

台塑企業
FORMOSA PLASTICS GROUP



CSR Report 2017

Formosa Chemicals & Fibre Corporation
Corporate Social Responsibility Report

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Overview

According to the GRI Standards issued by the Global Report Initiative (GRI) in 2016, Formosa Chemicals & Fiber Corp (FCFC) issues a corporate social responsibility report every year to provide a detailed account of our corporate commitments to economic development, environmental protection, and social welfare.

Report Scope and Boundary







The Report mainly refers to FCFC and its domestic subsidiaries listed in the consolidated financial statements, including Formosa Idemitsu Petrochemical Corp., Formosa BP Chemicals Corp., Formosa FCFC Carpet Co., Ltd., Tah Shin Spinning Corporation, Formosa Biomedical Technology Corp., and Hong Jing Resource Co. Ltd. Benchmarks and the report scope and boundary used in the Report are identical to those in 2016. All of the financial statements have been duly verified by our CPAs. Some of the statistics have been provided by the government agencies and related websites. Information is expressed using common benchmarks. Other measurements used, if any, will be specifically described in the Report.

Duration and Issuance Date

The duration of the Report is from January 1, 2017 to December 31, 2017. The Report is expected to be issued in June 2018, and the previous version was issued in June 2017.

Report Guideline

According to the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies, we have compiled our social responsibility reports based on the core options of the GRI Standards, discussing issues, strategies, goals, and related measures for corporate sustainability.

-  GRI Standards: 2016
-  Materiality, Inclusivity, and Responsiveness of AA1000 Accountability Principles Standard 2008
-  Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies
-  ISO 26000 Guidance of Social Responsibility
-  United Nations Global Compact
-  Sustainable Development Goals (SDGs)



Third Party Verification

To reinforce comparability and substantiality, all of the information disclosed in the Report has been verified by the British Standards Institution (BSI). For more information on BSI's Independent Assurance Opinion Statement, refer to Appendix 5. The Independent Assurance Opinion Statement is presented using international common indicators, and notes are provided in related sections of the Report in case of any estimation.

Contact Information

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

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Goals of Corporate Social Responsibility

To realize corporate social responsibility and seek sustainable development, FCFC has set up short, medium, and long-term objectives and directions for sustainable commitments. We expect to work together with the stakeholders to facilitate our sustainable commitments to corporate governance, environmental protection, and social welfare.

Dimension	Material Issues	2017 Objectives	2017 Results	2018 Objectives	Medium and Long-term Objectives and Commitments	SDGs
Economic	<ul style="list-style-type: none"> Corporate Governance Operating & Financial Performance 	<ul style="list-style-type: none"> Formulate the Corporate Social Responsibility Best Practice Principles Review materials and projects involving exclusive offers, non-minimum price awards, and emergencies and have the specification review team report the number and contents of cases reviewed Regularly check the occurrence of improper contracts to avoid any type of enrichment Promote the high value of products and provide solutions that meet customers' needs Develop new markets and expand markets outside China to reduce market risks 	<ul style="list-style-type: none"> Formulate the enforcement rules of internal controls and internal audits according to related regulations The review team under the President's Office reported a total of 849 cases in 2017. The President's Office carried out the acceptance and inspection of 89 construction projects in 2017. The sales volume of PIA (pure isophthalic acid) increased by 22.9% in 2017; the sales volume of special-grade plastic products increased from 42.5% to 43.8%. Developed new markets, such as Mauritius, Portugal, Kuwait, and Albania 	<ul style="list-style-type: none"> Pay close attention to the amendments to the Company Act and respond accordingly Promote the production and marketing of high-value, differentiated products and increase the sales volume of special-grade plastic products to 48.2% Stabilize the delivery, service, and product quality through safe production to further reduce costs Every month, the President's Office requests the Contracting Center to accelerate construction projects having been pending for 3 months. Formulate related regulations to have related departments develop consumable materials that are subject to the exclusive purchase to avoid the sole suppliers' monopoly 	<ul style="list-style-type: none"> Improve the ranking of FCFC's corporate governance evaluation Introduce AI to integrate the current data of each platform and create an innovative business model Improve company policies, strengthen internal controls, create shareholder value, and improve corporate governance 	



Dimension	Material Issues	2017 Objectives	2017 Results	2018 Objectives	Medium and Long-term Objectives and Commitments	SDGs
Environmental	<ul style="list-style-type: none"> Air Pollutant Management Waste Management Hazardous Substance Management Environmental Regulatory Compliance Greenhouse Gas Emissions and Carbon Footprints Climate Change Risk Management Water Resource Use and Management 	<ul style="list-style-type: none"> Promote energy conservation and carbon reduction and set the reductions in the unit water consumption, the unit energy consumption, and waste by 2%, 3%, and 1%, respectively, as the goals of 2017 Implement e-invoices in accordance with the government policy 	<ul style="list-style-type: none"> The Mailliao Industrial Complex reduced the unit water consumption and the unit energy consumption by 7.2% and 5.4%, respectively; waste reduction did not reach the objective and has been continuously improved. Contractors and customers have gradually adopted e-invoices. 	<ul style="list-style-type: none"> Promote the carbon footprint verification and look for opportunities for improvement under the risk of climate change Promote the green plant certification to keep the balance between environmental protection and industrial development through energy/resource conservation, pollution prevention, and green management Participate in the questionnaire of Carbon Disclosure Project (CDP) to disclose data, risks, and opportunities with respect to carbon management Save energy and reduce greenhouse gas emissions using the improvement plan for carbon reduction and set the reductions in the unit water consumption, the unit energy consumption, and waste by 2%, 3%, and 1%, respectively, as the goals for 2018 Phase out large-scale old diesel vehicles for self-use and contractors within 3 years to meet the Phase 4 environmental standards 	<ul style="list-style-type: none"> Obtain certified green plant labels Promote the carbon risk management and score Management in the questionnaire of CDP 	<ul style="list-style-type: none">   

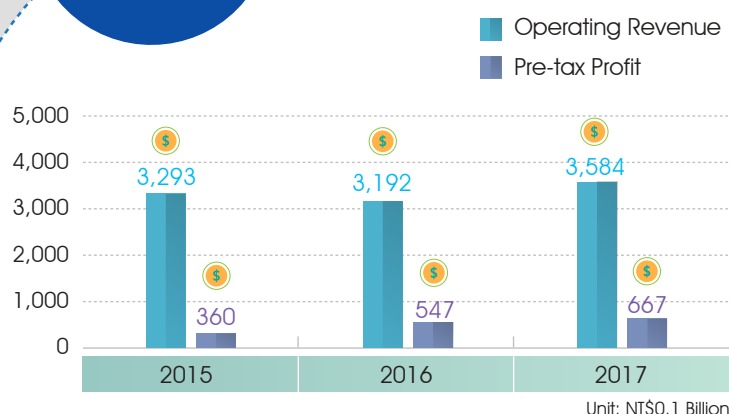
Dimension	Material Issues	2017 Objectives	2017 Results	2018 Objectives	Medium and Long-term Objectives and Commitments	SDGs
Social	<ul style="list-style-type: none"> Occupational Health and Safety Industrial and Public Safety Employee Recruitment and Retention Community Engagement and Contribution Employee Benefits and Compensation 	<ul style="list-style-type: none"> Improve the safety management practices through accidents and aim at no major occupational disaster or fire and no more than 5 general occupational disasters Promote the cleaning of surroundings and community environments and expect to co-organize 26 local temple activities and festivals Expect to organize 9 charitable activities for the disadvantaged, such as senior visits and fundraising for nursing homes Expect to organize 11 community activities to promote the relationships between plants and local communities 	<ul style="list-style-type: none"> A total of 3 fires, 2 major occupational disasters, and 6 general occupational disasters occurred in 2017, which did not reach the objective and has been continuously improved. Co-organized local temple activities to promote traditional cultures Cleaned the community environments, local parks, and surroundings and sponsored 26 community activities Organized 10 charitable activities for the disadvantaged, such as senior visits, product purchases, and fundraising for nursing homes Organized 11 community activities, including the flea market, free clinic, blood donation, charitable fair, Ming Hwa Yuan Arts performance, and Paper Windmill performance, to promote the relationships between plants and local communities 	<ul style="list-style-type: none"> Set zero major occupational disaster or general occupational disaster as the goal of 2018 Promote activities in the Formosa LOHAS, Yilan, including distoechodon tumirostris swimming upstream, road running, Land Art Festival, and environmental education Promote the cleaning of surroundings and community environments and expect to co-organize 29 local temple activities and festivals Expect to organize 9 charitable activities for the disadvantaged, such as senior visits and fundraising for nursing homes Expect to organize 12 community activities to promote the relationships between plants and local communities 	<ul style="list-style-type: none"> Achieve the goal of zero occupational injury and zero accident Create positive employee relations and healthy workplaces in pursuit of sovereign good Work with local communities to incorporate the concepts of circular economy and environmental protection into ecology and leisure Promote positive social development based on the spirit of taking from and giving back to society 	  



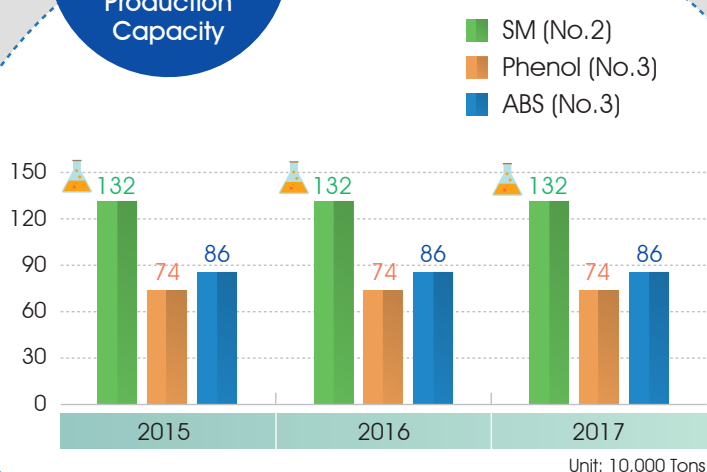
CSR Achievements at a Glance

1. Innovation Economy

Operating Revenue and Pre-tax Profit (Consolidated)



World's Top 3 Products for 3 Consecutive Years in Terms of Production Capacity



Note:

SM (styrene): Main raw material for polystyrene and acrylonitrile-butadiene-styrene (ABS)

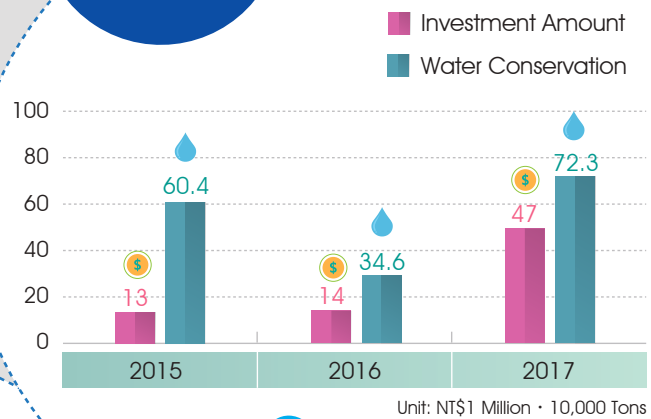
Phenol: Main raw material for propylene glycol, cyclohexanone, phenolic resin, and indophenol

ABS (acrylonitrile-butadiene-styrene): Home appliances, toys, computer components, building materials, fittings, helmets, and vehicle parts

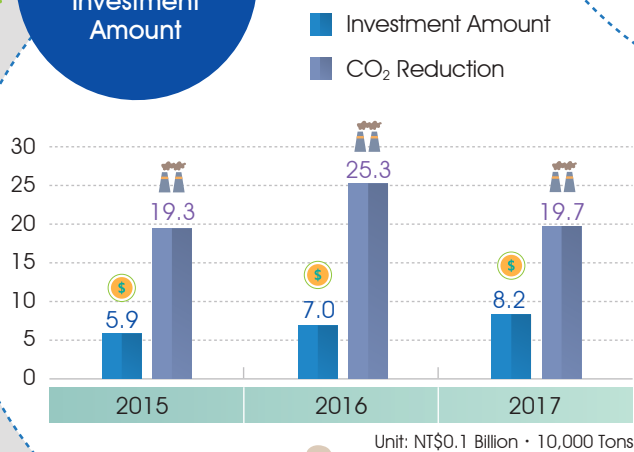
2. Environmental Sustainability

Note: In 2017, the water conservation and investment amount were nearly double compared with 2016 because some improvements plan in 2016 had not been completed until 2017.

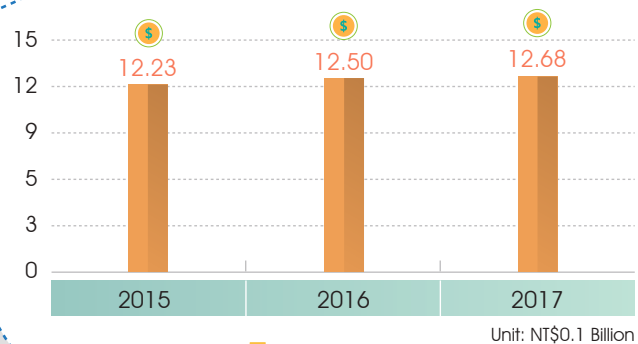
Water Conservation and Investment Amount



CO₂ Reduction and Investment Amount

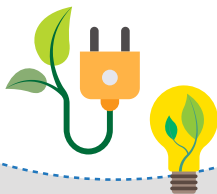
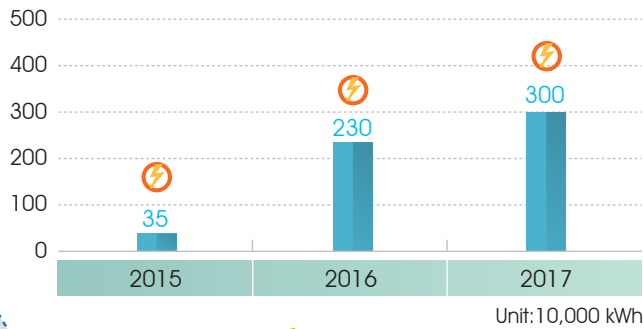


Environmental Costs

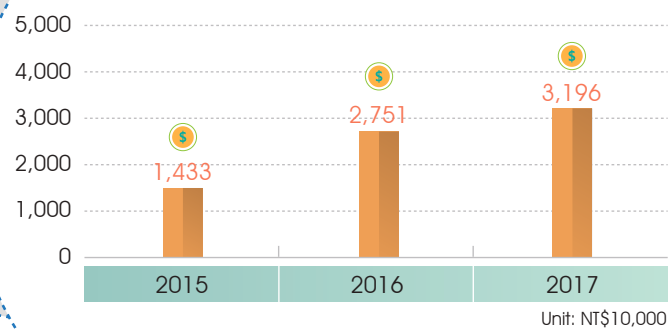




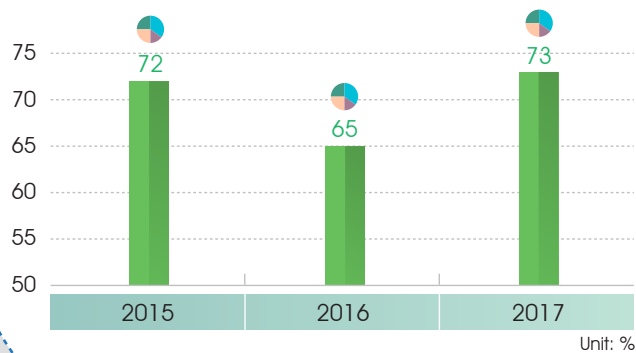
Green Power Purchase



Green Procurement Amount

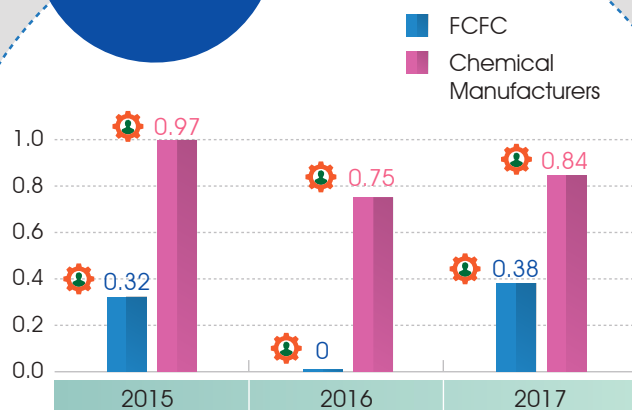


Local Procurement Percentage



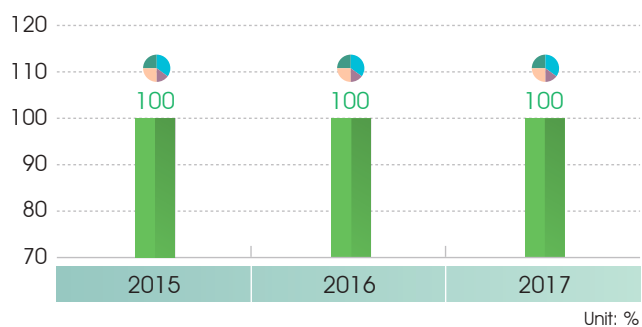
3. Sustainable Human Capital

Frequency-severity Indicator

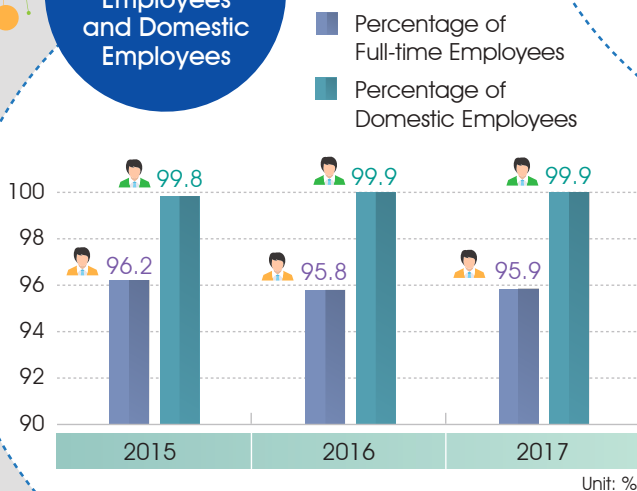


Note: Frequency-severity Indicator by Sector (2015-2017) published by the Occupational Safety and Health Administration, Ministry of Labor
(<https://www.osha.gov.tw/1106/1113/1115/19441>)

Percentage of Employees Reinstated from Unpaid Parental Leaves

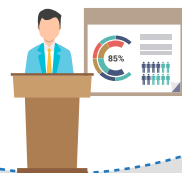
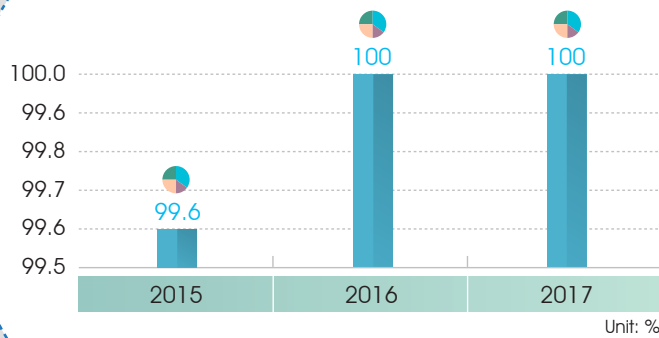


Percentage of Full-time Employees and Domestic Employees



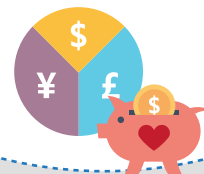
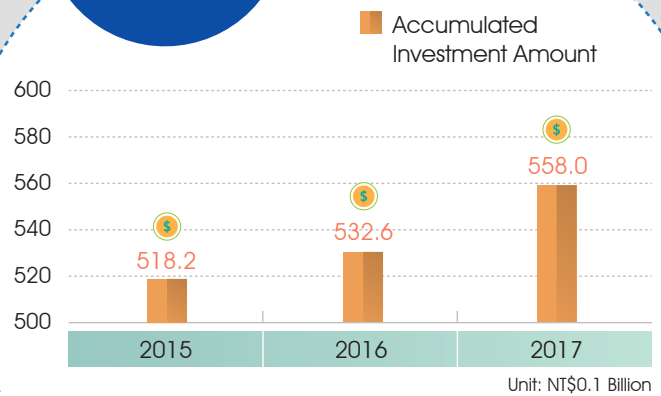


Completion Rate of the Annual Training Program

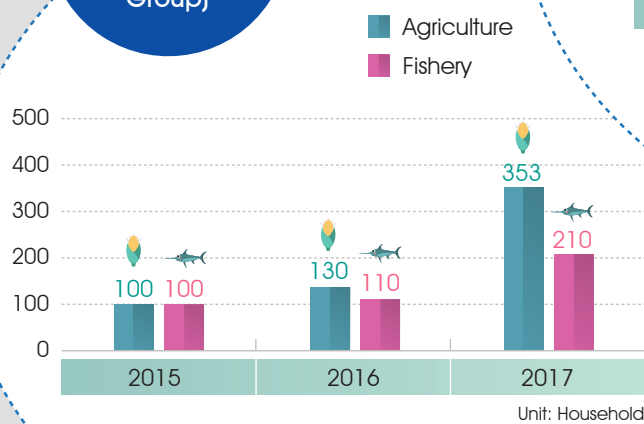


4. Common Prosperity

Investment in Social Welfare (Formosa Plastics Group)



Investment in Agricultural and Fishery Counseling (Formosa Plastics Group)





1

**A Pioneer of Infinite
Value Creation**



1.1 From the Executive Board

In 2017, the global economy fully revived thanks to the growth of investment, manufacturing and trade; in addition, major economies, such as the U.S., Europe, China, and Japan, expanded, driving the business performance to rise steadily with high profitability. In 2017, FCFC's plastics products benefited from the economic boom and the rise in international crude oil prices, which also strengthened the spreads; with reduced costs, extended high-value product deployment, and the efforts of all employees, the Company's revenue and profit grew significantly compared to those in 2016.

Corporate governance is increasingly valued by all sectors. To this regard, we have strived to improve the functions of the Board of Directors, the Audit Committee, and the Remuneration Committee in the hopes of fulfilling regulatory compliance, promoting corporate governance, and maximizing profit. To further create the interests of shareholders and contribute to society, we actively developed new markets, such as ASEAN and the Middle East, and high-value products; in addition to expanding the manufacturing process of PIA (pure isophthalic acid), we adjusted the sales ratio of general-grade and special-grade PC (polycarbonate) and tapped into medical-grade PP (polypropylene). To strengthen the investment in high-value products, we promoted the expansion of the manufacturing process of PIA with an annual production capacity of 200,000 tons in Ningbo and intended to increase the annual production capacity of phenol from 300,000 tons to 400,000 tons. Considering the risk dispersion and the cost advantages of shale gas, we started investing in an integrated petrochemical plant in Louisiana, USA with Formosa Petrochemical Corp. (FPCC) and Nan Ya Plastics Corp. (NPC).

The effects of climate change caused by greenhouse gas emissions continue to cause widespread discussions and concerns around the world. To reduce the impact of global warming on the Earth, the long-term goal of the Paris Agreement is to keep global average temperatures from rising 2 ° C (compared to temperatures pre-industrial revolution). According to Taiwan's Greenhouse Gas Reduction and Management Act, the national GHG emission reduction goals shall be to reduce GHG emissions by more than 50% of the GHG emission in 2005 by 2050 and to reduce GHG emissions by more than 30% of the GHG emission in 2005 by 2030. This shows that the low-carbon operation has become the key to sustainable development. We adopted the most advanced manufacturing processes and pollution control equipment beginning at the plant design stage and continuously pursued innovative and efficient energy-saving technologies in the hope of reducing the unit energy consumption per year by 3%. In addition, we promoted circular economy at the Mailiao Industrial Complex by using byproducts and waste from the upstream manufacturing process as raw materials or fuels for the midstream and downstream process. Waste, waste heat, and low-grade energy were reused after full integration; rainwater was also collected and reused during the process. In the future, we will continue to implement circular economy that covers water and energy conservation, carbon reduction, and recycling and ultimately achieve the goal of zero waste.

To attract and retain outstanding talent, we offer favorable compensation and benefits and a complete training and promotion system. In 2017, our turnover rate was only 4.2% (including retirement). We further encourage our employees to volunteer for charitable activities. By incorporating social services into corporate activities, we localize sustainable development and strive for common prosperity in cooperation with local communities, vendors, and governments. We continue to invest our resources in education, social welfare, ecological conservation, industrial development, and agriculture/fishery refinement. In addition to promoting the relationships between our plants and local communities, we have taken the lead to sponsor a variety of charitable activities to fulfill our corporate social responsibility based on the spirit of taking from and giving back to society.

Thanks to the support and cooperation of residents in the operating areas, shareholders and investors, customers, suppliers and contractors, government sectors, professionals and environmental protection organizations, and employees, we have achieved satisfactory results in the aspects of corporate governance, employee care, environmental protection, community prosperity, and social welfare in the past year. In the future, we will refer to the international trend on sustainability issues in addition to seeking valuable opinions from our stakeholders and integrate them into our business strategies to further improve the results of corporate social responsibility.

Formosa Chemicals & Fibre Corp.
Chairman

Wen-Yuan Wong

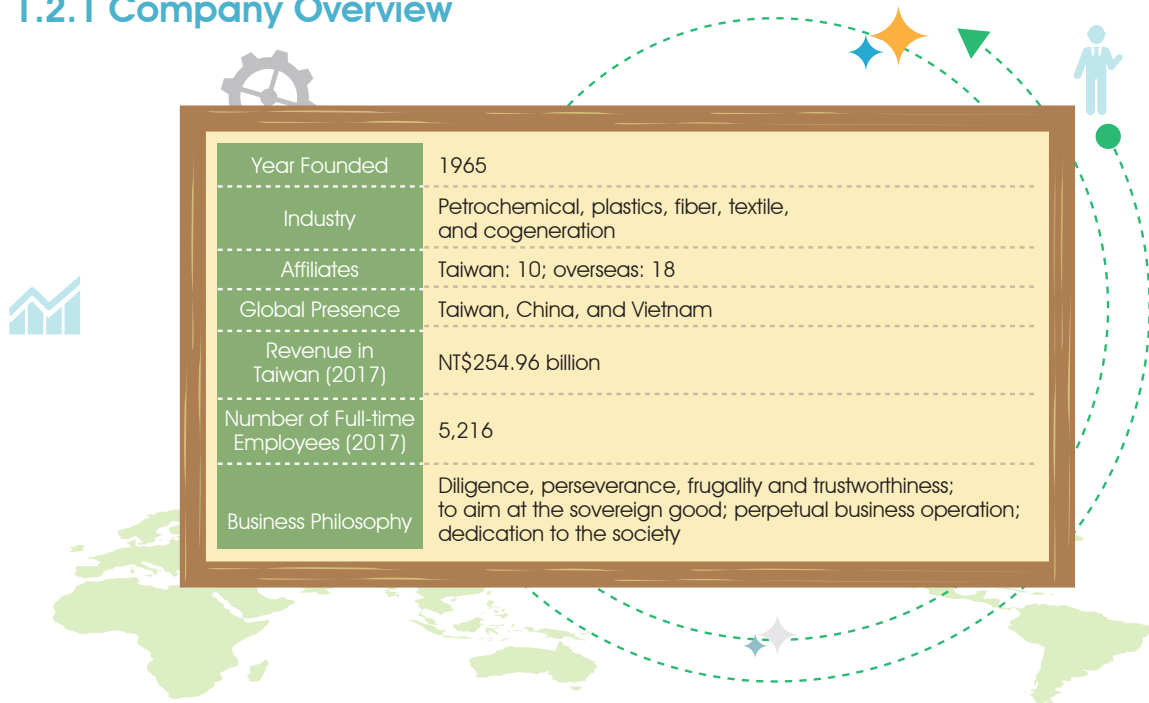
2018



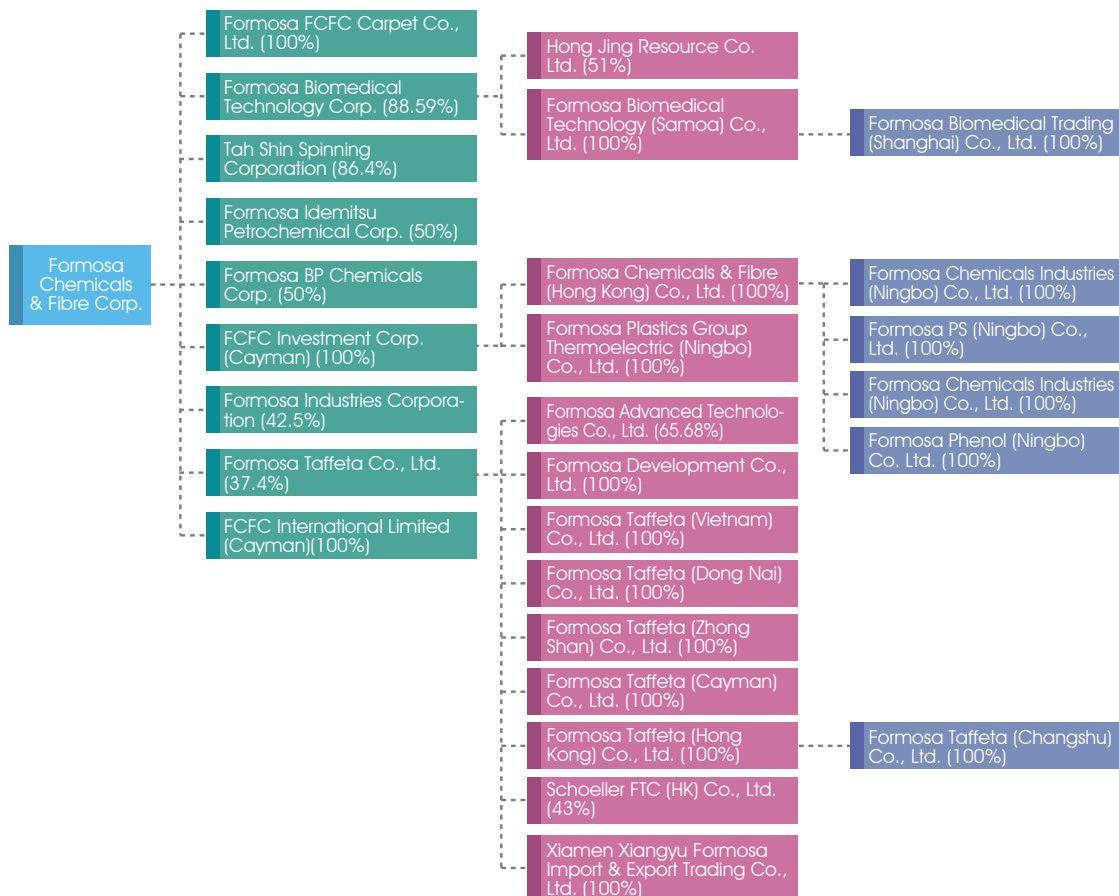


1.2 About FCFC

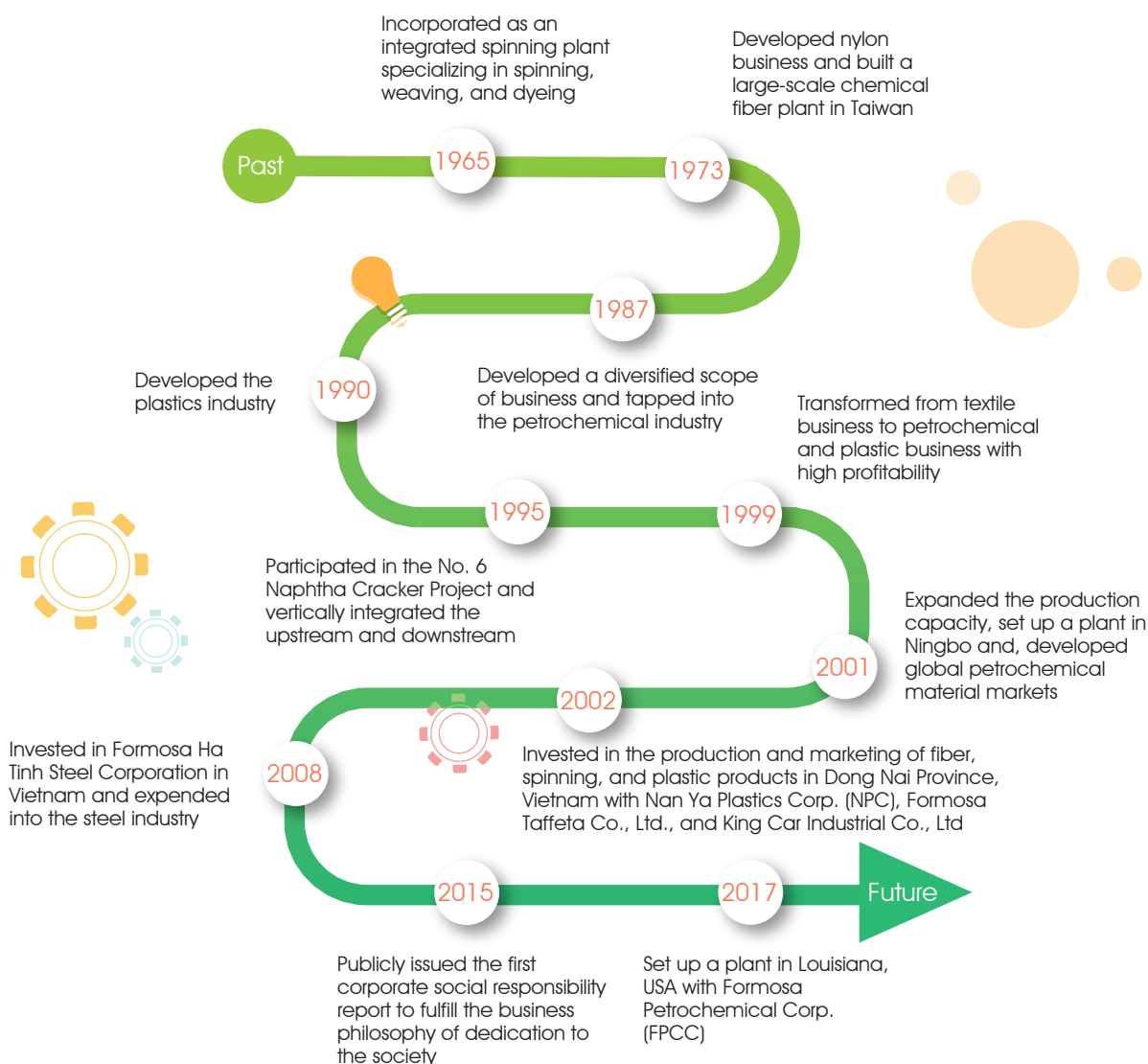
1.2.1 Company Overview



FCFC Organization



1.2.2 Company History



Note: For more information on the history of FCFC, refer to P.8-P.19 of the 2016 Annual Report.

1.2.3 Corporate Identity System

Formosa Plastics Group (FPG) has a chained logo as its corporate identity system, which represents the significance of interactive connections, cooperation, harmony, consistency, and the endless, powerful development capacity of FPG. Each symbol in the logo borrows a meaning from Chinese words to promote our outstanding traditional cultures and to enhance the positive image of trustworthiness among international players with its unique, simple, and powerful style.

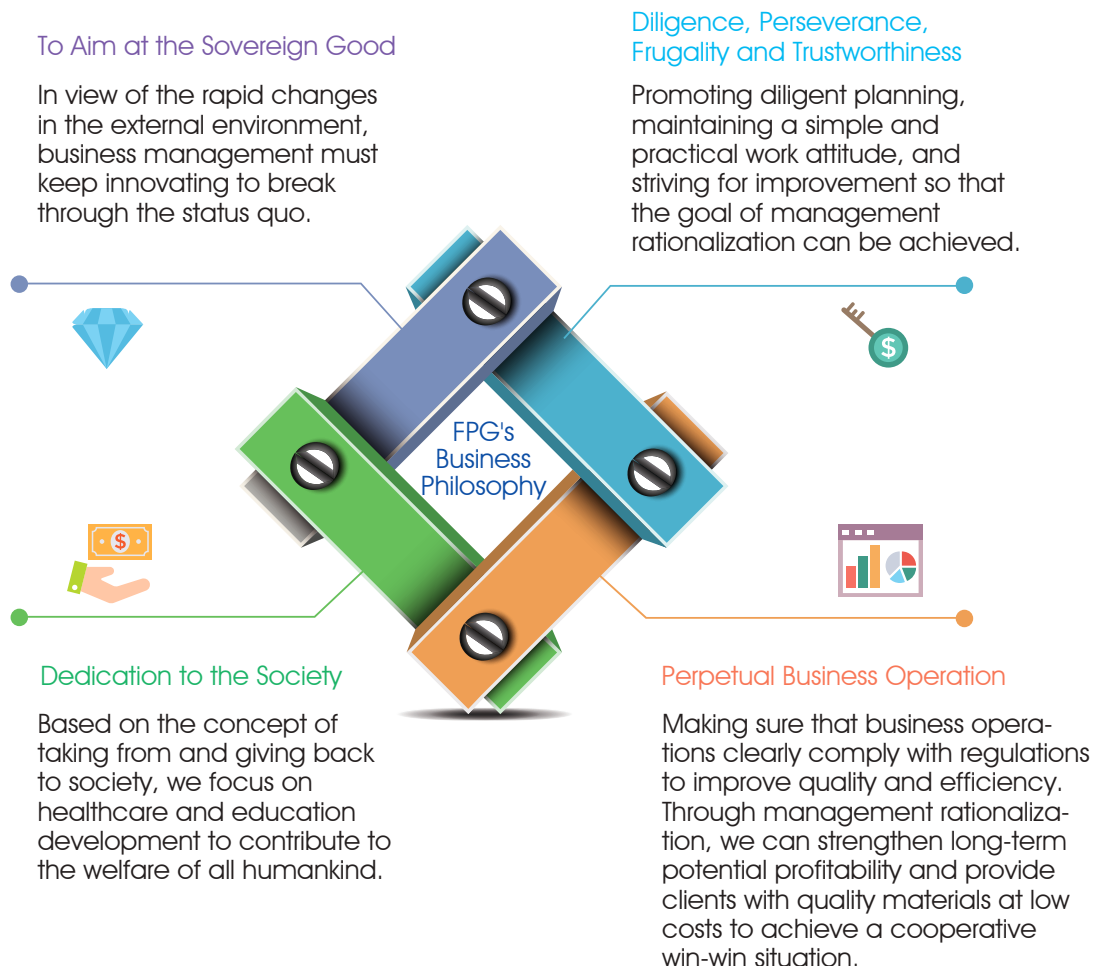




Our corporate identity comes from FPG's corporate identity system. The corporate identity of FCFC is the upper half of the Chinese character " 糸 " and also resembles the word " 台 ". The two hexagons symbolize the basic sign for chemical structures and are partially overlapped to emphasize that FCFC is a chemical company.

1.3 Business Philosophy

With FPG's business philosophy of diligence, perseverance, frugality and trustworthiness, FCFC pursues rationalization in a practical and realistic way and ultimately aims at the sovereign good. As society advances, to aim at the sovereign good can never be reached because of the ever-changing environment, but we will always keep working to make improvements. This is the major driving force of our endeavor to further refine our operations and performance and ultimately achieve the perpetual business operation.



1.4 Stakeholder Identification and Communication

1.4.1 Stakeholder Identification Procedures

Based on the discussions with heads of departments and the 5 principles (dependency, responsibility, influence, diverse perspectives, and tension) of the AA1000 Stakeholder Engagement Standards (SES), our CSR Report Team has identified 7 types of stakeholders, namely residents in operating areas, government sectors, professionals and environmental protection organizations, shareholders and investors, customers, suppliers and contractors, and employees.

FCFC Stakeholders



1.4.2 Stakeholder Communication Channels and Frequency

FCFC has established multiple and effective communication channels that enable stakeholders to express their needs and thoughts and have them be understood. Feedback and decisions regarding these requests are provided in the Report and have served as significant references for developing our business strategies and plans. Our communication with key stakeholders in 2017 is described as follows:



Relationship between Stakeholder and FCFC	Communication Frequency/Year	Communication Channels and Key Points	Issues of Concern
<p>Residents in Operating Areas</p> <p>As community friendliness has been an important subject for our business operation, we consider local residents while establishing our annual business strategies and objectives.</p>	<p>Occasionally, at least 3 times/year</p>	<ol style="list-style-type: none"> 1. Task force members are assigned regularly to attend community meetings and pay visits to residents in operating areas to learn more about their suggestions and promote community care and welfare. 2. We hold conferences or symposia to involve local residents and resolve different ideas. 3. The Good Neighbor Hotline has been established to provide local residents with a communication channel for reporting environmental issues around the clock. Dedicated personnel will be assigned to address such issues and respond to residents in a timely manner. 	<ul style="list-style-type: none"> Corporate Governance Air Pollutant Management Waste Management Water Resource Use and Management Controlled Chemical Substance Management Industrial and Public Safety Community Engagement and Contribution
<p>Government Sectors</p> <p>In addition to following related laws and regulations, FCFC also communicates with government sectors to promote sustainable business operation.</p>	<p>Occasionally, at least 4 times/year</p>	<ol style="list-style-type: none"> 1. To better understand and comply with related policies and regulations, we participate in public hearings and conferences held by government sectors, such as the Occupational Safety and Health Administration, the National Fire Agency, the Environmental Protection Administration, the Fire Department, and the Environmental Protection Bureau. 2. We strive for the reasonable amendments to related EHS regulations through Chinese National Federation of Industries' whitepaper to maintain the rights and interests of our industry. 3. The environmental impact assessment of the No.6 Naphtha Cracking Plant is discussed in the supervisory committee meeting each quarter. 4. We maintain close and efficient communication with government sectors. 5. Our plants participate in activities organized by local government agencies, such as landscaping, park adoption, and occupational health, to facilitate mutual understanding. 6. We keep the local legislative bodies updated of the plant management and keep track of local information. 	<ul style="list-style-type: none"> Corporate Governance Air Pollutant Management Waste Management Water Use and Management Controlled Chemical Substance Management Environmental Regulatory Compliance Greenhouse Gas Emissions and Carbon Footprints Industrial and Public Safety Occupational Health and Safety Energy Consumption and Management Social and Economic Regulatory Compliance Employee Benefits and Compensation

Relationship between Stakeholder and FCFC		Communication Frequency/Year	Communication Channels and Key Points	Issues of Concern
Professionals and Environmental Protection Organizations	We emphasize the suggestions for EHS sustainability and attach great importance to environmental sustainability like environmental protection organizations. We also exchange opinions with environmental protection organizations to contribute to a sustainable environment.	Occasionally, at least 3 times/year	<ol style="list-style-type: none"> 1. Environmental issues that concern professionals and environmental protection organizations are adequately explained and discussed during meetings. Interested parties with deep concerns are invited to our industrial complexes for on-site observation if necessary. 2. We discuss and communicate environmental protection issues with external associations. 3. We organize an annual conference to present outstanding improvements in energy conservation and carbon reduction or environmental protection and discuss possible refinements with professionals. 4. A SHE section has been made available on our official website to provide a communication channel for SHE issues. 	<ul style="list-style-type: none"> Corporate Governance Air Pollutant Management Waste Management Water Resource Use and Management Environmental Regulatory Compliance Greenhouse Gas Emissions and Carbon Footprints Climate Change Risk Management Biodiversity and Environmental Conservation Environmental Cost and Benefit Analysis
Shareholders and Investors	FCFC continues to seek long-term benefits for our shareholders and investors based on credible business operations and sustainable development.	The shareholders' meeting: once; other issues: occasionally, at least once	<ol style="list-style-type: none"> 1. We report the annual business operations and future prospects and receive shareholders' suggestions in the annual shareholders' meeting. 2. The Stock Affairs Department has been established under the Finance Department of the Group Administration to respond to the shareholders' inquiries and learn their needs. 3. The Investor Relations Section has been set up on our official website to respond to investors' frequently asked questions. 4. We provide real-time updates on financial statements and company information on the Market Observation Post System under the Financial Supervisory Commission. 5. A spokesperson is appointed to serve as the contact window between FCFC and institutional investors. 	<ul style="list-style-type: none"> Corporate Governance Operating & Financial Performance Air Pollutant Management Waste Management Climate Change Risk Management Major Investment Projects Operational Risk Management and Responses



Relationship between Stakeholder and FCFC		Communication Frequency/Year	Communication Channels and Key Points	Issues of Concern
Customers	Customer support is the key factor to our sustainable development, and customer feedback is the motivation behind our constant improvement; providing customers stable and quality products is our responsibility.	Occasionally, at least once/year	<ol style="list-style-type: none"> 1. We participate in various trade shows (e.g. Intertextile Shanghai Apparel Fabrics, CHINAPLAS Guangzhou, PLASCOM TAIWAN, Texworld, European Outdoor, Outdoor Retailer Market, and China (Yuyao) International Plastics Expo.) to gain direct insight into the voice of customers and market development. 2. We visit customers from time to time to access their equipment, operating status, and material requirements. 3. We gain direct insight into customers' needs and feedback through customer feedback forms and customer satisfaction surveys. 4. We provide customers with instant technical support and after-sales service. 5. Through our hotline and company website, customers can report product conditions immediately. 6. We receive and respond to new customers' price inquiries and negotiations online. 7. Based on the requests of large customers, we brief on products of their concerns. 	<ul style="list-style-type: none"> Corporate Governance Operating & Financial Performance Air Pollutant Management Waste Management Product Technology Development and Innovation Customer Health and Safety Anti-corruption Measures
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	<ol style="list-style-type: none"> 1. Suppliers make direct contact with FPG's Procurement Department and Contracting Center. 2. Formosa Technology E-Market Place provides 24-hour online customer service. 3. Supplier meetings are conducted to enhance mutually effective communication. 4. E-mail addresses will be provided on the main page of FPG's official website to receive and handle suppliers' and contractors' suggestions. 	<ul style="list-style-type: none"> Corporate Governance Operating & Financial Performance Air Pollutant Management Waste Management Controlled Chemical Substance Management Environmental Regulatory Compliance Industrial and Public Safety Use of Raw Materials Major Investment Projects Occupational Health and Safety

Relationship between Stakeholder and FCFC		Communication Frequency/Year	Communication Channels and Key Points	Issues of Concern
Employees	Employees are our most valuable assets and the basis of corporate competitiveness. By providing training and a friendly working environment, we strive to improve employees' cohesiveness.	Occasionally, at least 4 times/year	<ol style="list-style-type: none"> 1. Regular morning briefings allow employees to learn updates on internal regulations and make suggestions. 2. An appointed employee will respond to opinions received via physical and online suggestion boxes. 3. The 799 Hotline is available at each plant for employees to voice their concerns and receive responses. 4. The Formosa Plastics Group Magazine is published by the Group Administration bi-monthly to provide information on company dynamics, expertise, and medical care. 5. Meetings between the senior management and labor union representatives are held occasionally to facilitate labor relations. 6. Employees are encouraged to join the labor union or the Employee Welfare Committee to participate in regular meetings and communicate with the attendant management. 7. An annual employee satisfaction survey is conducted to improve the quality of service at related departments. 8. Employees can give suggestions for the Company's policies via the Policy Suggestion Feedback Form. 9. Employees are encouraged to share original ideas via the FPG Innovation Platform. 10. Counselors provide new recruits professional counseling services so that they can quickly adapt to their jobs and new lives. 	<ul style="list-style-type: none"> Corporate Governance Operating & Financial Performance Air Pollutant Management Waste Management Occupational Health and Safety Employee Benefits and Compensation Employee Recruitment and Retention Industrial and Public Safety Employee Rights and Protection

1.5 Identification of Material Issues

Through multiple channels, including the labor union, company website, e-mail, media and meetings, we communicate with both internal and external stakeholders to improve mutual interaction and find out their major concerns. We have also assembled related departments to discuss several material issues that concern our stakeholders most. After reaching an agreement, we revealed the proper contents in the Report to address stakeholders' concerns. In the future, we will discuss the material issues in the Report and items that need improvement. By making these improvements, we seek to maintain sound communication and partnership with all of our stakeholders.

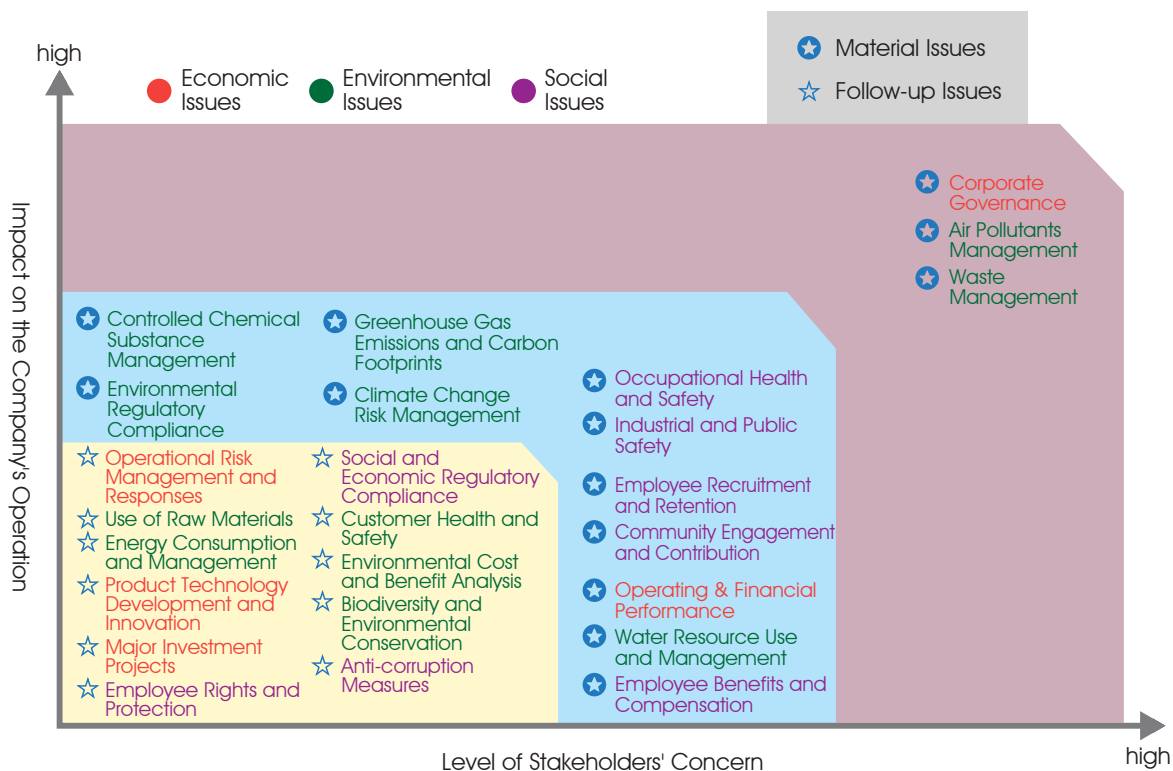


1.5.1 Procedures for Identifying Material Issues



1.5.2 Prioritizing Material Issues

Stakeholders' concerns are reviewed by President's Office, Safety & Health Department, Accounting Department, Industrial Complex Administration Department, Business Department representatives, and CSR Committee members. Once integrated, the major concerns of stakeholders are proposed. At the beginning of 2018, a meeting was held to decide on the subject of the Report and material issues. Once the Report is completed, these issues are 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.





























Adjustments of the material issues in 2017 are described as follows:

No.	2017 Material Issue	Adjustment	Description
1	Controlled Chemical Substance Management	Added	Controlled Chemical Substance Management is an important industrial issue. After discussions, the CSR Team added this issue as one of the material issues in 2017 based on the results of the stakeholder questionnaire.
2	Industrial and Public Safety	Added	Industrial and Public Safety is an important industrial issue. After discussions, the CSR Team added this issue as one of the material issues in 2017 based on the results of the stakeholder questionnaire.
3	Climate Change Risk Management	Added	Climate Change Risk Management is an important industrial issue and a global trend. After discussions, the CSR Team added this issue as one of the material issues in 2017 based on the results of the stakeholder questionnaire.
4	Greenhouse Gas Emissions and Carbon Footprints	Integrated	After discussions, the CSR Team integrated Greenhouse Gas Emissions with Product/Service Carbon Footprints identified in the previous year to strengthen the management of GHG emissions and carbon footprints. Scope 3 GHG inventory and carbon footprint verification are also expected to be promoted in the future. Greenhouse Gas Emissions and Carbon Footprints was added as one of the material issues in 2017 based on the results of the stakeholder questionnaire.



No.	2017 Material Issue	Adjustment	Description
5	Sustainable Development Strategy	Deleted	Sustainable Development Strategy and Moral/Ethical Code of Conduct range extensively and serve as the highest guidelines for each material issue. To focus on the material issues, this issue was deleted in 2017.
6	Moral/Ethical Code of Conduct	Deleted	Sustainable Development Strategy and Moral/Ethical Code of Conduct range extensively and serve as the highest guidelines for each material issue. To focus on the material issues, this issue was deleted in 2017.
7	Risk Management	Deleted	Risk Management ranges extensively. To focus on the material issues, the risk assessment of each material issue was described in the corresponding chapter.
8	Environmental Grievance Mechanisms	Deleted	As GRI Standards have integrated environmental grievance mechanisms into management approaches, this issue was deleted in 2017.
9	Product Safety and Health Responsibility	Deleted	As GRI Standards have described product-related impacts in each environmental issue, this issue was deleted in 2017.
10	Use of Raw Materials	1. The importance of the issue was reduced. 2. The issue is to be followed up.	According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report still retained related contents to keep track of the issue regardless of its reduced importance.
11	Energy Consumption and Management	1. The importance of the issue was reduced. 2. The issue is to be followed up.	According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report still retained related contents to keep track of the issue regardless of its reduced importance.
12	Employees' Rights and Protection	1. The importance of the issue was reduced. 2. The issue is to be followed up.	According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report still retained related contents to keep track of the issue regardless of its reduced importance.
13	Investment in Environmental Protection	1. The name of the issue was adjusted. 2. The importance of the issue was reduced. 3. The issue is to be followed up.	The name of the issue was replaced by Environmental Cost and Benefit Analysis. According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report still retained related contents to keep track of the issue regardless of its reduced importance.
14	Supplier Safety and Health Management	The importance of the issue was reduced.	The name of the issue was replaced by Supplier Environmental Assessment. According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report only disclosed the key points of the issue due to its reduced importance.
15	Products/Services and Customer Relations	The importance of the issue was reduced.	The name of the issue was replaced by Products/Services and Labeling. According to the results of the stakeholder questionnaire and the CSR Team's discussions, the Report only disclosed the key points of the issue due to its reduced importance.

1.5.3 Impact of Material Issues on Stakeholders

Dimension	Material Issue	GRI Material Aspect ¹	Internal Boundaries		External Boundaries					
			Formosa Chemicals & Fibre Corporation	Subsidiaries ²	Customers	Shareholders and Investors	Suppliers and Contractors	Experts, Scholars, and Environmental Organizations	Community Residents	Government Agencies
			Description							
Economic	Corporate Governance	Governance	102-18~102-39	 						
				Only by establishing sound corporate governance can the Company have positive influence and achieve sustainable development while creating financial benefits.		With sound corporate governance, FCFC rewards the shareholders and investors for their trust and complies with government regulations.				
	Operating & Financial Performance	Economic Performance	201							
				The Company's operating activities have a direct impact on business performance.		The Company's business performance will have an impact on the interests of the shareholders, investors, customers, suppliers, and contractors.				
Environmental	Air Pollutants Management	Emissions	305	 						
				The management of air pollutants at plants has a directly impact on the results of the Company's environmental assessment and operating activities.		The management of air pollutants at plants has a direct impact on the health of residents in the operating areas and the results of the Company's environmental assessment conducted by the government, experts, scholars, and environmental organizations.				
	Waste Management	Effluents and Waste	306							
				Sound waste management reduces operating costs and improves business performance.		The quality of waste management affects the health of the external stakeholders, the environment, the interests of the shareholders, and the concerns of related government agencies.				



Dimension	Material Issue	GRI Material Aspect ¹	Internal Boundaries		External Boundaries					
			Formosa Chemicals & Fibre Corporation	Subsidiaries ²	Customers	Shareholders and Investors	Suppliers and Contractors	Experts, Scholars, and Environmental Organizations	Community Residents	Government Agencies
			Description							
Environmental	Water Resource Use and Management	Water Effluents and Waste 303 306								
	Greenhouse Gas Emissions and Carbon Footprints	Emissions 305								
	Controlled Chemical Substance Management	FCFC and Industrial Issue -								
			<p>Water resource use and management are closely related to the Company's operations. Stable and quality water resources are beneficial to the Company's operations.</p> <p>The use and management of water resources are supervised and controlled by government agencies. The distribution of water resources also has a direct impact on the lives of residents in the operating areas. It is also an issue of concern to experts, scholars, and environmental organizations.</p> <p>Greenhouse gas emissions and carbon footprints have a direct impact on the Company's operations. Appropriate countermeasures can reduce operational risks and costs.</p> <p>The concerns and supervision of greenhouse gas emissions and carbon footprints by experts, scholars, environmental organizations, and government agencies have an impact on the Company's operations. Complying with the regulations and meeting the expectations of the stakeholders are beneficial to the Company's perpetual business operation.</p> <p>Appropriate and legal management of controlled chemical substances can reduce the Company's operational risks and improve its business performance.</p> <p>The management of controlled chemical substances by the Company and suppliers and contractors is subject to the supervision and management of government agencies. Misconduct will impact on the health and lives of residents in the operating areas.</p>							

Dimension	Material Issue	GRI Material Aspect ¹		Internal Boundaries		External Boundaries					
				Formosa Chemicals & Fibre Corporation	Subsidiaries ²	Customers	Shareholders and Investors	Suppliers and Contractors	Experts, Scholars, and Environmental Organizations	Community Residents	Government Agencies
				Description							
Environmental	Climate Change Risk Management	FCFC and Industrial Issue	-								
				Whether climate change risk management is appropriate or not has a direct impact on the Company's business performance. Improper strategies will increase operational risks.		Appropriate climate change risk management is beneficial to the Company's stable profitability and shareholder return and helps gain recognition from experts, scholars, and environmental organizations for the Company's responses to climate change.					
	Environmental Compliance	Compliance with Environmental Protection	307	Whether the Company complies with environmental regulations has a direct impact on the Company's operations.		The concerns of government agencies, experts, scholars, and environmental organizations about the degree of environmental compliance of the Company, suppliers, and contractors have an impact on the Company's operations.					
Social	Employee Welfare and Compensation	Labor Relations	401								
				Employee welfare and compensation has an impact on the employees' rights and expectations of the Company and ultimately the Company's business performance.		Government agencies' concerns about the Company's regulations and measures for employee welfare and compensation will have an impact on the Company's operations.					
	Employee recruitment and retention	Labor Relations Training and Education	401 404	Sound labor policies can improve the employees' coherence and productivity and the Company's operational efficiency.							



Dimension	Material Issue	GRI Material Aspect ¹		Internal Boundaries		External Boundaries					
				Formosa Chemicals & Fibre Corporation	Subsidiaries ²	Customers	Shareholders and Investors	Suppliers and Contractors	Experts, Scholars, and Environmental Organizations	Community Residents	Government Agencies
				Description							
Social	Occupational Health and Safety	Occupational Health and Safety	403								
				Establishing a healthy and safe workplace can enhance employees' coherence and the Company's operational efficiency.		Government agencies shall supervise the occupational health and safety management of the Company, suppliers, and contractors in compliance with related regulations.					
	Industrial and Public Safety	FCFC and Industrial Issue	-								
				The safety maintenance and disaster prevention at the Company's plants have a direct impact on the safety of employees' working environment.		The safety maintenance and disaster prevention at the Company's plants have a direct impact on the safety of contractors' construction and the residents in the operating areas.					
	Community Engagement and Contribution	Local Community	413								
				Promoting community engagement and contribution can enhance the corporate image and engagement in the community, which has a positive effect on the Company's operations.		Active community engagement and contribution can integrate the Company's operations into community activities, creating prosperity of the Company and the community.					

1. GRI Material Aspect refers to the disclosure of the issue. For the disclosure, refer to Appendix 1 (Global Reporting Initiative (GRI) Comparison Table).
2. Subsidiaries do not include Formosa Taffeta Co., Ltd., Formosa Advanced Technologies Co., Ltd., and overseas companies.



2

Innovation Economy

2.1 Corporate Governance



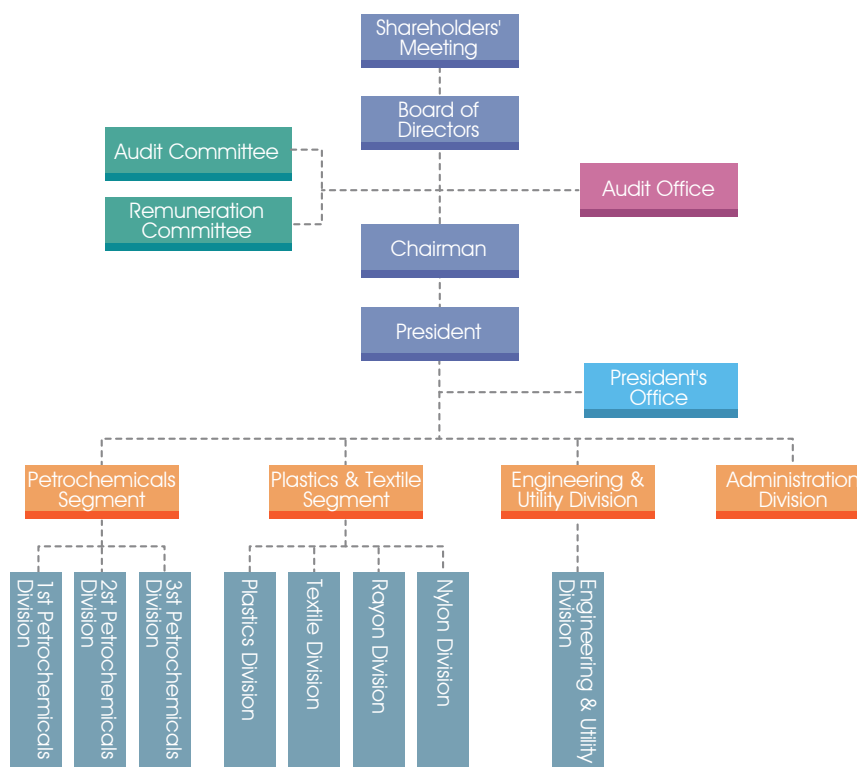
Management Approach to Corporate Governance



Corporate governance is increasingly valued by all sectors. Having a sound corporate governance system is the key to sustainable operation. FCFC follows the Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies and related laws and regulations and sets the Board of Directors as the highest governance body. The Board of Directors is responsible to set up and implement a corporate governance system and a comprehensive internal control system to ensure that the business operations comply with laws and regulations, to reduce operational risks, and to seek the optimal balance between business operations and corporate governance. We will keep pace with the times and adapt to changes in laws and regulations and advanced management skills and concepts, so as to improve the performance of corporate governance and the ranking in the corporate governance evaluation of Taiwan Stock Exchange. We will also introduce AI-based management models to improve the performance of corporate governance.

2.1.1 Corporate Governance Profile

FCFC Corporate Governance Structure





Operation of Board of Directors

In FCFC, the Board of Directors is the highest governance body and the center of making business decisions. The Board of Directors is appointed by the shareholders. In addition to conforming to the resolutions made in shareholders' meetings, the Board of Directors acts in accordance with the corresponding laws and regulations (e.g. Company Act, Securities and Exchange Act, Articles of Incorporation, and Rules of Procedure for Board of Directors Meetings) to monitor and control the management, operation, decision making, and other key leadership activities within the Company. Furthermore, we have established the Board and Management Ethics Policy. In all circumstances, all personnel shall abide by this policy to prevent wrongdoing against the Company and the shareholders.

After the ideal candidates are nominated and put into a candidate list, members of the Board of Directors are selected in the shareholders' meeting. The term of office is three years, and a meeting must be held at least once every quarter. In 2017, the Board of Directors was composed of 14 members, with an average age of 67. The Board of Directors provides vital business expertise, and the members are equipped with insightful knowledge and rich industrial experience. In particular, several directors have been long immersed in the fields of petrochemistry and plastics and can provide professional business strategies. To maintain the diversity of the Board of Directors and strengthen the Company's governance, we have included female directors and have established a mechanism for independent directors to participate in the operation. The Board of Directors is as follows.

Position	Name	Gender	Educational Background	Major Experience	Positions Concurrently Held in FCFC and Other Companies
Chairman	Wen-Yuan Wong	Male	Master of Industrial Engineering, University of Houston	Chairman, Formosa Taffeta Corp. Chairman, Mai-Liao Power Corporation	Chairman, Formosa Taffeta Co., Ltd. Chairman, Formosa Advanced Technologies Co., Ltd.
Vice Chairman	Fu-Yuan Hung	Male	Bachelor of Chemical Engineering, Chung Yuan Christian University (Taiwan)	President, Formosa Chemicals & Fiber Corp.	Vice Chairman, Formosa Chemicals & Fibre Corp.
Managing Director	Wen-Chiao Wang	Male	Department of Mechanical Engineering, University of London	Chairman, Formosa Petrochemical Corp.	Chairman, Formosa Plastics Marine Corp. (Taiwan) Chairman, Nan Ya Photonics Inc.
Managing Director	Ruey-Yu Wang	Female	Master of International Business, National Taiwan University	Chairman, Formosa Biomedical Technology Corp.	Chairman, Formosa Biomedical Technology Corp.
Independent Director	Jui-Long Chen	Male	Department of Applied Economics, National Chung Hsing University	Minister of Economic Affairs	Chairman, Sinocon Industrial Standards Foundation
Independent Director	Tsung-Yung Lin	Male	Master of Law, National Taiwan University	Administrative Deputy Minister, Ministry of Finance	Chairman, Huasheng Venture Capital Co., Ltd. and Huacheng Venture Capital Co., Ltd.

Position	Name	Gender	Educational Background	Major Experience	Positions Concurrently Held in FCFC and Other Companies
Independent Director	Kong Wang	Male	PhD, Massachusetts Institute of Technology	Director-General, Hsinchu Science Park Bureau	Chair Professor, China University of Technology; Independent Director, Qisda Corporation and Formosa Taffeta Corp.
Director	Wen-Hsiang Wang	Male	University of California, Berkeley	Chairman, J-M Manufacturing Co., Inc.	Chairman, J-M Manufacturing Co., Inc.
Director	Hung-Chih Yang	Male	Department of Mechanical Engineering, National Cheng Kung University	President, Formosa Ha Tien Steel Corp.	Consultant, Formosa Chemicals & Fibre Corp.
Director	Chiu-Ming Chen	Male	Department of Chemical Engineering, National Taiwan University	Executive Vice President, Formosa Chemicals & Fiber Corp.	None
Director	Tung-Teng Huang	Male	Department of Chemical Engineering and Biotechnology, National Taipei University of Technology	Executive Vice President, Formosa Chemicals & Fiber Corp.	President, Formosa Chemicals & Fibre Corp.
Director	Ying-Ta Fang	Male	Department of Chemical Engineering, Chinese Culture University	Senior Vice President, Formosa Chemicals & Fiber Corp.	Executive Vice President, Formosa Chemicals & Fibre Corp.
Director	Sun-Ju Li	Male	Master of Statistics, National Chengchi University	President, Formosa Technologies Corporation	None
Director	Wen-Chin Lu	Male	Department of Chemical Engineering, Tatung University	Vice President, Formosa Chemicals & Fiber Corp.	Senior Vice President, Formosa Chemicals & Fiber Corp.

To prevent conflicts of interest between members of the Board of Directors and the Company, if any member of the Board of Directors releases the non-competition clause from the labor contract, he or she must explain the details at the shareholders' meeting for final permission in accordance with the Company Act. To prevent members of the Board of Directors from hiding facts due to self-interest, relevant regulations have been stipulated in the Rules of Procedure for Board of Directors Meetings and the Articles of Incorporation. Regarding the meeting agenda, if a member of the Board of Directors or his/her representative has a conflict of interest that might cause damage to the Company, he or she is only allowed to make comments and respond without any right to engage in discussion or voting; he or she is also not allowed to engage in voting on behalf of other members of the Board of Directors. In addition, social responsibility issues with respect to economy, society and the environment will be submitted to the Board of Directors for discussion, if necessary, as a basis for promoting social responsibility.



Remuneration for the Highest Governance Body

FCFC established the Remuneration Committee in August 2011 to evaluate the remuneration policy for the directors and management. They provide advice for the Board of Directors to prevent the directors and management from making unnecessarily risky decisions against the Company. According to the Remuneration Committee Charter, a meeting must be held at least twice every year. In 2017, two meetings were held by the Remuneration Committee with an attendance rate of 100%.

Senior executives' annual compensation is mainly composed of salary, bonuses, and extra dividends 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

To reinforce the Board of Directors' function as a supervisory body, FCFC established the Audit Committee in June 2015 to verify the fair presentation of its financial statements, to select (or discharge) the CPAs and evaluate their competitiveness, independence, and performance, and to supervise the Company's internal control, legal compliance, and risk management. FCFC has established an independent supervisory system by setting up the Audit Committee and developing a comprehensive audit management system. The Audit Committee is composed of three independent directors as follows:

Position	Name	Gender	Educational Background	Major Experience	Positions Concurrently Held in FCFC and Other Companies
Independent Director	Jui-Long Chen	Male	Department of Applied Economics, National Chung Hsing University	Minister of Economic Affairs	Chairman, Sinocon Industrial Standards Foundation
Independent Director	Tsung-Yung Lin	Male	Master of Law, National Taiwan University	Administrative Deputy Minister, Ministry of Finance	Chairman, Huasheng Venture Capital Co., Ltd. and Huacheng Venture Capital Co., Ltd.
Independent Director	Kong Wang	Male	PhD, Massachusetts Institute of Technology	Director-General, Hsinchu Science Park Bureau	Chair Professor, China University of Technology; Independent Director, Qisda Corporation and Formosa Taffeta Corp.

To ensure financial transparency and compliance, FCFC has established a comprehensive audit system in addition to setting up the Audit Committee. Furthermore, relevant audit reports are presented at each Board of Directors meeting. The Audit Office of the Company is responsible for internal audit, and the Group Administration of Formosa Plastics Group (FPG) jointly established by respective FPG companies also plays an important role in independent audit. With its extraordinarily independent status, the auditing proficiency and efficiency can be improved to achieve full supervision.



Training Courses for Directors

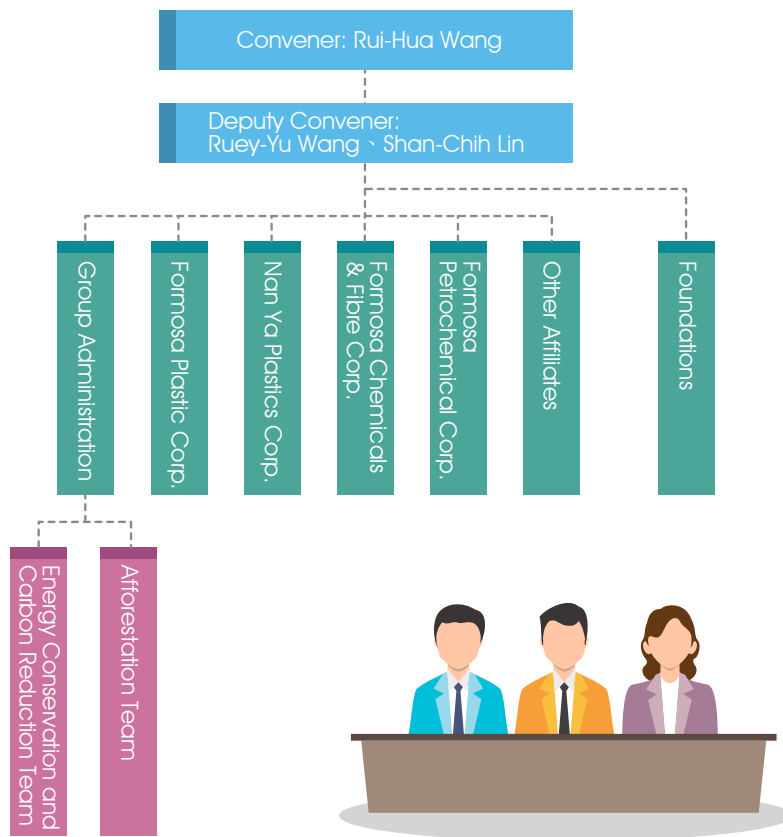
To continuously assist the directors in improving their professional knowledge and legal literacy with respect to corporate governance, FCFC provides them the following training courses every year:

Position	Name	Date of training	Organizer	Course title	Length of training
Director	Wen-Yuan Wong, Fu-Yuan Hung, Wen-Chiao Wang, Ruey-Yu Wang, Tsung-Yung Lin, Kong Wang, Tung-Teng Huang, Hung-Chih Yang, Chiu-Ming Chen, Sun-Ju Li, Ying-Ta Fang, Wen-Chin Lu	November 17, 2017	Securities and Futures Institute	From Ethics to Getting Rich - The Insights of Insider Trading	3
			Dharma Drum Mountain Humanities and Social Improvement Foundation	From Big Data to Artificial Intelligence	3
Director	Jui-Long Chen	July 26, 2017	Taiwan Corporate Governance Association	Legal Liabilities of Directors and Supervisors in the Context of Mergers and Acquisitions	3
		August 4, 2017	Taiwan Corporate Governance Association	A Case Study of Knowledge Management	3
		August 9, 2017	Taiwan Corporate Governance Association	Corporate Governance and Criminal Risk Management	3
		August 21, 2017	Securities and Futures Institute	Anti-tax Evasion Development at Home and Abroad and Corporate Responses	3
		August 21, 2017	Securities and Futures Institute	Intersection of Theory and Practice of Corporate Secretariat - New Corporate Governance System under the Full Amendment to the Company Act	3
Director	Wen-Hsiang Wang	December 27, 2017	Securities and Futures Institute	Impact of Tax Law Reform on Business Operations and Response	3
				Legal Risk Analysis of Business Decisions and Business Considerations	3

2.1.2 Organization of the CSR Committee

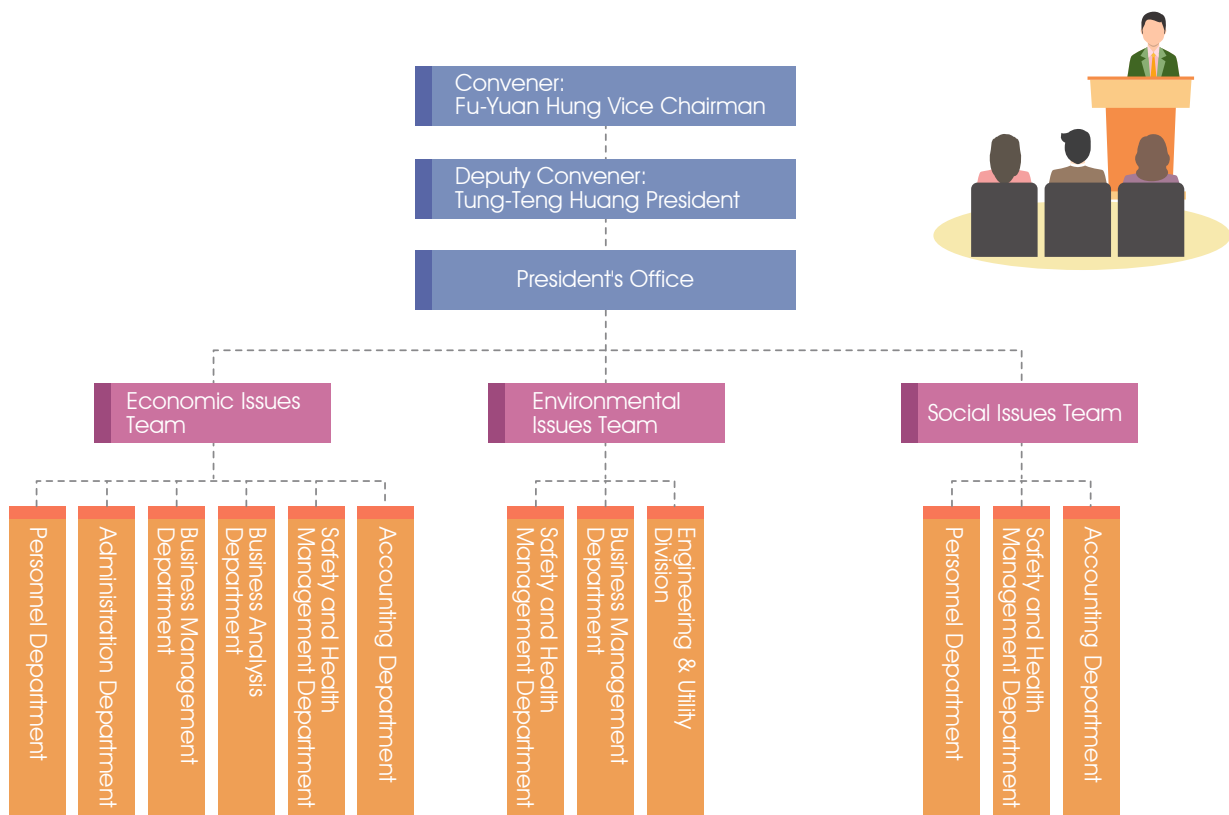
To effectively exercise corporate social responsibility, FPG formed the CSR Committee in 2008, which is led by the Managing Director Rui-Hua Wang from Formosa Plastics Corp. and assisted by the Managing Director Ruey-Yu Wang and Shan-Chih Lin from FCFC. The CSR Committee is responsible for proposing CSR strategies and evaluating their performance. Under this structure, the Energy Conservation and Carbon Reduction Team and the Afforestation Team are responsible for environmental protection-related affairs; in addition, many foundations have been established directly under the convener and deputy conveners to promote social welfare-related affairs.

FPG CSR Committee



FCFC is a company subordinated to FPG, with Vice Chairman Fu-Yuan Hung acting as the convener and President Tung-Teng Huang acting as the deputy convener to promote corporate social responsibility. Three teams in charge of economic issues, environmental issues, and social issues respectively are established under the convener and the deputy convener to promote social responsibility in cooperation with the CSR Committee of the Group Administration.

FCFC CSR Team



2.1.3 Internal Control Mechanisms

FCFC's internal control mechanisms feature an integrated system to increase operational efficiency and minimize risk at each level within the Company. With the implementation of audit management, this system ensures that the shareholders' rights and interests are protected. Details are provided below.



Computerized Management Procedures

To comply with the Group Administration of FPG, FCFC has been dedicated to the implementation of a goal-oriented management system and the improvement of projects since 1968. The management system has been computerized since 1982 and features the following four strengths:

- ⚙ One entry with multiple outputs
- ⚙ Interconnection between the six main management segments
- ⚙ Consistency of information
- ⚙ Management of abnormalities

The management system of FCFC is divided into six segments: HR, Finance, Operations, Production, Materials & Resources, and Engineering. All information is shared among the different segments, and checks are done between all links by an automated logic deduction system. A system warning is provided for related personnel when an abnormality is detected. A final operation analysis report is available for all segments. This feature, which is unique to FCFC, uses a computerized management system to minimize human error.



One-Day Settlement

Another achievement of FCFC's computerized management system is the one-day settlement, which was completed in May 2001. One-day settlement is provided, and the management can access the monthly P&L on the first day of the following month, which enables the management to quickly respond and make any necessary adjustments in the operations. The readily accessible operational information is the best example of computerizing management procedures.

The internal computerized management system functions not only as a management tool but also as an indicator for improvement. As the founder of FPG emphasized the continuous pursuit of rationalization, we believe that every computerized procedure has room for improvement.



Professional and Independent Internal Audit System

Every year, the Audit Office under the Board of Directors of FCFC appoints internal auditors to attend audit training courses organized by professional training institutions. The FPG established the Group Administration in 1968 to integrate management operations while maximizing the use of available resources within FPG companies. The Group Administration is responsible for the implementation of management policies, the development of the computerization of various systems, and the improvement in management and projects. Furthermore, independently evaluate and supervise the functions of FPG companies to ensure their operational efficiency.

The scope of internal audit includes:

- ⚙ Review the reliability and integrity of financial and operational information
- ⚙ Review the existing system to ensure compliance with policies, plans, procedures, contracts and regulations
- ⚙ Review methods for safeguarding assets
- ⚙ Evaluate the efficiency and effectiveness of resource utilization
- ⚙ Review the operations or project plans to determine whether the results are consistent with the established goals

Internal audit is not the sole obligation of the Audit Office. Each department is also required to carry out the internal audit of its own on either a regular or intermittent basis. The Audit Office shall review the result of the internal audit at each department and then decide whether to carry out a scheduled or unscheduled inspection to ensure that internal control has been thoroughly implemented at each department.

Legal Compliance within FPGaa

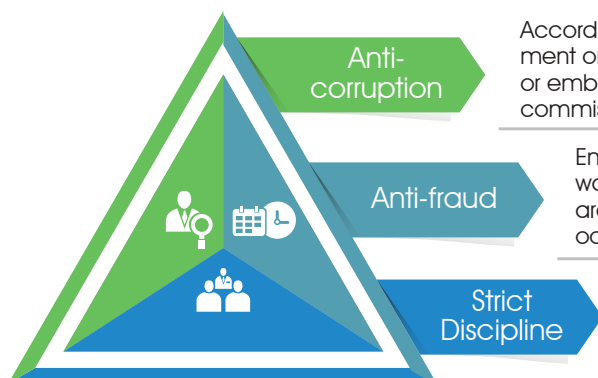


2.1.4 Code of Ethics and Business Conduct



Core Value

With the core values of diligence, perseverance, frugality and trustworthiness, FCFC has stipulated strict ethics and principles. We expect that our employees' speech and conduct meet the ethical requirements and the Company's reputation and regulations, whether in the workplace or their daily lives.



According to the internal regulations, no business entertainment or gifts shall be accepted. Those found guilty of graft or embezzlement of public funds or taking bribes or commissions will be dismissed.

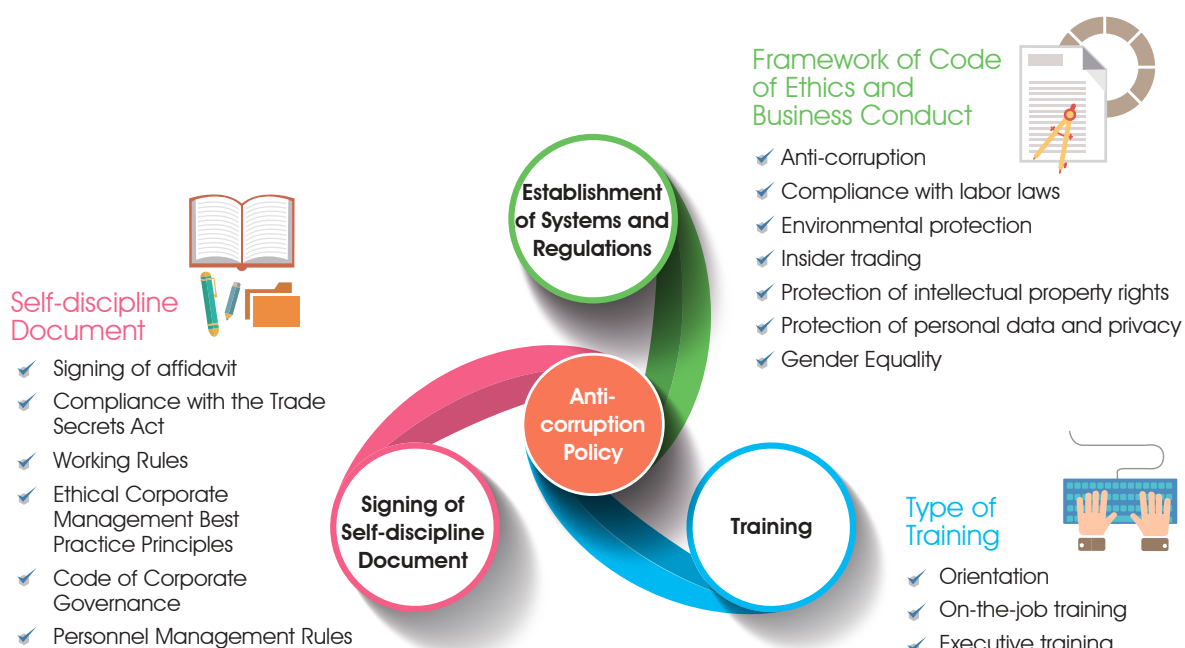
Employees working in sales, procurement, product warehousing, construction oversight, and budget divisions are required to regularly rotate their positions to prevent the occurrence of any malpractice.

We take strict actions toward those who violate the regulations. Improper behavior will not be tolerated, and even immediate supervisors are monitored and given warnings.



Establishment of Systems and Regulations

Under the framework of Code of Ethics and Business Conduct, FCFC has established separate systems or regulations for different regulatory areas, including anti-corruption, compliance with labor laws, environmental protection, insider trading, protection of intellectual property rights, protection of personal data and privacy, gender equality, etc. The aforementioned systems or regulations help implement the Company's Code of Ethics and Business Conduct and legal compliance. We adopt severe disciplinary measures against violators of Code of Ethics and Business Conduct, including termination of employment or business dealings, and take appropriate action.



Signing of Self-discipline Document

All employees of the Company are required to sign an affidavit on the first day of employment, including the willingness to abide by the Trade Secrets Act, guaranteeing that there will be no violation of intellectual property rights of computer software owners, never accepting any bribes and other illegitimate interests, or acting in violation of business opportunities, reputation, business or duties of the Company or customers. The Working Rules will be distributed to each employee, along with the Ethical Corporate Management Best Practice Principles, the Code of Corporate Governance and the Personnel Management Rules, all of which specify the policy of ethical corporate management and regulate unethical conduct.

For the positions dealing with manufacturers (e.g. procurement staff and contracting staff), it is necessary for them to sign the self-discipline convention and rotate on a regular basis to prevent the occurrence of any collusive tender offers (quotations), under-the-table operations or malpractice.

In addition, FCFC has established the Board and Management Ethics Policy. To offer, promise, request or accept any illegitimate interests directly or indirectly or to commit other acts that violate ethics, lawlessness or fiduciary duties is strictly forbidden to prevent any violation of good faith, such as malpractice, embezzlement, bribery, disclosure of secrets or misrepresentation.



Training

FCFC includes duty-related laws and regulations in the orientation, on-the-job training and executive training to strengthen the legal concept that employees should have. In 2017, we organized the course on anti-corruption regulations for sales representatives, procurement reviewers and supervisors. The government's legal body was invited to disseminate common corporate corruption cases and strengthen the sensitivity of case reviewers and supervisors to potential corruption. The Group Administration's Outsourcing Center and Procurement Department are responsible for the Company's outsourcing and procurement. The Group Administration also organizes online courses on anti-corruption regulations, including protection of confidential information, for all employees in the Procurement Department and the Outsourcing Center. Case study is also included to develop employees' correct work ethics and ability to discover abnormalities and risks.



Reporting Channel

Through the institutionalized "Violation Reporting Guidelines", all FCFC's employees are provided with an internal channel for reporting violations. Once an employee finds a violation within the Company that could pose a threat to personal or corporate equity or any employees trying to gain improper interests by utilizing their personal positions, he or she can fill out the "Violation Reporting Form" and report the case to the head of related department. When investigating a case, the Company and the investigators shall conduct the investigation and report in a fair and impartial manner, protect the complainant from retaliation, and keep confidential throughout the process. Failing to do so may be subject to punishment.

2.1.5 Operational and Financial Performance



Management Approach to Operational and Financial Performance

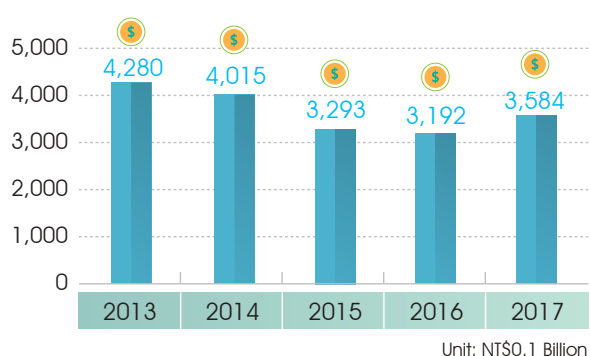
Pursuing profit is not the only goal of the Company, but it is fundamental. Only stable profitability can support the implementation of corporate social responsibility, promote inclusive and sustainable economic growth, and achieve SDG 8. With FPG's business philosophy of diligence, perseverance, frugality and trustworthiness, FCFC pursues rationalization in a practical and realistic way. Aiming at the sovereign good, FCFC continuously expands the production scale and diversifies business to improve business performance and reduce operational risks and ultimately achieve the goal of perpetual business operation. In addition, we deal with financial affairs in a stable manner without making highly leveraged or risky investments. We hedge the risk of fluctuations in interest rates or exchange rates by appropriate derivatives.



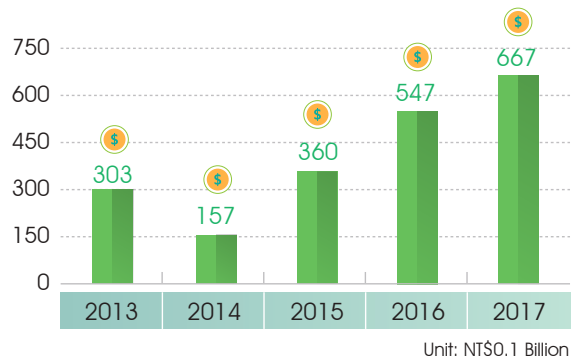
Financial Performance

In 2017, FCFC's plastics products benefited from the economic boom and the rise in international crude oil prices, which also strengthened the spreads; with reduced costs and extended high-value products, the Company's pre-tax profit reached NT\$66.7 billion (in the consolidated financial statements), which showed a significant growth compared with that in 2016. The Company's revenue, pre-tax profit, earnings per share and return on equity in the consolidated financial statements for 2017 are shown as follows:

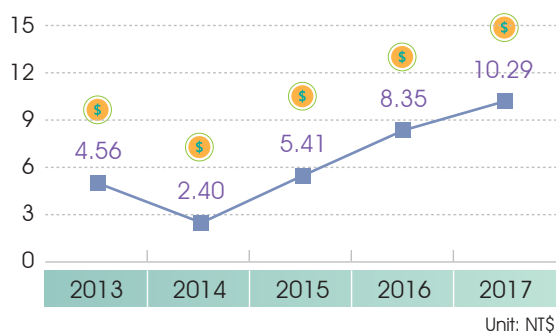
2013-2017 Operating Revenue



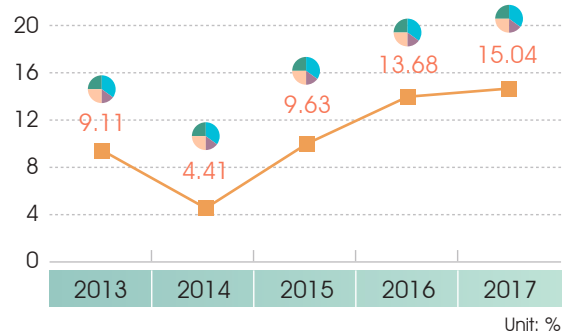
2013-2017 Pre-tax Profit



2013-2017 Earnings per Share



2013-2017 Return on Shareholders' Equity



It is incumbent upon companies to pay taxes according to the law. In 2017, the Company paid a profit-seeking enterprise income tax of NT\$3.65 billion and a tariff of NT\$260 million, and did not receive any relevant subsidies from government agencies.

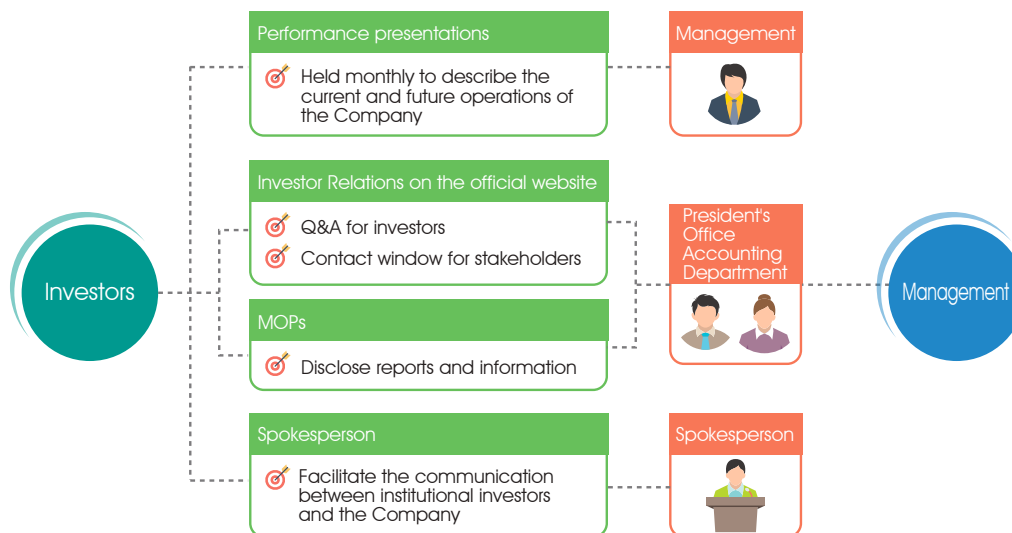


Investor Relations

The Finance Department of the Group Administration has established the Shareholder Services Department to serve as a communication channel between the Company and the shareholders. The Shareholder Services Department strives to elevate service standards, including developing a seal verification system, strengthening storage security and fulfilling stock dematerialization.

FCFC also maintains a section called Investor Relations on the official website to answer investors' inquiries. All statistics and relevant data are disclosed in EMOPS. In addition, a spokesperson is appointed to ensure an efficient communication channel with institutional investors. We also organize a performance presentation every month to directly communicate with institutional investors.

Communication with Investors



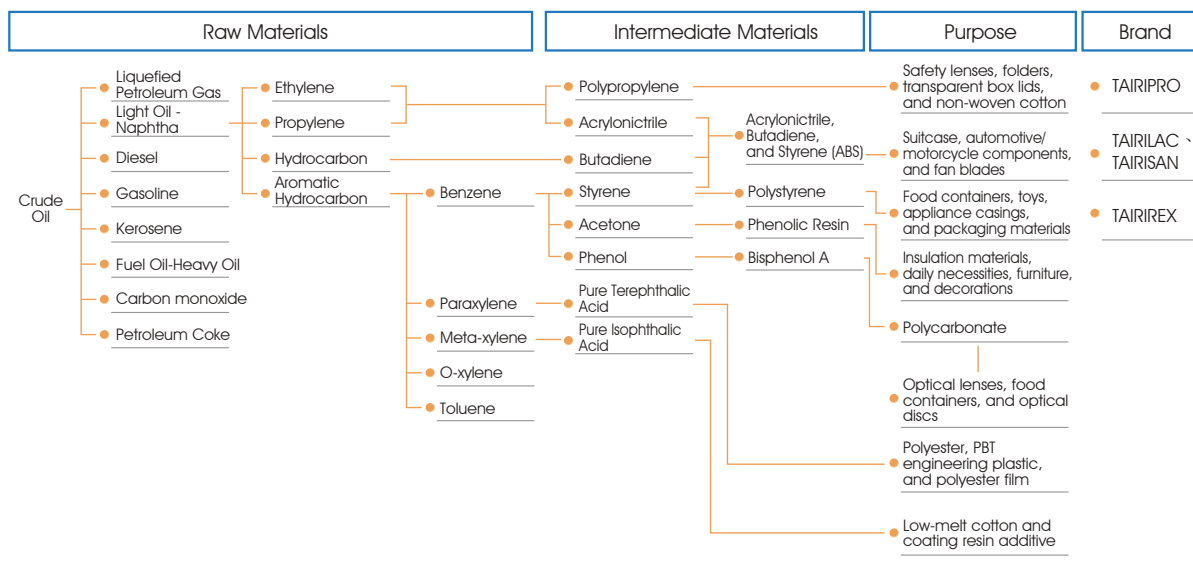
2.2 Product Innovation and Sustainability

In addition to the core petrochemical industry in which FCFC is involved, we have also expanded our market reach through vertically integrated production to reduce operating costs by expanding the production volume. We strive to meet customers' demand for raw materials and improve our market competitiveness. Currently, we have expanded our product line to include petrochemicals, plastics, fibers, and textiles, all of which have worked toward our integrated industrial strategy.

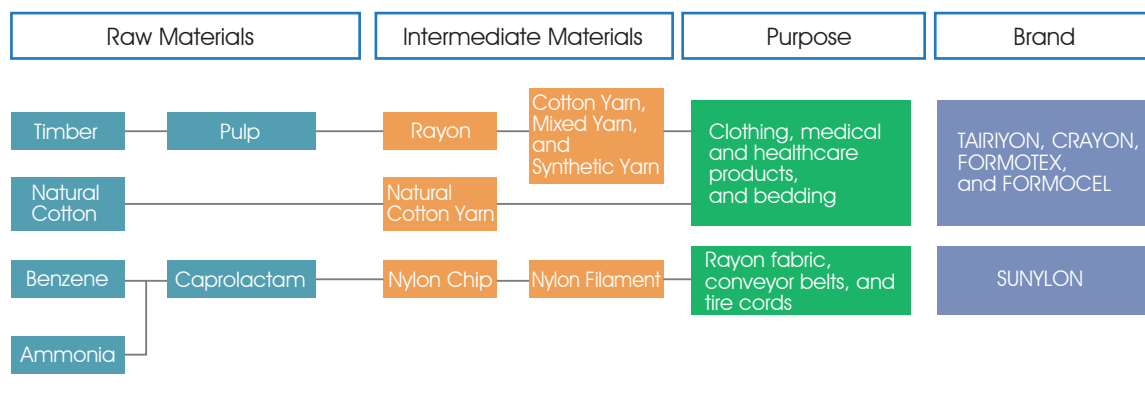
2.2.1 Upstream and Downstream Relationship of FCFC Products

Upstream and Downstream Relationship Diagram of FCFC Products

Petrochemical and Plastic Products



► Textile and Fiber Products



Use of Raw Materials

FCFC is a part of integrated plants of FPG. Some of the raw materials are supplied by FPG companies or the former part of the manufacturing process. The supply and demand are less affected by market fluctuations, which can stabilize the sources of raw materials and reduce the inventory. The consumption and sources of FCFC's major raw materials in 2017 are summarized in the following table:

Raw Material	Unit	Quantity	Main Supplier
Naphtha & Medium Naphtha	Ton	3,501,214	Imported and domestic suppliers
Pyrolysis Gasoline	Ton	1,203,071	Formosa Petrochemical Corp.
Xylene Mixture	Ton	863,981	Spot market
Benzene	Ton	1,544,918	Imported and domestic suppliers
p-Xylene	Ton	824,717	Imported and domestic suppliers
Propene	Ton	480,389	Formosa Petrochemical Corp.
Ethylene	Ton	408,889	Formosa Petrochemical Corp.
Acrylonitrile	Ton	86,120	Formosa Plastics Corp.
Butadiene	Ton	52,275	Formosa Petrochemical Corp.
Bisphenol A (BPA)	Ton	164,312	Nan Ya Plastics Crop.
Rubber	Ton	11,356	TSRC Corporation, Asahi Kasei Corporation, and JSR
Caprolactam	Ton	105,127	China Petrochemical Development Corporation, Royal DSM (Netherlands), and Sumitomo Group (Japan)
Pulp	Ton	135,278	Saiccor (South Africa) and NPC (Japan)
Slack Coal	Ton	2,090,274	Indonesia, Australia, and Russia



Product Brands

FCFC started up as a mass manufacturer of textile products. Later, business operations transformed from fiber and textile-oriented industries into petrochemical and plastic-oriented industries. Over the years, we have established our own brands. By integrating group manufacturing techniques, academic research, and medical trials, Formosa Biomedical Technology Corp. (our subsidiary) officially established the brand FORTE for skincare products in 2003. FORTE has many distributors nationwide and has become one of the most renowned skincare brands in Taiwan. Currently, our subsidiaries have the following brands:

Main Brands of FCFC's Subsidiaries

Company	Main Brand	Product	Usage
Formosa Biomedical Technology Corp.	FORTE	Skincare products	General products
	DR'S FORMULA	Detergents, skincare products, blankets and undergarments	General products
	Derma Formula	Cosmetic products	General products
	Formosa Plastics Corp.	Detergents	General products
	Forte	Cleaning products	General products
	TAIRY	Cleaning products	General products
	Shen-Yen	Cleaning products	General products
	MeDiPro	Medical devices and medical examination reagents	Medical products
	Formosa One Sure	Medical examination reagents	Medical products
	Formosa Biomedical Technology Corp.	Detergent, skincare products, medical examination reagents and healthcare food products	General products
	MD Formula	Healthcare food products	Domestic Consumables
	forte solution	Skincare products	Domestic Consumables
	DF	Skincare products	Domestic Consumables
Formosa Carpet Corp.	Biolead	Household detergents	Domestic Consumables
	ARTIST	Carpet sheets	Building materials
	FORMOSA CARPET ROLL	Full carpets	Building materials





2.2.2 Main Products

Production Capacity

To optimize the operations and competitiveness, FCFC has increased its production capacity to meet customers' needs. Of our production, 7 petrochemical and plastic products have capacities that rank among the top ten in the world:

Product Category	Item	Description	Key Value
Petrochemical Products	Aromatic Hydrocarbon (Aroma)	As an important upstream product of FCFC, aroma is used to produce key materials, such as benzene, toluene, OX (o-xylene), MX (Meta-xylene), and PX (Paraxylene). Benzene is integrally provided for FCFC to produce the remaining key intermediate products. With this horizontally integrated system across FPG companies, FCFC can improve the overall market competitiveness.	Production Capacity in Taiwan: 3.81 million tons Global Ranking: 7
	Styrene (SM)	FCFC produces styrene using self-produced benzene and FPCC-produced ethylene. Styrene is then used to produce plastic products, such as polystyrene (PS) and acrylonitrile, butadiene, and styrene (ABS), which are later delivered to plastic and chemical fiber industries for further processing to satisfy various industrial demands and horizontal integration.	Production Capacity in Taiwan: 1.32 million tons Global Ranking: 2
	Phenol	FCFC produces phenol and acetone using self-produced benzene and FPCC-produced propylene. Phenol is mainly used as a raw material by Nan Ya Plastics Corporation to produce BPA. FCFC then uses BPA to produce polycarbonate (PC), which is later sold to downstream optical, LED, and plastic processing industries to produce a variety of products. Acetone is mainly used as a raw material for methyl methacrylate and methyl isobutyl ketone.	Production Capacity in Taiwan: 0.44 million tons Overseas Production Capacity: 0.3 million tons Global Ranking: 3
	Acetone		Production Capacity in Taiwan: 0.27 million tons Overseas Production Capacity: 0.19 million tons

Product Category	Item	Description	Key Value
Petrochemical Products	Pure Terephthalic Acid (PTA)	FCFC produces pure terephthalic acid (PTA) using self-produced p-xylene (PX). PTA is mainly provided for textile industries and beverage industries to produce polyester fibers and plastic bottles, respectively. PTA is also used to produce polyester resins, such as ethylene terephthalate and butylene terephthalate.	Production Capacity in Taiwan: 1.7 million tons Overseas Production Capacity: 1.2 million tons Global Ranking: 7
	Pure Isophthalic Acid (PIA)	FCFC produces isophthalic acid (PIA) using self-produced m-xylene (MX). PIA is used to produce polyester resins, such as PET (bottle grade & membrane grade), alkyd resin, unsaturated polyester resin, allyl polyphthalate, dibutyl isophthalate and other high polymers and plasticizers. PIA is also used to produce photographic developers, coating, modifiers, and medicines.	Production Capacity in Taiwan: 0.2 million tons Asian Ranking: 2
	Acetate	Formosa BP Chemicals Corporation is a joint venture established by FCFC and British Petroleum (BP) with a 50:50 partnership. In general, it mainly produces acetic acid, which is later delivered to FCFC, Nan Ya Plastics Corporation, and Dairen Chemical Corp. to produce PTA, Butanediol (BDO), and vinyl acetate (VAM), respectively.	Production Capacity in Taiwan: 0.3 million tons
Plastic Products	Polystyrene (PS)	FCFC produces a variety of PS products using self-produced SM. The PS products are used to produce food containers, toys, appliance casings, and packaging materials.	Production Capacity in Taiwan: 0.32 million tons Overseas Production Capacity: 0.2 million tons Global Ranking: 5
	Acrylonitrile, Butadiene, and Styrene (ABS)	FCFC produces a variety of ABS resin products using self-produced SM, FPCC-produced butadiene, and FPC-produced acrylonitrile. The ABS resin products meet the needs of all aspects, from the general grade, extrusion grade to special purposes, such as high gloss, high flow, heat-resistant, flame-resistant, transparent, and electroplating grades.	Production Capacity in Taiwan: 0.41 million tons Overseas Production Capacity: 0.45 million tons Global Ranking: 3
	Polypropylene (PP)	FCFC produces PP using FPCC-produced propylene, including homopolymer and random, impact copolymer. PP is supplied to injection, extrusion, fiber, blowing, and vacuum forming industries to be widely used in home appliances, automobile parts, food packaging, toys, and consumer goods.	Production Capacity in Taiwan: 0.51 million tons Ranking in Taiwan: 1
	Polycarbonate (PC)	FCFC produces polycarbonate (PC) using Idemitsu's phosgene polymerization process. Featuring high physical strength and transparency, PC is supplied to injection, blowing, and extrusion industries to be widely used in home appliances, automotive lamps and components, food containers, instrument housings, outdoor sun visors, and optical components.	Production Capacity in Taiwan: 0.2 million tons Global Ranking: 7

Product Category	Item	Description	Key Value
Fiber & Textile Products	Rayon	FCFC purchases wood pulp to produce rayon with good water absorption and dyeing and a soft, comfortable texture. Rayon features special drapes zero-static and high biodegradability. It is applied to clothing fabrics, lining fabrics, plastic base fabrics, sanitary materials, and laundry-free materials.	Production Capacity in Taiwan: 79,000 tons Taiwan's Only Rayon Manufacturer
	Nylon Filament	FCFC purchases caprolactam to produce nylon chips. Nylon chips are then processed to produce nylon filaments, oriented yarn, tire cord yarn, and industrial yarn, which are used as raw materials to produce ski clothing, aerobic suits, umbrellas, stockings, vans, bags, and fishing nets.	Production Capacity in Taiwan: 89,000 tons Overseas Production Capacity: 36,000 tons Asian Ranking: 2
	Yarn	FCFC produces a variety of yarn using self-produced rayon, NPC-produced polyester cotton, and purchased natural cotton. Yarn is used as a raw material for woven fabric.	Production Capacity in Taiwan: 11,000 tons Overseas Production Capacity: 69,000 tons

2.2.3 Recycling of Byproducts

To promote circular economy, the Company recycles exhaust and waste produced during the manufacturing process in addition to achieving important results in energy and water conservation, thereby reducing production costs and promoting sustainable use of resources. The main results achieved in 2017 are as follows:

- 🛒 In 2017, the aromatic hydrocarbon plant at FCFC's 1st Petrochemical Division generated crude hydrogen as a byproduct of its reforming process. These byproducts were passed through hydrogen purifiers to produce 43,307 tons of hydrogen, which were later delivered to the PTA plant in the same industrial complex and Formosa Petrochemical Corporation's oil refinery plant for further application. Through the trans-alkylation processing reaction and hydridealkylation reaction, the remaining hydrocarbons that contain C4- were transformed into hydrocarbons that contained C1~C3-. All of these exhaust gases (524,550 tons) were introduced into the gas burning system and applied as burning fuels for in-plant stoves. Burning gas from this source is sufficient, so no additional heavy crude oil or LPG is necessary.
- 🛒 In 2015, the crude hydrogen refrigeration system and LPG purification system were established to condense the heavy components in crude hydrogen generated from the reformation process. The recycled liquefied petroleum gases (LPG) were then purified and improved in July. In 2017, 15,300 tons of recycled LPG was added to the original recycled volume, all of which were delivered to SM plant in the same industrial complex and to Formosa Petrochemical Corporation's oil refining plant to reduce fuel consumption.

- 🛒 In 2017, FCFC's Plastic Division recycled undersized polypropylene rubber generated from the polypropylene (PP) plant, oversized powder blocks generated from the polycarbonate resin (PC) plant and oversized SAN rubber generated from the PABS plant and later delivered them to the plants in the same industrial complex to reduce the amount of off-grades produced by 300 tons per year. A tail gas pumping windmill was added at the PP plant to send exhaust generated from equipment maintenance and filter cleaning to the system to recycle propylene, and then send the remaining low-concentration exhaust to the incinerator for treatment, which can reduce exhaust originally discharged to the flare tower by 390,000 Nm³ per year.
- 🛒 In 2017, FCFC's Rayon Division generated mirabilite liquid as a byproduct from its spinning and coagulation process. Through the vacuum crystallization process, the mirabilite liquid was recycled and transformed into 45,648 tons of dry mirabilite particles to reduce wastewater generation.
- 🛒 In 2017, FCFC's Nylon Division generated extracted water (remaining parts that were not thoroughly polymerized) from its polymerization and spinning process and recycled all extracted water generated and transformed it into 8,400 tons of Caprolactam (CPL), which was later applied to the polymerization reaction. Nylon chunks and nylon fibers (particles) were reprocessed by downstream customers into 2,600 tons of nylon chips to reduce raw material consumption.

2.2.4 Product Development and Innovation

FCFC has been vertically integrated, which requires our employees to be well trained and equipped with full knowledge and experience in each production process, from raw materials to finished goods. Through inter-department cooperation and R&D management, R&D resources have been fully integrated and utilized to develop innovative ideas so that products can be developed to meet market demands.



Establishing a R&D Culture of Professional Technical Services

To enhance the R&D atmosphere and product value, a technical service-oriented R&D culture has been developed. Each R&D employee has realized that materials with high performance, products with multiple functions, and processes with high-level controls are important factors for scientific development. They not only contribute to the extension of an end product's life and the improvement of material processing performance, thus ensuring industrial, customer, and environmental safety, but also expand the functionality of general, inexpensive materials. Our manufacturing processes use the most advanced and eco-friendly production systems so that we can produce a variety of products with different functions to meet customers' demands; furthermore, to help customers and consumers identify a product's quality, we send each product to a third-party accreditation organization for certification to ensure that it meets international specifications and quality standards.

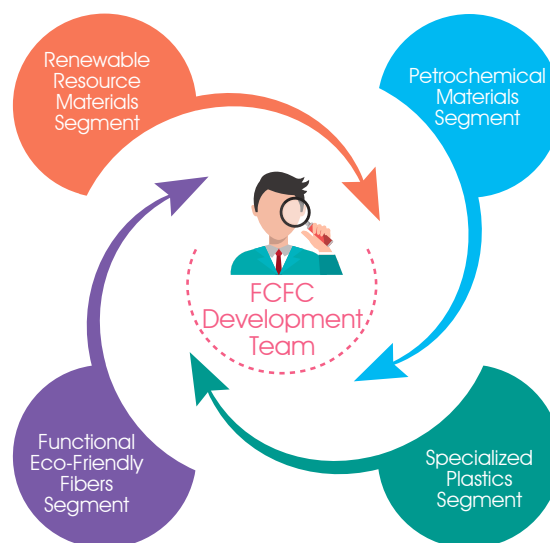


Realizing Vertical Integration Management

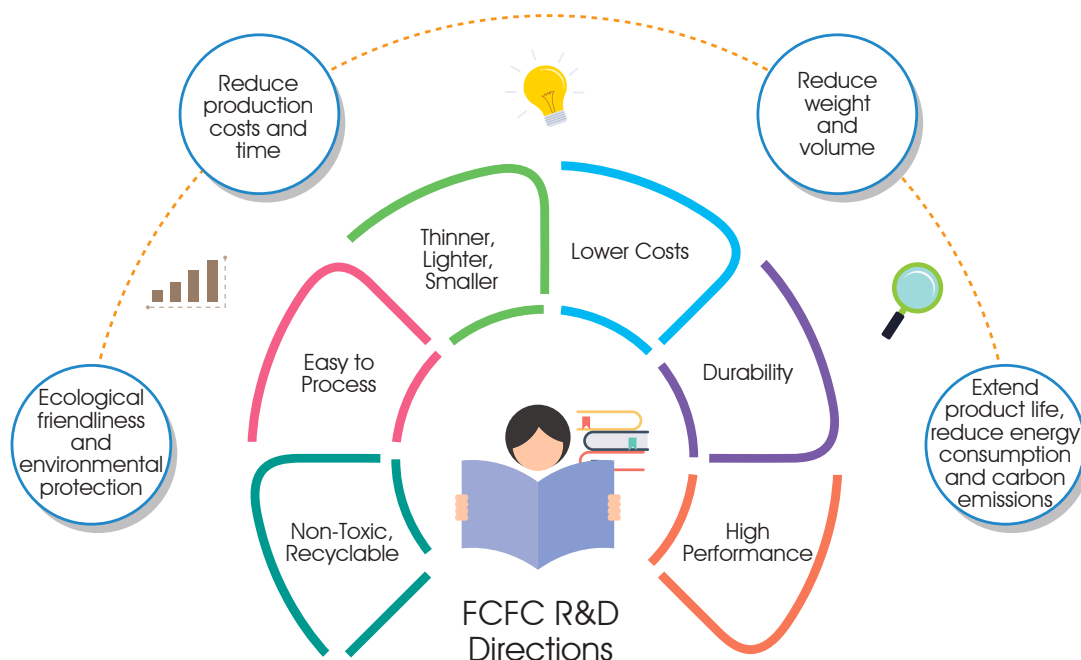
To provide customers a variety of eco-friendly products with superior quality, FCFC has invited experts from the government and academic and research institutes to give speeches on a regular basis. And four cross-departmental industrial development teams have been formed by the President's Office to integrate resources, study product techniques, analyze industrial conditions, and make comparisons with other industries so that vertical integration can be strengthened to facilitate the comprehensive and horizontal development of all products.

Four industrial development teams have been operated since September 2002. Regular meetings are held to review the latest trends in product development, share research ideas, design research items, and assign different tasks to appropriate departments. As a result, we have been able to develop many eco-friendly products and have evaluated several major investment opportunities in new products and businesses. In the future, we will continue to develop R&D plans for products with high performance, ease of processing, durability, recyclability without toxins, decreased costs, lightness, and compactness; at the same time, we will strengthen our overall R&D performance to aid sustainable growth.

4 Industrial Development Teams



Guidelines for FCFC Product Development and Innovation



Encouraging Development and Innovation by Honoring Outstanding Teams

To encourage development and innovation, FPG has established a variety of promotional measures that are aimed at patent proposal, certified patents, key products, and patents addressed toward significant benefits; furthermore, FPG invites each department to participate in the annual FPG Technology Application Seminar, where departments with the most innovative ideas are chosen to enter a competition in which they are awarded for outstanding R&D outcomes. FCFC has assigned employees to participate in the competition, where they have won prizes.



The 15th FPG Technology Application Seminar



Innovative Products

To increase the added value of products, FCFC has participated in the High-Value Petrochemical Promotion Program sponsored by the Ministry of Economic Affairs and signed a cooperation agreement with the Industrial Technology Research Institute in 2011 to strive for a high-value petrochemical industry. Innovative products developed by FCFC in 2017 are shown in the following table:

No.	Innovative Product	Description
1	ABS ANC160 (halogen; flame retardant)	(MW=1067) A flame retardant ABS market is developed.
2	PC AC385X V0 (transparent; flame retardant) 3.0mm	Applied to the chassis of products and LED lights
3	Anti-stress corrosion cracking HIPS	Applied to refrigerator sheets
4	Medical grade; anti γ -ray	Medical material markets for mainland China, Southeast Asia, Europe and America are developed.
5	ABS AF3537 & AF3535- K (high currency)	Applied as a consumable of large printers
6	Rayon Cotton (collagen)	1.25D collagen cotton is mass-produced to develop cool and comfortable women's clothes.
7	Formotex (cool material)	1.25D and 1.5D Formotex are mass-produced to expand the cool yarn and fabric market.
8	Nylon Fiber (recycled)	Fishing nets and offal are recycled to reproduce CPL.
9	N/C (bath dyeing)	Nylon materials that can be dyed at one time like cotton and wool are developed to reduce multiple dyeing of different materials and wastewater generated from dyeing.
10	Nylon Fiber (for dyeing)	Dyeing particles with stable viscosity and amino above 85 are developed.
11	Cool Nylon Fiber (for dyeing)	Yarn that can be dyed under a condition of Amino 49 is developed. 90 °C

No.	Innovative Product	Description
12	FDY 10D ↓ (denim fiber)	5D and 7D yarn and cloth made from these materials are highly commercialized.
13	Color Net Fiber (for industrial use)	Color net fiber is produced for multi-color ropes and canvas.
14	Formotex (1%) Coffee/E 60/40 40/1 Yarn	Anti-bacteria and anti-pilling yarn is developed and sold to the Japanese market.
15	Formotex (cool) 100% 40/1 Compact Yarn	Cool yarn is developed for outdoor purposes.
16	Flame Retardant Cloth (for navy costume)	Applied as a raw material for making navy costume

2.2.5 Product Safety and Health

FCFC cares about customers' safety and health. When developing and improving products, we evaluate the extent of impact that each stage imposes on customers' safety and health. Constant improvements are also made in the manufacturing process, such as manufacturing waste reduction and green product development, to create eco-friendly and green-powered products. Details are as follows:

- ☛ We have replaced traditional wooden pallets with eco-friendly plastic pallets in the manufacturing department and the automatic warehouse.
- ☛ We have adopted non-woven fabric made from pulp materials that pass the SGS Chain-of-Custody and meet FSC's (Forest Stewardship Council) requirements to prevent deforestation.
- ☛ In 2017, FCFC worked with Environmentally Biodegradable Polymer Association to promote the certification of compostable rayon cotton. It is expected that the biodegradable compost certificate will be obtained by June 2018 to reduce the environmental impact of rayon cotton products.
- ☛ FCFC has implemented chemicals registration, evaluation and authorization in line with the EU's REACH regulation and has completed the pre-registration for 16 products. Among them, 11 products have been exported to the EU with a quantity of more than 1 ton and have been officially registered within the time limit; in addition, in response to the REACH regulation implemented in Korea, it is expected to complete the registration of SM and Phenol products by June 30, 2018.
- ☛ Currently, we provide the following eco-friendly and customer-friendly products and will continue to develop green products that have environmentally and socially low impacts in the future:

Product	Contribution to Society and Consumers
Electro-plating Grade ABS (for automobiles)	Applicable to automobile surfaces, wheel covers, and water storage covers, with such specific features as sturdiness, light-weight, electroplating, and recyclable
Light-dispersing Grade PC (for LED lights)	Specific features include transparency, light dispersion, UV resistance, heat resistance, flame resistance (UL94V-2), and RoHS-certified.
GPS (for light diffuser plate)	Applicable to LVD-TV & LED-TV light diffuser boards, with such specific features as transparency, heat resistance, size stability, and moisture resistance

Product	Contribution to Society and Consumers
PP (for automobile interior/exterior design)	Replace hard plastic with recyclable green material; replace metal and buffer in automobile bumper with plastic to reduce overall automobile weight and steel consumption
PP (for household appliances, corrugated boards, and hot water pipelines)	Save wood materials for making paper; replace hard plastic and steel tubes used in architecture
Medical Grade PP	Replace PC with PP in manufacturing medical appliances and baby utensils to prevent patients and babies from being exposed to endocrine disrupting substances
Impact-resistant PP	Impact-resistant PP can be used to manufacture containers that require impact resistance, such as luggage, to reduce the frequency of replacement and waste.
PC/ABS Alloys	PC/ABS alloys are used to manufacture electronic products, such as notebooks/mobile phones, which can improve the impact resistance of mobile electronic device casings and reduce the frequency of replacement.
Coffee Yarn	Coffee yarn is composed of coffee particles that can form fibers of different shapes. The product comes with several special features, such as being easy to dry, UV resistance, and foul odor control.
Cool Yarn	By adding cooling material, heat conductive material, fiber water content, and heat dispersion material, FCFC cool yarn provides a cool sensation and great sustainability. Through polymerization, cool particles are congregated together to form cool yarn with relatively higher production efficiency.



Light-dispersing Grade PC (for LED lights) - Automobile Lampshade



PP (for Automobile Exterior Design) - Rearview Mirror

2.2.6 Participation in Third-Party Associations

FCFC actively participates in several external associations and groups of related industries. Through our communication and interaction with these associations and jointly holding relevant seminars and international conferences, we have the opportunity to share and acquire knowledge of various market trends and technical information. This allows FCFC to contribute to numerous industries and provide the government pertinent experience and advice. In 2017, association membership fees and related sponsorship amounted to NT\$21,845,000.

Petrochemicals and plastics sector:

We have participated in a total of 7 petrochemical associations, namely Petrochemical Industry Association of Taiwan (where the Vice Chairman Fu-Yuan Hung serves as Executive Director), Taiwan Synthetic Resins Manufacturers Association (where the Chairman Wen-Yuan Wong serves as Executive Director after the reelection on May 18, 2018), Acid and Alkali Industry Association of Taiwan, Taiwan Cogeneration Association, Pressure Vessel Association, Chinese Association for Energy Economics, and Taiwan Responsible Care Association.

Textile fiber sector:

We have participated in a total of 4 associations, namely Taiwan Textile Federation (where the Chairman Wen-Yuan Wong serves as Honorary Chairman), Taiwan Man-Made Fiber Industries Association (where the Chairman Wen-Yuan Wong serves as Executive Director) and the Taiwan Spinner's Association (where the Chairman Wen-Yuan Wong serves as Executive Director), and Taiwan Weaving Industry Association.

Others:

We have participated in 10 other associations, namely Chinese National Federation of Industries (where the Chairman Wen-Yuan Wong serves as Chairman after the reelection on April 17, 2018), Chinese National Association of Industry and Commerce, Taiwan, Industrial Safety and Health Association of the R.O.C., Cross-Strait CEO Summit (where the Chairman Wen-Yuan Wong serves as Executive Director), Taiwan Safety Council, Taiwan Association of Energy Service Companies, Taiwan Boiler Association, Chinese Enterprise Accounting Association, Taipei City CPA Association, and Huizhi Club.

2.3 Customer Service and Supply Chain

2.3.1 Customer Relations

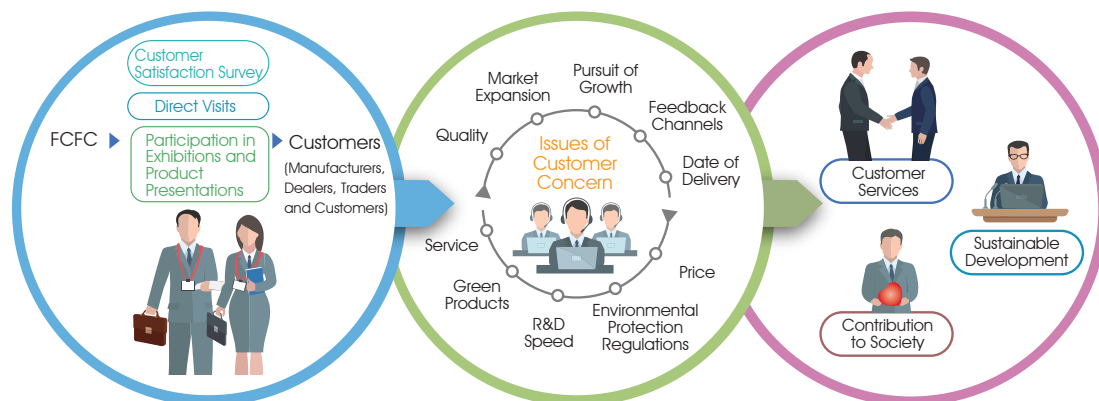
"Customers First" is our core value and the basis of our business operations. We strive to build long-term customer relations based on mutual respect and benefits. Sales representatives serve as a communication bridge between customers and the Company. To FCFC, customer service is a job not only for sales representatives, but for everyone in the Company. We are committed to customer satisfaction and continuous improvement. We value comments from customers very much and strongly believe that the performance of our customers reflects upon the Company. We are committed to fostering long-term, trusting partnerships with all of our customers.



Model of Positive Interaction

FCFC's development is highly interrelated with that of customers, and we strive to build a cooperative partnership of mutual benefit and trust. To achieve this, we visit our customers on a regular basis to discuss the development of existing and future products. We also take the initiative to hold dealer conventions or participate in major trade shows (e.g. Intertextile Shanghai Apparel Fabrics) every year to stay up to date on the latest market trends and to receive direct feedback from customers for operations and future improvements.

Stakeholder Engagement and Feedback Mechanism



Disclosure of Product Information

The "Products" section is set up on the official website for customers to check out product features, functions, and specifications.



Responses to Customer Feedback

Customer relationship management is one of the key factors that affect a company's success. We value and appreciate feedback from customers and have established official channels so that they can give suggestions and voice their complaints, exchange or return a product, and apply for reimbursement. Customers can fill in the Customer Feedback Form to share their comments and suggestions, while sales representatives have to fill in the Customer Complaint Form when dealing with a customer complaint, which is then processed into the computerized management system to keep track of progress after the accountability and improvement plans are confirmed by the head of the responsible department. Another method for customers to make inquiries or comments is to contact the telephone number or e-mail address listed on the official website. Comments and suggestions are prioritized according to the level of importance and timeliness and forwarded to the relevant departments to ensure that we meet all customers' needs.

Responses to Customer Feedback



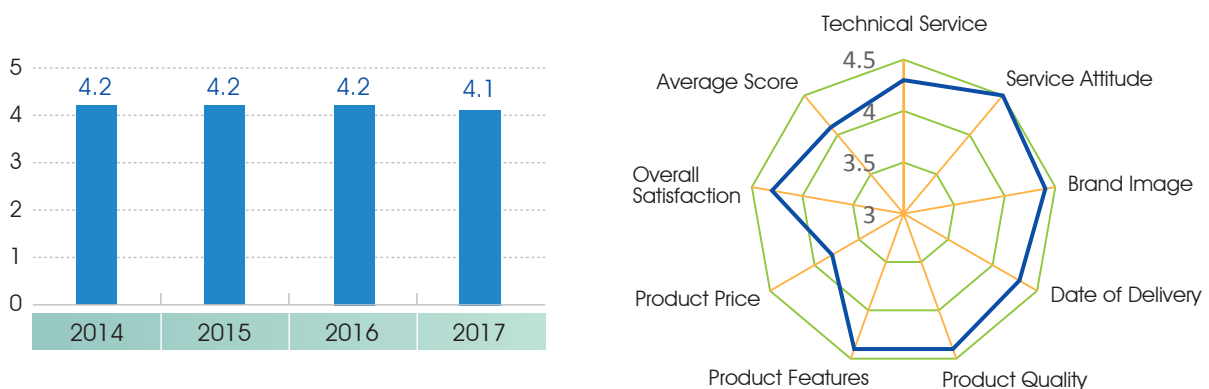
2.3.2 Customer Satisfaction Survey

To raise customer satisfaction, we have collected customer opinions and feedback on our products and services to improve internal business operations; furthermore, in compliance with ISO9001, we conduct at least one customer satisfaction survey for both domestic and foreign customers every year. The survey is composed of eight sections. Adjustments can be made to the survey depending on the issues of customer concern.



According to the result of the customer satisfaction survey in 2017, the overall performance of the Company was beyond satisfaction; however, among these reviews, the product price failed to meet customers' expectations due to the continuous increase in crude oil prices, which forced us to raise product prices in response to costs. We have included each of our customer's suggestion in our operating policies.

In 2017, the customer satisfaction averaged 4.1 points (out of 5).

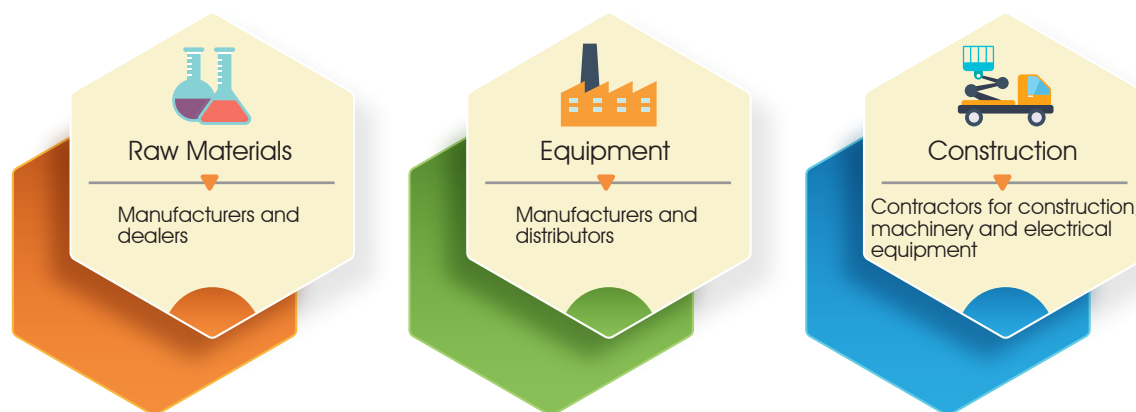


2.3.3 Legal Compliance and Customer Privacy

All of our manufacturing and sales comply with the relevant regulations. In addition to the OHSAS 18001, ISO14001, and TOSHMS certifications that have been obtained by all of our plants, we have also established the Regulations Governing Personal Data regulations and have requested that each related department lists them as one of its voluntary inspection items. Employee and customer information will only be provided for the authorized personnel; otherwise, employees are required to sign the application form for collecting, processing and using personal information and ensure that such information is used for business purposes. Relevant procedures for assuring legal compliance will be strictly examined. Statistics indicate that no case was concerned with privacy infringement in 2017.

2.3.4 Suppliers and Contractors

FCFC provides online suppliers and contractors the Formosa Technology E-Market Place to perform multiple operational functions, including inquiry, quote, bargain, order, delivery, and payment; furthermore, contractor briefings are periodically held to reinforce communication between both parties.



All of the Company's operating activities and investment agreements are in accordance with national laws and regulations without separate human rights clauses. The contractual agreements with suppliers, contractors and other business partners are in accordance with national human rights regulations without separate human rights clauses. Materials or projects are mainly purchased from or contracted to local manufacturers. If local manufacturers are unavailable, the procurement or tender will then be open to foreign manufacturers. In 2017, the local procurement ratio was 73%, an increase of 8% from 2016.

Since January 2009, FPG has cooperated with Kerry TJ Logistic Co., LTD to reduce CO2 emissions from delivery vehicles through the Supplier Collaboration E-System. The system provides online shipment management to help suppliers improve the efficiency of their storage and delivery. Since March 2009, several briefings have been organized in different regions for suppliers to have better understanding of online shipment management. According to the statistics, 97% of suppliers complied with the system in 2017.

In addition, traditional invoices have been replaced with e-invoices to reduce costs and increase management efficiency. Thus far, 81% of suppliers have used e-invoices, which has significantly reduced time, costs, and paper consumption for both parties.

2.3.5 Supplier Management



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 test. Should there be a delay in delivery, inferior quality control, or a violation of occupational safety, the suppliers are required to undergo the process of re-qualification. We maintain long-term business relationships with those that meet our expectations.

FCFC requires all suppliers to be certified to RoHS, ISO, and national standards based on the nature of materials, and all goods must be labeled with appropriate warning labels; furthermore, we require all suppliers to use recycled containers and prioritize products from organizations that employ the physically or mentally disabled and have non-radioactive certificates. We ask that our suppliers strictly adhere to these regulations as soon as they receive our issued price inquires and orders. For our corporate sustainability, we address not only our concerns regarding fair trade but also the issues of environmental protection, occupational safety, and human rights. We reject those suppliers whose performance fails to meet these requirements.



Contractor Classification Management System

To reinforce safety management, control the quality of contractors, improve contractors' occupational safety standards, and prevent their employees from injuries, FCFC has implemented the classification management system.

This system categorizes our contractors into three classes, namely A, B and C, according to their proficiency in facility environment, construction site, engineering machinery, safety management, technical capability, and business performance. For project contractors who demonstrate abnormalities, such as poor construction quality, schedule delays, mismanagement, bidding with a borrowed license, and subcontracting without notice, we will require management improvements or cease future dealings.

To prevent contractors from hiring child labor or forced labor, FCFC also establishes contract agreements based on national human rights regulations. Our contractors are required to follow the regulations governing labor and occupational safety and health; furthermore, our contract notice clearly states that only labor aged 16 years or above can be hired. In 2017, no incident related to child labor and forced labor occurred within the contractors.

We also require contractors to include the cost of health and safety management in their budgets, and mandatory safety and health related examinations should be detailed and listed on their contracts. The cost of safety and health management will automatically be included in the budget for each quotation, which prevents suppliers from accidentally excluding safety and health cost. As to inquiries for public bidding, we ensure that the final bidding price for occupational safety and health management is no less than the budgeted amount to prevent contractors from not fulfilling occupational safety and health management.

2.3.6 Green Procurement

The procurement of eco-friendly products can reduce and prevent environmental pollution and its impact on our planet. Since 2007, the Environmental Protection Administration has strongly promoted the green procurement policy. We place top priority on products with green marks (renewable materials, recyclability, low pollution, or energy conservation); furthermore, Type II environmentally preferable or other products with similar effects (energy marks, water labels, and energy stars) are also preferred. The 15 primary eco-friendly products include toner cartridge and fluorescent lamps. By strictly adhering to government policies, FCFC has successively received the Best Participation in Green Procurement from the local government. Statistics show that the total amount spent on green procurement reached NT\$31.96 million in 2017.

2.4 Description of Material Economic Issues

Investments in mainland China and the U.S.

- 🌐 Ningbo, China: To expand high-value investments, FCFC invested about US\$260 million in building an annual capacity of 200,000 tons of PIA and an annual capacity of 135,000 tons of MX. FCFC also invested about US\$100 million to expand the capacity of Phenol from 300,000 tons to 400,000 tons. These two expansion projects are currently ongoing. It is expected that they will be put into production in the second half of 2019.
- 🌐 Louisiana, the U.S.: Aiming at the business opportunity in shale gas, FCFC invested together with Formosa Petrochemical Corp. and Nan Ya Plastics Corp. about US\$9.4 billion in ethylene, propylene, PE (polyethylene), PP and EG (ethylene glycol) production in Louisiana, the U.S. The construction is currently under the environmental impact assessment and is expected to commence as early as 2020. The first phase of the construction is expected to be put into production in 2024.

Resignation of Corporate Director Chang Gung Memorial Hospital

- 🌐 On December 7, 2017, Chang Gung Memorial Hospital resigned as the corporate director of Formosa Plastics Corp., FCFC and Formosa Petrochemical Corp. to show that it did not intervene in the business operations of FPG and that it was not the holding company of FPG. Chang Gung Memorial Hospital stated that it will no longer appoint a corporate director and that it will not exercise the right to vote in the election of directors and supervisors. The Company will no longer re-elect the directors until the convention of 2018 shareholders' meeting. The vacancy will be filled in by another corporate representative or natural person.

3

Environmental Sustainability

Upholding FPG's safety, health and environmental (SHE) policy, FCFC has devoted its efforts to environmental protection and community safety. To fulfill our commitment to environmental sustainability, we also encourage our employees to sharpen their professional knowledge and always take SHE into consideration before making any business decisions.

3.1 Safety, Health and Environmental Management Approach

It is our core belief that industrial development and environmental protection are equally important. It is our social responsibility to provide our customers products that are safe to use, while protecting the safety, health, and well-being of our employees, contractors, operations, and neighboring communities. By accepting this obligation, we can make FPG more competitive.

All employees must have the proper professional knowledge to perform their duties. With each decision they make, they should consider the potential impact on the overall environment, health and safety. Every employee must have the fullest understanding of the policies/procedures that govern their duties and follow them. When resolving problems, they must inquiry into the root of the matter and make continuous improvements to keep up with the best industry practices.

Ensuring the safety of our colleagues, neighbors, and ourselves as well as safeguarding our environment and corporate assets is not only our individual responsibility but also a collective one in pursuit of perpetual business operations.



3.1.1 Organization and Strategy of Safety, Health and Environment



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

To reinforce SHE management and perpetual business operations, the Safety & Hygiene Management Department is established under the President's Office to integrate SHE policies, make necessary amendments to related regulations and put such regulations into practice. And safety & hygiene management offices have also been established at each plant to promote SHE activities. A SHE association meeting is held once a month and a Safety and Health Committee meeting is held at each plant quarterly, in which executives, plant managers, plant directors, 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. Of our plants located in Mailiao, Xingang and Longde, 20 production plants have successfully passed ISO 14001 (EMS), OHSAS 18001 and TOSHMS certifications to meet the SHE practices and international standards.



Strategies and Actions for Environmental Protection

- 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) beginning at the plant design stage.
- We care about the quality of air, soil, groundwater, ocean and public health in nearby areas by strictly controlling the quality of water resources and consumption of energy and performing constant reviews of items that need improvement.
- We aim at the sovereign good in promoting the improved operations of environmental protection and set the yearly goals, which enables us to measure the progress and quality of our operations. We reward the plants that achieve excellence in their performance and help those that fall behind in their goals to improve. Doing so strengthens our employees' sense of participation and achievement.

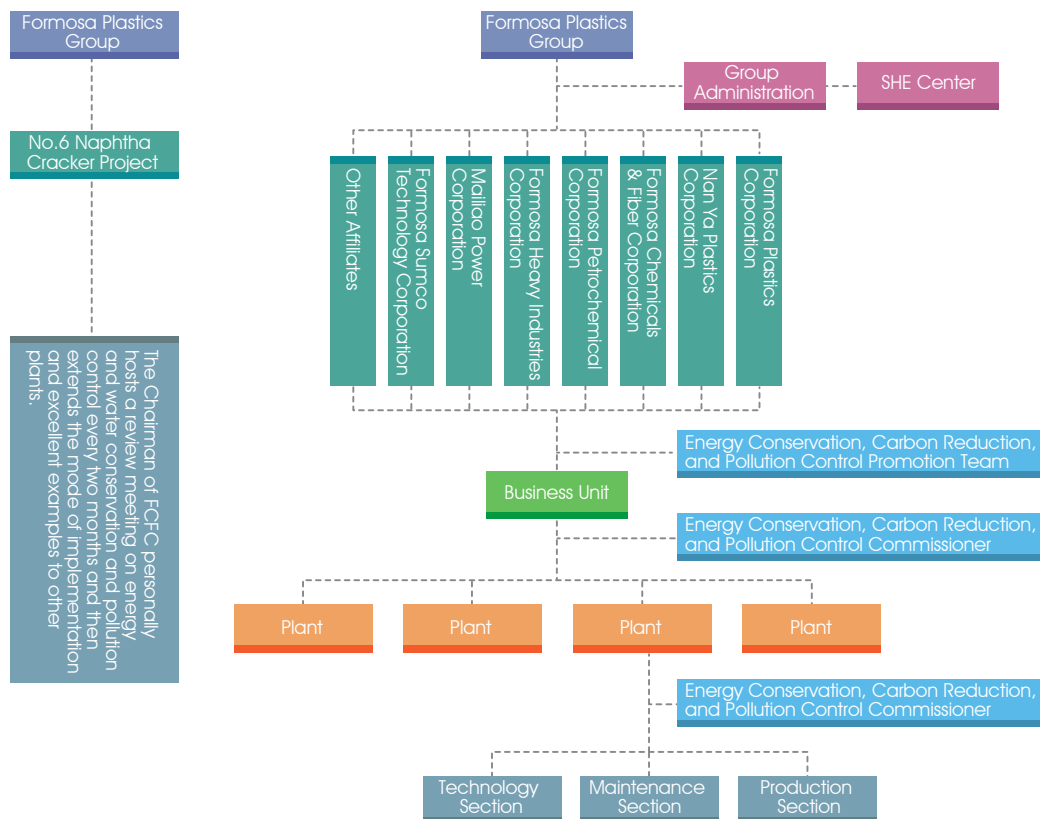
3.1.2 Energy Conservation, Carbon Reduction and Pollution Control Organization



Energy Conservation, Carbon Reduction and Pollution Control Organization

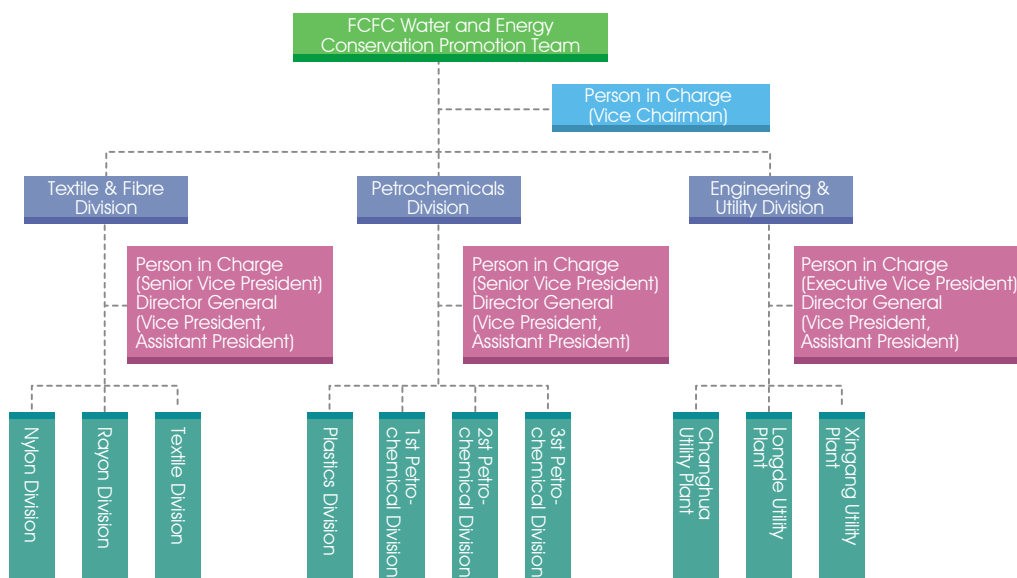
In response to the issues of water conservation and carbon reduction in recent years, FPG has integrated its corporate resources to establish the Energy Conservation, Carbon Reduction and Pollution Control Organization, with FCFC's Vice Chairman Fu-Yuan Hung designated as the convener to promote water conservation and pollution control across all FPG companies. Since 2008, illumination conservation, green products, green procurement, office environmental protection, recycling and green buildings had also been incorporated into the scope of environment protection.

Energy Conservation, Carbon Reduction and Pollution Control Organizational Chart



To put water and energy conservation into practice, FCFC's Vice Chairman has undertaken the post of a convener that is responsible for designating assistant managers to promote water and energy conservation at Rayon Division, Nylon Division, Textile Division, Petrochemicals Division, and Engineering & Utility Division. A water and energy conservation review meeting is held each month. The Water and Energy Conservation Organization and its responsibility are shown below.

Water and Energy Conservation Organizational Chart

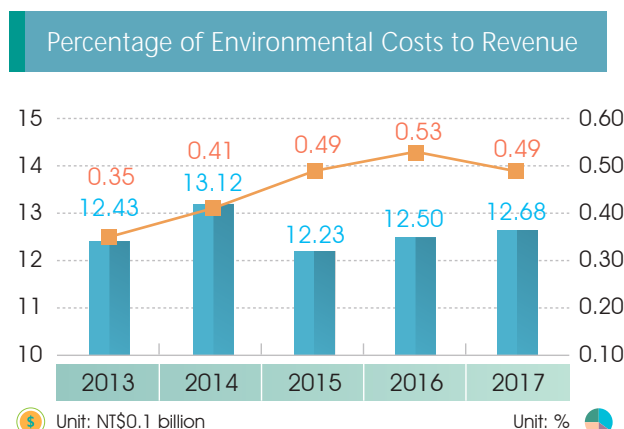


We achieve the goals of energy conservation and carbon reduction through projects, betterment, regular symposiums, and other counseling programs. In 2017, FCFC purchased 3 million kWh of green power to support the government's policy and fulfill environmental sustainability and corporate social responsibility.

3.1.3 Environmental Cost-benefit Analysis

FPG, which FCFC is a part of, is the first in Taiwan to include environmental benefit information in the environmental accounting system, which demonstrates its determination to fulfill the responsibility for environmental protection. According to the Environmental Protection Administration, Executive Yuan, the definition of environmental accounting can be further classified into environmental costs and environmental benefits. Environmental costs include expenses and subsequent investments in reducing or preventing the environmental impact caused by business operations and in improving the use of resources. An environmental benefit measures the reduction of the environmental impact or the environmental pollution brought by environmental protection activities.

In October 2008, FCFC introduced an environmental accounting policy. According to the statistics, the expenses devoted to environmental protection reached 1.268 billion in 2017. To generate the greatest benefit from these expenses, FCFC began implementing an environmental benefit and cost accounting policy in October 2009. With the introduction of the environmental accounting system, we can monitor environmental expenses and estimate environmental benefits and make such information available to our stakeholders. The environmental accounting system mentioned above can clearly record investments, maintenance, R&D, and regulatory fees for environmental activities so that the business decisions can be analyzed from the perspective of environmental protection and competitiveness can be further improved.



FCFC Environmental Costs in 2017

Unit: NT\$ million

Type	Item	Sum
Environmental Costs	Operating Costs	779
	Costs Associated with Suppliers and Customers	33
	Management Costs	289
	Social Event Costs	11
	Fees and Energy Taxes	156
	Total	1,268
Revenue in 2017		259,570

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.

Note 2: The environmental costs in 2017 include depreciation expenses of fixed assets.

Note 3: The source of revenue in 2017 is from the parent-only financial statements.

3.2 Water Resource Use and Management



Water Resource Use and Management Approach



For us, who mainly produce and sell plasticized products, the use and management of water resources are especially important in comparison with other industries. Therefore, we attach great importance to the stability of water sources and water conservation. In order to cope with the impact of extreme weather conditions that cause water shortage, the Water and Energy Conservation Organization has promoted measures such as water reduction processes, rainwater collection and reuse, water conservation management, and lowering evaporation losses to reduce water demand and aims to reduce 2% of unit water consumption each year.

3.2.1 Water Resource Use



Water Sources and Emissions

The water sources of each of FCFC's plants (Changhua, Mailiao, Longde, and Xingang) are mainly surface water from rivers, lakes and reservoirs. The Longde Plant has been granted the right to use groundwater by Yilan County Government and uses a small amount of groundwater. Water used and emitted in 2017 is as follows:

Unit: M³/year

Type		Plant				Total
		Longde	Changhua	Mailiao	Xingang	
Water Consumption	Surface Water (A)	13,854,670	420,480	13,967,455	7,287,590	35,530,195
	Groundwater (B)	1,111,060	-	-	-	1,111,060
	Total Water Consumption (C)=(A)+(B)	14,965,730	420,480	13,967,455	7,287,590	35,641,255
Emissions	Wastewater Emissions (on land)	10,869,969	291,545	-	2,551,261	13,712,775
	Wastewater Emissions (at sea)	-	-	5,864,184	-	5,864,184



Use of Water from the Jiji Weir

It's said that the Mailiao Industrial Complex's use of water from the Jiji Weir affects agricultural and domestic water. Based on the Monthly Report of Industrial and Public Water Consumption from Agricultural Water Consumption in the Jiji Weir provided by the Industrial Development Bureau, Ministry of Economic Affairs, the Jiji Weir has provided 247,589 to 622,348 ten thousand tons of water annually over the past 5 years (2013~2017); on the average, 2.2% was for industrial purposes, while 1.8% of the agricultural water was used for industrial purposes annually. This shows that the Mailiao Industrial Complex's use of water from the Jiji Weir has an insignificant impact on the source of water in the Jiji Weir (Note) and does not affect other industries or farmers. The records of water consumption are summarized below:

Water Supplied by the Jiji Weir from 2013 to 2017

Unit: Ten thousand tons

Year	Inflow (A)	Average Consumption (B)	Industry			
			Average Consumption (C)	Percentage (C)/(A)	Taking from Agricultural Water (D)	Percentage (D)/(B)
2013	622,348	218,289	10,075	1.6%	3,294	1.5%
2014	315,258	182,795	10,462	3.3%	3,646	2.0%
2015	247,589	144,380	9,999	4.0%	3,632	2.5%
2016	510,257	227,234	9,976	2.0%	3,317	1.5%
2017	572,887	186,163	10,138	1.8%	3,328	1.8%
Average	453,668	191,772	10,130	2.2%	3,443	1.8%

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

Note: According to GRI 303-2, the level of significance is determined based on whether the average water consumption reaches more than 5% of the known annual average water volume of the water body.



Marine Ecology at the Mailiao Industrial Complex

FCFC has established the Formosa Plastic Group Evaluation Committee of Influences on Marine Ecosystems by the Mailiao Industrial Complex's Wastewater Disposal to improve plant operations based on BAT & BACT models. The Committee aims to understand whether the quality of water emissions has an impact on the marine ecology and to propose feasible suggestions for improvement through scientific approaches. As of 2017, statistics reveal that the Mailiao Industrial Complex had had no significant impact on nearby seawater, marine ecology, aquaculture industry, fishery resources, or surface breeding. If perceivable impacts prevail in the near future, FCFC will plan to reduce the severity of impacts through countermeasures proposed by the professional counseling committee to secure the living standards of local residents and the sustainability of local marine ecology.

In 2017, the average daily wastewater disposal of the Mailiao Industrial Complex was 83,838 tons, far below the environmental assessment limitation of 187,638 tons. Due to our strict self-regulations that wastewater from each treatment center cannot be emitted until standards are met, which is reinforced by daily inspection of effluent quality, the temperature, electric conductivity, and pH value of the disposed water in recent years has met effluent standards.

Plankton or phytoplankton species within Mailiao's marine ecosystem show prominent changes with the seasonal circulation. In general, plankton and phytoplankton show greatest abundances in the interval between springtime and summertime. Therefore, the results of the marine ecosystem investigation show higher plankton or phytoplankton quantities in the second and third quarters than those in the first and fourth quarters. Investigation results reveal that the same goes for benthos and fish in Mailiao's marine ecosystem; that is, benthos and fish quantities also change with the seasonal circulation. No impact of the Mailiao Industrial Complex's operation on benthos and fish quantities was found in 2017.



Impact on Chinese White Dolphins' Ecosystem

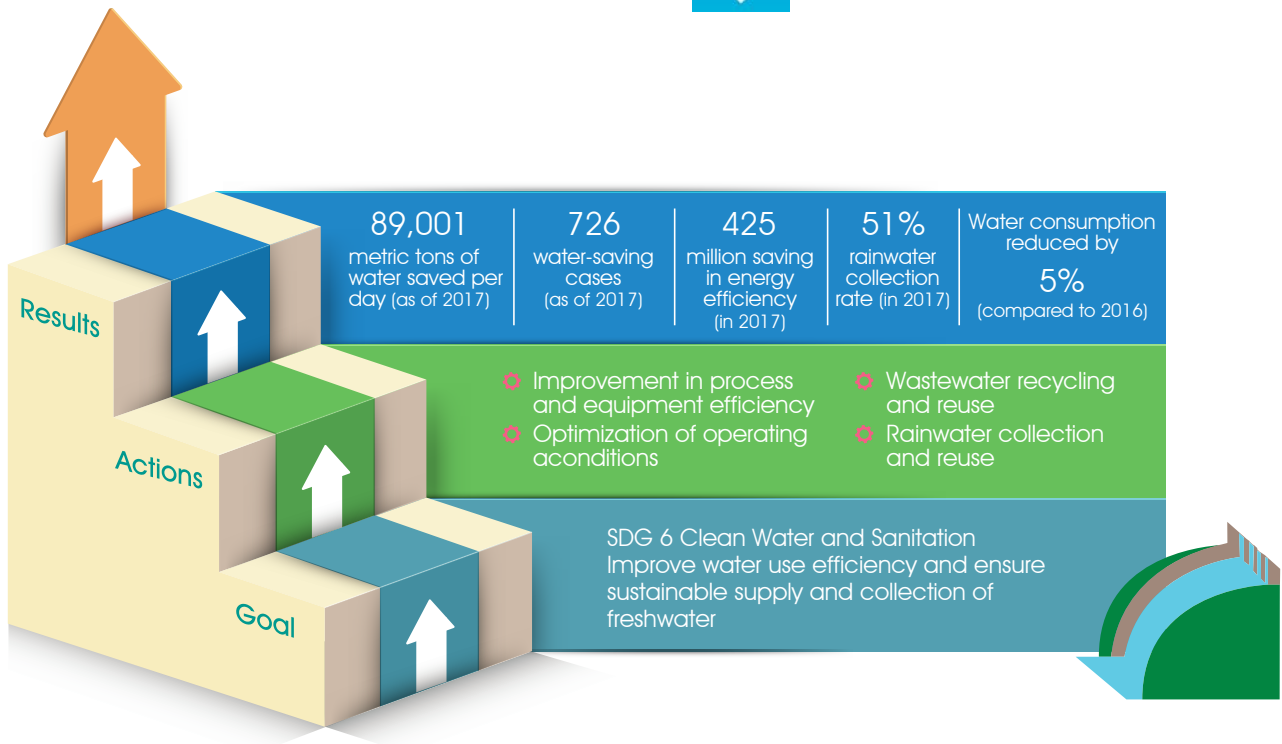
Since August 2008, Chinese white dolphins have been protected under the International Union for Conservation of Nature as a critically endangered species. According to the research, the dolphins' habitat is in a 3-km offshore region that spans from Miaoli to Tainan's coastal area.

Professional institutes employed by FPG have been conducting a long-term study since 2008, in which 233 trips were made, 272 sightings recorded, and 1,342 dolphins identified in the long and narrow range along the Yunlin coast (offshore <3 km and depth <15 m). Among the group members, mother-child dolphin pairs account for 50% to 70%, and 54% of the dolphins are seen repeatedly each year. Therefore, the coast of Yunlin is considered an important nursery habitat.

In 2017, 6 groups of Chinese white dolphins were spotted approximately 500 meters away from the water discharge location of the Mailiao Industrial Complex and 2 groups to the north of the water discharge location near the Zhuoshui River estuary. This shows that the operation of the Mailiao Industrial Complex has no negative impact on the Chinese white dolphins' habitat.



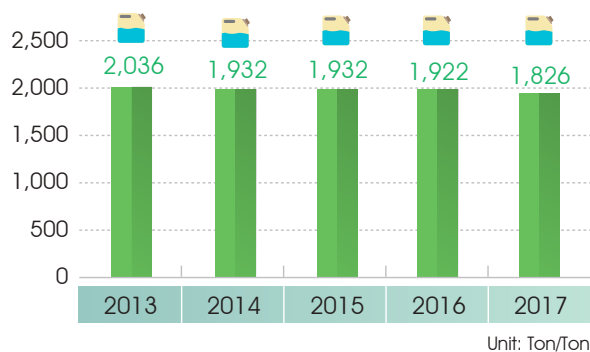
3.2.2 Water Resource Use Efficiency



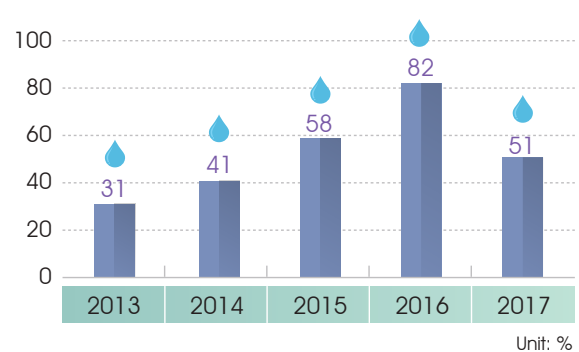
FCFC (including Formosa BP Chemicals Corp.) Water Conservation Performance (2000-2017)

Item \ Year	2000-2016	2017	Accumulation (2000-2017)	Ongoing	Total
Improvement (Number of Cases)	629	97	726	54	780
Volume Saved (Tons/Day)	87,021	1,980	89,001	3,523	92,524
Amount Invested (NT\$0.1 Billion)	26.08	0.47	26.55	8.9	35.5
Investment Benefit (NT\$0.1 Billion/Year)	4.17	0.13	4.25	0.2	4.5

Water Consumption in the Mailiao Industrial Complex (FCFC & Formosa BP Chemicals Corp.) from 2013 to 2017



Rainwater Collection Rate in the Mailiao Industrial Complex (FCFC & Formosa BP Chemicals Corp.) from 2013 to 2017



FCFC has installed rainwater storage tanks to stockpile and use rainwater. In 2017, the rainwater collection rate at the Mailiao Industrial Complex was 58% and the average volume of rainwater collected was 1,931 tons/day. The reason why the collection rate in 2017 was lower than that in 2016 was mainly due to excessive concentration of rainfall in June and August, which made timely storage impossible.

In 2017, the volume of water recycled from the manufacturing process and reused was 3,901,140 tons/day, with the collection rate of 91% according to the formula under the Directions for Application Review on Proposal of Water Usage promulgated by Ministry of Economic Affairs. The formula is as follows:

Water Collection Rate (91%) = Water Recycled from the Manufacturing Process (3,901,140 tons/day) / Total Water Consumption at the Mailiao Industrial Complex in 2017 (3,941,337 tons/day).

3.2.3 Soil and Groundwater Management

Groundwater quality monitoring management:

To monitor changes in groundwater quality, monitoring wells have been established within Changhua, Mailiao, Xingang and Longde industrial complexes, while certified institutions are authorized to perform soil and groundwater testing during high flow and dry seasons each year.

Prevention actions:

- ④ The floor of each plant may be paved with anti-corrosion coatings or acid and alkali-resistant bricks based on the manufacturing process and the characteristics of raw materials and products.
- ④ The appearance of the storage tanks (such as the surroundings and the tank walls) should be kept clean. If any traces of leakage are found, they should be repaired immediately to avoid soil and groundwater pollution caused by such leakage.
- ④ Underground storage tanks should be constructed of non-corrosive materials and a secondary containment.
- ④ When wastewater from the manufacturing process is transported to the on-site collection system, the process trench should be kept dry during normal use.
- ④ In special cases where the process trench is used to collect wastewater, it should be provided with a stainless steel lining and, if necessary, an anti-corrosion, acid and alkali-resistant containment.



Before Installation



After Installation

A Secondary Containment Installed on the Underground Storage Tank

3.2.4 Water Pollution Control

FCFC has customized its wastewater treatment according to the characteristics of wastewater source at each plant. To meet national standards, we have selected marine outfalls (such as sewage in Mailiao discharged into the Taiwan Strait) or effluent streams (e.g. sewage of the Longde Plant discharged into the Shincheng Stream in Yilan, the Xingang Plant to the Puzi River in Chiayi, and the Changhua Plant to the Dadu River in Taichung) to nearby bodies of water based on the Water Pollution Control Act and the location of each plant.

A total of 5 sets of automatic effluent monitoring systems have been installed in the Changhua Plant, Mailiao Plant, Xingang Plant and Longde Plant to monitor water volume, water temperature, pH, electric conductivity, COD, and SS around the clock, with all monitored data delivered to local authorities in a timely manner.



Automatic Effluent Monitoring System

3.3 Climate Change and Greenhouse Gas Emission Management



Climate Change Risk Management and Management Approaches to Greenhouse Gas Emissions and Carbon Reduction



To reduce the possible impact of climate change and integrate energy and resources within FPG, FCFC actively promotes measures for energy conservation and carbon reduction and the cooperation across FPG companies and plants based on the principle of circular economy. FCFC will also consider introducing carbon footprints to seek opportunities for energy management and greenhouse gas reduction.

3.3.1 Countermeasures for Climate Change Risks

FCFC pays constant attention to global climate change and response trends and collects potential risks caused by climate change. We consider factors such as financial impacts, impacts on reputation, global economic situation, fluctuations in energy costs, and environmental regulations to determine the priority of risks and ensure the stable operations and competitiveness.



In terms of short-term goals, as the international carbon reduction management has covered GHG emissions of the supply chain, FCFC will start promoting GHG emissions of its supply chain (Scope 3) and carbon footprint verification in 2018 to find solutions for carbon reduction management; as to medium-term and long-term goals, FCFC will participate in the Carbon Disclosure Project's survey of climate change and water disclosure so that global investors can understand the Company's results in energy conservation, carbon reduction, and water conservation in response to global climate change and water resources in Taiwan. It is also expected that the fuel for the existing heat medium boilers at each plant will be replaced by natural gas or process gas by 2020 to reduce GHG emissions.

3.3.2 Greenhouse Gas Inventory and Energy Use

FCFC has promoted the greenhouse gas inventory and verification according to ISO 14064-1. Both British Standards Institution (BSI) and System & Services Certification (SGS) were authorized to implement the greenhouse gas inventory and verification from 2006 to 2016. SGS was authorized to verify GHG emissions for the Longde Plant, Changhua Plant and Xingang Plant, while BSI was authorized to verify GHG emissions for the Mailiao Plant. The GHG emissions of each plant in 2016 are shown in the table below. Data on GHG emissions in 2017 are still under verification and will be reported to Taiwan's National Greenhouse Gas Registry by the end of August in accordance with the Regulations Governing Greenhouse Gas Inventory Registry promulgated by the Environmental Protection Administration. As the international carbon reduction management has covered GHG emissions of the supply chain, FCFC will further promote GHG inventory and verification of its supply chain (Scope 3).

FCFC Greenhouse Gas Emissions in 2016

Unit: tons CO₂e

Plant	Mailiao Plant	Xingang Plant	Changhua Plant	Longde Plant	Subtotal
Scope 1	2,143,377	2,547,987	1,093,294	1,393,527	7,178,185
Scope 2	3,436,117	9,579	9,635	3,047	3,458,378
Total	5,579,494	2,557,566	1,102,930	1,396,574	10,636,563

Source: 1. 2016 inventory reports published by SGS and BSI.

2. GHG emission factors used in the GHG inventory are quoted from the Greenhouse Gas Emission Factor Table Version 6.0.3 (updated on January 17, 2018) published by the Environmental Protection Administration, Executive Yuan.

For plants other than the Mailiao Plant, the total energy consumed in 2016 was about 5.1×10^{16} joules, and GHG emissions were mainly from coal burning, accounting for 96.59%; the total energy consumed in the Mailiao Plant was about 2.8×10^{16} joules, and GHG emissions were mainly from internally purchased power and steam gas, accounting for 27.76% and 36.1%, respectively. Based on FCFC's revenue of NT\$217.33 billion in 2016, the energy intensity was about 363 kJ/NT\$1 and 4.894 thousand tons CO₂e-/NT\$0.1 billion.

FCFC Major Emission Sources and Consumption of Greenhouse Gas in 2016

Mailiao Plant					Plants Other than the Mailiao Plant				
Emission Source	Consumption (A)	Calorific Value (B)	Total Energy Consumption (A)*(B)	CO ₂ e Emissions (%)	Emission Source	Consumption (A)	Calorific Value (B)	Total Energy Consumption	CO ₂ e 排放量佔比
Purchased Power	1,735,236 thousand kWh	3.6*10 ³ KJ/kWh	6.2*10 ⁶ GJ	27.76%	(A)*(B)	CO ₂ e Emissions (%)	2.4*10 ⁷ KJ/ton	5.1*10 ⁷ GJ	96.59%
Fuel Oil	66,284 Kiloliter	4.1*10 ⁷ KJ/kiloliter	2.7*10 ⁶ GJ	3.91%	Fuel Oil	16,648 Kiloliter	4.1*10 ⁷ KJ/kiloliter	6.8*10 ⁵ GJ	1.05%
Fuel Gas	636,840 M ³	3.8*10 ³ KJ/ M ³	2.4*10 ⁴ GJ	17.9%	Purchased Electricity	43,268 kWh	3.6*10 ⁶ KJ/ thousand kWh	1.5*10 ⁴ GJ	0.45%
Internally Purchased Steam Gas	6,952,106 ton	2.8*10 ⁶ KJ/ton	1.9*10 ⁷ GJ	36.1%	Purchased Steam Gas	0 ton	2.8*10 ⁶ KJ/ton	-	-
Total			2.8*10 ⁷ GJ	85.67	Total			5.1*10 ⁷ GJ	98.09

Source: 1. FPG Greenhouse Gas Inventory Database

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

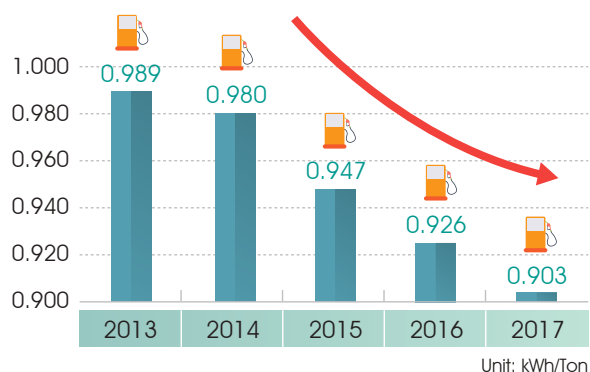
3. FCFC produces electricity and steam gas itself; therefore, the electricity and steam gas emission factors are calculated based on 2016 Taipower's emission factors published by the Bureau of Energy and the GHG Inventory Tool developed by the Foundation of Taiwan Industry Service commissioned by the Industrial Development Bureau.

3.3.3 Improvement in Energy Conservation

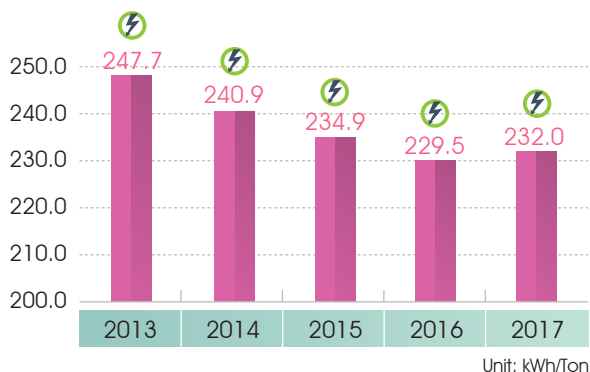
Climate change and greenhouse gases have become the most important issues around the world. FCFC has continuously promoted various energy conservation and carbon reduction programs and integrated energy resources across plants and FPG companies in line with the domestic and global trends, thus improving energy efficiency significantly. To strengthen the enforcement of improvements in water and energy conservation, we have created improvement cases through the established GHG inventory and reduction system, so as to control the progress and benefits of improvement cases and the reduction of CO₂ emissions. Since 2008, FCFC has participated in the Industrial GHG Voluntary Reduction Plan promoted by the Industrial Development Bureau and received Taiwan Green Productivity Foundation to verify the improvement in the reduction of GHG emissions.

From 2000 to 2017, 3,058 improvements had been made, with an investment of NT\$7.34 billion and the accumulated benefit of NT\$8.8 billion. In 2017, the unit steam consumption in the Mailiao Industrial Complex was 0.903 kWh/ton, which shows a decreasing year-on-year.

Unit Steam Consumption in the Mailiao Industrial Complex (FCFC and Formosa BP Chemicals Corp.) from 2013 to 2017



Unit Electricity Consumption in the Mailiao Industrial Complex (FCFC and Formosa BP Chemicals Corp.) from 2013 to 2017



Note: In 2017, the unit electricity consumption increased slightly compared with that in 2016 mainly due to the decrease in production

FCFC (Formosa BP Chemicals Corp. included) Energy Conservation from 2000 to 2017

Item \ Year	2000-2016	2017	Accumulation (2000-2017)	Ongoing	Total
Improvement (Number of Cases)	2,560	498	3,058	317	3,375
Steam Saved (Tons/Hour)	817	55	872	160	1,032
Electricity Saved (1,000 kWh/Hour)	94.5	7.5	102	7.4	109.5
Fuel Saved (Tons/Hour)	15.3	1.7	17	1.0	18
CO ₂ e Reduction (1,000 Tons)	3,185	197	3,382	376	3,758
Amount Invested (NT\$0.1 Billion)	65.2	8.2	73.4	27.7	101.1
Investment Benefit (NT\$0.1 Billion/Year)	81.5	6.5	88	10.34	98.3

3.3.4 Green Plant Certification Promotion

The scope of green plants covers green buildings and clean production, including the ecology, energy conservation, waste reduction and health of plant buildings as well as the reduction in waste and environmental impacts generated from each stage of the manufacturing process. Green plants are considered the highest standards for plant operations.

In recent years, the Company has made considerable progress in promoting water and energy conservation and already started assigning production plants in the Marilia Industrial Complex to obtain the Green Plant Label promoted by the Industrial Development Bureau, Ministry of Economic Affairs. The green plant certification will be extended to each complex under the jurisdiction of the Company depending on the enforcement in the Mailiao Industrial Complex.

3.4 Air Pollutant Management



Air Pollutant Management Approach



To improve air quality and reduce the harm of PM2.5 to human bodies, the Company adopts the best available control technology (BACT), including the advanced process, clean fuel, and efficient pollution prevention equipment. Each process emission pipeline is equipped with a continuous automatic monitoring system in accordance with related regulations to monitor air pollutant emissions in real time; in addition, the Company continues to promote the waste reduction at source and recycling to reduce environment impacts and achieve the goal of zero pollution and perpetual business operation.



Emissions and Control

We constantly seek to make improvements in air pollution control. A total of 3 sets of FTIR infrared sensors and 11 sets of GasFind IR have been purchased to monitor leaks of process gas. Since 2007, certified institutions have been authorized by the co-generation coal-fired unit twice a year to make sure that our plants' dioxin emissions meet national standards. According to the Montreal Protocol on Substances that Deplete the Ozone Layer, FCFC does not use any material or equipment that depletes the ozone layer during the manufacturing process.

In 2017, the Environmental Protection Administration made an advance announcement of the Stationary Pollution Source Hazardous Air Pollutant Emissions Standards (draft) to strengthen the control of hazardous air pollutants. The draft specifies the hazardous air pollutant emission standards for specific industries. The Company will follow up the provisions and progress of the draft closely to make early improvements. The air pollutant emissions in 2017 are shown in the table below:

Type		Plant				Total
		Longde	Changhua	Mailiao	Xingang	
Air Pollutant Emission Management	SOx	138.44 tons/year	0 tons/year	340.26 tons/year	393.03 tons/year	871.73 tons/year
	NOx	382.75 tons/year	0 tons/year	1,116.5 tons/year	1,256.19 tons/year	2,755.44 tons/year
	Volatile Organic Compounds (VOC)	113.15 tons/year	3.52 tons/year	478.89 tons/year	89.64 tons/year	685.2 tons/year
	Total Suspended Particulate (TSP)	59.64 tons/year	0 tons/year	58.94 tons/year	42.9 tons/year	161.48 tons/year

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 has 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 ensure that all environmental indicators are controlled in a timely manner, we have built a comprehensive environmental monitoring network that consists of 8 layers of intense monitoring control with considering the prevailing wind direction in Mailiao. The network includes 8,109 fixed gas detectors, 39 GasFind IR thermal imaging cameras used by the American military, 34 CEMS fixed pollutants sequential monitoring systems, 39 FLARE fixed pollutants sequential monitoring systems, 6 mobile FTIR monitors, and 8 fixed FTIR monitors within the Mailiao Industrial Complex as well as 1 VOC monitoring station, 10 photochemical assessment monitoring stations, 12 automatic odor sampling stations, 10 fixed air quality monitoring stations, and 1 air quality monitoring vehicle outside the Complex to identify emission sources as quickly as possible and ensure local air quality.

Studies have revealed that air quality in towns and villages near FCFC's industrial complexes is much better than that in the counties and cities of Western Taiwan; in winters when air pollution is higher in Central and Southern Taiwan, the northeast monsoon blows most of the pollutants in the complexes to the Taiwan Strait, which indicates that FCFC has imposed limited impacts on local air quality. The previously mentioned statistical analysis also reveals that exhaust emitted from the Mailiao Industrial Complex located on the western coastline has not contributed much to the long-term poor air quality and PM2.5 in Douliu, Puli, Chiayi and Lunpei. Even the coal-fired boilers in the Mailiao Industrial Complex are fueled by natural gas, the reduction in the concentration of PM2.5 in Yunlin County is extremely limited. The government research has further confirmed that industrial curtailment has little effect on reducing PM2.5 concentrations, indicating that open burning, vehicle discharges, and cooking fumes are the main factors in deteriorating air quality in Taiwan in the recent years. To improve air quality in Taiwan, we must cooperate to reduce overall exhaust emissions so that local governments can stipulate reasonable air quality standards and exhaust reduction responsibilities for all industries. In the upcoming sections, we will explain the real impacts that the Mailiao Industrial Complex has had on surrounding air quality through various channels. In this way, we hope to eliminate long-standing public concerns and doubts.



VOC Monitoring Station



Air Quality Monitoring Vehicle

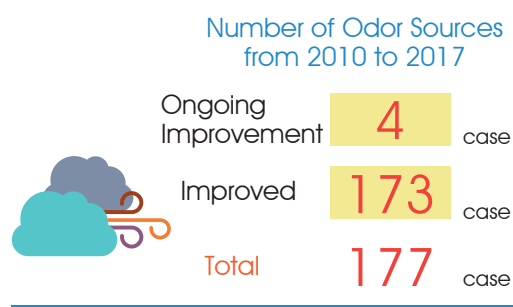
Comparison between Air Quality Detected by the Environmental Protection Bureau and Statistics of the No. 6 Naphtha Cracking Plant

Item	Monitoring Station	No. 6 Naphtha Phase 4 2010/4-2017/12	Control Standards
SO ₂ (ppb)	No. 6 Naphtha	3.9	250
	Tucheng (Northern Taiwan)	3.2	
	Hsienhsi (Central Taiwan)	4.1	
	Taishi (Yunlin-Chiayi-Tainan)	3.4	
	Hsiaokang (Kaohsiung-Pintung)	7.9	

Item	Monitoring Station	No. 6 Naphtha Phase 4 2010/4-2017/12	Control Standards
NO ₂ (ppb)	No. 6 Naphtha	9.2	250
	Tucheng (Northern Taiwan)	18.1	
	Hsienhsi (Central Taiwan)	12.3	
	Taishi (Yunlin-Chiayi-Tainan)	8.2	
	Hsiaokang (Kaohsiung-Pintung)	23.3	
O ₃ (ppb)	No. 6 Naphtha	30.7	120
	Tucheng (Northern Taiwan)	28.1	
	Hsienhsi (Central Taiwan)	31.4	
	Taishi (Yunlin-Chiayi-Tainan)	36.4	
	Hsiaokang (Kaohsiung-Pintung)	25.8	
CO (ppm)	No. 6 Naphtha	0.4	35
	Tucheng (Northern Taiwan)	0.5	
	Hsienhsi (Central Taiwan)	0.3	
	Taishi (Yunlin-Chiayi-Tainan)	0.3	
	Hsiaokang (Kaohsiung-Pintung)	0.5	
PM ₁₀ (μg/m ³)	No. 6 Naphtha	55	125
	Tucheng (Northern Taiwan)	41	
	Hsienhsi (Central Taiwan)	50	
	Taishi (Yunlin-Chiayi-Tainan)	49	
	Hsiaokang (Kaohsiung-Pintung)	67	
PM2.5 (μg/m ³)	No. 6 Naphtha	31	35
	Tucheng (Northern Taiwan)	23	
	Hsienhsi (Central Taiwan)	26	
	Taishi (Yunlin-Chiayi-Tainan)	27	
	Hsiaokang (Kaohsiung-Pintung)	32	
NMHC (ppm)	No. 6 Naphtha	0.3	-
	Tucheng (Northern Taiwan)	0.2	
	Hsienhsi (Central Taiwan)	0.1	
	Taishi (Yunlin-Chiayi-Tainan)	0.1	
	Hsiaokang (Kaohsiung-Pintung)	0.2	
Description	<p>🔗 PM_{2.5} detected by the No. 6 Naphtha Cracking Plant was acquired manually. Records provided by the monitoring stations of the Environmental Protection Administration (the EPA) were all acquired through an automated system.</p> <p>🔗 The EPA sets the standard as an average amount per hour.</p> <p>🔗 The value of PM2.5 in the No. 6 Naphtha Cracking Plant is lower than that in Hsiaokang and similar to that in monitoring stations near other air quality or industrial zones.</p>		

Source: The EPA Air Quality Monitoring Station & the No. 6 Naphtha Cracking Plant Air Quality Monitoring Station.

We have taken extra measures to ensure that odors produced by our facilities do not influence the surrounding residents. On September 17, 2010, FPG established the Odor Evaluation Team, which consists of members from the Group Administration and 4 FPG's main companies. Odors around the facilities are examined daily at 4 p.m., and the results are reported to the supervisors so that they can take immediate corrective actions. During 2014-2015, an improvement program was promoted to identify odor sources during the manufacturing process. Despite the fact that the Odor Evaluation Team identified an increasing number of odor sources, the number has gradually decreased since 2016, and the overall odor control has been significantly improved.



3.5 Waste and Controlled Chemical Substance Management



Waste and Controlled Chemical Substance Management Approach



To achieve SDG12: Responsible Consumption and Production, we are committed to the sustainable management and efficient use of natural resources. For all operational activities, we strive to comply with the regulations with respect to environmental protection and lower the emissions of controlled chemical substances and waste in the air, water, and soil through prevention, reduction, recycling, and reuse, so as to reduce adverse effects on human health and the environment. We are constantly striving to reduce pollutant emissions and their impacts on the environment in the hope of achieving the goal of zero pollution and perpetual business operation.

3.5.1 Waste Management

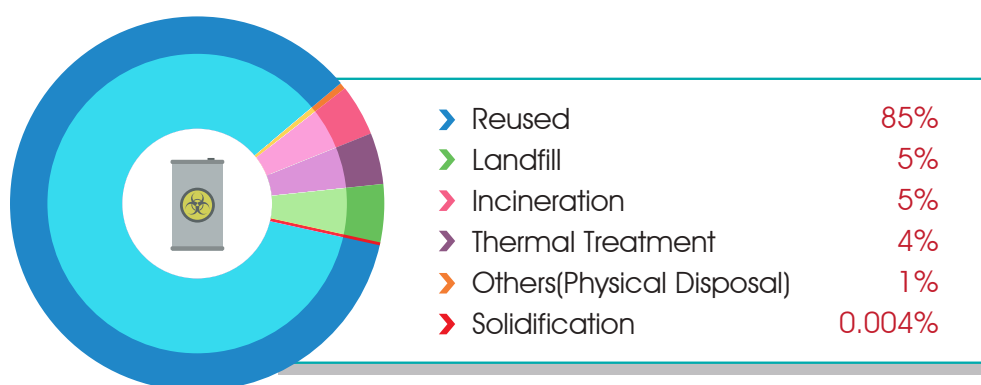
To reach the ultimate goals of zero waste and zero landfill, waste management, including source classification, manufacturing waste reduction, and resource recycling, is implemented to reduce waste incineration and landfill.

Each unit is required to reduce, sort, store, reuse, and clean up manufacturing waste in accordance with the regulations with respect to waste disposal and the Regulations Governing Industrial Waste established by FPG. For outsourced waste management, each industrial complex shall implement the waste disposal plan approved by the regulator and select qualified waste disposal suppliers. We have also established self-audit measures for waste disposal to ensure that waste disposal suppliers properly handle industrial waste in accordance with the regulations with respect to environmental protection without arbitrary dumping or other malpractice. In 2017, no arbitrary disposal of waste was reported. The Company will continue to audit the operations of waste disposal.

Waste management is outsourced to domestic suppliers, and we prioritize reuse over waste incineration, thermal treatment, and waste landfill. In 2017, FCFC's industrial waste reached 252,103 tons, and reused resources (including coal ash) reached 215,368 tons (85%). A total of 36,724 tons of the remaining industrial waste and 11 tons of hazardous industrial waste were properly handled by qualified suppliers as summarized below:

Type	General				Hazardous	Reused	Total
	Others (Physical Disposal)	Incineration	Thermal Treatment	Landfill	Solidification		
Handling Capacity (Tons)	1,437	11,179	11,157	12,951	11	215,368	252,103
Percentage (%)	0.57	4.43	4.43	5.14	0.004	85.43	100

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



3.5.2 Controlled Chemical Substance Management

To ensure the safe management of the production, use, storage and transportation of controlled chemical substances in the operating sites and facilities of each plant, we have obtained the required government licenses for the controlled chemical substances in accordance with the regulations governing environmental protection, occupational safety, fire and transportation. We have also established internal regulations to strengthen the independent management of controlled chemical substances; in addition, regular assessments of the working environment are conducted by external environmental assessment institutions to control the real working environment and the employees' exposure. 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 shall be conducted twice every year along with an overall drill in disaster prevention and contingency plans.



Classification and Exposure Assessment

We screen the hazards and the use of controlled chemical substances in the operating sites and then classify the hazards using GHS and determine the potential exposure based on the level of diffusion and consumption of chemical substances. A risk matrix is used to determine the management method (overall ventilation, engineering control, isolation, and special regulations) and the risk level of chemical substances, so as to reduce operators' exposure.



Containment for Controlled Chemical Substances

Storage tanks are equipped with containment, such as anti-overflow embankments and collecting trenches, to contain the controlled chemical substances and avoid damage or pollution in case of leaks.



Controlled Chemical Substance Detectors and Alarms

A gas detector is installed around the operating site of controlled chemical substances to instantly transmit the on-site gas value detected to the DCS. The DCS controllers monitor at any time and have operators check once the gas detector detects an abnormality.



Safety Protective Equipment and First-aid Medicine Management

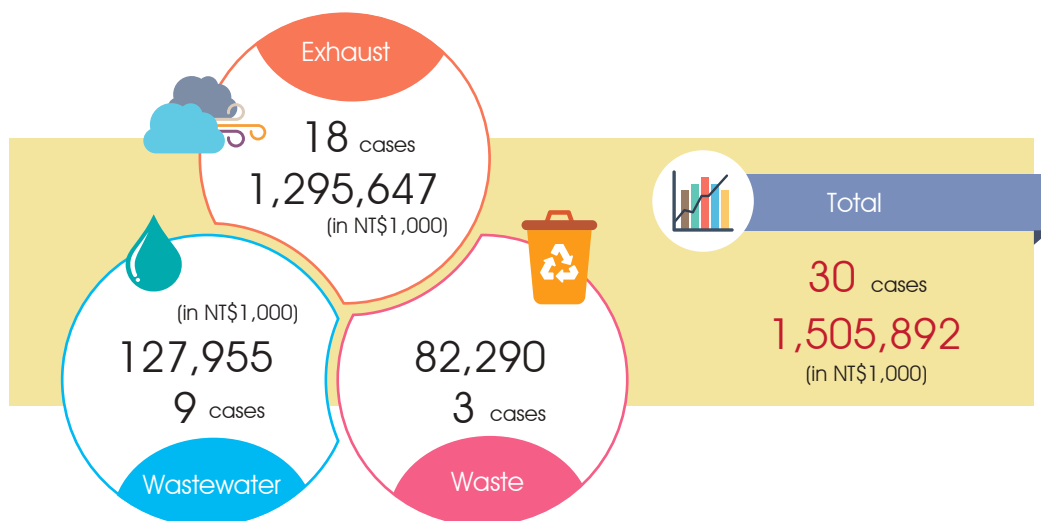
All departments are required to regulate the use, storage, and hazardous characteristics of controlled chemical substances according to the scale and install a sufficient number of emergency rescue devices, such as safety protective clothing, air respirators, fire-fighting clothing, stretchers, acid and alkali-resistant gloves, and fire-fighting equipment, for emergency use.



3.5.3 Pollution Control Betterment Projects

Since its incorporation, FCFC has focused on both industrial development and environmental protection. We promote environmental protection based on the spirit of inquiring into the root of the matter. According to the best available control technology (BACT), we have built our plants based on the best manufacturing technology, the best pollution control equipment, and the best environmental protection system; furthermore, we have been committed to reducing pollutant emissions. As of 2017, the total investment reached NT\$17.14 billion. Of the 30 ongoing pollution control betterment projects in 2018, 18 projects involve exhaust, 9 projects involve wastewater (including soil and groundwater) and 3 projects involve waste reduction, with estimated NT\$1.505 billion to be further invested. The expenditures on the ongoing pollution control betterment projects in 2018 are shown below:

Expenditures on the Ongoing Pollution Control Betterment Projects in 2018



3.6 Compliance with Environmental Protection Regulations



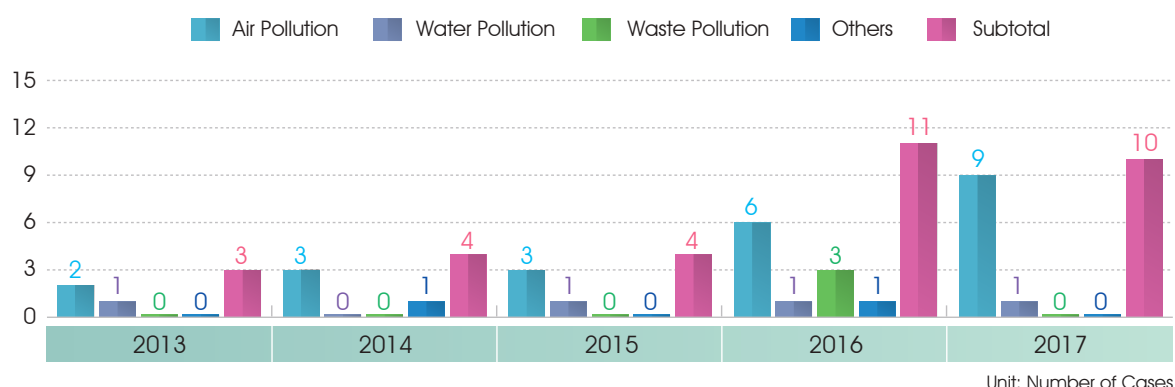
Management Approach to Compliance with Environmental Protection Regulations



We emphasize and require the compliance of plant activities, products, and services with environmental protection regulations. The dedicated department will review the latest environmental protection regulations promulgated by the government on the website every month and participate in the public hearings and publicity meetings held by the government to obtain the latest version of the environmental protection regulations and drafts related to the Company and to master the legislative spirit, priorities, and trends, and to make sure that each unit's environmental protection activities, products, and services comply with the regulations. We have also established the procedures for compliance verification in accordance with the ISO 14001 Environmental Management System. If the results of compliance verification show noncompliance that cannot be improved immediately, we will request improvement measures and follow up their enforcement.

As a member of the petrochemical industry with a concentrated industrial chain, FCFC has become the main audited target of central and local environmental authorities (3 times/day). No significant leakage was found in 2017, but 10 environmental violations were identified(Note1) and led to the total fine of NT\$990,000. We have reviewed and thoroughly investigated the causes of the violations and have submitted a variety of improvement measures for safety, health and environmental management.

FCFC Environmental Violations (2013-2017)



Note 1: According to the statistics in the Pollutant Release and Transfer Register, Environmental Protection Administration, the Company had 16 environmental violations in 2017, among which 5 were revoked for separate punishments in accordance with applicable laws, and 1 was appealed successfully and to be corrected; therefore, the number of environmental violations subject to punishment was 10.

Note 2: In 2017, no serious pollution leakage caused the Company to discontinue production.

3.7 Description of Material Environmental Issues



Impact of the Air Pollution Control Act

In recent years, air pollution has been concerned by the public. The Environmental Protection Administration will levy the air pollution fee for PM2.5 for the first time. The air pollution fee will be levied at differential rates based on the season and the volume of process waste. The air pollution fee will take effect as soon as April 2018. The government also considers doubling the SOx and NOx air pollution fees and restrictions in 2018.

Since 2016, the Company has invested NT\$2.6 billion in developing the co-generation unit renovation plan, including ultra-low emissions of exhaust particulate matter, such as the installation of dust collectors, NOx ultra-low emissions, such as SCR capacity expansion, low nitrogen combustion and smoke improvement, such as the installation of smoke re-heaters. The plan is expected to be completed in 2018, which enables the co-generation unit to meet the highest standards and compete with the natural gas unit; in addition, it can reduce the impact of the air pollution fee.



License to Operate Co-Generation Equipment in the Changhua Plant Was Rejected

On September 29, 2016, Changhua County Government rejected the application for the renewal of the license to operate the co-generation unit with point source pollution in the Changhua Plant, forcing the manufacturing process to stop due to lack of steam heat; on June 20, 2017, Changhua County Government revoked the original license of operating point source pollution and the license to use raw coal approved in 2011 and 2012, respectively. To protect the rights of the shareholders and the Company, we appealed the cases to the Environmental Protection Administration, Executive Yuan. The results of the two appeals showed that the original punishments were revoked and that separate punishments will be determined in accordance with applicable laws; that is, Changhua County Government's rejection of the application for the renewal of the license violates the laws and infringe the rights of the Company.

However, Changhua County Government did not enforce the decisions on the two appeals but issued an official letter on November 14, 2017 stating that the co-generation unit in Changhua Plant violated the environmental impact assessment with a fine of NT\$1.244 billion imposed. The Company has appealed the case to the Environmental Protection Administration. After reviewing the appeal on March 9, the Appeal Committee found major faults in the fine imposed by Changhua County Government, including insufficient evidence and incorrect prescriptions, and resolved to revoke the punishment.



Phase 4.6 Environmental Impact Assessment at the Mailiao Industrial Complex

On March 15, 2017, the Environmental Protection Administration requested the Company to re-conduct the Phase 4.6 environmental impact assessment (EIA) for the No. 6 Naphtha Cracking Plant. Such a conclusion from six years of review is deeply regrettable and disappointing, but we treat it with respect. Based on the high petrochemical value policy and the circular economy, the Phase 4.6 environmental impact assessment adopts better process technologies to improve efficiency, reduce pollution and occupational safety risks, and add value to products with reduced air pollutant emissions, water consumption and unit energy consumption. We have reduced air pollution, GHG emissions and water consumption with the percentage of increment to decrement being 1:1.2, 1:1.5 and 1:2, respectively. We have also cooperated and provided additional data based on the requirements raised by the Environmental Protection Administration in the EIA review meetings for 4-6 years. We will continuously fight for this case and give thorough consideration after prudent assessment.

4

Sustainable Human Capital

4.1 Employee Profile and Compensation and Benefits



Management Approach to Employee Compensation and Benefits

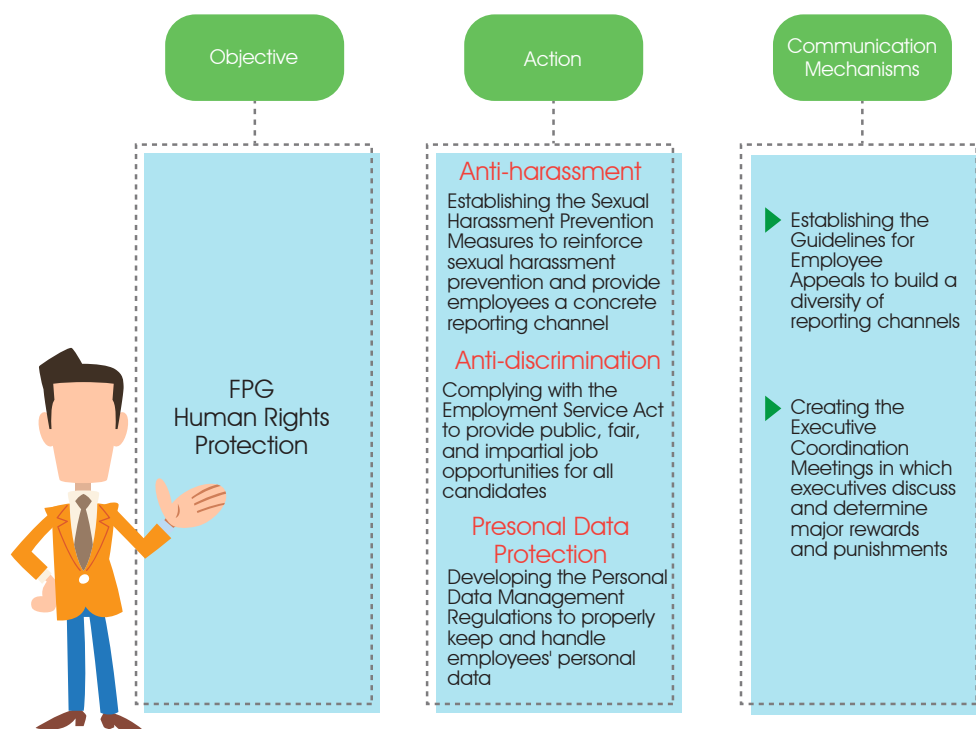
To take care of each employee, FCFC offers favorable compensation and benefits and creates a sound working environment through a complete training and promotion system. Upholding the spirit of equal pay for equal work, the compensation standards are designed based on the education and work experience required in each position. Treating our employees as family members, we take care of our employees by offering a variety of benefits. In addition, employees may give opinions and suggestions through a suggestion box, an online mailbox, the labor union, or the Employee Welfare Committee, which facilitates communication between the management and employees and creates harmonious labor relations.

4.1.1 Protection of Employees' Rights



Protecting Employees' Human Rights

We strictly adhere to international and local regulations regarding labor and human rights so that every employee is treated fairly. All the employees are protected by the mutual agreement of the management and employees and may join the labor union of their own free will. At present, 68.1% of the employees have joined the labor union. The working regulations for employees stipulate that employees shall be protected from being discriminated due to their membership of the labor union. In 2017, no employment of child labor, violation of human rights, or discrimination occurred.





Employees' Feedback

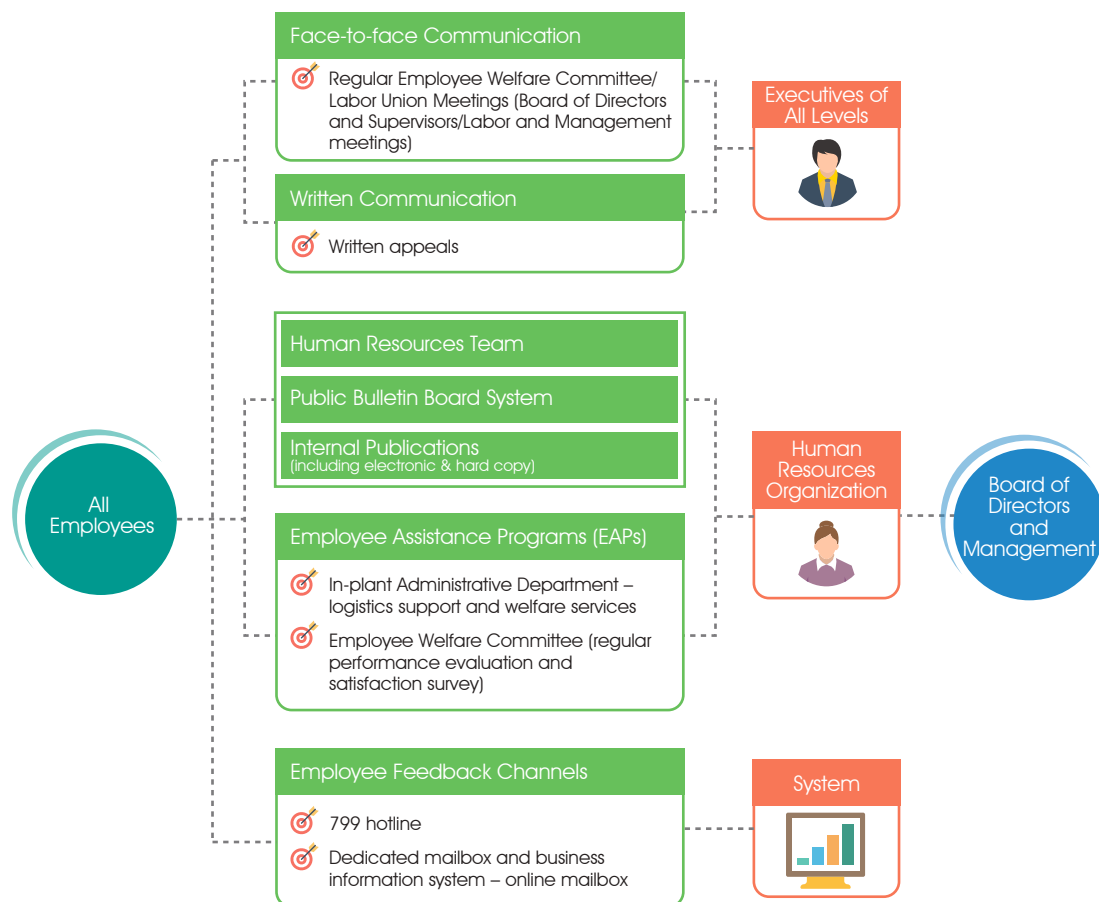
FCFC emphasizes a harmonious relationship between the management and employees. We offer multiple communication channels for employees to voice their opinions and make suggestions. Employees are encouraged to take part in the labor union or the Employee Welfare Committee to voice their suggestions to the management in regularly-held meetings. We prioritize the labor union's suggestions when formulating crucial policies; in addition, all the employees are protected by the mutual agreement of the management and employees.

We have also set up the following channels for internal communication:

- 📌 Suggestion boxes at appropriate locations
- 📌 An online mailbox in the business information system
- 📌 799 hotlines at each complex

Regarding new recruits, we hold periodic consultation programs so that we can better understand the various difficulties they face in both their jobs and their daily life. By resolving their problems, we hope to eliminate their uneasiness of adjusting to a new working environment and reduce the turnover rate.

FCFC Internal Communication Channels



4.1.2 Employee Profile

In 2017, FCFC's regular employment accounted for 96%, all of which were full-time employees; the temporary employment (e.g. consultants, contract-based employees, foreign employees, and work-study students) accounted for only 4%, including 2 part-time employees. The percentage of local employees was over 99%. The percentage of male to female employees was 7:1; the average age was 44.1 years old; the average years of service were 18.4 years.

FCFC Manpower Structure in 2017

(Unit: Person)

Type	Nature	Female		Male		Total
		Number of People	Percentage to the Nature	Number of People	Percentage to the Nature	
Employment Contract	Regular Employees	641	12.3%	4,575	87.7%	5,216
	Temporary Employees	135	60.5%	88	39.5%	223
Type of Employment	Full-time Employees	774	14.2%	4,663	85.8%	5,437
	Part-time Employees	2	100.0%	0	-	2
Position	Executives	1	0.2%	51	1.1%	52
	First and Second Level Directors	23	3.6%	1,132	24.7%	1,155
	Entry Level Managers and Employees	340	53.0%	3,392	74.1%	3,732
	Assistants	277	43.2%	0	-	277
Location	Northern Taiwan	200	31.2%	793	17.3%	993
	Central Taiwan	132	20.6%	2,181	47.7%	2,313
	Southern Taiwan	256	39.9%	1,038	22.7%	1,294
	Eastern Taiwan	53	8.3%	563	12.3%	616
Age	Under 29 Years Old	51	7.96%	423	9.25%	474
	30-39 Years Old	126	19.66%	1,119	24.46%	1,245
	40-49 Years Old	241	37.60%	1,752	38.30%	1,993
	50-59 Years Old	196	30.58%	1,015	22.19%	1,211
	Over 60 Years Old	27	4.21%	266	5.81%	293
Years of Service	Under 10 Years	151	23.56%	1,260	27.54%	1,411
	11-20 Years	74	11.54%	1,238	27.06%	1,312
	20-30 Years	257	40.09%	1,477	32.28%	1,734
	Over 30 Years	159	24.80%	600	13.11%	759

Type	Nature	Female		Male		Total
		Number of People	Percentage to the Nature	Number of People	Percentage to the Nature	
Education	Doctor's Degree	0	-	8	0.2%	8
	Master's Degree	45	7.0%	459	10.0%	504
	Bachelor's Degree	38	5.9%	817	17.9%	855
	Others	558	87.1%	3,291	71.9%	3,849
Subtotal of Regular Employment by Gender		641	100.0%	4,575	100.0%	5,216

4.1.3 Employment



Employee Recruitment

FCFC's recruitment has always been carried out in a fair, impartial and transparent manner in accordance with the Labor Standards Act. Based on the fundamental human rights that everyone is equally considered for any job opportunities, we evaluate each candidate completely based on his or her expertise and experience. After candidates are employed, we ensure that they receive fair treatment in terms of promotion, evaluation, training, and rewards and punishments. Through FCFC's human resources system, we expect to achieve the SDGs Target 8.6, substantially reducing the proportion of youth not in employment, education or training.

New Recruits by Age and Region

Year		2016		2017	
Type	Division	Female	Male	Female	Male
Age	Under 29 Years Old	20	124	22	149
	30-39 Years Old	13	42	6	40
	40-49 Years Old	1	1	-	-
	50-59 Years Old	-	1	1	-
	Over 60 Years Old	-	-	-	-
Region	Northern Taiwan	18	21	16	23
	Central Taiwan	2	112	1	97
	Southern Taiwan	11	11	11	26
	Eastern Taiwan	3	24	1	43
Total		34	168	29	189
Percentage		0.65%	3.21%	0.56%	3.62%

Note: Percentage = New (Male) Female Recruits / Total Regular Employees



Employment Security

Even in difficult economic times, we prioritize the protection of our employees' rights, and human resource reallocation is preferred over layoffs. All personnel transfers and adjustments are reported verbally by heads of departments and processed within 10 days according to the applicable laws and regulations.

In 2017, the turnover rate (including retirement) of FCFC was 4.2%, 49.77% of which were retirees. This fully demonstrates FCFC's emphasis on providing our employees employment security.

Turnover by Age and Region

Year		2016		2017	
Type	Division	Female	Male	Female	Male
Age	Under 29 Years Old	12	42	13	35
	30-39 Years Old	14	39	10	29
	40-49 Years Old	42	40	12	21
	50-59 Years Old	51	108	13	39
	Over 60 Years Old	10	135	6	41
Region	Northern Taiwan	12	28	15	48
	Central Taiwan	78	276	4	55
	Southern Taiwan	37	38	35	46
	Eastern Taiwan	2	22	-	16
Total		129	364	54	165
Percentage		2.47%	6.96%	1.04%	3.16%
Turnover Rate (Year)		9.43%		4.20%	

Note: Percentage = (Male) Female Turnover / Total Regular Employees



Percentage of Local Recruits as Senior Managers

We have contributed to the local communities by prioritizing employment offers to local residents. We also train the locals to become senior managers. The percentage of local recruits as senior managers over the past 5 years is shown in the table below:

Percentage of Local Recruits as Senior Managers over the Past 5 Years

(Unit: Person, %)

Year	2013	2014	2015	2016	2017
Number of People	993	1,046	1,019	940	677
Percentage of Local Recruits (%)	46.0	47.5	47.0	43.7	39.6

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

4.1.4 Compensation

The compensation standards for new recruits are established based on the education and experience relevant to the position's requirements. In the spirit of equal pay for equal work, the minimum salary ratio of female and male employees with identical positions and ranks is 1:1. Annual promotions and raises are determined by performance. At present, the salary ratio of male and female employees is shown in the table below:

Salary Ratio of Female and Male Employees

Unit: %

Year	2015		2016		2017	
Type	Female	Male	Female	Male	Female	Male
Level 2 Directors or Above	100	96	100	103	100	95
Entry Level Managers or Below	100	144	100	142	100	138

For entry level managers or below, female employees receive lower salaries than male employees for two reasons: (1) female employees generally undertakes jobs with less skill needed, such as operators or stewardesses; (2) female employees are generally free from shift works. The minimum salary offered to new male and female recruits is higher than the statutory basic salary, NT\$21,009/month, by 1.67%; in addition to the minimum salary, performance bonuses, year-end bonuses, and employee bonuses appropriated at a certain percentage of profit are offered to recognize employees' achievements.

Regarding retirement protection, the Company makes monthly contributions to employees' pension funds based on the new or old pension plan selected by the employees so that FCFC is able to give pensions to employees when they meet the statutory conditions of retirement. As of 2017, FCFC had 1,609 employees joining the old pension plan and 3,607 employees joining the new pension plan. For those joining the old pension plan, the Company contributes 2% of the total monthly salary to the retirement pension account opened at the Bank of Taiwan in accordance with the Labor Standards Act. As of 2017, the balance of the account reached NT\$2,438,815 thousand. For those joining the new pension plan, the Company contributes 6% of their monthly salary to the dedicated account opened at the Bureau of Labor Insurance in accordance with the Labor Pension Act; in addition, employees may contribute the pension voluntarily within 6% of their monthly salary.

4.1.5 Employee Benefits

FCFC views each and every employee as a member of our family. Initially, before a plant begins operation, we ensure that such basic needs as food, accommodations, and recreational infrastructure are already in place; furthermore, we actively promote a variety of employee benefits that aim to provide our employees and their families with basic necessities, education, and recreation.

Various employee benefits have been implemented according to the corporate welfare system with a number of benefits better than the statutory requirements. We have established the Employee Welfare Committee at each plant to organize annual trips, birthday gifts, presents for major festivals, scholarships for employees' children, group insurance, and club funds. The Administration Department of each plant is responsible to support the implementation of welfare services.

Leave Benefits

We provide annual leaves, marital leaves, bereavement leaves, official leaves, occupational injury leaves, paternity leaves, maternity leaves, sick leaves, menstrual leaves, personal leaves, family care leaves, relocation leaves, family visit leaves for expatriates returning to Taiwan, etc.

Insurance Benefits

In addition to labor insurance and national health insurance, the Employee Welfare Committee of each plant provides casualty insurance and medical insurance. Employees are offered a variety of group insurance policies with discounted premiums, such as casualty insurance, medical insurance, and cancer insurance, so that they can freely select more comprehensive insurance plans.

Retirement Benefits

With monthly contributions to employees' pension funds and retirement reserves, we give pensions and souvenirs to employees joining the retirement plans when they meet the statutory conditions of retirement.

Marital and Parental Benefits

- ♥ Wedding or bereavement cash gifts and subsidies will be given when employees or their direct relatives get married or pass away.
- ♥ Breastfeeding rooms are provided in some plants for nursing (milk collecting) during work hours.
- ♥ Parental leaves are provided in accordance with related laws and regulations. Qualified employees may schedule their working hours flexibly as needed.
- ♥ Unpaid parental leaves are provided upon request. In 2017, a total of 6 female employees applied for the unpaid parental leaves.

FCFC Application for Unpaid Parental Leaves and Reinstatement

Unit: Person

Item	2015			2016			2017		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Number of Employees Qualified for Unpaid Parental Leaves	3	192	195	8	180	188	6	148	154
Number of Employees Applying for Unpaid Parental Leaves	3	-	3	8	-	8	6	-	6
Number of Employees Expected to Reinstatement in the Year (A)	2	1	3	3	-	3	4	-	4
Number of Employees Applying for Reinstatement in the Year (B)	2	1	3	3	-	3	4	-	4
Number of Employees Having Reinstated for over a Year (C)	-	-	-	2	1	3	3	-	3
Reinstatement Rate (%) (B/A)	100	100	100	100	-	100	100	-	100
Retention Rate (%) (C/B)	-	-	-	100	100	100	100	-	100

Note: 1. Since most of our employees sought long-term daycare approaches, the number of employees applying for unpaid parental leaves was rather low.

2. "-" means that no value is currently available.

Healthcare Benefits

- 🏠 We provide employees routine health examinations that are better than the statutory requirements.
- 🏠 We take the initiative to arrange special health examinations and health management at different levels for employees who perform specific operations with health hazards, such as noise and specific chemicals. The health examinations include such metabolic syndromes as high density lipoprotein (HDL) cholesterol, alpha-fetoprotein (AFP), and carcinoembryonic antigen (CEA) as well as oral examinations and cancer screening.
- 🏠 We provide subsidies for employees and their families receiving medical services at Chang Gung Memorial Hospital. Discounts are also given for health examinations.
- 🏠 We set up fitness and entertainment facilities in some plants, such as basketball courts, volleyball courts, table tennis courts, and fitness rooms.
- 🏠 We offer healthcare information and organize health lectures at each plant from time to time.
- 🏠 We arrange infirmary and medical staff at each plant to provide medical services and counseling. Health promotion activities, such as weight management, smoking cessation clinics, and preventive health care are also held occasionally. We partner with the John Tung Foundation to organize the Stress Relief Day.

Benefits for Everyday Living

- 🏠 We provide cash prizes for Chinese New Year, Dragon Boat Festival, and Mid-Autumn Festival.

- 🏠 We provide gifts for birthday and three Chinese festivals.
- 🏠 We provide subsidies for employees' annual trips and gatherings.
- 🏠 Employee cafeterias, dormitories for single employees and dependents, welfare buildings, canteens, salons, libraries, guest houses, and recreational facilities are established at the plants.
- 🏠 We provide cash prizes for buying stocks of listed affiliated companies
- 🏠 Scholarships are offered to employees' children.
- 🏠 Favorable bank-issued mortgages are offered to employees.
- 🏠 Employees can enjoy resource sharing between subsidiaries and discounts at cooperative stores.

Benefits of Employee Cafeterias

- 🏠 We offer subsidies for employees' daily meals.
- 🏠 Examination of any pesticide residue of ingredients used in the cafeteria is conducted periodically.
- 🏠 We have dietitians improve cooking, spices, ingredient selection, and menus and provide low-oil and low-sodium dining For example, FPG's employee cafeterias provide over 4,000 dishes each month, and less than 6% of them are fried dishes.
- 🏠 Special meals are provided on certain holidays and Chinese New Year to treat hardworking employees.

Promoting Employee Relations

- 🏠 A spectacular year-end party with lucky draws is held each year.
- 🏠 We subsidize club activities.
- 🏠 We organize the corporate Sports Day to encourage sports and recognize outstanding employees with rewards and prizes.
- 🏠 Employees with 5 years of service will be awarded a commemorative gold coin to express the Company's gratitude.
- 🏠 We organize a variety of trips, hiking events, sports competitions, art exhibitions, and lifestyle seminars to help employees develop healthy bodies and minds.



Mountaineering Club of the Longde Plant



Road Running Club of the Xingang Plant

Self-Learning Benefits

We provide comprehensive training and continuing education opportunities for employees to obtain professional certificates and learn foreign languages. They are given rewards after obtaining the certificates.

Personal Safety and Family Care

- 🏠 We provide employees flame-retardant uniforms and steel-toed shoes.
- 🏠 We compensate for on-the-job deaths better than what is legally required without offsetting labor insurance benefits (although offsetting is allowable under the law); furthermore, we provide benefits that are better than what is legally required for deaths that are unrelated to official business. The minimum benefits are 6 months' average salary.
- 🏠 Despite the fact that there is no such regulation, NT\$0.65 million to NT\$2.57 million will be additionally provided as compensation based on deaths caused on-duty or off-duty.

Expatriate Benefits

- 🏠 Casualty insurance and travel accident insurance are provided for expatriates and business trips.
- 🏠 Subsidies for family visits, medical services, and business trips are provided for expatriates in China and Vietnam.
- 🏠 Health examinations for expatriates are provided prior to dispatch and once every two years thereafter.

Retirees' Association

In appreciation of the tremendous contribution from our retired employees, we established the Retirees' Association in 2013. FCFC is in charge of the three branches in Yilan, Changhua and Chiayi. As of 2017, the Association had 768 members. We subsidize the Association's activities each year to strengthen the connections between our retirees.



Retirees' Association

4.2 Talent Development



Management Approach to Talent Recruitment and Retention



Employees are the Company's most valuable assets and the basis for sustainable development. FCFC has implemented a comprehensive employee training and development system that computerizes a variety of training courses, which allows the Company to ensure that training is completed by each employee in a timely manner.

4.2.1 Career Development Management

In addition to providing favorable compensation and benefits, FCFC also attaches great importance to our employees' career development. Appropriate training programs are arranged at each stage, from new recruits to entry level employees and then to the managerial level. Such training programs include orientation, basic training, professional training, manager reserve training and cross-functional training. To implement the talent development plan, we have established the Training Management Regulations. With the ERP training system, we can electronically monitor and keep track of each employee's training progress to ensure that training is completed within the given time frame. Therefore, we can ensure that each employee is equipped with the necessary expertise and skills in line with the objectives of the talent development plan.

Employees' Career Development Path

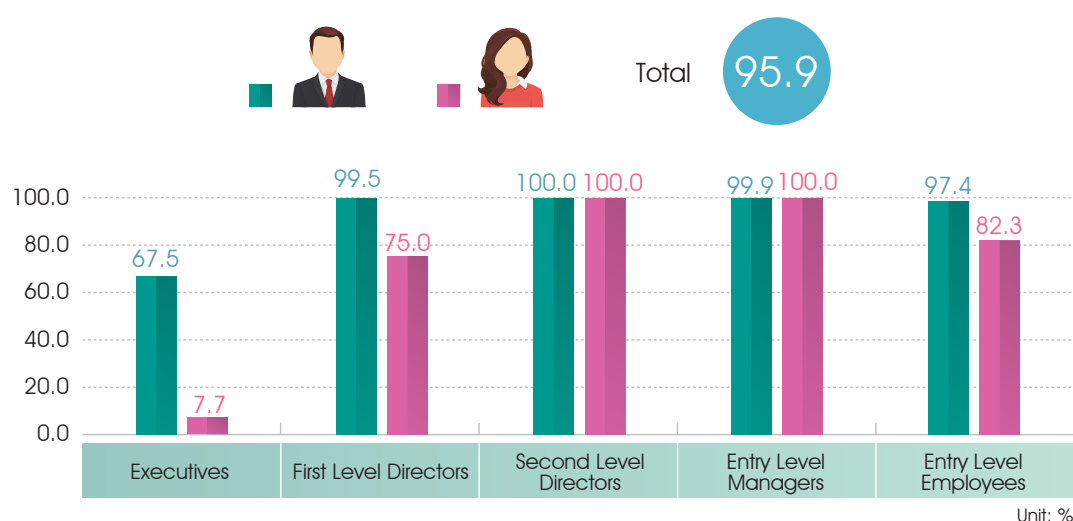


In addition to the training courses, we also review the appropriateness of employees' duties and implement performance evaluations on a regular basis to examine the employees' career development and motivate our employees. The performance evaluations include:

- 💡 the monthly performance evaluation for Level 2 directors or below;
- 💡 the quarterly performance evaluation for Level 1 directors; and
- 💡 the year-end performance evaluation for all employees.

At present, all employees of FCFC are required to undergo the performance evaluations except for temporary employees (such as consultants, contract-based employees, work-study students, and foreign employees). The average of each category is 95.9%. Through performance evaluations, managers are able to communicate with subordinates face to face and further discover their talent that may be referred to in case of training or job transfers, which helps fulfill the career development management.

Percentage of Employees Receiving Regular Performance and Career Development Evaluations in 2017



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

4.2.2 Professional Training and Development

To strengthen employees' expertise and safety, professional training is divided into 9 functions. Employees are encouraged to obtain the required licenses for their particular expertise; in addition, we have established regulations governing ranking advancement and promotion to encourage employees to learn the second expertise or foreign languages and participate in transfer training. We also provide various seminars from time to time to promote life-long learning. To improve environmental protection and occupational safety management, employees were arranged to receive 5,163.5 hours of related training in 2017.

To promote employees' awareness of human rights and occupational safety, we organize occasional courses on occupational safety and health, the Labor Standards Act, the Sexual Harassment Prevention Act, and the Act of Gender Equality in Employment in addition to the orientation where employees receive training related to evaluation, appointment, employee benefits, attendance and access control.

We also commission FPG's Technical Training Center to organize technical training on a regular basis, such as EHS training for maintenance/engineering employees, training for production line operators, training for paint coating inspectors, and training for welding inspectors, to improve employees' expertise.

In 2017, each employee received an average of 28.4 hours of training (17.2 hours for senior managers; 29.1 hours for entry level managers; 32.8 hours for entry level employees) with the completion rate of 100%.



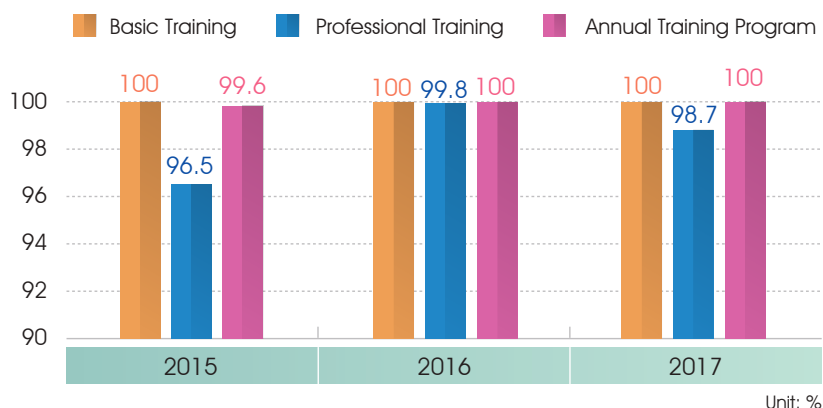
FCFC Employee Training over the Past 3 Years

(Unit: Hour)

Rank \ Year	2015			2016			2017		
	Male	Female	Average	Male	Female	Average	Male	Female	Average
Middle to Senior Managers	12.1	33.7	12.4	19.7	13.5	19.6	17.4	8.8	17.2
Entry Level Managers	33.7	26.9	33.4	33.8	18.5	32.9	29.4	20.7	29.1
Entry Level Employees	23.3	25.0	23.7	23.2	34.8	25.3	32.3	35.0	32.8
Average Training Hours/ Person	22.3	25.2	22.7	24.0	33.0	25.2	27.7	32.9	28.4

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

FCFC Training Completion Rate over the Past 3 Years



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

4.3 A Healthy and Safe Working Environment



Management Approach to Occupational Health and Industrial Safety



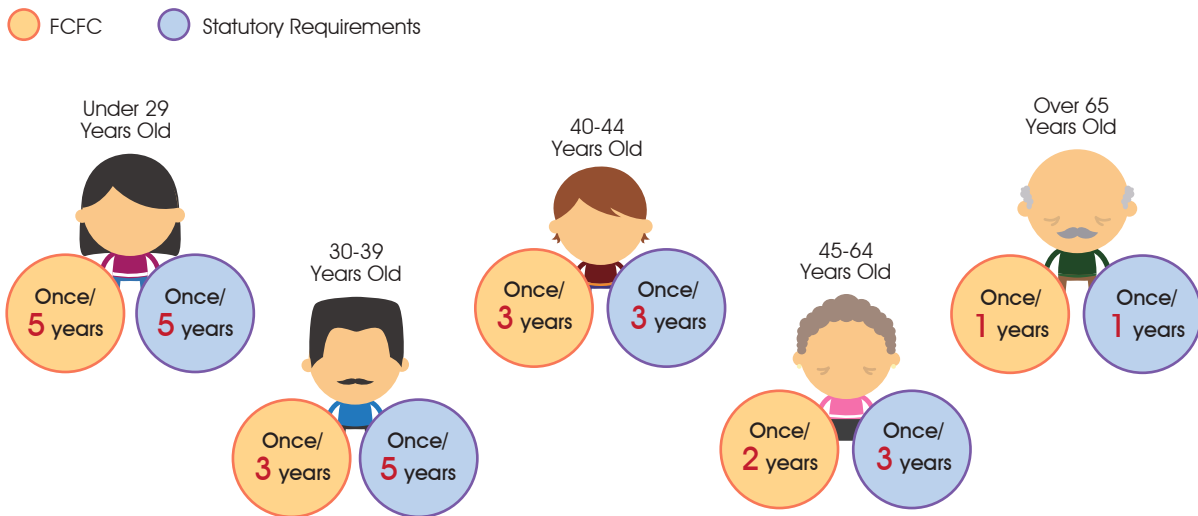
Through review, audit and communication as well as training and corporate requirements, we make sure that each of our employees participates in EHS activities. We also impose stricter EHS requirements on our procurement and contract system to realize the ultimate goal of zero injury, zero disaster and zero pollution and create an environment for perpetual business operation.

Our employees are required to strictly adhere to the standard operating procedures (SOP), the Occupational Safety and Health Act, the Regulations of the Labor Health Protection, and the Health Management Regulations to create a healthy and safe working environment. We provide our employees with EHS suggestion channels, instant responses, and appropriate countermeasures; furthermore, nurses are also arranged in industrial complexes to provide medical guidance and consulting services according to employees' needs.

4.3.1 Employee Health Management

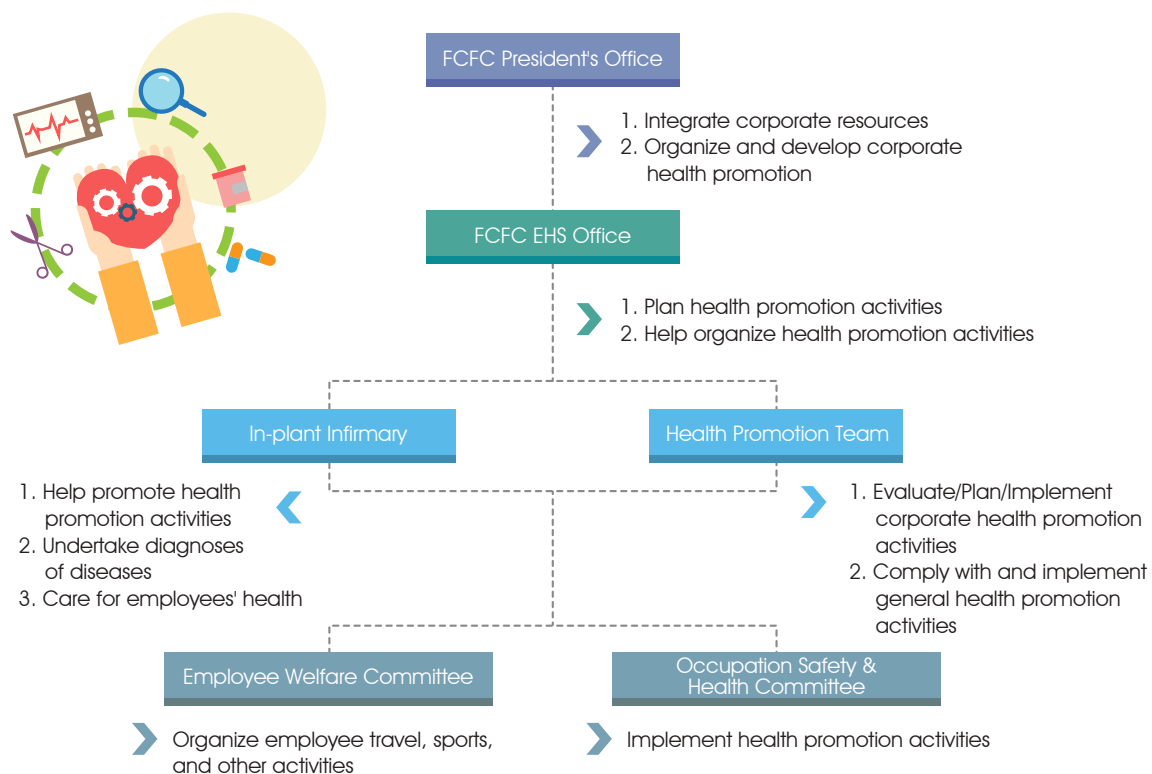
According to the Regulations of the Labor Health Protection and FPG's Health Management Regulations, FCFC organizes general health examinations as well as special health examinations for operators working under high temperature, high pressure, or hazardous fluids. In 2017, the results of the special health examinations showed no incidence of occupational disease. Besides the health examination items already stipulated in the stated laws and regulations, health examination items such as Alpha-Fetoprotein (AFP), carcinoembryonic antigen (CEA), oral cancer, and high density lipoprotein-cholesterol (HDL-C) are also incorporated to facilitate better employee healthcare. As shown in the table below, the frequency of health examinations for employees aged 30-40 and 40-65 is better than the statutory requirements.

Comparison between FCFC Frequency of Health Examinations and Statutory Requirements



To further promote health management, the EHS Office at the Mailiao Industrial Complex has helped establish a health promotion organization. The Employee Welfare Committee and the Infirmary are invited to participate in health promotion programs. In 2017, a weight loss activity was held in the Mailiao Industrial Complex and attracted 395 attendants. The total weight lost reached 826 kg. To provide employees better healthcare and safety, the health promotion organization received employees' opinions by attending labor union meetings and management-employee meetings.

Health Promotion Organization



Medical personnel are assigned to industrial complexes to provide employees with personal health guidance and professional counseling services. In collaboration with the Medical Center of Chang Gung Memorial Hospital, FCFC promotes preventive medicine and disease prevention to raise employees' awareness of their health conditions. To enhance employees' awareness of their diet, exercise and health conditions, we have offered healthcare seminars on such topics as smoke and alcohol prevention, healthy diet, and physical fitness. A total of 36 seminars were organized in the first and second halves of 2017 (as shown in the table below). FCFC was awarded the Excellent Enterprise in Promoting Anti-addictive Substances by Ministry of Health and Welfare.



Seminars Held in the First Half of 2017	Seminars Held in the Second Half of 2017
<ul style="list-style-type: none"> Kidney Care Metabolism and Weight Control Tobacco Control Maternal Healthcare Cancer Prevention Liver Care and Metabolism A Happy and Friendly Workplace 	<ul style="list-style-type: none"> Noise Prevention Acupressure Massage Herbal Essential Oils and Aromatherapy 4-minute Tabata Aerobic Yoga Influenza Prevention Stress and Depression

4.3.2 Promoting a Healthy Workplace in Cooperation with Government Agencies

FCFC works with government agencies to organize safety promotion meetings and executive symposiums at the Mailiao Industrial Complex to discuss various high-risk hazardous operations, such as fires, explosions, and limited space, and improve the safety of operating environments. The Longde Plant continues to form the safety and health group in cooperation with the Occupational Safety and Health Administration, Ministry of Labor and the Yilan County Government to provide assistance for small and medium enterprises within the Group in their safety and health operations.



We have set up automated external defibrillators (AED) throughout our industrial complexes. In 2017, additional 31 AEDs were installed, and the total number of AEDs installed reaches 64 (2 sets per plant). The AED Monthly Checklist has also been designed for the occupational safety personnel to check the AEDs on a monthly basis. In addition, CPR+AED training is also strengthened so that employees who suffer from atrial fibrillation can receive first aid immediately. In 2017, 70% of the employees of the Xingang Plant received CPR+AED training, and the Xingang Plant was thus awarded the AED-certified premise by Ministry of Health and Welfare.



4.3.3 Workplace Safety Management

An occupational safety and health committee has been established at each industrial complex. The committee convenes meetings on a regular basis to explain the EHS policies and their implementation to the labor representatives. The number of committee members and labor representatives of each industrial complex are summarized below:

Plant	Chairperson	Number of Occupational Safety and Health Committee Members	Number of Labor Representatives	Percentage of Labor Representatives (%)
Mailiao Plant	Vice President Chi-Chu Chang	7	3	42.9
Xingang Plant	Director Chih-Ming Hu	16	9	56.3
Changhua Plant	Manager Wen-Kuang Tseng	8	3	37.5
Longde Plant	Assistant Vice President Chin-Fu Huang	12	11	91.7

To absorb knowledge from a diversity of professional domains, FCFC shares technologies and skills with experienced domestic and foreign teams. For example, we periodically collaborate with labor inspection institutions to organize symposiums and observation tours, work with local authorities to arrange emergency response drills, and appoint firefighters to receive practical fire training in professional fire agencies in the hope of improving employees' responses to unexpected situations.

In addition, we invite TÜV Rheinland Group and Lloyd's Register Quality Assurance to conduct comprehensive inspections, set up verification and offer suggestions, and commission IHS to instruct our employees the process hazard analysis (PHA), making our safety, health and risk assessments and fire management in line with the international standards. By the mutual cooperation with government agencies, various resources can be brought into full play.



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). At present, 57 employees are assigned to PSM in each level, who are dedicated to promoting PSM in all departments. The 14 items of PSM are audited on a regular basis; in addition, the Forum on PSM Operation and PSM Personnel is organized every year. Since 2013, we have regularly commissioned the impartial third party, such as Mary Kay O'Connor Process Safety Center (the U.S.) and the Pressure Vessel Association, to audit PSM performance at our process plants. As of today, 22 plants have been audited, and the results of the audits meet the OSHA's requirements for PSM.

Since 2014, we have organized training courses on PSM audit skills and performance audits, including the Technical Practice of Failure Mode and Effects Analysis (FMEA) and the Identification of Process Hazards in Non-routine Operations, and invited domestic experts and Sphera, an American consulting company, to instruct PSM personnel and PHA facilitators and give hands-on practice, so as to improve the functions of performance audits. Since 2016, we have appointed employees to attend the Global Congress on Process Safety every year to learn from other petrochemical companies at home and abroad, adjust related regulations, and further improve the process safety.



Management of Change (MOC)

To ensure that any alternation in the design, equipment, materials or operation does not create new or potentially harmful situations, we actively carry out the process hazards analysis (PHA). Since 2011, we have scheduled the annual MOC counseling and evaluation plan, along with exchange activities, for each plant in Taiwan. The plants are divided into 5 MOC project teams based on their specific locations (with the Mailiao Industrial Complex subdivided into Mailiao MOC Project Team and Haifeng MOC Project Team). PSM personnel from the Business Department are designated (to other Business Departments) as the leaders of MOC Project Teams to facilitate exchange activities and performance evaluations in the plants.

In 2017, the MOC counseling and evaluation plan was completed. The results show that hazard identification, risk assessment, and development of related control measures can be carried out in advance for each alteration to avoid possible damage after the alteration.



Fire Control Plan

To reinforce the capabilities of emergency responses and firefighting at the Mailiao Industrial Complex, FPG continues to work with related central and local government agencies to organize a disaster response drill every quarter. Through the drill, the emergency response personnel assigned to each plant are able to get familiar with the operating procedures, while government agencies can know the potential hazards at each plant and provide necessary assistance.

In 2017, three disaster response drills were organized, including the emergency response to ocean pollution caused by public pipeline leakage at the pier and the drill in fires at the plant caused by leakage of chemical substances controlled by the Environmental Protection Administration. Based on the PHA, the participating plant simulated the accidents at the high risk of causing disasters, such as pipelines for flammable, explosive or controlled chemical substances, marine transport and equipment pipelines

operated in the plant; the participating plant designed the script and rescue methods based on the actual situations and familiarized the participating units and disaster relief personnel with the emergency response procedures and respective duties through repeatedly discussions and practices. Other plants were invited to observe the quarterly emergency response drills carried out at the Mailiao Industrial Complex to improve the overall awareness of disaster relief and emergency response at the Mailiao Industrial Complex.

Date of Drill	Company	Participating Plant	Subject
April 20, 2017	FPC	Carbon Fiber Plant	Short circuit ignition caused by leakage of acrylonitrile (controlled chemical substance) in the pump (P-700B) pipeline
October 18, 2017	FPCC	Harbor Administrative Services	Fire caused by leakage of discharge flanges during the abnormal fuel oil loading operation at Mailiao Port
		Port Company	
November 16, 2017	FCFC	SM Plant	Fire caused by leakage of ethylbenzene in the pump (P-302) pipeline flange transported from the storage tank to the EB process zone



Complex Emergency Response Drill for Fire Caused by Leakage of Controlled Chemical Substances



Emergency Response Drill for Ocean Pollution



Complex Emergency Response Drill

4.3.4 Statistics of Occupational Injuries

In 2017, the statistics of occupational injuries in FCFC are shown in the table below. No male or female employee suffered from an occupational injury. The frequency-severity indicator was 0.38 on average, which was far lower than that of the chemical material manufacturers in Taiwan (0.84) (Note). This shows the efforts made by FCFC to reduce the incidence of occupational injuries.

FCFC Occupational Injuries in 2017

Disabling Injury Rate		Disabling Severity Rate		Frequency-severity Indicator		Absence Rate		Occupational Disease Rate	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1.37	0	135	0	0.43	0	0.42	0.46	0	0

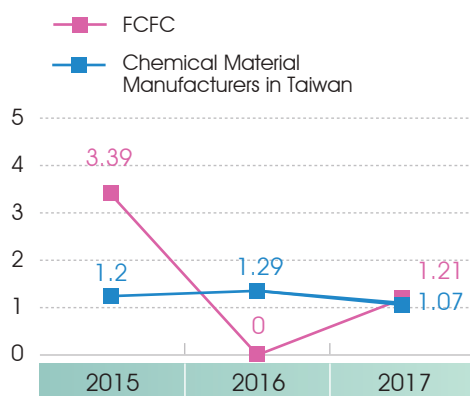
Note: Industry information comes from the 2015-2017 Frequency-severity Indicators by Sector published by the Occupational Safety and Health Administration, Ministry of Labor.
(<https://www.osha.gov.tw/1106/1113/1115/19441>)

Compared to the occupational safety performance of the domestic chemical material manufacturing industry, the frequency-severity indicator of FCFC from 2015 to 2017, excluding traffic accidents, were well below the statistics published by the Ministry of Labor. This reflects our efforts made to prevent similar abnormalities by reinforcing our employee's ability to identify potential hazards and strengthening equipment safety.

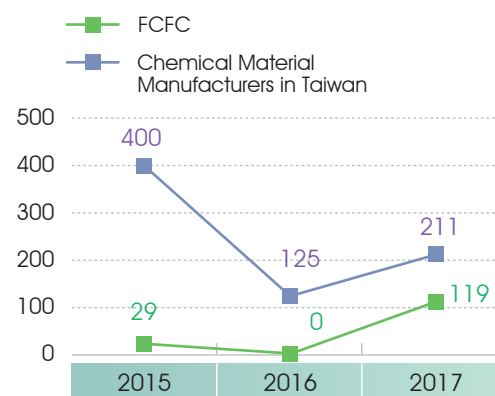
FCFC Occupational Injuries over the Past 3 Years

Year	Disabling Injury Rate	Disabling Severity Rate	Frequency-severity Indicator	Absence Rate	Occupational Disease Rate
2015	3.39	29	0.32	0.24	0
2016	0	0	0	0.3	0
2017	1.21	119	0.38	0.41	0

Disabling Frequency Rate

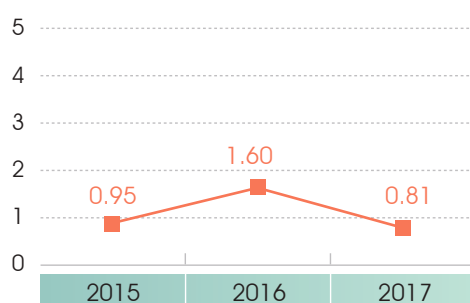


Disabling Severity Rate

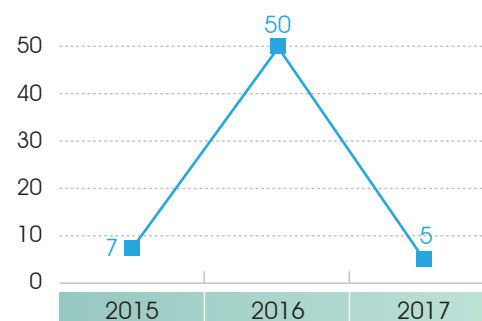


Note: The frequency-severity indicator in 2017 was higher than those in 2015 and 2016 due to the flashover on the reheating furnace at the SM Plant and the arc burn in the substation of the ARO1 Plant. Related issues will be described in Section 4.4.

Disabling Injury Rate



Disabling Severity Rate



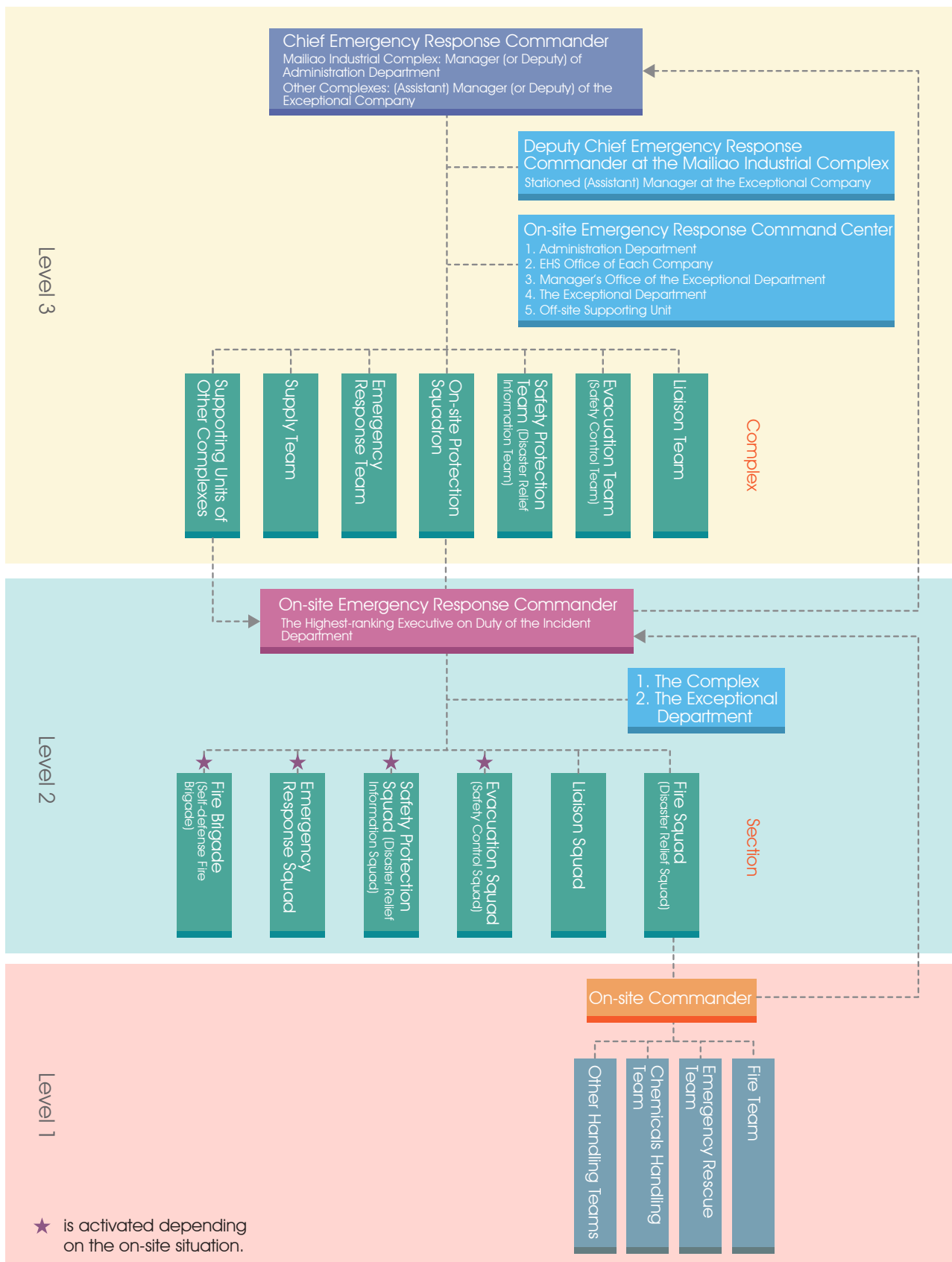
Note 1: The absence rate and the occupational disease rate of contractors were unavailable; thus, the working hours were estimated through the access system.

Note 2: Hours of Attendance = Number of Employees * 250 Working Days * 8 Hours; hours of absence include hours of sick leaves and occupational injury leaves.

In 2017, our employees and contractors suffered from 8 accidents, including occupational disasters and fires, at the workplace. 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 may also report to the Yunlin Offshore Industrial Park Service Center and the Yunlin County Government. According to the Regulations Governing Accident Handling and the Regulations Governing Emergency Responses, in the event of an accident, the Company groups the employees based on the emergency response organization and initiates the emergency response procedures at section, plant and complex level based on the severity of the accident. Each team handles the accident according to its duties. The accident will be reported through the accident (abnormality) bulletin system and the accident (abnormality) SMS system. After the accident takes place, the investigation procedures will be initiated to clarify the cause and improve accordingly, so as to avoid the recurrence of similar accidents.

Plant	Fire	Major Occupational Disaster	General Occupational Disaster	Total
Longde Plant	1	0	1	2
Changhua Plant	0	0	0	0
Mailiao Plant	1	2	2	5
Xingang Plant	1	0	0	1
Total	3	2	3	8







Overview of Occupational Disasters

The Company's occupational disaster rate (persons per thousand) from 2015 to 2017 was lower than the national average:

Item	2015	2016	2017
Number of Occupational Disabilities	7	1	3
Occupational Disaster Rate (Persons per Thousand)	1.72	0.23	2.53
Number of Occupational Fatalities	0	0	0
Number of Major Occupational Disasters (Contractors)	0	1	0
Number of Occupational Fatalities (Contractors)	0	1	0
National Occupational Disaster Rate (Persons per Thousand)	3.19	2.95	2.9

- Remark
1. The above-mentioned national occupational disaster rate did not include traffic accidents.
 2. The occupational disaster rate (persons per thousand) in 2017 was higher than that in 2016 due to 2 major occupational disasters.

In 2017, our employees suffered from 3 accidents at the workplace, as described below:

Department	Frequency of Accidents	Category of Accidents	Area	Number of Injuries	Gender
3rd Petrochemical Division	1	Fall	Longde	1	Male
2nd Petrochemical Division	1	Burn	Mailiao	4	Male
1st Petrochemical Division Engineering & Utility Division	1	Burn	Mailiao	6	Male

4.3.5 Contractor (Carrier) Safety

Upholding FPG's business philosophy, FCFC considers contractors our own employees and important business partners. To ensure the safe operations, we insist on holding periodic meetings with contractors before starting construction to give a full explanation so that the related personnel can be provided with a safe working environment. Our contractors must pass training courses and tests before entering the plant to ensure that they have full understanding of safety and health knowledge and concepts. We also request contractors to implement self-management. Through such mutual trust and cross-supervision,

we hope to achieve the goal of zero disaster in cooperation with our contractors. In 2017, we offered training for 5,987 contractors with a qualification rate of 100%.

In addition to communicating with contractors about construction safety in the kick-off meeting, we conduct a briefing meeting before starting daily operations to inform them of the possible risks and hazards at the workplace. We also inspect their mental conditions to further enhance safety during operations.

To improve transportation safety, we require all carriers and contractors to propose their own safety management systems and take into account the Safety & Quality Assessment System (SQAS) evaluation. Every year, all carriers must receive SQAS evaluation, and those pass the evaluation will be certified by SQAS. As of now, the number of contractors transporting hazardous materials for FPG has reached 75. Carriers who have been certified by SQAS must install recorders in all transportation vehicles and take all appropriate safety measures for hazardous materials. They are not qualified to enter the plants until they receive a certificate sticker that demonstrates their passing of the regular inspections; furthermore, alcohol breathalyzers and blood pressure meters must be available at all transportation sites. Drivers with an alcohol testing level above 0 mg/L or a systolic pressure higher than 160 mmHg are prohibited from performing any loading or shipment; those with a systolic pressure higher than 180 mmHg will be expelled from the plants immediately.



To strengthen the safe operations of in-plant carriers, the Guidelines for the Operation of Stackers and Powered Pallet Trucks were established in 2017. According to the Guidelines, a plant is required to reduce the incidence of accidents through guidance, speed limit control, and lane separation; in addition, when passing the road outside the plant is necessary, a truck or pallet truck is required to transport the goods to the operating site so as to further enhance carriers' awareness of independent safety management.



Construction Safety Management for Contractors

When signing contracts with contractors, we require them to comply with the safety and health regulations and appoint safety and health managers. No contracted employees are allowed to enter the plants until they receive and pass safety and health training and hazard identification training.

We audit the safety and health protection facilities, automatic inspections, and the common operating organization established by contractors; vehicles, electrical equipment and mechanical equipment may only enter the plants after passing access control to prevent potential hazards inside the plants arising from lighters and disqualified electrical and mechanical equipment.

Random site inspections are also carried out for the construction sites without prior notice, with intensive examinations focused on high risk operations. In addition to imposing penalties on the violators, we will also notify the violators of the causes that lead to the abnormal incidents. By correcting construction workers' construction methods, the same mistakes can be effectively prevented. All abnormal incidents are incorporated into future training materials. Through repeatedly notification and training, we continue to strengthen the construction workers' awareness of construction safety .



Training and Certification of Safety Supervisors

To ensure the safety of construction, we have appointed the dedicated safety and health personnel superior to the domestic regulations. According to the corporate safety and health policy, safety supervisors are appointed to remind contractors of construction safety in due course, ensure their compliance with standard operating procedures and attend their independent inspections before construction; in addition, safety supervisors review the construction in a timely manner to ensure the safety of contractors and the process. We organize training for safety supervisors every year to enhance their supervisory skills on-site. As of 2017, 1,555 employees had received such training with 1,035 becoming certified safety supervisors.

4.4 Description of Material Occupational Safety Issues



Flashover on the Reheating Furnace in SM Plant

On March 6, 2017, the foreman at the SM Plant fed the F101 alkylation reactor to switch gas to fuel. Flashover occurred during the adjustment of incomplete combustion, resulting in 4 employees' injuries and the indirect shutdown of the ethylbenzene process zone (EB1) and the damage to the F101 reheating furnace. The accident had impeded the production capacity for more than two months. The tank oxygen detector was installed subsequently, and the safety inspection was carried out before operation. Related corrective actions were completed by the end of 2017.



SILo Gas Explosion in PABS Plant

On March 21, 2017, air leaked due to the deformation of the bag filter (F701F) above the BP storage tank in the PABS Plant. During the reinforcement of the bag filter, the welding temperature was transmitted to BP adhered to the bag filter, causing the coking and melting BP to fall into the bottom of the BP storage tank. The high-temperature molten coke caused BP to smolder and decompose to produce flammable gas, such as styrene and butadiene derivatives. After an hour, flashover occurred under the concentration of flammable gas and the ignition temperature. In this case, no employee was injured, but the BP storage tank and auxiliary equipment were damaged, impeding the production capacity for more than 10 days.

Subsequently, the transportation method for BP was changed from air transport to nitrogen transport, which can eliminate the presence of oxygen in the system and improve the intrinsic safety of the equipment. It is currently being improved and is expected to be completed in 2019.



Arc Burn in the Substation of ARO1 Plant

On May 19, 2017, the arc was generated due to the abnormal switchboard of the conveying motor in the ARO1 Plant, causing 6 employees to suffer from burns and damage to the switchboard; however, the production capacity was not affected. The phase reversal relay and the alarm display system were installed subsequently, and similar exception handling procedures were also established so that the field personnel could be aware of any exception and perform exception handling according to standard steps immediately to avoid the recurrence of similar situations.



Fire Alarm at Cooling Tower of Xingang Utility Plant

On November 28, 2017, a fire alarm rang due to a short circuit of the cooling tower fan in the Xingang Utility Plant, which caused surrounding wooden facilities to be on fire. On that day, the Xingang Fire Brigade immediately extinguished the fire. Although the facilities were damaged, the operation of the process was not affected. The cooling tower fan motors were inspected one by one subsequently, and the site inspection mechanism was strengthened to avoid the recurrence of similar situations.





5

Common Prosperity

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



Community Engagement and Contribution Management Approach



When constructing or expanding at plants, FCFC will pass strict environmental impact assessments (EIA). The impact and development of the surrounding communities are addressed according to the EIA commitments. Our plant operations are carried out in a manner higher than national standards to minimize the impact on the local environment and the life of community residents.

To promote common prosperity in local communities, the administration departments of the Changhua Plant, Mailiao Plant, Xingang Plant, and Longde Plant are responsible to communicate with the local communities and organize a variety of community activities with support of FCFC President's Office and the Group Administration.



Community service teams or volunteer teams have also been formed to promote community activities. The teams are assigned to the local government, environmental protection groups, local organizations, village offices, nearby households, and local residents on a regular or occasional basis to receive feedback from local residents. We take the initiative to promote our policies to our neighbors. This not only helps them understand our intentions but also helps build mutual trust and assistance. We also form strategic alliances with external units to promote the sustainable development of operating areas and enhance the relationships between the plants and local communities.

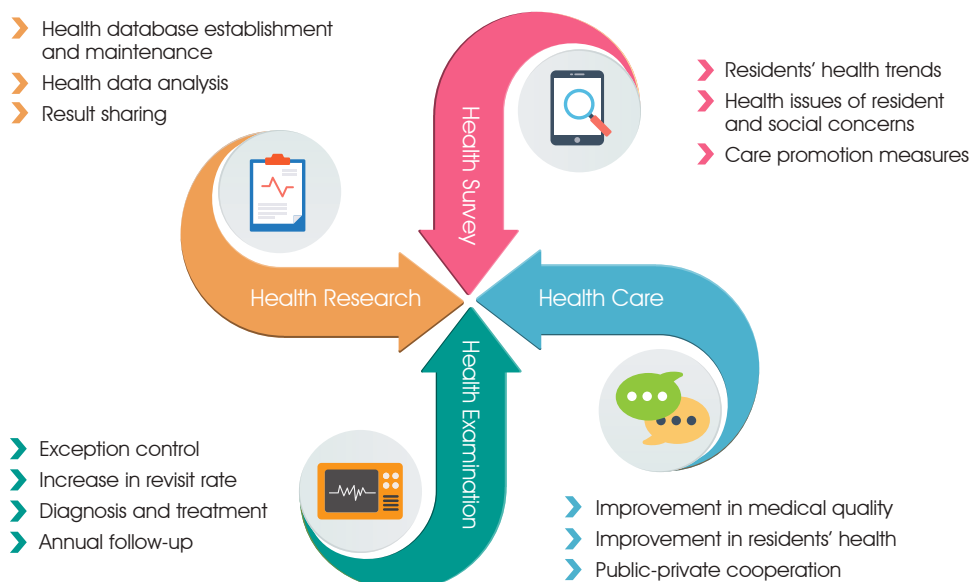
5.1.1 Care for Community Residents' Health



The SDGs Goal 3, Target 3.9 specifies "by 2030, substantially reduce the number of deaths and illnesses caused by hazardous chemicals, air, water and soil pollution, and contamination." Considering the Company's industrial characteristics and close relationship with the residents of the operating areas, the Company's vision and plans for promoting the residents' health are as follows:



Health Promotion Plan for Residents near the Mailiao Industrial Complex

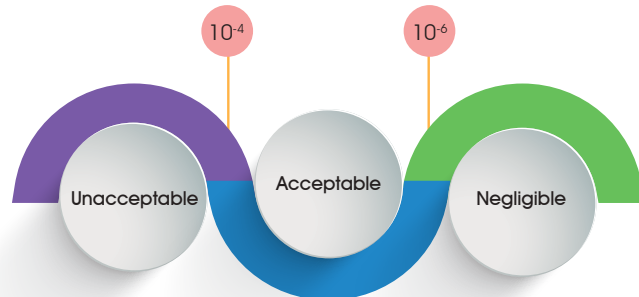




Health Research

FPG has entrusted National Cheng Kung University with a long-term health risk assessment program for specific hazardous air pollutants. As of 2017, 64 specific air pollutants have been assessed for health risks. The original area assessed was 20 km × 20 km in the No. 6 Naphtha Cracking Plant, including Mailliao, Taixi, Dongshi, Lunbei, and Baozhong Townships. The area assessed was further expanded to 30 km × 30 km to cover Sihua and Dacheng Townships. The average value of cancer risks was 5.07×10^{-7} , and the largest value was 6.38×10^{-6} , which are both between the acceptable range of 10^{-6} and 10^{-4} ; the largest value of non-cancer risks was lower than 1, which is acceptable for human health.

Benchmark of International Cancer Risk Assessment



Health Survey

To engage local communities and provide healthcare services for the locals, FPG established the Yunlin Chang Gung Memorial Hospital, which has been provided medical services for local residents since December 2009. Since 2010, we have been synchronizing the medical and educational resources of the Chang Gung Medical Foundation to facilitate health education and promotion of the local residents through hospitals, communities, and schools.

In 2017, a total of 470 local residents received the hepatitis B vaccine, with 193 acquiring the antibody so far; a total of 3,507 local residents participated in the community health education. The results of the health examination have shown continual improvement in the residents' health, making Mailliao the model of a healthy community.



Health Care

In 2017, the Yunlin Chang Gung Memorial Hospital had a medical team of 260 medical staff, 522 open beds, and 23 Western and Chinese medicine clinics, with a total of 105,525 outpatients, 14,217 emergency patients, and 18,935 inpatient bed days treated. The Yunlin Chang Gung Memorial Hospital will continue to expand its service range and scale to improve medical services along the coastal of Yunlin Township.

A course on tobacco control was organized for 853 junior high school students. In consideration of main causes of smoking, such as stress relief, Mailliao High School and Taixi Elementary School worked with the John Tung Foundation to encourage teenagers to relieve stress by exercising and make exercise a habit.



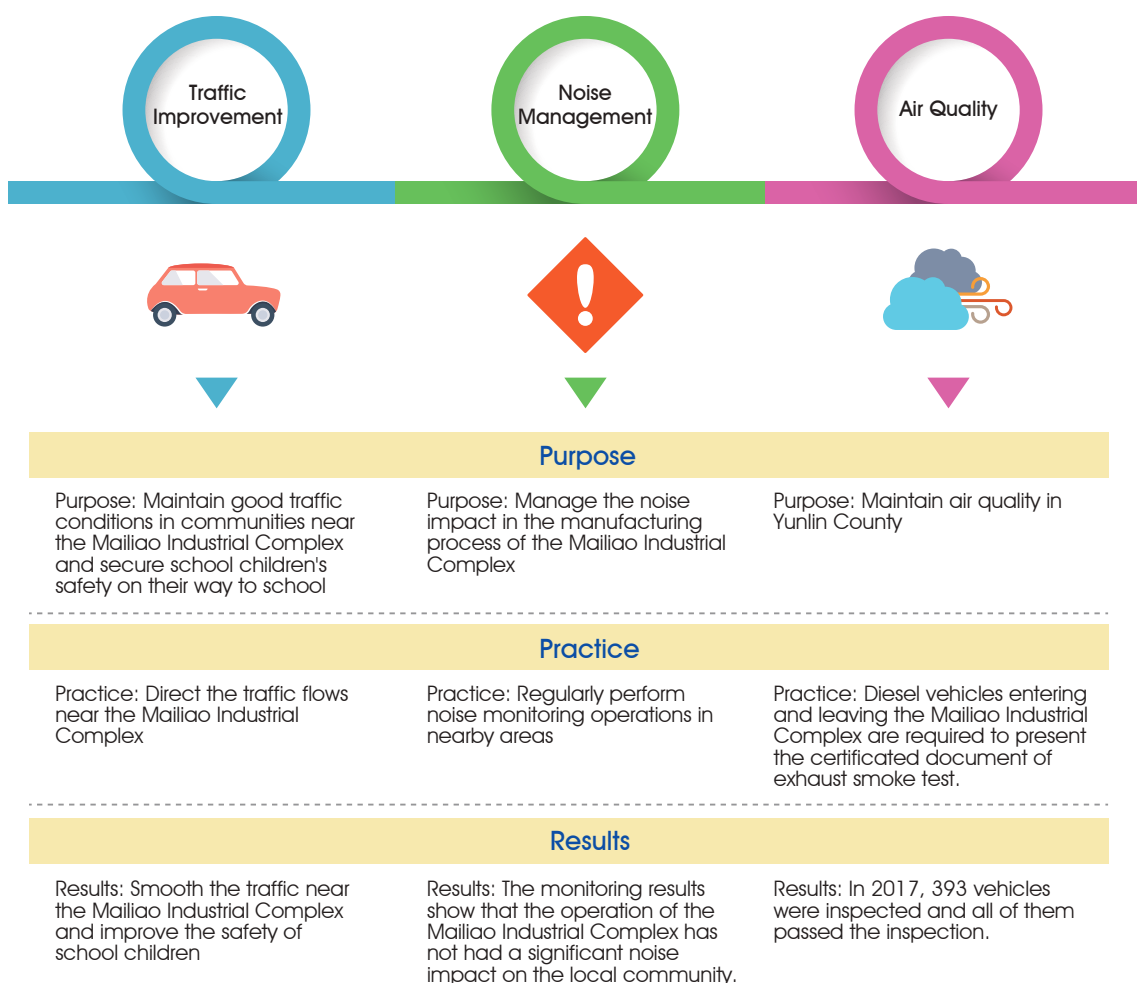
Health Examination

For FPG's Mailliao Industrial Complex to provide the most practical and considerate medical assistance and healthcare, the Yunlin Chang Gung Memorial Hospital has been entrusted to provide free health examinations for residents living in Mailliao and Taixi Townships. In 2017, a total of 9,928 residents received free health examinations with 539 patients with abnormalities offered follow-up services. By allowing local residents to understand their own health conditions, potential illnesses or diseases can be discovered and cured in their early stages before getting worse.



Free Health Examination in Mailliao and Taixi Townships

5.1.2 Improvement of the quality of life of community residents





Improving Quality of Life

(1) Traffic Improvement

Since the construction of the Mailiao Industrial Complex in 1997, we have monitored the traffic flow around the complex on a regular basis. The monitoring data over the past years show that the average level of service of the road during peak hours per day falls between A (driving speed ≥ 65 km/h) and E (driving speed ≥ 31 km/h) and that during off-peak hours falls between A and C (driving speed ≥ 48 km/h). To reduce the traffic flow around the Mailiao Industrial Complex during peak hours, we have set up different working hours for employees and contractors, encouraged them to utilize the designated roads for dump trucks, hired traffic police for traffic control, and provided public transportation for our employees. To ensure school children's safety, we have even employed some parents to direct traffic around Ciaotou Elementary School on children's way to school.

(2) Noise Management

To control the noise changes around the Mailiao Industrial Complex, we routinely commission certified institutions to monitor noise at North Terminal, South Terminal, Mailiao Dorm, West Coast Bridge, Ciaotou Elementary School, Syucuo Branch (former site), Fengan Elementary School, Ciaotou, and Haifeng. The results show that all values meet standards except for some abnormal values resulting from biological sounds and human activities, such as night markets, religious festivals, and school bells, which also indicates that the operation of the Mailiao Industrial Complex does not make an impact on the noise of the local community.

(3) Air Quality

To improve the air quality in Yunlin County, an emission qualification certificate must be attached to diesel vehicles when applying for entrance permits. When the competent authority lodges complaints regarding diesel vehicles, the contractors are required to re-attach qualifications; otherwise, entrance is prohibited. Based on the statistics of diesel vehicle emission inspections by the Department of Environmental Protection of Yunlin County, 393 diesel vehicles were checked in the roadside inspections around the Mailiao Industrial Complex in 2017, and all of them passed the inspections.

Year	Number of Vehicles Passing (A)	Number of Vehicles Checked (B)	Number of Vehicles Inspected (C)	Number of Vehicles Qualified (D)	Qualification Rate (D/C)	Disqualification Rate (D/B)	Disqualification Rate of Vehicles Passing (D/A)
2015	1,650	330	101	93	92.1%	2.4%	0.5%
2016	1,875	375	126	124	98.4%	0.5%	0.1%
2017	1,850	393	156	156	100%	0.0%	0.0%

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

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

Note: 3. Number of Qualified Vehicles refers to the number of diesel vehicles inspected and meeting the statutory requirements for exhaust smoke and opacity.

5.1.3 Promotion of Environmental and Ecological Education



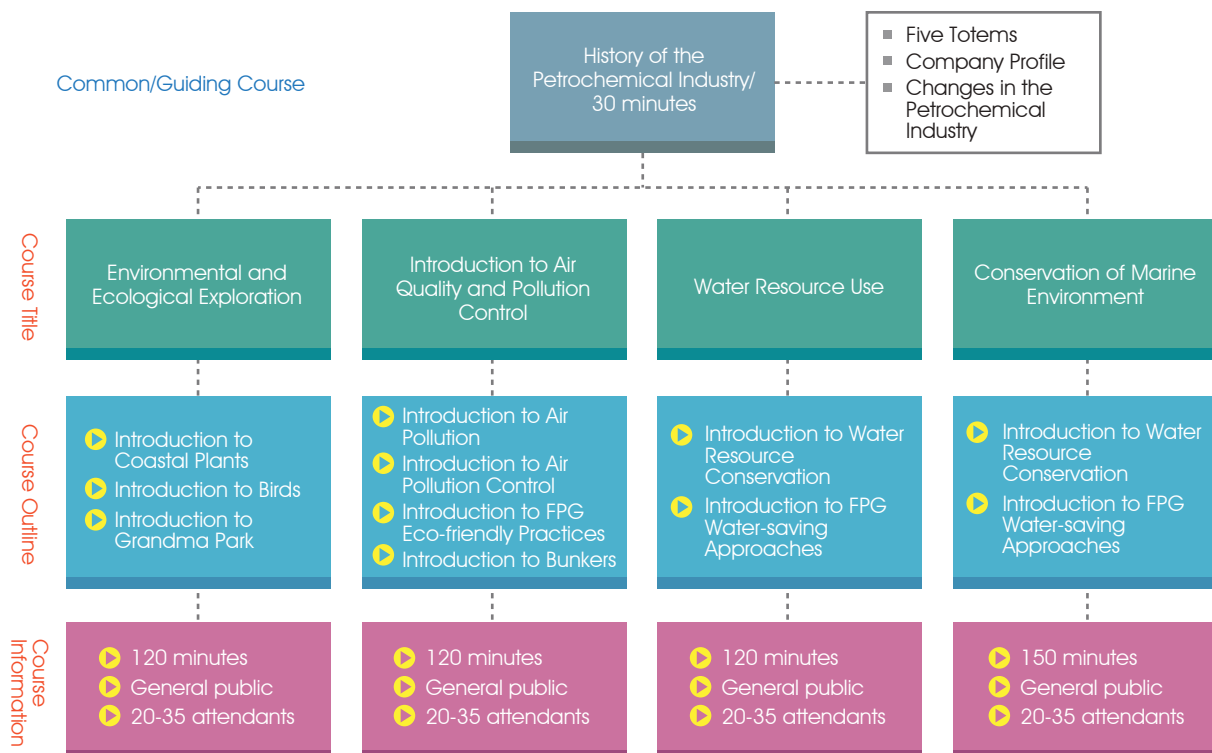
As the leader in the chemical fiber industry, FCFC has continued to promote the application of circular economy for many years; through a number of practical and effective measures for water and energy conservation in response to global climate change, FCFC has led the residents of the operating areas to learn together and promote the sustainable development of Taiwan in a more comprehensive way.

By promoting the environmental and ecological education, we believe that Taiwanese students may learn required knowledge and skills, which helps promote the sustainable development of Taiwan. According to the government policy regarding environmental education and field trips for senior high school students or below, FCFC has invited students to observe the environmental protection practices at the Mailliao Industrial Complex. With the influence of students, the concepts of environmental protection, water and energy conservation, and ecological conservation have spread from the Company to the various aspects of society and have been applied to daily life.

Environmental education includes a set of common courses and two main courses. The common/guiding course is the History of the Petrochemical Industry, followed by the Environmental and Ecological Exploration, the Introduction to Air Quality and Pollution Control, and the Water Resource Use and Conservation of Marine Environment.

Environmental education takes place in the established Administration Building, Environmental Monitoring Center, Environmental Lab, and Mailliao Port and is carried out by the environmental education staff and volunteers according to the teaching plan as follows:

The Environmental Training Plan for the FPG Mailliao Industrial Complex



- (1) Humanities: The common/guiding course, the History of the Petrochemical Industry, describes the development of Taiwan's petrochemical industry and the importance and necessity of petrochemical products. It is hard to balance industrial development and environmental protection. Balancing industrial development and environmental protection can be achieved through government regulations and public supervision.
- (2) Air quality: The purpose of the Introduction to Air Quality and Pollution Control is to allow trainees to understand the various sources of air pollutants and that air quality must be improved through not only industrial improvements but also efforts of all circles and government policies.
- (3) Water quality and marine environment: The course is divided into Water Resource Use and Conservation of Marine Environment. The course aims to describe the current status of water resources in Taiwan. Although the rainfall in Taiwan is abundant, it quickly flows into the ocean because of the steep terrain; in addition, reservoirs are easily silted up; with the rapid development of industry and commerce, Taiwan is the world's 18th water shortage country, which leads to water disputes. The reduction in offshore fisheries and marine resources is closely related to the industry, fishermen and climate change. Through the teaching plan, trainees may understand the Company's contributions to society and environmental protection practices and that efforts of all circles are needed to protect water resources and the marine environment.

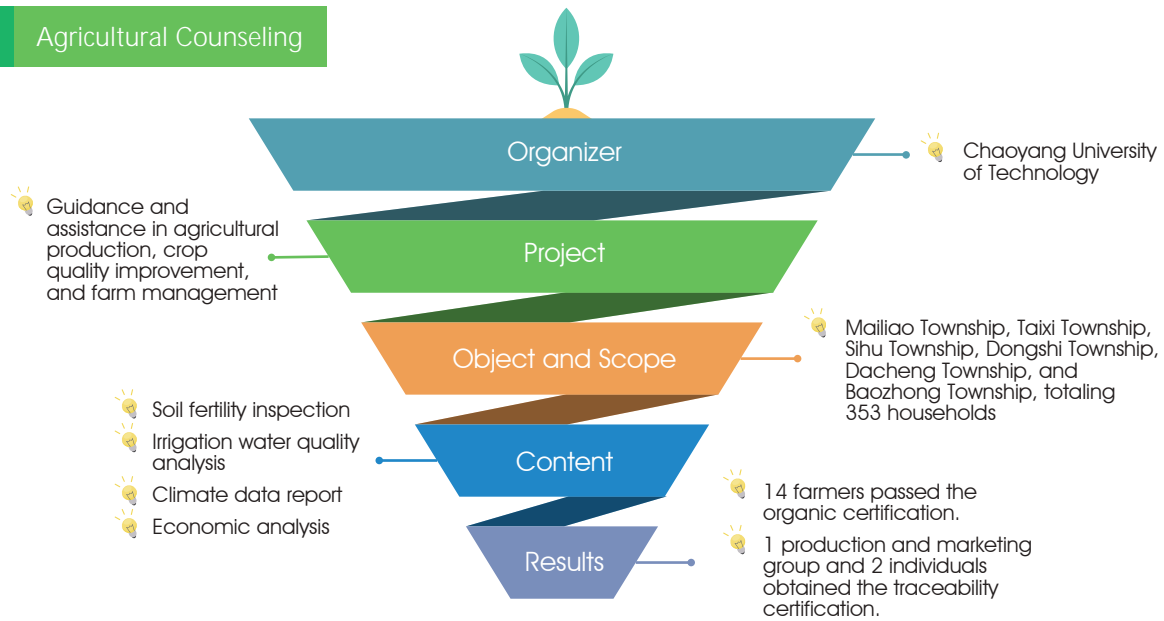


5.1.4 Promoting Local Industries

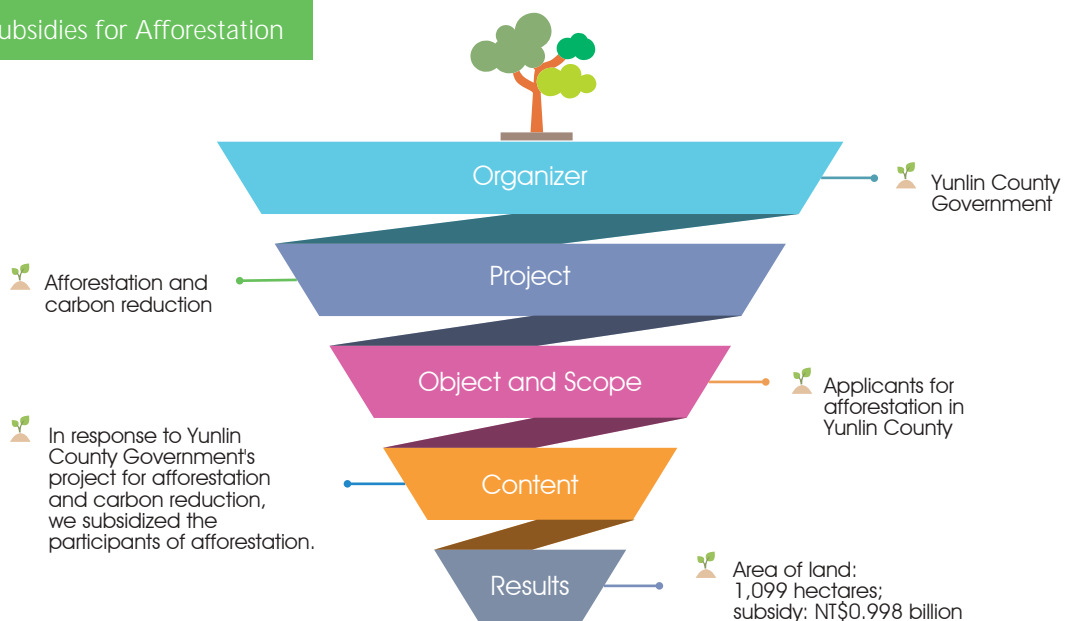
The construction of the No. 6 Naphtha Cracking Plant started in 1994. Since it was officially put into operation in 1998, it has brought a lot of job opportunities to the local communities, thus promoting the local economy. Over the past 20 years, FPG has developed 4 major initiatives, namely agricultural counseling, subsidies for afforestation, fishery counseling, and release of fry to nearby waters through the application of science and technology to promote the sustainable development of local industries in cooperation with local communities.



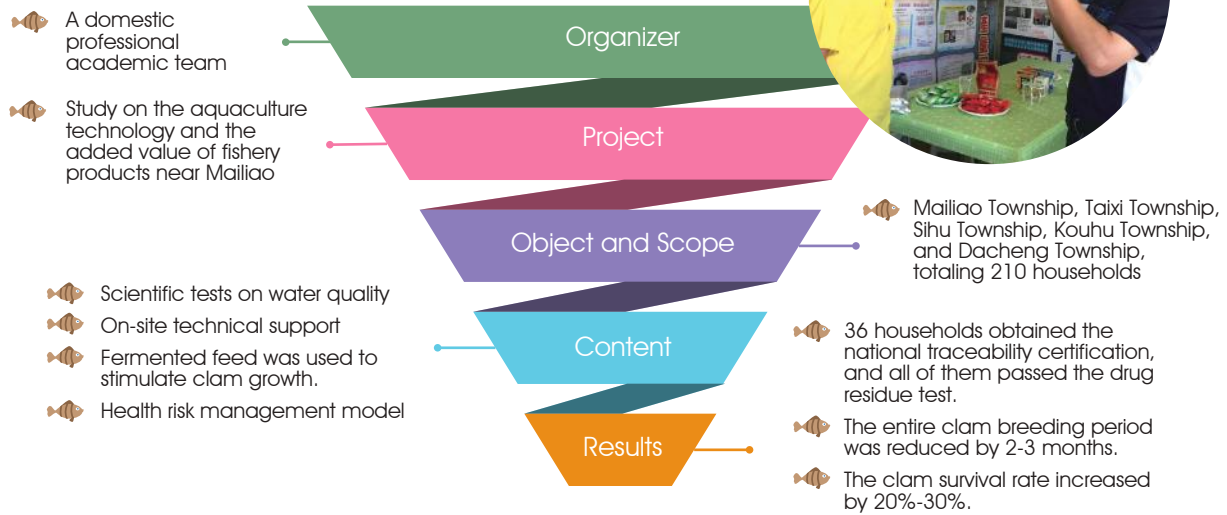
Agricultural Counseling



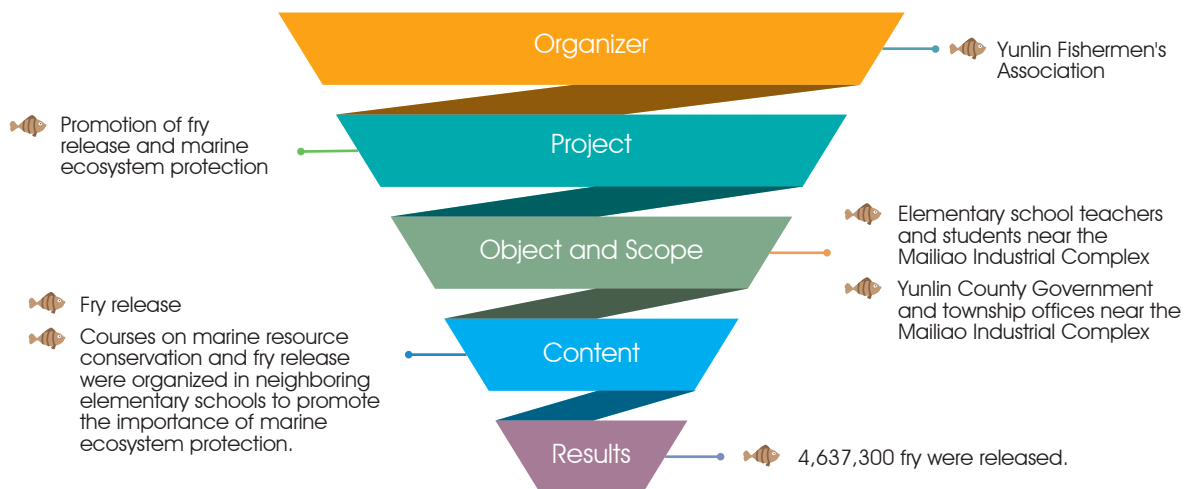
Subsidies for Afforestation



Fishery Counseling



Release of Fry to Nearby Waters



5.1.5 Enhancing Relationships between FCFC Plants and Local Communities

In 2017, the Administration Department of each complex was responsible to organize community activities as follows:

Item		Donation Amount (in NT\$10,000)
Caring for the Disadvantaged	Providing assistance for the disadvantaged organizations, such as subsidies for funerals	425
Promoting Local Festivals	Sponsoring Yilan International Children's Folklore & Folkgame Festival, temple activities, and community activities	1,050
Maintaining Community Environments	Providing funds for the remuneration of community cleaning team, road cleaning, and replacement of street lights	10,308
Others	Providing funds for foundation activities, scholarships, and the establishment of new facilities in Mailiao Fire Brigade	56,010

Note: The donation amount of the Xingang Plant was shared by FPC, NPC, and FCFC; the donation amount of the Mailiao Plant was shared by FPC, NPC, FCFC, and FPCC.

Every year, the Changhua Plant, Longde Plant, and Xingang Plant, and Mailiao Plant hold activities that enhance the relationships between the plants and the local communities. Labor unions, employees, and volunteers all actively participate, while local residents are also invited to take part in these activities. All income generated from these activities have been 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

To stay closer to the communities, FCFC holds the Environmental Protection Volunteer Day annually. Led by executives, our employees are encouraged to volunteer for nearby community projects and obligatory work, such as community, mountain, and beach cleanups. To improve the local environment, environmental protection volunteers have also been formed to clean up roads around our industrial complexes, nearby mountain trails, and beaches using one hour before work or their free time on weekends. By planting trees in empty spaces, we also provide local residents numerous green spots for leisure.

To promote the culture of volunteering within the Company, we have encouraged our employees to serve the communities as volunteers. In 2017, 1,282 employees provided volunteer services, such as working with government-certified public welfare organizations to maintain local community cleanliness and participating in extracurricular school programs; in addition to physical services, our employees also assisted related units in organizing charitable activities. For example, we donated supplies to public welfare organizations, cleaned the homes of solitary seniors, granted charitable donations, offered volunteer services, and cared for the disadvantaged families.

To encourage volunteers' contributions, we began implementing a recording system of volunteer service hours in 2011. Employees receive a reward for every 15 service hours they have volunteered; moreover, volunteers' family members and children are also invited to serve as volunteers. Those who participate are given certificates of their volunteering hours as a form of encouragement and recognition.



Volunteer Activity Led by Executives



Employees Devoting Themselves to Volunteering



Beach Cleanup



Environmental Protection Volunteer Activity Led by Executives



Charitable Fairs

To promote waste reduction, recycling, and reuse, we arrange a flea market, where unwanted goods are collected to be sold from both our employees and local residents, with all proceeds donated to charitable organizations. In addition, we regularly host charitable fairs to raise funds for the disadvantaged students. All income generated from these charitable fairs is donated to local charitable organizations, which in turn provide scholarships for the disadvantaged students.



The Charitable Fair Organized in Cooperation with Local NPOs



Proceeds from the Flea Market Donated to Public Welfare Organizations



Developing Traditional Arts

To commemorate his deceased mother, Wang Zhan Yang, our corporate founder Wang Yung-Tsai donated a significant amount to establish the Wang Zhan Yang Social Welfare Foundation. We feel that continuing and promoting traditional arts is very difficult because of an uneven distribution of cultural resources. To carry forward traditional arts and the features of local culture, we have collaborated with Ming Hwa Yuan Arts and Cultural Group to promote arts through high-standard visual performances at Yilan, Changhua, Xingang, and Mailiao Industrial Complexes over the past 6 years. Ifkids Theater and Apple Theater were also invited to perform. As of 2017, a total of 260,000 audiences had attended these performances, all of which were resounding.



Ming Hwa Yuan Arts and Cultural Group Performance



Ifkids Theater Performance



Participating in Local Events

The operation of the Company is built on the basis of taking from and giving back to society. We are dedicated to participating in local activities, including donating to local academic buildings, promoting local government's policies, and providing assistance for charitable events and other grand events sponsored by institutes or schools near our industrial complexes. Assistance is also given to competitions organized by local governments, activities arranged by disability institutes, religious festivals, school sports days, villager self-empowerment activities, festival activities, and weddings and funerals to maintain close contact with the local communities.



Donations to a Local Academic Building

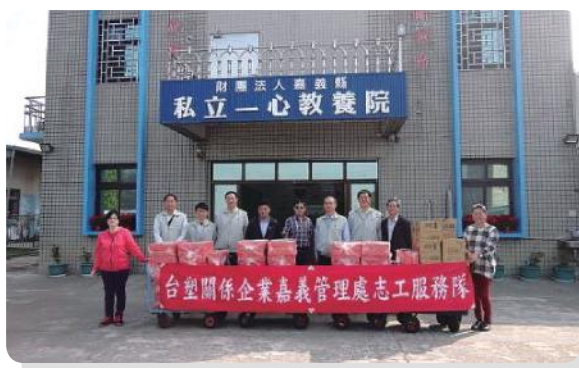


Donations to the Lantern Festival Activity



Caring for the Disadvantaged

To provide care for nearby communities and local residents, a welfare organization composed of our employees and collaborative contractors also provides assistance for seniors, children, the disadvantaged, and first aid organizations. We hope that FPG and all of our employees will continue to promote community engagement and attract more attention to the disadvantaged.



Caring for the Disadvantaged



End-of-Year Caring for Solitary Seniors

5.2 Contribution to Society

To realize our 2 founders' philosophy, FPG proactively works with the government and private organizations to comprehensively understand social needs and help the disadvantaged organizations. In recent years, FPG has donated nearly NT\$55.8 billion to educational, medical, and social welfare charities to continuously provide assistance for those in need. The Group Administration is responsible for organizing and planning major charitable events, such as early treatment, donation of pneumococcal vaccines to the elderly, Rainbow Project for prisoners, housing improvement for solitary seniors, scholarships for disadvantaged students, school assistance for indigenous students, financial assistance for families under domestic violence, medical and economic assistance for patients with rare diseases, sports talent training, and promotion of Taiwanese cultures, while FPG companies are responsible for promoting and implementing such events.

FPG Charitable Donations

Unit: NT\$100 million

Year	Type	Charitable Event	Donation Amount
1960-Today	Education	Establishment of Ming Chi University of Technology and subsequent donations	279.4
		Establishment of Chang Gung University and subsequent donations	
		Establishment of Chang Gung University of Science and Technology and subsequent donations	
1990-Today	Medical	Establishment of Chang Gung Memorial Hospital	28.4
		☀ Helping poor patients to access medical services	
		Helping indigenous students receive education and other subsidies	
2000-Today	Caring for the Disadvantaged	☀ Donation of cochlear implants	35.3
		Improving the service quality of disability organizations and other social welfare organizations	
		Children's and women's welfare	
2000-Today	Environmental Care	Donations to Taipei, Kaohsiung, and Yunlin Second Prisons for the Rainbow Project and drug withdrawal program for prisoners with AIDS	12.6
		Recycling kitchen waste	
		Planting organic crops	
2000-Today	Caring for the Elderly	Afforestation	6.4
		☀ Establishment of Chang Gung Health and Culture Village	
		Donation of pneumococcal vaccines to the elderly	
2000-Today	Reconstruction of Disaster Zones	♥ Reconstruction of 68 schools damaged during the 921 Earthquake and Typhoon Morakot and other impaired school facilities	47.9
		Cultural Promotion	
		Donations to local culture and performance groups	
2000-Today	Sports Promotion	Promotion of sports and development of outstanding sports talents	2.1
		Health Promotion	
		Carrying out health promotion research and related academic research	
2000-Today	Health Promotion	Carrying out health promotion research and related academic research	2.3

Year	Type	Charitable Event	Donation Amount
2000-Today	Community Investment	Involvement in the communities near FPG plants	133.6
	Others	Chang Gung Social Welfare Fund and other donations	9.2
Total			558

Note: 1. "☀" denotes donations derived from the revenue of Chang Gung Memorial Hospital and are not included in the total donation amount.

Note: 2. "♥" denotes the reconstruction of old and dangerous schools, including those under construction.

Note: 3. The table only records donations made in Taiwan.

5.3 Description of Material Community Issues

Formosa LOHAS in Yilan

The Longtan Lake is adjacent to the Yilan Plant of FCFC. Due to the clear water quality of the Longtan Lake, endangered distoechodon tumirostris will lay eggs in the Longtan Lake every year around the Dragon Boat Festival, which makes the swimming upstream a spectacle. With the support of Taipei Branch of Soil and Water Conservation Bureau, Council of Agriculture and Yilan County Government, the Distoechodon Tumirostris Ecological Park has been established at the Longtan Lake.

In Yilan LOHAS, FPG worked with the Longtan Community to promote distoechodon tumirostris conservation. The presentation of the conservation results was held on May 24, 2017, followed by two community events organized by Yilan County Government and the Longtan Community in June and July, respectively. Visitors were welcome to follow the map and cycle to each attraction within the scope of the events.

The Administration Building at the Yilan Plant was open to visitors to understand the ecology and cultures of the Longtan Lake and Longtan Community. The mascot of Formosa LOHAS, Formosa Pheasant, introduces the ecology and the history of the Longtan Lake and recommends visitors authentic food and tourist factories nearby. A DIY classroom is also available to have a fun hands-on experience.





Incidence of Cancer in Taixi Township

According to the domestic research reporting a high incidence of cancer near the No.6 Naphtha Cracking Plant in Taixi Township, few local residents filed a civil lawsuit against five companies in the No.6 Naphtha Cracking Plant in August 2015 on the grounds of suffering from cancer or deaths due to cancer and claimed some NT\$70 million. A total of 12 verbal arguments have been called, and relevant evidence is still under investigation and clarification.

According to the national statistics compiled by Ministry of Health and Welfare, the total incidence of cancer in Taixi Township from 2008 to 2010 increased by 0.40 time compared with that between 1999 and 2001, which is lower than the national increase of 0.45 time. The increase of 4.07 times claimed by the residents is nonexistent. The international literature also points out that there are many causes of cancer, and the incubation period of cancer is about 10 to 20 years. The No.6 Naphtha Cracking Plant has been in operation since 1999 and started operating on a large scale in 2005; therefore, there is no exact causal relationship between the residents' suffering from cancer and the operation of the Sixth Naphtha Cracker Project.

On April 27, 2017, Professor Chan Chang-Chuan held a press conference to publicize the results of the health study of residents in Taixi Village, Dacheng Township, Changhua County. Professor Chan pointed out that the residents' suffering from cancer correlated closely with the operation of the No.6 Naphtha Cracking Plant; however, we believe that the research results have not been scientifically verified and reviewed before publication, which is exactly the same as the previous TdGA case at Ciaotou Elementary School Xuchu Campus that was seriously criticized by experts and scholars.

To avoid the recurrence of the TdGA case, it is recommended that the central government should formulate the regulations governing academic research in this field. If there is any deviation from the regulations, it should be held in check according to the regulations, so as to prevent any public panic. FPG also appeals to research institutions to form a committee composed of international experts and scholars to design the research criteria in line with academic, scientific, international, and government requirements before conducting research. Before publication, the results of research should also be reviewed by experts with prudence.



Fogs in Lunbei Township

On October 16, 2017, United Daily News published an article titled Everyday Fogs Shadow Lunbei, pointing out that the poor air quality correlated with the emissions of the No.6 Naphtha Cracking Plant. According to the PM2.5 monitoring data of the Company from 2014 to 2016, PM2.5 in Lunbei was affected by agricultural waste combustion at an average of 32.6%, where January (29.1%), July (54.2%), and October (30.0%) accounted for the highest percentage. On June 16, 2017, the Environmental Protection Administration published the survey titled EIA Strengthens Pollution Control by Identifying Sources of PM2.5 through High Technology, showing that Lunbei was seriously affected by the agricultural waste burning in addition to the dust from the Choshui River. As a result, it is unfair to blame the Mailiao Industrial Complex for the air pollution.



Appearance of Dolphins at the Mailiao Port

The Mailiao Port has been implementing strict sea area management for a long time. The water quality of the port has been fairly clean, which creates sound ecology. The sea area has been classified to be Type A by the EIA. Fish of high economic value, such as grouper, red snapper, and beltfish, appear at the port from time to time. There are also tropical fish species, such as puffer fish, lobsters, champagne crabs, pike-eels, sea urchin, and lion fish. Even a large number of gorgonians, soft corals, and sun corals are found.

Without good water quality, it is impossible to breed such rich marine ecology. At 8:30 in the morning of March 13, 2017, the staff found more than 20 bottlenose dolphins. They returned to the harbor in three groups and left the port one hour later. Domestic scholars pointed out that dolphins are the most sensitive animals in the ocean. Their appearance means that the port has good water quality and diverse marine ecology.



In recent years, the concept of Eco Ports has gradually gained the attention of the world's major ports in Europe, the U.S., Japan, and Australia. The future trend of port operations will be green, ecological, and sustainable. To enhance the understanding of ecology at the Mailiao Port, we are actively striving for the certification of Eco Ports in the hope of proving the environmental quality of the No.6 Naphtha Cracking Plant.





Appendix



Appendix 1 Global Reporting Initiative (GRI) Comparison Table

The indexes mentioned below are cross-referenced with the GRI Standards: 2016. As presented by the Independent Assurance Opinion Statement, related information has been verified to meet the requirements of the GRI Standards.

Disclosure Item	Description	Referenced Section	Remark
GRI 102: General Disclosures 2016			
Organizational Profile	102-1 Name of the organization	1.2	
	102-2 Activities, brands, products, and services	2.2	No product that is banned in specific markets
	102-3 Location of headquarters	1.2	
	102-4 Location of operations	1.2	
	102-5 Ownership and legal form	1.2	
	102-6 Markets served	1.2	
	102-7 Scale of the organization	1.2 2.1.5	
	102-8 Information on employees and other workers	4.1.2	
	102-9 Supply chain	2.3.4 2.3.5	
	102-10 Significant changes to the organization and its supply chain	-	No significant change in 2017
	102-11 Precautionary principle or approach	2.1.3 2.1.5	
	102-12 External initiatives	2.2.4 2.3.5 4.3.2	
	102-13 Membership of associations	2.2.6	
	102-14 Statement from senior decision-maker	1.1	
Strategy		2.1.3	
	102-15 Key impacts, risks, and opportunities	2.1.5 3.3.1	
Ethics and Integrity	102-16 Values, principles, standards, and norms of behavior	2.1.4	
		2.3.3	
		3.4.5	
		4.1.1	

Disclosure Item		Description	Referenced Section	Remark
Material Issue: Corporate Governance				
Governance	102-18	Governance structure	2.1.1	
			2.1.2	
	102-36	Process for determining remuneration	2.1.1	
Management Approach	103-2	The management approach and its components	2.1	
			2.1.1	
	103-3	Evaluation of the management approach	2.1	
Communication with Stakeholders	102-40	List of stakeholder groups	1.4.2	
	102-41	Collective bargaining agreements	4.1.1	
	102-42	Identifying and selecting stakeholders	1.4	
	102-43	Approach to communication with stakeholders	1.4	
	102-44	Key topics and concerns raised	1.5	
Reporting Practice	102-45	Entities included in the consolidated financial statements	1.2.1	
	102-46	Defining report content and topic boundaries	Report Scope and Boundary	
	102-47	Material Topic list	1.5	
	102-48	Restatements of information	Report Scope and Boundary	No restatement of information
	102-49	Changes in reporting	Report Scope and Boundary	No significant change
	102-50	Reporting period	Duration and Issuance Date	
	102-51	Date of the most recent report	Duration and Issuance Date	
	102-52	Reporting cycle	Duration and Issuance Date	



Disclosure Item		Description	Referenced Section	Remark
Reporting Practice	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 5	
GRI 103: Management Approach 2016				
Management Approaches	103-1	Explanation of the material topic and its boundary	1.5.3	
GRI 200: Topic - Specific Standards Economic Series 2016				
Material Issue: Operational and Financial Performance				
Economic Performance	201-1	Direct economic value generated and distributed	2.1.5	
	201-3	Defining benefit plan obligations and other retirement plans	4.1.4 4.1.5	
	201-4	Financial assistance received from government	2.1.5	
Management Approach	103-2	The management approach and its components	2.1.5	
	103-3	Evaluation of the management approach	2.1.5	
Market Presence	202-1	Ratios of standard entry-level wage by gender compared to local minimum wage	4.1.4	
	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	
Procurement Practices	204-1	Proportion of spending on local suppliers	2.3.4	
Anti-corruption	205-3	Confirmed incidents of corruption and actions taken	-	No corruption occurring in 2017

Disclosure Item		Description	Referenced Section	Remark
GRI 300: Topic - Specific Standards Environmental Series 2016				
Material Issue: Water Resource Use and Management				
Water	303-1	Water withdrawal by source	3.2.1	
	303-2	Water sources significantly affected by withdrawal of water	3.2.1	
	303-3	Water recycled and reused	3.2.2	
Effluents and Waste	306-1	Water discharge by quality and destination	3.2.1	
	306-5	Water bodies affected by water discharges and other (surface) runoff discharges	3.2.1	
Management Approach	103-2	The management approach and its components	3.2 3.2.1	
	103-3	Evaluation of the management approach	3.2.2	
Material Issue: Greenhouse Gas Emissions and Carbon Footprints				
Emissions	305-1	Direct (Scope 1) GHG emissions	3.3.2	
	305-2	Indirect (Scope 2) GHG emissions	3.3.2	
	305-4	GHG emissions intensity	3.3.2	
Management Approach	103-2	The management approach and its components	3.3 3.3.2	
	103-3	Evaluation of the management approach	3.3.3	
Material Issue: Air Pollutants Management				
Emissions	305-7	NOx, SOx, and other significant air emissions	3.4	
	103-2	The management approach and its components	3.4	
	103-3	Evaluation of the management approach	3.4	
Material Issue: Waste Management				
Effluents and Waste	306-2	Waste by type and disposal method	3.5.1	
	306-3	Significant spills	3.6	
Management Approach	103-2	The management approach and its components	3.5 3.5.1	
	103-3	Evaluation of the management approach	3.5.1	



Disclosure Item	Description	Referenced Section	Remark
Material Issue: Compliance with Environmental Protection Regulations			
Compliance with Environmental Protection-related Regulations	307-1 Non-compliance with environmental laws and regulations	3.6	
Management Approach	103-2 The management approach and its components	3.6	
	103-3 Evaluation of the management approach	3.6	
GRI 400: Topic - Specific Standards Social Series 2016			
Material Issue: Employee Welfare and Remuneration			
Employment	401-1 New employee and employee turnover	4.1.3	
	401-2 Benefits provided to full-time employees (not including temporary or part-time employees)	4.1.5	
	401-3 Parental leave	4.1.5	
Management Approach	103-2 The management approach and its components	4.1 4.1.4 4.1.5	
	103-3 Evaluation of the management approach	4.1.4 4.1.5	
Labor/ Management Relations	402-1 Minimum notice periods regarding operational changes	4.1.3	
Material Issue: Occupational Health and Safety			
Occupational Health and Safety	403-1 Workers representation in formal joint management-worker health and safety committees	4.3.3	
	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and the number of work-related fatalities	4.3.4	
	403-3 Workers with high incidence or high risk of diseases related to their occupations	4.3.4	

Disclosure Item		Description	Referenced Section	Remark
Management Approach	103-2	The management approach and its components	4.3 4.3.1	
	103-3	Evaluation of the management approach	4.3.1	
Material Issue: Talent Recruitment and Retention				
Training and Education	404-1	Average hours of training per year per employee	4.2.2	
	404-2	Programs for upgrading employee skills and transition assistance	4.2.1	
	404-3	Percentage of employees receiving regular performance and career development reviews	4.2.1	
Management Approach	103-2	The management approach and its components	4.2 4.2.1	
	103-3	Evaluation of the management approach	4.2.1	
Employee Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	2.1.1 4.1.2	
	405-2	Ratio of basic salary and remuneration of women to men	4.1.4	
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	4.1.1	
Material Issue: Community Engagement and Contribution				
Local Communities	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.
	413-2	Operations with significant actual and potential negative impacts on local communities	5.1	
Management Approach	103-2	The management approach and its components	5.1	
	103-3	Evaluation of the management approach	5.1	



Disclosure Item	Description	Referenced Section	Remark
Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories	2.2.5	
	416-2 Violations of health and safety regulations concerning products and services	2.2.5	No violation of health and safety-related regulations concerning products and services in 2017
Marketing and Labeling	417-1 Requirements for product and service information and labeling	2.3.1	
	417-2 Violations of product and service information and labeling regulations	-	No violation of regulations concerning products and services in 2017
Customer Privacy	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.3.3	No complaint concerning breaches of customer privacy and losses of customer data in 2017
Socioeconomic Regulatory Compliance	419-1 Violations laws and regulations in the social and economic area	-	No violations of regulations concerning product services and use in 2017
FCFC and Industrial Issues			
Material Issue: Climate Change Risk Management			
Management Approach	103-2 The management approach and its components	3.3 3.3.1	
	103-3 Evaluation of the management approach	3.3.1	
Material Issue: Controlled Chemical Substance Management			
Management Approach	103-2 The management approach and its components	3.5 3.5.2	
	103-3 Evaluation of the management approach	3.5.2	
Material Issue: Industrial and Public Safety			
Management Approach	103-2 The management approach and its components	4.3 4.3.3	
	103-3 Evaluation of the management approach	4.3.3	

Appendix 2 Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies

Material Issues	Description	Referenced Section	Remark
Chapter 1 General Principles	Purposes of establishment, applicable objects, and principles of practice	About the Report	
Chapter 2 Exercising Corporate Governance	Implementation of corporate governance practices	2.1 Corporate Governance	
Chapter 3 Fostering a Sustainable Environment	Development of a sustainable environment	3. Environmental Sustainability	
Chapter 4 Preserving Public Welfare	Preservation of public welfare	5. Common Prosperity	
Chapter 5 Enhancing Disclosure of Corporate Social Responsibility Information	Improvement in the disclosure of corporate social responsibility information	Corporate Social Responsibility CSR Achievements at a Glance	
Chapter 6 Supplementary Provisions	Review and improvement in the corporate social responsibility system	1. A Pioneer of Infinite Value Creation	



Appendix 3 ISO 26000 Guidance on Social Responsibility

	Material Issues	Referenced Section	Remark
Organizational Governance	Decision-making processes and structures	2.1 Corporate Governance	
	Complying with laws and regulations and avoiding the audit of the risk posed by human rights problems	4.1 Employee Profile and Compensation and Benefits	
Human Rights	Human rights risk situations	4.1 Employee Profile and Compensation and Benefits	
	Avoidance of complicity - direct, beneficial, and silent complicity	4.1 Employee Profile and Compensation and Benefits	
	Resolving grievances	4.1 Employee Profile and Compensation and Benefits	
	Discrimination and vulnerable groups	4.1 Employee Profile and Compensation and Benefits	
	Civil and political rights	4.1 Employee Profile and Compensation and Benefits	
	Economic, social, and cultural rights	4.1 Employee Profile and Compensation and Benefits	
	Fundamental principles and rights at work	4.1 Employee Profile and Compensation and Benefits	
Labor Practices	Employment and employment relationships	4.1 Employee Profile and Compensation and Benefits	
	Conditions of work and social protection	4.1 Employee Profile and Compensation and Benefits	
	Social dialogue	4.1 Employee Profile and Compensation and Benefits	
	Health and safety at work	4.3 A Healthy and Safe Working Environment	
	Human development and training in the workplace	4.2 Talent Development	
The Environment	Prevention of pollution	3. Environmental Sustainability	
	Sustainable resource use	3. Environmental Sustainability	
	Climate change mitigation and adaptation	3.3 Energy Use and Greenhouse Gas Emission Management	
	Protection of the environment, biodiversity, and restoration of natural habitats	3. Environmental Sustainability	

	Material Issues	Referenced Section	Remark
Fair Operating Practices	Anti-corruption	2.1.4 Professional Ethics	
	Responsible political involvement	2.2.6 Participation in Third-Party Associations 2.1.5 Operational and Financial Performance	
	Fair competition	2.3.5 Supplier Management	
	Promoting social responsibility in the value chain	1.1 From the Executive Board 1.3 Business Philosophy	
	Respect for property rights		All employees are required to sign the Statement about Respect for Intellectual Property Rights to declare the Company's policy and position against the use of illegal software. Those violating this policy are subject to legal sanctions and severe punishments according to the internal regulations.
	Fair marketing, factual and unbiased information, and fair contractual practices	2.3.3 Legal Compliance and Customer Privacy	
	Protecting consumers' health and safety	2.3.1 Customer Relations	
	Sustainable consumption	2.2.5 Product Safety and Health	
	Consumer services, support, and complaints and dispute resolutions	2.3.1 Customer Relations 2.3.2 Customer Satisfaction Survey	
	Consumer data protection and privacy	2.3.3 Legal Compliance and Customer Privacy	No violation of customer privacy or loss of customer data in 2017
Consumer Issues	Access to essential services	2.3.1 Customer Relations	
	Education and awareness	2.3.1 Customer Relations	



Material Issues		Referenced Section	Remark
Community Involvement and Development	Community involvement	5.1 Community Engagement 5.2 Contribution to Society	
	Education and culture	5.1.3 Promotion of Environmental Education 5.1.5 Enhancing Plant-Community Relationships	
	Employment creation and skill development	5.1 Community Engagement 5.2 Contribution to Society	
	Technology development and access	5.1 Community Engagement	
	Wealth and income creation	5.1 Community Engagement	
	Health	5.1.1 Care for Community Residents' Health 5.2 Contribution to Society	
	Social investments	5.2 Contribution to Society	

Appendix 4 United Nations Global Compact

Category	Ten Principles	Referenced Section	Remark
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights.	2.3.5 Supplier Management 4.1.1 Protection of Employees' Rights	
	Business should make sure that they are not complicit in human rights abuses.	2.3.5 Supplier Management 4.1.1 Protection of Employees' Rights	
Labor	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	4.1.1 Protection of Employees' Rights	
	Businesses should uphold the elimination of all forms of forced and compulsory labor.	4.1 Employee Profile and Compensation and Benefits	
	Businesses should uphold the effective abolition of child labor.	4.1 Employee Profile and Compensation and Benefits	
	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	4.1 Employee Profile and Compensation and Benefits	
Environment	Social investment	5.2 Contribution to society	
	Businesses should support a precautionary approach to environmental challenges.	2.2.5 Product Safety and Health	
	Businesses should undertake initiatives to promote greater environmental responsibility.	3. Environmental Sustainability	
	Businesses should encourage the development and diffusion of environmentally friendly technologies.	2.2.4 Product Development and Innovation 2.2.5 Product Safety and Health	
Anti-corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	2.1 Corporate Governance	



Appendix 5 Independent Assurance Opinion Statement

INDEPENDENT ASSURANCE OPINION STATEMENT

Formosa Chemicals & Fibre Corporation 2017 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 assurance of this report.

This independent assurance opinion statement has been prepared for 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 accurate.

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

Scope

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

1. The assurance scope is consistent with the description of Formosa Chemicals & Fibre Corporation 2017 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the FCFC's adherence to all three AA1000 AccountAbility Principles in this report as conducted in accordance with type 1 of AA1000AS (2008) 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 FCFC 2017 Corporate Social Responsibility Report provides a fair view of the FCFC CSR programmes and performances during 2017. 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 2017 economic, social and environmental performance indicators are fairly represented. The CSR performance indicators disclosed in the report demonstrate FCFC's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR report assurers in accordance with the AA1000 Assurance Standard (2008). 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 AA1000 Assurance Standard and their self-declaration of 'in accordance' with the GRI Standards(2016): the Core option were fairly stated.

Methodology

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

- review of topics 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 and staffs on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 8 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 and responsiveness as described in the AA1000 AccountAbility Principles Standard (2008).

Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness and the GRI Standards(2016) is set out below:

Inclusivity

This report has reflected a fact that FCFC has continually made a commitment to its stakeholders, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. The reporting systems are being developed to deliver the required information. 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 topics.

Materiality

FCFC publishes sustainability information that enables its stakeholders to make informed judgements about the company's management and performance. In our professional opinion the report covers the FCFC's material topics.

Responsiveness

FCFC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for FCFC is developed and 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 topics.

GRI Sustainability Reporting Standards (GRI Standards)

FCFC provided us with their self-declaration of 'in accordance' with the GRI Standards(2016): the Core option (For each material topic covered by a topic-specific GRI Standard, comply with at least one topic-specific disclosures). Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to the 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 AA1000 Assurance Standard (2008) in our review, as defined by the scope and methodology described in this statement.

Responsibility

This CSR report is the responsibility of the FCFC's CEO 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 industrial sector, and trained in a range of sustainability, environmental and social standards including AA1000 AS, ISO14001, OHSAS18001, ISO14064 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.

For and on behalf of BSI:



Peter Pu
Managing Director BSI Taiwan
2018-05-03

bsi.



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