

Formosa
Chemicals & Fibre
Corporation



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# **About the Report**

#### **Overview**

The corporate social responsibility report of Formosa Chemicals & Fibre Corporation was written in accordance with the "GRI Standards" issued by the Global Report Initiative (GRI) in 2016. 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 2020

Current version release date: June 2021 Release date of the next version: June 2022

### Scope and Boundary of the Report

The Report mainly refers to Formosa Chemicals & Fiber Corp. (hereinafter referred to as "FCFC" or "the Company") and its domestic subsidiaries listed in the consolidated financial statements, including Formosa Idemitsu Petrochemical Corp., Formosa BP Chemicals Corp., Formosa FCFC Carpet Inc., Tah Shin Spinning Co. Ltd., Formosa Biomedical Technology Corp., and Hong Jing Resource Co. Ltd. The data period is from January 1, 2020 to December 31, 2020.

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 should be prepared in accordance with the regulations of the Taiwan Stock Exchange's "Methods for the Preparation and Application of Corporate Social Responsibility Reports by Listed Companies". The report adopted the core option of GRI standards 2016 > 2018 version as the main reference frame, And four principles of materiality of AA1000 (Account Ability Principle Standard), 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
- SDGs (Sustainable Development Goals, SDGs) UN Global sustainable development goals
- SASB (Sustainability Accounting Standards Board, SASB) Sustainability Accounting Standards Board, SASB standards are formulated by SASB
- TCFD (Task Force on Climate-related Financial Disclosures)

## **Third Party Verification**

In order to strengthen the comparability of performance and the substantiveness of the report, all information published in this report has been verified by the British Standards Institution (BSI). No.1 application type of v3, according to AA1000 assurance standards to proceed verification. 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**

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# **Goals of Corporate Social Responsibility**

In order to implement corporate social responsibility 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:

- Self-assessment of the Board of Directors and disclosure of relevant information from 2020
- Cooperate with the competent authority to revise the code of integrity management of listed companies, review the feasibility of formulating integrity management policies and preventing untrustworthy behaviors
- In 2020, it is expected to complete 16 production Al projects, and purchase 200 additional equipment prediction modules for 42 important rotating equipment
- The board of directors adopted a resolution to formulate the "Performance Evaluation Method of the Board of Directors", based on which the annual performance evaluation of the board of directors, individual directors and functional committees is carried out, and the relevant evaluation results have been reported in the board of directors in December 2020
- Considering that the board of directors has formulated amendments to the "Corporate Governance Code" and "Corporate Social Responsibility Code" in 2020, and the revision of the "Corporate Integrity Management Code" is suspended
- In 2020, the Company had completed 37 Al application projects, and purchased 200 additional equipment prediction modules for 118 rotating devices

- For the Environmental Protection Administration to give priority to the management of power and petrochemical industries that emit harmful air pollutants, the health risk assessment professionals have been appointed to meet regulatory requirements
- Reduce energy consumption, reduce water consumption by 2%; reduce unit energy consumption by 3%; target waste reduction by 1%
- By the end of 2020, 49 people in the company had completed professional training in health risk assessment, meeting the requirements of the regulations
- In 2020, there were a total of 383 water-saving, energy-saving and greenhouse gas reduction improvement cases (68 water-saving cases and 315 energy-saving cases), saving 3,928 tons of water per day and reducing carbon dioxide emissions by 233,000 tons per year

Socially-oriented major issues: employee human rights protection, employee benefits and salary, occupational health and safety, industry and public safety

- Establish the Company's own corrosion control team, and continuously cultivate professional personnel for corrosion
- Continue to promote social participation and environmental sustainability of the Formosa LOHAS circle in the factory area, with 54 events expected to be handled
- Promote the cleanliness of the surrounding environment of the plant and co-organize local festivals, etc., with 41 events expected to be handled
- Combined with the strength of the enterprise to continue to handle public welfare activities such as delivering warmth in cold winter with 10 events expected to be handled
- Expected to handle 17 factory and village activities

- Set up an equipment preservation group to be responsible for equipment corrosion maintenance and skill training. In 2020, there were 6 basic courses such as non-destructive detection and material corrosion, and total 72 person-times had completed classes
- Improve employee and manufacturing safety; A total of 752 person-times and 11,680 hours of employee safety and environmental protection training courses were conducted
- Continue to engage and give back to the community;
   Conducted 68 activities in the plant Formosa LOHAS circle to help gather the centripetal force of the community and increase visibility
- A total of 36 times such as cleaning up the environment in the surrounding communities of the plant and coorganizing local festivals activities, etc., but the target was not reached due to the epidemic situation
- Organized 10 times for public welfare activities to care for the disadvantaged groups, such as winter heating and raising funds for the nursing home
- Having conducted the plant and villages family activities for 13 times, we did not achieve the goal due to COVID-19

Mid-term goals

Long-term goals

- Build a big data database of requisition materials gradually, and establish an Al-assisted analysis system for the rationality of requisition requirements
- In 2021, it is expected to promote another 80 Al 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

- Reduce residual materials and inactive inventory
- Deepen Al applications, and introduce Industry 4.0 intelligent control production and equipment maintenance
- Identify potential risk factors, assess risk levels, and establish risk indicators and prevention mechanisms
- Rationalization of raw materials and inventories
- Complete 1 pilot plant of smart factory
- Planning assets allocation of balance, Promoting energy consumption reduction, Investing in green products development, Reducing manufacturing process of carbon emissions









- 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 and pollution prevention teams
- Promote various energysaving and carbonreduction measures, and coordinate affiliated company and crossplant cooperation within the enterprise based on the principle of circular economy to fully integrate various resources
- Respond to the government's diversification policy to promote the use of green energy
- Energy resource consumption target: propose a 1% reduction plan for greenhouse gas emissions every year













Socially-oriented major issues: employee human rights protection, employee benefits and salary, occupational nealth and safety, industry and public safety

- 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
- Continue to recruit and train AI personnel based on actual needs
- Foster positive employee relations and a healthy workplace environment
- Integrate the neighboring ecological, cultural and government resources of the factory area to promote social participation and environmental sustainability
- Continue to promote employees to pass job certification

- Actively achieve the goals of zero occupational injury and zero accident
- Promote positive social development based on the spirit of taking from and giving back to society
- Continue to promote the completion of cross-functional training for high intermediate executives, business executives, and actively cultivate Al talents









Highlights of CSR in 2020

# Economic

# Surroundings

Society

SUCCESS

**Economic** 



- Introducing circular economy
- Recovered **5,914** tons of CPL from low density of waste aquatic residual
- Put into the polymerization process to produce **5,432** tons of nylon pellets
- 1,544 tons of recycled environmentally friendly nylon pellets are produced from waste silk (blocks) through the recycling process and polymerization

Consolidated operating revenue

NTS 253.3 billion

- **Promote Al** intelligent plant
- By 2020, 41 and 49 colleagues had completed training in the technical leader training class and manager training class, respectively, of Taiwan artificial intelligence school







**Green plant recognition** 

Mailiao Styrene Plant 3



Management level A-

**Evaluation of Climate Change Disclosure Questionnaire** 

Leadership level A

**Evaluation of Water Safety Questionnaire** 



Achievements of energy conservation improvement

NT\$ 630 million

Amount of investment in energy conservation improvement in 2020

**233** thousand tons

Carbon dioxide reduction in 2020

NT\$ 73 million

Amount of investment in water-saving improvement in 2020

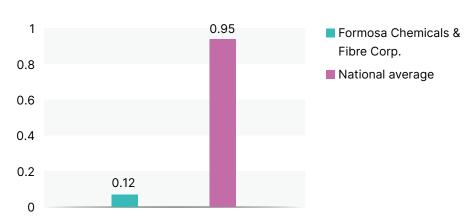
**1.434** million tons

Volume of water savings in 2020

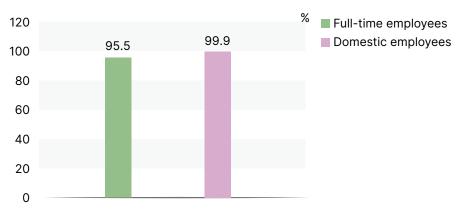
- Green products sales
- .12,650 tons of non-woven cotton
- •2,710 tons of Nylon environmentally friendly filaments
- 240 tons of environmentally friendly yarns



#### Frequency-severity indicator



**Employment ratio of full-time and domestic employees** 



# Talent development plan

86%

Reinstatement rate of employees on maternity leave without pay in 2020

99.5%

The completion rate of the training plan in 2020

# The pioneer of infinite value

- 1.1 From the Management Team
- 1.2 About FCFC
- 1.3 Management Vision
- 1.4 Stakeholder Identification and Communication
- 1.5 Identification of Material Topics
- 1.6 Practicing sustainable development goals
- 1.7 Response to new coronavirusrelated epidemic prevention mechanisms

1.6 Practicing sustainable

1.7 Response to new coronavirus-related epidemi prevention mechanisms

# **\$1.1** From the Management Team

The COVID-19 broke out in late 2019 and quickly spread around the world. Countries have implemented various prevention and control measures to prevent the spread of COVID-19. Improve international border import and export control, greatly restrict international trade and gradually tighten the scope of social gatherings, economic activities are blocked, corporate profitability has declined sharply, unemployment has risen, terminal demand has been suppressed, and exports have been drastically reduced. In response to the reduction in production, and the epidemic has suppressed oil demand, crude oil prices have been sluggish, and the prices of petrochemical plastic raw materials have also fallen, and the company's operations in the first quarter have suffered a sharp decline.

Although the company faced operational difficulties during the COVID-19 pandemic, the company responded to its cost-saving measures. Instead of laying off personnel and safeguarding the rights and interests of employees, it set up an emergency response team, established epidemic prevention regulations, and maintained employee safety; it continued to promote a circular economy in energy consumption and maintain a sustainable environment; strengthen the communication channels between upstream and downstream suppliers, contractors, transporters and customers, increase production and sales services, and share epidemic prevention resources. Since the second quarter, due to the mainland market had been properly controlled of COVID-19 epidemic and market consumer demand increased, and production and sales gradually returned to the right track. In addition, European and American countries were still subject to the impact of the COVID-19 epidemic. Raw materials were difficult to obtain, production and sales stagnated, and import demand increased, contributing to petrochemical plastics demand for raw materials, coupled with the gradual rise in crude oil prices, pushed up the price of petrochemical plastic raw materials. Thanks to the good control of the COVID-19 epidemic in Taiwan, corporate production activities were operating normally, upstream and downstream industrial chains were active, and supply and sales channels were smooth. The company has all-round production in line with market demand. Since the second quarter, operations had gradually improved, and the revenue had grown substantially since the third quarter. The annual revenue has turned from loss to profit.

In order to effectively prevent the spread of COVID-19 and protect the lives and health of employees, the company immediately sets up a crisis management team to implement access control. Masks were required to be worn in and out of the company, and temperature detectors were installed at the entrances and exits. Those whose body temperature exceeded the control standard would not be allowed to enter; implement worksites were diverted to work, video conference equipment was added to reduce personnel contact directly, and worksites and places were regularly disinfected; a logistic support system was established for staff returning from the epidemic area on business trips, assist in arranging isolation locations, and set up special personnel for contact and care; Contractors' network contact groups were set up in each plant area to provide contractors with information on the company current epidemic prevention measures and epidemic prevention education and publicity materials from time to time, so as to jointly prevent the spread of the epidemic. By the end of 2020, no COVID-19 infection had been reported by our employees. In view of the increasing environmental risks and the increasingly complex risks faced by enterprises, the company set up a risk management organization and established a risk management working group to assess the impact and severity of potential risks such as company operations, social issues and environmental changes, and formulate countermeasures to control potential risks within an acceptable range, and reduce business risks and pressures on enterprises.

The prosperities of our society, the protection of the environment and the sustainable development of enterprises are the integration of coexistences and prosperities of each other, and the Company's business philosophy of "taking from the society, using for the society" is in line with its context. In order to achieve the synchronization of sustainable development of the environment and the enterprise, the company is committed to promoting a circular economy, using the least resources and the best equipment, reusing resources to the limit, and exerting the

# The pioneer of infinite value

equipment efficiency to the extreme, so as to achieve the goal of circular economy. Therefore, at the beginning of the construction of the plant, the most advanced and energy-efficient manufacturing process and pollution prevention equipment were adopted, and the plant was built with the best available technology (BAT) and the best controllable technology (BACT), all that were to save water and energy consumption. After that, continue to invest in equipment optimization and actively introduce AI technology. With the promotion of AI, equipment efficiency, energy saving, cost reduction and product quality have been improved. Up to now, 46 projects had been completed and 80 projects are in execution. The accumulated investment amount exceeds NT\$260 million. For example, the Mailiao Synthetic Phenol Plant has converted the use of kerosene in the boiler system to liquefied petroleum gas (LPG). The source of the liquefied petroleum gas can be obtained from the production of liquefied petroleum gas in the aromatic hydrocarbon process, which not only reduces exhausts of gas emissions but also makes the most efficient use of the available energy. In addition, the synthetic phenol plant improves the waste heat energy recovery of alkylation tower for the process to save energy consumption, and it also cooperates with external academic units to use Al data analysis to optimize and establish the best operation mode of the process to improve production efficiency and save energy consumption. The company had also added nylon melting equipment for recycling of environmentally friendly nylon pellets and waste fishing nets to increase the amount of nylon waste to be recycled, expand the recycling of environmentally friendly filaments, and strive to achieve the goal of zero waste in a circular economy.

Formosa Plastics Group has always been enthusiastic about participating in community feedback activities and promoting environmental and ecological conservation education to promote community development. In 2020, it will continue to adhere to the original intention of humanistic care, encourage the purchase of local ingredients, support the development of local farmers, fisheries and animal husbandry, and provide subsidies. A total of NT\$84 million assisted the government of Yunlin province to promote the nutrition lunch programs for primary school. In addition, it will continue to cooperate with academic units to establish an agricultural and fishery counseling team to conduct environmental surveys of the surrounding Mailiao industrial complex. Experts provided scientific advice and counsel to breed clam technology. Assisting in improving the survival rate and breeding rate of clams have been effective since 2020. The breeding rate of clams has increased by more than 20%, and the fishermen's association has assisted in expanding market sales, which has brought the local clam industry back to life. Knowing the importance of the restoration of fishery resources, the company continues to cooperate with the Fishery Association of Yunlin province to implement the conservation of released fish fry nearby Mailiao industrial complex to enrich local fishery resources. The total number of fish fry released in 2020 was 420 thousand. Since the implementation of fish fry release in 2008, the total number of fish fry released in 12 years had exceeded 5.57 million, which has enriched the offshore areas fishery resources. In addition to fish fry release operations, experts were also invited to conduct fishery conservation publicity lectures in schools, so as to take root in conservation education concepts, and promote sustainable fishery operations. The company's Formosa LOHAS circle in Changhua event held the first "Changhua amusement center - Used Toys in WOW Market" to advocate the concept of plastic product recycling and the exchange of used toys. The "Changhua Used Toys Logistics Center" was established and toy recycling boxes were set up. Put the toys with no longer playing into the recycling bins, in order to pass the child's care through the toys to another child in need, and brought joys to other children, and then we launched the "Toys Around the Island, Love Around the Island" campaign to send the used toys to social welfare groups in need, so that love can surround the whole Taiwan. In the future, we will continue to adhere to the business philosophy of "taking from the society, using for the society", and achieve the goals concurrently of sustainable development of society, environment and enterprise.

> Sincerely, Chairman of Formosa Chemicals & Fibre Corporation

> > Wen Yuan, Wong

2021

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# ♠1.2 About FCFC

## 1.2.1 Company Overview



Location of the head office	Changhua Province, Taiwan
Year Founded	1965
Consolidated turnover in 2020	NT\$253.3 billion
Number of regular employee in Taiwan in 2020	4,951 people
Industry	Petrochemical, plastics, fiber, textile, and cogeneration

The company's main production bases are located in Taiwan, Mainland china 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 production and sales, please refer to "the section V, Operation Overview - Market and Production and Sales Overview, of 2020 Annual Report" of the Company Annual Report section of the Investor Relations of the company's website.

### 1.2.2 Company History

Past 7 1960s~1990s	Future 2000s~
FCFC was established to develop a integrated chemical spinning plant for spinning, weaving, dyeing and finishing	Expanded the scale of production capacity, built chemical plants in Ningbo, China, and laid out the global petrochemical raw material market
1987 Developed various and diversified	2003 The stock list category changed from textile to plastic
business blueprint, step into petrochemical industry	2008 Invested in Formosa Ha Tinh Steel in Vietnam and expended into the steel industry
1995 Participated in the No. 6 Naphtha Cracker Projects and vertically integrated the upstream anddownstream processing of	Publicly issued the first version of corporate social responsibility report, implementing the business philosophy of "contributing to society"
petrochemical materials	Teamed up with the Group's affiliate Formosa Petrochemical Corporation to jointly invest and set up a plant in Louisiana, USA
	The 2020 Water Safety Disclosure Questionnaire is rated as a leader Level (A), and the climate change questionnaire is rated as a management level (A-)

Note:For the company's development history, please refer to the company profile of the 2020 company annual report in the "Company Annual Report" section of the company website

## 1.2.3 Corporate Identity System

Among the companies of Formosa Plastic Group, 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 Chinese radical "Si" from the two Chinese character "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

#### Formosa Plastic Group's Business Philosophy

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



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

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

Diligence, Perseverance, Frugality and Trustworthiness





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

1.6 Practicing sustainable development goals

1.7 Response to new coronavirus-related epidemic prevention mechanisms

# 1.4 Stakeholder Identification and Communication

#### 1.4.1 Stakeholder Identification Process

The CSR Reporting Team of the Company conducted internal discussions with managers from each department and took the five major principles of AA1000 Stakeholder Engagement Standard (SES), including Dependency, Responsibility, Influence, Tension, and Diverse Perspectives, into consideration. The following eight 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 communication with key stakeholders in 2020 was as follows:

The importance of stakeholders to the Company	Frequency and Methods of Communication	2020 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.	<ol> <li>Occasionally, at least 3 times/year</li> <li>Community relations teams         regularly participates in village or         communal gatherings and visits         nearby residents.</li> <li>Organize various seminars or         conferences.</li> <li>Designated "Good Neighbor"         24-hour hotline for residents to         provide opinions on environmental         protection issues.</li> </ol>	<ul> <li>Providing emergency salvation for 16 people of the plant neighbors.</li> <li>Caring for a total of 873 elderly people living alone at the end of the year.</li> <li>Participated in the community residents' conference to understand the opinions of residents for 9 times.</li> </ul>	<ul> <li>Occupational Health and Safety</li> <li>Waste Management</li> <li>Operating &amp; Financial Performance</li> <li>Operational risk management</li> </ul>

# The importance of

#### Government Sectors

In addition to following related laws and regulations, the Company also communicates with government offices to promote sustainable business operation.

#### Frequency and Methods of Communication

#### 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 white papers submitted by the Chinese National Federation of Industries to protect the rights and interest of the industries.
- 3. Explain the implementation status of the No. 6 Naphtha Cracker related plans and EIA commitments in the No. 6 Naphtha Cracker EIA Supervision Committee every quarter.

- 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 white papers by the Chinese National Federation of Industries 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 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.
- Collaboration with the academic members to observe the presentation of energy and water saving improvement cases.
- Consult investment institutions to exchange industrial strategies to cope with climate change impacts.
- The company website provides a place to exchange environmental ideas.

- > 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.
- An exhibition of environmental protection achievements was held at the Xingang plant to illustrate the effectiveness of environmental protection implementation.
- Participate in World **Environment Day activities** and promote environmental awareness with environmental aroups.
- The company webpage provides a place where to show the company's environmental protection implementation status and group protection concept exchange area.

- Corporate Governance
- > Air Pollutants Management
- > Waste Management
- > Industrial and **Public Safety**
- > Operational risk management

1.6 Practicing sustainable development goals

1.7 Response to new coronavirus-related epidemic prevention mechanisms

# The importance of stakeholders to the Company

## Shareholders and

Investors

The Company continues to seek long-term benefits for our shareholders and investors based on credible business operations and sustainable development.

## Frequency and Methods of Communication

# Shareholders' Meeting once/year IR conference 2 sessions / year Other meetings organized occasionally at least once/year

- The stock affairs section of Finance Department under FPG's Group Administration is in charge of answering questions and needs from shareholders.
- A spokesperson is appointed to serve as the contact between the Company and institutional investors.
- 3. Holding IR conference to provide investors with information on company operations.

## 2020 Negotiation results and performance

- Holding public meeting for investment institutions twice a year to report the operating results of the company.
- Company's 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.

#### **Topics of Concern**

- Corporate Governance
- Operating& FinancialPerformance
- > Air Pollutants Management
- Occupational Health and Safety
- > Environmental Regulatory Compliance
- Industrial and Public Safety

#### Customers

Customer support is the key factor to our sustainable development, and customer feedback is the motivation behind our constant improvement; providing customers with stable and quality products is our responsibility.

#### Occasionally, at least once/year

- Occasional meetings or visits to customers to understand customer needs
- "Customer Opinion and Feedback Form" and "Customer Satisfaction Survey" are used to understand customer needs and suggestions.
- 3. A hotline and website are set up to instantly interact and communicate with customers.
- On average, each customer visited at least 1.13 times in 2020.
- In response to a total of 17 customer complaints concerning quality, we actively assisted customers to their satisfaction.
- The average customer satisfaction in 2020 was 4.4 points (out of 5 points).
- CorporateGovernance
- Operating& FinancialPerformance
- Air PollutantsManagement
- Innovative Development and Al Applications
- Operational risk management

## Suppliers and Contractors

Suppliers and contractors provide stable and quality products and services and establish a credible supply chain.

#### Occasionally, at least 3 times/year

- 1. FPG 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.
- Assist supplier to answer the system operation questions.
- One event is held in the North, Central and South of Taiwan each year. In 2020, they were postponed due to the COVID-19 epidemic, and it will be renewed in 2021.
- Two project submissions had been accepted and handled in 2020.
- Operating & Financial Performance
- Air Pollutants Management
- Industrial and Public Safety
- Occupational Health and Safety

#### **Employees**

Employees are our most valuable assets and the basis of corporate competitiveness. By providing comprehensive training and a friendly working environment, we strive to improve employees' cohesiveness.

#### Occasionally, at least 4 times/year

- Divisional meetings are regularly organized within the plants to interact and communicate with employees.
- Physical and online opinion mailboxes are established and "799" hotline is 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.
- Having weekly office, group or unit meetings to provide communication between colleagues.
- Convene labor and capital meetings every quarter to provide employee opinions.
- Specialized person to promptly respond to employees' opinions and feedback.
- CorporateGovernance
- 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 communicated with our eight types of stakeholders through various communication channels, and aggregates the issues that the stakeholders were concerned about, and convened 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.

## 1.5.1 Procedures for Identifying Material Topics



Refer to the GRI Guidelines, Code of Practice for Corporate Social Responsibility of Listed OTC Companies, ISO 26000 Social Responsibility Guidelines International Standards, UN SDGs, domestic and foreign industry issues, global trend issues and media reports, etc. After discussion by the CSR core team and external consultants, selected 28 sustainability issues for identification.

28 items



By issuing online questionnaires on issues of concerns to stakeholders, we can understand from the perspective of each stakeholder the degree to which they attach importance to the company's sustainability issues. a total of 253 valid questionnaires were collected in 2020.

### Questionnaire Reply:

copies

Through the questionnaire, we analyzed the impact of various issues on the operation from the perspective of the senior vice president, vice president and associate manager of the company. 18 questionnaires were collected in 2020.



## Issue ranking and identification

Based on the two aspects of "stakeholders' concerns" and "impact to the economy, environment, and society to operations", the three levels of intensity, high, medium, and low, were analyzed, and the order of priority was arranged, and a total of 13 major items were identified

**13** major issues

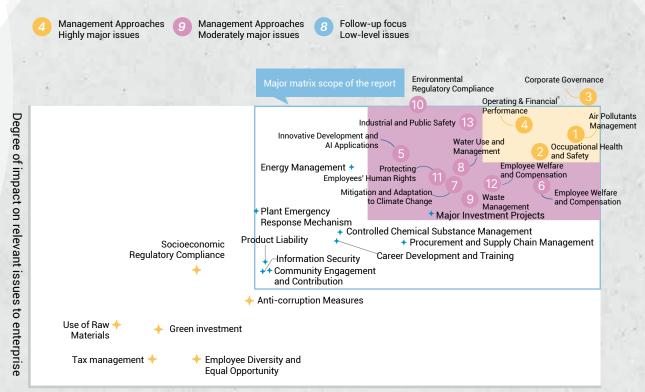


Material topics have been fully disclosed in the Report as important indicators of the Company's emphases on non-financial information to meet stakeholders' expectations. We will continue to review various material topics and take into consideration stakeholders' feedback on the Report to ensure transparency, reasonableness and impartiality.



## 1.5.2 Prioritizing Material Topics

Stakeholders' concerns were 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 "Social Responsibility Work Promotion Center", and organized based on their experience in communicating with stakeholders, reported the main stakeholders' concern issues, and discussed and decided on the subject of the report and the order of the issues in early 2020. Once the Report is completed, these topics were reviewed by the President, the Vice Chairman, and the Chairman to ensure their consistence with the stakeholders' needs; the Report will then be submitted to the Board of Directors for approval.



Level of stakeholder's concern

## 1.5.3 Description of changes in major topics

2020 Major questionnaire	Importance of the issue		Notes on changes in issues		
issues	2020	2019			
Operating & Financial Performance	High	Medium		Affected by the epidemic and the increasing international emphasis on ESG risks, stakeholders were concerned about not only major investments in various regions, but also the company's operating and financial performance.	
Occupational Health and Safety	High	Medium	Increased concern	This issue had been a major issue in the Company for past three consecutive years, indicating that stakeholders attached more importance to the OH&S issue.	
Industrial and Public Safety	High	Medium	_	This issue had been a major issue in the Company for past three consecutive years, indicating that stakeholders attached more importance to the issue of "industrial and public safety".	

2020 Major questionnaire	Importance of the issue		Notes on changes in issues		
issues	2020	2019			
Environmental Regulatory Compliance	Medium	High			
Controlled Chemical Substance Management	Low	Medium			
Career Development and Training	Low	Medium	Declined concern	Compared with previous years, stakeholders generally paid less attention to the issue, which was an important issue for the company, so it will continue to be tracked.	
Community Engagement and Contribution				for the company, so it will continue to be tracked.	
Anti-corruption Measures	Outside the matrix	Low			
Information Security	Low	Issues outside the matrix		According to the global risks report published by the World Economic Forum 2020, the results showed that "data fraud and theft" and "cyber attack" were two of the top ten important issues, and as the Group has been developing towards Al, "information security" has been becoming more and more important, so the 2020 Report added a new topic to expose.	
Product Liability	Low	Issues outside the matrix	New Issues	Stakeholders were concerned about the management mechanism of the Company on the impact of product life cycle on the environment, and the benefits it brought to the Company. Therefore, the issue of the scope of disclosure was added to the 2020 report.	
Energy Management	Low	Issues outside the matrix		The global focus on the energy transition has raised stakeholders' concerns on the management practices of the Company regarding "energy". Therefore, the issue of the scope of disclosure had been added to the 2020 report.	

## 1.5.4 Description of major issues to the value chain

After discussion and confirmation among the report editing teams and 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 "post-sale service and consulting" " The processes were the boundaries of impacts and influences of major issues. The company further evaluated the impact of 13 major issues on the value chain and the stakeholders affected by the major issues, and responded to the company's economic, environmental and social responses in the corresponding chapters.



1.6 Practicing sustainable development goals

1.7 Response to new coronavirus-related epidemic prevention mechanisms

Dimension	Material Topic		Description	Level of Impact
		000	Request to improve the professional ethics of procurement, contracting personnel and suppliers of FCFC in order to achieve the results of integrity and ethical corporate management.	Direct
			Strengthening corporate governance will have positive benefits in compliance and improvement for manufacturing and production stage.	Direct
	Corporate Governance	<b>S</b>	By making the internal control on sale cycle more rigorous, we can reduce the financial risks resulting from errors or frauds and thus enhance the quality of financial reporting.	Direct
			<ul> <li>Request to improve the ethics of FCFC's sales and aftersales service personnel, and establish a corporate image of ethical corporate management.</li> <li>"Encouraging shareholders to take actions" will prompt shareholders and investors to actively exercise their rights and interests.</li> </ul>	Direct
			02-18~102-39 Governance onse Section: 2.1 Corporate Governance	
Economic Impact		(FÖF	By putting more pressure on operating performance, the Company will be encouraged to research and develop higher value and differentiated products and to improve the production processes, thus enhancing productivity.	Direct
		000	Raw material procurement strategies and costs will directly impact the operating and financial performance of the Company.	Direct
	Operating & Financial		Sound processes will ensure the stability of operating performance and will also be reflected upon more stable production input; alternatively, large fluctuations in the production process will negatively affect operations.	Direct
	Performance	<b>6</b>	<ul> <li>Selling price and volume will directly impact operating and financial performance.</li> <li>Product sales that meet customer needs or sale of differentiated or higher value products will drive the Company's operating and financial performance.</li> </ul>	Direct
			Robust operating and financial performance will influence the investment decision-making and confidence of shareholders and investors regarding the Company.	Direct
				01: Economic Performance onse Section: 2.1 Corporate Governance

Dimension	Material Topic	Description	Level of Impact
		R&D and integration of Al applications to reduce costs and increase revenue, which in turn boosts the Company's operational growth.	Direct
		Through joint research and development and application of Al with suppliers and contractors, to obtain high-quality raw materials or reduce procurement process costs, and increase the Company's competitiveness.	Indirect
	Innovative Development and Al	Al applications and R&D complement each other to promote process and product innovation.	Direct
	Applications	Expand customer level through innovation and Al applications, improve sales patterns, and increase market share.	Direct
		Work with downstream industries to develop new products, new applications or new supply processes through innovation and Al applications.	Indirect
		<ul> <li>FCFC and Industrial Issues</li> <li>Corresponding Chapter: 2.4 R&amp;D Innovation and Al Application</li> </ul>	
Economic Impact	Operational risk management	Whether the research and development of products and process improvements can remain up-to-date will impact the Company's operating risk.	Direct
		Prices, exchange rates, and supply and demand status of global raw materials, as well as the timing of internal raw material procurement and inventory control will present risks to the Company's operations.	Indirect
		Whether safety management is maintained over the personnel, equipment, materials, and goods-in-progress during the production process will significantly influence the Company's production and operating risks.	Direct
		Product sales concentration, inventory control, exchange rates, and changes in selling price will lead financial risks to arise.	Direct
		Positive after-sale service can reduce the risk of customer churn.	Direct
		<ul> <li>GRI 102-15: Key Impacts, Risks, and Opportunities</li> <li>Response section: 2.2 Risk Management</li> </ul>	

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1.6 Practicing sustainable development goals

1.7 Response to new coronavirus-related epidemic prevention mechanisms

Dimension	Material Topic	Description	Level of Impact
	Air Pollutants Management	FCFC conducts process and equipment research and development and improvements from the source in order to reduce the negative impacts from production-stage emissions.	Direct
		Components of procured fuel coal, such as sulfur, ash, fixed carbon and water, will affect the quality of combustion emissions and thereby impact air pollutant management.	Direct
		Improper management over process emissions or emissions that exceed the regulatory standards will result in penalties from the competent authorities and may even result in interruption of production, leading to additional production costs and impact on the corporate image.	Direct
		Whether tools including transportation vehicles used during the product sale stage are in compliance with regulatory emission standards will impact and influence the sale.	Direct
		<ul><li> GRI 305: Emissions</li><li> Response Section: 3.4 Air Pollutant Management</li></ul>	
	Waste Management	FCFC conducts process and equipment research and development and improvements from the source in order to reduce the wastes from production-stage emissions.	Direct
Environmental Impact		Procurement of quality raw materials can help reduce waste; conversely, waste and environmental burden will increase and impact environment.	Direct
		Improper waste management will result in risks from production processes and may lead to penalties from breach of related laws, impacting the corporate image.	Direct
		<ul> <li>GRI 306: Effluents and Waste</li> <li>Response section: 3.5 Waste and controlled chemical substance management</li> </ul>	gement
		In order to reduce the negative impact caused by process wastewater, Taiwan Chemical Company conducts self-source management, conducts R&D and improvement of process and equipment, and improves water cycle efficiency	Direct
		<ul> <li>Stable water supply and adequate water use management will be beneficial toward process operations, production, and cost control.</li> <li>Treatment and discharge of industrial wastewater will impact production, and improper management may even lead to breaches of relevant laws and impact the corporate image.</li> </ul>	Direct
		<ul> <li>GRI 30: Water and Effluents; 306: Wastewater and Solid Waste</li> <li>Response section: 3.3 Use and management of water resources</li> </ul>	

Dimension	Material Topic	Description	Level of Impact
		Climate change affects product development and process improvement, and the Company is moving toward low-carbon products.	Direct
		Raw material procurement, transportation and storage methods will be impacted by climate change, and adjustments and changes will be made accordingly.	Direct
	Mitigation and Adaptation	Climate change will influence the selection of plant sites, production costs, and general legal compliance.	Direct
	to Climate Change	The storage method, sale and transportation, and marketing activities of finished goods will be impacted by climate change, and adjustments and changes will be made accordingly.	Direct
	1	After-sale services and consultation will be rendered more complex by climate change.	Direct
Environmental Impact		<ul><li> GRI 305: Emissions</li><li> Response section: 3.2 Mitigation of climate change</li></ul>	
		Changes in environmental laws may affects product development and process improvement.	Indirect
		Changes in environmental laws will impact raw material procurement, storage and usage methods.	Indirect
	Environmental Regulatory Compliance	Air pollution, wastewater, solid waste emissions or treatment during production process shall comply with legal standards. Incompliance or emissions that exceed the regulatory standards will result in penalties from the competent authorities and may even impact the corporate image.	Direct
		Whether products are in compliance with local legal regulations and certification will impact whether products can be sold.	Indirect
		<ul> <li>GRI 307: Environmental Compliance</li> <li>Response section: 3.6 compliance with environmental protection is regulations</li> </ul>	aws and

1.6 Practicing sustainable development goals

1.7 Response to new coronavirus-related epidemic prevention mechanisms

Dimension	Material Topic	Description	Level of Impact
	Employee Welfare and Compensation	More competitive employee benefits and remuneration than industry competitors and legal regulations will help reduce turnover from employees throughout the value chain, as well as to attract and retain outstanding talent.	Direct
		<ul><li>GRI 401: Employment</li><li>Response section: 4.2 Employee salary and benefits</li></ul>	
		FCFC requires suppliers and contractors to improve their employee health and the safety of their workplace environment in order to ensure stable supply of raw materials and labor.	Indirect
	Occupational Health and Safety	Whether the production environment is safe and worry-free is closely tied with employee and supplier health. The working environment impacts the health of employees and suppliers, and also affects production efficiency and labor costs.	Direct
Social Impact		Whether product storage methods, environment, and the selling process are safe will affect the health and safety of employees and suppliers at work.	Direct
Social impact		<ul><li>GRI 403: Occupational Health and Safety</li><li>Response section: 4.4 Healthy and safe working environment</li></ul>	
	Industrial and Public Safety	Ensuring the safety of the manufacturing process will reduce the impact on the safety of nearby residents and the impact on the surrounding environment.	Direct
		A positive industry and public safety image is beneficial toward product sales; conversely, it will affect customers' trust for the Company's products.	Direct
		<ul><li>FCFC and Industrial Issues</li><li>Response section: 4.4 Healthy and safe working environment</li></ul>	
	Protecting Employees' Human Rights	An equal-appointment, non-discriminatory and harassment work environment, and thorough implementation of human rights protection policies will have a positive impact on each stage of the corporate value chain, enhancing corporate image and operating performance.	Direct
		<ul><li>GRI 402: Labor-Management Relations</li><li>Response section: 4.1 Employees' human rights protection</li></ul>	

# **\$\pi\$1.6 Practice Sustainable Development** Goals

The company's CSR core team will conduct deeply identification of the company's relevant SDGs in 2020, and discussed 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

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

#### Integrate core functions

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

#### Sort goals and responses

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



#### **Secondary SDGs**

Target content	Detailed Objective	Major Issues	
3 GOOD HEALTH	3.9	<ul><li>Water Use and Management</li></ul>	3.3.2
- <b>₩</b> •		• Air Pollutants Management	3.4.1
	8.2	<ul> <li>Operating &amp; Financial Performance</li> </ul>	2.1.5
8 DECENT WORK AND ECONOMIC GROWTH	8.5	<ul><li>Protecting Employees' Human Rights</li></ul>	4.1.3
		<ul> <li>Employee Welfare and Compensation</li> </ul>	4.2.1
		<ul> <li>Occupational Health and Safety</li> </ul>	4.4.3
		• Industrial and Public Safety	4.4.5
	11.5	Industrial and Public Safety	4.4.4
11 SUSTAINABLE CRITES AND COMMUNITIES		• Air Pollutants Management	3.4.1
A		<ul> <li>Environmental Regulatory Compliance</li> </ul>	3.6
		<ul><li>Waste Management</li></ul>	3.5.1
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2	Corporate Governance	2.1.4
CO	12.4	Waste Management	3.5.1

Target content	Detailed Objective	Major Issues	Corresponding section
6 CLEAN WATER AND SANITATION	6.3	Water Use and Management	3.3.2
	6.4		
9 MOUSTRY, PANOVATION AND INFRASTRUCTURE	9.4	<ul> <li>Innovative Development and Al Applications</li> </ul>	2.4.1
13 CLIMATE ACTION	13.1	<ul> <li>Mitigation and Adaptation to Climate Change</li> </ul>	3.2.1
		<ul> <li>Operational risk management</li> </ul>	2.2
14 BELOW WATER	14.1	Water Use and Management	3.3.2
	14.2		

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# 1.7 Major sustainability issues illustration-

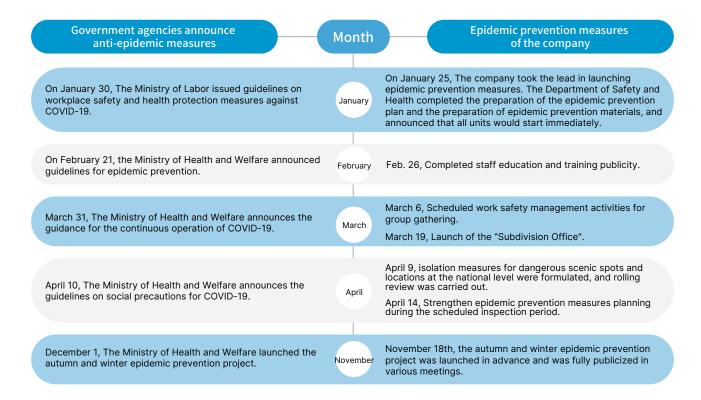
# the epidemic prevention mechanism related to severe special infectious pneumonia COVID-19

Forward the end of 2019, a severe special infectious pneumonia (COVID-19) epidemic (hereinafter referred to as the COVID-19) epidemic) broke out and spread around the world. Epidemic prevention measures such as quarantine, suspension of work, and lockdown of the city caused the production and supply chain to be broken, the flow of people and logistics were restricted, and terminal demand shrinkage, etc., has severely impacted the global economy. The company took the lead in launching epidemic prevention measures in January 2020, completing the epidemic prevention plans and the preparation of epidemic prevention materials, and formulating the "Severe Special Infectious Pneumonia Epidemic Prevention and Emergency Response Plan", "Severe Special Infectious Pneumonia Prevention Period Toolbox Implementation Rules", etc. Relevant anti-epidemic regulations, and continue to review office building and control room personnel entry and exit control, handover, agreement to organize epidemic prevention regulations, and implementation of plant personnel diversion, etc., to prevent the epidemic from affecting the health of employees and ensure the normal operation of the company.

Many of the company's products can be used for the production of anti-epidemic materials, such as chemical acetone for the production of dry hand sanitizer, disinfectant and other cleaning supplies; The plastic raw material ABS is used for the production of respirator and forehead temperature gun shell, PS is used for the production of epidemic prevention baffle, PP is used for the production of antimicrobial mask material; Nylon silk HOY, POY, DTY and non-woven cotton are also suitable for the production of protective clothing, mask belt, antimicrobial wet tissue materials, and provide manufacturers with timely production of anti-epidemic products. In addition, the cleaning products such as hand washing lotion and antibacterial spray produced by Formosa Plastic Biotech also help prevent the spread of COVID-19.

By the end of 2020, no personnel (including contractors) of the company had been diagnosed with COVID-19.

The company's implementation of epidemic prevention measures in each month of 2020 was as follows.





- 2.1 Corporate governance and performance
- 2.2 Risk management
- 2.3 Product Sustainability
- 2.4 Development, Innovation, and Al Applications
- 2.5 Excellent customer service
- 2.6 Procurement and Supply Chain Management
- 2.7 Description of Material Economic Issues

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# **2.1 Corporate Governance**

#### Material Topic: Management Approach to Corporate Governance

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 unit and is responsible for drafting and executing the governance system.

Resources

The general management office of Formosa Plastics Croup and the relevant departments of the general manager's office of the company jointly promote corporate governance matters.

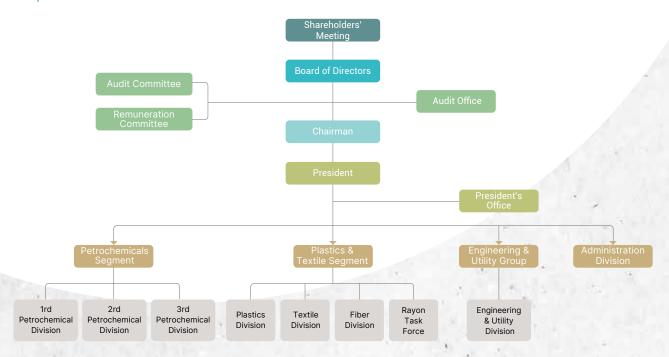
Specific Actions

- 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 unit as well as the center of operational decision-making at the Company. 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' 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.

There are 15 directors currently, with an average age of 67, all of whom are professionals and experienced in

industry management. In order to deepen the independence and diversification of corporate governance, three independent directors and one female director are also elected. For the composition of the board of directors, please refer to the "Board of Directors" section of the company's official website on the corporate governance of investor relations.

Social responsibility issues with respect to economy, society and the environment are submitted to the Board of Directors for discussion, if necessary, as a basis for promoting social responsibility.



#### Remuneration for the Highest Governance Unit

The company set up a remuneration committee in August 2011 to evaluate the remuneration policies and systems of directors and managers, and make recommendations to the board of directors to avoid remuneration policies that guide directors and managers to go beyond the risk appetite of the company. According to the organization rules of the remuneration committee, at least two meetings will be held each year, and three meetings were held in 2020. Please refer to the remuneration committee section of the investor relations corporate governance of the company's official website for details of 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. The Chairman carries out a comprehensive performance appraisal for executives' overall performance within their authority and individual work attainments. To ensure that senior executives fully understand and achieve the Company's strategic goals, the incentive system is tied up with individual work attainments and the overall performance of the Company.

#### **Independent Audit Committee**

In order to strengthen the supervisory functions of the Board of Directors, the Company established an Audit Committee in June 2015. Strengthen corporate governance through the establishment of an audit committee and a sound internal control system. The audit committee is composed of 3 independent directors. Please refer to the "Board of Directors" section of the corporate governance of investor relations on the company's official website.



#### **Training Courses for Directors**

In order to continue to help improve the professional knowledge and legal literacy of directors, and actively implement the corporate governance system, the directors of the company accept relevant training courses every year. Please refer to the company's official website of the company's annual report on investor relations and the company's corporate governance operation in the "2020 Annual Report" "Governance operation situation and its differences from the governance code of practice for listed companies and the reasons for it."



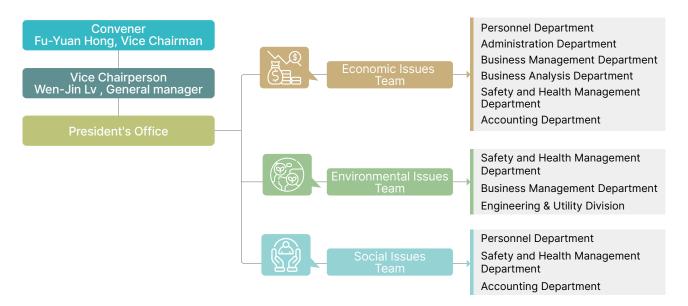
## 2.1.2 Corporate social responsibility work promotion organization SDG 12.2

Fu-Yuan Hong, Vice Chairman of the Company, served as the convener of the "Corporate Social Responsibility Promotion unit of the Company", and Wen-Chin Lu, the president of the Company, served as the deputy convener. There were economic, environmental and social issues units under its administration to work with the FPG's "Social Responsibility Work Promotion Center" to implements corporate social responsibility work, and formulates the "Corporate Social Responsibility Code" to promote environmental, economic and social progress to achieve sustainable development goals. For the Corporate Social Responsibility Code, please refer to the "Important Company Rules" section of the corporate governance of investor relations on the company's official website.



#### Formosa Chemicals & Fibre Corporation (FCFC)

#### Organization of FCFC CSR Team



#### 2.1.3 Internal Control Mechanisms

In addition to being supervised by the audit committee, the company has an audit department under the board of directors. Full-time internal auditors receive professional training courses each year, and submit relevant audit reports to the board of directors. Internal audit is not only the responsibility of the independent audit department, each department also needs to conduct independent inspections within the specified cycle for each designated asset item, and the auditors will re-inspect regularly or irregularly to implement the inspection plan.

#### 2.1.4 Professional Ethics

The company upholds the core spirit of "diligence and simplicity", sets strict ethics and related standards, and signs relevant self-discipline documents by employees. Each plant has set up multiple employee complaint channels to provide employees submitting their concerns anytime. Employees can also report internal illegal behaviors through labor unions, welfare committees, and labor-management meetings. There were no employee complaints in 2020.



### 2.1.5 Operational financial performance SDG 8.2

#### Material Topic: Management Approach to Operational and Financial Performance

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. Use the Company network or physical mailbox
- 2. Consult the Formosa Plastics Group's stock office or make suggestions at the company's annual 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**

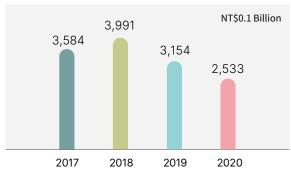
In 2020, affected by the China-US trade conflict, Brexit, and the slowdown of the mainland economy, the global economic growth momentum was insufficient, the international trade was weak, coupled with the sharp fluctuation of crude oil prices and the impact of new production capacity in the industry, the petrochemical industry was operating in a downturn, and the market wasn't boosted and the interest margin was narrowed. Although the company strived to increase sales of high-value products and promote Al projects to reduce costs,



its operations had not yet reached its target, and its turnover had fallen by 19.7% from the previous year. Aftertax profit was NT\$21.6 billion, a decline of 37.2%. Please check the consolidated financial statements on the company's official website. Consolidated revenue and profit for the 2020 consolidated financial report; earnings per share (EPS) and return on equity (ROE) are as follows:

2.6 Procurement and Supply Chain Management 2.7 Description of Material Economic Issues





#### 2017~2020 Annual after-tax profit



2017~2020 Earnings per Share (EPS)



2017~2020 Return on Shareholders' Equity(ROE)



Note: Increase the shareholding of Chiai Nan Industrial Co., Ltd. in September 2020, increase the shareholding ratio from 30% to 51% and recognized part of revenue and profit of Chiai Nan Industrial Co., in 2020.

#### **Investor Relations**

The company's website has an "Investor Relations" section, which provides investor applying questions, and answers common questions from shareholders. The financial statements and related information are disclosed on the "Public Information Observatory" simultaneously. In addition, a spokesman system is established to provide a window for dialogue between investment institutions and the Company; monthly performance presentations and regular semi-annual illustration meeting is held to establish public communication channels with investors.

#### **Communication with Investors**



# 2.2 Risk Management

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

### Material Topic: Management guidelines for operational risk management

- Enhance the risk awareness of all employees and control the risk to an acceptable level to Policy ensure the integrity, rationality and optimal benefit of risk management.
- The president office is responsible for promoting and supervising the various management Responsibilities 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.
- To put forward operational impact assessment and countermeasures for related departments Resources facing potential risk projects, and the president office coordinates the countermeasures of various risks and allocates and executes the work.
- Comprehensive consideration of financial and goodwill impacts, global economic conditions, Specific **Actions** 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.
- Evaluate the impact and severity of potential risks, formulate countermeasures, control Objectives and Commitment potential risks within a tolerable range, and reduce business risks and pressures.
- Grievance Operational management risks can be reported to the independent directors or the board of Mechanism directors of the company.
- Each relevant department evaluates the identification and execution performance of risky Performance projects on their own. The president office of Formosa Plastics Group and the president Evaluation Methods and office of the company will also conduct performance evaluation and guidance on relevant Results departments.

## 2.2.1 Risk Identification Procedures

The company follows the existing functional system and internal control system, and actively controls the risks that should be considered in the operation process in the most cost-effective manner, including human resources, information, financial analysis, operation management, legal affairs, procurement and production management, safety and health and other six aspects.



2.6 Procurement and Supply Chain Management 2.7 Description of Material

Each functional unit operates based on the Company's regulations and systems, and actively identifies and reports risks out of line to each functional supervisor. Moreover, functional units will also collaborate to identify risks in the aforementioned six aspects through relevant meetings from time to time. In addition, the audit unit is responsible for reviewing the various aspects of potential risks and whether risk management is implemented in accordance with regulations. Independent directors also communicate with the audit supervisor from time to time about audit deficiencies and abnormal issues, and report to the board of directors.

## 2.2.2 Risk Issues and Countermeasures **SDG 13.1**

Facing the rapid change of external operating environment, enterprises are facing with increasing risks of operating uncertainties. For information on the company's risk management policy, organizational structure and scope of risk management, please refer to the "risk management policy" section of the investor relations corporate governance section on the company's official website.



## 2.3 Product Sustainability

In addition to the horizontal development of the petrochemical industry as the core, the company also expands its economic scale through vertical integration of upstream and downstream industries to reduce production costs and meet customer demand for raw materials, and enhance market competitiveness. In the fields of petrochemical raw materials such as plastics, fibers, textiles, etc., the Company steps into and completes the consistent layout of upstream, midstream and downstream.

## 2.3.1 Relationship of Upstream and Downstream Products

#### **Upstream and Downstream Relationship Diagram of FCFC Products**

The company's products span petrochemicals, plastics, fibers and textiles, and there are co-generation plants to supply water, electricity, and steam for the manufacturing process. For the upstream and downstream relationships and uses of the products, please refer to the relevance of the upstream, midstream and downstream industries under the operating overview of the "2020 Annual Report of the Company" in the annual report of investor relations on the company official website.

## **Use of Raw Materials**

The company is a member of the integrated upstream and downstream production plants of Formosa Plastics

Group. The main raw materials are mostly supplied by internal companies or upstream processes, and are less affected by market fluctuations. The source of materials is stable and the raw material inventory can be reduced. For the usage and source of the main raw materials in 2020, please refer to supply status of the main raw materials under the operating overview of the "2020 Annual Report of the Company" in the investor relations of company's annual report on the company's official website.



### **Product Brands**

The company was originally founded to produce man-made textile products, and then gradually transformed into petrochemical plastic raw material production. The production process is designed and built with environmental protection and safety as the priority considerations, and is managed by a strict production system, and is aimed at a friendly environment. Co ntinuously improve product quality and production processes to establish a trustworthy product brand. For example, some product lines of Formosa FCFC Carpet Inc. have obtained certifications from the Green Building Material Mark of the Ministry of the Interior and the American Carpet and Rug Institute (CRI). The main brands of the company are as follows:



## 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 products can be used in transportation and medical applications. The current monthly sales volume is about 10,000 tons, and the quality has been obtained Kuozui Motors Ltd. affirmed and introduced it into the automobile production chain, becoming the first non-Japanese PP material supplier in Kuozui Motors Ltd. history, breaking the monopoly of the supply chain by



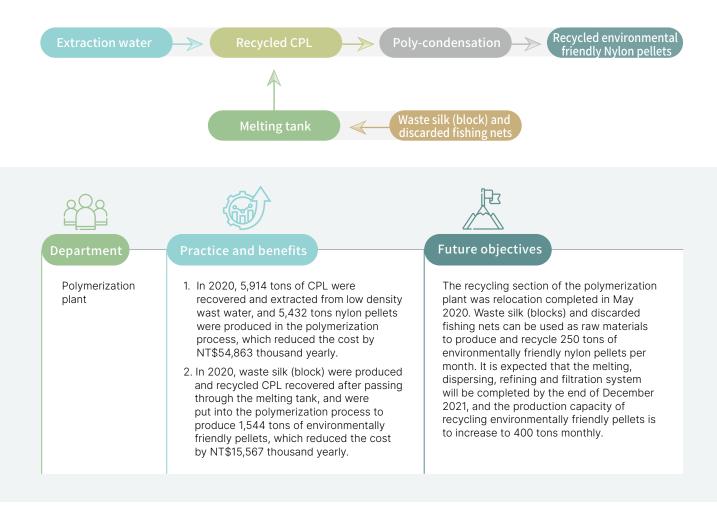
Japanese companies. For the production capacity of various petrochemical and plastic products of the company, please refer to the operation overview of the production volume value table of section V of the "2020 Annual Report" of the company's annual report of investor relations on the company's official website.

2.6 Procurement and Supply Chain Management 2.7 Description of Material

## 2.3.3 Promotion of circular economy-recycling of by-products

In order to promote the circular economy, the company recycles and reuses waste gas and waste produced during the process in addition to achieving important results in energy-water conservation and reducing production costs, on the other hand, promoting sustainable recycling and reuse of resources .

The polymerization plant of the Nylon department of the company recycles the extracted water and the waste silk (blocks) of Nylon, and then makes recycled Nylon pellets. In addition, discarded fishing nets are used to produce recycled environmentally friendly Nylon pellets. The process is briefly described as follows:



## 2.3.4 Product Safety and Health Responsibility

The company has always attached great importance to the health and safety of customers. The improvement and development process of all products carefully evaluates the impact of each stage on safety and health, and continues to improve the production process, as shown below:

- 1. 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.
- 2. 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.
- 3. Wood pulp that meets SGS "Chain-of-Custody" certification and Forest Stewardship Council (FSC) requirements is used to produce non-woven fabric.

- 4. Rayon fiber has passed the "Oeko-Tex Standard 100" stamp certification. In addition, we have also promoted the stamp certification of compostable rayon fiber 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.
- 5. The Taiwan plant is responsible for "Recycled Eco-Friendly Nylon filament" while the Vietnam plant is in charge of "Recycled environmentally friendly Nylon filament and filament" and recycled E cotton yarn. They have obtained the "Global Recycled Standard" certification by Control Union Certifications. The "Recycled Nylon Eco-Friendly filament" produced by the discarded fishing net purchased by the company from the recycler "BUREO" contract can use the trademark NET+ and is exclusively for the brand "Patagonia".
- 6. The Company has implemented chemicals registration, evaluation and authorization in line with the EU's REACH regulations, and has completed the pre-registration for 11 products. Cooperate with South Korea and Turkey to promote the REACH Acts, we have completed the registration of SM and Phenol products in South Korea and the pre-registration of SM, PTA and PIA products is in processing in Turkey.

## 2.3.5 Participation in External Associations

The company actively participates in relevant industrial associations, trade unions and other organizations, including 7 petrochemical and plastic associations, 4 textile and fiber associations and 22 other associations, trade unions and other types of associations. In addition to sharing our own operating experience through the organizations and co-organizing seminars and international conferences, we also share the latest market trends, changes in supply and demand, and technical information with the profession. Moreover, we participate in various international trade negotiations and consultation in order to contribute to the overall industry. Advice is also provided to the government on issues of international industries and economics. In 2020, the association dues and related sponsorships amounted to NT\$ 2,616 thousand.

## List of important positions held for external associations

Industry	External Association	Chairperson	Director	Executive Director	Chairman
Petrochemical Plastics	Petrochemical Industry Association of Taiwan	-	Wen-Chin Lu , President	-	-
	Taiwan Synthetic Resins Manufacturers Association	_	<del>-</del>	Wen-Yuan Wong Chairman	_
	Taiwan Textile Federation	-	-	-	Wen-Yuan Wong, Chairman
Textile fiber	Taiwan Man-made Fiber Manufacturing Industries Association	-	-	Wen-Yuan Wong Chairman	_
	Taiwan Spinner's Association	_	-	Wen-Yuan Wong Chairman	_
	Chinese National Federation of Industries	Wen-Yuan Wong, Chairman	-	-	_
Others	Cross-Strait CEO Summit	-	-	Wen-Yuan Wong Chairman	_



### Material Topic: Management policy of R&D innovation and Al application

- 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 plans and targets, and the business management is responsible for supervising and assisting in achieving performance.

- Resources
- Industry-academia cooperation, technology and facility exchange and sharing between academia 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 business management also supervises the operation situation at any time to improve performance.
- 2. Review the progress of launching Al application technologies that have been proposed on a monthly basis and to propose new application technologies.

## 2.4.1 Product development and innovation

Through the industry vertical integration model, the company encourages 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 R&D projects such as new products and new production technologies, the company formulated the "R&D Management Measures" and set up related computer operations, and stipulated the rewards for key product development and patent authorization in the "R&D 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**

Development of flame-retardant PC materials for traffic rail materials

## Development instructions

- 1. The company supports the localization policy of rail industry components, reducing the using proportion of imported raw materials, and reducing the overall purchase cost; In addition, polycarbonate (PC) is a thermoplastic material, which can be recycled to replace the unrecyclable thermosetting FRP material, so as to fulfill the responsibility of environmental protection on the earth.
- 2. According to the understanding of various countries rail material fire protection certification specifications and test methods, products are developed towards the main indicators of rail material smoke (Smoke), fire (Fire), and poison (Toxicity).

The railway carriages' interiors are replaced with new ones, and the railway carriages components such as dining table boards, armrests, lampshades, interior panels, etc. are replaced. Traffic track flame-retardant PC materials of the company sold 44 tons in 2020.

#### **Future Plans**

Based on the development performance and experience of the rail carriages' interiors, it will continue to complete the relevant certification. promote it to the international markets, and expand the sales of related products in the transportation rail markets. The sales target is estimated to be 100 tons in 2021.

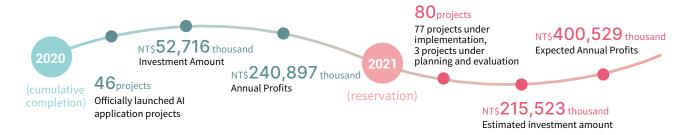
## Comparison table of material properties and applications of thermoplastic railway materials (PC) and thermosetting railway materials (FRP)

Applied materials	Thermoplastic railway materials (PC)	Thermosetting railway materials (FRP)
Advantage	Easy to process, high production efficiency, recyclable	Strong creep resistance, excellent chemical resistance
Disadvantage	Low mechanical strength	Process production efficiency is low, non-recyclable
Product Applications	Dining table board, armrest, lampshade, interior decoration board	Wall panels, ceilings, seats

## 2.4.2 Al Applications

The company's vice chairman appoints the executive vice president as the convener, and assistant vice president and senior engineers from each division; the plant-level supervisors of the production plant and maintenance department are responsible for promotion and application of Al. To develops from "Point-line-surface" into a comprehensive artificial intelligence plant.

In terms of practical actions, big data is used to construct process optimization, production energy saving, and management intelligence. Assign colleagues with backgrounds in information, mathematics, statistics, and programming to the Taiwan Artificial Intelligence School to learn Al intelligence module training. And use the existing plant information integration system (Plant Information, PI) to develop modules such as production management, process optimization, equipment maintenance early warning programs, maintenance prediction system, industrial safety management, energy-saving system, etc. to carry out transformations in all aspects. With the promotion of AI intelligent factories, the accumulated investment in hardware and software in Taiwan and the Ningbo plants in mainland China will reach NT\$268,239 thousand by 2021.



As of 2020, 46 projects were completed, and 80 projects are expected to be implemented in 2021 (77 projects under implementation and 3 projects under evaluation). By 2021, the estimated cumulative investment amount would be NT\$268,239 thousand; the estimated cumulative annual profits would be NT\$641,426 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.

#### 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.



## Preventive equipment abnormality diagnostics

Use data exploration to monitor the operating status of equipment and provide early warning for adjustment, detection and maintenance to avoid abrupt failures.

#### 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.

### **Professional Al Talent Training**



## **Industry-Academia Cooperation**

The company respectively cooperates with schools such as Sun Yat-sen University, Chang Gung University, National Taiwan University of Science and Technology, Taipei University of Technology, and Industrial Technology Research Institute, aiming at process control optimization, 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 the price of raw materials and determining the composition of raw materials, strengthening management functions, collecting existing big data, data screening and inventory, cleaning (replanting), data exploration and analysis, module development and evaluation, online testing and application.

## **Future Development Goals**

Continue to recruit and train professionals talents, develop Al intelligent plants to reduce energy consumption such as steam, electricity, real-time process optimization Al control, maximize the production efficiency of catalysts, predict equipment reliability, real-time abnormal signs correction and arrange maintenance, personnel control, work safety maintenance, raw material product price fluctuation estimation and material mix changes, customer orders, production, warehousing and outbound goods networking, to create a comprehensive Al intelligent plant.

## 2.4.3 Operation Platform of Digital Factory

The Process Information (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 division, and the second level is the manager's office of the division and its production plant. In addition, according to functional management, it can be divided into 8 categories, namely "department menu", "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

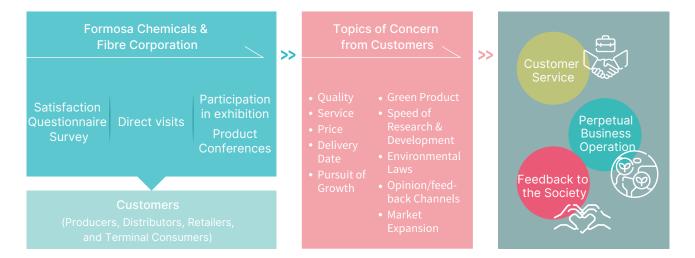
## 2.5.1 Customer Relations

Customer first is our core value, and building a co-existing and prosperous cooperative relationship with customers is a topic that our company has always paid close attention to. Sales representatives are bridges to communication between customers and businesses. Good customer services 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 businesses of downstream customers are 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.

2.6 Procurement and Supply Chain Management 2.7 Description of Materia

#### **Model of Positive Interaction**

To strengthen customer relations, the business department regularly visits customers to exchanges opinions on existing or new products, establishes interactive and timely communication channels, and directly communicates with customers face-to-face about market information exchanges and discussions through participation in product exhibitions, such as Taipei Textile Exhibition and Shanghai Textile Exhibition, etc., and customer responses will be collected for important references for company operations and future improvements.



#### **Disclosure of Product Information**

The "Product Information" section of the company's official website is available for customers to inquire about the characteristics, usage, quality specifications and other information of the company's related products at any time.

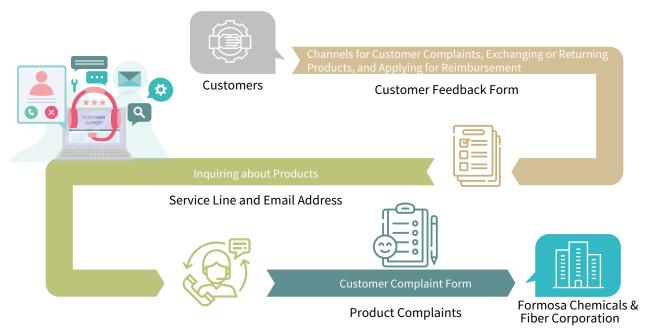


#### Responses to Customer Feedback

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

In case of customer complaints, the operation 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. There were 17 customer complaints in 2020, mainly because the quality does not meet the customer's needs. All cases were resolved by return goods or discount allowance after communicating with the customers.

## Customer response and handling



## **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 divisions 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. No data privacy violations occurred in 2020.

## 2.5.2 Customer Satisfaction Survey

In order to response customers' opinions and suggestions on the various products and services provided by the company, as a reference for the improvement of internal operations, and to comply with the ISO 9001:2015 quality management system, the spirit of commitment to customer quality and emphasis on customer satisfaction. At present, the company conducts customer satisfaction surveys for its domestic and overseas customers at least once a year. The questionnaire contains eight topics, and the questions of the questionnaire will be revised according to the topics of concern to customers.

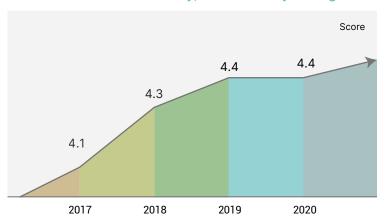
Providing customers with stable product quality is the company's commitment to customers. Providing customers with timely delivery is the company's mission to customers. Meeting customers' needs and growing together with customers is the company's long-term goal. In order to understand the pros and cons of the company's operations, the satisfaction of all survey indicators has reached the internally set goals.

## **Customer Satisfaction Survey Model**

Q	uestionnaire	Review and Examination	Continuous Improvement
Product feature	Service attitude		
Product quality	Technical and research	4 <u>=</u> :	⊚≡
. ,	development		
Date of delivery	Brand image		
Product price	Overall satisfaction		
1110000	overall satisfaction		

According to the results of the 2020 customer satisfaction survey, customer satisfaction had an average of 4.4 points (full score of 5), and the overall performance was higher than the "satisfaction" indicator. Suggestions of customers had been included in the review of the company's operating policies, and the service model had been continuously improved to increase satisfaction degree.

## Customer satisfaction survey, overall survey average score





# 2.6 Procurement and Supply Chain Management

## 2.6.1 Overview of supplier procurement

The company's suppliers and contractors, who use the "public bidding" mode, participate in the outsourcing system through the Formosa Network electronic trading platform, and provide online various functions such as inquiry, quotation, negotiation, order, delivery, payment progress etc. with regular suppliers and engineering partner, and manufacturer briefings are held to strengthen two-way communication and publicity.

#### **FCFC Supplier Classification**



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

# The value of the innovation economy

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 2020, the company's contractors did not find any cases of employing child labor or violations of forced labor. The objects of procurement and outsourcing are mainly local manufacturers. Only if local supply is not available, can they purchase and bid for overseas operations. Domestic purchases accounted for 73% of total purchases in 2020.

In order to reduce the carbon emissions of delivery vehicles, the Company cooperates with " KERRY TJ Logistics Co., Ltd." to jointly promote the "centralized delivery of e-commerce by purchasing suppliers". According to statistics, the supplier's centralized delivery rate had reached 97% by 2020. In addition, the company has fully issued electronic invoices to replace traditional paper invoices. By 2020, the percentage of electronic invoices issued by manufacturers had reached 83%.

#### **Green Procurement**

The company preferentially purchases environmentally friendly products that comply with renewable materials, recyclable, low-pollution, satisfy energy-saving environmental protection labels and the second category of environmental protection products. The main green products purchased include environmentally friendly label pallets, toner cartridges, personal computers, fluorescent lamps, etc. The purchase amount of green products in 2020 was NT\$151.08 million.

## 2.6.2 Management mechanism

## Supply chain CSR

FPG adheres to the spirit of sustainable operation and abides by the principle of fair trading, and requires the cooperating suppliers to meet the needs of environmental protection, work safety and human rights. In order to let the vendors understand the Company's concept of continuing to promote social responsibility and jointly promote the implementation, since October 2019, the "Supplier/Contractor Social Responsibility Commitment" and "Supplier/Contractor Social Responsibility Questionnaire" have been added. When the vendor logs in to FPG's electronic trading plateform or after ordering, a letter is followed to require the vendor to sign and reply, and abide by the relevant regulations. In 2020, the response rate of the social responsibility commitment letter reached 83%, and the response rate of the social responsibility commitment questionnaire survey was 76%.

## **Supplier Qualifications**

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 tests. 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 purchasing division should select the delivery conditions according to the purchase requirements of different materials, including RoHS compliance, work safety qualifications of relevant manufacturers' industrial based on national regulations and ISO certification. 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. Noncompliant manufacturers will be rejected and placed under manufacturer evaluation.

2.6 Procurement and Supply Chain Management 2.7 Description of Material

Regarding the 2020 "Supplier/Contractor Social Responsibility Commitment Letter" and "Supplier/Contractor Social Responsibility Questionnaire", in 2021, the company will continue to review the contents of the responses and arrange vendor evaluations as needed to ensure that the vendors with whom we deal are fulfilled according to the company's requirements Corporate social responsibility.

## **Vendor Classification Management System**



The quotation information and delivery records of the manufacturer who delivers more than (including) 3 pieces in nearly two years should be recalculated and graded again to distinguish the manufacturer level every month, and are used as reference for price comparison and decision of purchasing 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.



The company collects relevant information for various professional engineering manufacturers, investigate and evaluate plant sites, construction machinery and equipment, site safety management capabilities and technical capabilities, and contract performance, etc. These contractors are divided into three levels: 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.

# 2.7 Description of Material Economic Issues

## The email system was attacked and unusable

The company found that the e-mail system was unavailable at 10:15 on May 5, 2020. As the system was cyber-attacked by malicious program on May 4, 2020 at CPC Corporation, Taiwan, and the Information division of FPG acknowledged that the system may suffer from the same attack. The company immediately informed all the computers should be shut down and the network was disconnected to avoid proliferation. After a comprehensive inspection of computer systems, it was confirmed that the email system had been attacked and should not be used, but the other systems operated normally. The Taiwan Microsoft and Symantec Corporation were invited to the company for assistance in processing, tracing the source of the malicious program, and discarded it. The company informed at 3:30 pm the same day that computers could boot up and internet recovery.

Regarding the e-mail system, the northern factories returned to normal at 8 am on May 6, and the central and southern factories returned to normal at 8 am on May 7. The information division had once again reiterated the e-mail usage norms to the company's colleagues, and required all units to strictly review the rationality of their colleagues' application for e-mail accounts, and completed the establishment of an advanced continuous e-mail threat defense system in September, with existing E-mail anti-virus system to strengthen the prevention mechanism against malicious mail cyber- attack.



3.6 Compliance with environmental protection laws and regulations

3.7 Description of major

The company follows the safety, health and environmental protection policy of the Formosa Plastics Group. Externally, the company has the determination to protect the environment and maintain the safety of the community. Internally, it strengthens all employees to enrich their professionalism and integrate the concepts of safety, health and environmental protection into their work to protect the earth's environment, to fulfill the goal of sustainable development of the enterprise.

# 3.1 Mission in Maintaining Safety, Health, and Environmental Protection

We firmly believe that environmental protection and sustainable industrial operation can develop simultaneously. Providing a quality, safe production environment and common development with the society is the responsibility of the enterprise. Providing safe products and ensuring the safety of employees is the corporate social responsibility and is also the driving force for the sustainable development of the enterprise. All colleagues must enrich their profession at any time, take safety, health and environmental protection as their work philosophy, and constantly pursue progress with the best operating mode in the industry, and strive for perfection.

## 3.1.1 Organization and Strategy of Safety, Health and Environment

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

To strengthen the Company's SHE management and perpetual business operation needs, a SHE Division is set up directly under the President's Office which oversees the integration of all SHE policies, establish relevant management procedures, and to carry out the procedures throughout the Company. In addition, a Safety and Health Office is set up at each plant to be in charge of matters related to safety, health, and environmental protection in each plant.

A SHE association meeting is held once a month and a Safety and Health Committee meeting is held at each plant site quarterly, in which executives of the company, executives of each plant site, plant managers, SHE personnel and employees gather to discuss and reflect upon different SHE issues in the hope of achieving the ultimate goal of zero occupational hazard, zero disaster and zero pollution through SHE management.

#### 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 align the safety, health, and environmental management practices with international standards, the company's 3 plant sites in Mailiao plant site in Yunlin, Xingang plant site in Chiayi, and Longde plant site in Yilan, a total of 20 production plants have successfully passed the ISO 14001:2015 environmental management system, ISO 45001: 2018 Occupational Safety and Health Management System, CNS 45001: 2018 ROC Occupational Safety and Health Management System Verification.

## The value of a good environment

## Strategies and Actions for Environmental Protection

- Based on the concept of perfection and continuous improvement, the company actively promotes various environmental improvement operations and sets annual goals, and regularly grasps and reviews the progress of achieving goals.
- 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.

 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 improvement

 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**

In response to issues such as water conservation, energy conservation and carbon reduction, Formosa Plastics Group established the "Energy Conservation, Carbon Reduction and Pollution Control Organization" in 2006, and appointed Hong Fu yuan, vice chairman of Formosa Chemical & Fibre Corporation, as the chief convener to coordinate the integration of group resources and promote the improvement of water and energy conservation and pollution prevention and control of associated companies. In 2008, the project included energy-saving lamps, environmental accounting system, green products production, green products procurement, office environmental protection, resource recycling, and green construction to expand the scope of environmental protection. The company has also set up a "Formosa Chemicals & Fiber Corp Social Responsibility Promotion Unit" to help promote energy conservation and carbon reduction issues.

## 3.1.3 Environmental Costs

Through the introduction of the environmental accounting system, we grasp the environmental expenditure information, and prevent or remove the impact on the environment caused by operating activities, and improve the efficiency of resource utilization. At the same time, we take various environmental protection activities and disclose specifically and accurately relevant information to stakeholders. The environmental expenditure in 2020 amounted to 1.418 billion.

#### Table of Environmental Costs of FCFC in 2020

Unit: NT\$ million

Type	Item	Sum
	Operating Costs	996
	Costs Associated with Suppliers and Customers	31
	Management Costs	287
Environmental Costs	Social Event Costs	8
	Fees and Energy Taxes	96
	Total	1,418

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 implementing energy-saving and carbon reduction projects in the process, the company has also complied with the government's renewable energy policies to seek investment opportunities in green power and increase the proportion of renewable energy in order to reduce the impact of climate change. The company and Chiai Nan Water Conservancy Association jointly established a Chiai Nan Industrial Co., Ltd. in October 2000 which invested in the construction of three hydroelectric power plants in Tainan City, including Wushantou, Xikou, and Batian. The total power generation by 2020 had generated 1.14 billion kWh, which reduced  $CO_2$  emissions 580 thousand tons, of which 63,483,200kWh generated in 2020, which reduced  $CO_2$  emissions by 32,312 tons. In addition, we installed 1,500 kW solar power generation equipment in the Xingang plant, which the total power generation by 2020 had generated 4.197 million kWh and reduced  $CO_2$  emissions by a total of 2,130 tons. We have obtained a total of 2,826 green power certificates, of which the power generation in 2020 was 2,044,528 kWh, which reduced  $CO_2$  emissions by 1,839 tons, and continue to evaluate the feasibility of investing in solar equipment in other plant areas to increase green energy generation and reduce greenhouse gas emissions. The green power generation in 2020 was summarized in the following table.

Power plant	Power generation equipment	Device capacity (kW)	Power generation in 2020 (kWh)	Sale or self-use	CO <sub>2</sub> reduction tons/year
Wushantou	hydroelectric power	8,750	25,231,500	Sale to Taiwan Power Company	12,842.83
Xikou	hydroelectric power	11,520	28,395,300	Sale to Taiwan Power Company	14,453.21
Batian	hydroelectric power	2,196	9,856,400	Sale to Taiwan Power Company	5,016.91
Xingang	Solar energy	1,497	2,044,528	For self-use	1,839.16
Total	-	23,963	65,527,728	-	34,152.11

Note: The electric power coefficient of 2020 has not been announced yet. So it is calculated by the electric power carbon emission coefficient of 2019 at  $0.509 \text{kg CO}_2\text{e}/\text{kWh}$ .

Note 2: The environmental cost in 2020 included the cost of real estate, plant and equipment totaling NT\$503 million.

# 3.2 Mitigation and adaptation of climate change

## Material Topic: Mitigation and Adaptation Management Approach to Climate Change

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In addition to complying with environmental protection laws and policies, such as the "Greenhouse Gas Reduction and Management Law", the company sets up a "Formosa Chemicals & Fiber Corp Social Responsibility Work Promotion Unit " to promote the establishment of various environmental protection systems and benchmarks for relevant departments to comply with and implement.

#### Responsibilities

The company's "Energy Conservation, Carbon Reduction and Pollution Control unit " actively proposes countermeasures for the mitigation and adaptation of climate change, and other indirect management divisions also provide various supports.

#### Resources

Both the company and the Formosa Plastics Group are actively engaged in related work to respond to the management goals of mitigation and adaptation of climate change.

#### Specific Actions

- 1. Promote circular economy and various energy-saving and carbon-reduction improvement projects, and coordinate cross-company and cross-departmental cooperation within the enterprise to fully integrate various resources.
- 2. Respond to the government's diversification policies to promote the use of renewable
- 3. Participate in the evaluation of CDP climate change questionnaire.

#### Objectives and Commitment

- 1. A 1% reduction plan for greenhouse gas emissions is proposed every year.
- 2.The existing heating medium boilers in each plant will be replaced by natural gas or process residual gas instead of fuel oil by the end of 2022.
- 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. To discuss environmental issues with the company on various occasions.
- Performance Evaluation Methods and Results

Regularly convene "The reviewing on Water Saving and Energy Conservation Effectiveness" to review various response goals, review implementation results, and set new revised goals.

## 3.2.1 Corresponding strategies for climate change risk

The company continuously pays attention to global climate change and response trends, and collects potential risks caused by climate change as a reference for the company's internal risk identification, evaluation and analysis, policy implementation, control management and performance evaluation. In order to cope with the possible risks and impacts of climate change, FCFC has referred to the structure of Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board to identify and manage climate change risks and opportunities in 2020.

3.7 Description of major

environmental issues

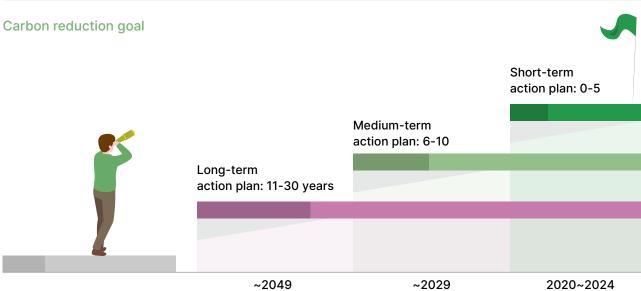
3.6 Compliance with environmental protection laws and regulations

In addition, the company has participated in the CDP climate change questionnaire since 2018, and will continue to participate in the questionnaire evaluation, so that global investors can understand the Company's achievements in responding to global climate change issues. Besides, it is planned to complete the replacement of fuel oil to natural gas or process residual gas for the existing heating medium boilers in each plant by the end of 2022 to reduce greenhouse gas emissions, which will reduce approximately 9,537 tons of  $CO_2e$  per year.

Task Force on climate-related Financial Disclosures (TCFD) structure of Taiwan Chemical Corporation

	Governance	Strategy	Risk Management	Index and targets
Management strategy and action plan	Responsible Department  Water and Energy Conversation Group  Corp Social Responsibility Work Promotion Group  The way the organization works  In principle, the Board of Directors holds a Directors' Meeting at least once every quarter. Discuss the promotion of CSR at least once a year	<ul> <li>Management of climate change issues</li> <li>Potential climate- related impacts in the way goals are set</li> </ul>	• ISO 14001 Environmental Review Practice Guidelines	<ul> <li>For major risks, evaluation indicators and targets</li> </ul>
Implementation of the current year	<ul> <li>There were 6 board meetings in 2020</li> <li>Decisions to replace oil-fired boilers with natural gas boilers to reduce greenhouse gas emissions and air pollution</li> </ul>	<ul> <li>Operational progress of the organization in 2020</li> </ul>	<ul> <li>Management method of output issue in 2020 (TBC)</li> </ul>	<ul><li>Inventory of evaluation indicators</li><li>Target achievement</li></ul>
Corresponding Chapter	<ul> <li>3.2.1 Climate change risk response strategy</li> </ul>	<ul> <li>3.2.2 Climate risk identification and assessment</li> </ul>	<ul> <li>3.2.2 Climate risk identification and assessment</li> </ul>	<ul><li>3.3.3 Mitigation and adaptation of climate change</li><li>Goals of Corporate Social Responsibility</li></ul>

	Governance	Strategy	Risk Management	Index and targets
Management strategy and action plan	<ul> <li>Responsible unit:</li> <li>Water and Energy Conversation Unit</li> <li>FCFC Social Responsibility Work Promotion Unit</li> <li>The way of the organization works:</li> <li>The Board of Directors holds a Directors' Meeting at least once every quarter. Discuss the promotion of CSR at least once a year.</li> </ul>	<ul> <li>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.</li> <li>Based on INDC as an environmental hypothesis, with the goal of reducing greenhouse gases by 2°C, a short-term, mediumterm, and long-term strategy is drawn up.</li> </ul>	• ISO 14001: 2015 Environmental Review Practice Guidelines.	<ul> <li>Based on ISO         <ul> <li>14064-1:The</li> <li>2006 promotion</li> <li>greenhouse gas</li> <li>emissions inventory</li> <li>and verification</li> <li>operations.</li> </ul> </li> <li>Set goals with reference to the principles of SBTi.</li> </ul>
Implementation	<ul> <li>The board of directors' meeting held at least once each quarter</li> <li>It is planned to complete the conversion of fuel oil boilers to natural gas boilers by the end of 2022 to reduce greenhouse gas emissions and air pollution.</li> </ul>	• The "Energy Conservation and Emission Reduction Circular Economy Conference" is regularly held every month, with the vice chairman as the person in charge and assigning assistant vice president at or above the level of each division as the head of the water and energy conservation promotion team.	• The president's office and the division 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 ISO 14001:2015 review operations, identify environmental risks and opportunities every year, and formulate countermeasures for each risk situation.	<ul> <li>In 2020, the carbon reduction rate of Mailiao plant site was 3.96% and the water saving rate was 7.2%.</li> <li>The short-term goal of the Mailiao site within 2018-2022 is a 5-year carbon reduction rate of 4.1%.</li> </ul>
Related Links	<ul> <li>3.2.1 Climate change risk response strategy.</li> </ul>	<ul> <li>3.2.2 Climate change risk and opportunity management.</li> </ul>	<ul> <li>3.2.2 Climate change risk and opportunity management.</li> </ul>	<ul> <li>3.2 Mitigation and adaptation of climate change.</li> <li>Corporate social responsibility goals.</li> </ul>



3.6 Compliance with environmental protection laws and regulations

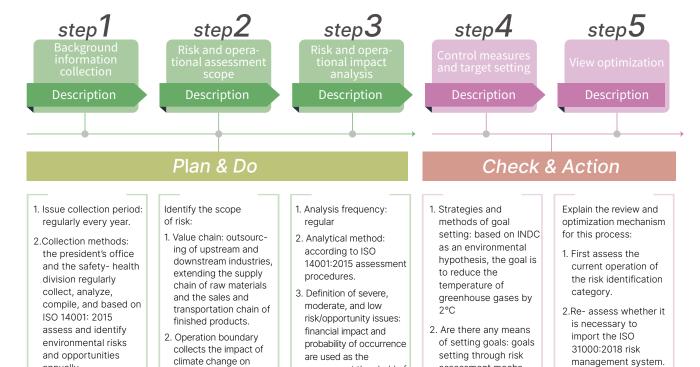
3.7 Description of major

Date	2020-2024	2025-2029	2030-2049
Maturity			20
Objective	<ol> <li>Target of power saving of more than 1% for all plants in 2020-2024.</li> <li>Short-term target for Mailiao plant site from 2018 to 2022: a 5-year carbon reduction rate of 4.1%.</li> </ol>	2030 is equivalent to another 20% reduction from 2005 emission levels.	According to the national regulations, the greenhouse gas emissions in 2050 will be reduced by 50% compared to 2005.
Action Plan	In 2020, a total of 383 cases had been completed, reduced carbon dioxide by 233,000 tons of CO2e; 350 cases have been taking under implementation or planning. The completed projects mainly include: Process improvement for ARO3 plant:  1. The pre-distillation double tower was integrated into a stacked tower.  2. Added a heat separation tank to the heterogeneous unit to reduce the loss of cooling water evaporation.  Energy transition: changing fuel oil to natural gas:  1. Phenol plant completed two sets in 2020.  2. There are seven sets of PABS plant in Xingang that were originally scheduled to be completed by the end of 2020. Due to the impact of the epidemic, they were scheduled to be completed by the end of January 2022.  3. Two sets of PABS plant in Mailiao that were scheduled to be completed by the end of 2021.  4. There are three sets of polymerization plant in Xingang, one of which had been completed so far, and the remaining two sets were scheduled to be completed in June 2021.	<ol> <li>Contribute to a cleaner industry: the company will invest more efforts in low energy products research and development to help customers reduce greenhouse gas emissions.</li> <li>Cleaner production: improve production energy efficiency and reduce the carbon intensity of products.</li> <li>Purchasing low-carbon or green products: encourage the purchase of low-carbon energy and environmentally friendly products. The amount of green products purchased by the company reached NT\$150 million in 2020.</li> <li>Comply with the government's INDC policies: the Company has been reducing the volume of greenhouse gas, and evaluates the introduction of SBTi.</li> </ol>	<ol> <li>Improve efficiency of energy.</li> <li>Recovery of waste heat from the processes and improvement of heat integration.</li> <li>Add renewable energy power generation equipment and increase the proportion of renewable energy power consumption.</li> <li>Recycle more CO2 to reduce the amount of petrochemical raw materials.</li> <li>Waste recycling and reuse.</li> </ol>
Achievement status (completed / in progress / not reached)	In progress	In progress	In progress

## 3.2.2 Climate change risk and opportunity management

The company's climate change risk identification processes are based on the ISO 14001:2015 framework to collect relevant information at all levels, consider the risks of potential threats to the company due to changes in external environmental factors and new opportunities for transformation, and formulate preventive and feasible countermeasures. For climate change issues, we should first assess the risks and opportunities related to climate change, and then pre-plan the countermeasures such as risk transfer or risk avoidance and disposal plans such as reducing the occurrence frequency and reducing the financial impact to reduce the possible losses caused by the risks.

## Climate Change Risk Issue Analysis Process



## Analysis results of climate change risk issues

financial, goodwill,

global energy supply

and economic trends, regulatory compliance and other factors.

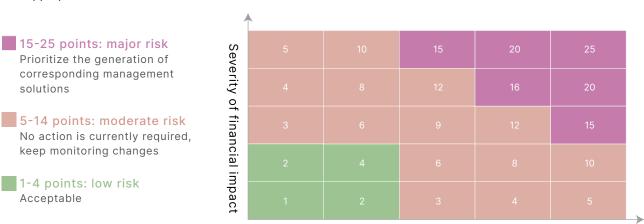
Based on the matrix scores, the climate change related risk scores are divided into three levels, scores 1-4 are classified as low risk, scores 5 -14 are classified as moderate risk, and scores 15-25 are classified as major risk; the corresponding risk management countermeasures are divided into four kinds in order: risk elimination, risk reduction, risk diversification and risk assumption.

assessment threshold of

risks and opportunities

level.

The company considers events with a financial impact exceeding NT\$1 million to have a substantial impact and incorporates it into the risk and opportunity assessment. These response plans and execution management work are included in the assessment and supervision or combined with the environmental management system ISO 14001: 2015 to be integrated into the environment related to the risk management of the whole company. When assessing climate related risks, the safety and health division invites the heads of the business units responsible for the identification of various risk categories to conduct a review meeting every year, and discuss the rationality and appropriateness of countermeasures.



Probability of risk occurrence

assessment mecha-

reference to SBTi.

nism and with

annually.

3.7 Description of major environmental issues

3.6 Compliance with environmental protection laws and regulations

Risk Type	Risk identification level	Risk management method	Risk issues
High risk	High financial impact and high probability of occurrence	Risk elimination	Policies and regulations
Medium to high risk	High financial impact but low probability of occurrence	Risk reduction	Global energy supply shortage
Moderate risk	Low financial impact but high probability of occurrence	Risk diversification	Waste management risk
Low risk	Low financial impact and low probability of occurrence	Risk assumption	Market risk and water shortage

## Financial impact of risk issues

Risk Type Trans- formation/	Risk issues	Impact level	Sc Up	ope of impa	nct Down	Major climate related risk factors	Major potential financial impact
entity		ievei	stream	Operating	stream		mpact
Trans- formation risk	Revision of policies and regulations	Major risk		V		<ol> <li>Impact of total carbon emissions control: reduce greenhouse gas emissions generated by the process by improving production efficiency.</li> <li>Impact of increased operating costs of carbon trading: a carbon market could operate through the purchase of carbon permits or by charging for energy, which would increase production costs.</li> </ol>	Carbon trading will lead to an increase in production costs, but this expenditure can be passed on to downstream customers in whole or in part. After the estimated cost is passed on, the additional expenses are still within that the company is able to bear.
Trans- formation risk	Market competition risk	Low risk		V		In response to customers' expectations that our company could provide more low-carbon products, we completed 19 carbon footprint surveys of plastic pellets, fibers and chemicals in 2019. Through study the greenhouse gas emissions of the product life cycle, it is used as a reference for the development of green products, the expenses increased.	It is the company's consistent policies to develop new products to provide customers with better products. Increased research and development expenses are paid according to the company's budget without resulting in company's financial burden.
Entity risk	Water shortage	Low risk		V		Taking into account the possible impact of water shortage due to abnormal weather, under the condition of limited water use, each process will respond to production reductions, resulting in operating losses. The company continues to modify water saving measures on processes, or switch to more efficient water saving equipment, and increase investment expenditures on equipment.	The company prepares a budget every year to invest in water-saving and energy-saving equipment, and the equipment improvement expenditures are listed under financial conditions annually, which has no impact on the company's finances.

## The impact of opportunity issues on finances

Opportunity	Impact	Scope of imp	act	
issues	level	Up stream Operating	Down stream	Opportunity description
Products/ Services	Medium	V	V	1. Adopt advanced low-carbon production technologies and updated equipment:  use low-carbon process technologies, equipment or update the use of high-efficiency inverter motors and multi-effect distillation technology to improve process quality in stages, reduce carbon emissions, and reduce production costs.  This has no financial impact on the company, but carbon reduction process improvements increase process efficiency, reduce costs and improve the quality of the production environment.  2. Establish a circular economy model:  recovery discarded fishing nets to produce recycled environmentally friendly nylon filaments. The company recycles discarded fishing nets to produce recycled environmentally friendly nylon filaments. In 2020, the annual output of post-Consumer (recycling discarded fishing nets) was 164 tons.
Energy source (electricity)	Medium	V	V	The company has installed a 230kW ORC unit in the Mailiao plant site, and has also built 16.18kW in the Changhua plant site and 1500kW of solar power generation equipment in the Xingang plant site. Because the plant site area is large and mostly located in central and southern Taiwan with strong sunshine, which is suitable for installing solar power generation equipment. The company will evaluate each site and type of renewable energy to install equipment, which is an opportunity for the company to develop solar energy.
Energy source (water)	Medium	V		The company has been starting water resources management since its establishment, and has set a goal of reducing water consumption per unit product by 2% per year. The achievement rate in 2020 was 84.0%. In order to reduce the risk of water shortage, a water recovery rate of more than 80% was set as the target (the water recovery rate was calculated according to the formula of " Main Points for Review of Water Use Plan " announced by the Ministry of Economic Affairs). In 2020, the recovery rate of water consumption in Longde, Changhua, Mailiao and Xingang plant sites all exceeded 90%.
Resource efficiency	Medium	V	V	The company's Acetic Acid plant in Mailiao used to use light oil to produce acetic acid and carbon monoxide. In 2018, it was proposed in the Technical Review and Coordination Meeting of Suppliers in Mailiao that Acetic Acid plant can use the CO2 discharged from the EG plant of Nan Ya Plastic Corp. process for carbon capture, recycling and reuse, instead of light oil as a raw material to produce liquid CO2. It was estimated that it can reduce 784,009 tons of CO2 emissions from the Mailiao industrial complex each year.

3.6 Compliance with environmental protection laws and regulations

## 3.2.3 Climate risk scenario analysis

The company refers to the model of NDC target usage scenario analysis conducted by government agencies, mainly RCP 2.6, RCP4.5, RCP 6.0 and RCP 8.5. The reference time range is the scenario of 2030 and 2050. In the scenario analysis, all the plant sites and the major upstream and downstream supply chains are included to analyze the temperature conditions under different conditions and physical risks such as climate change and rainfall.

BAU scenario

National Autonomous Reduction Scenario (NDC 2015)

Positive mitigation scenario

Analysis Results RCP scenarios were used to simulate the situation faced by the plant in four paths (RCP2.6, RCP4.5, RCP6.0 and RCP8.5), and to simulate the most serious situation encountered by the change of temperature and rainfall under four scenarios of each RCP:

- At RCP8.5, the temperature rises by up to 1.72°C, at RCP8.5, the rainfall increases by up to 100.7%.
- At RCP6.0, the rainfall reduces by 49.27% at most, and various water-saving and power-saving programs will be applied in Mailiao plant site.
- The scenario with the greatest impact is when the temperature rises by up to 1.72 Celsius degree at RCP8.5. The temperature in summer is higher than that in winter, which will increase the power consumption of air-conditioning.

Risks

Using RCP 2.6, RCP4.5, RCP 6.0 and RCP 8.5 for scenario simulations, refer to the scenario analysis to include all plant sites and the main upstream and downstream supply chains to analyze water shortages or plant flooding conditions under different conditions

Action Plans

According to the scenario analysis, in response to the risk of water shortage, the company proposes strategies to reduce process water consumption. The company's utility division submits improvement plans, such as: split flows of rainwater and waste water, increasing rainwater volume recovery, washing water and shaft seal water switch to discharge water or process water recycling to reduce supplementary and discharge water. The various water-saving programs implemented in 2020 saved 3,928 tons of water per day. In the face of rising temperature and increasing demand for electricity, the power produced by the power generation equipment of the company will be sold except for its own use, but it will still implement various energy-saving measures, such as increasing the use of power-saving equipment and evaluating the addition of solar power generation equipment to provide multiple sources of electricity.

# 3.2.4 Greenhouse gas inventory verification and energy resources use

Since 2009, the company has promoted the inventory and verification of greenhouse gas emissions in accordance with ISO 14064-1: 2006. Among them, the Mailiao plant site in Yunlin was verified by the British Standards Institution (BSI), and the Changhua, Xingang in Chiayi province and Longde in Yilan province plant sites were verified by the Taiwan Inspection Technology Company (System & Serviced Certification, SGS). However, before the publication of this report, the 2020 annual data was still under verification, and will be submitted to the National Greenhouse Gas Inventory Register by the end of August 2021, in accordance with the EPA's GHG Inventory and Register Management Procedures. This report discloses the greenhouse gas emissions of each plant site in 2019, as shown in the table below:

## Greenhouse gas emissions of Formosa Chemicals & Fiber Corp. in 2019

Unit: ton of CO.

Plant Site	Mailiao Plant Site	Xingang Plant Site	Changhua Plant Site	Longde Plant Site	Subtotal
Scope 1	1,554,825	2,352,166	1,316	1,270,124	5,178,431
Scope 2	3,133,487	13,903	30,806	1,049	3,179,245
Total	4,688,312	2,366,069	32,122	1,271,173	8,357,676
Scope 3					21,838,422

Note 1: 2019 results are based on SGS and BSI verification agency reports.

According to the company's greenhouse gas inventory results in Scope 1 and Scope 2 in 2019 (including Formosa Idemitsu Petrochemical Corporation and Formosa INEOS Chemicals Corporation) greenhouse gas emissions were 8,357,676 metric tons of CO<sub>2</sub>e, and the total energy usage of the main emission sources was about 6.28\*107 GJ as shown in the table below.

In 2019, the total turnover of Formosa Chemicals & Fiber Corp. and Formosa Idemitsu Petrochemical Corporation was NT\$203.708 billion. Based on the calculation, the company's energy intensity was approximately 308 kilojoules per NT dollar, and the greenhouse gas emission intensity was approximately 4.103 kilotons of CO<sub>2</sub>e- per NT billion.

Scope 1 and Scope 2 in 2019 of Formosa Chemicals & Fiber Corp. Summary table of main greenhouse gas emission sources and energy consumption

	Ма	iliao Plant S	Site		Plar	nt Sites Otl	ner than M	ailiao Plant S	ite
Emission Source	Usage (A)	Heat value (B)	Summary of energy consumption (A)* (B)	Ration of CO <sub>2</sub> e emissions (%)	Emission Source	Usage (A)	Heat value (B)	Summary of energy consumption (A)* (B)	Ration of CO₂e emissions (%)
Internally Purchased Electric Power	1,629,132 Million kW	3.6*10 <sup>3</sup> KJ/kW	5.86*10 <sup>6</sup> GJ	27.45	Coal Combustion	1,533,684 tons	2.4*10 <sup>7</sup> KJ/ton	3.68*10 <sup>7</sup> GJ	95.26
Fuel Oil	56,825 Kiloliter	4.1*10 <sup>7</sup> KJ/Kiloliter	2.33*10 <sup>6</sup> GJ	3.67	Fuel Oil	11,850 Kiloliter	4.1*10 <sup>7</sup> KJ/Kiloliter	4.86*10 <sup>5</sup> GJ	1.01
Fuel Gas	499,412 M³	3.8*10 <sup>3</sup> KJ/M <sup>3</sup>	1.90*10 <sup>3</sup> GJ	23.35	Externally Purchased Electric Power	87,174 Million kW	3.6*10 <sup>6</sup> KJ/M <sup>3</sup>	3.14*10 <sup>5</sup> GJ	1.21
Internally Purchased Steam Gas	6,084,207 tons	2.8*10 <sup>6</sup> KJ/ton	1.70*10 <sup>7</sup> GJ	39.6	Externally Purchased Steam	0 ton	2.8*10 <sup>6</sup> KJ/ton	-	0
	Total		2.52*10 <sup>7</sup> GJ	-		Total		3.76*10 <sup>7</sup> GJ	-

Source: 1. FPG Greenhouse Gas Inventory Database.

2. Joule (Joule, the English abbreviation is J); 1KJ=1,000J; 1GJ=109J; 1GJ=106KJ.

Note 2: The greenhouse gas emission coefficient quoted for the greenhouse gas emission inventory is mainly based on the "Greenhouse Gas Emission Coefficient Management Table Version 6.0.3" announced by the Environmental Protection Department of the Executive Yuan.

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 2019 greenhouse gas inventory report comes from the greenhouse gas inventory provided by Formosa Plastics Group; the 2020 inventory report is expected to obtain the greenhouse gas inspection statement in August 2021.

Note 5: In the method of consolidating the scope of the greenhouse gas inventory, the company uses the "Shareholding Method" to define the boundary due to special conditions. When defining the organizational boundary, it always adopts the control law, revealing that it includes the major subsidiaries Formosa Idemitsu Petrochemical Corporation and Formosa INEOS Chemicals Corporation.

Note 6: Scope 1 and Scope 2 greenhouse gas inventories are based on location-based inventories. The gas inventory 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, manufacturing products, used products, and disposal products.

3.7 Description of major

3.6 Compliance with environmental protection laws and regulations

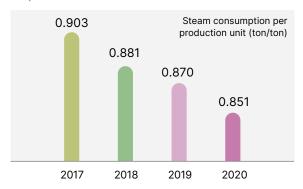
## Mitigation of climate change | SDG 13:

Global climate change and greenhouse gas warming have become one of the most concerned topics of the world. The company complies with enterprise's government laws to formulate 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 2017 to 2020 and the implementation results of energy conservation. Among them, the average gas consumption per unit output of Mailiao plants in 2020 was 0.851 ton/ton, showing a downward trend year by year.

In addition, the company promoted the third-party verification for product carbon footprint to conduct ISO 14066:2013 carbon footprint verification. In 2018, 6 products completed verification in Longde plant site and Jiayi plant site. In 2019, 19 products completed verification in Mailiao plant site; in 2020, the carbon footprint verification of PC and PP products were both completed as well.

Formosa Chemicals & Fiber Corp. & Formosa INEOS Chemicals Corporation (Mailiao Plant Site) Trend chart of gas consumption per unit output from 2017 to 2020



Formosa Chemicals & Fiber Corp. & Formosa INEOS Chemicals Corporation Implementation of energy-saving improvement cases from 2000 to 2020

Year	2000~2019	2020	Cumulative volume from 2000 to 2020	Ongoing	Total
Number of improvements (project)	4,914	383	5,297	350	5,647
Steam Saved (Tons/Hour)	1,006	64	1,070	237	1,307
Electricity Saved (kilo kWh)	116.5	11.5	128	12.4	140.4
Fuel Saved (Tons/Hour)	17.7	0.1	17.8	0.2	18.0
CO <sub>2</sub> e reduction (Kilo tons/year)	3,727	233	3,960	630	4,590
Amount Invested (NT\$100 million)	121.73	6.3	128.03	42.06	160.9
Investment Benefit (NT\$100 million/Year)	105.41	5.89	111.30	16.2	127.2

## Adaptation to climate change **SDG 13.1**

According to the World Economic Forum Risk Report released annually by the World Economic Forum (the latest version is the WEF 2021 Global Risk Report), the risk of extreme weather impacts on the environment caused by climate change is the highest. In order to improve the company's ability and resilience to respond to climate change and reduce the negative impact of climate change, the company actively researches and promotes various project work, such as promoting the acquisition of green plant certification at the Haifong plants, taking into account both environmental protection and the sustainable development of the industry through saving energy and resources, and pollution prevention, green management etc. cleaning production actions to minimize related impacts.

## The third SM plant in Mailiao Industrial Complex applied for green factory certification

The Company actively promotes the certification of green factories. The third SM plant in Mailiao Industrial Complex obtained the Green Building Labeling and the Cleaner Production Evaluation System Certificate in August 2019 and September 2019, respectively. In November 2019, it applied to the Industrial Development Bureau for the Green Factory Label. After review and approval, it became effective in January 1, 2020. The promotion process is as follows.



# 3.3 Water resources use and management

## Material Topic: Water Resource Use and Management Approach

Mission of Safety, Health and Environmental

- Policy
- Adhere to water source stability and water conservation policies and comply with regulations related to Water Pollution Control Act.
- Responsibilities

Companies that mainly produce and sell with plastic material products pay special attention to the use and management of water resources, and the water-saving and energy-saving promotion team is responsible for implementing specific actions. Please refer to the "Mission of Safety, Health and Environmental Protection" in the "Environmental Sustainability" section of the company's official website.

- Resources
- 1. The water resource impact was analyzed and evaluated by using the professional water resource scenario simulation tool established by WRI.
- 2. Formosa Plastics Group establishes the "Assessment and Advisory Committee on the Ecological Impact of Mailiao Industrial Complex Discharged Water to assess the impact of the discharged water quality on the marine ecology.
- 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.Discharged water: equipped with automatic continuous monitoring systems for discharged water, and regularly assess the ecological impact of discharged water.
- 3. 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. Complaints with the company on environmental issues during various external meetings.
- Performance Evaluation Methods and Results
- 1. Rainwater recovery rate of Mailiao plant site reaches 90%.

measures and increase the use of recycled water in the process.

- 2. One drop of rainwater can be reused 7 times at Mailiao Industrial Complex.
- 3.In 2020, the CDP Water Safety Disclosure Questionnaire was evaluated and won "Leadership A"

Water resources assessment

At present, Taiwan belongs to the medium-to-low risk area in the WRI's water stress zone, and does not belong to the water stress zone. However, the company's water consumption is relatively high. In order to reduce the risk of water stress, after using the professional water resources scenario simulation analysis tool established by WRI to evaluate the water resources risk, the company autonomically upgraded the management level and managed the locations of the plants as if they were water stress resources areas, continue to implement water-saving

3.7 Description of major environmental issues

## 3.3.1 Water resource access management

#### Water source

The water used in Changhua, Mailiao, Longde and Xingang plant sites is mainly from surface water such as rivers, lakes and reservoirs. In addition, a small amount of groundwater is used in the Longde plant site in Yilan province, which has obtained the legal groundwater rights approved by the Yilan and Changhua provinces respectively. The water consumption in 2020 was shown in the table below.

Annual water consumption table of FCFC in 2020

Unit: million liters

Type	Plant Site						
Type	Longde	Changhua	Mailiao	Xingang			
Surface water (A)	6,558.2	197.7	13,920.7	13,434.3			
Groundwater (B)	744.1	-	-	-			
Third-party Water (C)	-	-	-	-			
Subtotal (A)+(B)+(C)	7,302.3	197.7	13,920.7	13,434.3			
Water Use Quantity		34,8	355				

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

### Use of Water from the Jiji Weir

According to the "Monthly Report on Agricultural Water Consumption of Jiji Dam for Industry and Public Water Use" by the Industry Bureau of the Ministry of Economic Affairs, the annual water supply of Jiji Dam in the past four years (2017~2020) was between 572,887 and 1,750.73 million tons. The 4-year average industrial water consumption accounted for 2.5% of the total water supply, and the 4-year average transfer agricultural water consumption only accounted for 2.1% of the total agricultural water consumption. It is assumed that the water intake in Mailiao Industry Complex had 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 were summarized below.

Water Supplied by the Jiji Dam from 2017 to 2020

Unit: Ten thousand tons

Item	Inflow of	Agricultural water	Industrial water					
Year	Jiji Dam (A)	Average Consumption (B)	Average Consumption (C)	Percentage (C)/(A)	Taking from Agricultural Water (D)	Percentage (D)/(B)		
2017	572,887	186,163	10,138	1.8%	3,328	1.8%		
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%		
Average	391,478	171,146	9,945	2.5%	3,532	2.1%		

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

The Mailiao Industrial Complex actively solves the problem of water use during dry seasons, and conducted a test on the test unit for the desalination of seawater in 2008. However, due to the high sand content of seawater in the nearby sea area, the water supply was not stable. Through continuous review with desalination manufacturers in various countries and field visited abroad, the quality of the produced water can meet the water demand of Mailiao Industrial Complex after the improvement of existing technology. 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 begun in August 2019, and is expected to be completed by the end of 2022 to produce water.

## 3.3.2 Water resources discharge management

SDG 3.9 SDG 14.1 SDG 14.2

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 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 FCFC in 2020

Unit: million liters

Discharge volume is based	Plant Site						
on the terminal point	Longde	Changhua	Mailiao	Xingang			
Surface Water (A)	6,704.9	145.1	-	1,908.4			
Sea water (B)	-	-	5,750.9	-			
Sum (A)+(B)	6,704.9	145.1	5,750.9	1,908.4			
Water Discharge Volume		14,50	9.3				

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

The Yunlin Mailiao, Chiayi Xingang and Yilan Longde plant sites are equipped with a total of 5 sets of automatic continuous monitoring systems for discharge water. 24-hour monitoring of water volume, water temperature, pH, chemical oxygen demand (COD), suspended solids (SS) and other items, and the monitoring data is connected 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 plant sites, which can reduce the moisture content of the original sludge from 85% to less than 50%, greatly reducing the amount of sludge produced.

<sup>2.</sup>The data of Mailiao plant site contains Formosa Idemitsu Petrochemical Corporation and Formosa INEOS Chemicals Corporation

3.6 Compliance with environmental protection laws and regulations

3.7 Description of major environmental issues

## Statistics on control of discharged water quality in 2020

Water Volume (CMD)		рН		COD(mg/L)			SS(mg/L)				
Plant	Permissible Volume	Emissions	Statutory Requirements	Internal Control Value	Average Value	Statutory Requirements		Average Value	Statutory Requirements	Internal Control Value	Average Value
Longde	4,2238.28	18,318.93	6~9	6.5~8.5	7.95	100	80	43.805	30	24	11.335
Changhua	3,521.8	397.5	6~9	6~9	7.1	100	65	36	30	25	4
Mailiao	36,330	16,601	6~9	6.8~8.7	8.25	100	80	51.24	30	18	5.30
Xingang	10,701	6,509	6~9	6.5-8.5	7.5	100	90	38.58	30	25	4.833

## Wastewater treatment SDG 6.3

As of 2020, the company's total investment in wastewater discharge improvement had reached 7.84 billion. There are 6 wastewater improvement projects (including soil and groundwater) in progress in 2021, and an additional investment of NT\$143 million is expected, such as the Environmental Engineering Department of the Synthetic Phenol Plant in Mailiao Plant site invested NT\$65.271 million to install a wastewater recycling system (UF + RO), and the discharged water from the cooling tower and the backwash wastewater that have been treated in Haifong district is about 1,500 CMD, then to removes small particles of impurities to reduce suspended solids (SS) by ultrafiltration Method (UF). Then reverse osmosis (RO) removes cations and anions to reduce conductivity, and is recycled. The recovered water volume is 945 CMD, and the total recovery rate is 63%.

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

Regarding the Mailiao Industrial Complex, Formosa Plastics Group established the "Assessment and Advisory Committee on the Ecological Impact of the Water Discharged from the Mailiao Industrial Complex of the Formosa Plastics Group on the marine ecology. As of the survey results in 2020, it has been suggested that Mailiao Industrial Complex has no detectable impact on the water quality, ecology, fish breeding period, fishery resources, beach breeding, sand throwing, etc. of the nearby sea area. If there were 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 information about the research results on the ecological impact of discharged water from Mailiao Industrial Complex, please refer to the "Beauty of Liuqing" section on the official website of Formosa Plastics Corporation.

### 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 Strait is the area of habitat from Miaoli to 3 kilometers offshore of Tainan. In order to understand the inhabitation and foraging areas of the Chinese White Dolphins, Formosa Plastics Group has commissioned a professional organization to implement the project plan since 2008. The research results show that the operation of the Mailiao Industrial Complex has no impact on the ecological work and rest of the Chinese White



Dolphins. For more information about the ecological impact of the sea area in Mailiao Industrial Complex and the study of Chinese White Dolphins, please refer to the "Beauty of Liuqing" section of Formosa Plastics Corporation's official website.

## 3.3.3 Water resource use efficiency SDG 6.4



#### Objective



#### Action

Process and equipment performance improvement Optimization of operating conditions

Wastewater Recycling and Reuse

Reusing collected rain water



## **98,170** tons/day

Water saving (cumulative to 2020) 1,033 projects

Water saving improvement (cumulative to 2020) 4.96 million yuan

Annual benefit (2020)

84.2%

Rainwater recovery rate (2020 Mailiao Park) Use 7 times per drop

Frequency of reuse of process water recycling (Mailiao Industrial Complex)

The company's water consumption statistics in 2020

Unit: million liters

Plant Site	Longde	Changhua	Mailiao	Xingang
Water Consumption	597.4	52.6	8,169.8	11,525.9
Total Water Withdrawal by Source		20,3	45.7	

The implementation of water-saving of FCFC from 2000 to 2020

Year	2000~2019	2020	Cumulative volume from 2000 to 2020	Ongoing	Total
Number of Improvement Projects	935	68	1,003	66	1069
Volume Saved (Tons/Day)	94,242	3,928	98,170	5,204	103,374
Amount Invested (NT\$100 Million)	26.93	0.73	27.66	10.8	38.5
Investment Benefit (NT\$100 Million/Year)	4.79	0.17	4.96	0.21	5.2

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. Among them, the average amount of rainwater recovered in 2020 was 3,180 tons per day, and the recovery rate was about 84.2%.

## Successful cases of water saving

The Mailiao Styrene Plant had carried out process integration and improvement of multi-effect distillation technology. After the operation integration of the ethylbenzene recycling towers in the first and second phases, one ethylbenzene recycling tower and related equipment reduced, which reduced the daily use of 273.6 tons of cooling water. The water saving was about 99,864 tons.

3.6 Compliance with environmental protection laws and regulations

3.7 Description of major environmental issues



## Material Topic: Air Pollutant Management Appro

#### Policy

The Company pays close attention to domestic laws on emissions and regards relevant laws as the basis to our air pollution emission improvements, for example, the draft for "Standard for Hazardous Air Pollutant Emissions from Fixed Sources". 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

Divisions that emit air pollutants are responsible to reduce such pollution, and environmental protection division of the company supervises and assists in their improvement.

Resources

FPG establishes 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 are set up at each emission pipe to instantly monitor the emissions of all air pollutants.
- 2.Adopt Best Available Control Technology (BACT) to comply with the relevant regulations of the Environmental Protection Agency's Air Pollution Law.
- Objectives and Commitment
- 1. 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.
- 2.In response to the announcement of the Environmental Protection Agency that the plants with the steel, cement, electric power and petrochemical industries emit harmful air pollutants, the plans should set up special health risk assessment personnel. In 2020, 49 personnel were sent to participate in the training, and relevant certificates will be obtained in the future.
- 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. Discuss environmental issues to FCFC during various external meetings.
- Performance Evaluation Methods and Results

All emissions are performing better than legally stipulated levels.

## 3.4.1 Emissions and prevention SDG 3.9 SDG 11.6

We constantly seek to make improvements in air pollution control. A total of 3 sets of FTIR infrared sensors and 11 sets of Gas Find IR have been used to monitor leaks of process gas. Since 2007, certified institutions have been authorized by the cogeneration coal fired units twice a year to make sure that our plants' dioxin emissions meet national standards. In 2017, the Environmental Protection Administration made an early announcement of the Standard for Hazardous Air Pollutant Emissions from Fixed Sources (draft) to strengthen the control of hazardous air pollutants, gradually specifying emission standards for specific industries and controlling their air pollutant emissions. The Company had been following up the provisions and progress of the draft closely to make early improvements. As of 2020, the total amount of investment in air quality improvement reached NT\$10.64 billion. In 2021, there will be a total of 10 ongoing improvement projects for exhaust gas containing odor and elimination of visual pollution, and an additional investment of NT\$448 million is expected. The emissions of various air pollutants in 2020 were as follows.

	Tuno		Total			
	Туре	Longde	Changhua	Mailiao	Xingang	TOtal
	SOx	76.0	0	207.4	180.9	464.3
Air Pollutant Emission	NOx	129.1	0	1,116.9	380.4	1,626.4
Management	Volatile Organic Compounds (VOCs)	99.0	5.2	476.1	68.0	648.3
	Total Suspended Particles (TSP)	23	0	54.9	47.5	125.4

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

In view of the public concerns about the Mailiao Industrial Complex's air pollution, FPG established the "Evaluation and Counseling Committee for Mailiao Industrial Complex's Air Quality Impact" in September 2011 to analyze the air pollution of public concerns accurately through rigorous scientific research. To immediately take various environmental indicators under control, we built a sound environmental monitoring network. Taking the prevailing wind direction in Mailiao into consideration, eight layers of monitoring were implemented to ensure the local air quality. Relevant environmental monitoring and analysis can be found in the "Environmental Protection and Safety" section of Corporate



# 3.5 Waste and Controlled Chemical **Substance Management**

For the waste and controlled chemical substances, FCFC reduces the life cycle of controlled chemical substances and waste through prevention, reduction, recycling and reuse. Properly manage waste and chemicals in a manner that is consistent with the environmental sustainability and reduce negative impacts on human health and the environment.

## 3.5.1 Waste management SDG 3.9 SDG 11.6 SDG 12.4

## Material Topic: Management Policy of Waste Management

Social Responsibility on the Formosa Plastics Enterprise website.

- The waste management policy is based on the government waste clean-up laws and the Policy "Business Waste Management Measures" established by the Company.
- The waste generation division assumes management responsibility, and the environmental Responsibilities protection division supervises and assists the management.
- Resources Improvements such as waste reduction etc., with a total investment of NT\$483 million as of 2020.
- Specific Select waste disposal and treatment companies that have obtained qualified environmental protection permits. Actions
- Objectives and Achieve the goal of "zero pollution". Commitment
- 1. SHE section sets up on the Company's website as a channel for interested parties to provide Grievance their opinions and feedback. Mechanism
  - 2.Stakeholders can discuss with FCFC for environmental protection issues during various external meetings.
- 1. The waste recycling rate in 2020 was as high as 88%. Evaluation 2. There were no abnormal incidents in the waste disposal of the cleaning and transportation Methods and manufacturers in 2020 Results

Performance

3.6 Compliance with environmental protection laws and regulations

3.7 Description of major

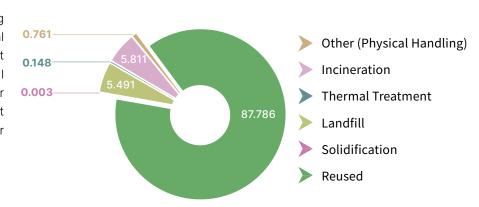
## Waste management strategy

The Company handles the waste in accordance with government waste clean-up laws and the "Business Waste Management Measures" established by the Company. Waste disposal is carried out at each plant based on the waste disposal plan approved by competent authorities, and select the waste disposal, transportation and treatment manufacturers that have obtained qualified environmental protection certificates to undertake the work. And we have established independent audit control measures for waste cleanup to ensure that waste removal and disposal companies comply with environmental protection regulations and properly dispose of business waste. There was no abnormal disposal of waste by cleaning and transportation companies in 2020.

#### Waste treatment method

Regarding the outsourcing treatment of waste, all industrial wastes generated in each plant are sent to domestic legal treatment institutions for proper treatment, and no export abroad. The relevant data for 2020 are as follows.

#### Statistical chart of waste treatment methods



		(	General	Hazar				
Туре	Other (Physical Handling)	Incineration	Thermal Treatment	Landfill	Reused	Solidification	Transfer processing	Total
Handling Capacity (Tons)	1,751	13,364	340	12,629	201,892	7	0	229,982
Proportion (%)	0.761	5.811	0.148	5.491	87.786	0.003	0	100

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

In order to reduce the generation of waste and improve waste reduction, the company had invested a total of NT\$483 million by 2020. There is one improvement project in progress in 2021, and an additional investment of NT\$11.819 million is expected.

## 3.5.2 Controlled Chemical Substance Management

## **Controlled Chemical Substance Management**

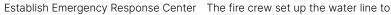
In order to ensure the safety management of the production, use, storage and transportation of controlled chemicals substances, and to ensure the normal operation of the operation sites and facilities of the controlled chemicals of each plant, we have obtained the approval documents of the competent 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 management measures to strengthen the independent management of the operation of controlled chemicals; and regularly commission environmental testing institutions to conduct labor working environment measurement, so as to master the actual working environment of colleagues and assess the behavior of colleagues' exposure.



Set up a contingency command center to rescue injured people during disaster reliaf

In addition, 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.







sprinkle water



Rescue team personnel carry out rescue

## 3.6 Compliance with Environmental **Protection Laws**

#### Material Topic: Management Approach to Compliance with Environmental Protection Regulations

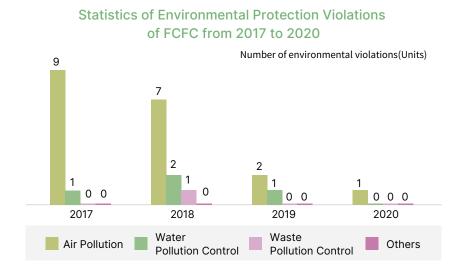
- Policy
- Pursue compliance with and better than the environmental protection regulations of the Environmental Protection Agency, and follow the corporate environmental supervision and management measures.
- Responsibilities
- Environmental protection experts have been designated at all production divisions of the company to be in charge of compliance with environmental protection laws. In addition, the environmental protection division establishes to assist, guide, and supervise matters related to environmental protection.
- Resources
- Designated personnel of the company continue sto 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 division browses the latest environmental protection laws and regulations announced by the government on government websites at any time, and attend the public hearing and advocacy meeting of environmental protection laws and regulations held by the government in time to obtain the latest version of environmental protection laws and regulations and draft related to the Company.
- Objectives and Commitment
- FCFC ensures safe production processes to prevent from causing environmental pollution and set "zero penalties" as the goal.
- Grievance Mechanism
- 1. SHE section sets up on the Company's website as a channel for interested parties to provide their opinions and feedback.
- 2.Stakeholders can discuss with FCFC for environmental protection issues during various external meetings.
- Performance **Evaluation** Methods and Results
- 1. The company establishes regulatory compliance inspection procedures in accordance with the spirit of ISO 14001:2015 environmental management system. And if there were any noncompliance with the legal inspection results and could not be improved immediately, it is required to formulate an improvement implementation plan and follow-up for control.
- 2. No major leaks occurred in 2020.
- 3. There was one case against environmental regulation in 2020. In response to the aforementioned environmental protection violations, we had conducted parallel investigations through internal meetings, reviewed and promoted with various divisions, and strengthened random inspection management and added preventive equipment for improvement.

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3.6 Compliance with environmental protection laws and regulations

h environmental 3.7 Description of major and regulations environmental issues

The company is one of the main inspection objects of the central and local environmental protection authorities (3 times per day) because it is a concentrated industry of petrochemical upstream and downstream. The environmental protection violations in 2020 included an automated air connection monitoring facility with a percentage rate of less than 85% when it was effectively monitored, which was punished by the competent authority with a penalty of NT\$0.1 million.



## 3.7 Description of Material Environmental Issues

#### **Environmental pollution lawsuit in Liuqing**

In 2018, two brothers of Mailiao village residents, Mr. Lin and his brother, filed a civil lawsuit against Formosa Plastic Group for compensation of more than NT\$8 million due to the death of their mother from cancer. In 2019, they combined with 40 other residents and neighboring Taixi Township of Yunlin County who suffered from respiratory diseases and filed a civil compensation of more than NT\$40 million. On October 30, 2020, the Yunlin District Court sentenced that because it was difficult to find out that the mother of the two brothers, had died of lung cancer and there was a causal relationship between the death of the mother and Mailiao Industrial Complex air pollution, it overruled the request of the two brothers and ruled to reject the additional requests of the other 40 plaintiffs. The whole case can be appealed.



- 4.1 Employee Human Rights Protection
- 4.2 Employee Remuneration and Benefits
- 4.3 Human Capital Development
- 4.4 A Healthy and Safe Workplace Environment

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## 24.1 Employee Human Rights Protection

#### Material Topic: Employee Human Rights Protection Management Approach

#### Policy

The company supports and follows the "United Nations Universal Declaration of Human Rights", "International Human Rights Covenants", "United Nations Global Covenants", the International Labor Organization's "Declaration of Fundamental Principles and Rights at Work" and other basic human rights principles and local laws and regulations, and formulates the company's human rights policy.

#### Responsibilities

All divisions of the company promote human rights protection in accordance with the "Human Rights Policy of Taiwan Chemical Fiber Co., Ltd".

#### Resources

The chairman of the company signs the "Human Rights Policy of Formosa Chemicals & Fiber Corp." and instructs all division to fully promote and implement human rights protection regulations.

#### Specific Actions

- 1. Establish the "Sexual Harassment Prevention Measures" to reinforce sexual harassment prevention and provide employees with a reporting channel.
- 2. Conduct questionnaire care for current employees.
- 3.Develop the "Personal Data Management Regulations" to properly keep and handle employees' personal data.

#### Objectives and Commitment

FCFC's employee rules have clearly stipulated that no employee shall be subjected to discrimination because of union membership. All 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.

#### Grievance Mechanism

- 1. The Company established the "Guidelines for Employee Appeals" to build a diversity of reporting channels.
- 2. There is a "Supervisor Coordination Committee", where business supervisors discuss and make resolutions on major cases of reward and punishment cases.
- 3. Employee opinion mailboxes have been set up.
- 4.An online mailbox in the business information system has been set up.
- Performance Evaluation Methods and Results
- 1. The proportion of unionization in 2020 was 69.3%, an increase of 1.1% over that in 2019
- 2. No cases of child labor, human rights violations or discrimination occurred in 2020

#### Communication Objective Action Mechanisms Establishing the Sexual Harassment Establishing the Guidelines Prevention Measures to reinforce for Employee Appeals to Anti-FPG Human sexual harassment prevention and build a diversity of reporting harassment Rights Protection provide employees a concrete channels reporting channel Creating the Executive Complying with the Employment Coordination Meetings in Anti-Service Act to provide public, fair, which executives discuss and impartial job opportunities for discrimination and determine major all candidates rewards and punishments Developing the Personal Data Personal data Management Regulations to Protection properly keep and handle employees' personal data

In order to strengthen and implement human rights protection, the company formulates a human rights protection policy based on international human rights conventions, which is signed by the chairman of the board. Please refer to the "human rights policy" in the occupational safety area of social responsibility of the company's official website.

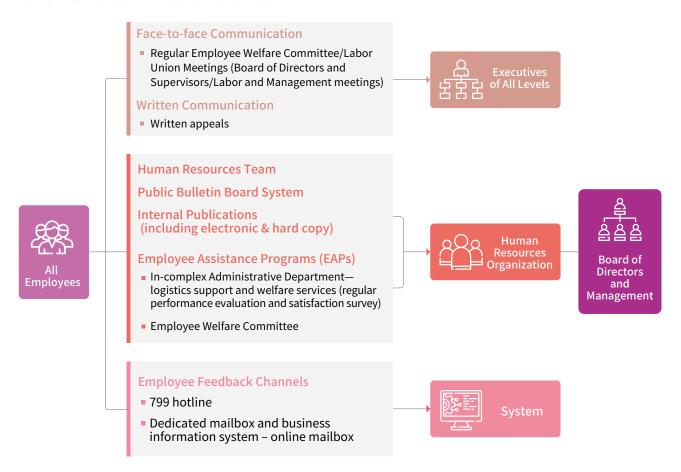


#### 4.1.1 Employee Opinions and Feedback

The employees of Formosa Chemicals & Fiber Corp. can communicate fully with the representatives of the management and labor in regular meetings through the labor union, welfare committee and other organizations. On major labor issues, priority is given to the views of the trade unions, and all employees are protected by mutual agreement between labor and management.

For newly recruited junior college cadres, we regularly learn about the difficulties they encounter in work and life through the "counseling specialist". Caring for and eliminating the anxiety of the new environment, assisting in solving various problems, making it stable development and reducing the turnover rate.

#### **FCFC Internal Communication Channels**



The employee care questionnaires are conducted every year, and the statistics had been carrying out on a 10-point scale since 2019. 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". The results of the 2020 survey showed that the growth rate of employees' management satisfaction with department heads had increased by 1.15% compared to that in 2019.

Development

The proportion of full-time employees in 2020 accounted for 95.5%; Non-regular employees (consultants, regularterm contract personnel, foreign workers, and working students) accounted for 4.5%, among which 2 were parttime workers. Local employees accounted for 99.9%.

4.1 Employee Human Rights Protection

#### Analysis table of Human Resources structure in 2020

Unit: Person

		Fer	nale	М	ale	
Туре	Nature	Number of employees	Percentage of the group %	Number of employees	Percentage of the group %	Total employees
Employment	Regular Employees	566	11.4	4,385	88.6	4,951
Contract	Temporary Employees	132	57.1	99	42.9	231
Type of	Full-time Employees	696	13.4	4,484	86.6	5,180
Employment	Part-time Employees	2	100	0	-	2
	Executives	1	0.2	48	1.1	49
Position	First and Second Level Directors	31	5.5	1,140	26.0	1,171
FOSITION	Entry Level Managers and Employees	272	48.1	3,195	72.9	3,467
	Assistants	262	46.3	2	0.05	264
	Northern Taiwan	221	39.0	737	16.8	958
Location	Central Taiwan	133	23.5	2,222	50.7	2,355
Location	Southern Taiwan	176	31.1	976	22.3	1,152
	Eastern Taiwan	36	6.4	450	10.3	486
	Under 29 Years Old	43	7.6	401	9.1	444
	30-39 Years Old	94	16.6	1,003	22.9	1,097
Age	40-49 Years Old	193	34.1	1,635	37.3	1,828
	50-59 Years Old	205	36.2	1,155	26.3	1,360
	Over 60 Years Old	31	5.5	191	4.4	222
	Under 10 Years	156	27.6	1,407	32.1	1,563
Years of	Terms 11~19 Years	35	6.2	736	16.8	771
Service	Terms 20~29 Years	199	35.2	1,670	38.1	1,869
	Over 30 Years	176	31.1	572	13.0	748
	Ph. D Degree	0	-	11	0.3	11
Education	Master Degree	52	9.2	513	11.7	565
Education	Bachelor Degree	50	8.8	774	17.7	824
	Others	464	82	3,087	70.4	3,551
Subtotal of F by Gender	Regular Employment	566	11.4	4,385	88.6	4,951

#### 4.1.3 Employee job security SDG 8.5

The recruitment of FCFC adheres 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 in accordance with the rules and regulations of the enterprise.

Based on the spirit of giving priority to protecting employees' working rights and interests, the Company establishes a manpower integration mechanism to replace layoff with transfers. Due to business adjustment or consolidation, the company deals with organization reorganization and other matters etc., and the employee's work changes, the notification method and notice time should be handled in accordance with the provisions of labor laws and regulations. The annual turnover rate (including retirement) of employees in 2020 was 7.59%, of which retirees account for 70.74%, as shown in the following table.

#### Overview table of new recruits and turnover rate in 2020

		New En	nployees	Employee Turnover		
	Туре	Number of employees	Proportion% (Note 1)	Number of employees	Proportion% (Note 2)	
	Under 29 Years Old	41	0.83	61	1.23	
	30-39 Years Old	6	0.12	32	0.65	
Age	40-49 Years Old	1	0.02	34	0.69	
	50-59 Years Old	0	-	125	2.52	
	Over 60 Years Old	0	-	124	2.50	
	Total	48	0.97	376	7.59	
Gender	Male	40	0.81	335	6.77	
Gender	Female	8	0.16	41	0.83	
	Total	48	0.97	376	7.59	

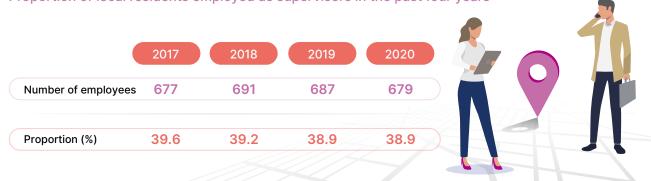
Note 1: Proportion to the total number of people = the number of newly recruited female (male) / the total number of official employees of Formosa Chemicals & Fiber Corp.

Note 2:Proportion to the total number of people = the number of turnover female (male) / the total number of official employees of Formosa Chemicals & Fiber Corp.

#### Proportion of local residents employed as supervisors

The company's grassroots new recruits preferentially recruit local residents from operating bases in order to give back privilege to the residents, and actively cultivate local employees to become outstanding cadres. The proportion of local residents employed as supervisors in the past four years were as follows.

Proportion of local residents employed as supervisors in the past four years



Note: Supervisors in this table refer to grassroots supervisors (including) or above, with over 5 years of service (including) in total, and their household registration is in the same county or city as the plant area.

## 24.2 Employee Remuneration and Benefits

#### Material Topic: Management Approach to Employee Compensation and Benefits

Policy The company formulates employee benefits and salary systems by adhering to the spirit of "equal pay for equal work" and the concept of "treating employees as family members".

The company provides employees with good workplace development environments, Responsibilities reasonable salary, and implements various comprehensive welfare systems.

The "799" hotline is set up at each operational site to provide timely channels for employees Resources to reflect their thoughts and to solve their problems.

Specific Both labor and management have met through the labor union, the employee welfare Actions committee and other organizations to fully communicate with each other.

Better salary than the same industry, with a sound benefit system, care for employees and Objectives and Commitment their families.

Grievance 1. Entity opinion complaint box and online complaint channels. Mechanism 2. Organizational meetings of labor unions, welfare committees, etc.

Performance 1. The minimum starting salary standard is better than the statutory basic salary. The basic Evaluation salary ratio of male and female employees of the same position and rank is 1:1 Methods and

2. Various benefits measures more competitive than legal regulations are offered.

#### 4.2.1 Employee remuneration **SDG 8.5**

Results

The salary standard for new recruits of Formosa Chemicals & Fiber Corp. is based on the academic education and experience and other conditions of the talents required by the position. The basic salary ratio of male and female employees of the same position and rank is 1:1. The salaries of new employees are adjusted annually depending on their work performance, and corresponding salaries are given for promotion. As of 2020, the relative proportions of the total basic salary plus remuneration of male and female employees were as follows.

#### Total comparison table of employee base salary plus remuneration

Unit: %

Year	2017		201	2018		2019		2020	
Gender		Male	Female	Male		Male	Female	Male	
Level 2 Managers or Above	100	95	100	97	100	107	100	103	
Entry Level Managers or Below	100	138	100	136	100	133	100	130	

The company's salary structure includes basic salaries and various allowances, performance bonuses, year-end bonuses and a certain percentage of employee compensation based on profit to motivate and reward employees' work performance. The proportion of basic salary and remuneration of female employees below grass-roots supervisors (including) is lower than that of male employees, mainly because grass-roots female employees work as operators or general staff, and most of them do not need to take shifts. Compared with grass-roots male employees who take shifts, they are entitled to receive shift-related allowances.

The value of sustainable talents

The number of full-time non-supervisory employees, the average salary and median salary of full-time nonsupervisory employees in 2020 were shown in the following table.

#### Salary summary for non-supervisory personnel

Year	2018	2019	2020
Number of non-managerial employees (number of employees)	4,890	4,911	4,672
Average salary of non-managerial employees (NT\$/per person)	1,384,584	1,366,832	1,319,672
Median salary of non-managerial employees (NT\$)	1,278,527	1,258,846	1,189,174

Note: 1. Non-managerial position is equivalent to non-manager position.

For the retirement programs of employees, the company allocates the pension to the special account on a monthly basis according to the individual employee's choice of the new or the old pension systems, so as to ensure that the employees can claim the pension according to the law when they reach the statutory retirement conditions. The number of employees choosing the new or old pension systems by 2020 was shown in the table below.

#### Number of employees choosing the new or old pension plan



Note: 1. For the status of pension recognition, please refer to the description of the "retirement" account title in the 2020 consolidated financial report.

2. The number of employees using the new pension plan included 231 non-regular employees.

## 4.2.2 Employee Benefits

The company adheres to the concept of "treating employees as family members". Each plant site has sound accommodation and leisure facilities, and actively promotes various comprehensive welfare systems. Employee welfare measures are handled in accordance with the corporate welfare system, and there are a number of employee welfare measures that are better than the statutory provisions. Each plant establishes 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 2020" section, Operation Overview-Labor Relations under the Company Annual Report of Investor Relations on the company's official website.

<sup>2.</sup> The number of non-supervisor employees refers to the average number of employees at the end of each month except for the manager (excluding subsidiaries) that have been paid for more than six months (inclusive) in the current year.

4.3 Human Capital

Development

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 discounts to insure various group insurances (accident insurance, medical insurance and cancer prevention insurance), so that employees can choose more perfect insurance plan freely.

4.1 Employee Human

#### Subsidies for social activities

The Company grants subsidies to in-house 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 appreciate retired employees for their contributions to the company, the "Retired Personnel Association" was established in 2013. The company builds three branches in Yilan, Changhua, and Chiayi. As of the end of 2020, there were 1,159 members. The company allocates funds to subsidize member activities every year, and gets in touch with retired employees through social activities.



#### **Unpaid parental leave**

The company provides a childcare leave without pay system, and employees can apply according to their personal needs. In 2020, there were six people who actually applied for maternity leave without pay, and the number of applicants in the past four years was shown in the table below.

#### Summary table of application and reinstatement of unpaid leave for childcare in the past four years

lton		2017			2018			2019		:	2020	
Item		Male	Total	Female	Male	Total		Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	6	148	154	12	180	192	11	168	179	17	158	175
Number of Employees Applying for Unpaid Parental Leaves	6	-	6	11	-	11	10	-	10	6	0	6
Number of Employees Expected to Reinstate in the Year (A)	4	-	4	6	-	6	8	-	8	7	0	7
Number of Employees Applying for Reinstatement in the Year (B)	4	-	4	6	-	6	8	-	8	6	0	6
Number of Employees Having Reinstated for over a Year (C)	3	-	3	4	-	4	5	-	5	7	0	7
Reinstatement rate% (B/A)	100	-	100	100	-	100	100	-	100	86	-	86
Retention rate (%) (C of the current year/B of the previous year)	100	-	100	100	-	100	83	-	83	88	-	88

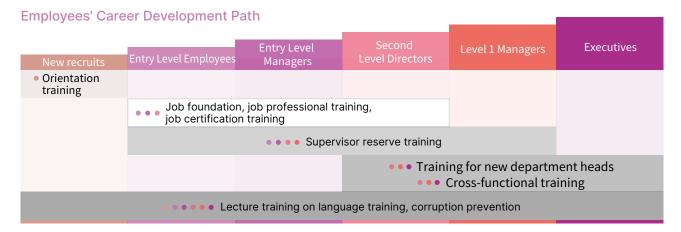
Note: "-" indicates an infinite value.

## 24.3 Human Capital Development

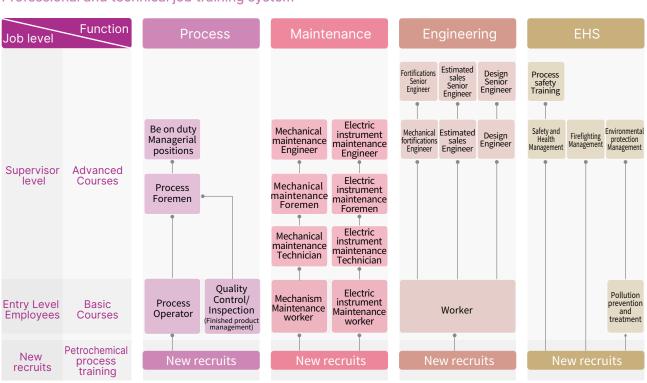
In addition to providing high-quality compensation and benefits, the Company also attaches great importance to the career development of employees. Appropriate training plans are arranged at all stages from the start of new recruits to promotion to supervisory positions. In addition, for professional and technical jobs, various in-job professional education and training courses are added to enhance staff's professional skills through job training and job certification systems.

#### 4.3.1 Employee Career Development Management

In order to implement the talent cultivation, the company formulated the "Training Management Method" and combined with the computer system for professional management, and regularly reminded the responsible unit to arrange training courses to achieve the goal of employee cultivation and retention.



#### Professional and technical job training system



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In order to regularly review the applicability of employees' job competences, the regular work appraisal mechanism is used to review the career development of employees, and the appraisal mechanism is used to motivate employees to improve their work performance. All full-time employees are subject to regular job evaluation and inspection, which is conducted through face-to-face communication between supervisors and subordinates to understand employees' abilities for reference in future training and post transfer. The company's regular assessment mechanism and employees' performance and career development assessment are shown in the following table. The average proportion of employees' performance and career development assessment in 2020 was 95.5%.

#### Employee assessment frequency table



#### Frequency of assessment

- ★ Quarterly performance evaluation
- Monthly performance evaluation
- ◆ Annual year-end evaluation

#### The proportion table of employee performance and career development assessment in 2020

Unit: %

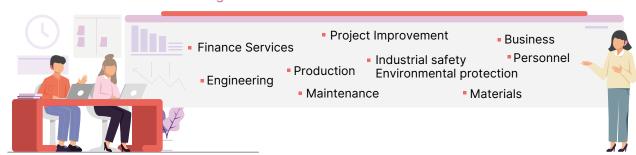
Official Category	Male	Female
Executives	65.8	14.3
Senior Managers	99.7	100
Managers	100	100
Senior supervisor	99.9	100
Junior Employees	96.6	78.6
Total		95.5

Note: the proportion of management supervisors is lower, which is due to the higher proportion of non-full-time staff consultants.

### 4.3.2 Employee professional training and cultivation of **SDG 8.6**

In addition to arranging employees to take training classes at various levels and stages, the company entrusts the "technical training center" of Formosa Plastics Group (TTQS gold medal evaluated by the Ministry of Labor) to develop job certification and technical training courses according to the nine functional categories of employees' functions, so as to enhance the employee positions professionalism. In addition, cross-functional learning courses are designed for supervisors to enhance the breadth and depth of supervisors' management intelligence, and there are provisions for professional licenses to add points and promotion levels and to encourage employees to learn from multiple sources, develop second expertise, learn foreign languages, and transfer training etc. from time to time, various thematic study courses are held to encourage employees to learn for life.

#### 9 Functions of Professional Training



#### Statistical table of job certification and training in 2020

Training Type	Number of Participants passed exams	Courses with the most number of participants
Job certification exams	1,096	Safety Supervisor Certification Course
Professional job training courses	1,676	Fire-fighting technical training for entry-level personnel

Statistical table of cross-functional training for supervisor positions in 2020



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 courses related to evaluation, appointment, employee benefits, attendance and plant access control. In addition, in order to strengthen the legal concept of employees, in 2020, the company arranged legal training courses for sales personnel and supervisors, and government legal units were invited to promote common corporate economic crime cases. A total of 95 people participated in the annual course.

In 2020, the average physical training course hours for each employee was about 26.6 hours, of which 14.6 hours were for senior (including) supervisors, 32.1 hours for senior management, and 29.8 hours for junior management. The completion rate of the training plan was 99.5%.

#### Statistics of training hours of employees of various ranks in the past four years

Unit: hour

Years		2017			2018			2019			2020	
Ranks	Male		Average	Male	Female	Average	Male		Average	Male	Female	Average
Executives	17.4	8.8	17.2	21.5	12.8	21.2	23.2	8.0	22.8	14.7	9.3	14.6
Senior management	29.4	20.7	29.1	36.9	28.5	36.5	41.5	25.6	40.8	32.8	19.3	32.1
Junior management	32.3	35.0	32.8	46.0	40.6	44.8	34.0	22.9	31.7	33.0	18.2	29.8
Average training hours per person	27.7	32.9	28.4	37.5	38.3	37.6	33.2	22.4	31.8	28.0	17.8	26.6

Note: 1. Intermediate and high-level (inclusive) and above supervisors refer to business supervisors, first-level supervisors and second-level supervisors.

#### Statistical table of training implementation rates of each level and stage in the past four years

Unit: %

	2017	2018	2019	2020
Basic Training	100	99.3	83.9	86.4
Professional Training	98.7	99.9	100	100
Annual Training Program	100	100	99.3	99.3

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

<sup>2.</sup> According to the rules and regulations of the company, colleagues at the same level should receive different hours of professional skills training according to their respective duties. In addition, on-site staff should regularly participate in professional skills refresher training or increase on-the-job training related to their respective professional skills. As most male colleagues are engaged in field work, the number of training hours for professional skills of male colleagues at all levels is higher.

Development

## 4.4 A Healthy and Safe Working **Environment**

#### Material Topic: Management Approach to Occupational Health and Safety and Industrial and Public Safety

Policy

Comply with applicable laws including Occupational Safety and Health Act, Labor Health Protection Rules, and Health Management Procedures. Personnel are asked to strictly abide by standard operating procedures (SOP) during operations.

Responsibilities

Ensure that all personnel participate in the safety, health and environmental management activities, take appropriate corrective measures and continuously improve the safety of the working environment.

Resources

The company president's office sets up a senior management unit of safety and health department in charge of company's health and safety management. In addition, the unit establishes branches in all plant sites and plants to assist in policy implementation, Besides, the FPG establish a dedicated unit for resource allocation and policy formulation.

Specific Actions

- 1. Strengthen the safety requirements in the procurement and contracting system.
- 2. Provide employee with health examination that are superior to legal requirements.
- 3. Carry out process hazard analysis and management.
- 4. Disaster prevention plan promotion and plant emergency response measures.
- Objectives and Commitment

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

Grievance Mechanism

- 1. To respond to safety and health management recommendations in the quarterly safety and health committee and make immediate improvement.
- 2.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", and reviews the implementation status of each unit every year, and revises it 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.

#### Frequency table of employee health examination

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

In order to continue to promote the health management of employees, the Mailiao unit of the company's safety and health division assists in the planning and establishment of a health promotion organization, combines with the welfare committee and infirmary to promote employee health promotion activities, such as healthy weight loss activities, and listen to the opinions of employees by attending the factory union meeting and labor-management meeting, and actively care for the safety and health of employees.

On-site medical personnel are providing 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 2020, a total of 175 health lectures were held in each year, with a total of 8,652 participants. In addition, in order to promote a friendly and healthy workplace, to care for the health of employees, and continue to manage healthy and autonomous weight loss, the company organizes "TABATA interval training" to improve sports of aerobic and anaerobic exercise capacity, assists employees to improve exercise efficiency, and expands health care services to contractor with high-risk business cases. The exercise was selected by the Health and Welfare of Executive Yuan as the "Annual Outstanding Healthy Workplace-Vigorous Vigor Award" in 2020.

## 4.4.2 Promoting a Healthy Workplace in Cooperation with **Government Agencies**

The company actively participates in the promotion of the government's healthy workplace activities. In 2020, the Longde plant in Yilan and the North District Occupational Safety and Health Center held the "Fire and Explosion Prevention Observation Meeting", and participated in the "Occupational Safety and Health Counseling Group" program, "Toolbox Observation" and "National Toxic Disaster Rehearsal" held by Yilan province. Also, the Company, the Industrial Bureau and the Central and Southern Occupational Safety and Health Centers, jointly organized the "2020 Ionizing Radiation Protection Safety and Hygiene Operation Standard Observation Meeting" and the "2020 Fall Prevention Observation Meeting". During the exchange of experience with the industry, the government agencies in the meeting affirmed all the contents of the exercise.



2020 Annual safety and health operation standards meeting



2020 Annual occupational safety prevention fall observation meeting

#### 4.4.3 Workplace Safety Management SDG 8.8

In accordance with the relevant requirements of the Occupational Safety and Health Law, the Company convenes the Occupational Safety and Health Committee every quarter in each plant. The committee members and labor representatives propose review and make suggestions on the potentially hazardous working environment, occupational safety and health policies and management plans on the site. The committee members also brief to labor representatives on recent safety and environmental policies and promotions (the members of committee and labor representatives are shown below). Besides, the Company also follows the provisions of the Occupational Safety and Health Law. If colleagues encountered hazards factors in the work environment, they can stop operations first and report to the supervisors to assist in deal with or to resolve through employee complaints channel.

Plant Site	Height Management of a Meeting	Number of Occupational Safety and Health Committee Members	Number of Labor Representatives	Proportion of labor representatives (%)
Mailiao plant site	Vice President Chi-Chu Chang	7	3	42.9
Xingang plant site	Department manager Chih-Ming Hu	16	9	56.3
Changhua plant site	Manager Wen-Kuang Tseng	8	3	37.5
Longde plant site	Assistant Vice President Chin-Fu Huang	12	11	91.7

The company has promoted the "people-oriented" and "essential safety management" to be a starting point to fundamentally do a good job in safety management since 2020. In order to strengthen the safety awareness of new recruits and implement the SOP, the Safety and Health division formulated and completed the "Detailed Rules for Safety Education and Training for Newcomers" in 2020, and conducted three-stage training at the company level, plant level, and production unit level. In addition, the safety and health division of the company regularly makes cases of accidents that occur in the industry at home and abroad, makes "Safety and Health Bulletins", announces through the company's OA system, and adds a QR code to the "Safety and Health Bulletins" to facilitate employees to read the original text and enhance their safety awareness. In addition, in order to ensure the continuous and effective operation of the occupational safety and health management system, the company invites third-party justice units to verify and obtain certificates for ISO 45001:2018 every year.

Phase	Implementation units	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	Production Unit/group	Process or maintenance SOP training

#### **Process Safety Management (PSM)**

To improve the process management at each plant, FCFC implements 14 items of PSM in accordance with the regulations of the Occupational Safety and Health Administration (OSHA). In accordance with process equipment and safety regulations, each plant establishes its own preliminary hazard analysis (PHA) and work safety analysis (JSA) teams, and holds regular monthly meetings. According to "Work Safety Analysis and Management Measures" work safety analysis process of the company, including hazard identification, risk assessment, risk control and other processes, to identify possible hazards and assess their risks for possible deviations in the manufacturing process and personnel operations, and further formulate preventive measures.

 A total of 57 dedicated PSM personnel have been set up at each rank whose responsibilities are to assist each department to coordinate and launch the 14 key PSM tasks. In addition, PSM deputy directors in each production plant were appointed, who are responsible for the management of safety and health.

- The Company has a total of 159 certified "process safety assessors", and sets up a special retraining class for "process safety assessors" every year. In 2020, there are 49 retraining personnel, and subsequent retraining will be continuously handled.
- Commissioned Chinese Pressure Association to complete Procedural HAZOP(Procedural HazOp) 15 times
- Personnel are dispatched to join international conferences such as the Global Congress on Process Safety in each year starting from 2016.

#### Performance Evaluation

- The company has regularly commissioned independent third-party entities such as Mary Kay O'Connor Process Safety Center, Pressure Vessel Association and Safety and Health **Technology Center to conduct** sampling units since 2013.
- In 2020, the Institute of Industrial Research and Safety and Health Technology Center were commissioned to inspect the ARO3 plant, and the results were all in line with the requirements of OSHA on PSM.

#### Management of Change (MOC)

In order to ensure that any change in design, equipment and raw material use or operating conditions will not cause harm to the process, the company actively implements the process hazard analysis. The annual implementation of the MOC coaching evaluation plan has been scheduled at the beginning of each year since 2011, combined with exchange activities and promoted to various plants in Taiwan. According to the plant's features, it is divided into five groups (Mailiao plant site sets up Mailiao and Haifong Group), appointed other relevant business department PSM specialists as the group leader to lead the exchange activities and evaluation.

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 relevant business department, 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 processes 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. Those who are relatively important will continue to be promoted in the future.

#### Promotion of night disaster prevention plan in Mailiao Industrial Complex

In 2020, in order to strengthen the disaster prevention and response capabilities of Mailiao Industrial Complex, the company scheduled monthly night safety emergency shutdown operation procedures and disaster prevention and response drills, and increased night disaster prevention and rescue training in the second half of the year to strengthen employees resilience, hoping to enhance the disaster prevention capacity of the government and private units through joint drills. In addition, in order to increase the disaster relief capacity of each plant, the plant is designated to conduct observation exercises every month, and the safety, health and environmental personnel of other plants are invited to watch the scene and learn the advantages or disadvantages of other units, and improve simultaneously.







ARO-1 plant night disaster prevention and response drill

#### 4.4.4 Occupational Safety Accident Notification and Statistics

SDG 11.5

The company is committed to reducing industrial safety accidents. In 2020, the statistical information of various industrial accidents of Formosa Chemicals & Fiber Corp. was as follows. In terms of the total injury index, the average male and female injury index was 0.12, which was far lower than the average 0.95 of the chemical raw material manufacturing industry (Note). And there were no major occupational disasters or accidents where the number of lost days were more than 6 months.

#### Statistics of various work-related injuries in 2020

Disabling	Injury Rate	Disabling	Severity Rate		cy-severity cator	Absen	ce Rate	Total Lost Day
Male	Female	Male	Female	Male	Female	Male	Female	000
0.45	0	41	0	0.14	0.03	0.27	0.41	366

Note: The industry information comes from the Occupational Safety and Health Administration of the Ministry of Labor. (https://osha-performance.osha.gov.tw/content/info/Download.aspx)

The company is a chemical material manufacturing industry, and its products are mainly "benzene and its derivatives", which are classified as the first category of occupational disease chemical substances of the Bureau of Labor Insurance. Based on the characteristics of the manufacturing process, personnel are at a higher risk of exposure to chemicals. According to the "Guidelines for the Classification of Health Management of Special Health Examinations for Labor", after the annual special health check for employees, abnormal results will be sent to occupational physicians for review and judgment. To ensure employees' safety at work, work of employees with abnormal results will be adjusted subsequently, or the results will be served as reference for reducing work environment risks.

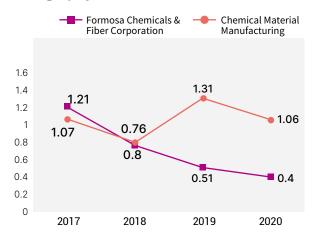
Compared with the chemical raw material manufacturing industry, the company's work-related safety performances from 2017 to 2020 showed that the total injury index of employees excluding traffic accidents was lower than the average announced by the Ministry of Labor in the last four years. This is the result of efforts to strengthen employees' hazard identification capabilities and safety advocacy, and to strengthen the intrinsic safety of various machinery and equipment.

#### Statistical list of various work-related injuries in the past four years

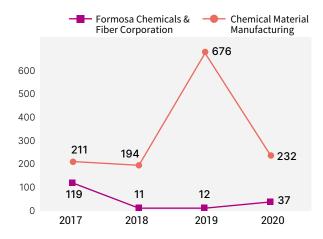
Year	Disabling Injury Rate	Disabling Severity Rate	Frequency severity indicator	Absence Rate	Working hours	Number of employee occupational accidents
2017	1.21	119	0.38	0.41	7,452,532	3
2018	0.76	11	0.10	0.37	7,899,430	6
2019	0.51	12	0.07	0.32	10,505,808	4
2020	0.40	37	0.12	0.28	9,862,392	4

Note 1: The high comprehensive injury index in 2017 was mainly due to the occurrence of two major occupational accidents in 2017, including flash burning of the Mailiao heating furnace in SM plant and arc burns in the transformer room of ARO-1 plant.

#### **Disabling Injury Rate**



#### **Disabling Severity Rate**



#### Statistics on various work related injuries of contractors in the past four years

Year	Disabling Injury Rate	Disabling Severity Rate	Working hours
2017	0.81	5	3,061,871
2018	0.94	4	6,461,511
2019	-	-	11,308,084
2020	0.22	26	13,086,940

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

Note 2: Working hours is equivalent to the number of employees times working days in a given year times8 hours plus overtime hours minus hours of leave

Note 3: Statistics on the number of occupational accidents do not include the number of occupational accidents for employees.

Note 2: Working hours is equivalent to the number of contracted merchants during the reporting period times 250 working days times 8 hours. Note 3: The number of working hours from 2019 to 2020 was much greater than in previous years, mainly due to the restoration of the ARO3 plant.

Occupational accidents in 2020 were mostly caused by unsafe behaviors of workers in violation of SOP. Three cases were fined NT\$180 thousand for violating the relevant provisions of the Occupational Safety and Health Law. The abnormal and occupational accidents and violations of the provisions of the Occupational Safety and Health Law in each plant area were detailed in the following table.

#### Summary table of abnormal and occupational accidents in various plants in 2020

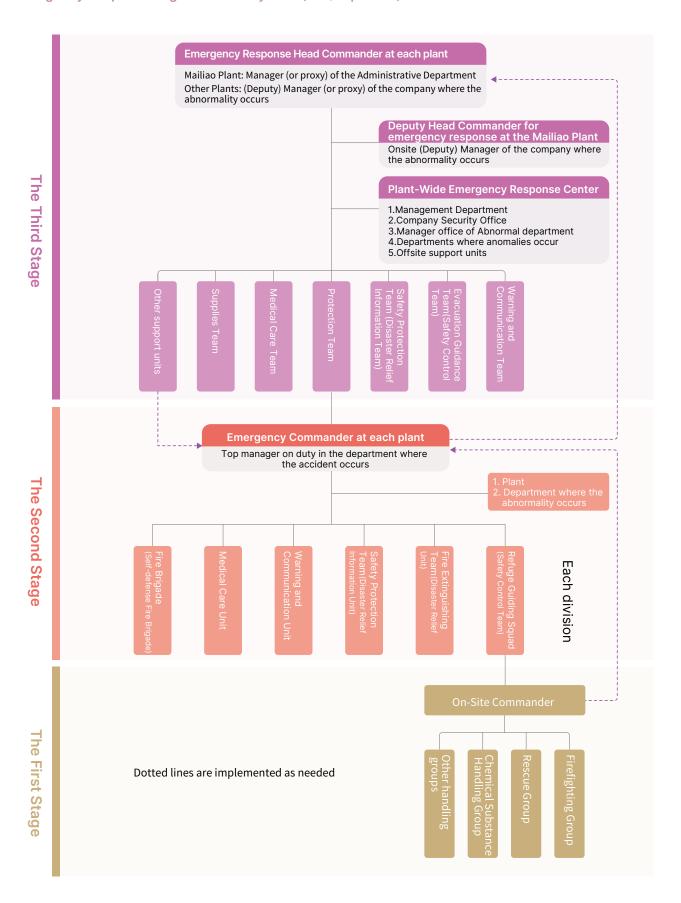
Plant Site	Fire Case	Major Occupational Disaster	General Occupational Disaster	Number of Total Case	Types of Occupational Disasters
Longde Plant Site	0	0	1	1	Shearing / cutting / scratching 1 case
Changhua Plant Site	0	0	0	0	-
Mailiao Plant Site	2	0	5	7	tumbling /slipping 2 cases, scalding/ burning 1 case, hitting 1 case, falling 1 case
Xingang Plant Site	0	0	1	1	Falling 1 case
Total	2	0	7	9	-

#### Summary table of violations of the occupational safety and health law in 2020

Date	Ticket description
2020/5/1	For malfunction of liquid level controller, PABS plant in Mailiao was fined NT\$60 thousand for violation of Section 8 Item 1 Article 6 of the occupational safety and health law and Section 2 Article 196 of the facilities rules.
2020/5/9	ARO-3 plant was fined NT\$60 thousand for failing to take necessary measures for work contact and adjustment, and violated Section 2 and 3, Item 1 Article 27 of the Occupational Safety and Health Law.
2020/5/21	For failing to install pedals, PTA plant in Longde was fined NT\$60 thousand for violation Item 2 Article 43 of the Occupational Safety and Health Law and Article 35 of the Facilities Rules.

Considering the characteristics of the company, we have promoted the improvement of equipment reliability in recent years, so as to reduce the potential risk of personnel in the workplace by improving the intrinsic safety 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 Complex Service Center and the authorities of Yunlin province. According to the Regulations Governing Accident Handling and the Regulations Governing Emergency Responses, in the event of an accident, the Company classification 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



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#### **Overview of Occupational Disasters**

The numbers of employee disability accidents and employee occupational disaster rate per thousand from 2017 to 2020 of the Company were as follows. In 2020, there were 4 cases of employee disability accidents, and the employee's occupational accident rate per thousand was 0.6 in the past four years. The occupational disaster rate per thousand employees in the manufacturing industry was lower than the national average for occupational disasters, as shown in the following table.

Year Item	2017	2018	2019	2020
Number of Occupational Disabilities	3	6	4	4
Employee occupational accident rate per thousand (%)	1.655	1.070	0.729	0.772
Number of Occupational Fatalities	-	-	-	-
Number of Major Occupational Disasters (Contractors)	-	-	-	-
Number of Occupational Fatalities (Contractors)	-	-	-	-
Ministry of labor national occupational accident per thousand (%)	2.904	2.718	2.494	2.517

#### 4.4.5 Contractor (Carrier) Safety

#### **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 2020, a total of 10,967 trainees were qualified.

In order to make the contractor to grow together with the company, after the 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 for the reference of the next final inspection improvement. A total of eight seminars had been handled in 2020, 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.

#### **Carrier safety management**



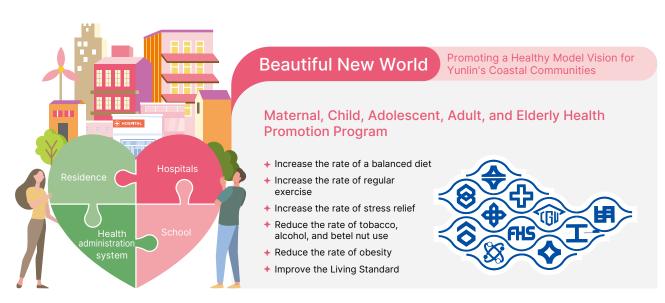
In order to improve transportation safety, in addition to actively participating in the safety & quality assessment system (SQAS) for transportation safety of contracted carriers promoted by the enterprise, the transportation safety proposed by the Company is also included in the SQAS management, and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

In order to improve work safety, contractors often use A-shaped ladders as upper and lower facilities or work platforms when installing crane auxiliary poles, which pose a potential risk of personnel falling. After convening various units and contractors to review, the company introduces "movable platform ladders" instead of A-shaped ladder, it has the advantages of light weight, adjustable height and standing platform. On August 13, 2020, it was demonstrated in the fall disaster prevention publicity meeting jointly held with the Southern District Occupational Safety and Health Center that the platform ladder can improve the safety of operation at high altitude, which was affirmed by the Southern District Occupational Safety and Health Center.



The operation of FCFC is 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**

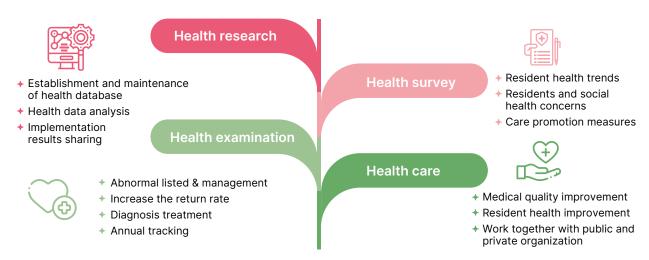




#### **5.1.1 Care for Community Residents' Health**

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 Plastics Group for the results of its implementation of health care for residents in the vicinity of Mailiao Industrial Complex.



#### 5.1.2 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 site to take care of 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.

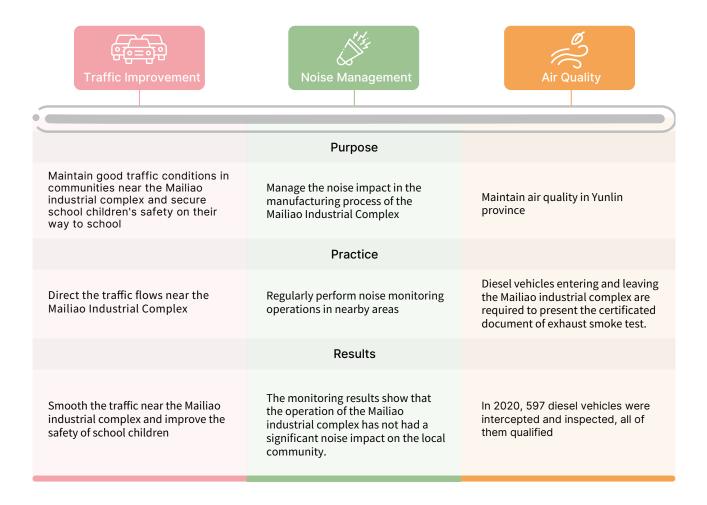


Outdoor inline skating activities



Halloween activities

#### 5.1.3 Improvement of the life quality of community residents



From 2017 to 2020, 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 were qualified. Inspection results over the past few years were indicated below.

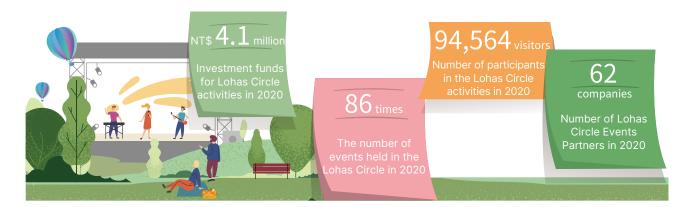
Year	Traffic volume (A)	Number of Vehicles Intercepted (B)	Number of vehicles under inspection (C)	Qualified number (D)	Examination passing rate (D/C)
2017	1,850	393	156	156	100%
2018	3,240	223	108	108	100%
2019	1,245	438	80	80	100%
2020	1,511	597	82	82	100%

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

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

<sup>3.</sup> Number of Qualified Vehicles refers to the number of diesel vehicles inspected and meeting the statutory requirements for exhaust smoke and opacity.

#### 5.1.4 Formosa LOHAS Circle

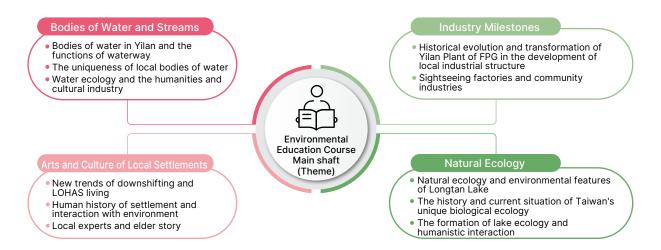


Formosa LOHAS Circle has been gradually established at Yilan, Taoyuan, Yunlin, and Kaohsiung by FPG's Group Administration in recent years. Founded with the purpose of community engagement and environmental sustainability, FPG coordinates with neighborhood communities, vendors, small-scale farmers, and local governments to promote LOHAS Circle. In 2020, Formosa Lohas Circle held a series of activities in each of the company's plant sites. Such as, Longtan Lake Ecological Classrooms in Yilan province were used as the base to promote ecological investigation and in-depth ecological tourism. It also held a hot air balloon carnival and grassland music festival. On the turf, people enjoyed the graceful music. Changhua Lohas Circle vigorously promotes public welfare activities, establishes a used toy logistics center, a recycled toy market, promotes the reactivation and utilization of used toys around the island, and promotes the concept of cherishing goods and making full use of the circular economy in the activities. It also held and organized the Bagua Mountain viewing eagle ecology and appreciated the phoenix tree flows to promote the concepts of symbiosis between local humanities and ecology.

In 2021, the Formosa Lohas Circle will promote eco-environmental education in the direction of "spreading branches" to achieve the goal of combining education with entertainment. Yilan Lohas Circle will continue to hold the Longtan Lake Hot Air Balloon Carnival, planning ecological surveys, and jointly protect the natural ecological environment of Longtan Lake. Changhua Lohas Circle will also continue to organize local cultural tours in 2020, so that participants can have a deeper understanding of the beauty of Changhua, and will expand the promotion of used toy theme series activities, and use the used toy base project combined with corporate resources to construct plastic toy recycling and demonstration of regeneration is expected to promote the concept of corporate circular economy and environmental protection to the general public. It is expected that 100 events will be held and the number of participants will reach 59,570. The activities in 2020 were as follows:

#### Formosa LOHAS in Yilan

**Environmental Education Activities at Formosa LOHAS Circle, Yilan** 



#### **Longtan Lake Ecological Classroom**

In 2020, the Yilan Lohas Circle continue to take the Longtan Lake Ecological Classroom as its base, and continued to cooperate with the Wilderness Conservation Association to conduct ecological commentary, volunteer training, and lake ecological survey work to promote in-depth ecological tourism and ecological guided activities. Due to the impact of the epidemic, there were open for groups visiting only. However, many organizations and groups were still inquiring about and registrations were very active. A total of eighteen times of commentary activities had been carried out. 25 professional volunteers trained by the company led the participants to understand animal and plant resources, ecological environment of Longtan Lake, and learned the skills of natural observation and recording.





Visit to Yilan Longtan Lake Ecological Classroom

Yilan Longtan Lake Ecological Guide

#### Longtan Lake Hot Air Balloon Carnival and Grassland Concert

In 2020, Formosa Lohas Circle cooperated with Yilan Jiaoxi Township Office, Yilan Tourism Plant Association, Chuangshi Foundation and other units to hold Longtan Lake Hot Air Balloon Carnival and Grassland Music Festival. Invite local art groups Lanyang Dance Company, Seagull K Vocal Orchestra, Punch Reality Percussion Orchestra, Crisp Orchestra, Anidola, Cliff Cliff and other 5 groups with different characteristics, with elements such as hot air balloons, grass music festival, the lakeside market and road running and other elements attract young people, parents and children, and the public to enjoy the graceful music on this green Longtan Lake turf, and relax and spend a wonderful weekend.

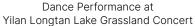






Yilan Longtan Lake Grassland Concert







Orchestra performance at Yilan Longtan Lake Grassland Concert

#### **Changhua Lohas Circle**

Changhua Lohas Circle takes the company's Changhua plant and Health Youhuo Hall of Formosa Biomedical Technology Corporation as the core, and cooperates with the used toy charity enterprise "Taiwan Toy Library Association" to create a parent-child fun base with local characteristics in Changhua, providing diversified parentchild interactive facilities that are educating and entertaining.

#### **Changhua Used Toy Logistics Center**

In 2020, the used toy logistics center of the company's Changhua plant started trial operation, and used toy collection boxes had been set up in the company's plants and FORMOSA gas stations throughout Taiwan. To promote the concept of plastic products recycling and disposal through toy recycling and organizing activities, so that children learn about plastic products science through entertainment and education. Meanwhile, toys can be recycled to social welfare organizations in need, so that toy resources can be used continuously.



Changhua Used Toy Logistics Center



Parent-child DIY activities at Changhua used toy logistics center

100

#### Play in Changhua-Used Toy WOW Market

Formosa Lohas Circle held "Changhua Play-Used Toy Wow Market" at the Welfare union of Changhua plant, and prepared four major breakthrough games, used toy exchange, Christmas wreath DIY, fun board games and other mini games, as well as interactive performances of bubbles players for friends and children to enjoy themselves.







Changhua Used Toy Market for Parents and Children

#### Toys Around the Island, Love Around the Island

From December 7th to 13th, 2020, Formosa Lohas Circle launched the "Toys Around the Island, Love Around the Island "activities, through the action toy train around the island in series with six units from all over the Formosa Plastics Group to send love, together with local companies, sent the recycled used toys from the toy base to social welfare organizations, so that the love of used toys can be around the whole Taiwan.



Toy roundabout action train to Yilan



Toy roundabout action train to Chiayi

#### Changhua Bagua Mountain-Phoenix Tree Flows Appreciation Fun, Eagle Appreciation **Activities, Parent-child Carnival**

The Changhua Lohuo Circle organized a series of activities in accordance with the characteristics of the local ecological environment in Changhua. In April 2020, it organized the Bagua Mountain Appreciation Fun with the Changhua province government, conducted the Bagua Mountain Eagle viewing activity in May, and organized the Bagua Mountain Parent-child Carnival in August. So as to led the public to understand the local characteristics of Changhua in depth and implement the goals of environmental education in the local community.



Changhua Tour Bagua Mountain Garden District



Eagle Appreciation at Bagua Mountain in Changhua



Parent-child Carnival at Bagua Mountain in Changhua

## 5.2 Social feedback SDG 14.2

#### 5.2.1 Social Welfare Donations from FPG

In order to implement the concepts of the two founders, Formosa Plastics Group actively cooperates with the government and various non-governmental organizations to deeply understand the needs of society and care for and assist the disadvantaged groups. Over the years, the total expenditure on social welfare undertakings such as

education, medical care, and social welfare has reached NT\$72.9 billion, and it has continued to give hands 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 Office of Formosa Plastics Group and promoted and implemented by affiliated companies. 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**

Since Mailiao Industrial Complex 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 near communities. For more than 20 years, based on the concepts of operation along with near communities to reach prosperity and sustainable development, Formosa Plastics Group has brought in 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 have been fully assisting and guiding the development of agriculture and fishery, subsidizing afforestation, upgrading technologies of aquaculture and fishery, releasing the advanced fry in the surrounding waters, promoting the economic growth of local agriculture, forestry and fishery, and continuing 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**

All plant sites, Changhua plant site, Longde plant site, and Xingang plant site, and Mailiao plant site, hold activities every year that enhance the relationships among the sites and local communities. Labor unions, employees, and volunteers all actively participate, while local residents are also invited to take part in these activities. All gains generated from these activities are donated to the disadvantaged organizations. By holding charitable events and traditional art performances, we hope to strengthen our relationship with the local communities.



#### **Corporate Volunteers**

Volunteers of the company actively participate in social charity activities. Employees and volunteers of Formosa Plastics Group also visit disadvantaged groups and participate in local activities. For related activities, please refer to the "Corporate Social Responsibility" section of the official website of Formosa Plastics Group.





Volunteer street sweeping activity in Yilan



Volunteer Service Team in Changhua

#### **Participating in Local Events**



Donation to elderly cultural and recreational center in Yilan



Visiting gerocomium on Double Ninth festival in Changhua

#### **Caring for the Disadvantaged**



Visiting Caring and Charity Home in Chiayi



Warmly accompany with living along old resident in the eve of Chinese New Year in Yilan

# 附錄



- 1. Global sustainability report disclosure index comparison table
- 2. SASB comparison table
- 3. Independent Assurance Opinion Statement

# Appendix 1 Global Reporting Initiative (GRI) Comparison Table

The indexes mentioned below are cross-referenced with the GRI Standards: 2016.As shown in the Statement of Independent Assurance Opinion, relevant information have been verified to comply with the requirement on external assurance from GRI Standards.

Item	Description	Referenced Section	Remark
	GRI 102: General Disclosures 2016	;	
102-1	Name of the organization	1.2.1	
102-2	Activities, brands, products, and services	2.3.1 2.3.2	No product that is banned in specific markets
102-3	Location of headquarters	1.2.1	
102-4	Location of operations	1.2.1	
102-5	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	2.6.1 2.6.2	
102-10	Significant changes to the organization and its supply chain	-	No major changes in 2020
102-11	Precautionary principle or approach	2.2.1 2.2.2	
102-12	External initiatives	Report Guideline 4.4.2	
102-13	Membership of associations	2.3.5	, A
102-14	Statement from senior decision maker	1.1	/L B
	Significant issues: Operational risk mana	gement	
102-15	Key impacts, risks, and opportunities	2.1.3 2.2.1 2.2.2 3.2.1	
103-2	Management approach and its components	2.2	
103-3	Evaluation of the management approach	2.2	
102-16	Values, principles, standards, and norms of behavior	2.1.4 2.5.1	
	102-1 102-2 102-3 102-4 102-5 102-6 102-7 102-8 102-9 102-10 102-11 102-12 102-13 102-14	GRI 102: General Disclosures 2016  102-1 Name of the organization  102-2 Activities, brands, products, and services  102-3 Location of headquarters  102-4 Location of operations  102-5 Ownership and legal form  102-6 Markets served  102-7 Scale of the organization  102-8 Information on employees and other workers  102-9 Supply chain  102-10 Significant changes to the organization and its supply chain  102-11 Precautionary principle or approach  102-12 External initiatives  102-13 Membership of associations  102-14 Statement from senior decision maker  Significant issues: Operational risk management issues:  102-15 Key impacts, risks, and opportunities  103-2 Management approach and its components  103-3 Evaluation of the management approach  Values, principles, standards, and norms of	CRI 102: General Disclosures 2016

Disclosure Item		Description	Referenced Section	Remark
		GRI 102: General Disclosures 2016	3	
		Material Topic: Corporate Governan	ce	
Governance	102-18	Governance structure	2.1.1 2.1.2	
	102-36	Process for determining remuneration	2.1.1	
Management	103-2	Management approach and its components	2.1	
Approaches	103-3	Evaluation of the management approach	2.1	
	102-40	List of stakeholder groups	1.4.2	
Communication with Stakeholders	102-41	Collective bargaining agreements	-	Though the Company has not made collective bargaining agreements, the Company still listens to employees' opinions through labor unions and employment relations meetings.
	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	
	102-45	Entities included in the consolidated financial statements	Scope and Boundary of the Report	
	102-46	Defining report contents and topic boundaries	1.5	
	102-47	Material Topic list		
	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
Reporting Practice	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 3	

Disclosure Item		Description	Referenced Section	Remark		
	GRI 103: Management Approach 2016					
Management Approaches	103-1	Explanation of the material topic and its boundary	1.5.4			

GRI 200: Topic-Specific Standards Economic Topics 2016					
		Material Topic: Operational and Financial Pe	rformance		
	201-1	Direct economic value generated and distributed	2.1.5		
Economic Performance	201-3	Defining benefit plan obligations and other retirement plans	4.2.1 4.2.2		
	201-4	Financial assistance received from government	-	Not obtained subsidies provided by government	
Management	103-2	The management approach and its components	2.1.5		
Approaches	103-3	Evaluation of the management approach	2.1.5		
Market	202-1	Ratios of standard entry-level wage by gender compared to local minimum wage	4.2.1		
Presence	202-2	Proportion of senior management hired from the local community	4.1.3		
Indirect Economic Impacts	203-1	Infrastructure investments and the development and impact of services supported	5.1 5.2		
Procurement Practices	204-1	Proportion of spending on local suppliers	2.6.1		
Anti-corruption	205-3	Confirmed incidents of corruption and actions taken	2.1.4		

GRI 300: Topic-Specific Standards Environmental Topics 2016						
Material Topic: Water Resource Use and Management						
Water and	303-3	Water Use Quantity	3.3.1			
discharge water	303-4	Water Release Volume	3.3.2			
(2018 Edition)	303-5	Water Consumption	3.3.2			
Effluents and	306-1	Water discharge by quality and destination	3.3.2			
Waste	306-5	Water bodies affected by water discharges and other (surface) runoff discharges	3.3.2			
	303-1	Mutual influence of shared water resources	3.3.2			
Management	303-2	Management of discharge-related impacts	3.3.2			
Approaches	103-2	Management approach and its components	3.3			
	103-3	Evaluation of the management approach	3.3			

Disclosure Item		Description	Referenced Section	Remark					
Material Topic: Mitigation and Adaptation to Climate Change									
	305-1	Direct (Scope 1) GHG emissions	3.2.4						
Emissions	305-2	Indirect (Scope 2) GHG emissions	3.2.4						
EIIIISSIOIIS	305-3	Indirect (Scope 3) GHG emissions	3.2.4						
	305-4	GHG emissions intensity	3.2.4						
Management	103-2	Management approach and its components	3.2						
Approaches	103-3	Evaluation of the management approach	3.2						
	GF	RI 300: Topic-Specific Standards Environment	al Topics 2016						
		Material Topic: Air Pollutants Manager	ment						
Effluents and Waste	305-7	NOx, SOx, and other significant air emissions	3.4.1						
Management	103-2	Management approach and its components	3.4						
Approaches	103-3	Evaluation of the management approach	3.4						
		Material Topic: Waste Managemer	nt						
Effluents and	306-2	Waste by type and disposal method	3.5.1						
Waste	306-3	Significant spills	3.6						
Management	103-2	Mmanagement approach and its components	3.5						
Approaches	103-3	Evaluation of the management approach	3.5						
	Materi	ial Topic: Compliance with Environmental Prot	ection Regulations	;					
Compliance with Environmental Protection	307-1	Non-compliance with environmental laws and regulations	3.6						
Management	103-2	Management approach and its components	3.6						
Approaches	103-3	Evaluation of the management approach	3.6						
		GRI 400: Topic-Specific Standards Social To	opics 2016						
Material Topic: Employee Welfare and Remuneration									
	401-1	New entrants and employee turnover	4.1.3						
Labor Relations	401-2	Benefits provided to full time employees that are not provided to temporary or part time employees	4.2.2						
	401-3	Parental leave	4.2.2						
Management	103-2	Management approach and its components	4.2						
Approaches	103-3	Evaluation of the management approach	4.2						

Disclosure Item		Description	Referenced Section	Remark			
		Material Topic: Employee Human Rights Protection					
Labor/	402-1	Minimum notice periods regarding operational changes	4.1.3				
Management Relations	103-2	Management approach and its components	4.1				
	103-3	Evaluation of the management approach	4.1				
		Material Topic: Occupational Health and	Safety				
Occupational safety and health (2018 Edition)	403-9	Occupational injury	4.4.4				
	403-1	Occupational Safety and Health	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	Workers participation, consultation, and communication on occupational health and safety	4.4.3				
Management Approaches	403-5	Workers 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				
	103-2	Management approach and its components	4.4				
	103-3	Evaluation of the management approach	4.4				

GRI 400: Topic-Specific Standards Social Topics 2016							
Training and Education	404-1	Average hours of training per year per employee	4.3.2				
	404-3	Percentage of employees receiving regular performance and career development reviews	4.3.1				
Employee Diversity and Equal Opportunity	405-1	Diversity of governance units and employees	2.1.1 4.1.2				
	405-2	Ratios of basic salary and remuneration of women to men	4.2.1				
Non- discrimination 406-1		Incidents of discrimination and corrective actions taken	4.1.1				

Disclosure Item		Description	Referenced Section	Remark	
Local	413-1	Operations with local community engagement, impact assessments, and development programs	5.1	Local community engagement, impact assessments, and development programs have been implemented at all operations.	
Community	416-2	Violations of health and safety regulations concerning products and services	-	No cases of violation of health and safety related laws and regulations concerning products and services in 2020	
Marketing and Labeling	417-2	Violations of product and service information and labeling regulations	-	No cases of violation of laws and regulations related to products and services in 2020	
Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.5.1	No complaints about infringement of customers or loss of customer information in 2020	
Socioeconomic Regulatory 419-1 Compliance		Violations laws and regulations in the social and economic area	3.6 4.4.4		
		FCFC and Industrial Issues			
		Material Topic: R&D Innovation and AI App	lications		
Management	103-2	Management approach and its components	2.4		
Approaches	103-3	Evaluation of the management approach	2.4		
		Material Topic: Industrial and Public S	afety		
Management	103-2	Management approach and its components	4.4		
Approaches	103-3	Evaluation of the management approach	4.4		

## **Appendix 2 Disclosure of SASB Index** Content

Global sustainability report disclosure index comparison table

No.	Disclosure	Disclosure index	Index		Data disclosure		Chapter		
INO.	theme	me Disclosure index		2018	2019	2020	comparison		
Major issue: mitigation and adaptation of climate change									
		1. Total emissions from Scope 1 (unit: ton CO <sub>2</sub> -e)	RT-CH-	5,589,208	5,178,431	The inventory will be completed by August 2021			
		2. Percentage of emissions covered by regulatory limits/ limits (Unit: %)	110a.1	The inventory should be conducted in accordance with the "Management Measures for the Inventory and Registration of Greenhouse Gas Emissions".					
1	Greenhouse Gas Emissions	Long-term and short-term carbon reduction strategies or plans for greenhouse gas emissions in Scope 1, with a description of emission reduction targets and achievement of those targets (qualitative description)	RT-CH- 110a.2	<ul> <li>In line with the target, set the in 2050 to be 2005.</li> <li>A 1% reduction emissions is preduction and development.</li> <li>Achievement development de</li></ul>	lescription 663 tons (a decr d compared to 2 g and carbon-re	on reduction as emissions % compared to house gas year. e impact of ess waste green product rease of 7.72%) 018, and 296	3.2 Mitigation and adaptation of climate change		
		1. Total energy consumed (unit: GJ)  2. Percentage of electricity consumed by the network (unit: %)		10,120,935.6	9,360,244.8	9,428,799.6	3.2 Mitigation and adaptation of climate change		
	Energy		_ RT-CH- 130a.1	69.9 (Including from Taipower and Formosa Petrochemical)	65.9 (Including from Taipower and Formosa Petrochemical)	69.8 (Including from Taipower and Formosa Petrochemical)			
2	Management	3. The percentage of renewable energy consumed (unit: %)		0.0125	0.0709	0.0789			
		4. Total energy of self-generation (unit: GJ)		9,861,642 (Including self- use and sale to other companies)	9,733,630 (Including self- use and sale to other companies)	9,569,873 (Including self- use and sale to other companies)			
	Major issue: air pollutant management								
3	Air Quality	Discharge of the following pollutants in the air (unit: metric tons)  1. NOX (not including N2O)  2. SOX  3. Volatile organic compounds (VOC)  4. Hazardous air pollutants (HAPs)	RT-CH- 120a.1	SOX:844.46 NOX:2,180.34 VOC:819.99	SOX:592.2 NOX:1,873.16 VOC:733.65	SOX:429 NOX:1,548.7 VOC:589.7	3.4 Air pollutant management		

	Disclosure theme	Disclosure index	Index		Data disclosure		Chapter comparison			
No.			code	2018	2019	2020				
	Major issue: water use and management									
		1. Total water taken (including water taken from areas with high or extremely high baseline water pressure) (unit:1,000m³)	RT-CH- 140a.1	26,100.3	23,389.6	20,346	_			
		2. Total water consumption (including water consumption in areas with high or extremely high baseline water pressure) (Unit: %)	Not a							
	Water Management	3. Number of violations related to water quality permits, water-related standards and regulations	RT-CH- 140a.2	1	0	0	3.3 Use and management of water			
		4. Describe water- related risk management strategies and actions	RT-CH- 140a.3	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.	The WRI Aqueduct assessment tool is used to assess the available and withdrawable water in a watershed or catchment area, analyze the water use in the catchment area, and identify the risk of operational interruption due to changes in the quality of upstream water sources.	Identify and evaluate the quality of discharged water and changes in the ecological environment, monitoring and control may generate potential risks by the risk matrix ISO 14046.	resources			
Major issue: waste management										
5	Hazardous Waste Management	The total amount of hazardous waste generated (unit: metric tons)	RT-CH-	9	9	7	3.5 Waste and - controlled			
		2. Recycling percentage of hazardous waste (unit: %)	150a.1	0	0	0	substance management			

	Disclosure	Disclosure index	Index	Data disclosure			Chapter			
No.	theme		code	2018	2019	2020	comparison			
	Major issues: Occupational health and safety/Industry and public safety									
		1. Direct employees can record the accident rate (TRIR) and fatality rate (Fatality Rate)	- RT-CH- 320a.1	Fatality rate: 0 TRIR: 0.15	Fatality rate: 0 TRIR: 0.10	Fatality rate: 0 TRIR: 0.08	4.4 A Healthy and Safe Working Environment			
		2. Recordable labor accident rate (TRIR) and fatality rate (Fatality Rate) of contracted personnel		Fatality rate: 0 TRIR: 0	Fatality rate: 0 TRIR: 0	Fatality rate: 0 TRIR: 0				
6	Workforce Health & Safety	3. Explain the management methods to reduce the risk of occupational health injury of employees	RT-CH- 320a.2	It should be implemented in accordance with the established occupational safety and health management system.	In addition to the existing occupational safety and health management system, we also continue to promote the safe production management of equipment, personnel and environmental safety.	People oriented, the design and improvement of on-site equipment or facilities are based on the safety of people as the starting point, and the safety education and training of personnel are strengthened to maintain the safety of employees.				
7	Operational Safety, Emergency Preparedness & Response	Number of process safety incidents (accident) (PSIC); Process safety incidents (accident) rate (PSTIR); Process safety incidents (accident) severity rate (PSISR)	RT-CH- 540a.1	PSIC: 0 PSTIR: 0 PSISR: 0	PSIC: 1 PSTIR: 0.008 PSISR: 0.144	PSIC: 1 PSTIR: 0.007 PSISR: 0.021				
		Transportation incident (accident)	RT-CH- 540a.2	2	1	1				
	Major issues: compliance with environmental protection laws and regulations									
8	Management of the Legal & Regulatory Environment	The organization identifies the risks and opportunities associated with environmental/ social regulations and their financial impact	RT-CH- 530a.1	Tickets: 10; Fines: NT\$1.25 million	Tickets: 3; Fines: NT\$5.37 million	Ticket: 1; Fines: NT\$0.1 million	3.6 Compliance with environmental protection Lawsa			

## Appendix 3 Statement of Independent **Guarantee Opinion**







#### INDEPENDENT ASSURANCE OPINION STATEMENT

#### 2020 Formosa Chemicals & Fibre Corporation Corporate

#### Social Responsibility 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 corporate social responsibility (CSR), 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

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 2020 Formosa Chemicals & Fibre Corporation Corporate Social Responsibility 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 2020 Formosa Chemicals & Fibre Corporation Corporate Social Responsibility Report provides a fair view of the FCFC CSR programmes and performances during 2020. The CSR 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 2020 economic, social and environmental performance information are fairly represented. The CSR performance information disclosed in the report demonstrate FCFC's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR 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.

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 CSR 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.



Statement No: SRA-TW-2020008

2021-04-27

For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan

...making excellence a habit."



## **Formosa Chemicals & Fibre Corporation**

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