling improvement	-	-	-	-	-	-	-	2	2
12	Process and equipment improvement (energy efficiency improvement)	-	145,368	145,368	1,972	136,313	138,285	-	105,673	105,673
13	Establish renewable energy facilities	-	-	-		598	598	-	2,007	2,007
14	Intelligentized manufacturing process	-	16,074	16,074	186	7,636	7,822	2,726	3,252	5,978
Total		11,952	280,246	292,198	9,068	279,807	288,875	154,135	204,362	358,497

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

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

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

Note 4: The improvement case includes Formosa INEOS Chemicals Corporation.

3.3.3 Greenhouse gas emissions management GRI302-1 GRI302-3

GRI305-1 GRI305-2 GRI305-3 GRI305-4

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). Greenhouse gas emissions of each plant sites from 2021to 2023 are disclosed in the following table.

Greenhouse Gas Emissions Table

Unit: tons CO₂e

Items	Plant sites	2021	2022	2023
Scope 1	Yilan Longde	1,309,470	1,242,260	1,408,052
	Changhua	1,580	942	571
	Xingang	2,213,660	1,727,980	2,067,217
	Mailiao	1,873,507	1,727,498	1,667,186
	Total	5,398,217	4,698,681	5,143,026
Scope 2	Yilan Longde	135	13	0
	Changhua	26,362	25,569	19,842
	Xingang	66,967	167,725	19,357
	Mailiao	3,171,649	2,973,281	2,976,875
	Total	3,265,113	3,166,588	3,016,074
Scope 3	-	18,701,610	14,488,269	14,640,213

Note 1: The data of greenhouse gas inventory report from 2021-2023 was based on SGS and bsi. verification agencies

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 greenhouse gas inventory report comes from Formosa Plastics Group.

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 Scope 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.

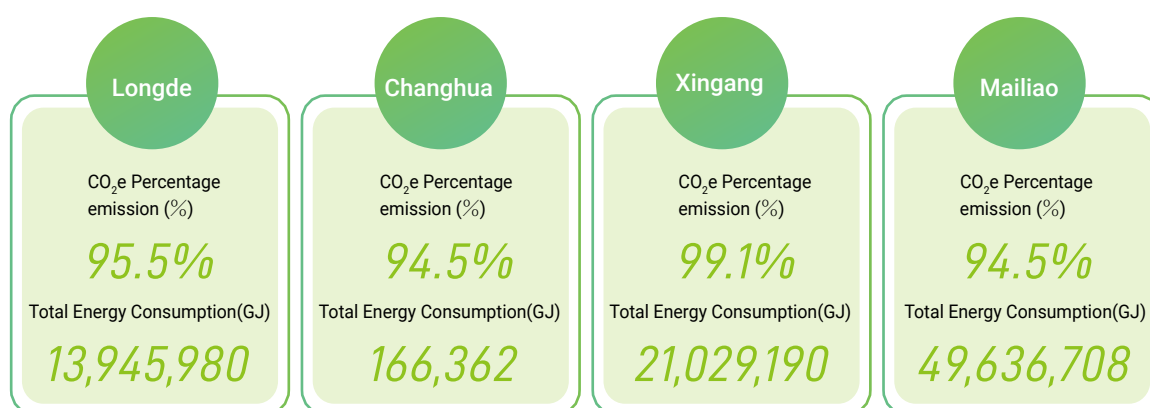
Note 9: In 2023, there was an increase in Scope 1 greenhouse gas emissions compared to 2022. This increase was primarily caused by a rise in electricity sales, in line with Taiwan Power Company's dispatch. As a result, emissions increased by approximately 440,000 metric tons. The Company's actual emissions continue to decrease, excluding the emissions from external electricity sales.

Summary table of energy consumption

Unit: GJ

Emission Sources	Plant site	2021	2022	2023
 Coal	Longde	12,584,832	12,035,736	13,880,880
	Changhua	-	-	-
	Xingang	21,711,072	16,913,904	20,479,200
	Mailiao	-	-	-
	Total	34,295,904	28,949,640	34,360,080
 Fuel Oil	Longde	23,018	14,065	12,957
	Changhua	-	-	-
	Xingang	332,298	97,438	69,111
	Mailiao	1,965,799	1,254,203	150,303
	Total	2,321,115	1,365,706	232,371
 Fuel Steam	Longde	156,027	104,524	52,143
	Changhua	179	410	275
	Xingang	238,569	357,935	341,723
	Mailiao	30,147,543	28,439,949	27,988,265
	Total	30,542,318	28,902,818	28,382,406
 Purchased Power From Associated Company	Longde	-	-	-
	Changhua	-	-	-
	Xingang	-	-	-
	Mailiao	6,598,687	6,152,899	5,934,438
	Total	6,598,687	6,152,899	5,934,438
 Purchased Stem From Associated Company	Longde	-	-	-
	Changhua	-	-	-
	Xingang	-	-	-
	Mailiao	17,641,884	15,436,019	15,563,702
	Total	17,641,884	15,436,019	15,563,702

Emission Sources	Plant site	2021	2022	2023
 Purchased Power From State Power Company	Longde	968	92	-
	Changhua	189,117	185,906	166,087
	Xingang	480,420	1,143,926	139,156
	Mailiao	-	-	-
	Total	670,505	1,329,924	305,243
Total Energy Consumption(GJ)	Longde	12,764,845	12,154,417	13,945,980
	Changhua	189,297	186,316	166,362
	Xingang	22,762,359	18,513,202	21,029,190
	Mailiao	56,353,914	51,283,071	49,636,708
	Total	92,070,415	82,137,006	84,778,240



Note1: FPG Greenhouse Gas Inventory Database

Note2: Joule (abbreviated as J); 1KJ=1,000J; 1GJ=10⁹J.

Note3: The Mailiao plant site contains Formosa INEOS Chemicals Corporation

Summary table of greenhouse gas emission and energy intensity from 2021 to 2023

Item	2021	2022	2023
Sales (NT\$100 million)	2,530.35	2,549.72	2,175.46
Total greenhouse gas emission of Scope 1 and Scope 2 (CO ₂ e tons)	8,663,330	7,865,269	8,159,100
Greenhouse gas emission intensity(CO ₂ e ton/NT\$100 million)	3,423.77	3,084.76	3,750.52
Total energy consumption (GJ)	92,070,415	82,137,006	84,778,240
Energy consumption intensity (GJ/NT\$100 million)	36,386.44	32,214.11	38,970.18

Note1: Data source is form FPG Greenhouse Gas Inventory Database.

Note2: 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

Note3: Greenhouse gas emission intensity (CO₂e tons / NT\$100 million) =Total greenhouse gas emission (CO₂e tons)/ Sales (NT\$100 million)

Note4: Energy consumption intensity (GJ/NT\$100million) =Total energy consumption (GJ)/ Sales (NT\$100million)

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 2023 was 8.156 million tons, increased 291,000 metric tons with 3.7% compared to 2022. The total returns of 2023 was NT\$217.546 billion, decreased NT\$37.426 billion with 14.7% compared to 2022, therefore the greenhouse gas emission intensity increased. The total energy consumption in 2023 was 84,778,240GJ, increased 2,641,234GJ with 3.2% compared to 2022, therefore the energy consumption intensity increased.

► Carbon footprint verification

The company promoted the third-party verification of product carbon footprint to conduct ISO 14067:2013. In 2018, Yilan Longde and Chiayi Xingang plants completed 6 products; in 2019, Yunlin Mailiao completed 19 products. The PC and PP products conduct ISO 14025:2006 environmental evaluation verification completed in 2006.

The Company is actively promoting carbon reduction measures, including energy conservation, energy transformation, and green energy development. Each year, we report our reduction performance to the Ministry of Economic Affairs' "Industrial GHG Voluntary Reduction Information Platform" and verify the actual reduction performance through on-site verification conducted by the Taiwan Green Productivity Foundation. In 2023, ARO-2 and ARO-3 plants were prized as "Outstanding Voluntary Greenhouse Gas Reduction Companies" for their exceptional performance in reducing greenhouse gas emissions.



◀ ARO-2 and ARO-3 plants were prized as "Outstanding Voluntary Greenhouse Gas Reduction Companies"

3.3.4 Energy Management

► Increasing 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 0.772 tons/ton, increased 0.061 tons/ton with 8.6% compared to 2022. Fuel steam consumption per unit output increased because of the production decreased which was affected by poor prosperity.



Average unit steam consumption of per unit output from 2021 to 2023

Unit: tons/ton

Item	Plant site	2021	2022	2023
Fuel steam consumption per unit output	Longde	0.712	0.720	1.292
	Changhua	-	-	-
	Xingang	0.150	0.130	0.101
	Mailiao	0.802	0.780	0.803
	Total	0.723	0.711	0.772

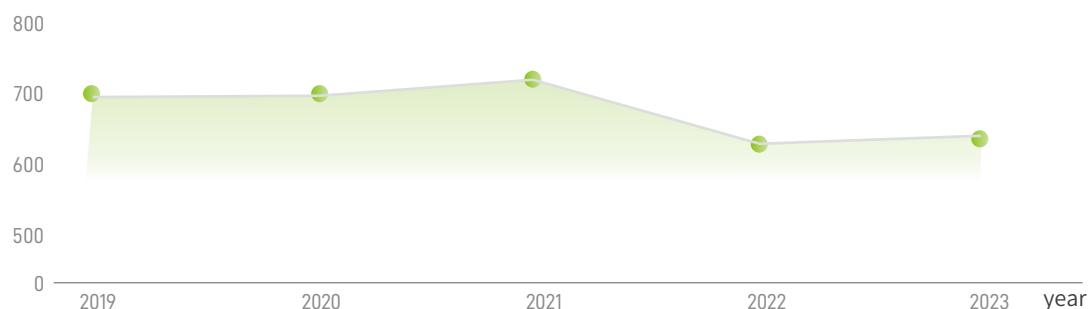
Note: The statistics in Mailiao plant site contains Formosa INEOS Chemicals Corporation

► The trends of unit steam consumption in Mailiao plant site

Mailiao plant site is one of the major production sites of the Company that steam consumption per unit output had appeared down trends by way of improvement the energy conservation implementation and optimization of manufacturing processes. The unit steam consumption for the last five years are disclosed as following table.

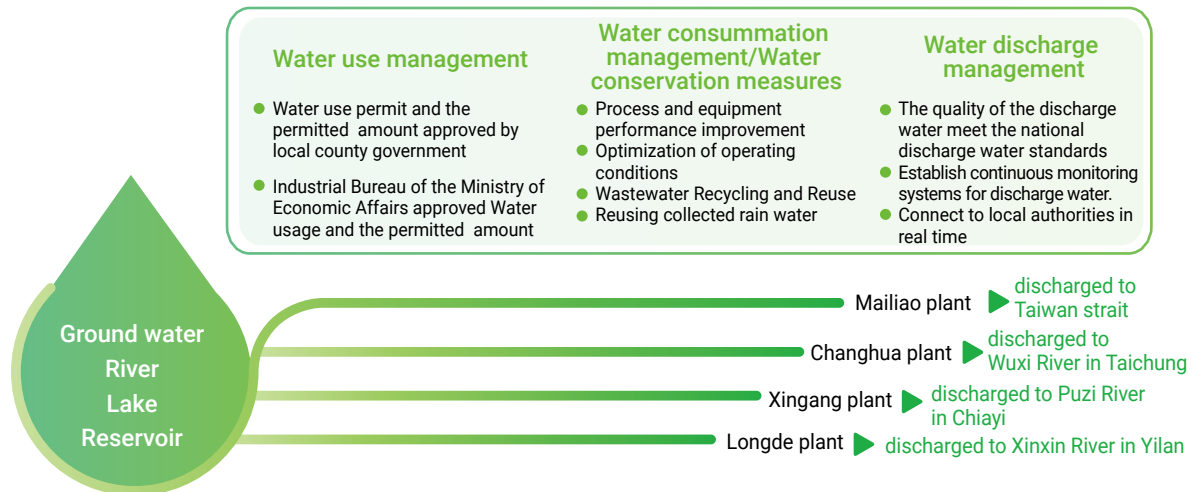
Year	2019	2020	2021	2022	2023
Steam consumption (tons/hour)	694.9	694.3	719.3	629.3	634.5

Steam consumption per hour in Mailiao plant site (tons)



3.4 Utilization and management of water resources

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

Water stress test

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 2024.

Water resource usage efficiency

In 2023, the CDP Water Safety Disclosure Questionnaire was evaluated and won "Leadership A"








Water conservation discharge management

In 2023, each drop of water in Mailiao Industrial Complex was reused **13.7** times

Water Resource Use Management

Recycled rainwater in Mailiao Industrial Complex accounted for **6.1%** of total consumption in 2023

► Contingency measures for water

Water condition signal	FCFC Water Contingency Measures	Occurrence in 2022	Occurrence in 2023	Comparison
 Normal supply of water	<ul style="list-style-type: none"> ◆ Continue to promote water-saving measures ◆ Rainwater recycling and reuse 	Regular production	Regular production	The same
 Water supply is tight	<ul style="list-style-type: none"> ◆ Continue to promote water-saving measures ◆ Reduce non-essential water use 	No occurrence	No occurrence	Regular supply
 Pressure reduced water supply	<ul style="list-style-type: none"> ◆ 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 	No occurrence	No occurrence	Regular supply
 Volume reduced water supply	<ul style="list-style-type: none"> ◆ Continue to promote water-saving measures ◆ Improve water usage efficiency of the production process ◆ Adjust the production processes 	No occurrence	No occurrence	Regular supply
 Zoned/fixed point water supply	<ul style="list-style-type: none"> ◆ 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 GRI303-1 GRI303-3

► 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 100,000 metric tons of fresh water, and will put into operation by the end of 2024 . The real water consumption in 2023 is shown in the table below:

Annual water source table from 2021 and 2023

Unit: thousand tons

Category	Plant site	2021	2022	2023
Surface Water	Longde	10,150	7,738	4,902
	Changhua	159	137	138
	Xingang	7,409	5,777	6,476
	Mailiao	14,379	14,245	14,016
Subtotal (A)		32,097	27,897	25,532

Category	Plant site	2021	2022	2023
Groundwater	Longde	146	149	105
	Changhua	-	-	-
	Xingang	-	-	-
	Mailiao	-	-	-
Subtotal (B)		146	149	105
Tap water	Longde	25	22	21
	Changhua	5	5	6
	Xingang	31	26	27
	Mailiao	45	88	90
Subtotal (C)		106	142	144
Total water usage (A)+(B)+(C)		32,348	28,188	25,781

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 statistics of water consumption in Mailiao plant site 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 three years (2021~2023) was 3.05 billion tons. The three-year average industrial water consumption was 89.93 million tons, accounted for 2.9% of the total water supply. The three-year average transfer agricultural water consumption was 29.91 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:

Statistics of water supply by the Jiji Dam from 2021 to 2023

Unit: Ten thousand tons

Year	Jiji Dam inflow volume(A)	Average use water volume in agriculture (B)	Industry			
			Average use water volume (C)	Percentage to the inflow volume (C)/(A)	Transferring water volume from farming (D)	Percentage of transferring water volume to agricultural use water (D)/(B)
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%
2023	3,640,151	1,534,490	83,934	2.3%	27,336	1.8%
Average	3,049,283	1,463,873	89,930	2.9%	29,914	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 GRI303-2 GRI303-4

GRI304-1

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 from 2021 to 2023

Unit: million liters

Discharge volume is based on the terminal point	2021				2022				2023			
	Longde	Changhua	Xingang	Mailiao	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	-	5,931.9	164.5	2,001.0	-
Sea water (B)	-	-	-	5,632.0	-	-	-	5,541.1	-	-	-	5,257.7
Total water discharge volume (a)+(b)	14,664.0				13,719.7				13,355.1			

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.

Note 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 2023

Plant Site	Water Volume (CMD)		pH		COD(mg/L)				SS(mg/L)		
	Permissible Volume	Emissions	Statutory Requirements	Internal Control Value	Permissible Volume	Statutory Requirements	Internal Control Value	Permissible Volume	Statutory Requirements	Internal Control Value	Permissible Volume
Longde	26,280	13,978	6~9	6.5~8.5	8.2	100	80	29	30	24	9.0
Changhua	3,522	172	6~9	6~9	7.1	100	80	51	30	25	8.6
Xingang	10,648	5,482	6~9	6.5-8.5	7.1	100	90	32	30	18	6.5
Mailiao	29,191	14,399	6~9	6.8~8.7	8.2	100	80	35	30	25	5.4

Note: The Company's wastewater discharge test value is far lower than the national discharge standard.

► Waste water treatment SDG 6.3

In 2023, 5 out of 11 waste water improvement projects were completed that total investment was NT\$12 million, the others are on-going proceeding with estimated investment NT\$70 million. As of 2023, the total investment was NT\$8.023 billion with 478 projects had completed.

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

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

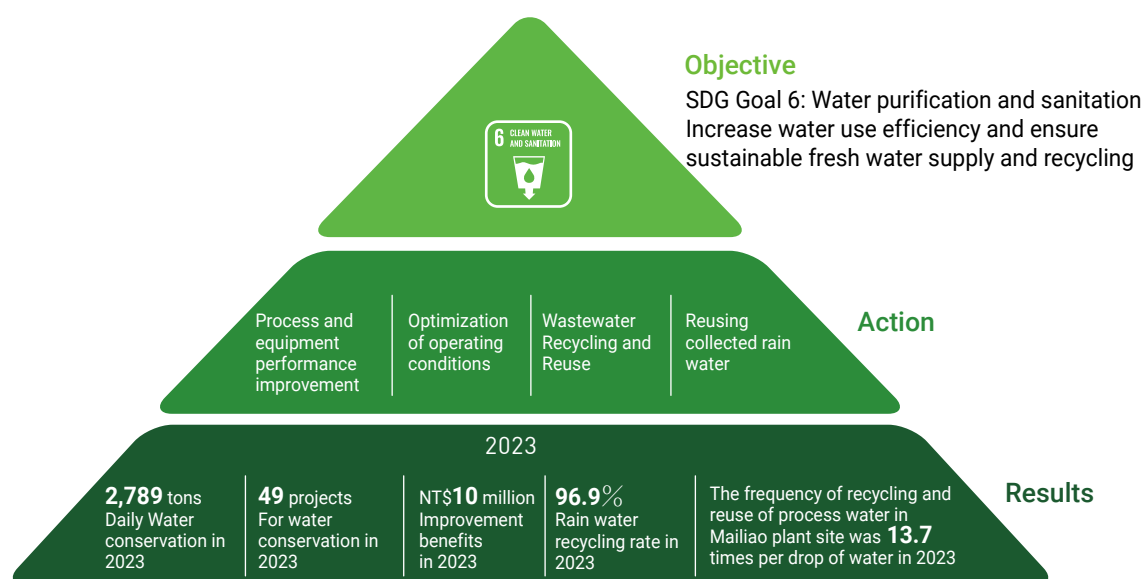
The Chinese White Dolphin was declared as Critically Endangered by the Red Book of the International Union for Conservation of Nature in August 2008. According to domestic studies, the sea area where it is active in Taiwan is the area of habitat from Miaoli to 3 kilometers off the coast of Tainan. In 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 GRI303-5



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 2023, the average amount of rainwater recovered in Mailiao plant site was 2,349 tons per day, and the recovery rate is about 96.9%.





Statistics of Water Consumption from 2021 and 2023

Unit: thousand tons

Item	Plant site	2021	2022	2023
Water withdrawal	Longde	10,320.2	7,909.7	5,028.0
	Changhua	163.8	141.9	143.8
	Xingang	7,440.1	5,803.0	6,503.9
	Mailiao	14,424.4	14,333.7	14,105.5
Subtotal of water withdrawal (a)		32,348.5	28,188.3	25,781.2
Water discharge	Longde	6,786.2	5,960.1	5,931.9
	Changhua	132.8	119.1	164.5
	Xingang	2,113.0	2,099.4	2,001.0
	Mailiao	5,632.0	5,541.1	5,257.7
Subtotal of water discharge (b)		14,664.0	13,719.7	13,355.1
Total water consumption(a)-(b)		17,684.5	14,468.6	12,426.1

Note 1: The statistic contains Formosa INEOS Chemicals Corporation.

Note 2: Water consumption is equal to water use minus water discharge volume.

FCFC Water Conservation Performance in Recent Years

Item \ Year	2023	Accumulated volume form 2017~2023	Ongoing	Total
Number of improvement projects	49	609	55	664
Volume saved (tons/per day)	2,789	20,835	1,877	22,713
Amount invested (NT\$100 million)	8.6	11.5	0.7	12.2
Investment benefit (NT\$100 million/year)	0.1	1.3	0.1	1.4

3.5 Air Quality Management

3.5.1 Emissions and Prevention GRI305-7 GRI306-2 GRI306-3

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. There were no incidents of exceeding emissions in 2023. In 2023, the "Equipment Component Simplification Project" was implemented, which reduced the number of equipment components by 39,095, surpassing the target of 5% with a streamlining rate of 5.8%. As a result, emissions were reduced by 13 metric tons. Continuously promote the simplification of components with the goal of reducing them by 2% annually.

Air Pollutant Emissions Table from 2021 to 2023

Unit: Ton/Year

Type		Plant site	2021	2022	2023
Air Pollutant Emission Management	(SOx)	Longde	92.87	95.94	110.00
		Changhua	0	0	0
		Xingang	149.31	122.00	137.95
		Mailiao	187.68	125.50	74.64
	(NOx)	Longde	158.62	155.41	172.57
		Changhua	0	0	0
		Xingang	340.80	310.00	316.30
		Mailiao	1,145.84	1,108.11	1,050.13

Type		Plant site	2021	2022	2023
Air Pollutant Emission Management	Volatile Organic Compounds (VOCs)	Longde	107.93	83.02	36.33
		Changhua	4.71	0.47	3.45
		Xingang	80.39	73.00	61.52
		Mailiao	459.18	449.03	455.61
	Total Suspended Particles (TSP)	Longde	19.22	6.60	31.80
		Changhua	0	0	0
		Xingang	38.79	32.00	38.22
		Mailiao	58.89	48.22	39.28

Note 1: No air pollutants violation occurred in 2023

Note 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.

3.6 Waste and Controlled Chemical Substance Management

3.6.1 Waste Management GRI306-1 GRI306-2 GRI306-3 GRI306-4 GRI306-5

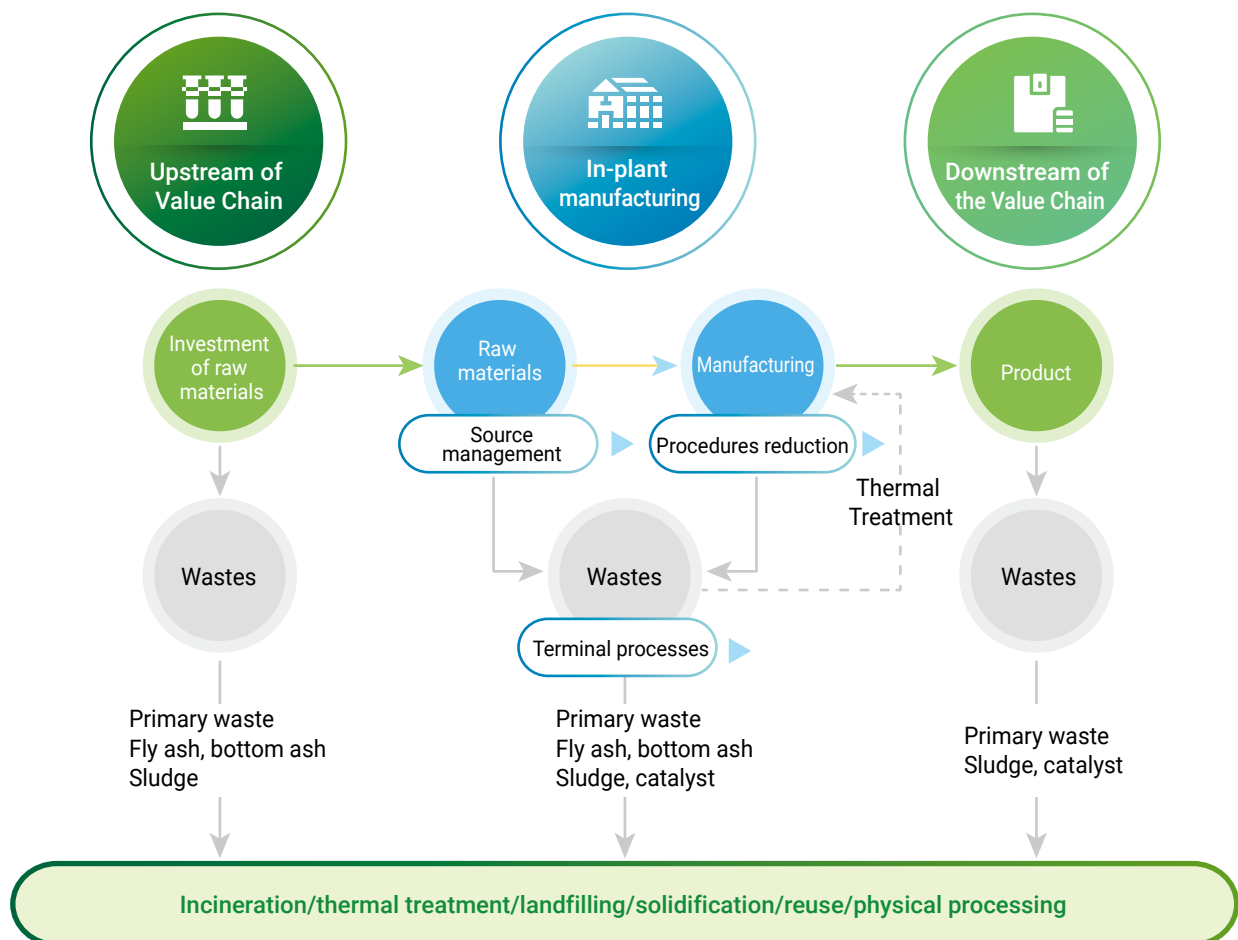
► Management Policy of Waste Management

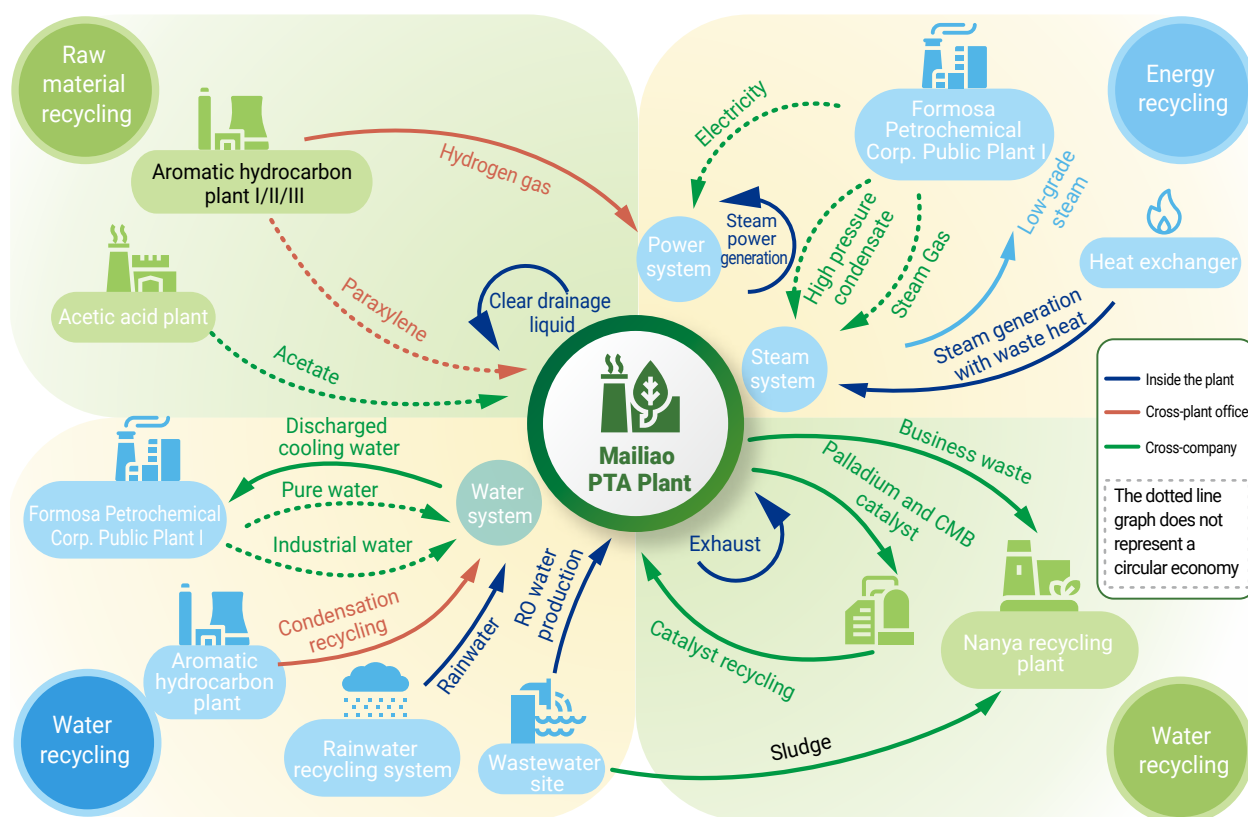
The Company is dedicated to reducing pollutant emissions. With regards to waste and regulated chemicals, our objective is to prevent, reduce, recycle, and reuse in order to minimize waste generation. We will manage waste and chemical substances in an environmentally sustainable manner. Our goals include an annual reduction of 2% in water consumption, a 3% decrease in energy consumption, and a 1% reduction in waste, all aimed at minimizing the impact on human health and 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.

► Waste Management and Disposal

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. To reduce processing waste, the Company decreases waste from original production processes, and increases waste recycling and reuse. The amount of waste generated was 169,347 tons in 2023, decreased 53,968 tons with 24% compared 2022, or decreased 117,658 tons with 41% compared 2021. 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\$523 million as of 2023. There were no abnormal disposals of waste by cleaning and transportation companies in 2023.

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.





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 reduced by 144.1 metric tons per month in 2023 compared to 2022.

► Waste source management

The Company classified waste by composition in 2021

Unit: tons

Year	Waste composition and components	Amount generated	Disposal and transfer amount	Direct disposal amount
2021	Toxic hazardous waste (class B)	0	0	0
	Waste with hazardous properties (class C)	61	0	61
	General business waste (class D)	22,883	5,821	17,062
	Announce the waste that should be recycled or reused (Class R)	26,4061	264,061	0
	Total amount of waste	287,005	269,882	17,123
2022	Toxic hazardous waste (class B)	0	0	0
	Waste with hazardous properties (class C)	73	0	73
	General business waste (class D)	23,716	8,546	15,170
	Announce the waste that should be recycled or reused (Class R)	199,526	199,526	0
	Total amount of waste	223,315	208,072	15,243
2023	Toxic hazardous waste (class B)	0	0	0
	Waste with hazardous properties (class C)	17	0	17
	General business waste (class D)	20,642	5,480	15,162
	Announce the waste that should be recycled or reused (Class R)	148,688	148,688	0
	Total amount of waste	169,347	154,168	15,179

Note: The composition of waste classified is according to the categories compiled by the EPA

► Waste reduction in the production process

Waste transferred from disposal by recycling operations in 2021

Unit: Tons

Year	Item	Onsite(self-processing)	Offsite(outsourced processing)	Total amount
2021	Hazardou	-	61	61
	Other recycling processes	-	-	-
	Total amount		61	61
	Ratio of hazardous waste recycling	100%		
	Non-hazardous waste	-	22,883	22,883
	Reuse preparation	-	-	-
	Recycling and reuse	-	264,061	264,061
	Total amount	-	286,944	286,944

Year	Item	Onsite(self-processing)	Offsite(outsourced processing)	Total amount
2022	Hazardous Waste	-	73	73
	Other recycling processes	-	-	-
	Total amount	-	73	73
	Ratio of hazardous waste recycling	100%		
	Non-hazardous waste	-	23,716	23,716
	Reuse preparation	-	-	-
	Recycling and reuse	-	199,526	199,526
	Total amount	-	223,242	223,242
2023	Hazardous Waste	-	17	17
	Other recycling processes	-	-	-
	Total amount	-	17	17
	Ratio of hazardous waste recycling	100%		
	Non-hazardous waste	-	20,641	20,641
	Reuse preparation	-	-	-
	Recycling and reuse	-	148,688	148,688
	Total amount	-	169,330	169,330

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

Data related to waste processing in 2021

Unit: tons

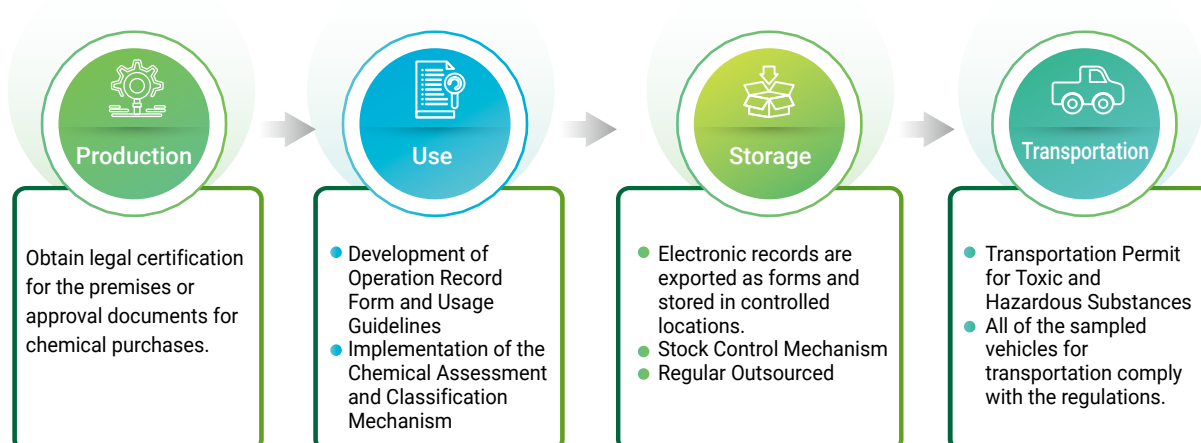
Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
2021							
Amount processed	Onsite (self-processing)	-	-	-	-	-	-
	Offsite (outsourced processing)	792	7,59	5,029	9,469	61	264,061
Percentage (%)	Onsite (self-processing)	-	-	-	-	-	-
	Offsite (outsourced processing)	0.28	2.65	1.75	3.30	0.02	92.01

Type		General				Hazardous	Reused
		Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Solidification	
2022							
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
2023							
Amount processed	Onsite (self-processing)	-	-	-	-	-	-
	Offsite (outsourced processing)	3,806	7,624	1,674	7,538	17	148,688
Percentage (%)	Onsite (self-processing)	-	-	-	-	-	-
	Offsite (outsourced processing)	2.25	4.50	0.99	4.45	0.01%	87.80

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

3.6.2 Controlled Chemical Substance Management

The Company has implemented management and operational standards that adhere to the Fire Services Act, Occupational Safety and Health Act, and Basic Environment Act set by the central authorities. In addition, the Company has established self-management and disaster response measures to ensure safe production, use, storage, and transportation operations. By adopting a circular economy model, the Company is developing a safe and environmentally sustainable production method. Specific management measures are in place for each category of chemicals. When chemicals are transported from outside the plant to inside, the occupational health and safety management mechanisms and process management procedures of each plant are activated. All personnel must adhere to the management measures and inspection procedures for the use of chemicals in order to ensure safety. The Company manages the three-stage management measures for controlling hazardous chemicals including regulatory compliance, management measures, and disaster response operations as follows:





Percentage of revenue from hazardous chemical products in the last 3 years

Unit: %

Year	2021	2022	2023
The product is classified as a health and environmental hazard under the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), with a classification level of 1 and 2. The percentage of products classified as chemical substances in terms of revenue.	46	51	55
Percentage of the products listed above that have undergone a hazard assessment	100	100	100

► Environmental Impact Assessment

The Company regularly hires third-party testing agencies to conduct environmental monitoring of the surrounding area of the chemical plant. Containment measures, tank bottoms, and recovery devices are installed in storage areas. Chemicals are mainly transported through pipelines to minimize direct environmental hazards and reduce the scope and impact on the environment.

► Emergency Response Measures

In consideration of the characteristics of the Company's work with potential risks, the Company has formulated counter strategies and operating procedures to control accident risks on three stages by before accident happened, incurred at that time and after accident happened. According to the Regulations Governing Accident Handling and the Regulations Governing Emergency Responses, in the event of an accident, the Company groups the employees based on the emergency response organization and initiates the emergency response procedures at section, plant and complex level based on the severity of the accident.

Each plant conducts unannounced tests at least twice a year and overall drills at least once a year, with records being kept for reference. In 2023, a total of 142 drills have been completed. In addition, stricter control measures have been implemented for the storage room in relation to the acute toxicity of Class III hazardous chemicals to the human body. Personnel entering the storage room must wear safety protective equipment to minimize direct contact. Furthermore, to effectively prevent disasters, alarm devices have been installed in the process, and regular emergency response drills are conducted annually.

Before an accident happened - reduce incident risk

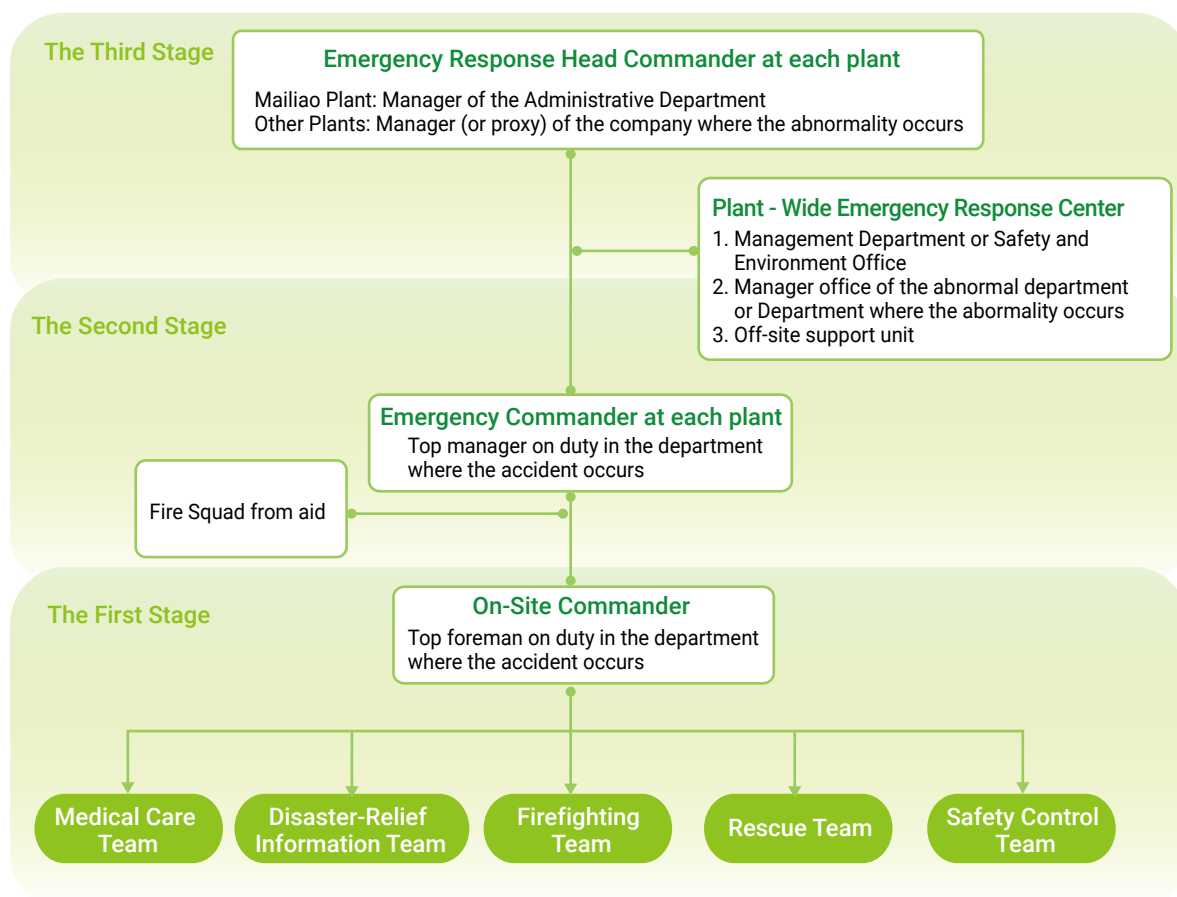
- Increase the reliability of equipment
- Improve safety at workplace
- Build report and cope with mechanism

An accident incurred at that time – counter measures at that time

- Report immediately to the authority and the supervisors in charge
- Accord the Company regulations to group emergency response organization and initiate the emergency response procedures
- Report through the accident bulletin and the accident SMS systems

After an accident happened – initiate investigation proceedings

- Apply reopening permission to the authorities in charge
- Initiate investigation proceedings and clarify the cause and improve operating measures



Exercise on Prevention and Rescue of Toxic Chemical Disasters in 2023

Exercise Date: October 20, 2023

Participating units: County Government Environmental Protection Department, Chiayi County Local Joint Prevention Organization, academic institutions, industry peers, and a total of 139 individuals from the Company's Safety and Health Management Department who jointly observed and provided guidance.

Exercise Results Record:

- ◆ Simulate and rehearse hypothetical scenarios, including notification → assembly → task assignment → rescue → coordination with supervisory competent authorities → situation resolution → post-disaster recovery.
- ◆ The plant fire brigade, Minsyong Branch's fire trucks support, and nearby Formosa Plastics Corp. and Nan Ya Plastics Corp. joint defense teams bring supporting equipment for assistance. Command authority at the scene is transferred to the fire brigade or the Environmental Protection Bureau commander.
- ◆ Firefighters conducted a practical water spray drill to provide protection for rescue personnel who were arriving at the accident scene. At the same time, they carried out operations to stop leaks and monitored the spread of environmental leakage concentrations. Detection personnel provided regular updates.
- ◆ The Environment Incidents Specialist Team of the Environmental Protection Department supports remote inspection vehicles to conduct air quality testing.
- ◆ After the exercise, a joint review was conducted to gather valuable opinions from the District Environmental Protection Department and academic experts in order to improve our emergency response capabilities.





The value of GRI3-3 sustainable talents

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4

Vision

To establish a safe working environment, protect the rights of employees, offer opportunities for professional growth and career development, and foster mutual growth with both employees and the company.



Policy and Commitment

The Company has formulated a human rights protection policy based on international human rights conventions. In compliance with the applicable provisions of the Occupational Safety and Health Act, offer on-the-job professional education and training, thereby enhancing job competitiveness. The Occupational Health and Safety Committee convene on a monthly basis to systematically evaluate potential workplace hazards and proactively mitigate the risk of accidents.



2023 Social Regulatory Compliance

There were no material occupational accidents or incidents of significant legal violations in 2023.



► Material topics: Occupational Health and Safety

Description

The Company ensures the safety and health of its workers by complying with the Occupational Safety and Health Act and ISO 45001 regulations. We also enhance safety and health management measures:

1. Safety Management: Establish an incident log by integrating the data management platform to facilitate education and training. Before commencing construction, it is important to review the construction Standard Operating Procedure (SOP) or Job Safety Analysis (JSA) with the contractor to ensure the safety of the construction process. SWAT helps to reduce unsafe behaviors of personnel.
2. Health and Safety Management: Enhancing employees' awareness of health and minimizing the impact of the work environment on physical well-being through initiatives such as health seminars, Cardiopulmonary resuscitation (CPR) / Automated External Defibrillator (AED) training, and health education campaigns.

Actual

Potential

Positive

Negative

Management Actions

2023 Performance Tracking

Overview of Achievements

Short-term Goals (In 1-3 years)

Medium and Long-term Goals (Over 3 years)

5S/TPM Competition

Through the competition to improve work environment safety, we have the opportunity to exchange and share safety management practices with other units.

Achieved

Provide each department manager with drafting autonomy management policies.

Systematize autonomous management policies to enhance workplace safety.

Cardiopulmonary resuscitation (CPR) / Automated External Defibrillator (AED) Training

The employee training rate has reached 98%.

Achieved

The achievement rate of employee training goals has reached 99%.

Achieve company-wide training.

Stakeholder Groups

Employees



Contractors



Pipeline and Effectiveness of Engagement

1. Hold a monthly organizational meeting to discuss safety and health matters with contractors and employees. Each plant site shall hold at least one supervisor meeting per month to discuss occupational health and safety matters.
2. Daily pre-work toolbox meeting held to discuss safety precautions for the day.
3. There were no significant occupational accidents in 2023.

► Material topics: Industrial and Public Safety

Description



In compliance with the Occupational Safety and Health Act and the relevant provisions of ISO 45001, establish daily inspection focus areas to ensure workplace safety. In order to ensure the safety of the plant and its surroundings, we have implemented an emergency response mechanism and allocated personnel to minimize any potential consequences.

Actual

Potential

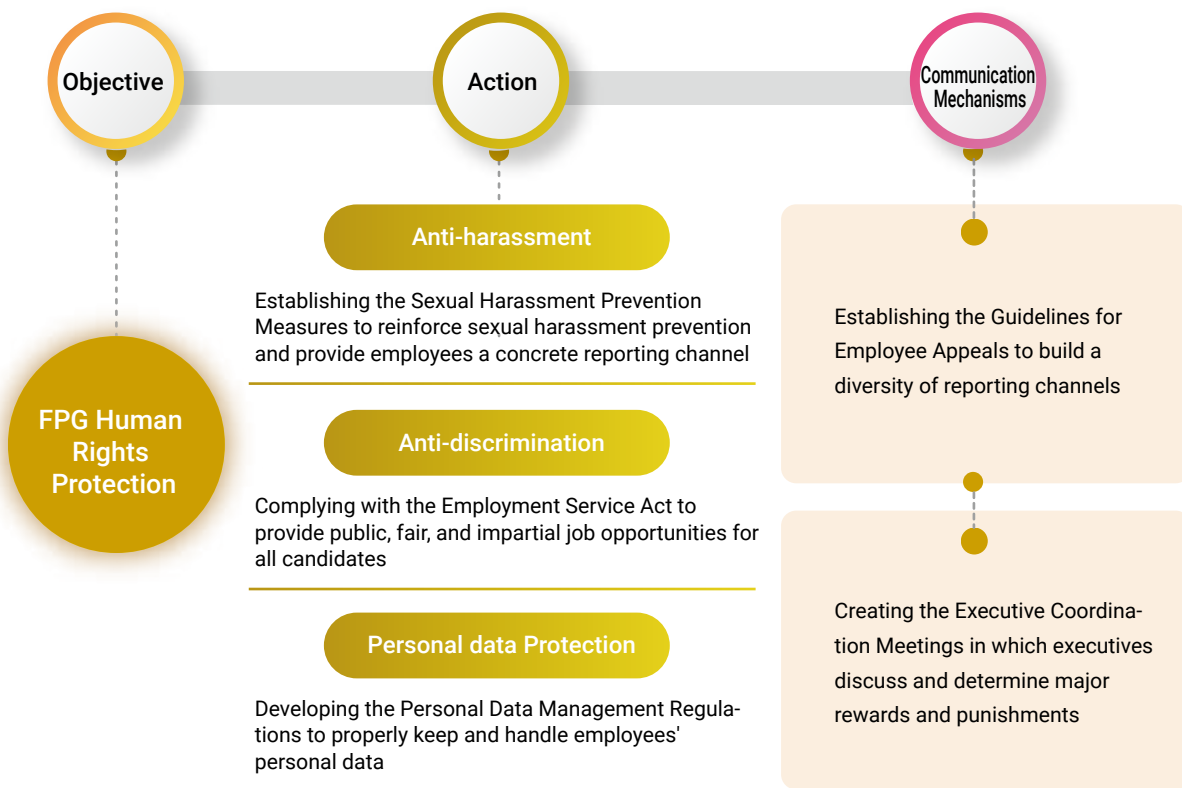
Positive

Negative

Management Actions	2023 Performance Tracking	Overview of Achievements	Short-term Goals (In 1-3 years)	Medium and Long-term Goals (Over 3 years)
Regularly conduct occupational hazard prevention review meetings.	Three educational training sessions will be conducted in 2023, incorporating the data management platform.	Achieved	Through education and training, the number of abnormal incidents has been reduced to less than 2 per year.	Achieve 0 abnormal occurrences.
Emergency Response Drill	142 drills are scheduled to be completed in 2023.	Achieved	Using Google Earth, plan safe evacuation routes based on the simulated spread level.	Continuously integrate (Areal Locations of Hazardous Atmospheres) ALOHA analysis into disaster prevention training.
Stakeholder Groups	Employees  Contractors 			
Pipeline and Effectiveness of Engagement	1. Hold a monthly organizational meeting to discuss safety and health matters with contractors and employees. Each plant site shall hold at least one supervisor meeting per month to discuss occupational health and safety matters. 2. Daily pre-work toolbox meeting held before work to discuss safety precautions for the day. 3. There were no significant occupational accidents in 2023.			

4.1 Employee Human Rights Protection GRI2-27

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.



4.1.1 Employee Opinions and Feedback GRI2-26

Employees of the Company have the opportunity to voice their opinions through the plant unions or the regular labor-management meetings held every quarter. Each plant union functions autonomously and has not entered into a unified collective agreement with the Company. The relevant department heads of the Company attend regular meetings and labor-management meetings organized by the labor unions in each plant area. The Company also takes into consideration and communicates the written appeals and suggestions made by the labor unions in each plant area. In major labor-management issues, the Company prioritizes compliance with government regulations and seeks consensus through discussions and negotiations between top management executives and the unions in each plant. All employees are protected by laws and agreements between labor and management, which ensure the full safeguarding of their labor rights. Both labor and management should conduct collective bargaining in accordance with the principles of good faith, while also ensuring the collective bargaining rights of employees, in line with the spirit of the Collective Agreement Act.

Internal communication channels for employees of Formosa Chemicals & Fiber Corp.

4.1.2 Employee Profile GRI2-7 GRI2-8

The total employees were 5,085 in 2023 decreased 81 employees compared to 2022, that full-time employees 4,909 were accounted for 96.5% and non-regular employees 176 were accounted for 3.5%, including consultants, contracted personnel, and part-time employees. Local employees accounted for 99.9% which was equivalent to the ratio of 2022. The ratio of male to the female employees was 7.4:1 in 2023 because of the characteristics of the industry, onsite personnel are mostly engaged in physically intensive work. Therefore, the gender ratio for male to female employees onsite work was 12.5:1, and the ratio for male to female employees non-onsite work was 3.0:1.

Manpower Structure from 2021-2023

Category	Gender			Location (Taiwan)			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
2021							
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	-	-	-

Category	Gender			Location (Taiwan)			
	Female	Male	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan
2022							
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	-	-	-
2023							
Number of Employees	692	4,393	5,085	1,060	2,474	1,107	444
Number of Permanent Employees	582	4,327	4,909	913	2,461	1,098	437
Number of Temporary Employees	66	110	176	147	13	9	7
Number of Employees without Guaranteed Hours	-	-	-	-	-	-	-
Number of Full-time Employees	692	4,393	5,085	1,060	2,474	1,107	444
Number of Part-time Employees	-	-	-	-	-	-	-

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.

The plant area is primarily staffed by engineering contractors who are responsible for assisting with mechatronics engineering and mechanical engineering, as well as environmental cleaning. These operations are included in the Company's safety and health management, although the employees are not directly employed by the Company. In 2023, the estimated number of contracted merchants is approximately 6,149, based on working hours. The proportion of the Company's employees to contracted merchants is about 83%.

2023 Non-employee (Contractor) Information



Contractors

Working hours (hour)

12,199,371

Number of people (person)

6,149

Note 1: The number of non-employees is estimated using the Full-Time Equivalent (FTE) method. The formula for calculating the number of individuals is as follows: Number of people (person) = Work hours (hour) / Daily working hours / Number of working days in a year. If the number of individuals is less than 1, it is rounded up to 1 person.

Note 2: The estimated number of working days for the year 2022 was 251 days, and for the year 2023, it was 248 days.

Note 3: This fiscal year marks the first year of statistical compilation.

4.1.3 Employee job security GRI202-2

The recruitment operations of the Company adhere to the principles of fairness, impartiality and openness, and are 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 2023 was 5.11%, among which, retirement accounted for 49.8%. The resignation rate raised 0.47% in 2023 compared to 2022.

Overview of new employees and resignations from 2021 to 2023

Category		New Employees		Employee Turnover	
		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)
2021					
Age	Under 29 Years Old	136	2.75	38	0.77
	30-39 Years Old	26	0.53	38	0.77
	40-49 Years Old	4	0.08	9	0.18
	50-59 Years Old	2	0.04	33	0.67
	Over 60 Years Old	0	-	60	1.21
Total		168	3.40	178	3.60
Gender	Male	148	2.99	149	3.01
	Female	20	0.40	29	0.59
Total		168	3.40	178	3.60
2022					
Age	Under 29 Years Old	145	2.91	39	0.78
	30-39 Years Old	69	1.39	55	1.10
	40-49 Years Old	9	0.18	13	0.26
	50-59 Years Old	1	0.02	52	1.04
	Over 60 Years Old	0	-	72	1.45
Total		224	4.50	231	4.64
Gender	Male	162	3.25	195	3.92
	Female	62	1.25	36	0.72
Total		224	4.50	231	4.64

Category		New Employees		Employee Turnover	
		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 1)
2023					
Age	Under 29 Years Old	121	2.46	49	1.00
	30-39 Years Old	66	1.34	57	1.16
	40-49 Years Old	8	0.16	19	0.39
	50-59 Years Old	1	0.02	72	1.47
	Over 60 Years Old	0	-	54	1.10
Total		196	3.99	251	5.11
Gender	Male	169	3.44	210	4.28
	Female	27	0.55	41	0.83
Total		196	3.99	251	5.11

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 2023, the total senior managers were 674 persons accounted for 38.2%, increased four persons compared to last year.

Table of local residents serving as senior managers in the last 3 years

Unit: person

Year	2021	2022	2023
Number of persons	671	670	674
Proportion (%)	38.4	38.0	38.2

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

4.2.1 Employee Emoluments GRI2-21

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. The salary adjustment rates table for the last three years is below.

The average remuneration and adjustment rates for employees form 2021 to 2023

Type	2021	2022	2023
Level 2 Managers or Above	3.83% + plus perks NT\$10,000	4.5%	2.5%
Entry Level Managers or Below	3.83% + plus perks NT\$10,000	4.5%	2.5%

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 remuneration ratios for employees from 2021 to 2023

Unit: %

Type	Female	Male	Male to female ratio
2021			
Level 2 Managers or Above	100	105	105
Entry Level Managers or Below	100	131	131
2022			
Level 2 Managers or Above	100	109	109
Entry Level Managers or Below	100	130	130
2023			
Level 2 Managers or Above	100	115	115
Entry Level Managers or Below	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 average cost of non-managerial full-time employees per year per person was NT\$1.35 million, decreased NT\$57,000 compared to 2022 due to decreased annual bonus by economic slump in 2023.

The following table indicates the number of non-managerial full-time employees and their median and average salary from 2021 to 2023:

Year	2021	2022 (B)	2023 (A)	Previous year Comparison (A-B)
Number of non-managerial full-time employees (people)	4,503	4,489	4,458	-31
Average salary of non-managerial full-time employees (NT\$/person)	1,527,548	1,408,932	1,352,081	-56,851
Median salary of non-managerial full-time employees (NT\$/person)	1,435,164	1,283,494	1,228,720	-54,774

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 Company experienced a significant decrease in net profit in 2022 compared to 2021. Employees received a year-end bonus of 4.06 months, which is lower than the 7-month bonus received in 2021. Consequently, the salary growth rate declined in 2022 when comparing in 2021. Although the Company's net profit decreased in 2023, but it was close to the target amount. Therefore, employees received higher group and individual performance bonuses compared to 2022, along with a 3-month annual bonus. Consequently, the salary growth rate increased in 2023 compared to 2022.

The growth ratio of emoluments on employees from 2021 to 2023

Year	2021	2022	2023
Ratio of maximum emoluments to median employee emoluments	15.1	17.0	17.5
Percentage of salary growth (Note 2)	55.7%	-9.7%	32.4%

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) .

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 to 2023 FCFC Pension System Overview is listed as following.

Descriptions	Number of Applicable Employees	Allotment Percentage
2021		
Old pension plan	1,272	2% monthly appropriation of the Company-wide salaries
New pension plan	3,885	Withholding 6% of employees' salary every month
2022		
Old pension plan	1,204	2% monthly appropriation of the Company-wide salaries
New pension plan	3,777	Withholding 6% of employees' salary every month
2023		
Old pension plan	1,122	2% monthly appropriation of the Company-wide salaries
New pension plan	3,787	Withholding 6% of employees' salary every month

Note: Please refer to the accounting items related to "Pension" in the 2023 Consolidated Financial Statements of FCFC's pension recognition.

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 2023" 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 2023, there are 1,070 members.

► Maternity and Childcare Assistance

A new maternity incentive program will be implemented starting from July 2022 to encourage employees to have children. In addition to receiving a thoughtful gift bag, employees or their spouses will also receive a childbirth gift of NT\$20,000 for each newborn. Furthermore, they will be eligible for a monthly childcare subsidy of NT\$2,000 per child until the child reaches the age of 6. In 2023, a total of 96 newborns were recorded, and a total of NT\$1.92 million was disbursed as childbirth allowance. A total of 634 employees applied for childcare subsidies and a total of NT\$17.29 million was distributed.

► Unpaid parental leave

The Company provides a parental leave without pay system. Employees may apply for the leave according to their needs. In 2023, a total of 9 employees applied for the leave, and reinstatement ratio raised 14% compared to 2022. Application for unpaid parental leaves and reinstatement in the past 3 years were shown in the table below:

Year	2021			2022			2023		
Item	Female	Male	Total	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	16	149	165	15	273	288	12	277	289
Number of Employees Applying for Unpaid Parental Leaves	6	3	9	8	2	10	12	0	12
Number of Employees Expected to Reinstatement in the Year (A)	7	3	10	6	3	9	9	0	9
Number of Employees Applying for Reinstatement in the Year (B)	7	0	7	6	3	9	9	0	9
Number of Employees Having Reinstated for over a Year (C)	5	0	5	6	0	6	6	3	9
Reinstatement Rate (%) (B/A)	100	0	70	100	100	100	100	0	100
Retention rate (%) (C of the current year/B of the previous year)	83	0	83	86	0	86	100	100	100

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.

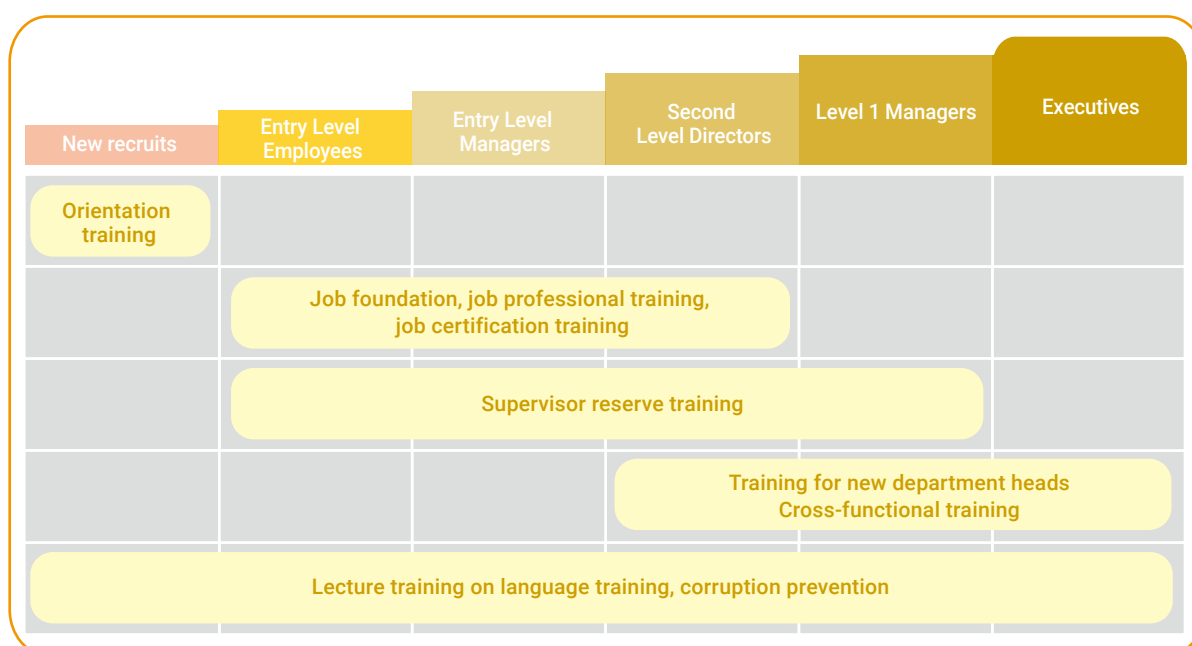
Note 3: According to the Company's parental leave without pay system, employees may apply for parental leave without pay on their own.

4.3 Talent Cultivation Programs

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

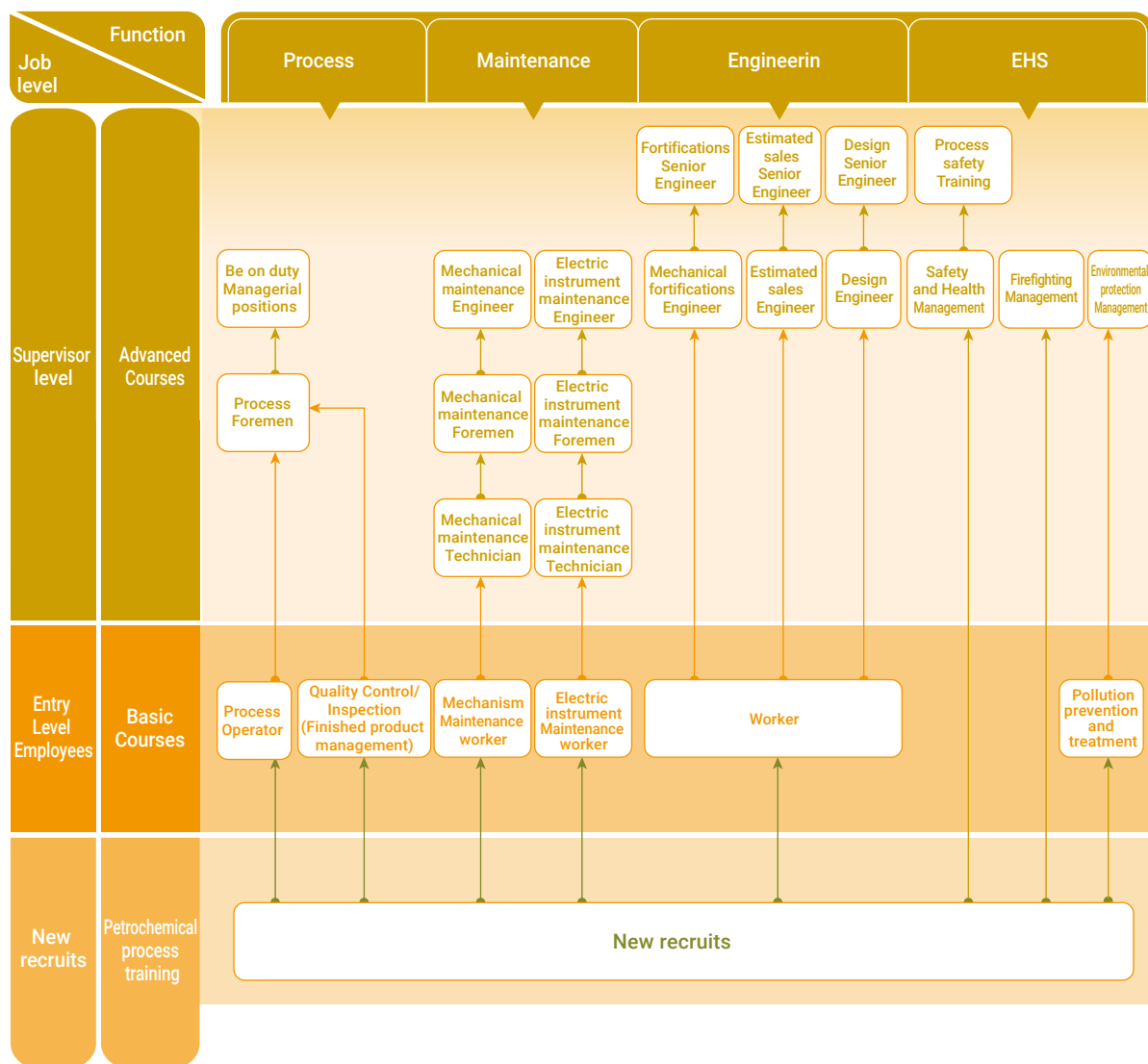
In order to implement talent cultivation, the Company has formulated "Training Management Measures" and used ERP system for computerized management. It regularly reminds the organizer to arrange training to achieve the goal of employee training and retention. In addition to the training courses, we also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

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, part time students and non-resident workforces), 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 2023, the overall average inspection ratio of each categories was 96.5% that increased 0.1% compared to last year.



Percentage of Employees Receiving Regular Performance and Career Development Evaluations from 2021 to 2023

Unit:%

Year	2021		2022		2023	
Employee Category	Male	Female	Male	Female	Male	Female
Executives	68.6	14.3	71.8	12.5	71.2	11.1
Level 1 Managers	99.5	100.0	99.5	100.0	99.7	100.0
Second Level Directors	100.0	100.0	99.9	100.0	100.0	100.0
Entry Level Managers	100.0	100.0	100.0	100.0	100.0	100.0
Entry Level Employees	97.3	79.1	97.8	81.7	97.9	81.5
Total		95.9		96.4		96.5

Note 1: The percentage of executives receiving evaluations was rather low due to the high percentage of temporary consultants.

Note 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

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 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. In 2023 employees presented job certification exam and professional job training course increased respectively 43 persons and 108 persons compared to 2022.



Statistics table of job certification exam for employees from 2021 to 2023

Year	2021		2022		2023	
Training Type	Number of people who passed	Courses with the Most Number of Participants	Number of people who passed	Courses with the Most Number of Participants	Number of people who passed	Courses with the Most Number of Participants
Job Certification Exam	805	Safety Supervisor Certification Course	850	Member of Manufacturing Operation Certification	893	Member of Textile Machine Operation Certification
Professional Job Training Course	1,533	Firefighting technical training for entry-level personnel	2,317	Safety Supervisor Certification Returning Course	2,425	Member of Petrochemical Operation Certification

In 2023, each employee received an average of 37.1 hours of training which were 21.5 hours for senior managers, 48.9 hours for entry level managers, and 39.4 hours for entry level employees. The training projects completed ratio was 99% in 2023, the same as that in 2022.

Statistic table of cross-functional training for supervisor positions from 2021 to 2023

Year	2021		2022		2023	
Type of Manager	Number of Participants	Training Hours	Number of Participants	Training Hours	Number of Participants	Training Hours
Middle to Senior Managers	167	571	13	65	109	394

Overview of Employee Training from 2021 to 2023

Unit: hour

Year	2021		2022		2023	
Rank	Male	Female	Male	Female	Male	Female
Middle to senior level Managerial positions	16.0	5.3	21.2	3.1	21.9	12.2
Entry level Managerial positions	37.6	9.9	59.0	23.7	50.5	27.4
Entry level Personnel	37.9	19.2	49.3	17.3	45.6	15.8
Average training hours per person	31.9	17.4	44.0	17.0	40.3	16.9

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

Training Completion Rate of the Company from 2021 to 2023

Year	2021	2022	2023
Training completion rate (%)	99.6%	99.1%	99.0%

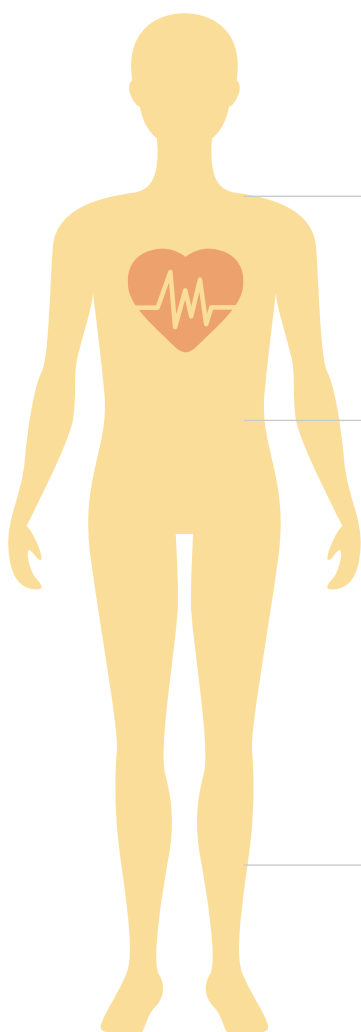
Note: The completion rate refers to the ratio of completed training courses which should be completed in the year.

4.4 Healthy and Safe Working Environment

4.4.1 Employee Health Management GRI403-3 GRI403-6

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 2023, we held 38 health seminars with 1,282 participants. To enhance on-site emergency response capabilities, the Company has gradually increased the number of automated external defibrillators (AEDs) to 76 units. These devices have successfully saved two lives of employee and contractor.

The various health management activities are as follows:



Regular employee health examinations

- Regular health examination frequency exceeds regulatory requirements
- Conduct general and specialized health examinations for production operators



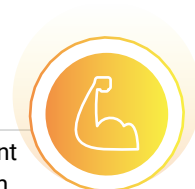
i-Care Health Station

- Case health guidance was implemented **55** people in 2023.
- A total of **59** drills for preventing summer heat hazards and providing first aid were conducted. A total of **45** sessions were conducted to promote the prevention of cardiovascular diseases during the winter.
- The Auditory Fit Testing System was introduced, and a total of **1,141** individuals were tested in 2023.



Comprehensive CPR and AED training for all personnel

- Promote training for all personnel across different factory sites, aiming for a training rate of **98%** in 2023.
- In 2023, the QCPR intelligent Anne training will be introduced to replace subjective assessment results with objective scores.

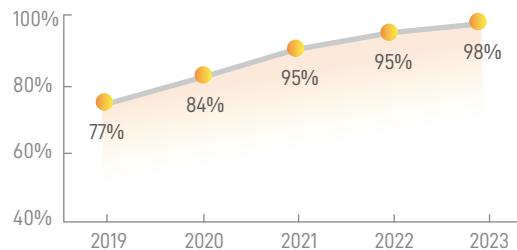


► i-Care Health Care Station



▲ Experiencing Q CPR intelligent Anne training

Chart of AED+CPR training ratio for all employees from 2019 to 2023



The Company's achievements in promoting CPR/AED have been acknowledged by the Chiayi County Fire Bureau. We have also been invited to conduct three sessions of "AED+CPR Promotion Experience" sharing to support Chiayi County in promoting emergency rescue education. This initiative will help small and medium-sized enterprises understand the real effectiveness of AED+CPR equipment and encourage more individuals to learn how to use them, ultimately saving more lives.



◀ Support AED+CPR experiences sharing to small and medium-sized enterprises

4.4.2 Promoting a Healthy Workplace in Cooperation with Government Agencies

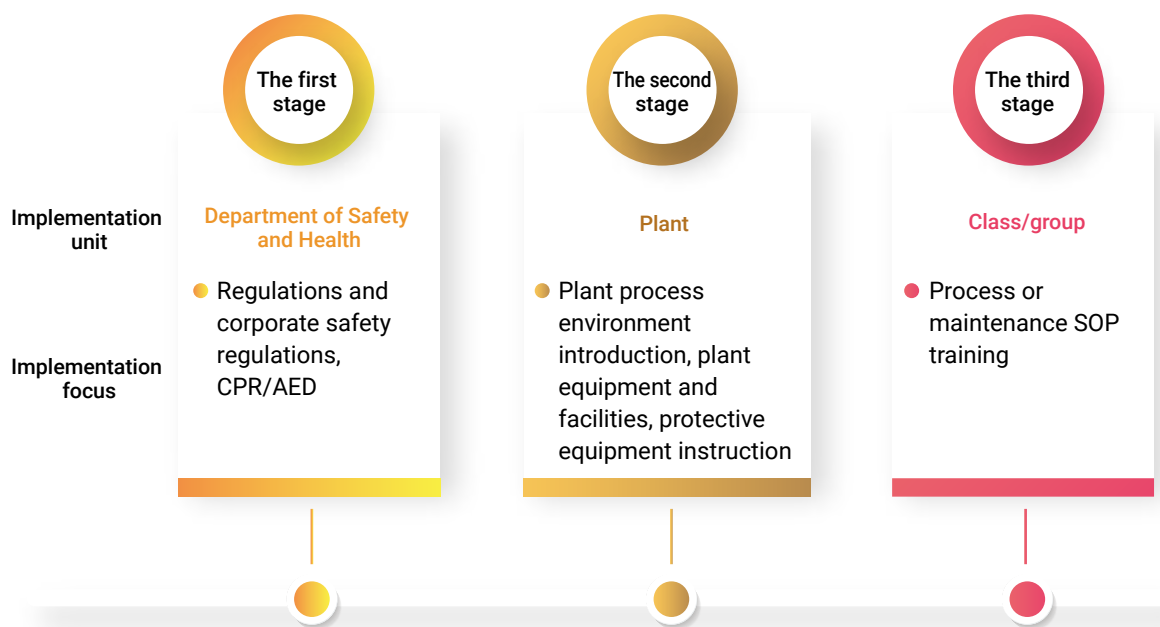
The Company maintains a friendly and healthy workplace, fostering a conducive working environment. It has been recognized by the Ministry of Health and Welfare for three consecutive years, receiving the "Annual Excellent Healthy Workplace - Health Management Award" in 2021, and the "Annual Excellent Healthy Workplace - Healthy Silver Age Award" in 2022. In 2023, it was honored with the "Annual Excellent Healthy Workplace - Comprehensive Health Award".



◀ Share working experiences in Occupational Safety and Health Seminar

4.4.3 Workplace Safety Management GRI403-1 GRI403-4 GRI403-7 GRI403-8

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. In addition, the Company periodically compiles accidents cases to stipulate "Safety and Health Bulletins" which are announced through the company's OA system to promote the consciousness. The total periodicals were 58 with total 536 notices. Parallel improvements had been implemented for external accidents and 6 accident investigations were implemented in 2023.



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. Furthermore, colleagues may suspend operations and leave the working place if they encountered hazardous factors, and report to supervisors for assistance in handling or through employees appealing channels.



Plant	Number of Occupational Safety and Health Committee Members	Number of Labor Representatives	The proportion of labor representatives (%)
Mailiao Plant	10	6	60.0
Xingang Plant	32	11	34.3
Changhua Plant	8	3	37.5
Longde Plant	24	12	50.0
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 has been invited to share its practices for promoting a healthy workplace at the Workplace Promotion Press Conference during the 2023 “Occupational Safety and Health Seminar”. The Xingang Plant has received the “Excellent Occupational Safety and Health Unit” award for three consecutive years, from 2021 to 2023. In 2023, it was also recognized with the prestigious “Excellent Occupational Safety and Health Unit - Five-Star Award” by the Ministry of Labor. Mailiao Plant was awarded the “Excellent Occupational Safety and Health Unit” by the Ministry of Labor in 2023.

The Company also follows the Occupational Safety and Health Act to promote various initiatives to reduce injuries caused by employees violating SOPs or engaging in unsafe work behaviors. Each unit should review the SOP/JSA at least once a month as a team and develop various management measures. For initial, emergency, and non-planned construction, the Company’s relevant departments and contractors collaborate to review construction methods and develop preventive measures for potential environmental or equipment hazards. We establish Standard Operating Procedures (SOP) and Job Safety Analysis (JSA). As of 2023, seven construction project reviews have been completed.



▲ Xingang Plant awarded the “Excellent Occupational Safety and Health Unit - Five-Star Award”



▲ Mailiao Plant awarded the “Excellent Occupational Safety and Health Unit”

▶ 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 171 people have received "production process safety evaluation" certification.

▶ 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.

▶ 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.

▶ 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 142 times in 2023.

4.4.4 Statistics of Occupational Injuries GRI2-27 GRI403-2 GRI403-9 GRI403-10

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 2023, no major occupational accidents resulted in more than six months of lost workdays. The overall injury index, with an average value of 0.07, slightly increased compared to the average of last three year with 0.05, but remained lower than chemical raw materials manufacturing industry's average of 0.87 (note). When comparing the Company with the chemical raw materials manufacturing industry, our last three years' occupational safety and health performance has been lower than the average value announced by the Ministry of Labor. The primary cause of occupational accidents in 2023 was the staff's failure to comply with Standard Operating Procedures (SOPs). In order to promote safety awareness, a total of nine educational training sessions were conducted in 2023, with a combined participation of 605 individuals. We will continue to enhance safety education and emphasize the work safety regulations that personnel must adhere to. The statistics for various occupational injuries are presented in the following table.

Occupational Injuries from 2021 to 2023 (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
2023	0.34	0	15	0	0.07	0	0.41	0.41	0	0

Note 1: Industry information comes from the 2021-2023 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*1,000,000/total working hours

Occupational Injuries from 2021 to 2023

Year	Disabling Injury Rate	Disabling Injury Severity Rate	Frequency-severity indicator	Absence Rate	Occupational Disease Rate	Working Hours (Thousand)
2021	0.20	4	0.03	0.30	0	9,831,620
2022	0.30	11	0.05	0.38	0	9,820,333
2023	0.30	13	0.06	0.41	0	9,739,456

Note 1: Working hours equal to number of employees times working days in a given year times eight hours and then plus overtime hours minus 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*1,000,000/total working hours

Note 4: Disabling injury severity rate: Number of days lost due to disabling injuries*1,000,000/total working hours

Statistics of Contractors Injury from 2021 to 2023

Year	Disabling Injury Rate	Disabling Severity Rate	Working Hours (Thousand)
2021	0.09	1	10,152,615
2022	0	0	10,437,485
2023	0.49	60	12,199,371

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*1,000,000/total working hours

Note 3: Disabling injury severity rate: Number of days lost due to disabling injuries*1,000,000/total working hours

Note 4: Working hours equal to number of contractors during the reporting period times 250 working days times 8 hours

Abnormal Incidents and Occupational Injuries at Each Plant from 2021 to 2023

Plant Site	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description
2021					
Taipei	0	0	0	0	-
Longde	0	0	1	1	Spilling
Changhua	0	0	0	0	-
Mailiao	0	0	2	2	Bruise
Xingang	0	0	0	0	-
Total	0	0	3	3	-
2022					
Taipei	0	0	0	0	-
Longde	0	0	0	0	Jammed
Changhua	0	0	1	1	-
Mailiao	0	0	0	0	-
Xingang	0	0	1	1	Burn
Total	0	0	2	2	-
2023					
Taipei	0	0	1	1	Falling
Longde	0	0	2	2	Spilling, Falling
Changhua	0	0	1	1	Electric shock
Mailiao	0	0	3	3	Falling, Crashing
Xingang	0	0	1	1	Burn
Total	0	0	8	8	-

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.

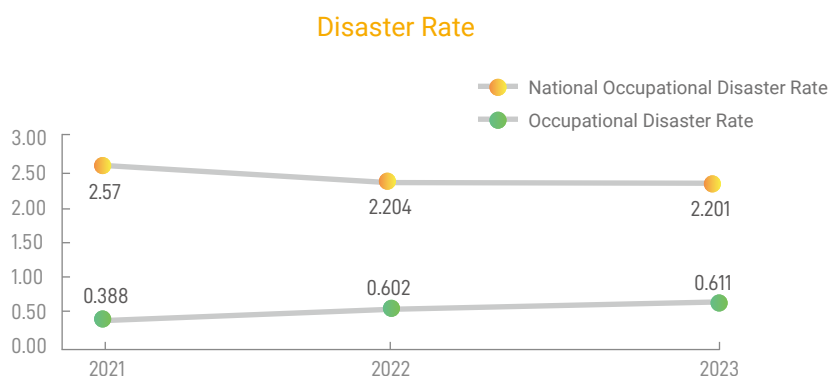
Note 3: Total occupational hazards were 2 with fine NT\$160 thousand dollars in 2022.

Note 4: Total occupational hazards were 8 with fine NT\$610 thousand dollars in 2023.

► Overview of Occupational Disasters

Occupational Disasters Rate (Persons per thousand) from 2021 to 2023

Item	2021	2022	2023
Number of Occupational Disabilities	2	2	3
Occupational Disaster Rate (Persons per Thousand)	0.388	0.602	0.611
Number of Occupational Fatalities	0	0	0
Number of Major Occupational Disasters (Contractors)	0	0	0
Number of Occupational Fatalities (Contractors)	0	0	0
National Occupational Disaster Rate (Persons per Thousand)	2.570	2.204	2.201



4.4.5 Contractor and Supplier Management GRI403-5 GRI403-6

GRI403-7 GRI403-8 GRI403-9

► Construction Safety Management for Contractors

In addition to complying with the Occupational Safety and Health Act, the contractor must also adhere to the Company's construction safety regulations to ensure the safety of construction personnel. Before commencing construction, it is important to convene a meeting with the contractor to provide an overview of the work environment and to explain the safety precautions that need to be followed on the day of construction. When faced with issues during construction, the supervisor, contractor, and equipment department come together to conduct a collaborative review and implement improvements. After the construction, 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. The management of equipment parking inspections is divided into three stages.

◆ 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.

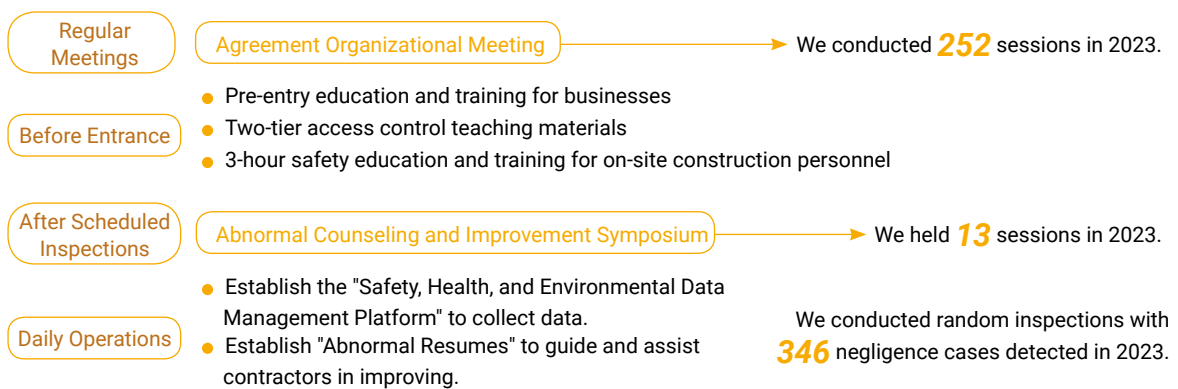
◆ During the scheduled inspection

- 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 3 meeting sessions in 2023.
- 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



► 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 319 spot checks in 2023 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. After screening and analysis, 55 high-risk cases were identified, the healthcare management staff reached out to each individual through telephone consultations to provide personalized health guidance.

Contractor Transportation Safety Management

Annual Evaluation

- ◆ Promote participation in the Safety & Quality Assessment System (SQAS) for transportation safety assessment.

A total of **4** companies passed the assessment in 2023.

Daily Operations

- ◆ Transport Vehicle GPS Monitoring
- ◆ Recorded video footage of driving twice / Random inspection by the dealership
- ◆ SWAT Inspection of Each Carrier Driver
- ◆ Regular Evaluation of Routes for Transporting Hazardous Materials
- ◆ Transportation Department Hazardous Materials Transportation Personnel Training
- ◆ Daily Inspection of the Top Ten High-Risk Loading and Unloading Areas

Because of against the Company's transportation safety regulations, the total penalty was NT\$ **634,000**, and there were no personnel casualties in 2023.



The value of social mutual prosperity

5.1 Community Engagement	118
5.2 Feedback to Society	125

5

Vision

Adhering to the business philosophy of “take from society and give back to society,” we actively participate in various charitable activities for the elderly and children, as well as support the sustainable development of the ecological environment. Our goal is to coexist and prosper with society, and to achieve the vision of social prosperity and sustainable development in ecological balance.



Policy and Commitment

The Company and its affiliates have collectively established multiple public cultural foundations, which provide ongoing support for the preservation of traditional culture and actively participate in promoting local environmental education. Our goal is to give back to society and contribute to its prosperous development.



5.1 Community Engagement



Maternal, Child, Adolescent, Adult, and Elderly Health Promotion Program

- Increase the rate of a balanced diet
- Increase the rate of regular exercise
- Increase the rate of stress relief
- Reduce the rate of tobacco, alcohol, and betel nut use
- Reduce the rate of obesity
- Improve the Living Standard

- Promotion of environmental and ecological education
- Contribution to communities



Changhua Plant

- Caring for residents' health
- Improvement in residents' quality of life
- Promotion of environmental and ecological education
- Promotion of local industries
- Contribution to communities

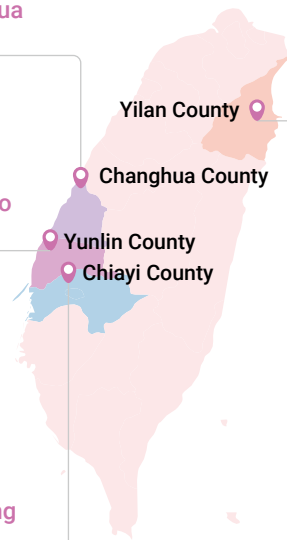


Mailiao Plant

- Contribution to communities



Xingang Plant



Yilan Plant



- Development of Formosa LOHAS Community
- Community Volunteers Activities

Longde Plant

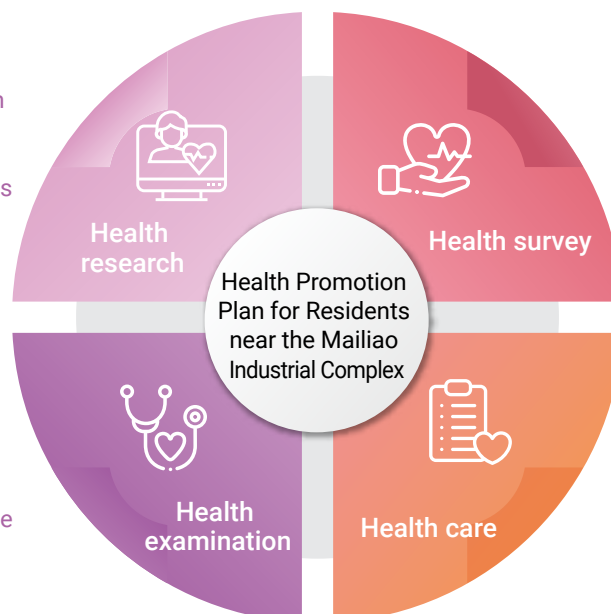


- Contribution to communities

5.1.1 Care for Community Residents' Health

The Company has been promoting 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.

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



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

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

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

► 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 age between 2 and 6 in neighboring communities to have a safe growth space.



▲ Fieldtrips for local culture

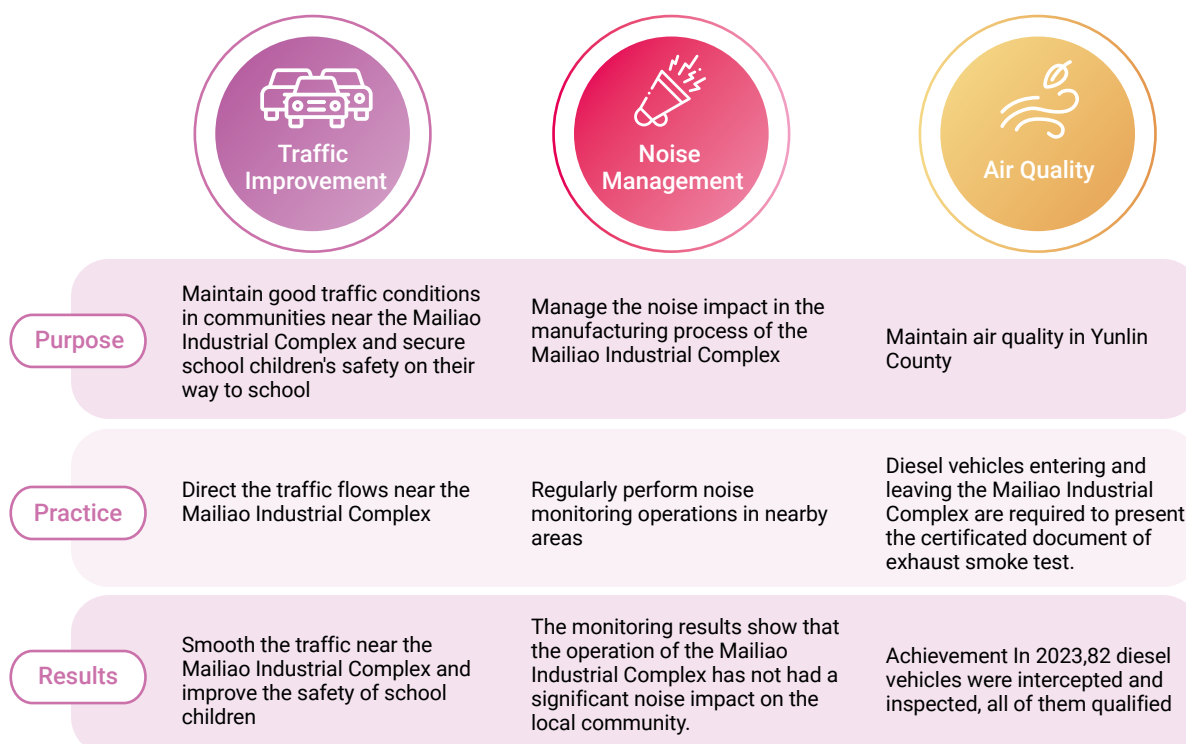


▲ Earthquake rehearsal

5.1.2 Enhancement of the quality of life of community residents

GRI413-2

For the vision and promotion plans of health cares for the nearby communities and neighbors, the Company has applied improvement plans for traffic jams and noises produced by the plants, and others, such as air quality improvement schedules, are all under ongoing and inspected. 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 last three years are indicated below:



Inspection vehicles results in Mailiao plant site from 2021 to 2023

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%
2023	2,470	212	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.

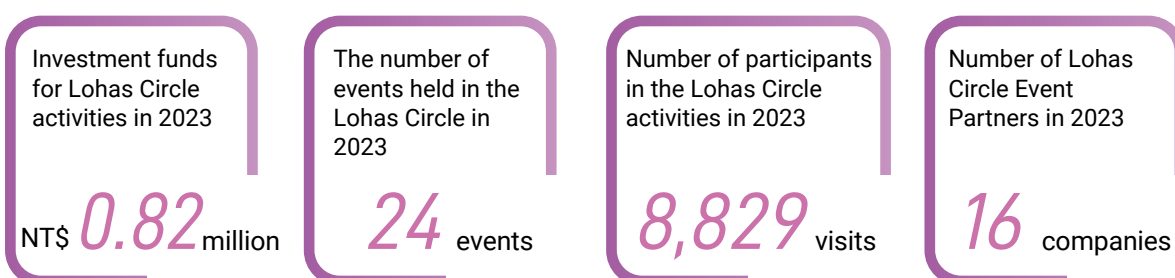
Note 2: Number of intercepted vehicles refers to the number of diesel vehicles intercepted in the roadside by the Environmental Protection Administration of Yunlin Province.

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.

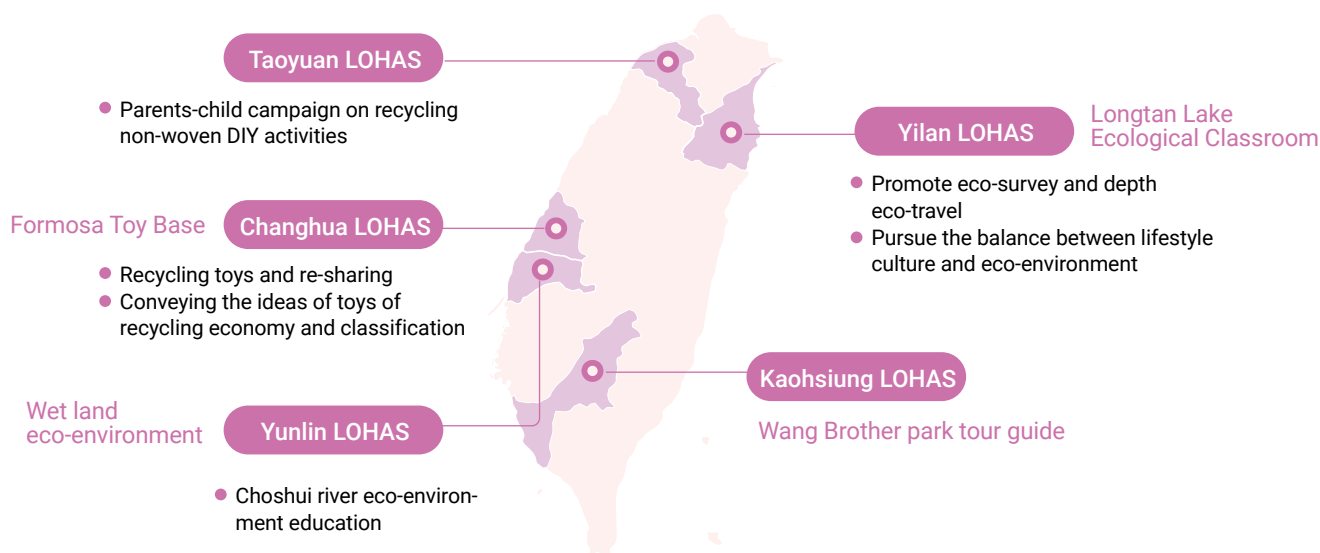
Note 4: Number of qualified vehicles refers to the number of diesel vehicles inspected and meeting the statutory requirements for exhaust smoke and opacity.

5.1.3 Formosa LOHAS Circle

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 2023



► Formosa Ocean Guardian

Formosa Plastics Group has generously donated a new ship called “Formosa Ocean Guardian” to Liuqiu Ocean Volunteers. This ship will be used for marine cleanup operations, such as removing marine waste and abandoned fishing nets. Additionally, it will be utilized for emergency rescue missions and canoeing protection activities at sea. In 2023, the total number of participants exceeded 190, and a net accumulation of 23 baskets of marine waste was collected.



◀ Ceremony for the donation of the new ship “Formosa Ocean Guardian” to promote environmental protection concepts.



▲ “Formosa Ocean Guardians” conduct marine conservation missions by taking Liuqiu Ocean Volunteers out to sea.



► Yilan Lohas Circle - Longtan Lake Ecological Classroom

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 *Mikania micrantha* and help promote the conservation of the fish through environmental education with a total of 703 visits in the activities in 2023, and as of 2023, there were more 3000 visits.



▲ In collaboration with the Yilan Branch of the Forestry and Nature Conservation Agency, we organized an event - "Mikania Micrantha National Prevention Day".



In collaboration with the Yilan Branch of the Forestry and Nature Conservation Agency, we organized an event to raise awareness about the dangers of and prevention measures for the Mikania Micrantha National Prevention Day. The event was attended by 186 participants, and a total of 274 kilograms of mikania micrantha were removed.



◀ Collaborating with the Longtan Community Development Association to restore the ecological habitat of Longtan Lake.

► Changhua LOHAS Circle–Formosa Toy Base

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 2023, the center has recycled 42,802kg of used toys and has shared the toys with 284 social welfare organizations and disadvantaged family, allowing more children to share this joy and enrich their childhoods. The Toy Base has also developed a comprehensive and inclusive toy curriculum, which includes courses on toy disassembly and reassembly for children. Additionally, they promote the idea of healthy living through healthcare initiatives and provide educational information for the elderly.



By the end of 2023, a total of **30** sessions had been conducted, with **1,536** participants in attendance.



- ◆ This year, we partnered with the Fulbright Taiwan, Foundation for Scholarly Exchange to organize a unique initiative. We brought together foreign students and children to dismantle toys and learn about plastic material classification. Additionally, the foreign students used word cards and picture cards to teach the children English.



By the end of 2023, a total of **6** sessions had been conducted, with **240** participants in attendance.



- ◆ Integrating health care initiatives, educational information is disseminated using toys to lead elderly individuals in group strength games. Participants use hand-held hoops to stretch upwards, leftwards, rightwards, and downwards, enhancing focus, muscular endurance, and social engagement.

► Changhua LOHAS Circle - Free Buzzard in Mt. Bagua Eagle Appreciation

“2023 Free Buzzard in Mt. Bagua Eagle Appreciation” is celebrating its 30 years in 2023. The Company actively participates in this bird-watching event, which is co-hosted by the Changhua County Government, Nantou Branch of the Forestry and Nature Conservation Agency, Tri-mountain National Scenic Area, Tourism Administration, MOTC. The event is hosted by the Wild Bird Society of Changhua Office. Thank you for assisting in organizing the eagle-watching event and the Company received a Certificate of Appreciation.

Free Buzzard in Mt. Bagua Eagle Appreciation ►



▲ Explanation at Free Buzzard in Mt. Bagua Eagle Appreciation

5.2 Social feedback SDG 14.2 GRI203-1

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\$104.23 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.

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:



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.





Activity

20 events of beach
cleaning

20 assistances

20 seminar
assistances

Performance 2023 volunteer services

total **600** participants

480 hours



► Blood donation
volunteers



▲ Changhua county Volunteer street sweeping service





▲ Changhua county Free Buzzard in Mt. Bagua Eagle Appreciation



▲ Chiayi county Parent-child mountain cleaning activity



▲ Yilan county Apple Theater Performance



▲ Chiayi county Ming Hwa Yuan and Cultural Group Pperformance



Appendix

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I. Global sustainability report disclosure index comparison table

Announcement	FCFC follows GRI Standards to report correspondent contents in 2023.
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 report 1.2.1	
	2-2 Entities included in the organization's sustainability reporting	About the report 1.2.1	
	2-3 Reporting period, frequency and contact point	About the report	
	2-4 Restatements of information	3.3.1	
	2-5 External assurance	About the report	
Activities and workers	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 governance ⁴ 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	2.1.1	
	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	

GRI 2 : General disclosures 2021				
Disclosure item		Description	Referenced Section	Remark
Governance	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	
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	2.7.2	
	2-27	Compliance with laws and regulations	3.1.2 、 4.4.4 4.1	
	2-28	Membership associations	2.4	
Stakeholder engagement	2-29	Approach to stakeholder engagement	1.4	
	2-30	Collective bargaining agreements	4.1.1	

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%
	205-3	Confirmed incidents of corruption and actions taken	2.1.4	
Operational Finance Performance				
GRI 3 : Material topics 2021	3-3	Management of material topics	2.1.5	

Material topics				
Disclosure item		Description	Referenced Section	Remark
GRI 201 : Economic performance 2016	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	4.2.1	
GRI 204 : Procurement Practices 2016	204-1	Disclosure for procurement ratio form local suppliers	2.7.1	
Operational Risk Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	2.2	
GRI 201 : Economic performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	3.2.2	
Sustainable Investment				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.1.4	
Greenhouse Gas Emission				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.3.3	
GRI 305 : Emissions 2016 (Indicator of topic standard)	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	
Energy Management				
GRI 3 : Material topic 2021	3-3	Management of material topics	3.3	
GRI 302 : Energy 2016 (Indicator of topic standard)	302-1	Energy consumption within the organization	3.3.3	
	302-3	Energy intensity	3.3.3	
	302-4	Reduction of energy consumption	3.3.2	

Material topics					
Disclosure item		Description		Referenced Section	Remark
Water Resource Management					
GRI 3 : Material topic 2021	3-3	Management of material topics		3.4	
GRI 303 : Water and effluents water 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	
GRI 304 : Biodiversity 2016	304-1	Operating site, leasehold, procession hold by organization, or nearby wild conservation, or valuable areas with variety species		3.4.3	
Air Quality Management					
GRI 3 : Material topic 2021	3-3	Management of material topics		3.5	
GRI 305 : Emission 2016	305-7	NOx 、SOx and other significant air emissions		3.5.1	
GRI 306 : Waste 2020 (Indicator of topic standard)	306-2	Management of significant waste-related impacts		3.6.1 、3.5.1	
	306-3	Waste generated		3.5.1	
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	
Occupational Health and Safety					
GRI 3 : Material topic 2021	3-3	Management of material topics		4.4 4.4.3	

Material topics			
Disclosure item	Description	Referenced Section	Remark
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	
	403-9 Work-related injuries	4.4.4	
	403-10 Work-related ill health	4.4.4	

II. 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 2023.

Disclosure Theme	Greenhouse Gas Emissions				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2023	
	Scope 1 total emissions (unit: tons CO ₂ e)	5,398,217	4,698,681	5,143,026	
RT-CH-110a.1	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".			3.3 Greenhouse Gas Emissions and Energy Management
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	Greenhouse Gas Emissions				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2023	
RT-CH-120a.1	NOx (unit: metric tons)	1,645.26	1,573.52	1,539.01	3.5 Air Quality Management
	SOx (unit: metric tons)	429.86	343.44	322.59	
	Volatile Organic Compounds (VOC) (unit: metric tons)	652.21	605.52	556.91	
	Hazardous Air Pollutants (HAPs) (unit: metric tons)	116.90	86.82	109.30	

Disclosure Theme	Energy Management																
Index code	Disclosure index	Corresponding disclosure			Disclosure index												
		2021	2022	2023													
RT-CH-130a.1	Total energy consumption (unit: Giga Joule)	92,070,413	82,137,006	84,778,240	3.3 Greenhouse Gas Emissions and energy management												
	Percentage of power usage from the grid (unit: %)	64.2	73.0	66.9													
	Percentage of renewable power usage (unit: %)	0.0636	0.1382	0.5488													
	Total energy of self-generation by FCFC (unit: GJ)	9,588,974	7,944,198	9,811,246													
Disclosure Theme	Water Management																
Index code	Disclosure index	Corresponding disclosure			Disclosure index												
		2021	2022	2023													
RT-CH-140a.1	Total amount of water acquired (unit: 1000m ³)	32,348.6	28,188.4	25,781.2	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: 1000m3)	17,684.6	14,468.7	12,426.1													
	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(unit: number of case)	The water pollution related environmental protection violations that occurred in 2021 to 2023 are as follows			3.4.3 Water resource discharge management												
		<table><tr><th>Violation Category \ Year</th><th>2021</th><th>2022</th><th>2023</th></tr><tr><td>Water Pollution</td><td>0</td><td>0</td><td>1</td></tr><tr><td>Soil and groundwater</td><td>0</td><td>0</td><td>0</td></tr></table>				Violation Category \ Year	2021	2022	2023	Water Pollution	0	0	1	Soil and groundwater	0	0	0
		Violation Category \ Year	2021	2022		2023											
		Water Pollution	0	0		1											
Soil and groundwater	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				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2023	
RT-CH-150a	The total amount of hazardous waste generated (unit: metric tons)	61	73	17	3.6 Waste and Controlled Chemical Substance Management
	Recycling percentage of hazardous waste (unit: %)	0	0	0	

Disclosure Theme	Community Relations			
Index code	Disclosure index	Corresponding disclosure		Disclosure index
RT-CH-210a.1	Discussion and integration process for managing risks and opportunities associated with community benefits	Community relations teams regularly participate in village or communal gatherings and visit nearby residents to discuss ideas for community development. Caring for residents' health, providing nearby residents with health check-ups. Establish an emergency mobile and village broadcast notification system to deliver information in real-time.		5.2 Community Feedback

Disclosure Theme	Workforce Health & Safety				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2021	
RT-CH-320a.1	Recordable injury rate (TRIR) and fatality rate of direct and contracted employees	Injury Rate	0.04	0.61	4.4 Workforce Health & Safety
		Fatality Rate	0	0	
RT-CH-320a.2	Measures to assess, monitor, and reduce long-term health risks for contractors and employees exposure.	Testing is conducted every six months to assess the potential chemical or physical hazards in the work environment and their impact on personnel. Operators undergo an annual special health examination. If additional observation is necessary following the examination, they will collaborate with the doctor to conduct a job assessment for suitability.			

Disclosure Theme	Product Design for Use-phase Efficiency			
Index code	Disclosure index	Corresponding disclosure		Disclosure index
RT-CH-410a.1	Revenue from products that can improve resource efficiency during the usage phase	Green product sales reached NT\$85 million in 2023.		2.7.1 Green products purchase

Disclosure Theme	Safety & Environmental Stewardship of Chemicals				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2023	
RT-CH-410b.1	The product is classified as a health and environmental hazard under the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The revenue of products containing chemical substances is classified as levels 1 and 2.	46	51	55	3.6.2 Safety & Environmental stewardship of chemicals
	Percentage of products that have undergone hazard assessment	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			2.3.3 Circular economy
	Describe the strategy for developing alternative products that reduce human and/or environmental impacts	Establish manufacturing methods of a circular economy			

Disclosure Theme	Genetically Modified Organisms		
Index code	Disclosure index	Corresponding disclosure	Disclosure index
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		
Index code	Disclosure index	Corresponding disclosure	Disclosure index
RT-CH-530a.1	Explanation of the organization's stance on government regulations and/or policy proposals concerning environmental and social issues that affect the industry.	The Company formulates various operational policies for its production activities in accordance with legal regulations. These policies are then enhanced with plans that go beyond the regulatory requirements.	3.7 Management of the Legal & Regulatory Environment 4.4.4 Statistics of occupational injuries

Disclosure Theme	Operational Safety, Emergency Preparedness & Response				
Index code	Disclosure index	Corresponding disclosure			Disclosure index
		2021	2022	2023	
RT-CH-540a.1	Production Safety Incident Count (PSIC)	2	1	1	4.4 Healthy and Safe Working Environment
	Production Safety Incident Rate (PSTIR)	0.02	0.008	0.009	
	Production Safety Incident Severity Rate (PSISR)	0	0	9.363	
RT-CH-540a.2	Transportation incident (accident)	1	1	1	

III. CORPORATE GOVERNANCE EVALUATION

ESG Index Disclosure Items

Item	Indicator items	Indicator descriptions	2023 Outcome Data	Remarks
Environmental Issues				
CPDC GHG Emissions	Amount of direct (Scope 1) GHG emissions	tons CO ₂	5,143,026	
	Amount of energy indirect (Scope 2) GHG emissions	tons CO ₂	3,016,074	
	Amount of other indirect (Scope 3) GHG emissions	tons CO ₂	14,640,213	
	GHG emissions intensity	tons CO ₂ /turnover (NT\$100 millions)	3,750.52	
	Strategies, approaches and goals of GHG management	Qualitative description	Utilization of processing to reduce energy consumption, and use solar power energy and micro hydroelectric power generation to reduce GHG emissions	
Energy Management	Renewable energy usage rate	Renewable energy/total energy	0.5488%	
	Energy usage efficiency	Qualitative description	Waste heat recovery and cross-factory integration to save steam and promote efficiency	
	Renewable material use policy	Qualitative description	Continuing promote PCR plastic pellets and environmental friendly nylon filaments	

Item	Indicator items	Indicator descriptions	2023 Outcome Data	Remarks
Water	Water Consumption	Thousand tons	25,781.2	
	Water usage intensity	Amount water usage (Metric tons)/Turnover (NT\$100 millions)	11,850.9	
	Water management or reduction goals	Qualitative description	To set a goal of reducing 2% of annual water consumption	
Wastes	Amount of hazardous waste	ton	17	
	Amount of non-hazardous waste	ton	169,330	
	Total weight (hazardous plus non-hazardous)	ton	169,347	
	Hazardous waste intensity	Amount of waste (Metric tons)/Turnover (NT\$100 millions)	77.81 Metric tons per NT\$100 millions	
	Waste management or reduction goals	Qualitative description	To set a goal of reducing 1 % of annual waste amount	
Social Issues				
Human Development	Average employee salary	NTD/person	1,318,905	
	Average employee benefits	NTD/person	161,204	
	Average salary of full-time employees who are not in managerial positions	NTD/person	1,352,081	
	Median salary of full-time employees who are not in managerial positions	NTD/person	1,228,720	
	Percentage of female managers	Percentage (%)	4.87%	
	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 (%)	87	
	Ratio of continuing education for directors and supervisors that complies with the key points for continuing education	Percentage (%)	87	
Investors Engagement	Number of investor conferences held by the Company during the year	Session	2	

IV. "METHODS FOR THE PREPARATION AND APPLICATION OF CORPORATE SOCIAL RESPONSIBILITY REPORTS BY LISTED COMPANIES"

Particular Industry Disclosure Index-Plastic Industry

Item	Indicator items	Indicator category	Disclosure	Unit	Remarks
1	Total energy consumption	Quantity	84,778,240	GJ	
	Percentage of power usage from the grid	Quantity	66.9	Percentage %	
	Percentage of renewable power usage	Quantity	0.5488	Percentage %	
	Total energy of self-generation-self-use [Note1]	Quantity	59.6	GJ	
2	Total amount of water acquired	Quantity	25,781.2	1,000m³	
	Total amount of water used	Quantity	12,426.1	1,000m³	
3	The total amount of hazardous waste generated	Quantity	17	ton	
	Recycling percentage of hazardous waste	Quantity	0	Percentage %	
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	ABS	308,615	ton
			PS	311,592	
			PP	378,284	
			PC	151,072	

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.

Climate-Related Information of Listed and OTC Companies

Risks and Opportunities of Climate Change on the Company and the Company's Countermeasures		Disclosure index
1	Supervision and Governance of Climate-Related Risks and Opportunities by the Board of Directors and Management	2.1.2
2	Describe how identified climate risks and opportunities affect the business, strategy, and finances of the enterprise (short-term, medium-term, and long-term).	3.2.2
3	Describe the financial impacts of extreme weather events and transition actions.	3.2.2
4	Describe how the process of identifying, assessing, and managing climate risks is integrated into the overall risk management system.	3.2.2
5	When assessing resilience to climate change risks using scenario analysis, it is crucial to provide a clear explanation of the scenario, parameters, assumptions, analysis factors, and significant financial impacts.	3.2.2
6	If there is a transformation plan to address climate-related risks, describe its contents, including indicators and objectives used to identify and manage physical risks and transition risks.	3.2.2
7	If internal carbon pricing is used as a planning tool, the basis for determining the price should be explained.	Inapplicable
8	If climate-related targets are set, provide details on the activities covered, the scope of GHG emissions, planned timelines, annual progress towards achievement, etc. If carbon offsets or Renewable Energy Certificates (RECs) are used to meet these targets, specify the sources and quantities of carbon offsets or the number of RECs used.	3.3.1
9	Inventory and Verification of GHG	Referring following table

GHG emissions Scope 1	Total GHG emissions (Metric tons CO ₂ e)	Emission intensity (Metric tons CO ₂ e / NT\$100 millions)	Verification Institution	Remarks
Formosa INEOS Chemicals Corporation	16,204	354.88	bsi.	
Formosa FCFC Carpet Inc.	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Formosa Idemitsu Petrochemical Corporation	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Chiai Nan Industrial Co., Ltd.	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Total	16,204	354.88		

GHG emissions Scope 2	Total GHG emissions (Metric tons CO ₂ e)	Emission intensity (Metric tons CO ₂ e / NT\$100 millions)	Verification Institution	Remarks
Formosa INEOS Chemicals Corporation	119,983	2,627.75	bsi.	
Formosa FCFC Carpet Inc.	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Formosa Idemitsu Petrochemical Corporation	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Chiai Nan Industrial Co., Ltd.	Total volume of GHG emissions was less than 25 thousand metric tons in 2023.			
Total	119,983	2,627.75		

Note 1: 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 2: Calculations are based on the Global Warming Trends data from Intergovernmental Panel on Climate Change's Fourth Evaluation Report published in 2007.

Note 3: The data of the greenhouse gas inventory report comes from Formosa Plastics Group.

Note 4: 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 5: The Scope 1, Scope 2 and Scope 3 gas inventory of FCFC includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbon, perfluorocarbon, sulfur hexafluoride, and nitrogen trifluoride.

V. Independent Assurance Opinion Statement GRI2-5



INDEPENDENT ASSURANCE OPINION STATEMENT

Formosa Chemicals & Fibre Corporation 2023 Sustainability Report

The British Standards Institution is independent to Formosa Chemicals & Fibre Corporation (hereafter referred to as FCFC in this statement) and has no financial interest in the operation of FCFC other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of FCFC only for the purpose of assuring its statements relating to its sustainability report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by FCFC. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to FCFC only.

Scope

The scope of engagement agreed upon with FCFC includes the followings:

1. The assurance scope is consistent with the description of Formosa Chemicals & Fibre Corporation 2023 Sustainability Report.
2. The evaluation of the nature and extent of the FCFC's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

Opinion Statement

We conclude that the Formosa Chemicals & Fibre Corporation 2023 Sustainability Report provides a fair view of the FCFC sustainability programmes and performances during 2023. The sustainability report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the FCFC and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are fairly represented. The sustainability performance information disclosed in the report demonstrate FCFC's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that FCFC's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards were fairly stated.

Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a review of issues raised by external parties that could be relevant to FCFC's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 1 interview with staff involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness, and Impact as described in the AA1000AP (2018).

Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness, and Impact of AA1000AP (2018) and GRI Standards is set out below:

Inclusivity

This report has reflected a fact that FCFC has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the FCFC's inclusivity issues.

Materiality

FCFC publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of FCFC and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the FCFC's management and performance. In our professional opinion the report covers the FCFC's material issues.

Responsiveness

FCFC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for FCFC is developed and continually provides the opportunity to further enhance FCFC's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the FCFC's responsiveness issues.

Impact

FCFC has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. FCFC has established processes to monitor, measure, evaluate, and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the FCFC's impact issues.

GRI Sustainability Reporting Standards (GRI Standards)

FCFC provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported, or omitted. In our professional opinion the self-declaration covers the FCFC's sustainability topics.

Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

Responsibility

The sustainability report is the responsibility of the FCFC's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064, and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.



AA1000
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For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan

Statement No: SRA-TW-802833

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...making excellence a habit.™



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