

台塑企業
FORMOSA PLASTICS GROUP

2021

Formosa
Chemicals & Fibre
Corporation

Sustainability Report

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About the Report

Overview

The sustainability report of Formosa Chemicals & Fibre Corporation was written in accordance with the "GRI Standards" issued by the Global Report Initiative (GRI) in 2016, 2018, and 2020. It is expected to issue one report every year to introduce in detail the sustainable actions we are actively engaged in the economic, environmental and social fields.

Initial release date: December 2015

Release date of the previous version: June 2021

Current version release date: June 2022

Release date of the next version: June 2023

Scope and Boundary of the Report

The Report mainly refers to FCFC and its domestic subsidiaries listed in the consolidated financial statements, including Formosa Idemitsu Petrochemical Corp., Formosa BP Chemicals Corp., Formosa FCFC Carpet Co., Ltd., Chia Nan Industrial Co., Ltd., Formosa Biomedical Technology Corp., and Hong Jing Resource Co. Ltd. The data period is from January 1, 2021 to December 31, 2021.

All of the financial statements have been duly verified by our CPAs. All figures are expressed in New Taiwan Dollar (NTD) unless otherwise specified. Some of the statistics are provided by the government agencies and related websites, and expressed in either descriptive or numerical forms. Other measurements used, if any, will be specifically described in the Report.

Report Guideline

The report was prepared in accordance with the "Corporate Environmental, Social and Governance (ESG) Information Disclosure and Declaration Operations" and "Corporate Environmental, Social and Governance (ESG) Information Disclosure Application Correction and Declaration Operations" of the Taiwan Stock Exchange. The report adopted the core option of GRI standards 2016, 2018, and 2020 version 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. Other reference architectures:

- GRI Standards Sustainable Reporting Guidelines
- Task Force on Climate-related Financial Disclosures (TCFD)
- SASB (Sustainability Accounting Standards Board) standards were formulated by the SASB
- SDGs (Sustainable Development Goals, SDGs) UN Global sustainable development goals
- Corporate governance evaluation ESG index disclosure items

Third Party Verification

In order to strengthen the comparability of performance and the essentiality of the report, all information published in this report has been verified by the British Standards Institution (BSI). Verification is conducted according to AA1000 v3 assurance standards and No. 1 application type in the 2018 appendix. The BSI Independent Assurance Opinion Statement is detailed in Appendix 3. If there is an estimate, it will be indicated in each relevant chapter.

Contact Information

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

Contact person: Mr. Lin, Business Analysis Group of General Manager's Office

Address: No. 201, Dunhua N. Rd., Songshan Dist., Taipei City, Taiwan, R.O.C

Telephone: 886-2-27122211#5409

Fax: 886-2-27133229

Email: management@fcfc.com.tw

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



Sustainable Development Goals

In order to implement and pursue sustainable development, the company sets short-term and mid-long term goals and directions for sustainability commitments, and hopes to work with stakeholders to achieve sustainability commitments and create governance and environment together. A sustainable development situation with a win-win situation for society:

Target in 2021	Implementation in 2021
Economic-oriented major issues: corporate governance, operational financial performance, operational risk management, R&D innovation and AI applications	
<ul style="list-style-type: none"> › Process optimization and energy consumption reduction to improve business performance › Build a big data database of requisition materials gradually, and establish an AI-assisted analysis system for the rationality of requisition requirements › In 2021, it is expected to promote another 80 AI production projects, and purchase additional equipment forecasting modules with unlimited usage, which will be applied to rotating equipment with online monitoring functions › Formulate risk management measures and establish prevention mechanisms 	<ul style="list-style-type: none"> › After analyzing the frequency of use of the database and evaluating the data analysis program, the Company can use the self-developed inventory application to quickly respond to reasonable requisition demands and reduce the probability of leftover material. › In 2021, the Company promoted a total of 53 AI projects including process optimization, production and sales optimization, quality improvement, energy saving improvement, process safety, etc. The smart prediction software is the corporate version, which allows for unlimited usage, for equipment AI prediction use
The environment is facing major issues: climate change mitigation and adaptation, water resources utilization and management, waste management, air pollutant management, compliance with environmental laws and regulations	
<ul style="list-style-type: none"> › To reduce potential impacts from climate change, besides complying with environmental laws such as the Greenhouse Gas Reduction and Management Act in practice, internally, the Company also sets various environmental protection systems and standards that shall be adhered by relevant departments through energy-saving, carbon reduction & pollution prevention teams 	<ul style="list-style-type: none"> › Promote an internal carbon pricing mechanism within the company. NT\$100 per ton of carbon emissions will be charged and displayed in the monthly unit cost table › In addition, each unit is required to set a reduction target every year. If the reduction target is not reached, improvement measures shall be proposed, in order to facilitate the management and promotion of energy conservation and carbon reduction by senior managers
Socially-oriented major issues: employee human rights protection, employee benefits and salary, occupational health and safety, industry and public safety	
<ul style="list-style-type: none"> › Continue to promote PSM, PHA safety management and hazard analysis certification operations, improve professional skills and ensure workplace safety › Publicize the rights and interests of employees through regular works and management meetings, welfare committees and other organizations 	<ul style="list-style-type: none"> › Continue to cooperate with external experts and scholars to introduce new safety management technologies and practices, and to strengthen the intrinsic safety of the working environment through parallel investigations of accidents and improvements › Strengthen personnel safety education and training to improve safety awareness among employees › Continue to publicize the rights and interests of employees through regular works and management meetings, welfare committees and other organizations



Objects in 2022	Medium Term Objectives and Commitments (3-5 years)	Long Term Objectives and Commitments (Years above 5 years)	SDGs
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Major economic issues: Corporate governance, smart management, production efficiency and digital optimization, operational risk management, and operational financial performances

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Continuously optimize the inventory analysis program, expand the program platform, and improve user efficiency Establish a digital and energy transformation project team. The ESG Committee shall promote the optimization of management efficiency In 2022, the Company is expected to develop 105 AI projects, and promote on-site operation and digital optimizations for production/sales/performance | <ul style="list-style-type: none"> Reduce residual materials and reduce inactive inventory Continue to develop simulated plants and whole plant optimization, and upgrade to the management model of early warning, prediction and optimization | <ul style="list-style-type: none"> Material and inventory rationalization Automation of smart dynamic production scheduling Improve the performances of real-time assessments of potential operational risks |
|--|---|---|



Major environmental issues: Project sustainable development responsibility, compliance with environmental laws and regulations, energy management, climate change mitigation and adaptation, water resources utilization and management, waste management, and air pollutant management

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> GHG emissions in 2022 decreased by 2% compared to 2020 The recycling rate of industrial waste plastic PIR was 42.3% in 2021 and will be 100% in 2022 Recycling and reuse Marine waste nylon (fishing nets, oyster rope, etc.) is recycled and reused, and supplied to high-value industries to reduce environmental impact | <ul style="list-style-type: none"> The GHG emission goal for 2025 is a 10% decrease compared to 2020 Turn post-consumer plastic waste into recycled materials for sale. Recycled plastics shall account for 4.5% of hard plastic pellets sold in 2025 Nylon recycling capacity (PIR+PCR) shall account for 12% of total output starting in 2023 | <ul style="list-style-type: none"> Carbon neutral by 2050 Planning asset balance allocation, promoting energy consumption reduction, investing in green products development, and reducing carbon emissions of production processes Seek in-depth supply chain and OEM factory joint operations, establish an industrial recycling circular economy, and achieve the purpose of waste reduction |
|--|--|--|



Major social issues: Industrial and public safety, occupational health and safety, talent training programs, and factory emergency response mechanisms

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> Continue to strengthen the corrosion control team of the Company, formulate risk management measures and establish prevention mechanisms Continue to promote PSM, PHA safety management and hazard analysis certification operations, improve professional skills and ensure workplace safety Publicize the rights and interests of employees through regular works and management meetings, welfare committees and other organizations | <ul style="list-style-type: none"> Identify potential risk factors, assess risk levels, and establish risk indicators and prevention mechanisms Continue to promote employees to pass job certification Promote intrinsic safety management for the workplace, establish positive employee relations and healthy workplaces, and promote social participation and environmental sustainability goals | <ul style="list-style-type: none"> Work towards the goal of zero work-related injuries and zero accidents Continue to promote the completion of cross-functional training for high Intermediate executives and business executives and actively cultivate professional talents Promote sustainable social development based on the spirit of taking from and giving back to society |
|---|---|--|





Sustainability Highlights In 2021

Economic

- Consolidated operating revenue

NT\$365.8 billion

- Introducing circular economy

Recovered **7,479** tons of amide from aquatic products

Put into the polymerization process to produce

7,361 tons of nylon pellets

2,987 tons of recycled environmental friendly nylon pellets are produced from waste nylon filaments (blocks) through the recycling process and polymerization



The Environment



Green plant recognition

Mailiao Styrene Plant III

Management level (Management) A-

Evaluation of Climate Change Disclosure Questionnaire

Leadership level (Leadership) A

Water safety questionnaire evaluation



- Achievements of energy and water conservation improvement

NT\$1.09 billion

Amount of investment in energy conservation improvement in 2021

NT\$80 million

Amount of investment in water-saving improvement in 2021

1.22 million tons

Water savings in 2021

293,000 tons

Carbon dioxide reduction in 2021

The Environment

- Green product sales

Non-woven cotton **2,729** tons

Nylon eco-friendly

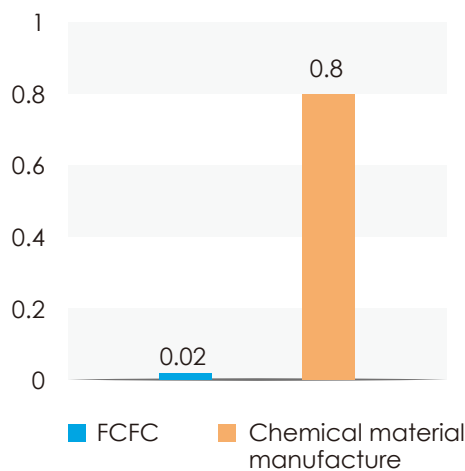
filaments **3,898** tons

eco-friendly yarn **812** tons



Social

2021 Frequency-severity indicator



Employment ratio of full-time and domestic employees



- Talent development plans

70%

Reinstatement rate of employees on maternity leave without pay in 2021

99.6%

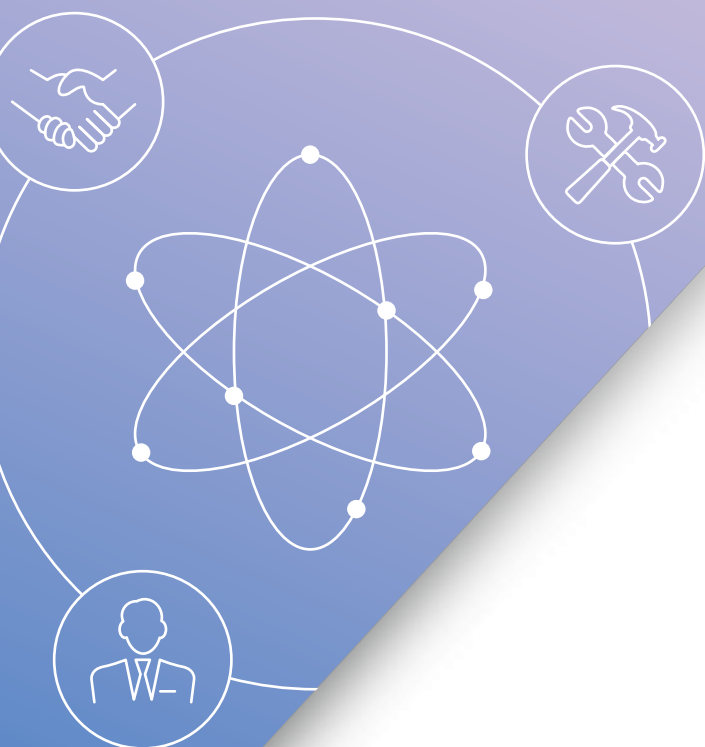
The completion rate of the training plan in 2021





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Business Philosophy



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1.1 From the Management Team

In 2021, due to natural disasters caused by the abnormal global climate, the occurrence of ice storms in America, and the floods in China have caused environmental imbalances and economic losses. This has led to social disorder and uneasy feelings among the public. The company understands these feelings. We have always fulfilled our responsibilities as a social citizen, adhering to the tenet of "taking from society and giving back to society", and fulfilling our social responsibilities, in order to achieve the goal of sustainable management. In terms of environmental protection, over the years, we have successively invested in the promotion of circular economy, the recycling of marine waste and plastic products and the use of recycled materials. We have also developed ways to reuse water resources, recycle and reuse rainwater and process water to save water. The development of green energy, expansion of solar and hydroelectric power generation equipment, plans for energy transformation, gradual increase of the proportion of clean and renewable energy power generation, and reduction in fossil energy consumption have led to reductions in greenhouse gas emissions. Among the greenhouse gases, the vast majority is carbon dioxide emissions. We are recycling and reusing the carbon dioxide. In terms of social development, we attach great importance to the social development of employees and the promotion of a people-oriented and healthy workplace. We safeguard the interests of shareholders and implement the concept of honest management, as well as strengthen the rights and interests of suppliers, to establish a stable relationship of mutual trust, coexistence, and co-prosperity. We continue to participate in public welfare activities and communities, help promote the development of local agriculture and fisheries, and expand the elderly care plan for community residents. In terms of corporate governance, in response to the need for remote work and the safety of the digital work environment during the pandemic, a digital and energy transformation project team was set up, computer equipment was updated, information security risk internal control identification items were added, and network and information security were strengthened.

Although the operation of the company faced various difficult challenges during the pandemic, the company continued to promote waste recycling and reuse. In 2021, we will cooperate with the local government of Chiayi County to recycle the discarded oyster ropes from raw oyster farming along the coast to produce recycled Nylon grains and Nylon fiber. The company recently invested in a new Nylon recycling plant in Chiayi Xingang Plant to reduce the transportation distance of waste and introduced green energy using solar power to build a consistent recycling plant. At present, the total monthly production capacity of Vietnam and Taiwan's recycled pellets is 500 tons, and the recycling output accounts for 4.2% of the total output. The production capacity is expected to reach 1,250 tons per month by the end of 2022, an increase of 150%, which will increase the recycling output and account for 7.8% of the total output. In 2021, environmental protection yarn will account for 13.8% of the total sales volume, and it is planned that the sales volume of environmental protection yarn will increase to more than 50% of the total sales volume in 2026. Since the third quarter of 2021, the recycling of failed products produced by the plastic process began, of which the recycling volume is 2,760 tons, and the recycling rate is 91%. The goal is to achieve 100% recycling by mid-2022. The recycled plastic products produced by recycling are planned to account for more than 10% of the total sales of hard rubber in Taiwan by 2026.

The Company continues to introduce automated production projects and update production equipment to provide and increase the use of green energy by improving production efficiency, reducing energy consumption and implementing management measures. The current installed solar energy equipment provides 1.5MWp, which will be extended to various factories in the future. The solar power supply equipment will be installed on the roof and idle space of each factory. It is expected to increase the supply of solar power by 7.8MWp in 2022, and reach 15.2MWp in 2025. In order to reduce greenhouse gas emissions and promote energy transformations, 13 oil boilers have been converted to use natural gas in 2021, accounting for 52% of the total, and 8 more are expected to be converted in 2022. All oil boilers are planned to be converted to use natural gas after 2025. At the same time, we plan to implement the coal



reduction plan to gradually reduce the coal consumption of power generation equipment. We expect to reduce coal consumption by more than 35% by 2030 compared to 2020. In terms of water resource use, the Company has invested in the Mailliao Eco-industrial Park seawater desalination plant, with a total investment of more than NT\$5 billion and a daily output of 100,000 tons of fresh water. During the estimated operational period, it can provide more than one-third of the water used in the Mailliao plant area. It is estimated to be complete by 2022. The water will be cleaned and diverted, and the rainwater will be recycled and reused in stages. In 2020, the rainwater recycling in the Mailliao plant will account for 8.4% of the total water consumption, and the recycled water will be reused more than 7 times. In 2021, the rainwater recycling area was expanded and recycled rainwater accounted for 8.7% of the total water consumption, and the recycled water was reused more than 10 times. It is planned to further improve the efficiency of the rainwater recycling system, gradually increasing the amount of recycled rainwater to more than 10% of the total water consumption.

The company continues to participate in social welfare activities and is committed to the harmonious and balanced development of the society. We have established good-neighborly groups in each factory area as a bridge for community care, environmental protection and participation in local cultural activities, which provide assistance through the project development plans of different foundations. In 2021, the spread of the COVID-19 pandemic impacted people's livelihood, and depressed the economy. Based on the spirit of social and humanitarian care, as well as coexistence and common prosperity, the company donated NT\$100 million to the government's special funds to face the difficulties together. At the same time, people in some parts of China suffered from floods and property damage. Based on the spirit of mutual aid and caring for "people who are hungry and others who are drowning", we also donated RMB 50 million for disaster relief. As of 2021, nearly NT\$76.4 billion has been invested in education, medical care, social welfare and other social public welfare undertakings, continuously helping people in need of help in society. In 2022, we plan to expand cooperation with public welfare groups to provide meal delivery services for the elderly living alone, and provide regular care and assistance.

The company has cooperated with relevant units of the Yilan County Government to invest in the long-term maintenance of the ecological environment of Longtan Lake and round-nosed catfish in the lake, and established an ecological classroom to assist in the promotion of environmental conservation education and information. The total number of participants in 2021 reached 487. Since 2020, we have cooperated with the Taiwan Toy Library Association to set up a toy recycling and sharing base in the Changhua plant. By the end of 2021, a total of 8,665 kilograms of second-hand toys have been recycled. After sorting, they were shared with other community groups. In addition to simply sharing joy, It also allows the concept of circular economy to be implemented in life.

The company continues to adhere to the business philosophy of "taking from society and giving back to society". We will continue to implement various operations for sustainable development issues such as corporate operation, environmental protection and social participation, so as to achieve zero workplace injuries, zero accidents, zero pollution and the goal of zero emission, and in line with the international sustainable development trend, work together to build a friendly environment.

Formosa Chemicals & Fibre Corporation
Chairman Fu-Yuan Hung
Year 2022



1.2 About FCFC

1.2.1 Company Overview



Location of the head office	Changhua County, Taiwan
Year Founded	1965
Consolidated turnover in 2021	NT\$365.8 billion
Number of regular employee in Taiwan in 2021	4,948 people
Industry	Petrochemical, plastics, fiber, textile, and cogeneration

The company's main production bases are in Taiwan, the mainland and Vietnam, and its sales and services are spread across all continents. The domestic and mainland markets account for the highest sales, followed by Southeast Asian countries. For a detailed overview of the financial situation and production and sales, please refer to the section V of "2021 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 Vision

FPG's Business Philosophy

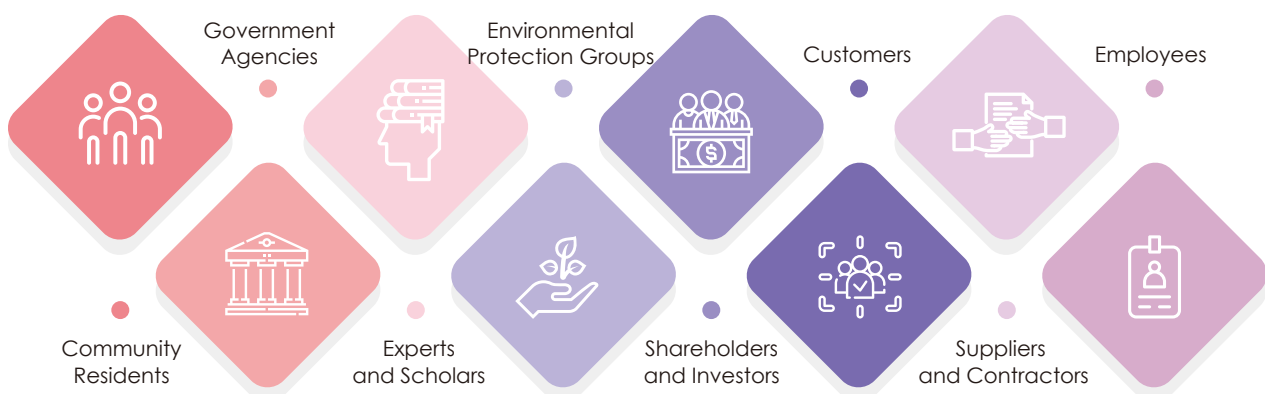


1.4 Stakeholder Identification and Communication

1.4.1 Stakeholder Identification Process

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

FCFC Stakeholders





1.4.2 Stakeholder Communication Channels and Frequency

All units of the Company have established multiple and smooth communication channels with stakeholders. Through various effective communication channels, we can fully understand the ideas and needs of stakeholders, and obtain the issues of concern and feedback from stakeholders. The company provides a communication channel through email, and all issues reported are assigned to dedicated personnel, and each person in charge will report the processing results according to the internal approval authority. The communication with key stakeholders in 2021 is as follows:

The importance of stakeholders to FCFC	Frequency and Methods of Communication	2021 Negotiation results and performance	Topics of Concern
Residents in Operating Areas As community friendliness has been an important subject for our business operation, we consider local residents while establishing our annual business strategies and objectives.	Occasionally, at least 3 times/year 1. Community relations teams regularly participate in village or communal gatherings and visits nearby residents. 2. Organize various seminars or conferences 3. Designated "Good Neighbor" 24-hour hotline for residents to provide opinions on environmental protection issues 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw	◆ Providing emergency salvation for 11 people of the plant neighbors ◆ Caring for a total of 265 elderly people living alone at the end of the year ◆ Participated in the community residents' conference to understand the opinions of residents for 5 times	> Occupational Health and Safety > Waste Management > Operating & Financial Performance > Operational risk management
Government Sectors In addition to following related laws and regulations, FCFC also communicates with government sectors to promote sustainable business operation.	Occasionally, at least 4 times/year 1. Participate in public hearings and briefings on laws and regulations held by the competent authority, and communicate with the business promotion situation 2. Respond to government for review and amendment through various industry associations to protect the rights and interest of the industries 3. Explain the implementation status of the Sixth Cracker Industry of Mailliao Industrial Complex related plans and EIA commitments in the Sixth Cracker Industry EIA Supervision Committee every quarter 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw	◆ Designate business personnel to participate in the legal briefings organized by the Financial Management Committee, etc., and relay them to the employees after the meeting. ◆ Explain the impact of exchange rate rise and depreciation on the industry through the associations and safeguard the development of the industry	> Corporate Governance > Air Pollutants Management > Operating & Financial Performance > Operational risk management > Industrial and Public Safety > Occupational Health and Safety
Experts and Scholars We continue to communicate with experts and scholars and remain committed to implementing sustainable development goals by following their recommendations regarding safety, health, and environmental sustainable topics	Occasionally, at least 3 times/year 1. Discuss and communicate environmental protection issues with external associations 2. Organize an annual conference to present outstanding improvements in energy conservation and carbon reduction or environmental protection and discuss possible refinements with professionals 3. A safety, health and environment (SHE) section has been made available on our official website to provide a communication channel for SHE issues. 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw	◆ Visit investment institutions to exchange industrial strategies to cope with climate change impacts ◆ The company website provides a place to exchange environmental ideas ◆ On November 30, 2021, the Company held the "Selection and Presentation of Excellent Environmental Improvement Cases" at National Cheng Kung University. The Company shared cases of waste fishing net recycling and waste water sludge drying and reduction	> Corporate Governance > Air Pollutants Management > Operational risk management > Occupational Health and Safety
Environmental Protection Groups We value environmental sustainability topics as much as the environmental conservation groups, and collaborate with them toward environmental sustainability through exchanging ideas and opinions.	Occasionally, at least 3 times/year 1. Appropriate explanations and communications during various meetings, and related personnel are invited to visit our plants when necessary 2. Annual conference for energy conservation and carbon reduction or outstanding improvements in energy conservation is organized and environmental conservation groups are also invited to join. 3. A safety, health and environment (SHE) section has been made available on our official website to provide a communication channel for SHE issues. 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw	◆ In response to the Chiayi County Environmental Protection Bureau, the Xingang Plant established a river patrol team in the Zhongyang Industrial Zone to implement water environmental protection, and arranged monthly cleaning and inspections of the Puzixi river bank. ◆ Mailliao, Changhua, and Longde plant sites have held circular economy tours and exhibitions, inviting social groups to share the concepts of environmental protection improvement and circular economies	> Corporate Governance > Air Pollutants Management > Waste Management > Industrial and Public Safety > Operational risk management



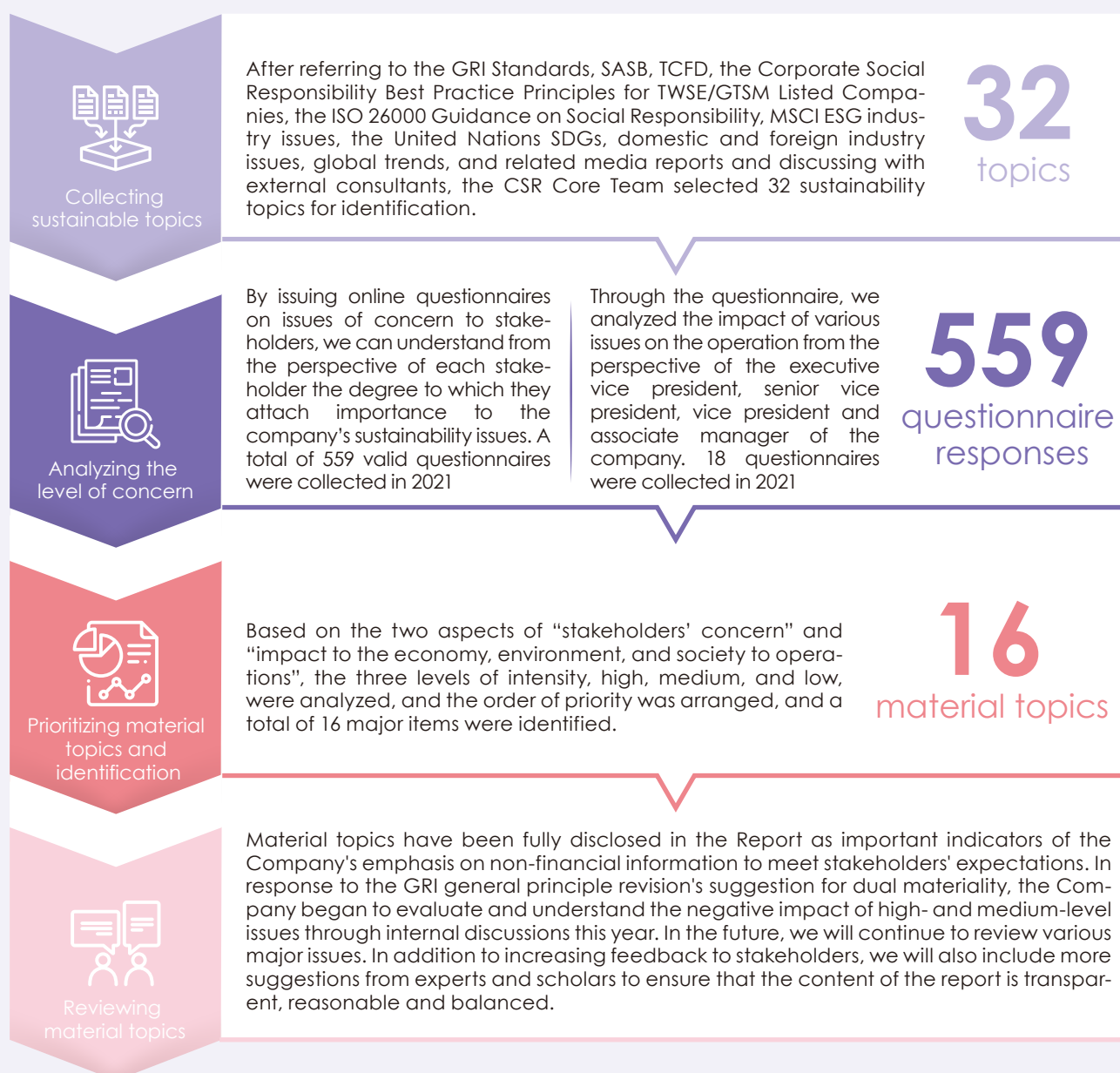
The importance of stakeholders to FCFC	Frequency and Methods of Communication	2021 Negotiation results and performance	Topics of Concern
		<ul style="list-style-type: none"> ◆ Participate in World Environment Day activities and promote environmental awareness with environmental groups ◆ The company webpage provides a place where to show the company's environmental protection implementation status and group protection concept exchange area 	
<p>Shareholders and Investors</p> <p>FCFC continues to seek long-term benefits for our shareholders and investors based on credible business operations and sustainable development.</p>	<p>Shareholders' Meeting once/year IR conference 2 sessions / year Other meetings organized occasionally at least once/year</p> <ol style="list-style-type: none"> 1. The stock affairs section of Finance Department under FPG's Group Administration is in charge of answering questions and needs from shareholders. 2. A spokesperson is appointed to serve as the contact between FCFC and institutional investors. 3. Holding IR conference to provide investors with information on company operations 4. Contact channel: Mr. Liu, President's Office Contact email: u127129@fcfc.com.tw 	<ul style="list-style-type: none"> ◆ Holding a legal person presentation meeting twice a year to report the operating results of the company ◆ Company website provides shareholders, interested parties and other contact window, with a dedicated person to reply ◆ Report the company's operating conditions from time to time 	<ul style="list-style-type: none"> ➢ Corporate Governance ➢ Operating & Financial Performance ➢ Air Pollutants Management ➢ Occupational Health and Safety ➢ Environmental Regulatory Compliance ➢ Industrial and Public Safety
<p>Customers</p> <p>Customer support is the key factor to our sustainable development, and customer feedback is the motivation behind our constant improvement; providing customers with stable and quality products is our responsibility.</p>	<p>Occasionally, at least once/year</p> <ol style="list-style-type: none"> 1. Occasional meetings or visits to customers to understand customer needs 2. "Customer Opinion and Feedback Form" and "Customer Satisfaction Survey" are used to understand customer needs and suggestions. 3. A hotline and website are set up to instantly interact and communicate with customers. 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw 	<ul style="list-style-type: none"> ◆ On average, each customer visited at least 1 time in 2021 ◆ In response to a total of 10 customer complaints concerning quality, we actively assisted customers to their satisfaction. ◆ The average customer satisfaction in 2021 is 4.5 points out of 5 points 	<ul style="list-style-type: none"> ➢ Corporate Governance ➢ Operating & Financial Performance ➢ Air Pollutants Management ➢ Innovative Development and AI Applications ➢ Operational risk management
<p>Suppliers and Contractors</p> <p>Suppliers and contractors provide stable and quality products and services and establish a credible supply chain.</p>	<p>Occasionally, at least 3 times/year</p> <ol style="list-style-type: none"> 1. FPC Electronic Trading System Customer Service Center 2. Supplier Conferences are organized. 3. E-mail addresses are provided on the main page of FPG's official website to receive and handle suppliers' and contractors' suggestions. 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw 	<ul style="list-style-type: none"> ◆ Assist supplier to answer the system operation questions ◆ One event will be held in North, Central and South each year. In 2021, it was postponed due to the COVID-19 pandemic, and it will be renewed in 2022 ◆ 4 project submissions had been accepted and handled in 2021 	<ul style="list-style-type: none"> ➢ Operating & Financial Performance ➢ Air Pollutants Management ➢ Industrial and Public Safety ➢ Occupational Health and Safety
<p>Employees</p> <p>Employees are our most valuable assets and the basis of corporate competitiveness. By providing comprehensive training and a friendly working environment, we strive to improve employees' cohesiveness.</p>	<p>Occasionally, at least 4 times/year</p> <ol style="list-style-type: none"> 1. Divisional meetings are regularly organized within the plants to interact and communicate with employees. 2. Physical and online opinion mailboxes are established and "799" hotlines are set up in each plant with designated personnel to receive responses. 3. Employees are encouraged to join the labor union or the Employee Welfare Committee to participate in regular meetings to communicate with the attendant management. 4. Contact channel: Mr. Yu, President's Office Contact email: fcfc@fcfc.com.tw 	<ul style="list-style-type: none"> ◆ Having weekly office, group, class meetings to provide communication between colleagues ◆ Convene labor-management meetings every quarter to provide employee opinions ◆ Specialized person to promptly respond to employees' opinions and feedback 	<ul style="list-style-type: none"> ➢ Corporate Governance ➢ Operating & Financial Performance ➢ Air Pollutants Management ➢ Environmental Regulatory Compliance ➢ Occupational Health and Safety ➢ Protecting Employees' Human Rights



1.5 Identification of Material Topics

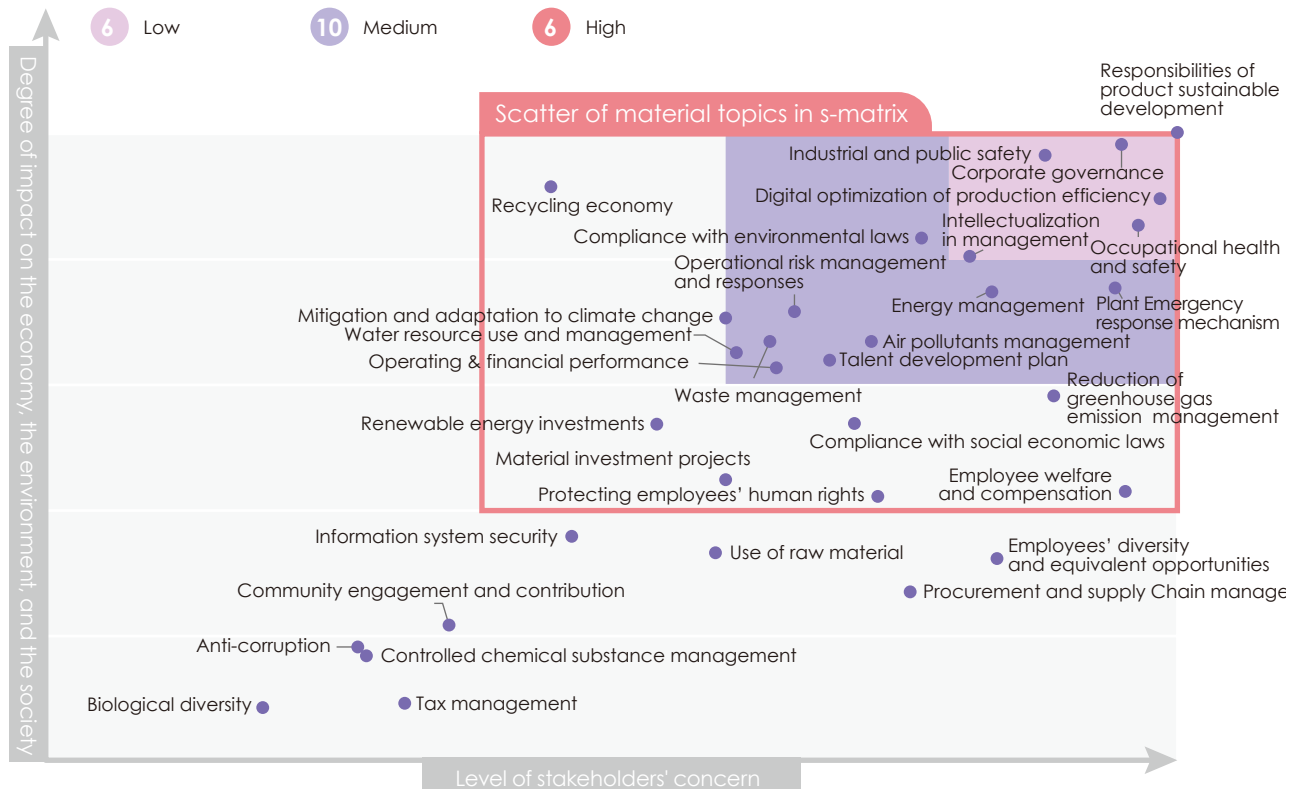
The company communicates with our 8 types of stakeholders through various communication channels, and aggregates the issues that the stakeholders are concerned about, and convenes related departments to discuss the issues that the stakeholders value, and after consensus was reached, it was used as the reference basis for the disclosure of the report. Stakeholders' concerns are reviewed by the company's general manager's office, safety and health office, accounting office, plant management office and business department representatives and members of the ESG Committee, and organized based on their experience in communicating with stakeholders, reported the main stakeholders concerns issues according to the internal decision making authorization, and discuss and decide on the subject of the report and the order of the issues in early 2021. Once the Report is completed, these issues are reviewed by the President and the Chairman to ensure their consistence with the stakeholders' needs.

1.5.1 Procedures for Identifying Material Topics





1.5.2 Prioritizing Material Topics



1.5.3 Description of changes in major topics

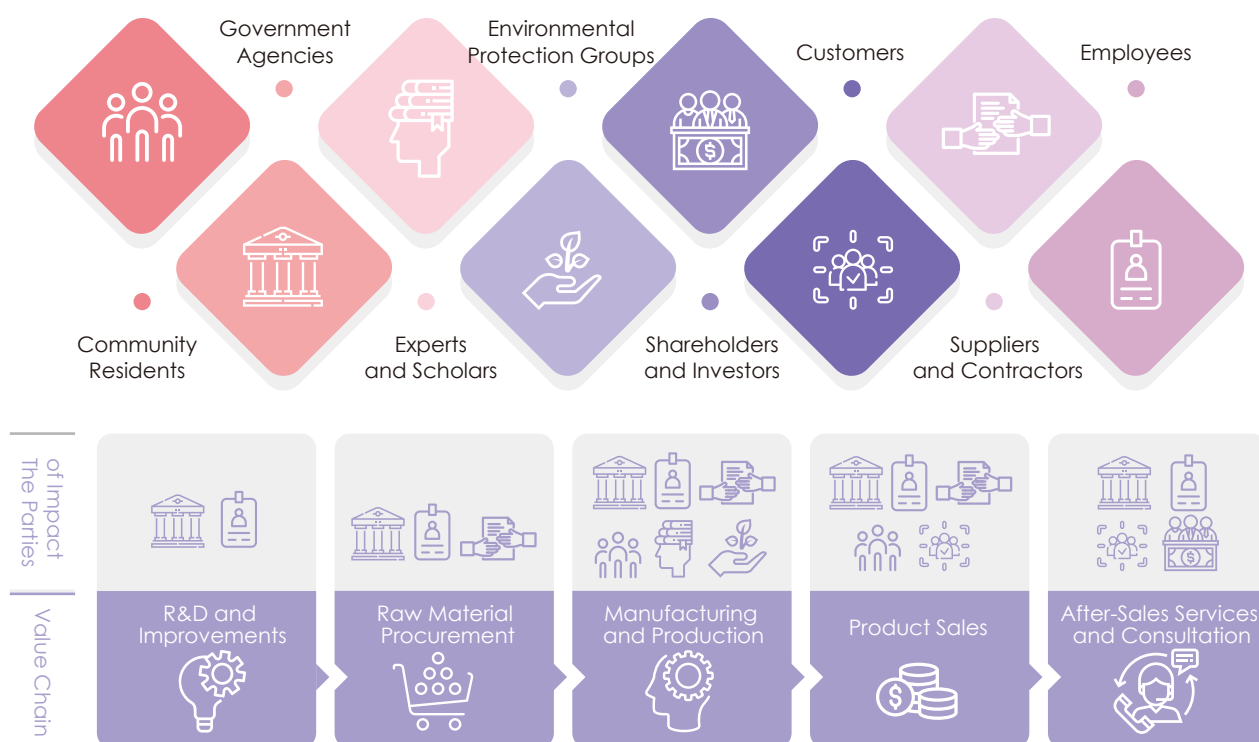
2021 questionnaire issues	Importance of the issue		Notes on changes in issues
	2021	2020	
Digital optimization of production efficiency	High	Medium	The introduction of digital technology by FCFC to optimize the production process continues to attract the attention of the Company's executives and stakeholders
Renewable energy investments	Low	Outside the matrix	Executives and stakeholders continue to pay attention to FCFC's green energy investments and energy transformation plans
Responsibilities of product sustainable development	High	Low	The issue has been upgraded to an issue of high importance, indicating that the executives and stakeholders of FCFC attach great importance to this issue
Energy Management	Medium	Low	The senior management and stakeholders of FCFC continue to pay attention to the demand for energy consumption within and without the company
Industrial and Public Safety	High	Medium	Increased concern This issue has been a major issue in Taiwan Chemical Corporation for three consecutive years, indicating that stakeholders attach more importance to the issue of "industrial and public safety"
Plant Emergency Response Mechanism	Medium	Low	
Talent development plan	Medium	Low	Senior management and stakeholders continue to pay attention to the recruitment of employees of FCFC, as well as career development plans and diversified education and training for employees
Socioeconomic Regulatory Compliance	Low	Outside the matrix	The senior management and stakeholders of FCFC continue to pay attention to the company's products and services, as well as compliance with relevant social and economic laws and regulations.






2021 questionnaire issues	Importance of the issue		Notes on changes in issues	
	2021	2020		
Operating & Financial Performance	Medium	High	Declined concern	Compared with previous years, stakeholders generally paid less attention to the issue, which is an important issue for the company, so it will continue to be tracked.
Information Security	Outside the matrix	Low		
Procurement and Supply Chain Management	Outside the matrix	Low		
Air Pollutants Management	Medium	High		
Controlled Chemical Substance Management	Outside the matrix	Low		
Community Engagement and Contribution	Outside the matrix	Low		

1.5.4 DESCRIPTION OF MAJOR ISSUES TO THE VALUE CHAIN

After discussion and confirmation by the internal supervisors, the company identified the five major value creation processes of the company, namely "R&D and improvement", "raw material procurement", "manufacturing", "product sales" and "after-sales service and consulting". The processes will be the boundaries of impacts and influences of major issues. The Company's product attributes are located in the mid-stream of the traditional petrochemical industry chain. It connects the upstream raw materials for refining and processing and then sends them to the downstream to produce petrochemical raw materials or finished products. Therefore, stable production and sales can maintain the company's operations. Good after-sales services can increase sales and promote the expansion of the company's market. Coupled with the long-term and stable contracted procurement of raw materials, the services are conducive to stabilizing the source of materials. In order to improve product quality, the company has long invested in product research and development and process optimization. Through research and development, high value-added products are produced to increase output value; continuous optimization of production processes, reduction of energy consumption, and friendly impact on the environment, the company further evaluates 16 major items. The impact of the issue on the value chain, as well as the stakeholders affected by the material issue, respond to the company's economic, environmental and social response actions in the corresponding chapters. The management of the company is responsible for planning and implementing issues related to the economy, environment and society. It has established an ESG Committee, which has an environmental sustainability organization under its jurisdiction to manage water resources and waste disposal. For corporate governance issues, such as stakeholder communication, workplace safety operation management, etc., the "ESG Committee" is responsible. For details on the ESG Committee and its operations, please refer to "ESG Committee" in Chapter 2.1.2 of this report.





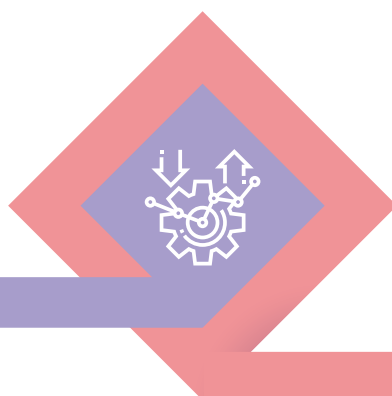
Dimension	Major Issues	GRI Topic Standards	Impact of major issues on the value chain				Stakeholders impacted by the issues	Corresponding Chapter
			Innovation Development & Research	Procurement Raw Material	Manufacturing and production	consultation Product sales and		
Economic 	Corporate Governance	GRI 102-18~102-39 Governance (2016)	◆	◆	◆	◆	Shareholders, customers, and employees	2.1
	Smart management	Industry issues		◆	◆		Employees	2.4.2
	Production efficiency and digital optimization	Industry issues		◆	◆		Employees	2.4.3
	Operational risk management	Industry issues	◆	◆	◆		Shareholders and employees	2.2
	Operating & Financial Performance	GRI 201 Economic Performance (2016)	◆	◆	◆		Shareholders and employees	2.1.5
The Environment 	Responsibilities of product sustainable development	Industry issues	◆	◆	◆		Shareholders and employees	2.3
	Environmental Regulatory Compliance	GRI 307 Regarding legal compliance for environmental protection (2016)	◆	◆	◆	◆	Employees	3.6
	Energy Management	GRI 302 Energy (2016) GRI 303 Emissions (2016)	◆		◆		Employees	3.2.4
	Mitigation and Adaptation to Climate Change	Industry issues	◆	◆	◆		Shareholders, customers, employees and contractors	3.2
	Water Use and Management	GRI 303 Water (2018)			◆		Employees	3.3
	Waste Management	GRI 306 Waste (2020)			◆		employees and contractors	3.5.1
	Air Pollutants Management	GRI 303 Emissions (2016)			◆		Employees	3.4
Social 	Industrial and Public Safety	Industry issues	◆		◆		employees and contractors	4.4.3
	Occupational Health and Safety	GRI 403 Occupational Safety and Health (2020)	◆		◆		Employees	4.4
	Talent development plan	GRI 404 Training and Education (2016)	◆		◆		Employees	4.3
	Plant Emergency Response Mechanism	Industry issues			◆		Employees	4.4.5



1.6 PRACTICE SUSTAINABLE DEVELOPMENT GOALS

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

Identification process of SDGs of FCFC



Core SDGs

Secondary SDGs

Target content	Detailed Objective	Major Issues	Corresponding Chapter
3 GOOD HEALTH AND WELL-BEING	3.9	● Water Use and Management	3.3
		● Air Pollutants Management	3.4
8 DECENT WORK AND ECONOMIC GROWTH	8.2	● Operating & Financial Performance	2.1
	8.8	● Occupational Health and Safety	4.4
		● Industrial and Public Safety	4.4
11 SUSTAINABLE CITIES AND COMMUNITIES	11.5	● Industrial and Public Safety	4.4
		● Air Pollutants	3.4
		● Management	3.6
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	11.6	● Environmental Regulatory Compliance Waste Management	3.5
	12.2	● Corporate Governance	2.1
	12.4	● Waste Management	3.5

Target content	Detailed Objective	Major Issues	Corresponding Chapter
6 CLEAN WATER AND SANITATION	6.3	● Water Use and Management	3.3
	6.4		
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.4	● Production efficiency and digital optimization	2.4
13 CLIMATE ACTION		● Mitigation and Adaptation to Climate Change	3.2
	13.1	● Operational risk management	2.2
14 LIFE BELOW WATER	14.1	● Water Use and Management	3.3
	14.2		



1.7 DESCRIPTION OF KEY ISSUES OF CONCERN

1 ENERGY TRANSFORMATION AND GHG EMISSION REDUCTION GOALS

Changes in the climate and environment affect human life. In order to balance sustainable economic development and protect the living environment, the reduction of greenhouse gas emissions is a matter that needs to be shared by everyone, and is also the responsibility and obligation of the company. In order to reduce greenhouse gas emissions, the company has drawn up a carbon neutrality road map. The company regularly checks greenhouse gases every month, and appoints an external verification agency to verify and disclose the emissions every year. The company's greenhouse gas reduction will begin to add renewable energies, such as solar power and hydropower equipment, in stages, and gradually reduce greenhouse gas emissions by reducing the amount of coal used for power generation and changing oil boilers to use natural gas. We plan to reduce carbon emissions by 25% in 2030 compared to 2020, and achieve carbon neutrality by 2050.

2 PROMOTION OF SUSTAINABLE DEVELOPMENT FINANCIAL POLICIES

The company strives to promote sustainable development financial policies. In 2021, approval from the Board of Directors was given to establish a sustainable development joint loan with Mitsubishi UFJ Bank of Japan and Mizuho Bank of Japan. The loan interest rate is linked to the main ESG sustainable development indicators to reduce greenhouse gas emissions. We will work together for the vision of ESG sustainable development and towards the goal of reducing greenhouse gas emissions.





2

The value of the innovation economy



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2.6	Procurement and Supply Chain Management	38



2.1 Corporate Governance

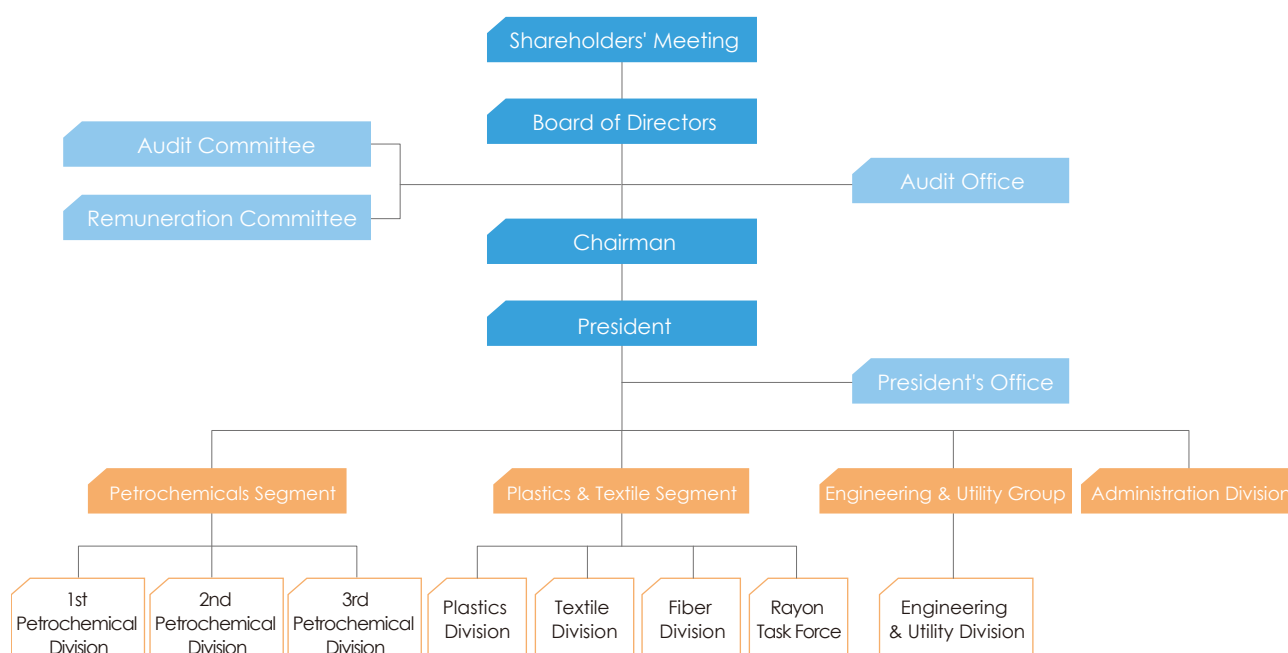
Management Approach to Corporate Governance

Material Topic

- **Policy:** Abide by Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies and other related regulations.
- **Responsibilities:** Board of Directors is the highest governance body and is responsible for drafting and executing the governance system.
- **Resources:** The general management office of Formosa Plastics Corporation and the relevant departments of the general manager's office of the company jointly promote corporate governance matters.
- **Specific Actions:**
 1. Draft and implement the company governance system, and use a complete internal control system to ensure the effectiveness and efficiency of operations, the reliability of financial reporting, and compliance with relevant laws and regulations.
 2. Establish code of professional ethics and require employees to sign self-discipline documents
 3. Organize education and training to promote the legal concept of employees
- **Objectives and Commitment:** Continue to improve the Company system, strengthen internal control, and improve the effectiveness of corporate governance.
- **Grievance Mechanism:** Formulate "Key Points for Employee Complaints" to provide channels for reporting internal illegal activities.
- **Performance Evaluation Methods and Results:** Internal auditors conduct audits on corporate governance matters such as the board of directors, audit committee, salary and compensation committee, and internal control system, and review and revise the internal control system for the lack of improvement and its causes.

2.1.1 Corporate Governance Profile

Corporate Governance Structure Chart





Operation of Board of Directors

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

Role of the Board of Directors

Principles of the Board of Directors	>	Formulate the Company's long-term operating policy and business objectives, and synchronize economic growth with environmental sustainable development
Vision of Sustainable Development	>	Promote environmental sustainability, economic growth and social progress
Operating Strategies and Policies	>	Propose strategies and policies according to potential changes in the external business environment and the utilization of internal resources, and evaluate the plans and implementation performance of the management team

Composition of a diverse Board of Directors

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

Official website: See Shareholders' meeting information under investor relations of investor sector



Remuneration for the Highest Governance Body

The Company has set up a "Remuneration Committee" consisting of 3 independent directors to evaluate the Company's Directors' and managers' salary remuneration policies and systems, and make recommendations to Board of Directors to prevent the compensation policy from guiding Directors and managers in undertaking the Company's risk appetite conduct. Pursuant to the Remuneration Committee Charter, at least two meetings shall be convened in each year. In 2021, 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 and social matters, linking the incentive system with individual performance and the Company's overall goals, and reporting to the "Remuneration Committee" for review.

Independent Audit Committee

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

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 "2021 Annual Report".

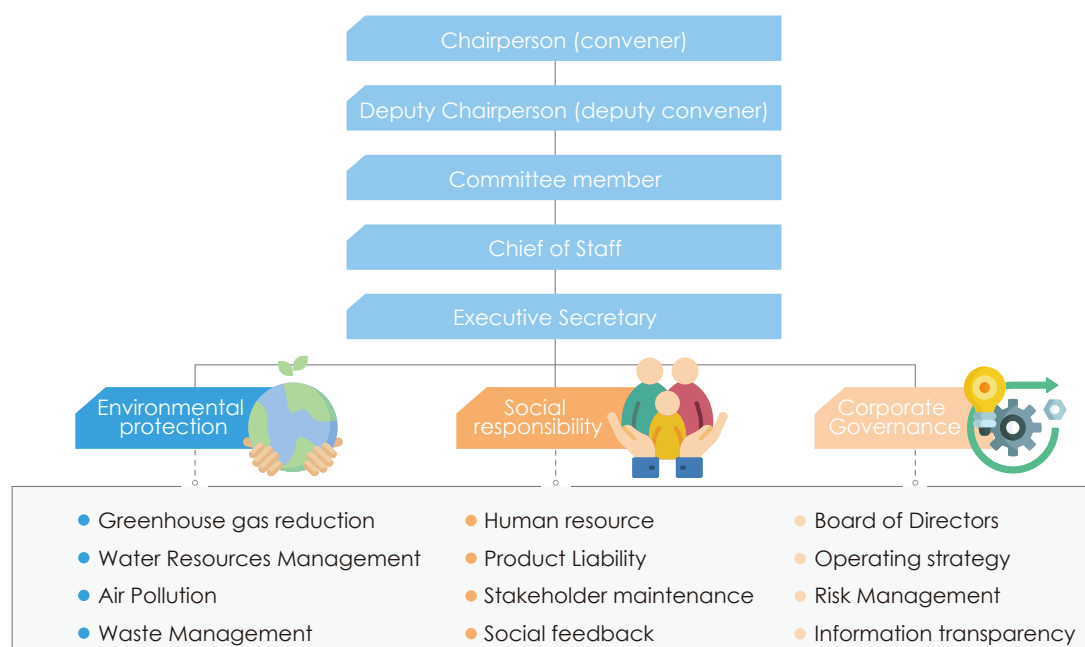


2.1.2 Sustainable Development Work Promotion Organization SDG 12.2

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

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

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



2.1.3 Internal Control Mechanisms

The Company has established an audit committee for supervision, and has also established an audit office under the Board of Directors. The full-time internal auditors receive lectures from professional training institutions every year, and they submit audit reports to the Board of Directors. Internal audits are not only the responsibility of the independent audit department, but each production department also needs to conduct independent business inspections within a specified period for specific audit items. At present, there are 19 internal auditors, including 8 new employees, who have completed 18 hours of training according to regulations. The training situation in 2021 is as follows.

Training of Internal Auditors in 2021		Course title	
Number of Participants	11	Existing audit personnel	
	2	Newly appointed audit personnel	
	6	Newly appointed audit personnel	
		1.Practical analysis of how enterprises construct risk management development blueprints through corporate governance 3.0	2 events
		2.Discussing the lack of internal control systems and the responsibilities of auditors from the perspective of illegal securities cases	
		Advanced training courses for newly appointed internal auditors of public companies	1 events
		Orientation training course for newly appointed internal audit personnel of the Company	3 events

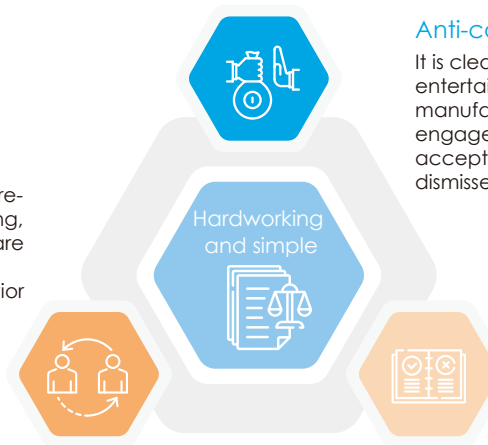


2.1.4 Professional Ethics

The Company adheres to the core spirit of "diligence and simplicity", established codes of ethics and related standards, and signed self-discipline documents. Every year, the judicial department is invited to the Company to talk about the laws and regulations that enterprises should abide by and legal education related to economic crimes. Each plant has set up employee grievance channels and dedicated personnel to handle grievance cases. Employees can lodge grievances immediately. In addition, they can report internal illegal acts through channels such as trade unions, welfare committees, and labor-management meetings. The whistleblower is protected by dedicated personnel, and the reported incident shall be secretly investigated by dedicated personnel. There were no employee complaints in 2021, and the Company has not received any reported corruption cases from 2018 to 2021. Please refer to the "Important Company Rules" section of the corporate governance of investor relations on the company's official website.

Anti-fraud

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.



Anti-corruption

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.

Strict Discipline

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

2.1.5 Operational financial performance

SDG 8.2

Management Approach to Operational and Financial Performance

Material Topic

- **Policy:** Toward the development of diversified and high-value products, diversify the investment market, reduce operating risks, and strive to improve operating performance.
- **Responsibilities:** The operating department formulates and implements annual performance goals, and the business management is responsible for supervising and assisting in achieving performance.
- **Resources:** The company fully supports operational financial performance and maintains sustainable business operations.
- **Specific Actions:**
 1. Financial operations are robust and stable, and the Company does not deal in high leverage, high risk investments.
 2. Appropriate derivatives are used to hedge against the risks of interest rate and exchange rate fluctuations to reduce influences from market changes.
- **Objectives and Commitment:** Annual financial performance targets are set in each year to pursue for sound, stable profitability.
- **Grievance Mechanism:**
 1. Company network or physical mailbox.
 2. Consult the Formosa Plastics Corporation's stock office or make suggestions at the company's shareholders meeting.
- **Performance Evaluation Methods and Results:** The Company regularly reviews effectiveness of goal implementation, and such reviews include monthly, quarterly, and annual management performance reviews. Evaluation and improvements are conducted on operational status at each department, while the management level also supervises operations at all times to enhance performance.



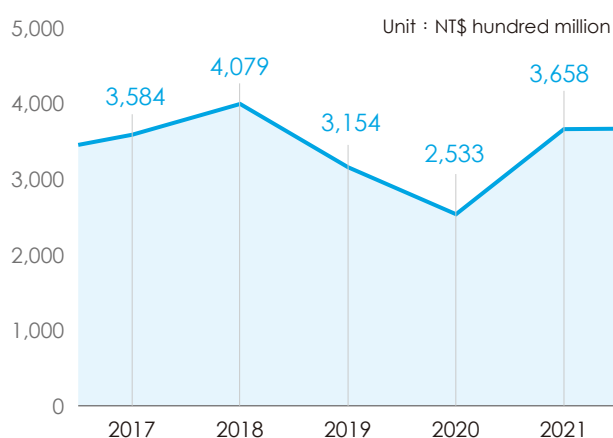
Financial Performance

The measures against the COVID-19 pandemic in 2021 are less severe than in 2020. The economy is recovering slowly, and consumer demand in the European and American markets increased significantly compared with 2020. However, international trade and shipping continue to be troublesome, resulting in insufficient supply increasing prices. Oil prices have also risen due to increased demand. The price and profit of petrochemical products have also increased due to the increase in oil prices. The Company's turnover in 2021 increased by 44.4% compared with 2020, and profits increased by 97.7%. Please visit the Company's official website to check and download the consolidated financial report.

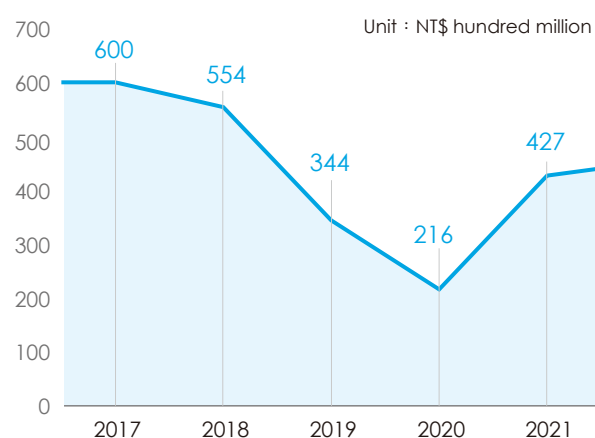
Official website:
See Financial report
under financials of
investor sector

The Company's revenue, profit after tax, earnings per share and shareholders' return on equity in the consolidated financial statements for the past 5 years are shown as follows:

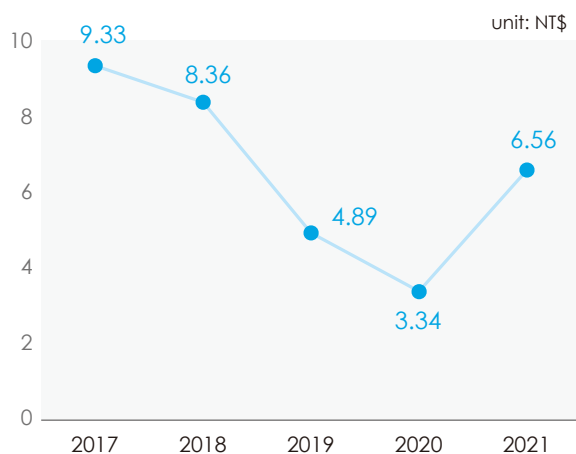
Consolidated Revenue from 2017 to 2021



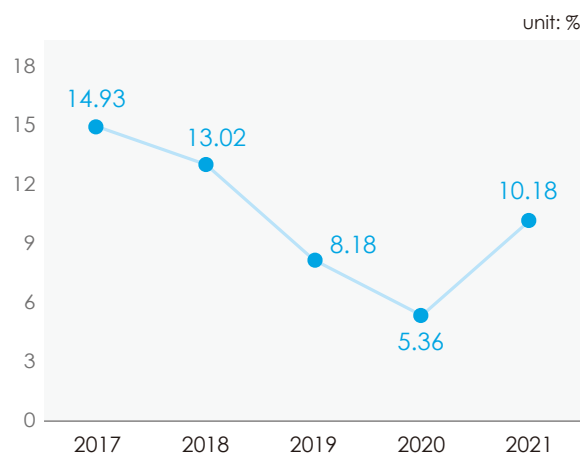
Consolidated Profit After Tax from 2017 to 2021



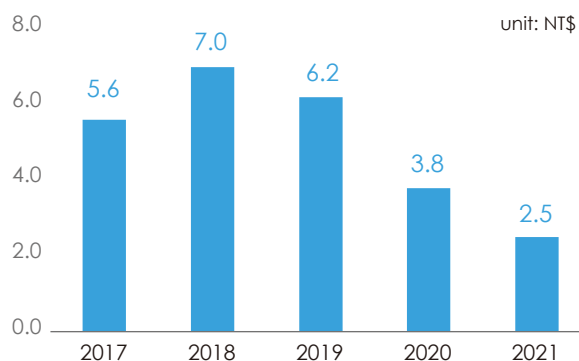
Earnings per Share from 2017 to 2021



Return on Equity from 2017 to 2021



Cash Dividend per Share from 2017 to 2021





Investor Relations

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

Communication with Investors



2.2 Risk Management

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

Management guidelines for operational risk management

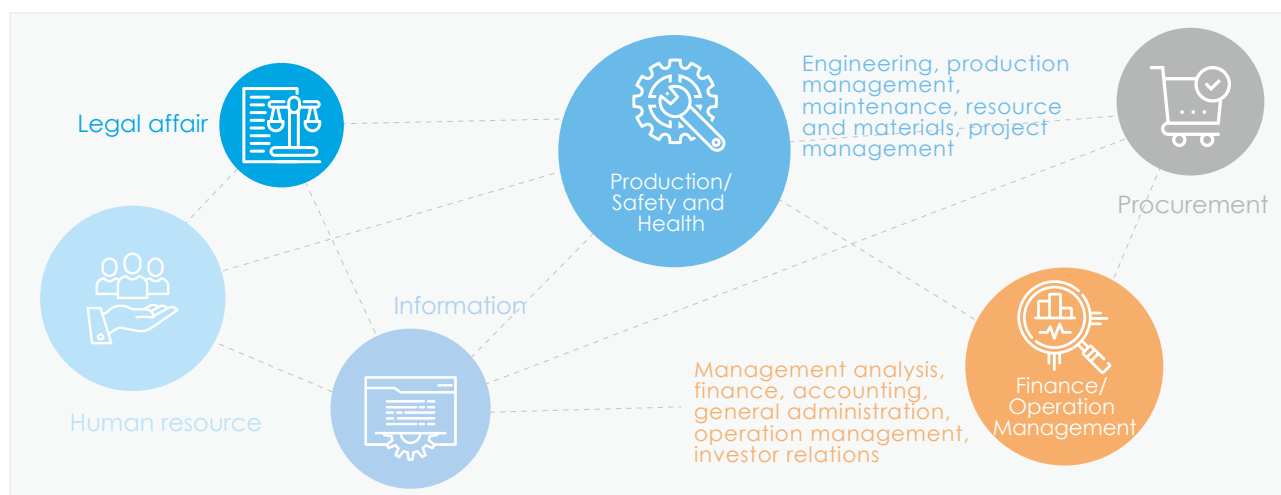
Material Topic

- **Policy:** Enhance the risk awareness of all employees and control the risk to an acceptable level to ensure the integrity, rationality and optimal benefit of risk management.
- **Responsibilities:** The general manager's office is responsible for promoting and supervising the various management work of risk indicators and prevention mechanisms established by various units after identifying and assessing operational risks according to the nature of the business, as the basis for formulating countermeasures.
- **Resources:** To put forward operational impact assessment and countermeasures for related departments facing potential risk projects, and the general manager office coordinates the countermeasures of various risks and allocates and executes the work.
- **Specific Actions:** Comprehensive consideration of financial and goodwill impacts, global economic conditions, energy cost fluctuations, environmental regulatory changes and other factors, assess the impact and severity of potential risks, formulate countermeasures, control risks within an acceptable range, and ensure the stability of the company's operations and maintain competitiveness.
- **Objectives and Commitment:** Evaluate the impact and severity of potential risks, formulate countermeasures, control potential risks within a tolerable range, and reduce business risks and pressures.
- **Grievance Mechanism:** Operational management risks can be reported to the independent directors or the board of directors of the company.
- **Performance Evaluation Methods and Results:** Each relevant departments evaluate the identification and execution performance of risky projects on their own. The General Management Office of Formosa Plastics Corporation and the general manager's office of the company will also conduct performance evaluation and guidance on relevant departments.



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 response to the rapid changes in the environmental situation, the potential risks faced by enterprises are increasing day by day. In the face of various potential risks and risks that may have an impact on the Company's finances or generate operational risks or generate operational opportunities and countermeasures. For the proposed risk management policy, risk management organizational structure and risk management scope, please refer to corporate governance "risk management policy" section of investor relations on the Company's website.



2.3 Product Sustainability

Management approach for product sustainability and responsibility

Material Topic

- **Policy:**
 1. Develop a circular economy and promote sustainable economic development and environmental protection.
 2. Gradually reduce greenhouse gas emissions and achieve carbon neutrality by 2050.
 3. Sign the Health, Safety, and Environmental Protection Policy.
- **Responsibilities:** The Company's ESG Committee has formulated a pathway to a circular economy for energy conservation and emission reduction, and has set annual implementation goals and regularly reviews the goal attainment rate.
- **Resources:** Integrate the Company's production management resources and fully invest in maintaining sustainable operations.
- **Objectives and Commitment:**
 1. Carbon emissions in 2030 will be reduced by 25% compared to 2020.
 2. Achieve the carbon neutral goals by 2050.
- **Grievance Mechanism:** Regularly review the progress meeting report of plan implementation.
- **Performance Evaluation Methods and Results:** Actual implementation progress attainment rate performance, re-evaluate the planning process, and propose improvement measures.

The Company expands our economic scale through vertical integration of upstream and downstream industries to reduce production costs, meet customer demand for raw materials, and enhance market competitiveness. Currently, we have completed our deployment throughout up-, mid-, and downstream sectors for petrochemicals, plastics, fibers, and textiles.

2.3.1 Upstream and Downstream Relationship of Company Products

Upstream and Downstream Relationship Diagram of FCFC Products

The Company's products span petrochemical, plastic, fiber and textile categories, and has a steam and electricity co-generation plant to produce water, electricity and steam for use in the manufacturing process. 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 "2021 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 "2021 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

In order to strengthen the management system, increase the production of high-value and differentiated products, and enhance competitiveness, the high-value plastic material PP produced can be used in transportation and medical applications. The current monthly sales volume is about 10,000 tons, and the quality has been obtained Kouzui Motors Ltd. affirmed and introduced it 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 "2021 Annual Report".

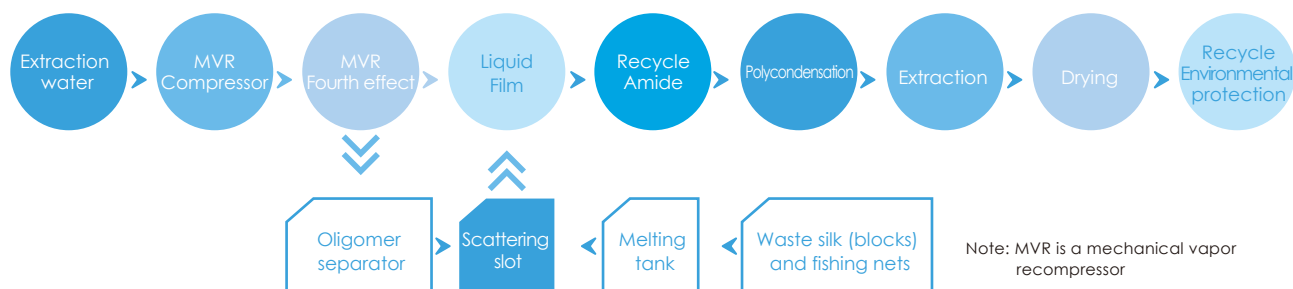
2.3.3 Circular economy - Reuse of recycled products

To promote circular economy, the Company recycles exhaust and waste produced during the manufacturing process in addition to achieving important results in energy and water conservation, thereby reducing production costs and promoting sustainable use of resources. The Company is one of the few companies in the world that can successfully recycle Nylon through chemical dispersion and mass produce recycled Nylon. The waste Nylon products are re-processed into recycled environmentally friendly Nylon pellets and Nylon fiber through reprocessing. We obtained GRS environmentally friendly product certification in 2012, and partnered with brand clothing in 2018 in order to recycle waste Nylon fishing nets to produce high-quality functional outdoor sports clothing. The Company's green product sales reached NT\$890 million in 2021.

The Fiber Division Polymerization Plant of the Company recycled extracted water and nylon waste silk (blocks) to make nylon chips, and produces nylon environmental protection chips from waste fishing nets. The



descriptions are as follows:



Department	Practice and benefits	Future objectives
Polymerization plant	<ol style="list-style-type: none"> In 2021, 7,479 tons of recycled amides were produced by recycled extraction water, and 7,361 tons of nylon chips were produced by polymerization process, with the cost reduced by NT\$83,250 thousand In 2021, waste silk (blocks) and discarded fishing nets were processed through the melting tank to produce recycled amides and put into the polymerization process to produce 2,987 tons of recycled environmental protection chips. It is supplied to produced recycled silk, generating NT\$91,880 thousand of revenue 	<p>The expansion of the melting, dispersing, refining and filtration systems is expected to be completed in December 2022. Recycled Nylon pellet production capacity in Taiwan and Vietnam will be increased to 1,250 tons/month</p>

2.3.4 Product Safety and Health Responsibility

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

- Environmentally-friendly plastic pallets are used in place of traditional wooden pallets at production divisions and automated warehouses. In addition, new plywood pallets are used in export containers to meet animal and plant health inspection and quarantine policies.
- It is required for vehicles that transport the Company's products to change from the environmental protection phase II standard to the environmental protection phase IV standard.
- Wood pulp that meets SGS "Chain-of-Custody" certification and Forest Stewardship Council (FSC) requirements is used to produce non-woven fabric.
- Rayon has passed the "Oeko-Tex Standard 100" stamp certification. In addition, we have also promoted the stamp certification of compostable rayon with the "Environmentally Biodegradable Polymer Association" and obtained the certificate of biodegradable compost stamp. Related products do not contain known harmful substances that have an adverse effect on human health. The production process is friendly to the environment and does not damage the environment when recycled.
- The Taiwan plant is responsible for "Recycled Eco-Friendly Nylon silk" while the Nhon Trach plant in Vietnam is charge of "Recycled environmentally friendly Nylon yarn and silk" and recycled E cotton yarn. They have obtained the "Global Recycled Standard" certification by Control Union Certifications The "Recycled Eco-friendly Nylon Filaments" produced from the fishing nets purchased by the Company from the recycler "BUREO" can use the NET+ trademark and is exclusively used by the brand "Patagonia". The Company also works with "Jinzhou Ocean" and the Hualien County Government and eight other county and city governments to recycle fishing nets, and has applied for a special trademark for recycled fishing net nylon fiber.
- FCFC has implemented chemicals registration, evaluation and authorization in line with the EU's REACH regulation and has completed the pre-registration for 11 products. In addition, countries outside the EU (South Korea, Turkey and the United Kingdom) have also implemented the REACH Act. We have completed the registration of SM and Phenol in Korea; SM, PTA and PIA in Turkey; and SM, ACETONE, PHENOL, PTA, and PIA in the United Kingdom.
- To meet the needs of customers, we have assisted in the Indian BIS certification operation, including for SM, ACETONE, PTA, ABS, PC produced in Taiwan and PTA produced in Ningbo. We are currently continuing the certification operations.



2.3.5 Participation in External Associations

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

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

2.4 Development, Innovation, and Digital and Energy Transformations

Management approach for smart management

Material Topic

● Policy:

1. Encourage the research and development atmosphere, so that each research and development staff will continue to innovate and improve, and boost the value of technology and products.
2. Through cross-departmental cooperation and R&D management, we shall actively develop high-quality, environmentally friendly and diverse products.

- **Responsibilities:** The technical department implements and formulates the annual research plan and target, and the business management is responsible for supervising and assisting in achieving performance.

- **Resources:** Industry-university cooperation, technology and facility exchange and sharing between universities and research units of various departments in the enterprises.

- **Objectives and Commitment:** Actively develop high-quality, environmentally friendly, diverse products and grow together with downstream customers.

- **Grievance Mechanism:** Actively care about the production status of customers, provide technical support at any time, and report the results to the management to maintain a good interactive relationship.

● Performance Evaluation Methods and Results:

1. Periodically review performance implementation effectiveness, including monthly, quarterly, and annual business performance reviews, and evaluate and improve the operating status of various departments. The management also monitors the operation status from time to time to improve performance.
2. Review the progress of launching AI application technologies that have been proposed on a monthly basis and to propose new application technologies.



2.4.1 Product R&D and Innovation SDG 9.4

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

Intellectual Property Management

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

Examples of Development and Innovation

Lithium battery PP separating film and module shell material development

Development instructions	Benefits	Future Plans
<ol style="list-style-type: none"> 1. With the rise of electric vehicles and energy storage devices, high energy density lithium batteries have become the focus of industrial development due to their lightweight, long battery lives and environmentally friendly characteristics. 2. The separating film is located between the positive and negative electrodes in a lithium battery to prevent the short-circuiting of electrode contacts, while allowing free lithium ions to pass through. 3. The selected material must have a certain level of mechanical strength and meet the assembly requirements. The structure must have enough porosity to absorb electrolytic solutions to maintain high ionic conductivity. Therefore, the choice of separating film plays an important role in battery performance. 	<ol style="list-style-type: none"> 1. Because the PE separating film requires ultra-high molecular weight and low impurities, the production cost is high. The main material used for PP separating film in the market is high-crystalline HOMO PP. The department uses CHISSO production, which has an edge in the production of high-crystalline HOMO PP. 2. In 2020, the global annual consumption was about 13,000 tons. The Company has made breakthroughs in the development process, which have been adopted by Taiwan separating film suppliers, with the sales volume reaching 60 tons. 	<p>The separating film is related to the safety of lithium battery terminal applications and has a long product certification period. The sales volume target in 2022 is 100 tons.</p>

The following table shows the comparison of the characteristics of PP and PE separating film

Features	PP separating film	PE separating film
Thickness (Puncture strength 400gf)	20μm	12μm. PE has good resilience, and its puncture resistance is better than PP, making it more suitable for thinner separating films. Lithium batteries are smaller
Heat resistance	Tm=165°C, high melting point and high temperature resistance.	Tm=135°C, the surface of the separating film is often coated with ceramic particles to improve heat resistance.
Resin type	High-crystalline HOMO PP	Ultra-high molecular weight HDPE
Battery comparison	Positive electrode material: Lithium iron phosphate Weight: 83g Size: φ26 *L65 (mm) Volume: 34,493 (mm ³) Power storage: 3.2V*3.5Ah=11Wh	Positive electrode material: Lithium ternary (nickel-cobalt-aluminum) Weight: 41g Size: φ18*L65 (mm) Volume: 16,532 (mm ³) Power storage: 3.7V*3.5Ah=12Wh



2.4.2 Digital and energy transformation and expert training

The Company has established a digital and energy transformation project team to coordinate the implementation of digital transformations for operations. It is led by vice presidents and senior engineers of each business department. Supervisors have been appointed in the production plants and maintenance departments to manage the implementation of AI applications, creating fully AI integrated smart factories from "point-line-plane". In terms of practical actions, we used big data to construct dynamic operation management, process optimization, production energy conservation and smart management. In addition, we use the existing plant information integration system (PI) to develop production management, process optimization, early equipment maintenance warning, maintenance prediction, work safety management, energy-saving systems and other modules to carry out transformations for all aspects. In line with the promotion of AI smart factories, the Company's Technical Training Center at Mailiao Industrial Complex continues to cooperate with Ming Chi University of Technology and Chang Gung University to provide corporate AI courses. The basic courses are regularly organized by the technical training center. In 2021, a total of 52 people completed the advanced training courses in 3 groups at Ming Chi University of Technology.

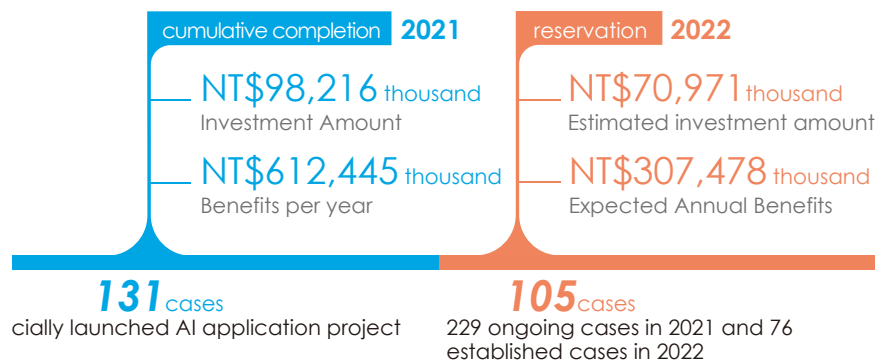
Industry-Academic Cooperation

The Company cooperates with academic units such as Sun Yat-sen University, Chang Gung University, Taiwan University of Science and Technology, Taipei University of Technology and Industrial Technology Research Institute, aiming at optimization of process control, material/product combination benefits, energy saving and carbon reduction, finished product quality prediction and control, and product defects identification, customer ordering and shipping management, forecasting raw material prices and deciding on raw material composition, strengthening management functions, collecting existing big data, data screening inventory, cleaning (replanting), data exploration and analysis, module development and evaluation, online testing and application.

Future Development Goals

We will continue to recruit and train professional talents, develop AI smart factory to reduce energy consumption ranging from steam gas to power, and to achieve instant AI-enabled process optimization. AI will also help us to maximize the production efficiency of catalysts, forecast equipment reliability and real-time abnormality correction and maintenance, personnel control, labor safety maintenance, forecast fluctuations in raw material prices and changes in material mix, and help to build a well-rounded AI smart factory by managing customer orders, production, warehousing and shipment IoT. At the same time, under the existing business model, the internal operation process is optimized to achieve operational excellence. Furthermore, through the change of work model, we are seeking changes and innovations in the operation model to achieve the Company's digital transformation goals.

As of 2021, 131 AI application projects have been completed, and 105 projects are expected to be implemented in 2022. The estimated cumulative investment amount by 2022 is NT\$169,187 thousand, and the expected cumulative annual benefit is NT\$919,923 thousand.



Applications of AI Smart Factory

Product quality Advancement

Correlation between variables and quality are operated quantitatively and production recommendations are provided to enhance and stabilize quality.

Preventive equipment abnormality diagnostics

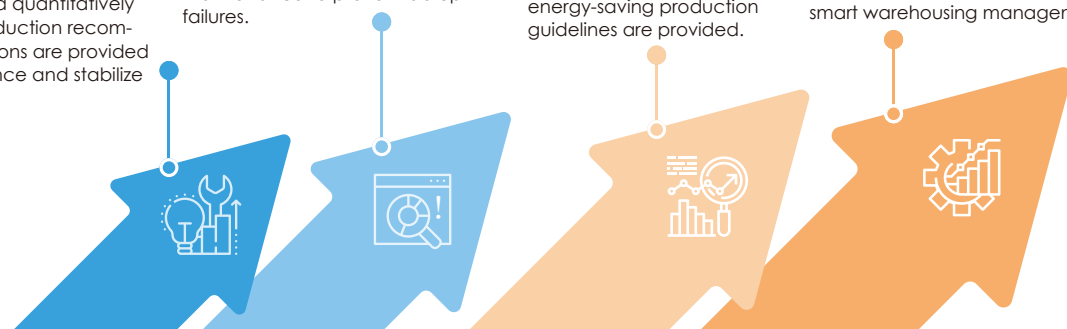
Data exploration is used to monitor the status of equipment operation, providing early warnings for adjustment, inspection, and maintenance to prevent abrupt failures.

Processing adjustment and optimization

Factors that affect process stability are analyzed based on operational data, and optimized operation and energy-saving production guidelines are provided.

Production and sales management optimization

Customer order and production dynamic information are integrated while market status and product profitability are estimated to enhance product and sales management and smart warehousing management.





2.4.3 Operation Platform of Digital Factory

The PI system connects the data obtained by the on-site sensors (including flow, pressure, liquid level, temperature, vibration...). Through analysis software, various functional screens are built on the real-time production management system (RTPMS) platform. The entry menu of the website is the business department, and the second level is the manager's office of the business department and its production plant. According to the function, it can be divided into 7 categories, namely, "production management", "process management", "quality management", "maintenance management", "safety, health and environment", "energy management" and "other", with each function planning management screen. In addition to providing supervisors at all levels with immediate access to important production information and making decisions in real time, when process operating conditions, product quality, and equipment operating conditions deviate, they are actively reminded through alarms to prevent abnormal occurrences or shorten processing time and increase the speed of response.

2.5 Excellent customer service

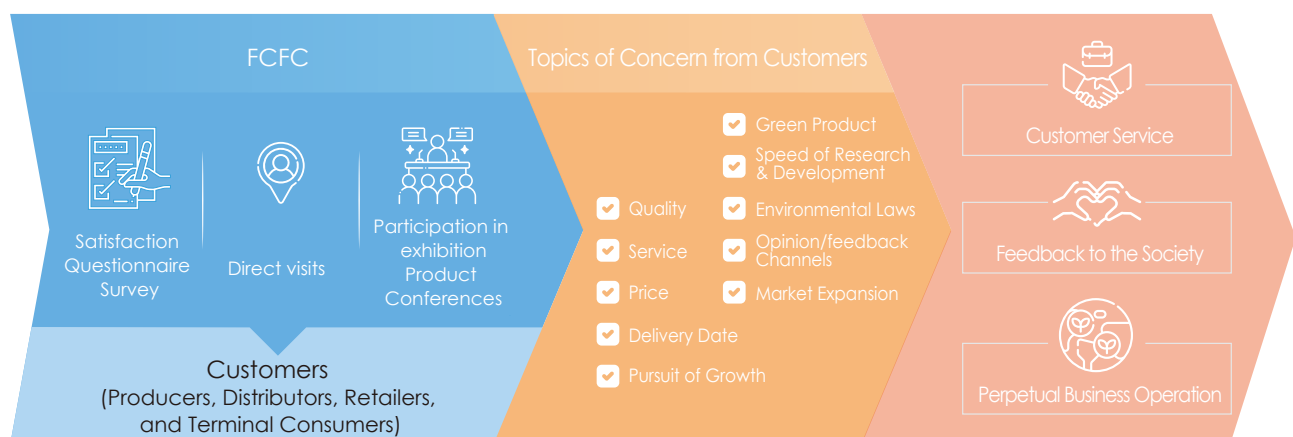
2.5.1 Customer Relations

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

Model of Positive Interaction

To achieve good positive relations, we visit our customers on a regular basis to discuss the development of existing and future products. We also take the initiative to form interactive and real-time channels of communication by organizing dealer conventions or participate in major trade shows (e.g. International Exhibition on Textile Industry in Shanghai) 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.

Official website:
See Product
sector





Responses to Customer Feedback

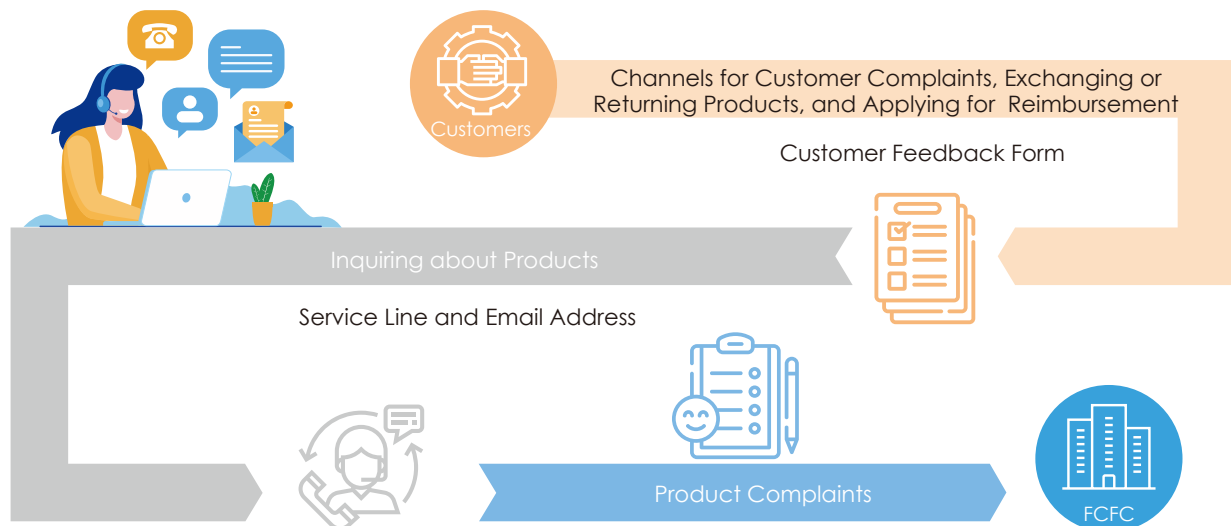
The Company has established official channels for customers to give suggestions, voice complaints, exchange or return a product, and apply for reimbursement. Besides dealing with sales reps directly, customers can also voice their opinions on product sales service hotline and email inbox on our Company website. The Sales Department will regularly compile, sort, analyze, and prioritize issues of customer concern by importance, timeliness, and order of improvement, to ensure that customer needs are being properly handled.

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 2021, we received 10 customer complaints, mostly attributable to product quality failing to meet customer needs. All cases were handled and resolved.

Compliance and Customer Privacy

The company's production and sales are in compliance with laws and regulations. We have also formulated the "Personal Data Management Measures" and require all relevant departments to be listed as one of the independent inspection items. For employee or customer data, except for those with authority, if it is confirmed that due to business needs, the "application form for personal data collection, processing and utilization" must be signed, which can be provided only after relevant procedures are reviewed and confirmed to comply with laws and regulations, and the way of use must be strictly limited. In 2021, there were no data privacy violations.

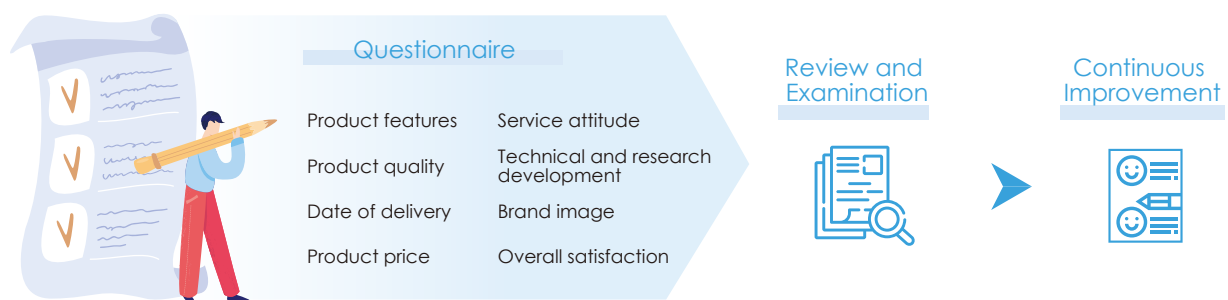
Responses to Customer Feedback



2.5.2 Customer Satisfaction Survey

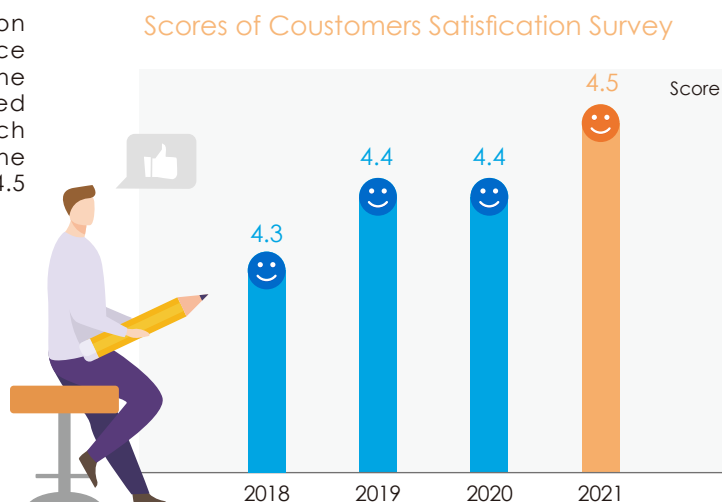
In order to collect customers' opinions and suggestions on the products and services provided by the Company, as a reference for the improvement of internal operation, and to meet the ISO 9001: 2015 quality management system, the quality commitment to customers and the spirit of customer satisfaction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

Customer Satisfaction Survey Model





The results of the 2021 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 2021 was 4.5 points out of 5 points.

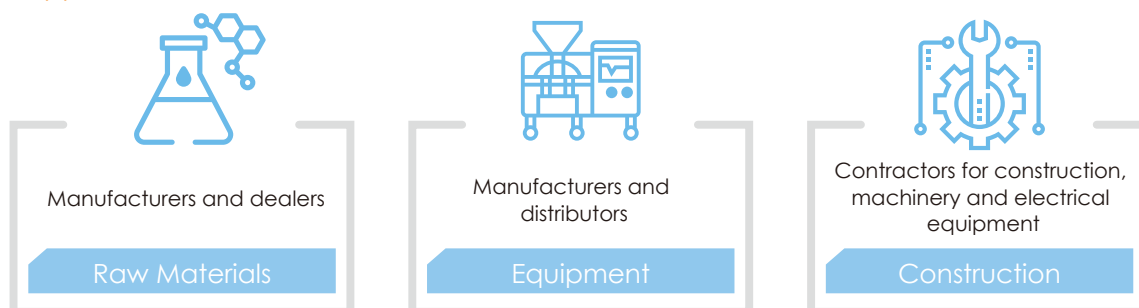


2.6 Procurement and Supply Chain Management

2.6.1 Overview of supplier procurement

The Company creates an environment of honesty, mutual benefit and fair exchange for suppliers and contractors and all of the suppliers and contractors use the "open bidding" method. Through the electronic procurement platform of FPG, we provide price enquiry, quotation, price negotiation, order, delivery, payment progress and other operational functions online to the suppliers and contractors. We regularly hold supplier briefings 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. In addition, through a sound partnered supplier management mechanism, we can eliminate bad suppliers and cultivate long-term excellent suppliers.

FCFC Supplier Classification



The procurement and outsourcing policies mainly revolve around local vendors. FCFC only sources goods from overseas and allows bidding from abroad when local suppliers are unable to meet the needs. The rate of local procurement in 2021 was 74%. 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 2021, the supplier's centralized delivery rate reached 99%. In addition, the company has fully issued electronic invoices to replace traditional paper invoices. At present, the percentage of electronic invoices issued by manufacturers has reached 83%.

Green Procurement

The company preferentially purchases environmentally friendly products that comply with renewable materials, recyclable, low-pollution or energy-saving environmental protection labels and the second category of environmental protection products. The main green products purchased include 562 products, namely recyclable plastic boards, energy-saving consumer electronics, recycled paints, and toner cartridges. Total procurement of green products in 2021 amounted to NT\$250 million.



2.6.2 Management mechanism

Supply chain's social responsibility

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 2021, the response rate of the social responsibility commitment letter reached 83%, and the response rate of the social responsibility commitment questionnaire survey was 78%. 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 2021, 1,517 companies have responded, with a response rate of 56%.

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 2021, 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. Non-compliant manufacturers will be rejected and placed under manufacturer evaluation.

For the "Supplier/Contractor Social Responsibility Commitment", "Formosa Plastics Group Integrity and Confidentiality Commitment for Suppliers" and "Supplier/Contractor Social Responsibility Questionnaire" in 2021, suppliers will continue to be encouraged to follow good work practices, and the suppliers that 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 2021, 83 cases of supplier feedback were received, which mainly inquired about the content of procurement cases, accounting for 37.4% of all cases.

Vendor Classification Management System

Suppliers

According to the inquiry and quotation data and delivery records of the vendors who have delivered more than (inclusive) 3 pieces of goods in the past two years, we calculate scores and grade the vendors, and provide reference for price comparison and purchase decision in purchase cases. The scoring elements include price competitiveness (accounting for 15 points), delivery overdue rate (accounting for 35 points) and quality abnormality rate (accounting for 50 points), with a total score of 100 points. The score obtained by the vendor is divided into six grades A-F from high to low. Among them, vendors of A and B grades have the priority to negotiate prices, and vendors of A or B grades can also be designated for important materials.

Contractors

According to the collection of relevant data, investigation and evaluation of plant site, construction machinery and equipment, site safety management ability, technical ability and contracting performance of various professional engineering vendors, it is divided into three grades: A, B and C. In case of any abnormal construction contractor, such as poor construction quality, delay in construction period, improper management, license borrowing, direct transfer (subcontracting), etc., it is required to strengthen management or stop contact.



3

The value of a good environment



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The Company follows the FPG safety, health and environmental protection policy, pays attention to environmental protection and is determined to maintain community safety, and encourages all employees to enrich their expertise. We also provide a safe working environment, maintain environmental and ecological development, and realize our commitment to implement simultaneous sustainable corporate management and environmental protection.

Long-term goals of FCFC

Increase the production of high-value and differentiated products to enhance competitiveness

- "Recycling" of waste fishing nets turns marine waste into a high-value industry
- Industrial waste plastic recycling and reuse
- Recycling and reuse of consumer plastic products

Zero work injury, zero disaster, and zero pollution

Connecting environment goals

- The waste fishing net "recycling" project will increase its production capacity to 750 tons per month in the fourth quarter of 2022
- 100% recycling and reuse of industrial waste plastics in 2022
- In 2026, the sales volume of recycled products in Taiwan will account for more than 10% of the total sales volume of hard rubber

Promote "people - oriented" "essential safety management" for the goal of enterprise perpetual business operation

3.1 Mission in Maintaining Safety, Health, and Environmental Protection

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

3.1.1 Organization and Strategy of Safety, Health and Environment

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

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

Safety, Health and Environmental Management System

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

Strategies and Actions for Environmental Protection

Establishing Goals

- Holding true to the mission of aiming at the sovereign good, the Company actively promotes various environmentally-friendly improvements and establishes annual goals. We also regularly understand and review the progress of goal implementations.
- Reinforced coaching is implemented for plants falling to keep up with preset goals, and rewards are given for plants with good performance in order to enhance employee participation and sense of accomplishment.

Adoption of Advanced Processing Equipment

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

Review and Improvements

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



3.1.2 Energy Conservation, Carbon Reduction and Pollution Control Organization

Energy Conservation, Carbon Reduction and Pollution Control Organization

The Company established the "ESG Committee of Formosa Chemicals & Fibre Corporation" with the Chairman as the convener to promote water conservation, energy conservation and carbon reduction, and coordinate the Company's water conservation, energy conservation and pollution prevention. The Committee formulates the environmental protection implementation strategies and projects such as waste resource recycling and process waste reduction. The investment amount in 2021 reached NT\$1.09 billion.

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 2021 was NT\$1.56 billion.

FCFC's 2021 Environmental Cost Statement

Unit: NT\$ million

Type	Item	Sum
Environmental Costs	Operating Costs	1,116
	Costs Associated with Suppliers and Customers	28
	Management Costs	307
	Social Event Costs	7
	Fees and Energy Taxes	102
	Total	1,560

Note 1: 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

In addition to actively improving the process energy conservation and carbon reduction projects, the Company also cooperates with the government's renewable energy policy, invests in the development of green power to increase the proportion of renewable energy, and reduces the impact of climate change. Chia Nan Industrial Co. Ltd., jointly invested by the Company and Chia Nan Irrigation Association, invested in the construction of three hydroelectric power plants in Tainan City, namely Wushantou, Xikou and Batian. In addition, we have also installed 1,500kWp of solar power generation equipment in the Xingang plant site. By 2025, we will add 13,731kWp of solar power and 340kW of small hydraulic power to reduce greenhouse gas emissions.

Summary table of clean energy power generation in 2021

Power plant site	Power generation Equipment	Equipment capacity (kW)	Power generation in 2021 (kWh)	Sold to Taiwan Power or for self-use	CO ₂ reduction tons/year
Wushantou	Hydraulic	8,750	16,234,727	Sold to Taiwan Power	8,150
Xikou	Hydraulic	11,520	17,484,100	Sold to Taiwan Power	8,777
Batian	Hydraulic	2,196	10,234,796	Sold to Taiwan Power	5,138
Xingang	Solar energy	1,500	2,000,673	For self-use	1,853
Total	-	23,966	-	-	23,917



3.2 Mitigation and adjustment of climate change

Mitigation and Adaptation Management Approach to Climate Change

Material Topic

- **Policy:** To reduce potential impacts from climate change, besides complying with environmental laws, the Company has established the ESG Committee to promote various environmental protection systems and standards that shall be adhered to by relevant departments.
- **Responsibilities:** As climate change will directly impact business divisions, the energy-saving, carbon reduction & pollution prevention team needs to actively initiate mitigation and adaptation measures, while other indirect management departments also offer their support.
- **Resources:** Both the company and the General Management Office of Formosa Plastics Corporation are actively engaged in related work to respond to the management goals of mitigation and adaptation of climate change.
- **Specific Actions:**
 1. Promote various energy-saving and carbon-reduction measures, and coordinate cross-company and cross-plant cooperation within the enterprise based on the principle of circular economy to fully integrate various resources.
 2. Respond to the government's diversification policy to promote the use of green energy.
 3. Participate in the evaluation of CDP climate change questionnaire.
 4. Support TCFD.
 5. Participate in the SBTi initiative.
- **Objectives and Commitment:**
 1. Promote AI application in process optimization for energy saving and carbon reduction.
 2. 100% industrial waste plastic recycling and reuse within the plants.
 3. Recycle and reuse consumer plastic products, and in 2026, the sales volume of recycled rubber pellets in Taiwan will account for more than 10% of the total sales volume of hard rubber.
 4. Nylon recycling capacity (PIR+PCR) shall account for 12% of total output starting in 2023.
 5. Green energy accounts for more than 5% of total energy usage by 2030.
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company's website as a channel for interested parties to provide their opinions and feedback.
 2. Complaints with the company on environmental issues during various external meetings.
- **Performance Evaluation Methods and Results:** Regularly hold "Energy Conservation and Emission Reduction Circular Economy Review Meetings" and "ESG Review Meetings" every month to review various response goals, review implementation results, and adopt rolling reviews to revise goals immediately.



3.2.1 Corresponding strategies for climate change risk



Strategy				
Factors of climate change	CO ₂	Emission of greenhouse		Emission of greenhouse and others
Scope of activity	FCFC operation	Value chain	Products	Others
Strategy of mitigation and adoption strategic plan	Mitigation	Adoption		
	Participate in the SBTi initiative and formulate a carbon reduction path within 24 months according to the requirements of the SBTi initiative	<p>Waste fishing nets are reused, and then made into recycled nylon granules and nylon fiber. We cooperate with the following local governments or fishing associations to recycle waste fishing nets and waste oyster ropes and other marine wastes:</p> <ul style="list-style-type: none">10/2020 Taichung City Wuqi Fishery Association4/2021 Chiayi County Government4/2021 Kaohsiung City Government7/2021 New Taipei City Tamsui Fisheries Association10/2021 Kinmen County Government <p>Cooperate with customers to develop high-quality nylon fiber</p> <p>Continue to increase sales of niche products such as eco-friendly fiber</p> <p>100% industrial waste plastic recycling and reuse within the plants in 2022</p> <p>The plastic department has obtained PCR certificates for a total of 9 specifications, and the products include ABS, HIPS, PC/ABS, PC, etc.</p>		



Task Force on climate-related Financial Disclosures (TCFD) structure of FCFC

	Governance	Strategy	Risk Management	Index and targets
Management strategy and action plan	<p>Responsible unit</p> <ol style="list-style-type: none"> Digital and energy transformation project team FCFC ESG Group <p>The way the organization works</p> <p>In principle, the Board of Directors holds a Directors' Meeting at least once every quarter. Discuss the promotion of ESG at least once a year</p>	<ul style="list-style-type: none"> Collect climate change impact issues on financial, goodwill, global energy supply and economic trends, regulatory compliance and other factors, assess and formulate risk categories, formulate operating strategies and report to the board of directors Based on RCP2.6, RCP4.5, RCP6.0, RCP8.5, INDC as environmental assumptions, and with the goal of greenhouse gas temperature rise not exceeding 2°C, formulate short, medium and long-term strategies 	ISO 14001 Environmental Review Practice Guidelines	<ul style="list-style-type: none"> In accordance with the ISO 14064-1 standard, promote the inventory and verification of greenhouse gas emissions, and promote the use of green electricity. In 2030, green electricity will account for more than 5% of the total electricity consumption Set goals by referencing and implementing the principles of SBTi
	<ul style="list-style-type: none"> Hold a monthly review meeting on energy conservation and emission reduction circular economy Hold monthly ESG review meetings 	The "Energy Conservation and Emission Reduction Circular Economy Conference" and "ESG Discussion Meeting" are regularly held every month, with the chairman as the person in charge and assigning directors at or above the associate level of each department as the head of the water and energy conservation and ESG promotion team	The Digital and Energy Transformation Project Team of the General Manager's Office and the Department of Safety and Health regularly collect, analyze, and aggregate information on climate change and energy risks and opportunities to identify and evaluate risks and opportunities related to climate change. According to the assessment procedures of ISO 14001, identify environmental risks and opportunities every year, and formulate countermeasures for each risk situation	Referring to the initiative principles of introducing SBTi, continue to promote the carbon reduction plan, and achieve the carbon reduction goal of 22.5% in 2027 compared with 2018
Implementation				
Related Links	3.2.1 Climate change risk response strategy	3.2.2 Climate change risk and opportunity management	3.2.2 Climate change risk and opportunity management	<ul style="list-style-type: none"> 3.2 Mitigation and adaptation of climate change Sustainable Development Goals

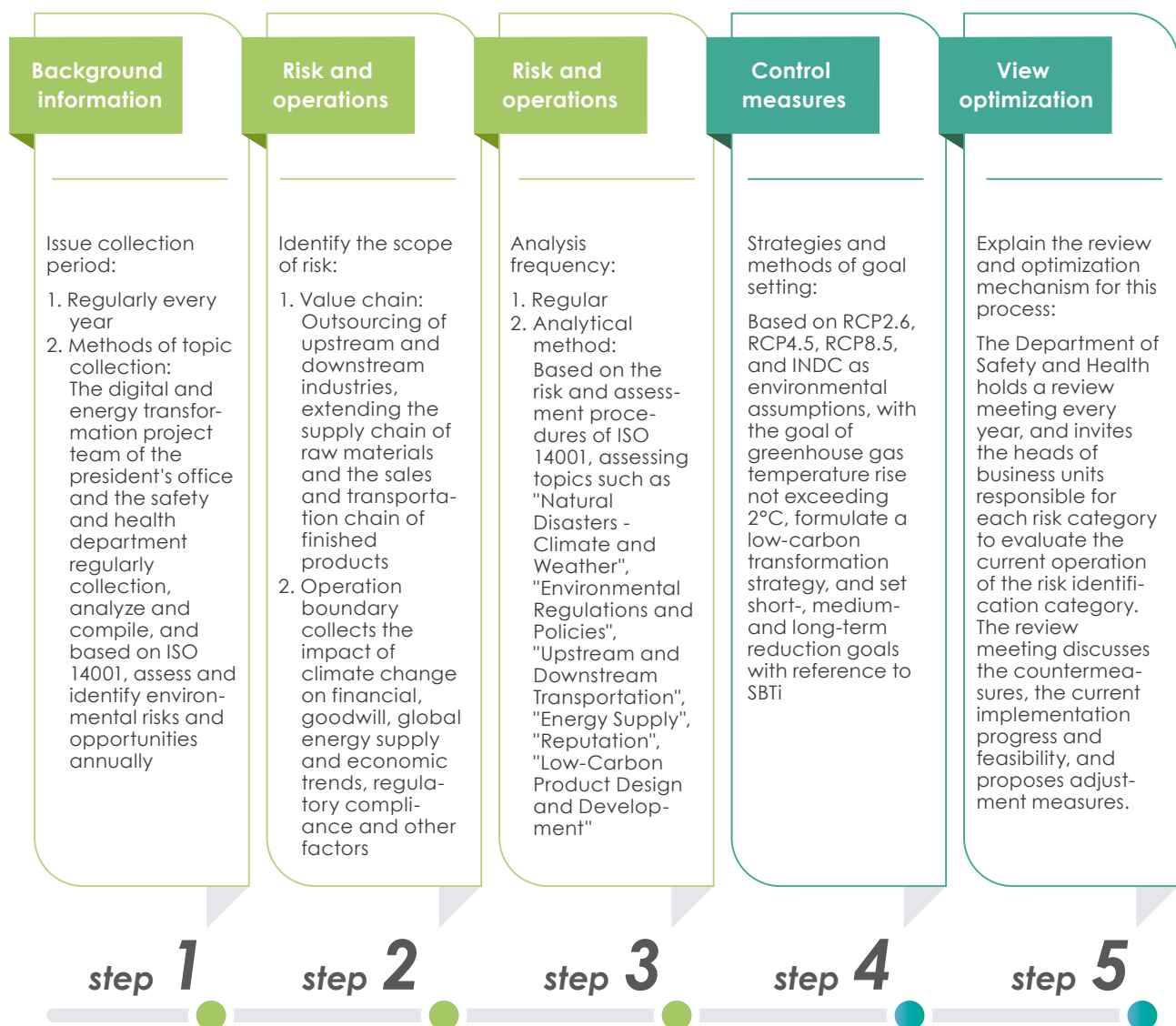


3.2.2 Climate change risk and opportunity management

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

Climate Change Risk Issue Analysis Process

According to the assessment procedures of ISO 14001, all relevant departments regularly collect, analyze and identify environmental risks and opportunities every year. Each production department uses the risk and opportunity matrix in the ISO 14001 Environmental Review Operational Guidelines to identify and evaluate the risks and opportunities related to climate change. The probability of occurrence of each risk and opportunity, that involves the degree of impact, the duration of the impact (short, medium, long), and the probability of the impacted objects (direct operations, upstream suppliers, downstream customers) in the value chain.





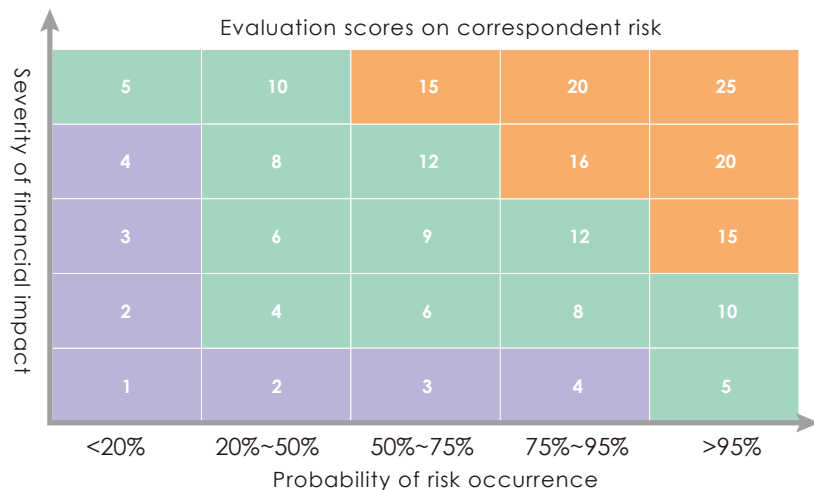
Analysis results of climate change risk issues

Based on the matrix scores, the Company divides climate change-related risk scores into three levels, with 1-4 as low risk, 5-14 as medium risk, and 15-25 as high risk; the corresponding risks are dealt with in sequence. It is divided into four categories: eliminating risks, reducing risks, diversifying 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.

15-25 points: major risk
Prioritize the generation of corresponding management solutions

5-14 points: moderate risk
No action is currently required, keep monitoring changes

1-4 points: low risk
Acceptable



Risk Type	Risk identification level		Risk Type	Management method	Fill in risk issues
	Probability of risk occurrence	Degree of financial impact			
High	High	High	Risk elimination	1. 14 energy saving and carbon reduction projects 2. Development of low carbon products	Policies and regulations
Mid to high	Low	High	Risk reduction	1. Increase the use of alternative raw materials in aromatic hydrocarbon plants, and use biomass energy such as biomass light oil, waste plastic cracking oil, etc. 2. Develop renewable energy - invest in small hydropower generation and increase solar power generation	Global energy supply shortage
Medium	High	Low	Risk diversification	Waste recycling, recycling waste fishing nets, waste plastic recycling	Waste management risk
Low	Low	Low	Risk assumption	Follow the Company's 14 energy saving and emission reduction circular economy projects and integrate AI technology to improve production efficiency and reduce water use	Market risk Water shortage



Financial impact of risk issues

When assessing the financial impact of risk issues, the Company defines the financial impact of more than NT\$1 million as a material impact. Based on the probability of occurrence of risks and opportunities, the degree of impact, the time of impact, and the object of impact, the Company formulates the risk elimination, Relevant countermeasures to reduce risk, diversify risk or take risk. Based on the above, the risks and opportunities are classified into 4 categories as follows:

1. High financial impact and high probability of occurrence
2. High financial impact but low probability of occurrence
3. Low financial impact but high probability of occurrence
4. Low financial impact and low probability of occurrence

Risk Type Transformation/ entity	Risk Type	Degree of impact	Scope of impact			Major climate- related risk factors	Major potential financial impact
			Upstream	Operating	Downstream		
transition Risk	Policies and regulations	High risk		◆		In order to respond to climate change, the government plans to collect carbon fees in the future	The fees are estimated to be NT\$100 per ton of carbon emission. The carbon emissions in 2020 will cost NT\$854 million
transition Risk	Market risk	Low risk		◆		In response to world carbon reduction and waste recycling trends	Customers' demand for environmentally friendly products has increased, the Company has implemented waste recycling, increased revenue, and improved its ability to impact financial impacts
Entity risk	Water shortage	Low risk		◆		Risk of heavy rainfall due to extreme weather	Comprehensively raise the embankments of drainage ditches, add waterproof gates and add pumps to avoid flooding

Levels of Financial impacts	Potential affected amount of money (NT dollars)	Possibility of Event Occurrence				
		Most unlikely (<20%)	More unlikely (20%<X<50%)	Likely (50%<X<75%)	More likely (75%<X<95%)	Most likely (>95%)
High	300million	Medium risk / opportunity	Medium risk / opportunity	High risk / opportunity	High risk / opportunity	High risk / opportunity
Medium high	180million	Medium risk / opportunity	Medium risk / opportunity	Medium risk / opportunity	High risk / opportunity	High risk / opportunity
High	120million	Medium risk / opportunity	Medium risk / opportunity	Medium risk / opportunity	Medium risk / opportunity	High risk / opportunity
Medium low	60million	Low risk / opportunity	Low risk / opportunity	Medium risk / opportunity	Medium risk / opportunity	Medium risk / opportunity
Low	1million	Low risk / opportunity	Low risk / opportunity	Medium risk / opportunity	Medium risk / opportunity	Medium risk / opportunity



The impact of opportunity issues on finances

Opportunity issues	Opportunities Type	Scope of impact			Opportunity description
		Upstream	Operating	Downstream	
Products/ Services	High		◆	◆	1. Nylon Fiber cooperates with customers to develop PA11 Bio-Nylon using castor plant as raw material, and produces Bio-Nylon precursor silk 2. Increase the use of alternative raw materials in aromatic hydrocarbon plants to replace light oil and pyrolysis gasoline raw materials
Energy source	Medium		◆	◆	1. Invest in small hydropower 2. Establish solar power generation 3. Renewable energy goal of 72MW
Resource efficiency	Medium		◆	◆	1. Recycling and reusing marine waste, establishing low-energy-consumption recycling and environmentally friendly Nylon products from raw materials to finished products 2. Waste plastic recycling, replacing raw materials in petrochemical processes with recycled plastics 3. Plan the recycling and reuse of PP woven bags 4. Develop a chemical recycling method for waste plastics to improve recycling

3.2.3 Climate risk scenario analysis

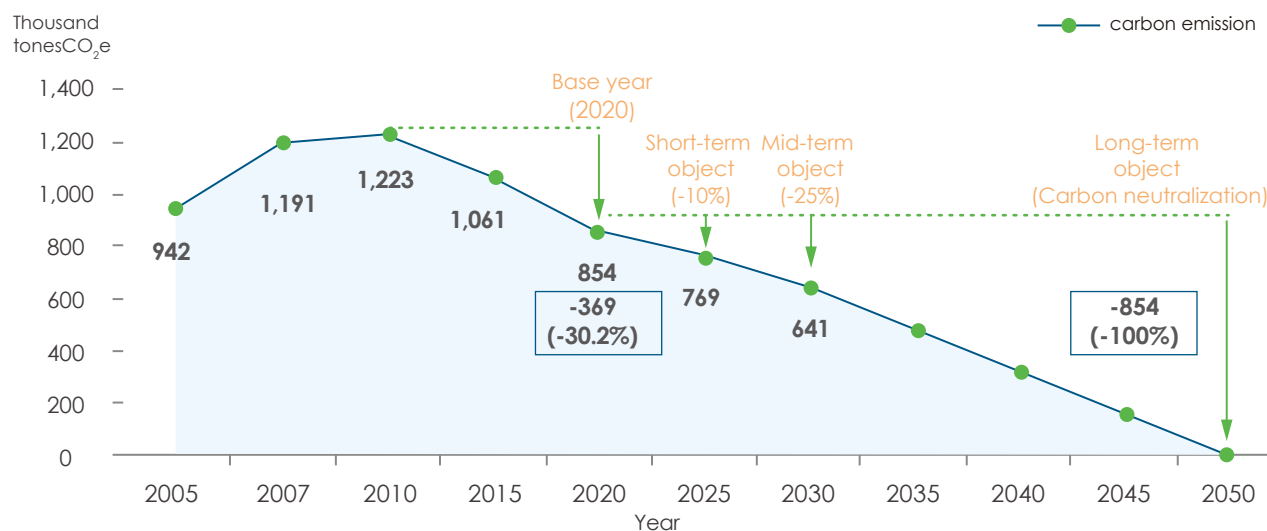
The Company uses the national public platform TCCIP (Taiwan Climate Change Projection Information and Adaptation Knowledge Platform), and refers to government agencies to conduct "Intended Nationally Determined Contribution" (INDC) The goal is to use the model of scenario analysis to simulate the RCP online scenario of the Company's plant area, and simulate the four scenarios of RCP2.6, RCP4.5, RCP6.0 and RCP8.5, and predict the temperature and rainfall during the period from 2021 to 2040. Change the situations that each plant area may face, include the plant area and main upstream and downstream supply chains in the situation analysis, analyze the climate change and rainfall under different conditions, and estimate the impact on water resources under different situations.

Plant Site	Longde Plant Site	Mailiao Plant Site	Xingang Plant Site
Scenario analysis	Estimate the scenarios of RCP2.6, RCP4.5, RCP6.0, RCP8.5, etc., and use the RCP 8.5 scenario to carry out the risk assessment of extreme climate		
Sea level rise	Partially affected	Affected	Not affected
Below the tide line area (risk of flooding)	Not affected	Partially affected	Not affected
Lower than the flooding levels of 2050	Not affected	Affected	Partially affected
Average drought time	2 months	2 months	2 months
Temperature rise	2.66	2.59	2.57
Total rainfall	1085mm	1085mm	1085mm
Maximum storm strength	Maximum consecutive days of rain is 7.5 days	Maximum consecutive days of rain is 7.5 days	Maximum consecutive days of rain is 7.5 days



3.2.4 Greenhouse Gas Emissions and Energy Management

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



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

Greenhouse gas emissions management

Among the greenhouse gas inventory 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). This report discloses that the greenhouse gas emissions of each plant area that have been checked are the data for 2020. Before the publication of this report, the data for 2021 is still under verification. The follow-up will be in accordance with the Environmental Protection Agency's Greenhouse Gas Emissions Inventory and Registration Management Measures. Complete the declaration on the National Greenhouse Gas Registration Platform before the end of the month.

Greenhouse gas emissions of Formosa Chemicals & Fiber Corp. in 2020

Unit: tons CO₂e

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

Note 1: 2020 inventory report based on SGS and BSI verification agency

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

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

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

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

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

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

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



According to the company's greenhouse gas inventory results in Scope 1 and Scope 2 in 2020 (including Formosa Chemicals & Fiber Corporation and Formosa BP Chemicals Corporation) greenhouse gas emissions are 8,538,988 metric tons of CO₂e, and the total energy usage of the main emission sources is about 8.82*10⁷ GJ as shown in the table below. Based on the 2020 turnover (FCFC and Formosa BP Chemicals Corp.) of NT\$164.182 billion, the Company's energy intensity is approximately 537 kilojoules/NTD, and the scope 1 and 2 greenhouse gas emission intensity is 5.201 thousand metric tons of CO₂e-/ NT\$100 million.

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

Mailiao Plant Site					Plants Other than the Mailiao Plant Site				
Emission Source	Consumption (A)	Calorific Value (B)	Total Energy Consumption (A)*(B)	CO ₂ e Emissions (%)	Emission Source	Consumption (A)	Calorific Value (B)	Total Energy Consumption (A)*(B)	CO ₂ e Emissions (%)
Purchased Power	1,735,091 MWh	3.6 GJ/kWh	6.25E+06 GJ	29.11%	Coal Combustion	1,466,863 ton	24 GJ/tons	3.52E+07 GJ	95.08%
Fuel Oil	42,463 Kiloliter	41 GJ/kiloliter	1.74E+06 GJ	2.61%	Fuel Oil	10,910 Kiloliter	41 GJ/kiloliter	4.47E+05 GJ	0.98%
Fuel Gas	559,182 ton	48.6 GJ/tons	2.72E+07 GJ	26.8%	Purchased Electricity	78,950 MWh	3.6 GJ/kWh	2.84E+05 GJ	1.14%
Internally Purchased Steam Gas	6,035,413 ton	2.8 GJ/tons	1.69E+07 GJ	35.36%	Fuel Gas	3,639 ton	48.6 GJ/tons	1.77E+05 GJ	0.28%
Total			5.20E+07 GJ	93.88%	Total			3.62E+07 GJ	97.48%

Source: 1. FPG Greenhouse Gas Inventory Database

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

3. The Mailiao plant site contains Formosa BP Chemicals Corporation

Energy Management

Approach for energy management

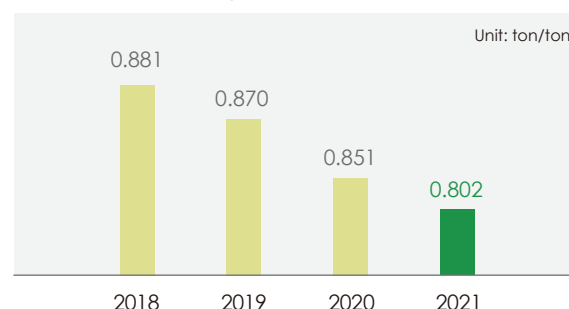
Material Topic

- **Policy:** Promote energy transformation and fuel transformation, reduce coal consumption in boiler power generation, use natural gas instead, and increase renewable energy installations.
- **Responsibilities:** Establish an energy saving and carbon reduction and pollution prevention and control organization to improve equipment operation efficiency and reduce greenhouse gas emissions.
- **Resources:** Both the company and the General Management Office of Formosa Plastics Corporation are actively engaged in related work to respond to the management goals of mitigation and adaptation of climate change.
- **Specific Actions:**
 1. Promote equipment improvements, improve efficiency and reduce coal consumption.
 2. Converting oil boilers to gas boilers.
 3. Add solar photovoltaic equipment.
- **Objectives and Commitment:**
 1. Green energy accounts for more than 5% of total energy usage by 2030.
 2. Coal consumption in 2030 will be reduced by more than 35% compared with 2020.
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company website as a channel for feedback.
 2. Complaints with the company on environmental issues can be discussed during various external meetings.
- **Performance Evaluation Methods and Results:** Regularly hold "Energy Conservation and Emission Reduction Circular Economy Review Meetings" and "ESG Review Meetings" every month to review various response goals, review implementation results, and adopt rolling reviews to revise goals immediately.



Global climate change and greenhouse gas warming have become one of the most concerned topics of all countries. The Company has formulated the computer operation of greenhouse gas inventory reduction management, and establishes energy-saving improvement cases at each plant to facilitate the progress, effectiveness and emissions reduction of the implementation etc. The following table shows the cumulative improvement of gas consumption per unit output from 2018 to 2021 and the implementation results of energy conservation. Among them, the average gas consumption per unit output of Yunlin Mailiao Plant site in 2021 was 0.802 tons/ton, showing a downward trend year by year, as shown in the figure below:

Unit steam consumption in the Yunlin Mailiao Plant (FCFC and Formosa BP Chemicals Corp.) from 2018 to 2021



In addition, the company promoted the third-party verification unit of product carbon footprint to conduct ISO 14066:2013 carbon footprint verification. In 2018, Yilan Longde and Chiayi Xingang plants completed 6 products. In 2019, Yunlin Mailiao completed 19 products; By 2020, the carbon footprint verification of PC and PP products will be completed.

FCFC (including Formosa BP Chemicals Corporation) Energy Conservation from 2016 to 2021

Item	Year	2016 to 2020	2021	Accumulation (2016 to 2021)	Ongoing	Total
Number of Improvement Projects (Number of Cases)		2,214	338	2,552	250	2,802
Steam Saved (Tons/Hour)		317.0	82.8	399.7	176.6	576.3
Power Saved (kWh/hour)		40.9	13.4	54.3	13.1	67.4
Fuel Saved (Tons/Hour)		5.5	0.6	6.1	6.2	12.3
CO ₂ e reduction (1,000 tons/year)		1,051	293	1,345	646	1,991
Amount Invested (NT\$0.1 Billion)		50.8	10.9	61.7	43.0	104.7
Investment Benefit (NT\$0.1 Billion/Year)		31.8	8.1	39.9	12.3	52.2

Summary of the 12 Dedicated Promotion Items for Energy Conservation and Carbon Reduction in Taiwan Plants in 2021

Project type	Completed improvements in 2021 (carbon reduction)		
	Scope 1 CO ₂ suppression amount (ton/year)	Scope 2 CO ₂ suppression amount (ton/year)	Total CO ₂ suppression amount (ton/year)
1 Wastewater recycling/water	-	404	404
2 Rainwater storage and reuse improvement system	-	-	-
3 Improvement of cooling water system and refrigeration and air conditioning systems	-	894	894
4 Distillation tower optimization and improvement	4,340	40,280	44,620
5 High and low order energy recycling improvements	-	28,569	28,569
6 Steam piping system, equipment insulation and drainer improvement	-	26,198	26,198
7 Combustion equipment improvement	7,584	3,499	11,083
8 Improvement of rotating equipment (including pumps, windmills, compressors, and mixers) and conveyor systems	-	24,025	24,025
9 Air compressor improvement	-	6,233	6,233
10 Power system and lighting system improvements	-	574	574
11 FLARE recycling improvement	-	-	-
12 Process and equipment improvement (energy efficiency improvement)	-	150,644	150,644
Total	11,924	281,319	293,243

Note 1: The project type is cases closed in 2021.

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

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

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



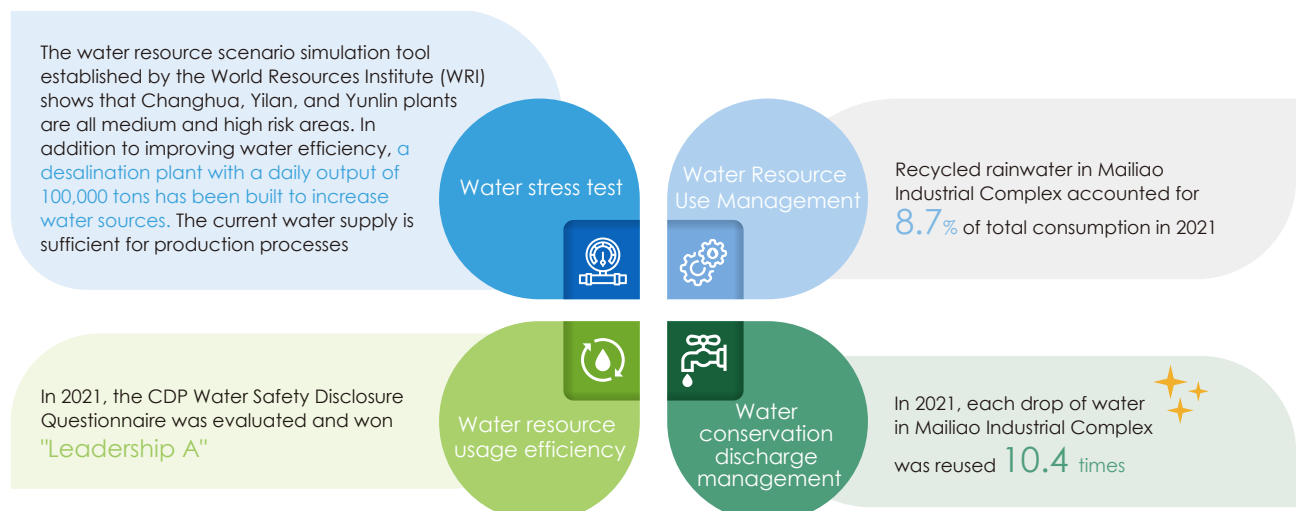
3.3 Utilization and management of water resources

Water Resource Use and Management Approach

Material Topic

- **Policy:** Adhere to water source stability and water conservation policies and comply with regulations related to Water Pollution Control Act.
- **Responsibilities:** The use and management of water resources are promoted by the ESG Committee.
- **Resources:**
 1. The impact of water scarcity was simulated and evaluated by using the water resource scenario simulation tool established by WRI and responses are stipulated.
 2. Process optimization improves equipment operation efficiency and reduces water consumption.
 3. Increase the rainwater, wastewater recycling and reuse percentage.
- **Specific Actions:**
 1. Water intake: the source includes surface water, tap water and underground water, and the underground water used is entitled with the legal right.
 2. Water consumption: recycling rainwater, recycling process wastewater, and optimizing processes to reduce water use.
- **Objectives and Commitment:** Responding to SDGs sub-target 6.4, increase water use efficiency, and ensure sustainable fresh water supply and recycling.
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company's website as a channel for interested parties to provide their opinions and feedback.
 2. Stakeholders can discuss environmental protection issues with the Company during various external meetings.
- **Performance Evaluation Methods and Results:**
 1. Recycled rainwater in Yunlin Mailiao Industrial Complex accounted for 8.7% of total consumption in 2021.
 2. In 2021, each drop of water in Yunlin Mailiao Industrial Complex was reused 10.4 times.
 3. In 2021, the CDP Water Safety Disclosure Questionnaire was evaluated and won "Leadership A".

3.3.1 Water resource risk management





Contingency measures for water

Water condition signal	FCFC Water Contingency Measures	Occurrence in 2021
Normal supply of water	<ul style="list-style-type: none"> Continue to promote water-saving measures Rainwater recycling and reuse 	Normal manufacturing
Water supply is tight	<ul style="list-style-type: none"> Continue to promote water-saving measures Reduce non-essential water use 	Reduce plant watering
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 tank in the plant 	<ul style="list-style-type: none"> Improve the concentration ratio of cooling water towers When water is supplied at a lower pressure, the standby water tank in the plant is requisitioned to support the water supply without affecting production.
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 process 	In line with the reduction of water supply, the Synthetic Phenol Plant, the SM Plant, Haifeng and the PP Plant will be shut down during annual holidays starting in March to reduce water consumption.
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 process 	No occurrence

3.3.2 Water resource access management

Water source

The upstream raw material source of the Company is mainly Formosa Petrochemical Group, and the downstream of the finished product channel is mainly Nanya Plastics and Formosa Plastics Corp. In Mailiao Industrial Complex. We jointly promote water resources management activities and continue the water saving vision of sustainable use of water resources. In addition, the Company has four plants in Changhua, Yunlin Mailiao, Yilan Longde and Chiayi Xingang. The water mainly comes from surface water such as rivers, lakes and reservoirs. Changhua, Yilan Longde and Chiayi Xingang, etc. 3 plants, each month, the local county government communicates with relevant stakeholders to obtain the monthly water use permit and the permitted amount. In addition, the Yilan Longde plant uses a small amount of groundwater, which has been approved by the Yilan county government The legal groundwater right; Yunlin Mailiao Plant, after the coordination and communication between the Industrial Bureau of the Ministry of Economic Affairs and the relevant units representing stakeholders, approved the acquisition of the legal water rights and the approved water consumption.

In order to improve the independent water supply capacity of Mailiao Park during the dry season, the seawater desalination test unit was installed in 2008. After continuous review of the process with the equipment manufacturers of the desalination plant, and sent personnel to overseas for on-the-spot investigation, and after technical improvement, the output The water quality can already meet the water demand of Mailiao Park. Therefore, on October 9, 2018, the submitted environmental impact statement was approved by the EPA for recordation. In December of the same year, it was approved by the Ministry of Economic Affairs to develop and establish a desalination plant with a daily output of 100,000 tons of fresh water. Construction has begun in August 2019, and is expected to be completed by the end of 2023. The actual water consumption in 2021 is shown in the table below:

Annual water consumption table of FCFC in 2021

Unit: million liters

Type	Plant Site			
	Longde	Changhua	Mailiao	Xingang
Surface Water (A)	10,617.5	167.7	14,379.0	7,657.0
Groundwater (B)	146.0	-	-	-
Third-party Water (C)	-	-	-	-
Subtotal (A)+(B)+(C)	10,763.5	167.7	14,379.0	7,657.0
Water Use Quantity	32,967.2			

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



Use of Water from the Jiji Weir

According to the "Monthly Report on Agricultural Water Consumption of Jiji Dam for Industry and Public Water Use" by the Industry Bureau of the Ministry of Economic Affairs", the annual water supply of Jiji Dam in the past four years (2018~2021) is 3,194.35 million tons. The 4-year average industrial water consumption accounted for 3.5% of the total water supply, and the 4-year average transfer agricultural water consumption only accounted for 2.3% 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, and will not squeeze out other industries and compete with farmers for water. The records of water consumption are summarized below:

Water Supplied by the Jiji Dam from 2018 to 2021

Unit: Ten thousand tons

Year	Inflow	Agriculture	Industry			
	(A)	Average use Water volume (B)	Average use Water volume (C)	Percentage (C)/(A)	Transfer farming water (D)	Percentage of agricultural water use Total ratio (D)/(B)
2018	307,946	182,450	10,256	3.3%	3,618	2.0%
2019	510,006	189,778	9,840	1.9%	3,712	2.0%
2020	175,073	126,194	9,545	5.5%	3,469	2.7%
2021	284,714	135,989	9,726	3.4%	3,282	2.4%
Average	319,435	158,603	9,842	3.5%	3,520	2.3%

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

3.3.3 Water resource discharge management

The industrial wastewater produced from each plant of the company is treated properly by wastewater treatment facilities based on the characteristics of the source of the wastewater, so that the quality of the discharge water can meet the national discharge water standards. According to the Water Pollution Prevention and Control Law and the location of the plant, the Yunlin Mailiao Industrial Complex adopts the method of ocean discharge to the Taiwan Strait, while the other three plant areas adopt the method of river discharge, the Longde plant is discharged to Xinxin River in Yilan, Xingang plant is discharged to Puzi River in Chiayi and the Changhua plant discharged to Wuxi River in Taichung.

Annual discharge table of Formosa Chemicals & Fiber Corporation in 2021

Unit: million liters

Discharge volume is based on the terminal point	Plant Site			
	Longde	Changhua	Mailiao	Xingang
Surface Water (A)	6,786.2	132.8	-	2,113.0
Sea water (b)	-	-	5,632.0	-
Sum (A)+(B)	6,786.2	132.8	5,632.0	2,113.0
Water Discharge Volume	14,664			

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



The Yunlin Mailiao, Chiayi Xingang and Yilan Longde plants are equipped with a total of 5 sets of 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 2021

Plant Site	Water Volume (CMD)		pH			COD(mg/L)			SS(mg/L)		
	Permissible Volume	Emissions	Statutory Requirements	Internal Control Value	Average Value	Statutory Requirements	Internal Control Value	Average Value	Statutory Requirements	Internal Control Value	Average Value
Longde	42,238	18,592	6~9	6.5~8.5	7.9	100	80	41.5	30	24	11.0
Changhua	3,522	398	6~9	6~9	7.1	100	65	36.0	30	25	4.0
Mailiao	36,330	15,430	6~9	6.8~8.7	8.3	100	80	38.0	30	18	5.4
Xingang	10,648	6,509	6~9	6.5~8.5	7.6	100	90	38.6	30	25	4.8

Note: The Company's wastewater discharge test value is far lower than the national discharge standard, and there will be no fines issued by the competent authority in 2021.

Wastewater treatment SDG 6.3

As of 2021, the company's total investment in wastewater discharge improvement has reached NT\$8.01 billion. In 2022, the ongoing wastewater improvement projects (including soil and groundwater) include setting up a wastewater recycling system. For cooling tower discharge water and backwash wastewater discharge water, ultrafiltration (UF) is used to remove small impurities and reduce suspended solids (SS). Reverse osmosis (RO) is then used to remove cations and anions to reduce conductivity. Recycling and other projects totaled 23 projects, with an estimated investment of NT\$840 million.

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

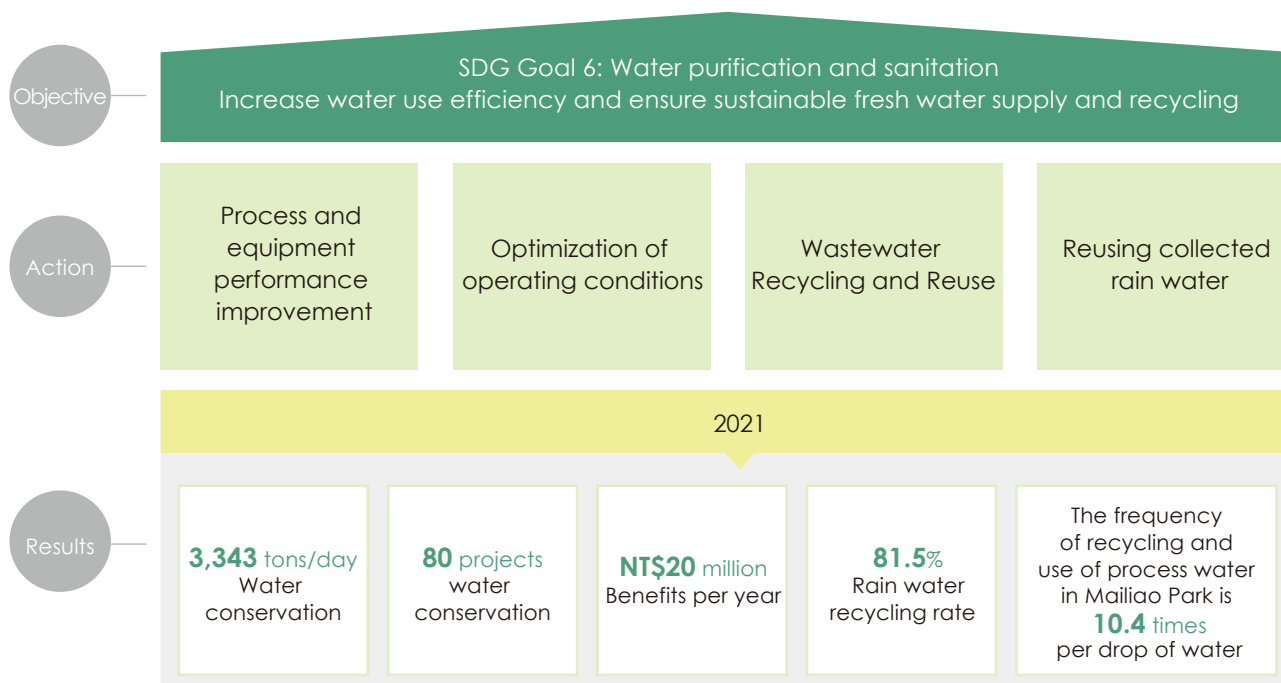
In response to the impact of the discharge water from Mailiao Industrial Complex on the ecology, FPG jointly established the "Assessment and Advisory Committee of FPG's Mailiao Industrial Complex Discharge Water Ecological Impact on Marine Ecology", and commissioned a professional organization to investigate. 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.



3.3.4 Water Resource Consumption Efficiency



2021 FCFC Water Consumption

Unit: million liters

Plant Site	Longde	Changhua	Mailiao	Xingang
Water Consumption	3,977.2	34.9	8,747.0	5,544.2
Total Water Withdrawal by Source	18,303.3			

FCFC Water Conservation Performance in Recent Years

Item \ Year	2016 to 2020	2021	Accumulation 2016 to 2021	Ongoing	Total
Number of Improvement Projects	469	80	549	78	627
Volume Saved (Tons/Day)	13,716	3,343	17,059	3,239	20,298
Amount Invested (NT\$0.1 Billion)	1.8	0.8	2.6	10.5	13.2
Investment Benefit (NT\$0.1 Billion/Year)	0.9	0.2	1.1	0.2	1.2

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 2021, the average amount of rainwater recovered in Mailiao Plant was 3,418 tons per day, and the recovery rate is about 81.5%.



3.4 Air Pollutant Management

Air Pollutant Management Approach

Material Topic

- **Policy:** The Company pays close attention to domestic laws on emissions and regards relevant laws as the basis to our air pollution emission improvements. In addition, the Company also complies with the Montreal Protocol on Substances that Deplete the Ozone Layer, in which substances or equipment that would deplete the Ozone layer will not be used during production processes.
- **Responsibilities:** Departments that emit air pollutants will be responsible to reduce such pollution, and the environmental protection department of the company will supervise and assist in the reductions.
- **Resources:** FPG has established the Evaluation and Counseling Committee for Mailiao Industrial Complex's Air Quality Impact, which coordinates the air quality evaluation at Mailiao Industrial Complex.
- **Specific Actions:**
 1. Continuous automated detection systems have been set up at each emission pipe to instantly monitor the emissions of all air pollutants.
 2. Adopt Best Available Control Technology (BACT) to reduce emissions.
- **Objectives and Commitment:** Continue to promote waste reduction and recycling at the source, and hope to achieve the goal of "zero pollution" to create a sustainable operating environment.
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company website as a channel for feedback.
 2. Propose discussions of various environmental protection issues in public or academic conferences.
- **Performance Evaluation Methods and Results:** All emissions are performing better than legally stipulated levels.

3.4.1 Emissions and Prevention

We constantly seek to make improvements in air pollution control. 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. Control the discharge of harmful air pollutants according to the proposed "Standard Pollution Source Hazardous Air Pollutant Emission Standards" announced by the Environmental Protection Agency. As of 2021, the total amount of investment in air quality improvement has reached NT\$11.535 billion. In 2022, NT\$820 million is expected to be spent on ongoing waste gas improvement cases.

Air Pollutant Emissions Table for 2021

Unit: Ton/Year

Type		Plant Site				Total
		Longde	Changhua	Mailiao	Xingang	
Air Pollutant Emission Management	SOx	92.87	0	187.68	149.31	429.86
	NOx	158.19	0	1,145.84	340.80	1,646.62
	Volatile Organic Compounds (VOCs)	107.92	4.71	459.18	83.45	655.257
	Total Suspended Particles (TSP)	19.22	0	58.89	38.83	116.94

Note: 1. All air pollution emissions of the Company are in compliance with regulations and standards, and no fines will be issued by the competent authority in 2021.

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.

3.5 Waste and Controlled Chemical Substance Management

Management Policy of Waste Management

Material Topic

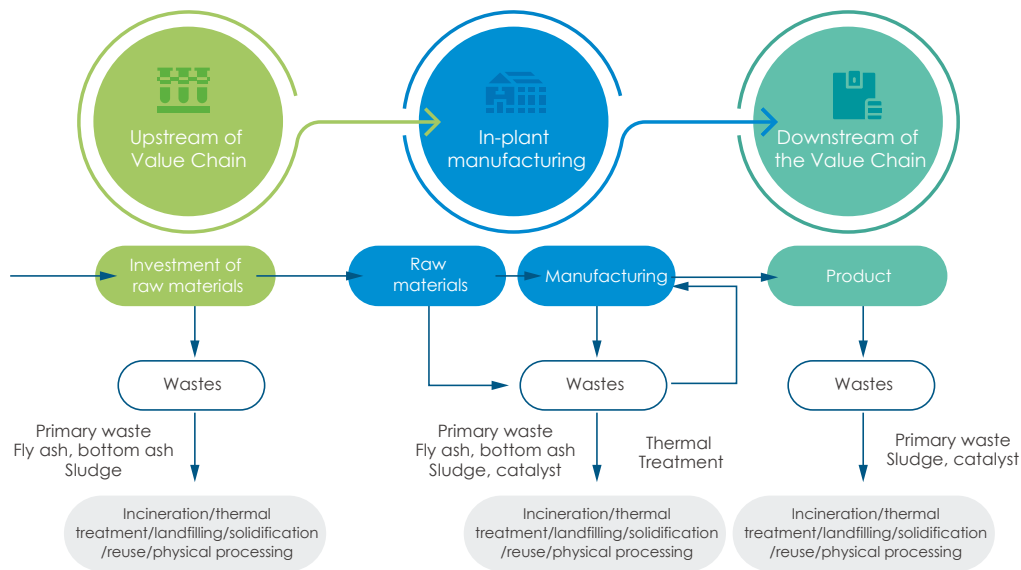
- **Policy:** The waste management policy is based on the government waste clean-up laws and the "Business Waste Management Measures" established by the Company
- **Responsibilities:** The waste generation department needs to assume management responsibility, and the environmental protection department needs to supervise and assist the management
- **Resources:** Improvements in waste reduction, with a total investment of NT\$440 million as of 2021
- **Specific Actions:** Select waste disposal and treatment companies that have obtained qualified environmental protection permits are hired to handle the waste
- **Objectives and Commitment:** Achieve the goal of "zero pollution"
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company's website as a channel for interested parties to provide their opinions and feedback.
 2. Propose discussions of various environmental protection issues in public or academic conferences
- **Performance Evaluation Methods and Results:**
 1. The waste recycling rate in 2021 is as high as 86%
 2. There were no abnormal incidents in the waste disposal conducted by the cleaning and transportation companies in 2021
- **Value chain management:** The Company handles all wastes generated in the value chain in accordance with legal requirements. Wastes are managed at the source of the process and process reduction to reduce the generation of waste and reduce the impact on the environment, and to grasp the potential impact of the waste cleaning process in real time.

3.5.1 Waste Management

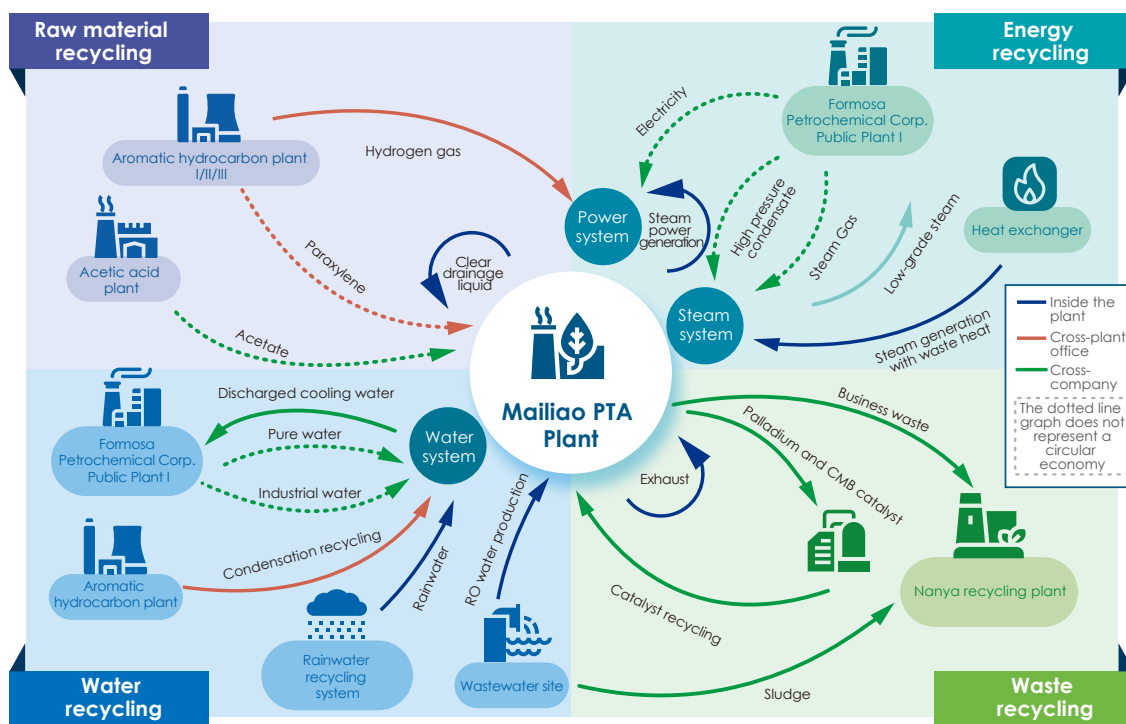
Waste management strategy

For waste and controlled chemical substances, the Company reduces the generation of waste through prevention, reduction, recycling and reuse, etc., and properly manages waste and chemicals in an environmentally sustainable manner, reducing the impact on human health and harm, negative impact on the environment. The Company has formulated the "Industrial Waste Management Regulations" in accordance with the relevant government waste disposal laws and regulations. Each plant has established independent audit control measures for waste disposal, and selected and obtained qualified environmental protection licenses according to the implementation content of the waste disposal plan approved by the competent authority. To ensure that the waste removal process is properly handled, there was no abnormal disposal of waste by cleaning and transportation companies in 2021.

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.



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.



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	For the reduction of coal use, it is estimated to reduce coal ash by 1,713 tons in 2022	Wastewater sludge drying improvement is estimated provide a reduction of 144 tons in 2022	Reduce amount of waste for landfills
Effectiveness	The recycling of failed plastic products started in the third quarter of 2021, with a recycling volume of 2,760 tons and a recycling rate of 91%	Sludge removal volume decreased by 67.9% compared with 2020	The landfilled amount was reduced by 2,660 metric in 2021, which was 63.7% less than in 2020



Waste source management

The Company classified waste by composition in 2021

Unit: Tons

Waste composition and components	Amount generated	Disposal and transfer amount	Direct disposal amount
Toxic hazardous waste (class B)	0	0	0
Waste with hazardous properties (class C)	61	0	61
General business waste (class D)	33,107	10,224	22,883
Announce the waste that should be recycled or reused (Class R)	253,837	253,837	0
Total amount of waste	287,005	264,061	22,944

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

Waste reduction in the production process

Waste transferred from disposal by recycling operations of FCFC in 2021

Unit: Tons

	Onsite (self-processing)	Offsite (outsourced processing)	Total amount
Hazardous Waste	-	61	61
Other recycling processes	-	10,224	10,224
Total amount	-	10,285	10,285
Ratio of hazardous waste recycling	-	0%	-
Non-hazardous waste	-	33,107	33,107
Reuse preparation	-	-	-
Recycling and reuse	-	253,837	253,837
Total amount	-	286,944	286,944

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

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

Note 3: Hazardous waste is classified as Class C waste

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

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

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

Waste treatment method

Regarding waste outsourcing, the business waste generated in each plant is sent to domestic legal disposal institutions for proper disposal, and no export is made abroad. In order to reduce waste generation, the Company implemented waste reduction improvements. The total investment amount reached NT\$491 million as of 2021.

Data related to waste processing in 2021

Unit: Tons

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

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



3.5.2 Controlled Chemical Substance Management

In order to ensure the safety management of the production, use, storage and transportation of controlled chemicals substances, and to ensure the normal operation of the operation sites and facilities of the controlled chemicals of each plant, we have obtained the approval documents of the competent authorities of controlled chemicals in accordance with the provisions of environmental protection, labor safety, fire control, transportation and other relevant laws and regulations, and formulated self-management measures to control chemicals. We regularly commission environmental testing institutions to conduct labor working environment measurement, in order to assess employee exposure in the environment and manage safety in the operating environment.

Each plant will consider possible disasters with respect to the manufacturing process and formulate the Regulations of Emergency Rescue based on the Safety Data Sheet (SDS) as a training material for emergency response drills. Unscheduled tests should be conducted twice every year along with an overall drill in disaster prevention and contingency plans, and large-scale observation drills are carried out in cooperation with the competent authorities of counties and cities.

3.6 Compliance with Environmental Protection Regulations

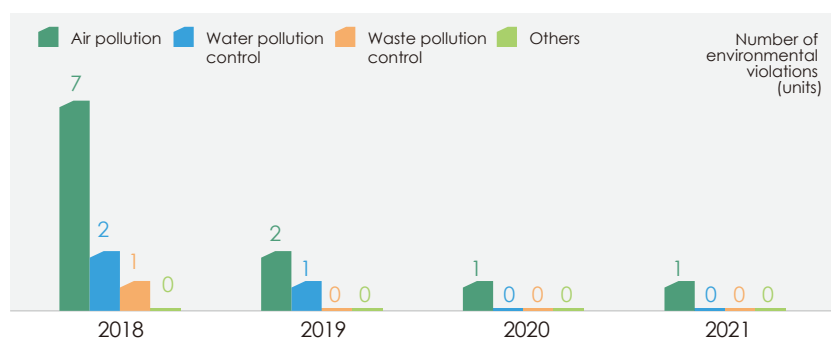
Management Approach to Compliance with Environmental Protection Regulations

Material Topic

- **Policy:** Pursue compliance with and better than the environmental protection regulations of the Environmental Protection Agency, and follow the corporate environmental supervision and management measures
- **Responsibilities:** Environmental protection experts have been designated in all production departments to be in charge of compliance with environmental protection laws. In addition, the environmental protection department has been established to assist, guide, and supervise matters related to environmental protection.
- **Resources:** Designated personnel of the company will continue to track and follow up and focus on amendments to environmental protection laws and drafts from competent authorities and to propose improvement projects.
- **Specific Actions:** A designated department will check the latest environmental protection laws and regulations announced on government websites regularly, and attend the public hearing and advocacy meeting of environmental protection laws and regulations held by the government when necessary to obtain the latest versions of the environmental laws and regulations.
- **Objectives and Commitment:** FCFC will ensure safe production processes to prevent from causing environmental pollution and set "zero penalty" as the goal.
- **Grievance Mechanism:**
 1. SHE section has been set up on the Company's website as a channel for interested parties to provide their opinions and feedback.
 2. Propose discussions of various environmental protection issues in public or academic conferences
- **Performance Evaluation Methods and Results:**
 1. The Company has established the procedures for compliance verification in accordance with the ISO 14001 Environmental Management System. If the results of compliance verification indicate non-compliance that cannot be improved immediately, we will request improvement plans to be formulated and follow up on their enforcement.
 2. No major leaks occurred in 2021
 3. One environmental violation in 2021. Regarding the environmental protection violations, we have implemented horizontal improvements and warned every department through internal meetings. We have also strengthened random inspection management and increased preventive equipment.

As FCFC has intensive upstream and downstream presence in the petrochemical industry, we have become a major inspection target for the central and local environmental protection government agencies (inspected 3 days per day). The one environmental protection violation in 2021 involved the non-inclusion of equipment in the air pollution permit, which was punished by the competent authority with a penalty of NT\$100 thousand.

Statistics of Environmental Protection Violations of Formosa Chemicals & Fiber Corp. from 2018 to 2021





4

The value of sustainable talents

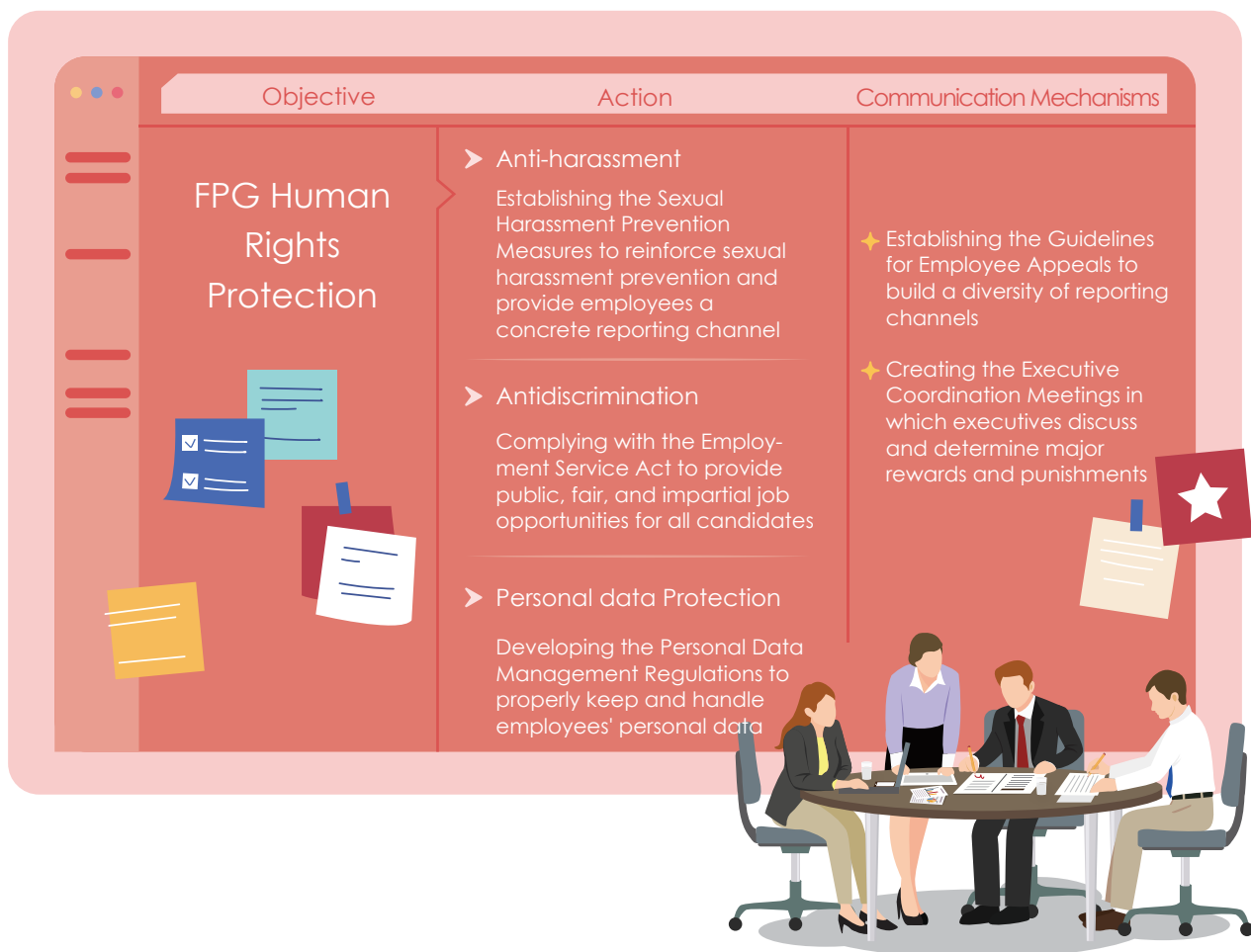


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4.1 Employee Human Rights Protection

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



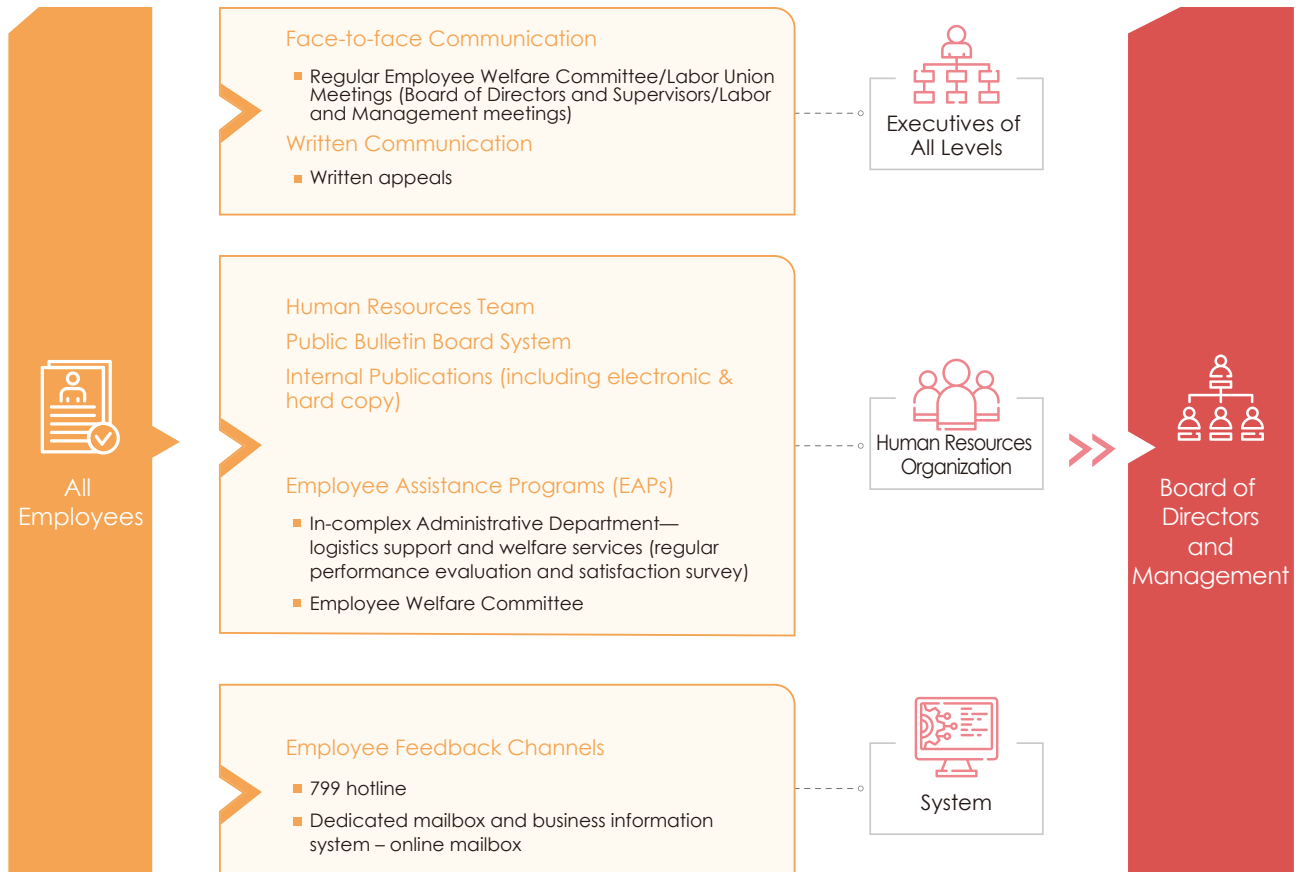
4.1.1 Employee Opinions and Feedback

The employees of the Company can communicate fully with the representatives of the management and labor in regular meetings through the labor union, welfare committee and other organizations. For material labor issues, government laws and regulations shall be prioritized for compliance. All male and female employees shall be equally protected by the labor-management agreements.

For newly recruited college-level management associates, we have arranged "dedicated counselors" to help them with various issues they may face in a new work environment, making them comfortable with their work and reducing the resignation rate. The Company issues employee care questionnaires every year to understand the employees' satisfaction and suggestions for the department's working atmosphere and the company's various measures. In order to improve the management capabilities of new supervisors, the Company offers leadership training courses for new supervisors such as "New Supervisor Study" and "Enhancing Work Enthusiasm and Team Effectiveness". We hope to establish a good working atmosphere and a good vertical communication channel, in order to improve work efficiency in all departments.



FCFC Internal Communication Channels





4.1.2 Employee Profile

The proportion of the 4,948 full-time employees in 2021 accounted for 95.9% and the 209 non-regular employees (consultants, fixed-term contract personnel, foreign workers, and working students) accounted for 4.1%. Local employees accounted for 99.9%. The ratio of male to female employees is 7.7:1. The gender ratio of onsite work is 13.5:1. Due to the characteristics of the industry, onsite personnel are mostly engaged in physically intensive work, therefore there is a higher proportion of male workers. The gender ratio for non-onsite work is 2.8:1.

FCFC Manpower Structure in 2021

Unit: Person

Type	Nature	Female		Male		Total
		Number of persons	Percentage of the group Percentage (%)	Number of persons	Percentage of the group Percentage (%)	
Employment	Regular Employees	566	11.4	4,382	88.6	4,948
Contract	Temporary Employees	127	60.8	82	39.2	209
Type of Employment	Full-time Employees	692	13.4	4,464	86.6	5,156
	Part-time Employees	1	100	0	-	1
Position	Executives	1	0.2	48	1.1	49
	First and Second Level Directors	36	6.4	1,133	25.9	1,169
	Entry Level Managers and Employees	271	47.9	3,199	73.0	3,470
	Assistants	258	45.6	2	0.05	260
Location	Northern Taiwan	223	39.4	703	16.0	926
	Central Taiwan	132	23.3	2,232	50.9	2,364
	Southern Taiwan	173	30.6	995	22.7	1,168
	Eastern Taiwan	38	6.7	452	10.3	490
Age	Under 29 Years Old	42	7.4	416	9.5	458
	30-39 Years Old	95	16.8	988	22.5	1,083
	40-49 Years Old	187	33.0	1,542	35.2	1,729
	50-59 Years Old	206	36.4	1,218	27.8	1,424
	Over 60 Years Old	36	6.4	218	5.0	254
Years of Service	Under 10 Years	164	29.0	1,450	33.1	1,614
	11-20 Years	37	6.5	698	15.9	735
	20-30 Years	182	32.2	1,630	37.2	1,812
	Over 30 Years	183	32.3	604	13.8	787
Education	Doctor's Degree	0	-	14	0.3	14
	Master's Degree	55	9.7	510	11.6	565
	Bachelor's Degree	52	9.2	758	17.3	810
	Others	459	81.1	3,100	70.7	3,559
Subtotal of Regular Employment by Gender		566	11.4	4,382	88.6	4,948

Note: The number of employees is consistent with the scope of the Report.



4.1.3 Employee job security

The recruitment operations of the Company adhere to the principles of fairness, impartiality and openness, and is handled in accordance with the provisions of the Labor Standards Act. Based on the basic human right of equal employment opportunity, 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. In 2021, the Company's internal transfer ratio reached 11.5% (persons/total number of people).

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 2021 was 3.6%, among which, retirement accounted for 50%.

Overview of new employees and resignations in 2021

Unit: Person

Type		New Employees		Employee Turnover	
		Number of persons	Proportion% (Note 1)	Number of persons	Proportion% (Note 2)
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

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.

Table of local residents serving as senior managers in the most recent 4 years

	2018	2019	2020	2021
Number of	691	687	679	671
Proportion (%)	39.2	38.9	38.9	38.4

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 Remuneration and Benefits

The Company upholds the philosophy of "equal pay" and the mission of "seeing all employees as members of our family" while providing excellent career development environments and good salaries, and establishing the benefits and remuneration system for our employees. The employees and employees shall fully communicate with each other through unions and employee welfare committees to implement various comprehensive welfare measures.

4.2.1 Employee Remuneration

The remuneration standard for new employees in the Company is based on the qualifications required for a position. A competitive remuneration structure is provided, which includes the base salary, various allowances, efficiency bonuses, holiday bonuses, supervisor incentives, etc. The overall remuneration combines the employee's professional knowledge and skills, performance, work quality and timeliness, ability for innovation, and planning capabilities. The reasonable and competitive remuneration structure has been stipulated according to the salary survey. The Company conducts overall evaluations of the operating goals, operating performance, and potential salary adjustments in future management environments of each location every year. Salaries shall be adjusted according to local salary adjustment rates and 3 to 7 month year-end bonuses shall be issued for all employees in each location. The salary adjustment in 2020 was 1% and the adjustment in 2021 was 3.83%. The average salary adjustment in the last 5 years was 3.22%.

In order to stipulate a reasonable and competitive remuneration system, middle manager evaluations for level 2 managers (inclusive) or above combines various sustainability indicators (such as energy conservation and carbon reduction, project execution, ability to innovate, leadership abilities, etc.), in order to incorporate the spirit of sustainability into company performance evaluations. The Company aims to attract, cultivate, and retain talent, as well as incentivize employees to continue achieving good performance. The basic salary ratio for males and females in the same position and of the same rank is 1:1. In 2021, the average employment cost per year per person was NT\$1.67 million. The basic salary plus remuneration ratios for male and female employees in 2018 to 2021 are shown in the table below:

Percentage of basic salary plus bonus for employees

unit: %

Year	2018		2019		2020		2021	
Type	Female	Male	Female	Male	Female	Male	Female	Male
Level 2 Managers or Above	1	0.97	1	1.07	1	1.03	1	1.05
Entry Level Managers or Below	1	1.36	1	1.33	1	1.30	1	1.31

The percentage of basic salary plus bonus of female employees below the entry level managers (inclusive) is lower than that of male employees, mainly because most female employees at the entry level act as operators or clerks. Most of them do not need to work shifts and do not receive shift related allowances. Male employees at the entry level work shifts and do receive shift related allowances.

The following table indicates the number non-managerial full-time employees and their median and average salary from 2018 to 2021:

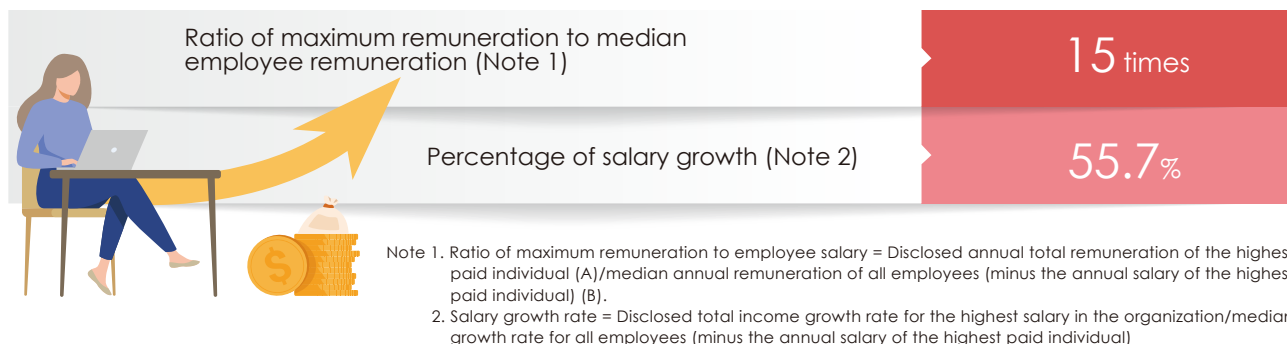
Salary Overview of FCFC Non-managerial Staff

Year	2018	2019	2020 (B)	2021 (A)	Previous year Comparison (A-B)
Number of non-managerial full-time employees (people)	4,890	4,911	4,672	4,503	-169
Average salary of non-managerial full-time employees (NT\$/person)	1,384,584	1,366,832	1,319,672	1,527,548	207,876
Median salary of non-managerial full-time employees (NT\$/person)	1,278,527	1,258,846	1,189,174	1,435,164	245,990

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



Ratio of maximum remuneration to annual employee remuneration in 2021



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 FCFC Pension System Overview



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

4.2.2 Employee Benefits

The company adheres to the concept of "treating employees as family members". Each plant area has a sound accommodation and leisure facilities, and actively promotes various comprehensive welfare systems. Employee welfare measures are implemented in accordance with the corporate welfare system, and there are several measures that are better than the legal requirements. Each plant has established employee welfare committees in accordance with the law to handle employee-related welfare. For the details of the benefits, please refer to the "Company Annual Report 2021" 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 insurance plans so that employees can insure various group insurances at discounted prices (accident insurance, medical insurance and cancer prevention insurance). Employees are provided with a variety of 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 2021, there are 1,017 members.



Unpaid parental leave

The Company provides a parental leave without pay system. Employees may apply for the leave according to their needs. In 2021, a total of 9 employees applied for the leave. Applications for leave in the past 4 years are shown in the table below:

FCFC Application for Unpaid Parental Leaves and Reinstatement

Item	2018			2019			2020			2021		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	12	180	192	11	168	179	17	158	175	16	149	165
Number of Employees Applying for Unpaid Parental Leaves	11	-	11	10	-	10	6	-	6	6	3	9
Number of Employees Expected to Reinstatement in the Year (A)	6	-	6	8	-	8	7	-	7	7	3	10
Number of Employees Applying for Reinstatement in the Year (B)	6	-	6	8	-	8	6	-	6	7	0	7
Number of Employees Having Reinstated for over a Year (C)	4	-	4	5	-	5	7	-	7	5	0	5
Reinstatement Rate (%) (B/A)	100	-	100	100	-	100	86	-	86	100	0	70
Retention rate (%) (C of the current year/B of the previous year)	100	-	100	83	-	83	88	-	88	83	0	83

Note 1. "-" indicates no numeric value.

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

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

4.3 Talents Cultivation Development

Management approach for the talent development program

Material Topic

- **Policy:** We provide good career development and training system and measures, and carry out well-rounded talent development based on the "Training Management Method."
- **Responsibilities:** Employee is the most important asset to a company, as well as the foundation to sustainable management. Planning a comprehensive training system and actively developing outstanding talent is an important growth driver for the Company's business.
- **Resources:** Formulate the "Training Management Measures" and implement personnel training through ERP system computerized management. In order to ensure training quality, the FPG "Technical Training Center" (TTQS Gold Award from the Ministry of Labor) has been entrusted to develop and execute employee competency certification and technical training courses.
- **Specific Actions:** Training courses have been computerized to regularly remind the organizers to arrange employee training within the deadline. In case incomplete training is overdue, the system will continuously follow up until it has been completed.
- **Objectives and Commitment:**
 - Implement training for all ranks and functions.
 - Continue to implement employee safety, health and environment training and expand the training to contractors.
 - Recruit and train AI personnel.
 - Promote the passing of function certification by employees and the completion of cross-functional training by middle to senior managers and managing supervisors.
- **Grievance Mechanism:**
 - Physical mailbox and online suggestion box. ➢ Dedicated hotline.
 - Organizational meetings of the union and Employee Welfare Committee.
- **Performance Evaluation Methods and Results:** All formal employees are subjected to performance evaluations. The evaluation ratio in 2021 was 95.9%. Through performance evaluations, managers are able to communicate with subordinates face-to-face and can further discover their talents, which may be taken into consideration for training and job transfers, helping fulfill career development management.

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



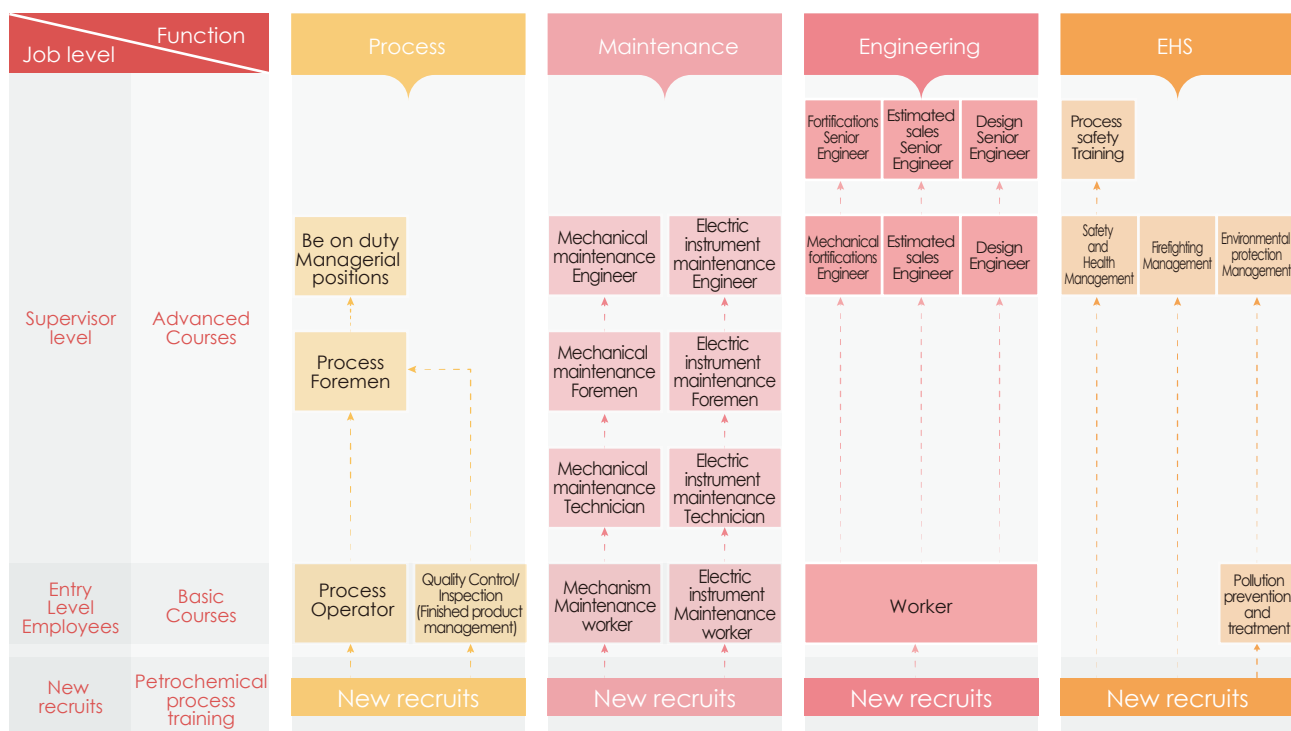
4.3.1 Employee Career Development Management

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

Employees' Career Development Path

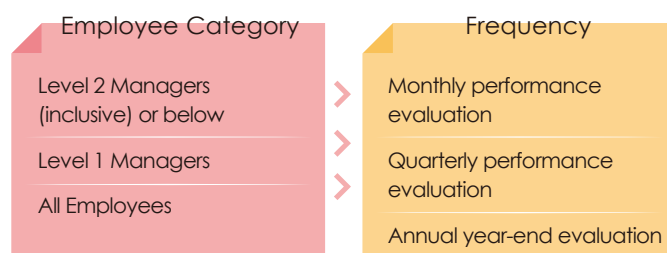


Professional and technical job training system



FCFC Evaluation Mechanism

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.





In addition to informal personnel (such as: consultants, contract personnel, work-students, foreign workers), 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 2021, the overall average inspection ratio of each category was 95.9%.

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

unit: %

Employee Category	Male	Female
Executives	68.6%	14.3%
Level 1 Managers	99.5%	100.0%
Second Level Directors	100.0%	100.0%
Entry Level Managers	100.0%	100.0%
Entry Level Employees	97.3%	79.1%
Total	95.9%	

Note: The percentage of executives receiving evaluations was rather low due to a higher percentage of temporary consultants.

4.3.2 Employee Professional Training and Development

9 Functions of Professional Training

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" (ITQS gold medal evaluated by the Ministry of Labor) 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.



- Finance Services
- Business
- Project Improvement
- Engineering
- Personnel
- Industrial safety
- Environmental protection
- Production
- Materials
- Maintenance

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

Training Type	Number of people who passed	Courses with the Most Number of Participants
Job certification exam	805	Safety Supervisor Certification Course
Professional job training course	1,533	Firefighting technical training for entry-level personnel

Middle to Senior Managers

Number of Participants **167**

Training Hours **571**

To promote employees' awareness of human rights and occupational safety, we organize occasional courses on Occupational Safety and Health Act, the Labor Standards Act, the Sexual Harassment Prevention Act, and the Act of Gender Equality in Employment in addition to the orientation where employees receive training related to evaluation, appointment, employee benefits, attendance and plant access control. In addition, in order to strengthen the legal concept of employees, in 2021, the company arranged "ethical management" legal training courses for internal sales personnel and supervisors, and government legal units were invited to promote common corporate economic crime cases and regulations. A total of 74 people participated in the course, with total training hours of 148 hours. An "insider trading prevention" course was held for current directors, managers, and related employees. A total of 171 people participated in the course, with total training hours equaling 85.5 hours.

In 2021, each employee received an average of 29.9 hours of training (15.6 hours for senior managers; 36.0 hours for entry level managers; and 33.9 hours for entry level employees).



FCFC Employee Training over the Past 4 Years

Unit: hour

Rank \ Year	2018			2019			2020			2021		
	Male	Female	Average	Male	Female	Average	Male	Female	Average	Male	Female	Average
Middle to senior level Managerial positions	21.5	12.8	21.2	23.2	8.0	22.8	14.7	9.3	14.6	16.0	5.3	15.6
Entry level Managerial positions	36.9	28.5	36.5	41.5	25.6	40.8	32.8	19.3	32.1	37.6	9.9	36.0
Entry level Personnel	46.0	40.6	44.8	34.0	22.9	31.7	33.0	18.2	29.8	37.9	19.2	33.9
Average training hours per person	37.5	38.3	37.6	33.2	22.4	31.8	28.0	17.8	26.6	31.9	17.4	29.9

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

Training Completion Rate of the Company in the Past 4 Years

	2018	2019	2020	2021
Training completion rate (%)	100	99.3	99.5	99.6

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

4.4 A Healthy and Safe Working Environment

Material Topic

● Policy:

1. Focus on the causes for various accidents and strive for improvements to prevent recurrence.
2. Implement the provisions of the Occupational Safety and Health Act and Fire Services Act to create a safe work environment.
3. Continue to implement production process safety management activities to eliminate potential dangers in the production process and prevent major risks.
4. Continue to implement various health improvement activities and enhance workplace health management.

● Responsibilities:

1. Create a people-oriented healthy occupational environment with the goal of zero-accidents.
2. Uphold the ideals of "working hard for good" and move towards the goal of sustainable management.

● Resources:

1. Increase the rank of safety, health and environment supervisors in all plants and offices and establish PSM Deputy Plant Directors to coordinate safety, health and environment operations.
2. All operations are planned with safety as the basis.
3. Implement the assistance of external experts to bring in the latest knowledge and technologies in the plant and implement them.

● Specific Actions:

1. Regularly review the implementation of various safety, health and environment policies every year according to the ISO internal audit model.
2. Stipulate safety and health KPIs to review and adjust the implementation of various safety and health operations every month.

● Objectives and Commitment: Promote "people - oriented" "essential safety management" for the goal of enterprise perpetual business operation

● Grievance Mechanism:

- To respond to safety and health management recommendations in the quarterly safety and health committee and make immediate improvement.
- On-site medical professionals are appointed to provide professional medical advice and consultation based on employees' needs.

● Performance Evaluation Methods and Results: Performance evaluation is carried out according to the national "occupational safety and health management system". The Company has stipulated safety and health KPIs to review the implementation status of each unit regularly and revisions are made simultaneously.



4.4.1 Employee Health Management

In accordance with the "labor health protection rules" and the "health management measures" of Formosa Plastic Group, the company conducts general health examination for employees and special health examination for production plant operators in the environment of high temperature, high pressure or hazardous fluid. The frequency of health examination for employees is shown in the table below:

Comparison between FCFC Frequency of Health Examinations and Statutory Requirements

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

To further promote health management, the EHS Office at the Mailiao Industrial Complex has helped establish a health promotion organization. The Employee Welfare Committee and the Infirmary are invited to participate in health promotion programs. The health promotion organization received employees' opinions by attending labor union meetings and management-employee meetings, in order to actively care for employee safety and health.

Medical personnel are assigned to industrial complexes to provide employees with personal health guidance and professional counseling services. In collaboration with the Medical Center of Chang Gung Memorial Hospital, FCFC promotes preventive medicine and disease prevention to raise employees' awareness of their health conditions. In 2021, a total of 16 health lectures were held, with a total of 545 participants. In order to help medical staff obtain employee blood pressure and blood sugar data in a more-timely manner, blood pressure monitors and blood sugar machines, along with other measuring equipment, have been upgraded to the "i-Care Health Station" in 2021. When employees are in need, individual health counseling can be implemented immediately.



Promote CPR+AED training for all employees

The Company's AED+CPR training aims to include all employees. In 2021, there were 2 cases of actual usage, which successfully saved the lives of one employee and one contractor. The cases further increased the importance of AED+CPR in the minds of all employees. With the cooperation of all units, the employee training rate reached 95% this year.

Plant Site							
	Year	Longde	Xingang	Changhua	Mailiao	Taipei	Total
Training rate	2018	58%	63%	60%	93%	58%	74%
	2019	77%	64%	62%	93%	53%	77%
	2020	78%	81%	61%	99%	51%	84%
	2021	98%	87%	92%	99%	97%	95%



4.4.2 Promoting a Healthy Workplace in Cooperation with Government Agencies

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



4.4.3 Workplace Safety Management

The Company complies with the Occupational Safety and Health Act and the requirements of ISO 45001 Management System. All employees within the plants, including external contractor personnel, shall comply with the related requirements within the workplace and accept the management of the Company's safety supervision personnel. Each plant convenes the Occupational Safety and Health Committee every quarter. The committee members and labor representatives' review, coordinate and make suggestions on the potentially hazardous working environment, occupational safety and health policies and management plans on the site. Members also briefed Labor representatives on recent safety and environmental policies and promotions (the number of committees and Labor representatives is shown below). In addition, we also follow the occupational safety laws and regulations. Colleagues may suspend operations and leave the area if they encounter hazardous factors in the work environment. They may report to supervisors for assistance in handling or suggest solutions through employee appealing channels, and will not be subject to punishment.

Plant Site	Chairperson	Number of Occupational Safety and Health Committee Members	Number of Labor Representatives	Proportion of labor representatives (%)
Mailiao	Assistant Vice President	7	3	42.9
Xingang	Section Chief	16	9	56.3
Changhua	Manager	8	3	37.5
Longde	Assistant Vice President	12	11	91.7

The company promotes the "people-oriented" "essential safety management", with people as the starting point, and fundamentally do a good job in safety management. 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.

Phase	Implementation unit	Implementation focus
The first stage	Department of Safety and Health	Regulations and corporate safety regulations, CPR/AED
The second stage	Plant	Plant process environment introduction, plant equipment and facilities, protective equipment instruction
The third phase	Class/group	Process or maintenance SOP training

In addition, the safety and health department regularly compiles accidents that occur in the industry at home and abroad into cases to stipulate "Safety and Health Bulletins", which are announced through the company's OA system. The department adds a QR code to the "Safety and Health Bulletins", to facilitate employees to read the original text and enhance their safety awareness. Parallel improvements have been implemented for internal and external accidents of the Company. In 2021, 6 accident investigations were implemented. In addition, because creating a healthy and good workplace is the Company's continuing goal, the Company has promoted various people-oriented workplace safety activities in 2021 and received the affirmation of workplace awards issued by the Ministry of Labor.





Process Safety Management (PSM)

In addition to complying with the US OSHA regulations, the Company has established a total of 57 dedicated PSM personnel at each rank to assist each department to coordinate and launch the 14 key PSM tasks. Furthermore, PSM Deputy Plant Directors have been established in the production plants, who are in charge of safety, health, and environment management. In order to enhance the professional abilities of personnel, the Company continues to appoint personnel for professional training. To date, a total of 159 people have received "production process safety evaluation" certification.

Management of Change (MOC)

In order to ensure that any design, equipment, raw materials or operating conditions change will not cause harm to the process, the Company actively implements process hazard analysis. The Company actively promotes the "change management" procedures. Starting in 2011, the Company has arranged MOC counseling evaluation schedules every year. The Vice Presidents of various business departments and PSM personnel act as the leaders of the counseling evaluation team to lead managers with various professional backgrounds in production process operation, electrical instrumentation, machinery maintenance, engineering design, and safety, health and environment. The different teams conduct operation exchanges in the various plants. Through the counseling, evaluation, and experience sharing processes, the main points of change management are applied to the onsite production activities of the plants.

The bottleneck removal project, the distributed control system (DCS), the emergency shutdown system (Emergency Shutdown Device, ESD) upgrade or the software/hardware change, the motor or disk form change of 3.3KV or more, the high risk fluids involving process equipment or pipeline updates, operating contents changes, and internal corrosive environments must be notified to the business department, sustainable security (security department + security group), inspection AI, and PSM personnel to review together, so that MOC cases can be viewed from different perspectives analyze to ensure safety since 2019. In order to make the review of MOC change cases more rigorous and safer, in 2020, the company developed the MOC process to further refine the practice, eliminated "external corrosion improvement" and added possible low temperature brittle fracture", and focus on relatively important factors affecting the safety of the process. In 2021, according to the directions of the chairperson, if the plants had any concerns about equipment repair, they may actively submit the change management case to the equipment security team for professional and technical review. In the future, this policy will continue to be implemented.

Work safety analysis

In order to help employees identify the potential dangers in the operating process and propose improvement measures, the "Risk and Opportunity Assessment Operating Guidelines" were formulated. Plant and office personnel who have received safety analysis training assessed the danger of physical, chemical, biological, human error, or similar cases in the industry. The personnel identified the level of exposure, the probability, and severity to calculate the level of risk. The personnel then proposed corresponding improvement measures according to the levels of risk, in order to further reduce operational dangers.

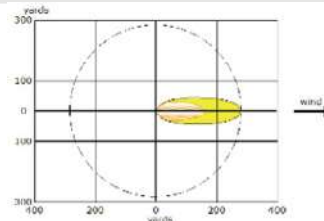


Promotion of disaster prevention drill enhancement

In order to help each unit simulate real situations in a more scientific manner and help personnel more accurately implement response measures according to each simulated situation, the Company introduced the ALOHA spread simulation analysis and GOOGLE EARTH in 2021 to plan safety evacuation routes according to the degree of spread.

STEP 1

Enter the climate, topography, leakage and other factors of Mailiao plant into ALOHA for analysis.



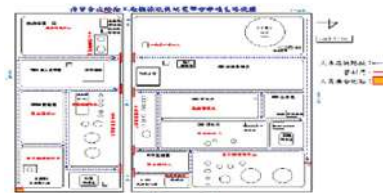
STEP 2

Introduce Google Earth to understand the scope of the spread.



STEP 3

Plan employee evacuation routes, gathering locations, and support routes for external personnel.



STEP 4

Plan employee evacuation directions according to the simulation results.



4.4.4 Statistics of Occupational Injuries

The company is committed to reducing industrial safety accidents. In 2021, the statistical information of various industrial accidents of Formosa Chemicals & Fiber Corp. is as follows. In terms of the total injury index, the average male and female injury index is 0.02, which is far lower than the average 0.8 of the chemical raw material manufacturing industry (Note). There were no major occupational disasters, or accidents where the number of lost days was more than 6 months.

FCFC Occupational Injuries in 2021

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
0.22	0	5	0	0.03	0	0.28	0.46	0	0

Note 1: Industry information comes from the 2019-2021 Frequency-severity Indicator by Sector published by the Occupational Safety and Health Administration, Ministry of Labor.

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

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



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.

Compared with the chemical raw material manufacturing industry, the company's work-related safety performance from 2018 to 2021 shows that the total injury index of employees excluding traffic accidents is lower than the average announced by the Ministry of Labor in the last four years. This is the result of efforts to strengthen employees' hazard identification capabilities and safety advocacy, and to strengthen the intrinsic safety of various machinery and equipment.

Statistics on various work-related injuries of the Company in the past four years

Year	Disabling Injury Rate	Disabling Injury Severity Rate	Frequency-severity indicator	Absence Rate	Occupational Disease Rate	Working hours
2018	0.76	11	0.10	0.37	0	7,899,430
2019	0.51	12	0.07	0.32	0	10,505,808
2020	0.40	37	0.12	0.28	0	9,862,392
2021	0.17	4	0.02	0.30	0	11,970,330

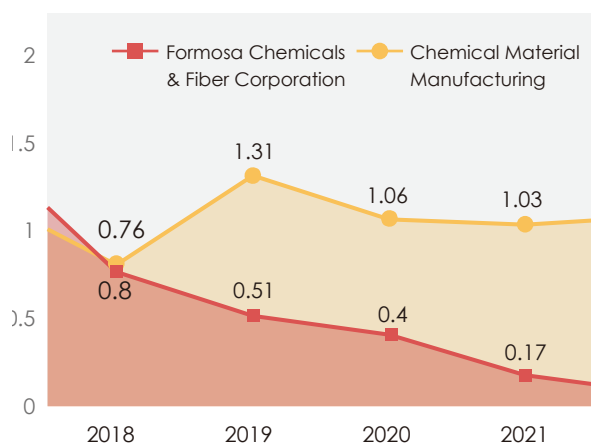
Note 1: Working hours = number of employees*working days in a given year*8 hours + overtime hours - hours of leave

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

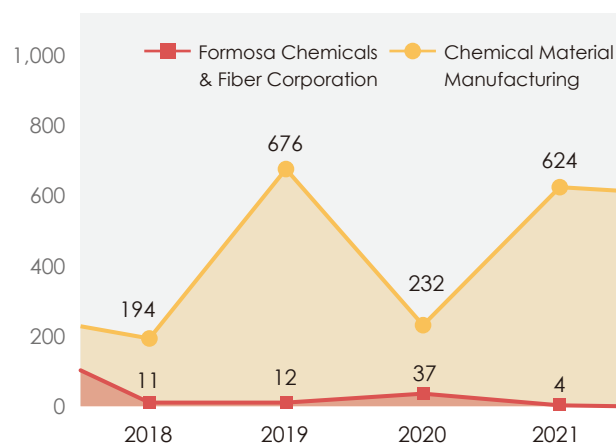
Note 3: Disabling injury rate: Number of disabling injuries*1000000/total working hours

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

Disabling Injury Rate



Disabling Injury Severity Rate





Statistics on various work-related injuries of Contractors in the past four years

Year	Disabling injury rate	Disabling severity rate	Working hours
2018	0.94	4	6,461,511
2019	-	-	11,308,084
2020	0.22	26	13,086,940
2021	0.09	1	10,152,615

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

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

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

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

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

In 2021, most occupational accidents occurred due to unsafe personnel behavior that violated SOPs. The Company will continue to strengthen people-oriented safety education and training and emphasize the importance of complying with work safety regulations.

2021 FCFC Abnormal Incidents and Occupational Injuries at Each Plant

Plant Site	Fire	Major Occupational Disaster	General Occupational Disaster	Total	Description
Longde	0	0	1	1	Sprayed by production process liquids
Changhua	0	0	0	0	-
Mailiao	0	0	2	2	Collision with equipment
Xingang	0	0	0	0	-
Total	0	0	3	3	

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.

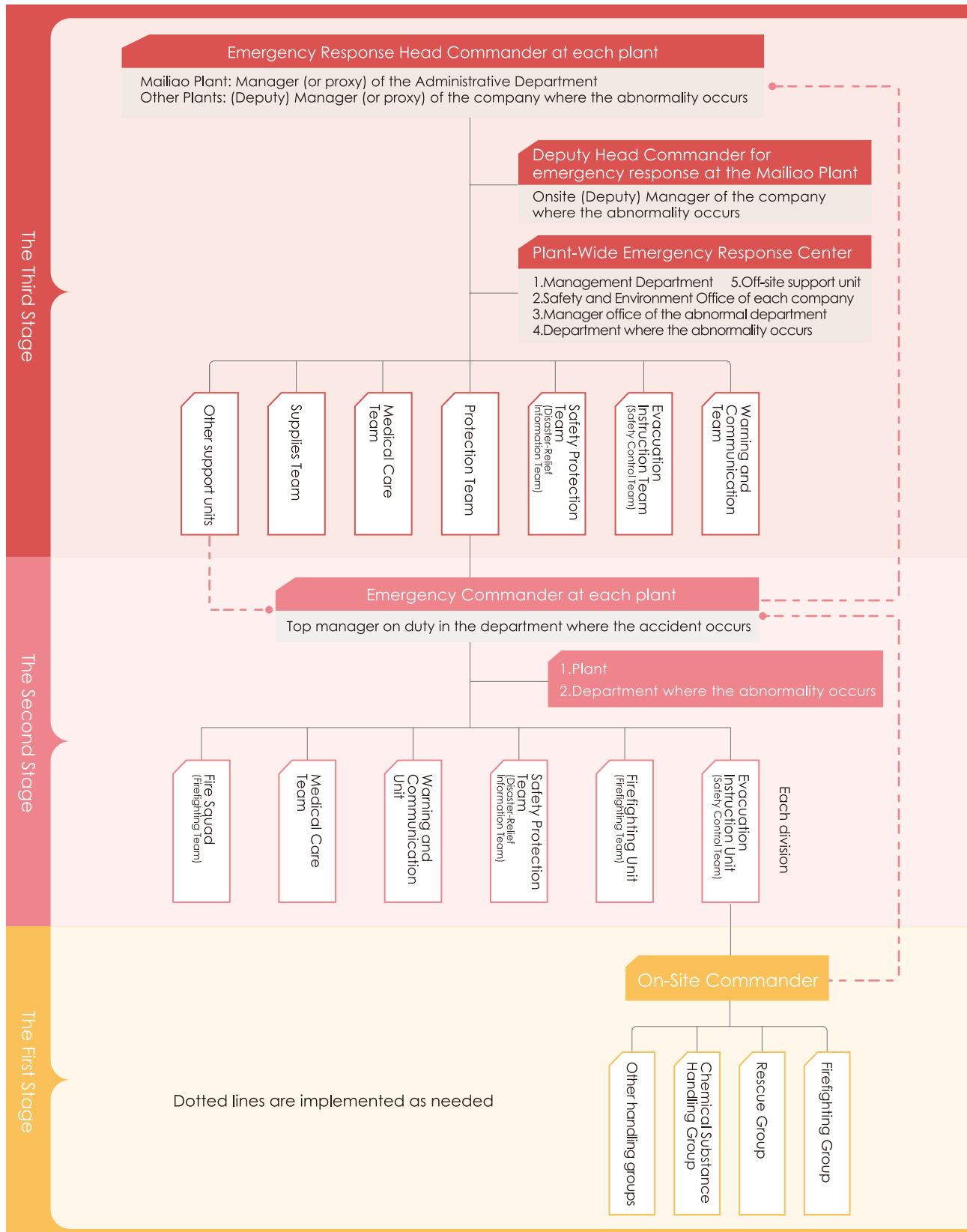
Note 2: Recordable occupational hazards refer to general occupational hazards.

In consideration of the characteristics of the Company's work, besides the risk of spilling from chemical substances, there are also higher risks of machinery injuries, collision caused by transportation of materials, or falling. Therefore, the Company has been active in increasing the reliability of equipment in recent years in the hope of reducing potential personnel risks during operations through the improvement of the equipment. In the event of an accident, related information is immediately reported to the authority in charge and the supervisors at all levels; in addition to reporting to the local inspection agency in accordance with the Occupational Safety and Health Act and the Enforcement Rules of Labor Inspection Act, the Mailiao Industrial Complex also reports to the Yunlin Offshore Industrial Park Service Center and the Yunlin County Government.



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 team handles the accident according to its duties. The accident will be reported through the accident (abnormality) bulletin system and the accident (abnormality) SMS system. After the accident takes place, the investigation procedures will be initiated to clarify the cause and improve accordingly, so as to avoid the recurrence of similar accidents.

Emergency Response Organizational System (Fire/Explosion) at Each Plant





Overview of Occupational Disasters

The Company's occupational disaster rate (persons per thousand) from 2018 to 2021 was lower than the national average.

Item	2018	2019	2020	2021
Number of Occupational Disabilities	6	4	4	2
Occupational Disaster Rate (Persons per Thousand)	1.07	0.9	0.6	0.38
Number of Occupational Fatalities	-	-	-	-
Number of Major Occupational Disasters (Contractors)	-	-	-	-
Number of Occupational Fatalities (Contractors)	-	-	-	-
National Occupational Disaster Rate (Persons per Thousand)	2.61	2.49	1.06	2.57

4.4.5 Contractor and Supplier Management

Management Approach for Plant Emergency Response Mechanisms

Material Topic

- **Policy:** Handled in accordance with fire laws and regulations
- **Responsibilities:** All employees in plants and offices
- **Resources:** Executed according to the "Accident Handling Management Measures" and "Emergency Response Handling Management Measures"
- **Specific Actions:**
 1. The plants and offices organize a cross-plant and office response drill every year. The plants and offices organize an internal drill every month to regularly review the proficiency of personnel
 2. The safety and health office implements random inspections every year to review improvements for inadequacies with the plants and offices
- **Objectives and Commitment:** The Company strengthens the emergency response procedures, methods, techniques, and implementation measures for each plant and office. We aim to improve personnel familiarity with emergency response procedures in order to ensure handling capabilities for accidents, prevent the spread of disasters, and reduce losses. This policy shall ensure the safety and integrity of personnel, the environment, equipment, and property.
- **Grievance Mechanism:** Safety and Health Office of each plant
- **Performance Evaluation Methods and Results:** Stipulate the "Implementation Guidelines of Emergency Response Drill Testing" to implement testing for various drill items, in order to verify the implementation performance of the plants and offices in a quantified manner.

Construction Safety Management for Contractors



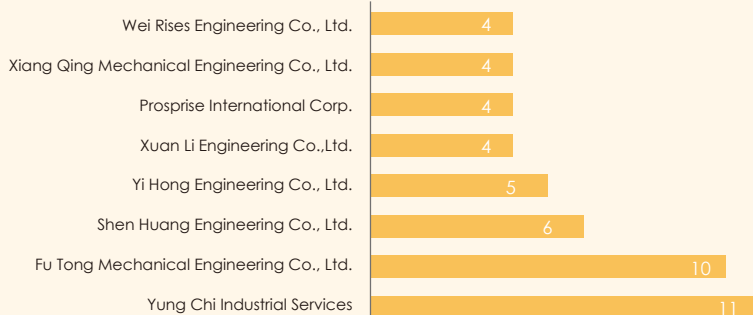
In order to enable the personnel to work at ease and safely in the working environment, an agreement organization meeting is regularly held with the contractor to detail the environmental profile. In addition to the safety education and training before the contractor enters the plant, the company actively compiles two access control teaching materials to strengthen the contractors' safety education, and grants another three hours of general safety education and training to the construction personnel who want to enter the plant. In 2021, a total of 2,254 trainees have been qualified.

In order to help contractors grow together with the company, after each scheduled inspection, the inspection plant, engineering unit, and contractor are invited to jointly hold an "abnormal counseling and improvement symposium" and analyze the abnormal events of this and previous scheduled inspections. A total of 9 symposiums were held in 2021, and improvement measures developed jointly for the repeated abnormal occurrence, and the occupational disaster prevention plan before the next scheduled inspection were reported



back to avoid repeated abnormal occurrence. In addition, in order to make management more scientific and precise, key point education and training is implemented for suppliers with recurring abnormalities and safety and health management personnel. The "Safety, Health and Environment Data Management Platform" was established in 2021. Through the collection of data, "abnormality resumes" for contractors and safety supervisors are established, in order to help each unit effectively find the suppliers or personnel that require key point management. Counseling and reminders can be provided before operations, and the objective data will be used to review improvements with the contractors.

Number of defects of responsible suppliers



Carrier transportation safety management

In order to improve transportation safety, in addition to actively participating in the safety & quality assessment system (SQAS) for transportation safety of contracted carriers promoted by the enterprise, the transportation safety of transportation proposed by the customer is also included in the SQAS management, and all contracted carriers are evaluated once every year. A total of 15 companies have passed the assessment in 2020.

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 cares about employee care within contractors. Contractors with more than 50 employees are included in the care system. The "Assessment for the Occurrence of Cerebral or Cardio Vascular Risks within 10 Years" is conducted according to "we-Care" announced by the Occupational Safety and Health Administration to identify "high risk" individuals for care. In order to continue caring for contractor health during the pandemic, the Safety and Health Office actively identified 15 high-risk cases among the 285 contractors that comply with the conditions for care. Health management personnel provided one-on-one health counseling over the phone. The management activity received the recognition of Chang Shin, Chi Sun, and other contractors. The contractor employees who received care also expressed their gratitude.





5

The value of social prosperity

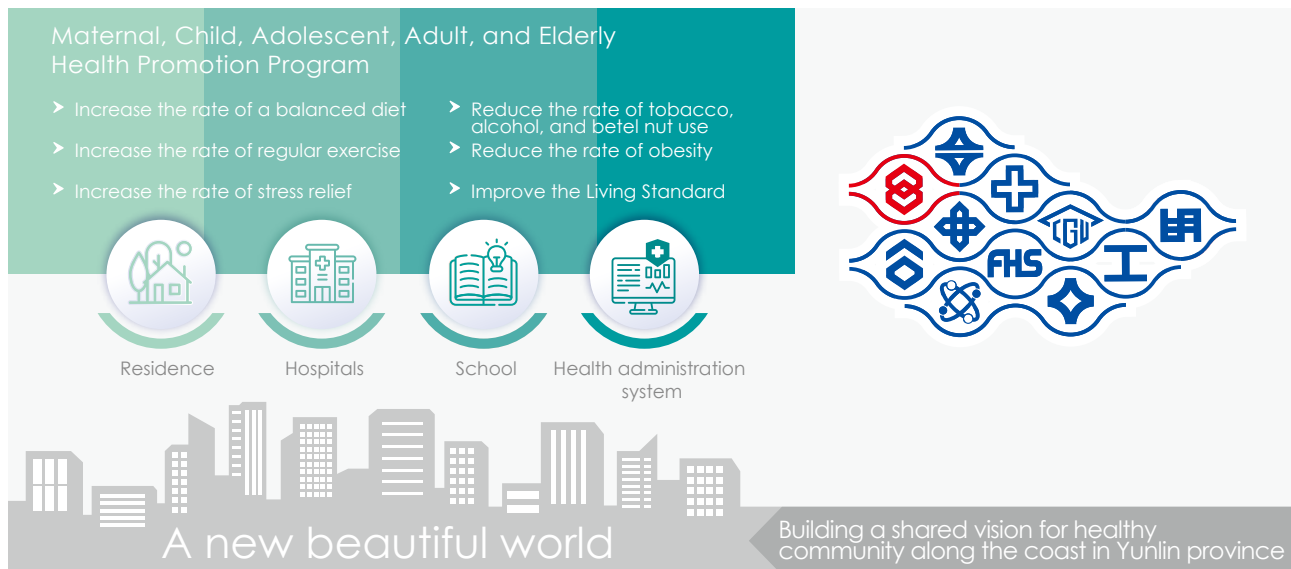


5.1	Community Engagement	84
5.2	Feedback to Society	89



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

5.1 Community Engagement





5.1.1 Care for Community Residents' Health

Due to the company's industrial characteristics and its close relationship with residents in the operating areas, the vision and promotion structure for residents' health care are as follows:

Health Promotion Plan for Residents near the Mailiao Industrial Complex



Please refer to the "Corporate Social Responsibility" section on the official website of Formosa Plastic Group for the results of the implementation of health care for residents in the vicinity of Mailiao Park by the Company and companies within the group.

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. In order to enable children in neighboring communities to have a safe growth space and environment to grow up, we expanded child care services and provide preferential access to preschool children aged between 2 and 6 in neighboring communities.



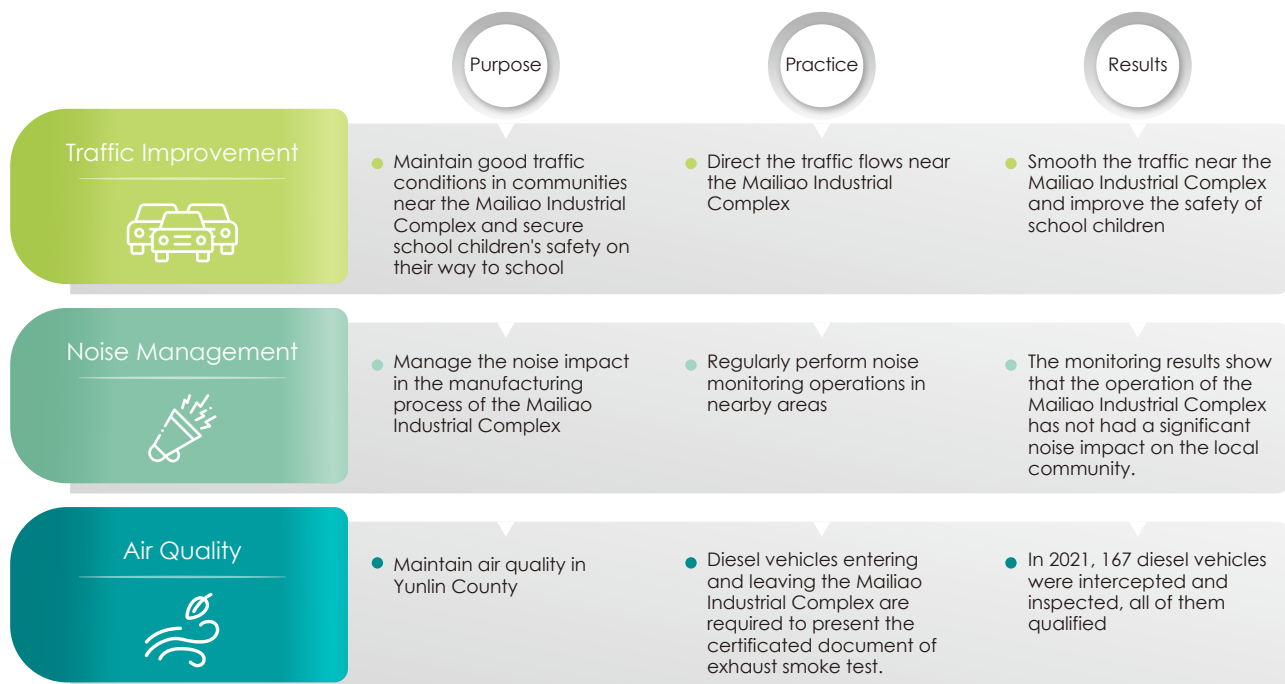
Fieldtrips for local culture



Earthquake drills



5.1.2 Enhancement of the quality of life of community residents



2From 2018 to 2021, the inspection operations were carried out on the adjacent roads entering and exiting of the Mailiao Industrial Complex with diesel vehicles, and all of them are qualified. Inspection results over the years are indicated below:

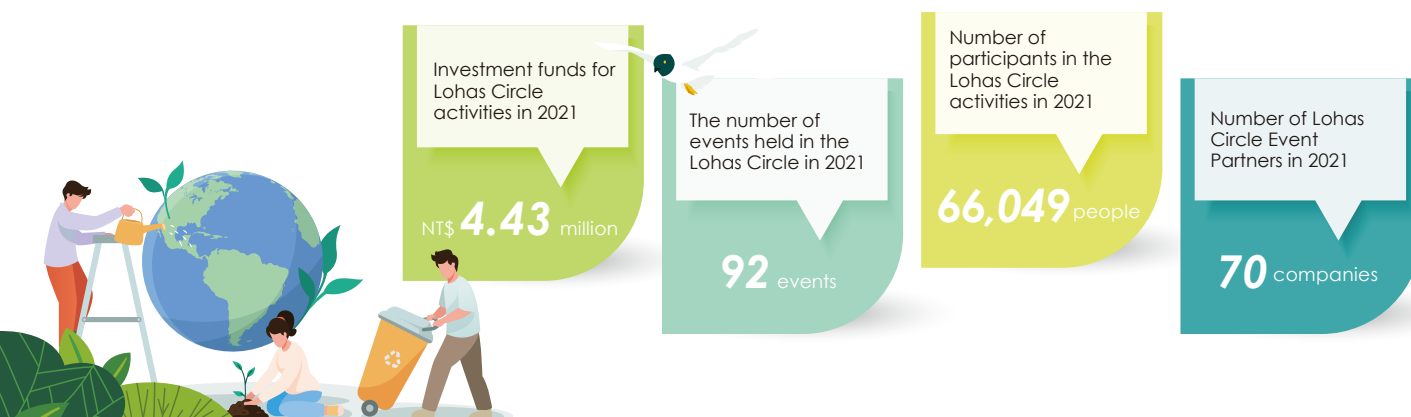
Year	Amount of traffic (A)	Number of intercepted vehicles (B)	Number of examined vehicles (C)	Number of qualified vehicles (D)	Number of passing rate (D/C)
2018	3,240	223	108	108	100%
2019	1,245	438	80	80	100%
2020	1,511	597	82	82	100%
2021	1,470	167	84	84	100%

Note: 1. Number of Vehicles Checked refers to the number of diesel vehicles checked in the roadside inspections by the Environmental Protection Administration.

2. Number of Vehicles Inspected refers to the number of diesel vehicles emitting black smoke among the diesel vehicles checked in the roadside inspections.

3. 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





Formosa LOHAS Circle has been gradually established at Yilan, Taoyuan, Yunlin, and Kaohsiung by the Company and companies within the group in recent years. Founded with the purpose of community engagement and environmental sustainability, FPG coordinates with neighborhood communities, vendors, small-scale farmers, and local governments to promote LOHAS Circle. In 2020, Formosa Lohas Circle held a series of activities in each of the company's plants. In Yilan, Longtan Lake Ecological Classroom was used as the base to promote ecological investigation and in-depth ecological tourism. In Changhua, the Lohas Circle also implemented wetlands ecological education events and continued to promote the recycling of second hand toys around Taiwan, in order to convey respect for life and care for possessions through the events. The Company has worked with education institutions to promote recycling and reusing creative competitions. We aim to reduce environmental pollution and advocate the ideals of balance between environmental protection and economic development through creativity. The events held in 2021 are as follows:

Yilan Lohas Circle incorporates the ideals of lifestyle culture and ecological balance

Environmental Education Activities at Formosa LOHAS Circle, Yilan



Longtan Lake Ecological Classroom

In 2021, Yilan Lohas Circle continued using Longtan Lake Ecological Classroom as its base. It established a fixed location on the shores of Longtan Lake to explain ecological information and the beauty of nature to the general public. Yilan Lohas Circle worked closely with the Longtan Community Development Association, related government organizations, and local schools to invest in ecological improvements for distoechodon tumirostris and help promote the conservation of the fish through environmental education. Yilan Lohas Circle aimed to give local students a better understanding of the beauty of their hometown. Sanxin Elementary School and Xinsheng Elementary School, which are located in other counties, also brought their students on a fieldtrip to the area for environmental education. In 2021, a total of 487 participated in the activities.

Yilan Lohas Circle was invited by the Yilan County Government to participate in the "Water Conservation Fun - Playing in the Mountains and Waters" water protection event. The event aimed to promote environmental protection and activities related to the Longtan Lake Ecological Classroom to the general public. The event had 1,000 participants. The public, participating organizations, and organizers agreed with the ideals of the Longtan Lake Ecological Classroom and actively invited the Longtan Lake Ecological Classroom to participate in related environmental events, in order to do our part for the environment together.



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



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

Changhua LOHAS Circle

Starting in 2020, the Company has worked with the Taiwan Toy Library Association to establish the "Formosa Toy Base" brand. We established a second hand toy logistics center in the Fuli Building of Changhua plant to recycle toys from the central region. As of 2021, the center has recycled 8,665kg of second hand toys and has shared the toys with 129 social welfare organizations and disadvantaged family groups, allowing more children to share this joy and enrich their childhoods. Through education and promotion, we aim to convey the types of plastics, recycling classification, and correct usage ideas, allowing the concepts of a circular economy to be implemented in every aspect of life.

The toy base also designed diverse toy courses for all ages, teaching children how to disassemble and rebuild toys. As of the end of 2021, 63 courses have been held, covering social welfare institutions, elementary schools, and kindergartens throughout Taiwan. Furthermore, for the elderly, toys have been used to lead the elderly through group games that combine health care actions and health education, in order to improve the focus, stamina, and willingness for social participation among the elderly. As of the end of 2021, 39 events have been held.



The toy base led the elderly in Guyili Community, Changhua City, through hand exercises.



During the toy disassembly course, toy base conveys knowledge related to different plastic types.



Toy disassembly event in Gangdong Elementary School, Tainan.



Toy creativity course - We taught children to disassemble toys and create toy specimens.



5.2 Social feedback SDG 14.2

5.2.1 Social Welfare Donations

In order to implement the concept of the two Founders, the Company actively cooperates with the government and civil society organizations to deeply understand social needs, and care for and assist vulnerable groups. Over the years, the total expenditure of the Company and companies within the group on social welfare undertakings such as education, medical care, and social welfare has reached NT\$76.4 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 General Management Office of Formosa Plastics Group and promoted and implemented by the companies in the enterprise. For more information, please refer to the "Community Participation" section of corporate social responsibility on the official website of Formosa Plastics Group.

5.2.2 Promoting Local Industries

The six oil cracker refinery of Formosa Plastics Group was built in 1994 and put into operation in 1998. Since then, it has promoted the development of local economy and brought prosperity to the local community. For more than 20 years, based on the concept of local operation and local co-existence and co-prosperity and sustainable development, the Company and companies within the group have promoted scientific breeding and planting technology, promoted industrial upgrading to improve the quality of agricultural products and revitalized the local economy by means of industry-university cooperation, and proposed four industrial upgrading action plans. We will fully assist and guide the development of agriculture and fishery, subsidize afforestation, upgrade the technology of aquaculture and fishery, release the fish fry in the surrounding waters, promote the economic growth of local agriculture, forestry and fishery, and continue to cooperate with local communities to jointly promote the sustainable development of the industry. For related industry-university cooperation promotion results, please refer to the "Social Participation" of Corporate Social Responsibility on the official website of Formosa Plastics Group.



5.2.3 Enhancing Relationships between FCFC Plants and Local Communities

Every year, the Changhua Plant, Longde Plant, and Xingang Plant, and Mailiao Plant hold activities that enhance the relationships between the plants and the local communities. Labor unions, employees, and volunteers all actively participate, while local residents are also invited to take part in these activities, in order to create cohesion between the plants and the communities. In 2021, employees invested 1,648 hours and their families invested 1,580 hours in volunteer activities.



Corporate Volunteers

Every year, the Changhua Plant, Longde Plant, and Xingang Plant, and Mailiao Plant hold activities that enhance the relationships between the plants and the local communities. Labor unions, employees, and volunteers all actively participate, while local residents are also invited to take part in these activities, in order to create cohesion between the plants and the communities. In 2021, employees invested 1,648 hours and their families invested 1,580 hours in volunteer activities.



Employees passionately served as volunteers in the volunteer care activities



In addition to corporate volunteers, the Company also visits and communicates with local organizations, participates in local activities, and cares for disadvantaged groups. Please visit the corporate social responsibility website of FPG for more information.

Participating in Local Events



Local Visits



Elderly Care Activities in the Community

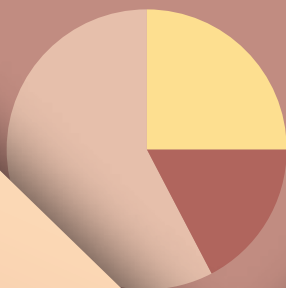
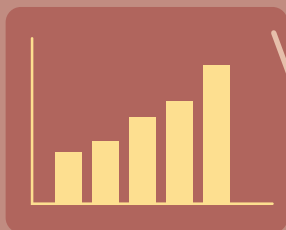
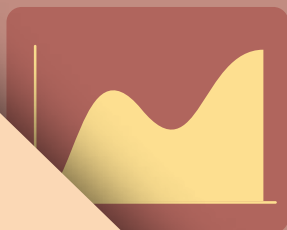
Caring for the Disadvantaged



Caring for the Disadvantaged



Community Care



Appendix



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I. Global Sustainability Reporting Standard Table

The following standards referenced the 2016 Global Reporting Initiative (GRI) Standards for sustainability reporting that correspond to the contents of the Report. As stated in the external review statement, the relevant information has been reviewed and complies with the external review requirements of the GRI Standards:

Disclosure Item	Description	Referenced Section	Remark
GRI 102: General Disclosures			
Organizational Profile (2016)	102-1	Name of the organization	1.2.1
	102-2	Activities, brands, products, and services	2.3.1, 2.3.2
	102-3	Location of headquarters	1.2.1
	102-4	Location of operations	1.2.1
	102-5	Characteristics of ownership and legal form	Overview
	102-6	Markets served	1.2.1
	102-7	Scale of the organization	1.2.1, 2.3.1
	102-8	Information on employees and other workers	4.1.2
	102-9	Supply chain	2.6
	102-10	Significant changes to the organization and its supply chain	- No significant changes
	102-11	Precautionary principle or approach	2.2
	102-12	External initiatives	2.3.5
	102-13	Membership of associations	2.3.5
Strategy (2016)	102-14	Statement from senior decision-maker	1.1
	102-15	Key impacts, risks, and opportunities	2.1.3, 2.2.1 2.2.2, 3.2.1
Ethics and Integrity (2016)	102-16	Values, principles, standards, and norms of behavior	2.1.4, 2.5.1
	102-17	Mechanism for advice and concerns about ethics	2.1.4, 2.5.1



Disclosure Item	Description	Referenced Section	Remark
Significant Issues: Corporate governance			
Governance (2016)	102-18	Governance structure	2.1.1
	102-19	Appointment powers and responsibilities	2.1.2
	102-20	Management is responsible for economic, environmental, and social topics	2.1.2
	102-21	Consulting stakeholders on economic, environmental, and social topics	1.4.2
	102-22	Composition of the highest governance body and its committees	2.1.2
	102-23	Chair of the highest governance body	2.1.2
	102-24	Nominating and selecting the highest governance body	2.1.1
	102-25	Conflicts of interest	2.1.3, 2.1.4
	102-26	Role of highest governance body in setting purpose, values, and strategy	2.1.1
	102-27	Collective knowledge of highest governance body	2.1.1
	102-28	Evaluating the highest governance body's performance	2.1.1
	102-29	Identify and manage economic, environmental, and social impacts	2.2
	102-30	Effectiveness of risk management processes	2.2
	102-32	Highest governance body's role in sustainability reporting	2.1.1, 2.1.2
	102-33	Communicate key material events	1.5
	102-34	Characteristics and total number of key issues	1.5
	102-35	Remuneration policy (employee, retirement, etc.)	2.1.1, 4.2.1
	102-36	Process for determining remuneration	2.1.1, 4.2.1
	102-38	Total annual remuneration ratio policy (employee, retirement, etc.)	4.2.1
	102-39	Percentage increase policy for total annual remuneration ratio (employee, retirement, etc.)	4.2.1
Management Approaches (2016)	103-2	The management approach and its components	2.1
	103-3	Evaluation of the management approach	2.1



Disclosure Item	Description	Referenced Section	Remark
Communication with Stakeholders (2016)	102-40 List of stakeholder groups	1.4.2	
	102-41 Collective bargaining agreements		The Company has not entered into a group agreement but still takes into account the opinions of unions and labor-management meetings during implementation
	102-42 Identifying and selecting stakeholders	1.4.1	
	102-43 Approach to communication with stakeholders	1.4.2	
	102-44 Key topics and concerns raised	1.4.2	
Reporting Practice (2016)	102-45 Entities included in the consolidated financial statements	Scope and Boundary of the Report	
	102-46 Define report content and topic boundaries	1.5	
	102-47 Material Topic list	1.5.4	
	102-48 Restatements of information	Scope and Boundary of the Report	No restatement of information
	102-49 Changes in reporting	Scope and Boundary of the Report	No significant change
	102-50 Reporting period	Duration and Issuance Date	
	102-51 Date of the most recent report	Duration and Issuance Date	
	102-52 Reporting cycle	Duration and Issuance Date	
	102-53 Contacts for questions regarding the Report	Contact Information	
	102-54 Claims of reporting in accordance with the GRI Standards	Report Guideline	
	102-55 GRI content index	Appendix 1	
	102-56 External assurance	Appendix 4	
GRI 103: Management Approaches			
Management Approaches (2016)	103-1 Explanation of the material topic and its boundary	1.5.4	



Disclosure Item		Description	Referenced Section	Remark
GRI 200: Disclosure of specific topics - Economic				
Significant Issues: Operational financial performance				
Economic Performance (2016)	201-1	Direct economic value generated and distributed	2.1.5 5.2.1	
	201-2	Financial implications and other risks and opportunities due to climate change	3.2.2	
Management Approaches (2016)	103-2	The management approach and its components	2.1.5	
	103-3	Evaluation of the management approach	2.1.5	
Market Presence (2016)	202-1	Ratios of standard entry-level wage by gender compared to local minimum wage	4.2.1	
	202-2	Proportion of senior management hired from the local community	4.1.3	
Indirect economic impact (2016)	203-1	Infrastructure investments and the development and impact of services supported	5.1, 5.2	
Procurement Practices (2016)	204-1	Proportion of spending on local suppliers	2.6.1	
Anti-corruption (2016)	205-3	Confirmed incidents of corruption and actions taken	2.1.4	
GRI 300: Disclosure of specific topics - Environmental				
Significant issue: Energy management				
Energy (2016)	302-3	Energy intensity	3.2.4	
	302-4	Reduce energy consumption	3.2.4	
Emissions (2016)	305-1	Direct (Scope 1) GHG emissions	3.2.4	
	305-2	Indirect (Scope 2) GHG emissions	3.2.4	
	305-3	Other indirect (Scope 3) GHG emissions	3.2.4	
	305-4	GHG emissions intensity	3.2.4	
	305-5	Reduction of GHG emissions	3.2.4	
Management Approaches (2016)	103-2	The management approach and its components	3.2	
	103-3	Evaluation of the management approach	3.2	



Disclosure Item		Description	Referenced Section	Remark
Significant Issues: Utilization and management of water				
Water (2018)	303-1	Water withdrawal by source	3.3.2	
	303-2	Management of discharge-related impacts	3.3.3	
	303-3	Water Use Quantity	3.3.2	
	303-4	Water Release Volume	3.3.3	
	303-5	Water Consumption	3.3.3	
Management Approaches (2016)	103-2	The management approach and its components	3.2	
	103-3	Evaluation of the management approach	3.2	
Significant Issues: Air pollutant management				
Emissions (2016)	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant gas emissions	3.4.1	
Management Approaches (2016)	103-2	The management approach and its components	3.4	
	103-3	Evaluation of the management approach	3.4	
Significant Issues: Compliance with environmental protection laws				
Regarding legal compliance for environmental protection (2016)	307-1	Non-compliance with environmental laws and regulations	3.6	
Management Approaches (2016)	103-2	The management approach and its components	3.6	
	103-3	Evaluation of the management approach	3.6	
Major issue: waste management				
Wastes (2020)	306-1	Waste generation and significant impacts related to waste	3.5	
	306-2	Management of significant impacts related to waste	3.5.1	
	306-3	Waste generation	3.5.1	
	306-4	Disposal and transfer of waste	3.5.1	
	306-5	Direct disposal of waste	3.5.1	
Management Approaches (2016)	103-2	The management approach and its components	3.5.1	
	103-3	Evaluation of the management approach	3.5.1	
GRI 400: Disclosure of specific topics - Social				
Labor Relations (2016)	401-1	New employee and employee turnover	4.1.3	
	401-2	Benefits provided to full-time employees (not including temporary or part-time employees)	4.2.2	
	401-3	Parental leave	4.2.2	



Disclosure Item	Description	Referenced Section	Remark
Significant Issues: Occupational health and safety			
Occupation and health and safety (2018)	403-1	Occupational Safety and Health Management System	4.4.3
	403-2	Hazard identification, risk assessment, and incident investigation	4.4.3, 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
	403-6	Promotion of worker health	4.4.1
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	4.4.5
	403-8	Workers covered by an occupational health and safety management system	4.1.2, 4.4.5
	403-9	Occupational injury	4.4.4, 4.4.5
	403-10	Occupational disease	4.4.4
Management Approaches (2016)	103-2	The management approach and its components	4.4
	103-3	Evaluation of the management approach	4.4
Significant Issues: Talent development program			
	404-1	Average hours of training per year per employee	4.3.2
	404-2	Programs for upgrading employee skills and transition assistance	4.1.3, 4.3.2
	404-3	Ratio of employees receiving regular performance and career development reviews	4.3.1
Management Approaches (2016)	103-2	The management approach and its components	4.4
	103-3	Evaluation of the management approach	4.4
Local Community (2016)	413-2	Operations with significant actual and potential negative impacts on local communities	5.1
Customer health and safety (2016)	416-1	Assessment of the health and safety impacts of product and service categories	- No cases related to the violation of health and safety laws and regulations
	416-2	Incidents of violations concerning the health and safety of products and services	- No cases related to the violation of health and safety laws and regulations



Disclosure Item		Description	Referenced Section	Remark
Marketing and Labeling (2016)	417-2	Incidents of non-compliance concerning product and service information and labeling	-	No cases of legal violations related to products and services
Customer Privacy (2016)	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.5.1	
Socioeconomic Regulatory Compliance (2016)	419-1	Violations laws and regulations in the social and economic area	3.6, 4.4.4	
FCFC and Industrial Issues				
Significant issue: Smart management				
Management Approaches (2016)	103-2	The management approach and its components	2.4	
	103-3	Evaluation of the management approach	2.4	
Significant issue: Production efficiency and digital optimization				
Management Approaches (2016)	103-2	The management approach and its components	2.4	
	103-3	Evaluation of the management approach	2.4	
Significant Issues: Climate change risk and opportunity management				
Management Approaches (2016)	103-2	The management approach and its components	3.2	
	103-3	Evaluation of the management approach	3.2	
Significant issue: Responsibilities of product sustainable development				
Management Approaches (2016)	103-2	The management approach and its components	2.3	
	103-3	Evaluation of the management approach	2.3	
Material Topic: Industrial and Public Safety				
Management Approaches (2016)	103-2	The management approach and its components	4.4	
	103-3	Evaluation of the management approach	4.4	
Significant issues: Operational risk management				
Management Approaches (2016)	103-2	The management approach and its components	3.2	
	103-3	Evaluation of the management approach	3.2	
Significant issue: Emergency response mechanism within the plant				
Management Approaches (2016)	103-2	The management approach and its components	4.4	
	103-3	Evaluation of the management approach	4.4	



II. Sustainability Accounting Standards Board (SASB) Table

Index code	Disclosure index	Corresponding disclosure				Chapter comparison
		2018	2019	2020	2021	
Disclosure theme: Greenhouse Gas Emissions						
RT-CH-110a.1	Scope 1 total emissions (unit: tons CO ₂ e)	5,589,208	5,178,431	5,260,584	Inventory will be completed before December 2022	3.2 Mitigation and adjustment of climate change
	Emissions as a percentage of legal restrictions/coverage of restrictions (unit: %)	The inventory should be conducted in accordance with the "Management Measures for the Inventory and Registration of Greenhouse Gas Emissions".				
RT-CH-110a.2	Long-term and short-term carbon reduction strategies or plans for Scope 1 greenhouse gas emissions and descriptions of the emission reduction goals and goal attainment	For the carbon reduction goals and strategies, carbon reduction goals have been formulated, with the aim of reducing carbon emissions by 10% by 2025 compared to 2020. The 1% annual reduction in the greenhouse gas reduction plan shall be achieved through production waste reduction and green product development to alleviate and adapt to the impacts of climate change				
Disclosure theme: Air Quality						
RT-CH-120a.1	NOx	844.46	592.2	429	429.86	3.4 Air Pollutant Management
	SOx	2,180.34	1,873.16	1,548.7	1,646.62	
	Volatile Organic Compounds (VOC)	819.99	733.65	589.7	655.3	
	Hazardous Air Pollutants (HAPs)	49.99	148.41	85.84	75.37	
Disclosure theme: Energy Management						
RT-CH-130a.1	Total energy consumption (unit: gigajoule)	99,604,603	87,478,971	88,159,957	92,136,841	3.2 Mitigation and adjustment of climate change
	Percentage of power usage from the grid (unit: %)	59.8 (including from Taipower and Formosa Petrochemical Corp.)	56.5 (including from Taipower and Formosa Petrochemical Corp.)	60.1 (including from Taipower and Formosa Petrochemical Corp.)	64.4 (including from Taipower and Formosa Petrochemical Corp.)	
	Percentage of renewable power usage (unit: %)	0.0101	0.0599	0.0687	0.0636	
	Total energy of self-generation by FCFC (unit: GJ)	10,258,611 (including self-use and sales to other companies)	10,110,362 (including self-use and sales to other companies)	9,943,675 (including self-use and sales to other companies)	9,588,974 (including self-use and sales to other companies)	



Index code	Disclosure index	Corresponding disclosure				Chapter comparison
		2018	2019	2020	2021	
Disclosure theme: Water Management						
RT-CH-140a.1	Total amount of water acquired (unit: 1000m3)	43,976	41,478	34,855	32,967	3.3 Utilization and management of water resources
	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)	26,100.3	23,389.6	20,506	18,303	
	Percentage of water used from areas with high or extremely high water pressure (unit: %)	Not applicable to the current scope of disclosure				
		The water pollution related environmental protection violations that occurred in 2018 to 2021 are as follows				
RT-CH-140a.2	Number of violations related to the water quality permit, water related standards, and relevant laws and regulations	Unit: case				
		Violation category \ Year	2018	2019	2020	2021
		Water pollution	2	1	0	0
		Soil and groundwater	0	0	0	0
RT-CH-140a.3	Describe risk management strategies and actions related to water	Assessment of available water resources and withdrawal risk by using risk matrix ISO 14046 and WRI Aqueduct assessment tool. The Company plans to increase the amount of waste water recycling and seawater desalination equipment to reduce the impact				
Disclosure theme: Hazardous Waste Management						
RT-CH-150a	The total amount of hazardous waste generated (unit: metric tons)	9	9	7	61	3.5 Waste and Controlled Chemical Substance Management
	Recycling percentage of hazardous waste (unit: %)	0	0	0	0	
Disclosure theme: Community Relations						
RT-CH-210a.1	Describe the evaluations and actions to enhance the interests of community groups and reduce risks faced by the community	Care for the urgent needs of society, donate social welfare expenditures, and provide scientific breeding technologies to local agricultural and fishery industries in partnership with academia to establish environmentally friendly management and increase output				5.1 Community Engagement
Disclosure theme: Workforce Health & Safety						
RT-CH-320a.1	Recordable injury rate (TRIR) and fatality rate of direct and contracted employees	Fatality rate:0 TRIR: 0.15	Fatality rate: 0 TRIR: 0.10	Fatality rate: 0 TRIR: 0.08	Fatality rate: 0 TRIR:0.03	4.4 A Healthy and Safe Workplace Environment
RT-CH-320a.2	Describe the management approach for reducing employee occupational health and injury risks	TRIR: 0 TRIR: 0	Fatality rate: 0 TRIR: 0	Fatality rate: 0 TRIR: 0	Fatality rate: 0 TRIR: 0	
Disclosure theme: Product Design for Use-phase Efficiency						
RT-CH-410a.1	Revenue from low pollution, low energy consumption, high energy efficiency, and low carbon green material products	In 2021, green product sales reached NT\$890 million				2.3 Product Sustainability



Index code	Disclosure index	Corresponding disclosure				Chapter comparison
		2018	2019	2020	2021	
Disclosure theme: Safety & Environmental Stewardship of Chemicals						
RT-CH-410b.1	Percentage of products classified as category 1 health and category 2 environmentally hazardous materials according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) (unit: % by revenue)	99.6%	99.6%	99.6%	99.6%	3.5 Waste and Controlled Chemical Substance Management
	Percentage of products that have undergone hazard assessment (unit: % by revenue)	100%	100%	100%	100%	
RT-CH-410b.2	Describe the chemical management strategy	Implemented according to the Occupational Safety Act and Fire Services Act. Establish production methods that comply with environmental sustainability of a circular economy to reduce the impact on the environment				
	Describe the strategy for developing alternative products that reduce human and/or environmental impacts	Establish manufacturing methods of a circular economy				
Disclosure theme: Genetically Modified Organisms						
RT-CH-410c.1	Percentage of products containing genetically modified organisms (unit: % by revenue)	The Company does not produce products containing genetically modified organisms				
Disclosure theme: Management of the Legal & Regulatory Environment						
RT-CH-530a.1	The organization identifies the risks and opportunities associated with environmental/social regulations and their financial impact	Tickets: 10; fines: NT\$1.25 million.	Tickets: 3; fines: NT\$5.37 million.	Tickets: 1; fines: NT\$100 thousand.	Tickets: 3; fines: NT\$220 thousand.	3.6 Compliance with environmental protection Laws
Disclosure theme: Operational Safety, Emergency Preparedness & Response						
RT-CH-540a.1	Production Safety Incident Count (PSIC)	0	1	1	0	4.4 A Healthy and Safe Workplace Environment
	Production Safety Incident Rate (PSTIR)	0	0.008	0.007	0	
	Production Safety Incident Severity Rate (PSISR)	0	0.144	0,021	0	
RT-CH-540a.2	Transportation incident (accident)	Transportation accident count in 2021: 1				
Disclosure theme: Production by reportable segment						
RT-CH-000.A	Describe the types of products the organization produces (unit: tons)	Please refer to the production and sales volume table in the Company's 2021 Annual Report on the Company's website				2.3 Product Sustainability



III. Corporate Governance Evaluation ESG Index Disclosure Items

Item	Indicator items	Indicator descriptions	2021 Outcome Data	Remarks
Environmental Issues				
CPDC GHG Emissions	Amount of direct (Scope 1) GHG emissions	Tons CO ₂	5,260,584	
	Amount of energy indirect (Scope 2) GHG emissions	Tons CO ₂	3,278,404	
	Amount of other indirect (Scope 2) GHG emissions	Tons CO ₂	18,725,825	
	GHG emissions intensity	Tons CO ₂ /turnover	5.200 thousand tons CO ₂ e/NT\$ hundred million	
	Strategies, approaches and goals of GHG management	Qualitative description	3.2 Mitigation and adjustment of climate change	
Energy Management	Renewable energy usage rate	Renewable energy/total energy	0.0000091%	
	Energy usage efficiency	Qualitative description	3.1.4 Clean energy investment	
	Renewable material use policy	Qualitative description		
Water	Water Consumption	ton	32,967,200	
	Water usage intensity	Water usage amount/unit product, service or turnover	13,450 tons/NT\$ hundred million	
	Water management or reduction goals	Qualitative description	3.3 Utilization and management of water resources	
Wastes	Amount of hazardous waste	ton	61	
	Amount of non-hazardous waste	ton	286,944	
	Total weight (hazardous + non-hazardous)	ton	287,005	
	Hazardous waste intensity	Amount of waste/unit product, service or turnover	118 tons/NT\$ hundred million	
	Waste management or reduction goals	Qualitative description	3.5.1 Waste Management	
Social Issues				
Human Development	Average employee salary	NTD/person	1,540,577	
	Average employee benefits	NTD/person	65,409	
	Average salary of full-time employees who are not in managerial positions	NTD/person	1,527,548	
	Median salary of full-time employees who are not in managerial positions	NTD/person	1,435,164	
	Percentage of female managers	Percentage (%)	0.75	
	Number of people involved in occupational disasters	Number of persons	3	
	Percentage of occupational disasters	Percentage (%)	0.02	
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 (%)	92	
	Ratio of continuing education for directors and supervisors that complies with the key points for continuing education	Percentage (%)	100	
Investors communication	Number of investor conferences held by the Company during the year	Session	2	



IV. Independent Assurance Opinion Statement

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INDEPENDENT ASSURANCE OPINION STATEMENT

2021 Formosa Chemicals & Fibre Corporation

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 purposes 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 2021 Formosa Chemicals & Fibre Corporation 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 2021 Formosa Chemicals & Fibre Corporation Sustainability Report provides a fair view of the FCFC sustainability programmes and performances during 2021. 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 2021 economic, social and environmental performance information 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 assurors 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: Core option 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.
- 9 interviews with staffs 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 economic, social and environmental information 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: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that social responsibility and 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 social responsibility and 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 Lead 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.



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For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan



Formosa Chemicals & Fibre Corporation

Address : No. 201, Dunhua N. Rd., Songshan Dist.,
Taipei City 105, Taiwan (R.O.C.)

Tel:886-2-27122211#5409

Fax:886-2-27133229

Email : management@fcfc.com.tw



www.fcfc.com.tw