

2018 企業社會責任報告書

Corporate Social Responsibility Report



Catalog

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Catalog



Corporate Culture and Governance

(I) Commemorating the Corporate Founders



Founders Wang, Yung-Ching & Yung-Tsai Brothers

Be diligent, simple and practical
Keep advancing till the perfect end
Sustain businesses development
Make contributions to society.

勤 勞 奉 獻 永 續 至 樸 實 會 營 善 實

By Wang Yung-Ching

" Find out factors through detecting each regarding detail."

"There is neither impossible thing nor simple thing in the world."

(II) Business Philosophy

● Harmony

With integrity, individuals, departments, our Company, clients, subcontractors, the community, industries, and local society are developing in harmony.

● Service

The Company is a service provider with rapid cycles, which is beneficial for getting a foothold in the industry, and we require all employees to be accommodating and altruistic to meet clients' needs with thoughtful services.

● Innovation

To enable the Company to achieve excellence and users to enjoy more utility, we motivate talents' potential and develop products with better intentions by proactively providing

● Contribution

We endeavor to align goals of the Company with social humanitarian needs across borders so as to establish a connection with the world by providing quality products, promoting industry prosperity, improving quality of life, and continuing reaching out to society.

(III) Vision

We can provide solutions to clients' various requirements and create an excellent research and development site to produce high-tech products. Through innovation, we will continue growing, satisfy the demands of stakeholders, and earn the loyalty of product users and the respect of society.

We emphasize good qualities and virtues of employees and hope them to be enthusiastic about efficient working and revolution and to value the protection of life, ecology, and environment. At last, the Company will become a famous brand for sustainable development in the industry and clients' first choice.

(IV) Common Values

● Corporate Goals

To make both clients and the Company grow and be mutually beneficial, to satisfy clients, users, stockholders, and employees, and to win all of their respect,

● Quality Policy

To surpass the improvement speed of the same trade, and share profits of growth with clients.

● Cultural Image

Our Company is a professional and continuously running manufacturer, which means that our Company has an established history, philosophy, systems, organization, experience, technology, previous performances, integrity, responsibilities, and intellectual property. Our Company has formed strategic alliances with many global corporations, and kept clients' needs and trends in mind so as to pursue the growth of intelligence of our personnel and improvements to our product quality.

● Corporate Mission

To provide quality products, relevant information, and services to respective users fast and reliably.

● Client Policies

To satisfy clients by serving them in a proactive manner.

(V) Sustainable Development

● Sustainable Development Policies

To follow what the vice chairman announced in 2013 Sustainability Development Report for the economic, social and environmental policies

● Sustainable Development Strategies

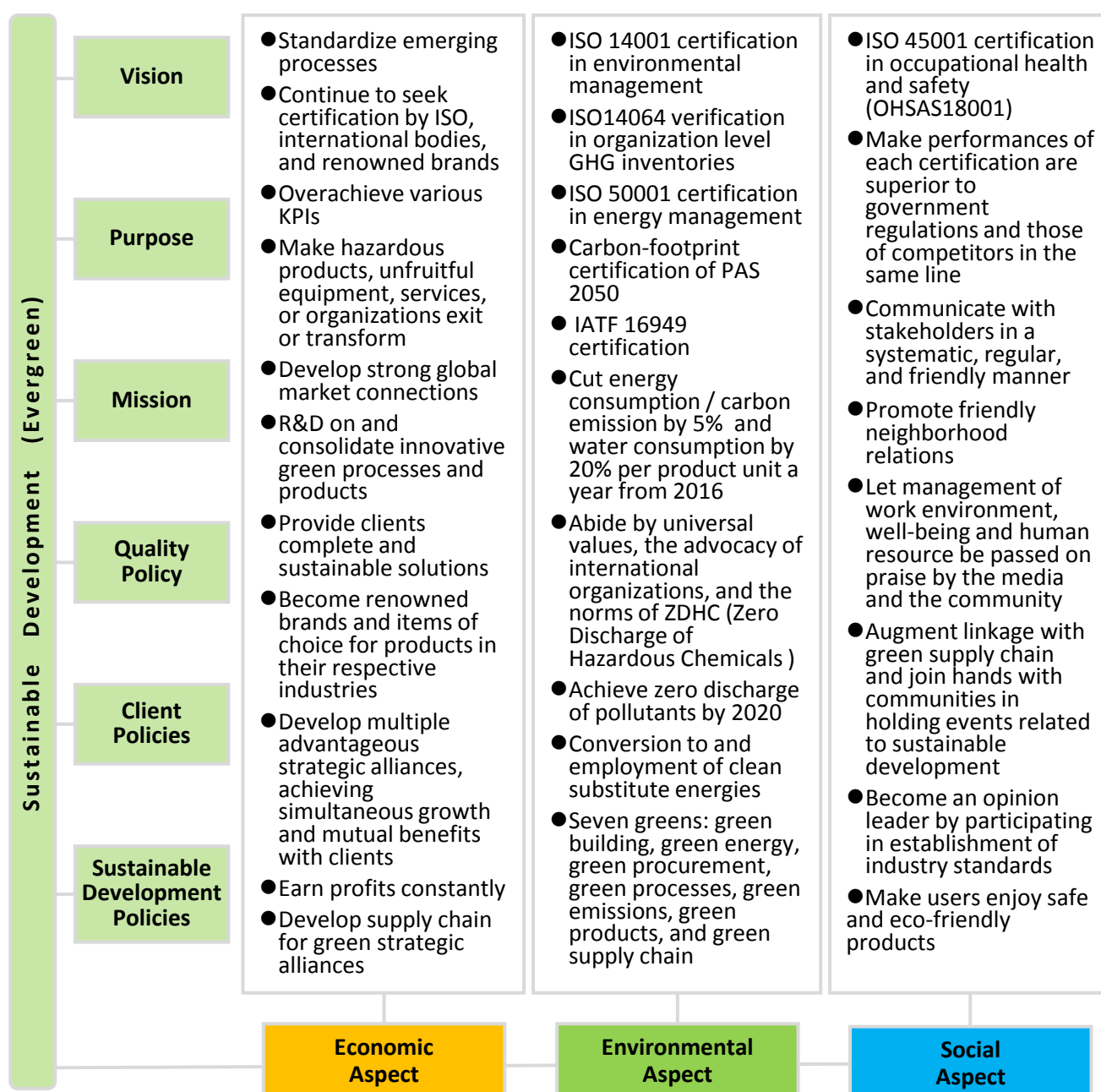
To create green processes and products through enabling FTC people to do themselves justice with environmental protection in mind, and to continuously grow and meet stakeholders' expectations through the promotion of lean production, advances in effectiveness of resource usage, the utilization of environmentally friendly materials and green equipment, and the supply of ecologically safe products.

● Sustainable Development Matrix

- For FTC's long- and short-term business development, please refer to of the 2018 annual report\V. Operational Overview\ (I) Business Status section\iv. Long- and Short-terms Plans (on pp. 91-94 http://www.ftc.com.tw/newftc/annual_report.php).
- For achievable work items for execution in long-term business development plan, please refer to the following matrix on sustainable development in the next 10 years.

Matrix on Sustainable Development in the Next 10 Years

Since 2013



(VI) Previous and Current Chairmen



The Late, 1st Chairman,
Lai, Shu-Wang
from 1973 to 1998



Chairman,
Wong, Wen-Yuan
1998 onwards

(VII) Message from the President

CSR Heritage

Indonesia, whose population ranks number 4 in the world, has planned to relocate its capital. It is reported that the ground of Jakarta, in which 10 million people live, is sinking by 7cm on average annually, which is resulting from the excessive extraction of groundwater. If the extraction goes on and no sustainable solutions to this problem and climate change are come up with, Jakarta might end up with turning into "Eastern Venice," where residences are surrounded by water.

Global competitiveness of Taiwan-made products took a drubbing in 2018, amid a turbulent global market, featuring continuing rise of international oil prices after the reach of the bottom in January of 2016, loose monetary policy, low interest rate, appreciation of the U.S. dollar, price stickiness despite the hike in cost of purchase of raw materials, multi-party geopolitical conflict, stalled cross-Taiwan Strait official exchanges, ongoing negotiations among the U.S. and its main trade deficit countries since March that generate impacts on each other's tariffs, exchange rates, existing international trading rules and the supply chain, etc. In 2018, the Company's consolidated revenue grew by 9.43% to NT\$44.50451 million, an increase of NT\$3.83939 million compared to that of 2017, with pretax profit jumping 19.03% to NT\$6.28036 million, an increase of NT\$1.00388 million compared to that of 2017, and after-tax profit amounting to NT\$5.32070 million; earnings per share stood at NT\$2.82 and cash-dividend payout reached NT\$2.1 per share.

In a continuing effort since 2017, the Company strived to maintain stead growth in the face of harsh domestic and overseas economic environments in 2018, a campaign which has even extended to 2019. The challenge has been especially rigorous for the Company, whose operation covers not only traditional textile business but also technology and environmental protection. Still, the Company has managed to make major inroads in the aspects of economy, society, and environment, facilitating its sustainable development. Despite failure of Taiwan to sign free trade agreements with other countries and withdrawal of the U.S. from the Paris Agreement on climate change, the Company has been continuing to make progress in CO₂ reduction, in line with the dictation of universal value, an achievement acknowledged by the honor of "best trade contribution award" and "award for contribution in exploring emerging markets" in the textile category of the 2017 "Golden Trade Award" organized by the Ministry of Economic Affairs in Taiwan.

Since 2015, the Company has passed corporate governance best principles, procedures for verification and disclosure of material information, and ethical corporate management best principles for implementation, which have been incorporated into the Company's courses for education and training for the entire workforce, including directors and factory workers. In July 2017, the auditing committee was instituted, in place of supervisors, marking a milestone in corporate supervision. In 2018, the Company ranked 2nd grade, or among best 6-20%, among 686 listed companies subject to corporate-governance evaluation by Taiwan Stock Exchange, and became a constituent stock of Taiwan Sustainability Index, one of a few in the textile industry.

In compliance with the five-day workweek scheme, which took effect in Jan. 2017 before revision in March 2018, the Company has adjusted work schedule and expanded workforce. In 2018, the Company instituted a system calling for promotion of medium- and low-tier unit chiefs according to authority, capability, and performance evaluation. In 2018, year-end bonus for employees at the Taiwan plant amounted to 3.3 months of basic pay, equivalent to the level in 2025, which underscores the Company's harmonious labor-management relationship.

The Company has been pushing circular economy in an innovative manner, with its achievement having been acknowledged by various international certifications, such as passage of ISO-50001 for the Company's energy management system in Dec. 2015. In 2018, the Company made further investments in waterless dyeing and waterless and water repelling equipment and process and rolled out temperature-controlled smart clothes, whose technology was patented in 2016. In response to the requests of internationally renowned branded customers, the Company has strictly restricted or banned the use of hazardous chemicals for environment, underscoring the Company's thorough environment-friendly policy which covers entire product life from development to usage.

As a member of the global community, the Company is fully aware of the fundamental value of environmental protection and has been faithfully executing the policy, in line with the indicators of security, hygiene, and environment. Adhering to the policy emphasizing environment/security/hygiene and economy equality and the management concept of "deep cultivation in Taiwan, march towards the world, and sustainable development," the Company has spared no effort in implementing the policy, system, and management of environmental protection, hygiene and health promotion, job safety, and product safety, on top of legal compliance and institution of regulations and systems for discretionary management.

As for pollution abatement, the Company has kept on investing in upgrading of various related processes and equipment, installed new pollution-abatement equipment, adopted various energy-saving programs, cut pollutant emission, and make processes conform to latest environment-protection standards, and obtained various environment-protection certifications. As for water-related governance, the Company has strived to cut water consumption per product unit and has installed equipment to separate discharge of clean and polluted water at the five domestic and overseas plants. In 2018, total water consumption dropped by 20% from the 2017 level. In air-pollution abatement, during 2016-2018 the Company installed regenerative thermal oxidizers, boosting VOCs (volatile organic compounds) treatment efficiency to 90%, two cogeneration systems, and SCR (selective catalytic reduction) denitration control equipment, reducing NOx (nitrogen oxides) emission by 72%. In addition, Formosa Taffeta 2nd plant switched to natural-gas fuel for #5 dip dryers, in place of pyrolysis low-sulfur fuel oil, renovated heating system for equipment, and installed natural-gas pipeline, slashing SOx (sulfur oxide) emission by 83%. The Company managed to minimize impact of power-rate hike in April and cope with the challenges of water conservation, energy conservation, and carbon abatement in 2018.

In the field of industrial environment, health, and safety, the Company has made the following commitments:

- faithful compliance with laws/regulations on industrial safety, hygiene, and environmental protection, as well as reasonable requests of stakeholders;
- implementation of management system on industrial safety, hygiene, and environmental protection, to intensify pollution abatement, pollution prevention, and hazard reduction;
- promotion of hazard identification, risk evaluation and response, and risk management, to prevent occurrence of harms;
- pushing of energy conservation and waste abatement, to lower the impact on environment, safety, and hygiene;
- improvement of communal relationship via increase of compatibility and good communications, to promote sustainable development.



Vice Chairman Shih-Ming Hsieh
CSR commissioner,
March 2015 ~ September 2018



Director & President Ming-Chang Lee
CSR commissioner,
September 2018 onwards

In inventory on greenhouse-gas emission and climate-change CDP disclosure, the Company has installed new equipment to facilitate the effort in carbon reckoning, carbon abatement, emission and emission reduction. In Jan. 2019, CDP of the U.K. granted the Company grade B for the performance in CDP questionnaire, A for scope-3 emission (with the figures verified by SGS) and value-chain participation, and A- for participation of suppliers in related issues.

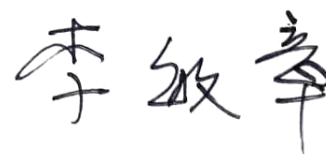
The Company's management system for occupational safety and hygiene has incorporated hazard identification and risk management strategy, handling related works according to the principles of documentation, set procedure, and standardization, on top of instant rectification of flaws for the sake of continuous improvement. Since June 2009, the Company has been upgrading OHSAS1800 1/CNS-15506 certification once every three years and is scheduled to upgrade ISO 45001 certification in 2020.

To catch up with the trends of Industry 4.0, AI, and big-data analysis, the Company has spared no effort in cultivating related talent via various vocational education and training programs. In April 2016, in cooperation with National Yunlin University of Science and Technology, the Company held 160-hour education and training courses on programmable control PLC/human-machine interface (HMI) for Industry 4.0, attended by 60 employees. In Oct. 2016, the Company's quality management system for TTQS talent cultivation was certified by the Ministry of Labor. In 2018, after passing admission exam, eight employees of the Company attended AI leader training class of the Taichung branch of Taiwan AI Academy during Aug. through Dec., completing courses totaling 384 hour/persons. The Company expects that those training programs will contribute to the improvement of the performance of plants, such as increased success rate of "optimized dyeing recipe" and materialize the policy of "doing the right thing at first try," making improvement, via the assistance of big-data analysis, in failure cost, work-schedule rotation, and delivery time, which is also conducive to energy conservation, waste abatement, and emission reduction.

In the management of environment protection system, the Company has dedicated to pollution prevention, control and abatement/recycling/reuse of waste air, waste water, and solid wastes and development of products with environment-friendly, so as to augment the efficiency of energy conservation and waste abatement. Following passage of SIO-14001 certification in 2010 and subsequent years, the Taiwan plant passed the certification of upgraded version in Dec. 2017 before passage of the certification by overseas plants in Aug. 2018.

The initiation of trade talks between the U.S. and its major trade partners over chronic trade imbalance in March 2018 has blocked shipment to the U.S., due to higher tariffs and other barriers, forcing global supply chains to make adjustment. The development has affected shipments of the Company's tire cords, mainly for supply to auto, steel and aluminum, rubber, and hi-tech equipment industries. Fortunately, textiles are not covered by the crossfire and the Company can bypass the barriers partially, via exports from the Vietnamese plant. In Sept. 2018, the tire-cord business division passed SGS certification, followed by the acquisition of IATF 16949:2016 and ISO 9001:2015 certifications by the Company, paving the way for the Company to join the global supply chain for auto parts and components and auto-safety products.

Following reshuffle in Sept. 2018, the CSR committee now consists of value-chain development chain, environment sustainability division, and social co-prosperity division, covering the three aspects of economy, society, and environment, respectively, which oversee 23 theme sections, to intensify the works of information collection/disclosure and fulfillment of responsibilities and better meet the needs of stakeholders, including community/international organizations/branded customers, marking a major step in the march towards the 17 sustainable development indicators of the UN. One step at a time, the Company has continued to publicly disclose performance in carbon footprint and face up to the expectations of and responsibilities for the society honestly. In compliance with the resolution of the CSR committee, I have taken over the helm of the committee, succeeding vice chairman Hsieh, to continuing the effort of attaining sustainable development for the Company.



May 22, 2019

(VIII) Annual Business Policy



FTSE4Good
TIP Taiwan ESG Index

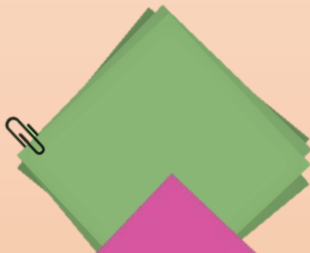


The FTSE4Good TIP Taiwan
ESG Index Logo





About This Report





(I) Editing Principles

This report has been prepared in accordance with Core option of the GRI Standards and AA1000 standards; its information is gathered in line with the identified material topics so as to encompass as complete stakeholders' concerned topics as possible. Its contents can be grouped into economic, environmental, and social aspects, each of which elaborates the overview of sustainable policies, management approaches and performance indicators while corporate future risk evaluations and responses are placed an emphasis on. To obtain the external assurance from SGS, this report is edited in accordance with three principles—inclusivity, materiality and responsiveness—of AA1000 APS (Accountability Principles Standard). Furthermore, reporting principles of GRI Standard are also taken as a work of reference—the contents of this report are disclosed conforming to materiality, stakeholder inclusiveness, sustainability context while its quality is in light of principles of balance, comparability, accuracy, timeliness, reliability and clarity. Due to miscalculation, total water supply at Dong-nai Plant in Vietnam in 2017 was recorded as 1,071 kilotons, instead of the accurate figure of 692 kilotons, a mistake which has been corrected on page 50 of this report.

Financial data is presented in New Taiwan Dollars while other relevant information is presented in the form of what international universal indicators require and/or explained with notes beneath or beside charts/tables.

The disclosed information is what took place from January 1st to December 31st 2018, but a summary of main events before the deadline for compilation in the first half of 2018 are covered so as to acquainted stakeholders with the latest status. The reported objects are invested subsidiaries over which FTC has, based on majority of shareholdings, operational control or significant influence, including the four oversea ones, Formosa Taffeta (Zhong-Shan) CO., LTD., Formosa Taffeta (Chang-Shu) CO., LTD., Formosa Taffeta Vietnam CO., LTD., Formosa Taffeta Dong-nai CO., LTD., and 106 stations of Formosa Petrol Stations (FPS); information of overall environment, financial performance, safety/hygiene, and performance of energy/water conservation of all these subsidiaries is disclosed. The coverage on all these objects includes information of their overall environment, safety/hygiene, and performance of energy/water conservation. Among FTC's 8 subsidiaries that are not included in this report, Formosa Advanced Technologies Co., Ltd. compiles its own CSR report because of being a listed enterprise for years. The exclusion of the other 7 subsidiaries, namely Formosa Development (in the Taiwan Plant), Formosa Taffeta (Hong Kong), Xiamen Xiangyu Formosa Taffeta Trading (shutdown in 2017), Formosa Taffeta (Cayman), Schoeller Formosa Taffeta (Hong Kong) CO., LTD., , Public More International Company Ltd., and Formosa Taffeta America Corp. (shutdown in 2018 and cancellation of registration in February 2019) from disclosure in this report results from their total workforce of 16, no factory established, and their total sales being only the small proportion of the Company's revenue.

The finalization of disclosed topics were determined through first listed potential issues, gathering stakeholders' opinions on their interested issues via questionnaire, weighing materiality of those issues, prioritizing the relevance of stakeholders to the Company's operations, and then picking out topics with higher weights. CSR reports are published annually from 2016, and the publication date of the Chinese version is no later than the end of every June. At the end of June 2018, the previous report whose information is mainly about the operations state of 2017 was posted on the FTC's website. Welcome to visit http://www.ftc.com.tw/newftc/respons_report.php to download CSR reports for reference.

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(II) Stakeholders Engagement and Identification of Material Topics

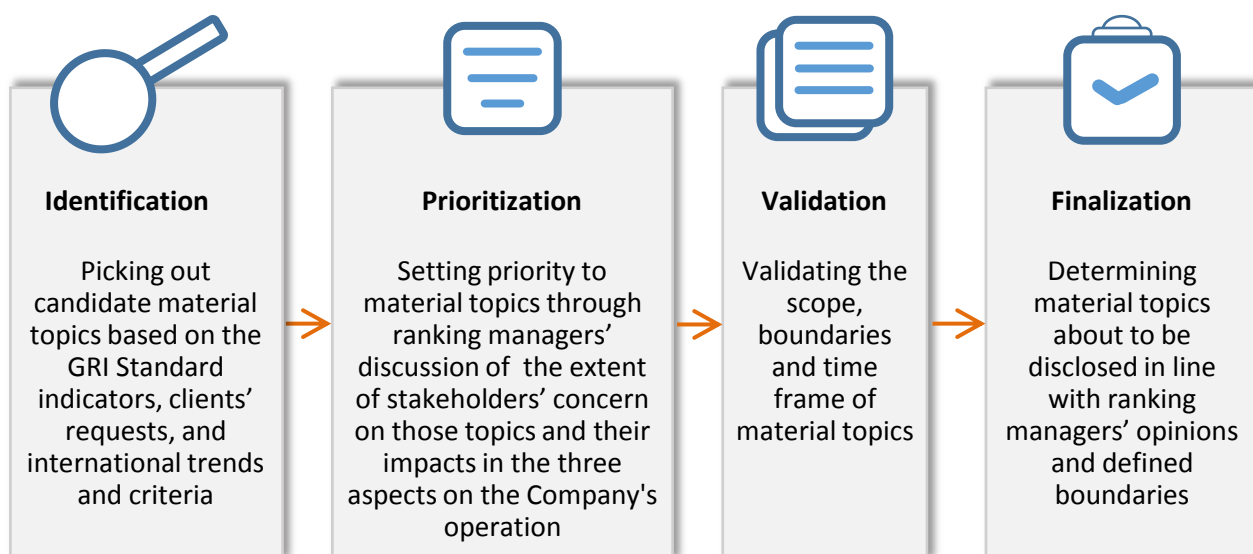
i. Identification of Stakeholders, Concerned Topics, Communication Methods, and Frequency

Based on the five major principles of the AA1000SES, potential topics and stakeholders that may generate interactions with the Company's activities, products and services are first discussed and determined; then stakeholders' concerned topics are identified through surveys. Identified stakeholders and concerned topics, and their corresponding communication methods and frequency are as follows:

Stakeholders	Concerned Topics	Communication Methods	Frequency
Brand Dealers / Clients / Potential Clients	Competitiveness in product quality, quantity, delivery date, and price, supply and demand, service or strategic partnerships; conservation of raw materials, energy and water resource and reduction of exhaust, effluent and waste; the degree of interaction with stakeholders, lawfulness of employment procedures and relevant regulations; the management system of workplace safety; gender equality, humanizing management, client privacy, and human rights protection.	Phone / E-mail / Interviews / Attendance of meetings	Irregularly
Shareholders / Investment Trust Institutions	Projected objectives and actual performance, earned profits and the allocation of dividends, the state of corporate governance, and indicators of long-term shareholdings for foreign and international investors.	Board of Directors Meeting / the Shareholders' Meeting / Shareholder Service Room / Spokesman Interview / Mails	Every Two Months / Annually / Irregularly
Government	Environmental protection system and certification, exhaust and effluents discharge inspection, waste management and pollution prevention, continuity in issuance of permits to use coal, pension policy, water and energy conservation projects, control over the usage and storage of chemicals, labeling and safety of products, availability of the environment of fair competition.	Interview / Document / Inspection Video Conferencing / Phone	Irregularly
Suppliers	Mutually beneficial partnership that enables each party to grow simultaneously, transparency of environmental protection information, compliance with the labor system, fairness of bidding and haggling, incoming quality control (IQC) and whether the selection of suppliers in compliance with regulations	Phone / e-mail / Interview	Irregularly
Employees / Unions	Whether the HR system explicitly regulate the payroll, promotions, performance evaluation, training and rewards and penalties and whether equitable treatment is put into practice, whether the condition of working environment and labor rules comply with the international human rights treaties, and whether systems of job protection, benefits, and career planning and development, and the channel of communication are complete.	Face-to-face Communication / e-mail/Suggestion Box / Regular Meetings of the Union and Labor Organizations	Irregularly / Every Two Months
Community / Local Groups	Whether there are clear community communication channels, maintenance of public relations, involvement in community activities, concern for local vulnerable groups, resource allocation for emergency relief, the advocacy and sponsorship of public benefit affairs like education, fulfillment of energy conservation and reduction in carbon emissions and in environmental hazards, and control over the discharge of effluents and exhaust to the required extent.	Face-to-face Communication / Phone	Irregularly

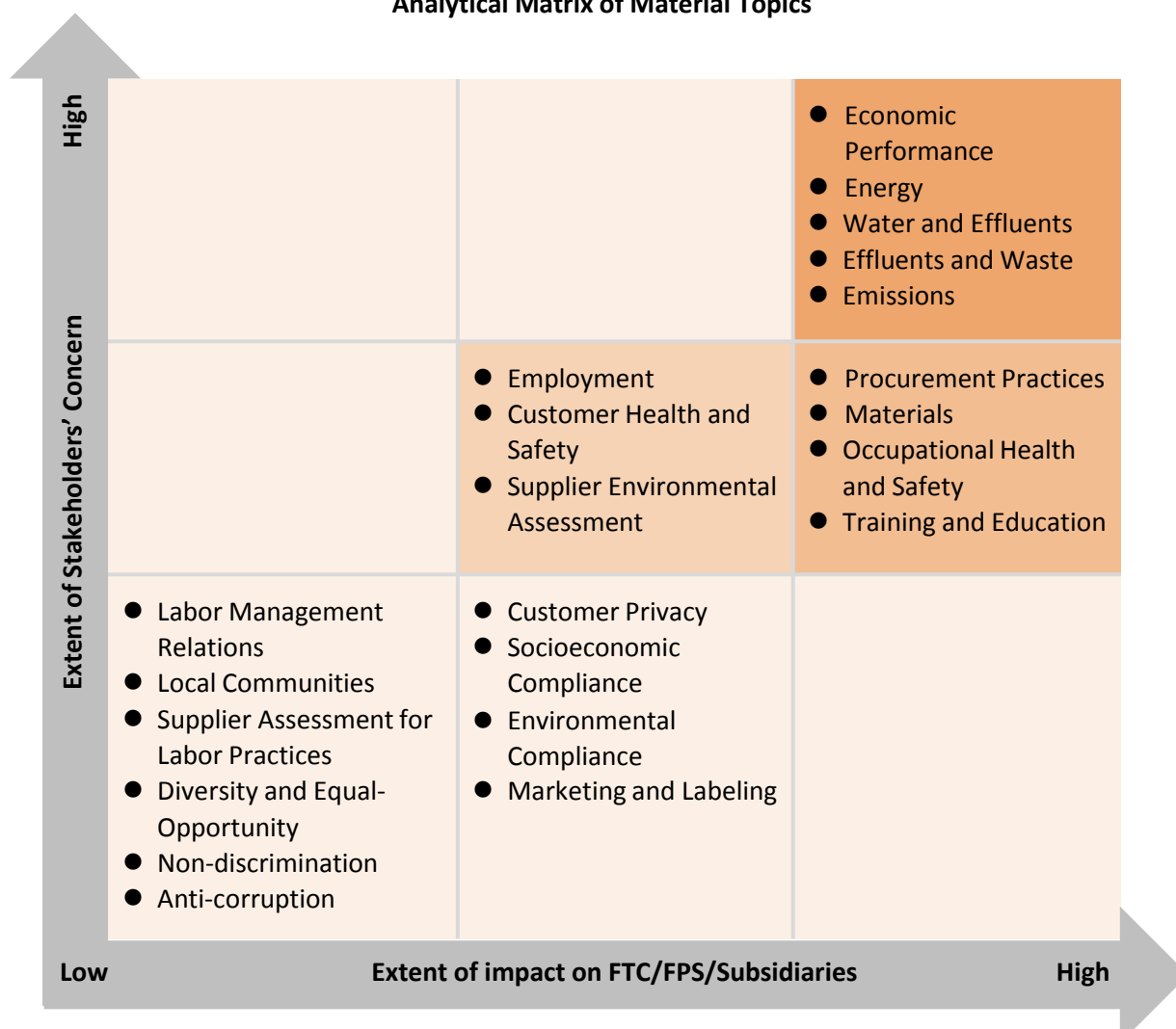


ii. The Process of identifying Material Topics



Material topics are identified and determined in line with the above process and their materiality and the corresponding internal/external boundaries are illustrated in the following matrix and the table on the next page.

Analytical Matrix of Material Topics





Internal and External Boundaries of FTC and its subsidiaries (including Formosa Petroleum Stations (FPS))

● Disclosed with materiality ○ Undisclosed with materiality ▲ Disclosed without materiality

Boundary Topic		Internal				External			
		Taiwan		Subsidiaries in China	Subsidiaries in Vietnam	Suppliers	Clients	Community	Government
		FTC	FPS						
Economic	Economic Performance	●	●	●	●				●
	Procurement Practices	●		●	●	●			
Environmental	Materials	●	●	●	●	●			
	Energy	●	●	●	●				
	Water	●	●	●	●				
	Emissions	●	●	●	●			▲	▲
	Effluents and Waste	●	●	●	●			●	
	Products and Services	▲		▲	▲			▲	
	Environmental Compliance	▲							
	Supplier Environmental Assessment	○	○	○	○	○			
Social	Employment	●	●	●	●				
	Labor/Management Relations	▲		▲	▲		○		
	Occupational Health and Safety	●	●	●	●				
	Training and Education	●	●	●	●				
	Diversity and Equal Opportunity	▲	▲	▲	▲				
	Non-discrimination	▲	▲	▲	▲				
	Local Communities	▲	▲	▲	▲				
	Anti-corruption	▲	▲	▲	▲		▲		
Products	Customer Health and Safety	●	●	●	●				
	Product and Service Labeling	▲							
	Customer Privacy	▲	▲	▲	▲				





Management Overview





(I) Overview of the Company

i. Corporate Profile

Formosa Fiber Co., Ltd., the predecessor of Formosa Taffeta Co., Ltd. (FTC), is established on the outskirts of Douliu in Yunlin County. It was registered and jointly founded by Formosa Chemical & Fiber Corporation, a member of Formosa Plastics Group (FPG), and several industrialists on April 19th, 1973, which was in the booming phase of Taiwanese textile industry and export trading. Modern equipment was introduced for businesses of weaving, dyeing, printing, finishing, etc. of taffeta made of filaments of polyamide and polyester. Not until January 1979 is it renamed Formosa Taffeta Co., Ltd., and the time of its listing on the Taiwanese stock exchange is in December 1985 with total capital NT\$16,846,646,370.

The Company gains a foothold in the textile industry with its specialization in midstream techniques, such as weaving of filaments, dyeing, printing, and finishing, etc. and proactive innovation. It is a bridge between the upstream raw silk materials and the downstream finished product manufacturer, which makes it indispensable to the supply chain of the textile industry. Furthermore, it is a worldwide manufacturer of filament polyamide/polyester taffeta that is of both high capacity and quality. What is worth mentioning is that its complex function fabrics, applied to sports and leisure wear, are on a par with trends and the progress of international brands. This makes it famous as a worldwide “faithful supplier” among our clients in relevant industries.

To diversify its operations, the Company expand its business scope to include the manufacture of tire cord fabric, cotton yarn and cloth, special textiles for safety and protection, PE plastic bags, carbon fiber cloths, and the operation of petrol stations. Over the past 40 years, it, in light of its business philosophy of harmony, innovation, service and devotion, dependably supplies quality products, services and information to support the development of the downstream clients in various lines of business and to make life better.





(i) Overview of Subsidiaries

(in thousands of NTD)

Company Name	Date of Establishment	Address (as appeared on the license)	Paid-in Capital	Scope of Business
Formosa Taffeta (Hong Kong) Co. Ltd.	Apr. 11, 1989	Room 1606, Tower 6, China Hong Kong City, 33 Canton Rd., Tsim sha tsui, Kowloon, Hong Kong	1,356,822	Sales of fabrics woven with filament/staple synthetic fibers
Formosa Advanced Technologies Co., Ltd.	Sep. 11, 1990	329, Henan St., Douliu City, Yunlin County 640, Taiwan	4,422,222	IC assembly, test, and modularization
Formosa Development Co., Ltd.	Sep. 20, 1990	29, Ln. 224, Shiliu Rd., Douliu City, Yunlin County 640, Taiwan	161,000	— Urban land consolidation — Development, rental and sales of residential/business buildings and industrial plants
Formosa Taffeta (Zhong-Shan) Co., Ltd.	Dec. 3, 1992	167, South Shenwan Avenue, Shenwan Town, Zhong-Shan City, Guangdong Prov. 528462, China	1,402,085	Manufacture and sales of — Polyamine/polyester fabrics woven with synthetic fibers
Xiamen Xiangyu Formosa Import & Export Trading Co., Ltd.	Aug. 24, 1994	Room B5, 7 th Fl., Xiangyu Building, No.22, Xiang Xing 4 th Road, Xiamen Logistics Park (Free Trade Zone), Xiamen 361006, China	15,273	Import/export/transit trades; suspension of operation for liquidation since April 2017
Formosa Taffeta Vietnam Co., Ltd.	Jun, 16, 1999 Reformed after M & A	SEC.1, Nhat Chanh, Com., Ben Luc Dist., Long-an Prov., Vietnam	2,342,353	Manufacture, processing and dyeing of fabrics woven with synthetic fibers
Schoeller F.T.C. (Hong Kong) Co., Ltd.	Oct. 31, 2001	Room 1606, Tower 6, China Hong Kong City, 33 Canton Rd., Tsim sha tsui, Kowloon, Hong Kong	6,879	Trade in special textile
Formosa Taffeta Dong-nai Co., Ltd.	Jun. 25, 2004	Nhon Trach 3 Ind. Zone., Hiep Phuoc Com., Nhon Trach Dist. Dong-nai Prov., Vietnam	2,590,434	Manufacture, processing and sales of various dyeing fabrics and tire cord fabric woven with synthetic fibers
Formosa Taffeta (Chang-Shu) Co., Ltd.	Apr. 4, 2005	15, Peng-Hu RD., Dongnan St., Chang-Shu City, Jiangsu Prov. 215500, China	1,302,019	Dyeing and finishing of top-grade fabrics; Rental of owned facilities and the offer of property management
Formosa Taffeta (Cayman) Co., Ltd.	Mar. 12, 2014	Cassia Court, Suite 716, 10 Market St., Camana Bay, Grand Cayman, Island KYI-9006	5,284,775	Investing Formosa Ha Tinh Steel Corporation (Vietnam)



Formosa Taffeta (Hong Kong) CO., LTD./Schoeller FTC (H.K.) CO., LTD.

Xiamen Xiangyu Formosa Import & Export Trading CO., LTD.

Formosa Taffeta (Chang-Shu) CO., LTD.

Taipei Office of Formosa Taffeta CO., LTD.

Formosa Taffeta CO., LTD. (Headquarters)

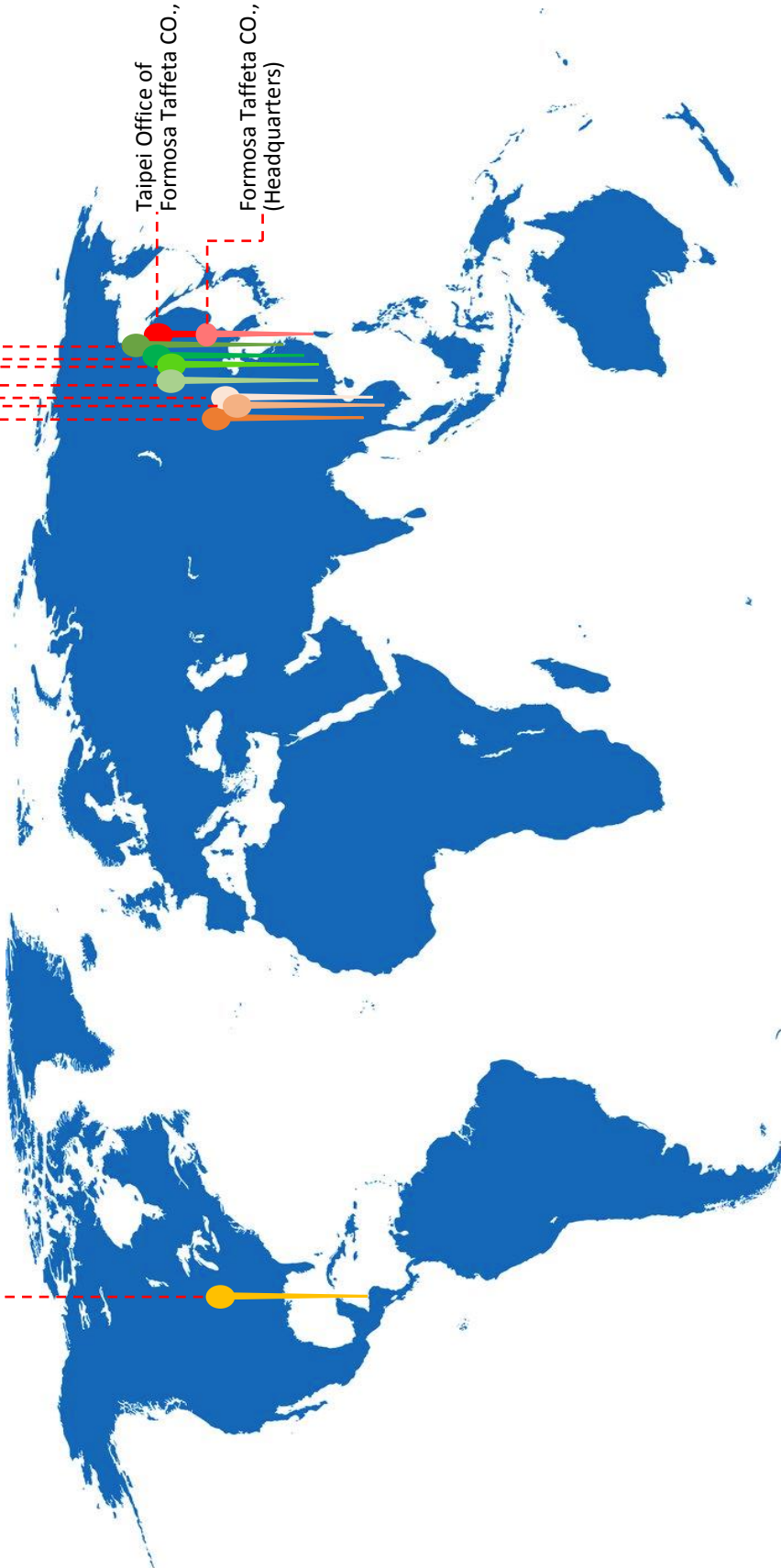
Formosa Taffeta (Zhong-Shan) CO., LTD.

HCM City Office of Formosa Taffeta Vietnam CO., LTD.

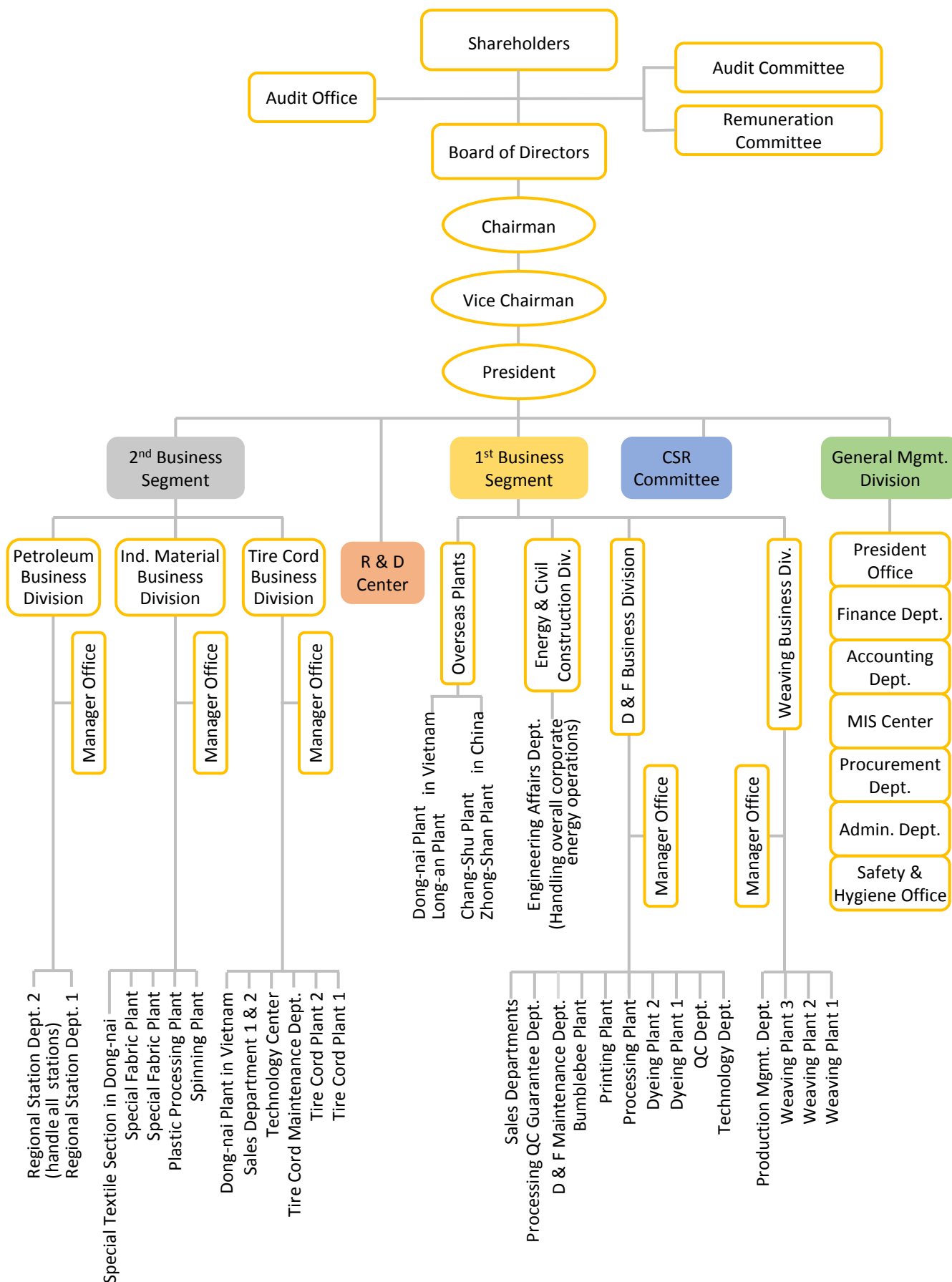
Formosa Taffeta Vietnam CO., LTD.

Formosa Taffeta Dong-na iCO., LTD.

Formosa Taffeta (Cayman) CO., LTD.



(ii) Organizational Structure (Effective on May, 2019):





ii. Overview of Products

(i) Products and Scope of Their Applications

Product	Scope of Application
Polyamine fabric	Wet breathable & waterproof rain coat, waterproof breathable snow coats, jackets, sleeping bags, garments, down jackets, sportswear, jackets, hunting suits, hats, tents, air beds, umbrellas, parasols, golf umbrellas, beach umbrellas, sails, gloves, shields with electromagnetic insulation etc.
Polyester fabric	Sports casual wear, microfiber clothing, curtains, umbrellas, medical supplies, home accessories, etc.
Cotton fabric, blended fabric, fabrics interwoven with filament/staple fiber, pre-dyed plaid	Garments, jackets, shirts, umbrellas, backpacks, medical health care supplies, etc.
New functional yarn	Individual or composite applications to diverse woven/knitted fabrics for various apparel, bedding, health care supplies, sports casual wear, hats, coats, parasol (umbrella), special processing purpose, etc.
Combed cotton yarn, blended yarn	All kinds of woven and knitted fabrics, cotton and blended fabrics, fabrics interwoven with filament/staple fiber, and pre-dyed plaid
Protective fabric	Flame retardant/resistant fabric, air force flight suits, tank suits, secret service suits, firefighting suits, electric arc suits, auto/motor racing suits
Fabrics with special purposes	Clean-room clothes/aseptic clothes for electronic, foodstuff, and pharmaceutical factories, sterile gown, wrapping fabric, petroleum clothes, anti-electric arc clothes, uniform for policemen and servicemen, bullet-proof/stab-proof clothes, helmet, shield, drum paper for speaker, damper fabric for stereo equipment
Carbon fiber fabrics as composite materials	Sports equipment, bicycles, motorcycles, automobiles, aerospace industry, electronic products, industrial mechanical arms and mechanisms, construction reinforcement, wind turbine blades, etc.
Polyamine /Polyester Tire cord fabrics	tire cord fabrics to various specifications, bead chafing fabric, conveyor belt fabric, puncture resistant fabric for bicycle tires, lining, high pressure rubber hose cord
Plastic bags	Plastic shopping vest bags, perforated bags, garbage bags
Super diesel/98,95+,92 unleaded gasoline various motor oil / car wash service	Retails of vehicle fuel, generator oil, motor oil, and lubrication oil, daily necessities, cooling shirts ; car maintenance and car washing

(ii) Sales Markets

1. Textile Products:

The Company's sales markets are all over the world, including Asia, Europe, America, etc., and the target markets are the ones in Asia, mainly in Hong Kong, Southeast Asia, and the Middle East.

2. Tire Cord Fabrics:

Besides tire manufacturers in Taiwan, these fabrics are also exported to Southeast Asia, India, Sri Lanka, the United States, China, Japan, Korea, and Eastern Europe; their export Rate is 80 %.

3. Plastic Bags:

These are mainly sold to Japan, and then South America. 99% of them are for export, and the others are for the domestic market.

4. Oil Products:

100% of oil products are for domestic markets.



(iii) Sales quantity and amount of main products for the last 3 years

in thousands of NTD

Year Quantity/Amount	2018				2017				2016			
	Domestic Sales		Export Sales		Domestic Sales		Export Sales		Domestic Sales		Export Sales	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Main Product												
Polyamine /Polyester Fabric (thousand yard)	40,407	1,449,212	255,574	12,567,647	50,172	1,670,212	225,208	10,539,034	41,842	1,555,608	213,623	10,141,327
Polyamine /Polyester Tire Cord Fabric (ton)	8,516	1,498,881	44,808	6,165,482	8,925	1,441,386	48,879	6,532,330	7,681	1,279,006	42,856	5,909,952
PE Bags (ton)	1,327	73,458	5,012	376,684	1,142	59,651	4,952	353,847	1,576	84,100	5,063	386,953
Yarn Count (piece)	21,168	407,882	2,038	22,878	23,670	474,974	260	4,417	26,493	523,024	257	4,974
Cotton Cloths (thousand yard)	558	39,415	381	41,830	1,031	83,602	575	62,581	1,746	144,211	450	42,398
Special Textile (thousand yard)	3,137	557,580	1,414	327,483	3,783	567,899	1,098	223,391	2,916	533,949	1,175	263,161
Oil Products (KL)	463,812	12,144,072	0	0	467,609	10,671,800	-	-	501,488	10,296,989	-	-
Ribs (ton)	0	-	0	0	3,361	80,056	-	-	-	-	5,887	137,627
Packaging (thousand piece)	925,997	4,679,790	4,105	60,434	913,391	4,485,782	4,858	75,536	920,503	4,947,708	11,932	131,042
Testing (thousands piece)	1,009,930	3,434,643	256	1,770	919,773	2,784,144	281	2,995	929,924	2,952,912	403	5,795
Modules (thousands piece)	3,644	559,931	650	48,957	3,626	539,986	6	51	2,514	453,939	-	-
Land Development (-)	-	34,155	-	-	-	21,043	-	-	-	23,510	-	-
Investment Promotion income (-)	-	0	-	34,274	-	-	-	30,947	-	-	-	30,801
Commission Income (-)	-	8,107	-	10,488	-	-	-	-	-	-	-	-
Total	-	24,887,126	-	19,657,927	-	22,880,535	-	17,825,129	-	22,794,956	-	17,054,030

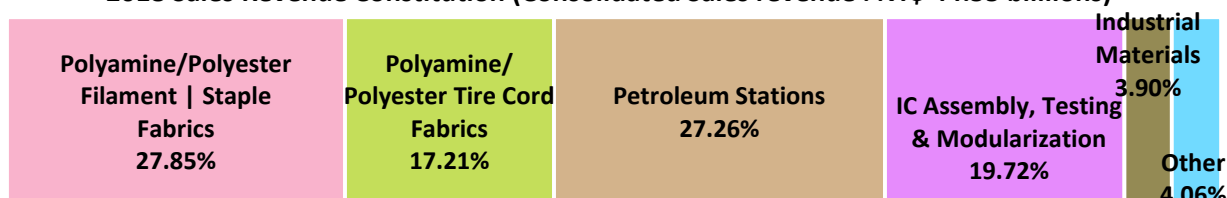


iii. Financial Information

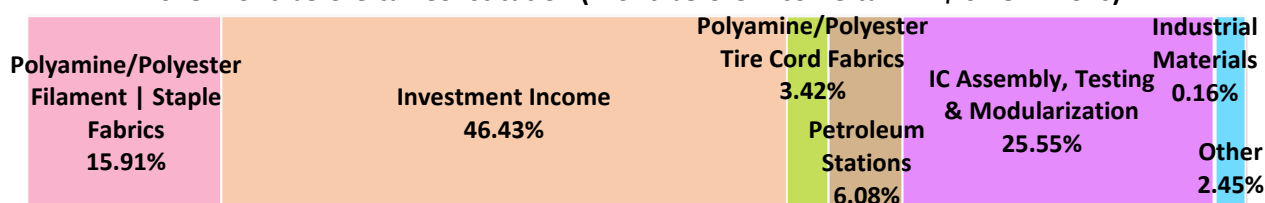
Sustainable profitability is a necessity for corporate sustainability and one of shareholders' key concerns. To enable stakeholders to have full understanding of its operating status, FTC annually holds shareholders' meeting, regularly updates the financial information, audited by the third party, of the "Investors" section on its website, appoints a spokesperson and establishes mailboxes as communication media, etc. Furthermore, it held the first investors' conference in 2017 to communicate with stakeholders, and the subsequent are held twice a year, which has become an annual routine since 2018. Facing so many challenges in the global industrial environment, it drives profitability through creating competitive edge and operational efficiency in line with business policies of "Transform Mentality", "Accelerate Innovation," and "Pursue Value." In 2017, FTC's after-tax net profit grew by 23.93% to US 4,760 million.

The profit after income tax of its 2018 consolidated financial report grew by 11.78% to NT\$ 5,321 million. Its diversified businesses mainly include polyamine/polyester filament woven fabrics, polyamine/polyester tire cord fabrics, industrial materials, petroleum stations, IC assembly/testing/modularization, investment, etc.; its financial status is healthy because of stable cash flow from 106 petroleum stations. For related financial information, please refer to the annual report, downloadable on <http://www.ftc.com.tw/newftc/financial.php>.

2018 Sales Revenue Constitution (Consolidated Sales revenue : NT\$ 44.55 billions)



2018 Profit-before-tax Constitution (Profit-before-income-tax: NT\$ 6.28 Billions)



Annual Financial Review

(in millions of NTD)

Year	Sales Revenue	Operating Costs	Employee Salaries and Wages	Employee Benefits Expenditure	Profit after Income Tax	Research and Development Expenses	EPS Dollar/Share	Retained Earnings	Investment Tax Credit	Profit-Seeking Enterprise Income Tax	Government Grants
2018	44,545	39,264	4,111	4,925	5,321	81	2.81	9,743	0	960	0.63
2017	40,706	35,567	4,146	4,931	4,760	60	2.54	5,398	25	516	2.2
2016	39,849	34,355	4,136	4,953	3,841	54	2.07	4,830	25	634	0.47

iv. Changes in Capacity

1. The umbrella-rib plant in the Zhong-Shan Plant ceased operation in Oct. 2017; it, in 2018, sold equipment and shifted to the production of woven fabrics, one of the core products, which proclaims that it withdrew from the umbrella rib market.
2. Capacity of the dyeing and finishing plant in the Long-an plant was expanded by 12 million yards/year in 2018 to increase the supply.

v. Major Award-Winning Record

The received awards are summarized below:

Award	Awarding Organization	Awarded Unit	Award Description
Awards for Excellent Trading Businesses_Awards for Outstanding Trade Contributions in the Textile Industry	Ministry of Economic Affairs	FTC	Sales channels throughout five major continents
Awards for Excellent Trading Businesses_Awards for Contributions to Expansion in Key Emerging Markets	Ministry of Economic Affairs	FTC	Successful inroads into the Indonesian market
Materials Quality Summit 2018	adidas	FTC	Offer of quality fabrics
Certificate of Appreciation_Sponsoring Da-Yeh University	Da-Yeh University	Industrial Material Business Division	Offer of 100 meters of carbon fiber fabric, technological consulting and instructions for the 26 th National Intercollegiate competition of eco-friendly and energy-conserving cars



Awards for Excellent Trading Businesses_Awards for Outstanding Trade Contributions in the Textile Industry



Materials Quality Summit 2018



Awards for Excellent Trading Businesses_Awards for Contributions to Expansion in Key Emerging Markets



Certificate of Appreciation_Sponsoring Da-Yeh University



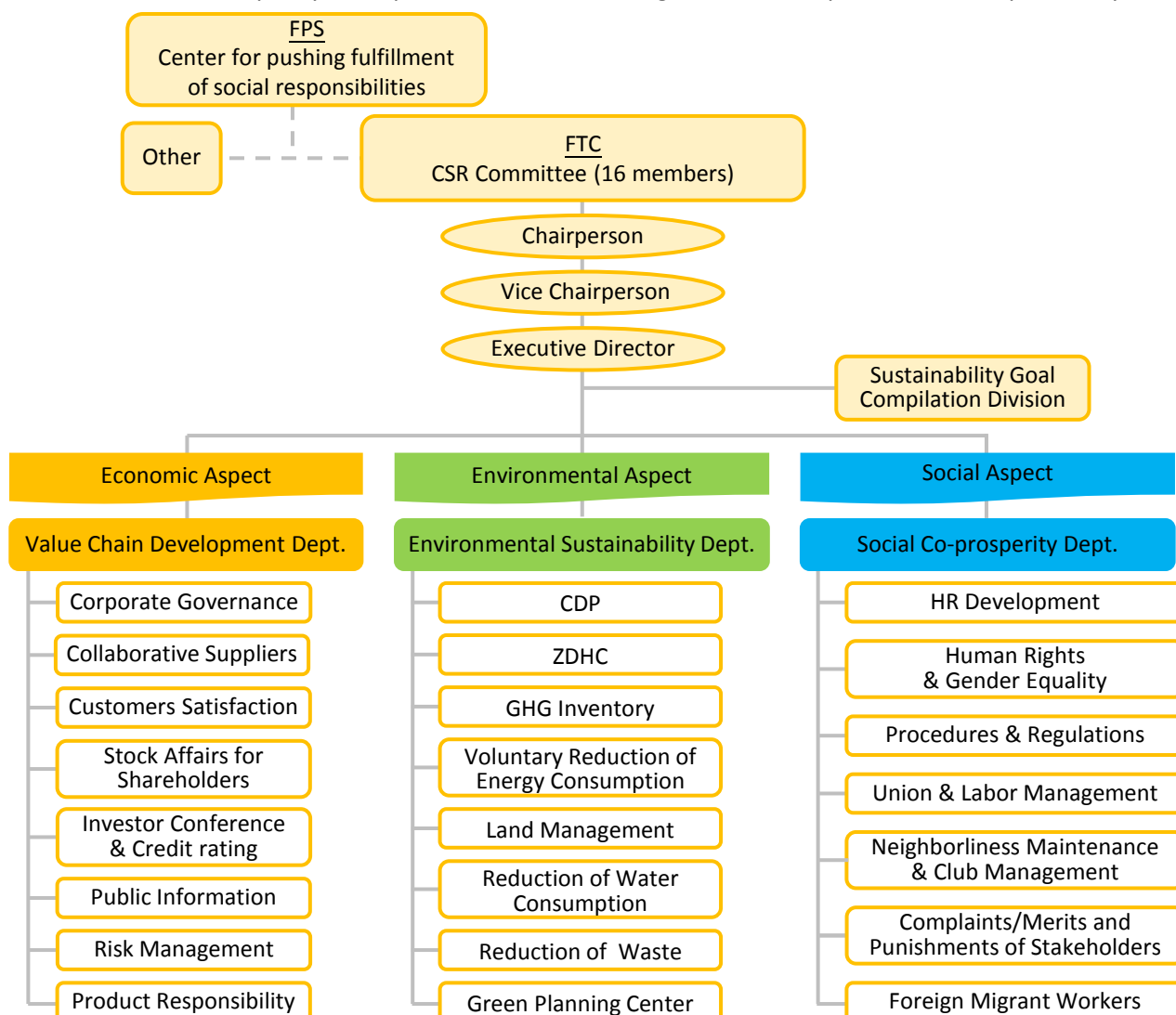
(II) Corporate Governance

i. Information of Corporate Governance Principles, Board of Directors, Audit Committee, Internal Control, Remuneration Committee, Managerial Officers and Subsidiaries:

On November 7th 2014, 61 articles of "Corporate Governance Principles" were passed by the Board of Directors that is composed of 11 directors, among whom, three are independent directors who are also members of the audit committee, one female, two in the 51-to-59 age group, six in the 61-to-69 age group, and three above 70, and posted, as the Security Competent Authority required, on the Market Observation Post System (MOPS) and FTC's website. As for information of the background, experience, and academic qualifications of directors and members of the Audit Committee, President, Executive Vice Presidents, Senior Vice Presidents, managerial officers of each unit, branches, Remuneration Committee, and Internal Control System Statement, etc., please refer to pages 14-15, 18-20, 21, 44-45, and 63 of the 2018 annual report on http://www.ftc.com.tw/newftc/annual_report.php.

ii. CSR Committee Organizational Structure and Task Group

On March 6th 2015, a CSR Committee was set up, and its chairperson was assumed by the managing director and President then, who was promoted as the Vice Chairman in June 2016. In September 2018, it was reshuffled and renamed, and its chairperson was assumed by the director and President instead. Its functions encompass three aspects—the economic, environmental, and social—and its tasks are executed by 23 Topic Groups. The related major matters must be reported to the chairperson; the submission of an annual CSR report is a must in the agenda of the Board of Directors prior to the publication of that report. "Corporate Social Responsibility Principles" were approved by the Board of the Directors on August 7th 2015, which includes 31 articles that specify aims, policies, and detailed regulations of corporate social responsibility.





iii. Advocacy and Implementation of Business Integrity and Anti-Corruption

(i) Institutionalization of integrity-oriented management

Corporate integrity management has been of social concern. In 1999, the United Nations proposed the Global Compact to include anti-corruption in main issues of CSR, advocating that corporations should be responsible for actively creating an ethical and fair environment. APEC also promulgated the necessity for corporations to face “Improving corporate social responsibility” and “Cracking down on corruption,” which are of global concern, and encouraged public and private sectors to cooperate in improvement of governance mechanisms and the fight against and elimination of corruption.

In June 2015, the Board of Directors passed the 26 Articles of FTC’s “Ethical Corporate Management Best Practice Principles,” which stipulated that the directors, audit members, managers, and staff, etc. must comply with relevant legal regulations and prevent unethical conduct. These principles are applicable to not only FTC but also its subsidiaries and posted on FTC’s website. The aim of these principles is the generation of internal consensus on the creation of ethical management environment and integrity-oriented business edge through the prevention of unethical conduct and the conformity to related legal regulations with ethical management and risk control mechanisms. These principles are mainly on :

1. Requirements of the inclusion of related rules of ethical management in the Articles of Incorporation and outgoing documents and of actual implementation of these rules so as to strengthen FTC’s commitment to such management
2. Prohibition on business dealings with parties with an unethical record(s) to ensure the fairness and transparency of commercial activities
3. Prohibition on direct/indirect bribery and fraud, directly/indirectly providing illegal campaign funding, false charitable donations, unreasonable gifts, entertainment, or other unjust enrichment
4. Duty of the Board of Directors to supervise conduct of the management and ensure the implementation of ethical management policies by, but not limited to, the dedicated compliance units.
5. Rules/regulations governing duty of the directors, audit members, managerial officers and personnel and precautions against unethical conduct
6. Requirements of stipulation of regulations on recusal of interest conflict for directors, supervisors and managers.
7. Requirements of establishment of effective accounting and internal control systems, regular/irregular internal audit of all personnel’s compliance, and periodical submission of written audit reports
8. Requirements of stipulation of relevant SOPs and regulations to facilitate ethical management
9. Requirements of regular training and outreach and establishment of reporting and punishment mechanisms
10. Requirements of strengthening information disclosure of ethical management implementation

Furthermore, we established a unit, dedicated to corruption prevention, and channels for reporting malfeasance to prevent illegal behavior, fraud , and insider trading.

(ii) Anti-Corruption Mechanisms and Risk

Anti-corruption measures and conduct audit are not only implemented but also incorporated into daily operations by FTC and other subsidiaries of Formosa Plastics Group. The possibility of exposure to the risk of corruption is rather low, in terms of the proportion of the amounts of money involved, which can be inferred from the following:

1. Independent, internationally renowned accountants without negative social images will be selected for the third-party verification.
2. Supervisors are independent of the Board of Directors and undertake independent audits. From July 2017, they are replaced with the auditing committee, which makes audits done in a manner of team work, rather than by individuals.
3. “Corporate Governance Principles,” “Ethical Corporate Management Best Practice Principles,” and “Codes of Ethical Conduct,” etc., passed by the Board of Directors, are widely applicable to the self-discipline and recusal of directors, audit members, managerial officers, and personnel involved in trading, accounting, and warehousing. What are regulated, including bribes and illegal acceptance of entertainment, etc., are incorporated in the “Work Rules” and other relevant regulations that have been in effect for years.



4. The Audit Office conducts monthly audits of 9 transaction cycles—sale and receipt cycle, purchase and payment cycle, production cycle, labor and wage cycle, property, plant and equipment (PP&E) cycle, finance cycle, investment cycle, research and development cycle, and computerized information processing system cycle—, submits audit reports that specifies a material weakness and/or an abnormality, if any, to the independent directors and the audit committee for review, and further follows up on or conducts investigations into the weakness/abnormality in accordance with instructions; it also quarterly and annually reports its findings to the Board of Directors.
5. Each unit, including each sector of President Office, Accounting Dept., Procurement Dept., Engineering Affairs Dept., , Sales Dept., General Affairs Sector, Human Resources Sector, Manager Office, Plant Manager Office, etc., has the responsibility and obligation to conduct and undergo audits.
6. Overseas subsidiaries are required to avoid illegal rent-seeking; especially in China , no improper entertainment took place, which can partially attribute to the effective enforcement of Chinese government’s anti-corruption. Visits for faster official approvals are admittedly inevitable sometime to meet the schedule and seek efficiency, but their occurrences have decreased. Bans on friendship-oriented visits, business interactions, and inquiry about legal requirements have not been imposed.

To view more details of what above, please refer to the “Status for implementation of ethical management and measures” section in FTC’s Annual Report on its website.

iv. Overall Corporate Risk Inspection and Countermeasures

Economic Aspect

(i) Inventory Valuation Loss Risk

Inventory in 2017 and 2018 are worth NT\$ 8.45 and NT\$ 8.71 billion, respectively, and the later one accounts for 9% of the total asset. Inventory includes raw materials, works in process, semi-finished products, and finished products, with raw materials mainly consisting of reusable yarn, dye, and auxiliaries. Works in process are of high liquidity. Inventory of finished products, namely fabrics and gray, is worth about NT\$ 6.1 billion. For the reduction of inventory risk, inventories are sold in batches several times irregularly a year to lessen the load, and inventory valuation loss reserve is also set aside annually. The reduction and realization of inventory should be speeded up, but inventory valuation loss is not that serious to incur vital risk of insufficient turnover of working capital.

(ii) Risks of Technology Concentration

The textile industry is a mature one and doesn't involve R&D on key technologies as the hi-tech one does, which means that the completion of finished products of this industry still requires collaborative efforts of upper-, middle- and down-stream manufacturers. Including the four overseas plants, there had been 102 plant managers/division chiefs and those ranking higher as of April 30, 2019, with different kinds of expertise, working at respective plants, which attested that there is little risk for key-technology outflow or technology concentration. Some technological outflows resulting from retirement or poaching of key technicians are, however, inevitable, posing challenge to the Company's advantage based on certain unique technologies.

(iii) Risks of Client Concentration

FTC has always viewed clients’ 100% loyalty to our products as our target and honor, and thus strived to achieve a good cooperation or alliance relationship with clients, amongst which the main branded customers (such as Nike, Adidas, Columbia, Puma, Cheng Shin Rubber Ind., Kenda Tires and others) are our primary targets. Textiles are FTC’s main products, that is, FTC is in the globally so-called traditional industry, in which suppliers are numerous and competition is quite fierce. Therefore, unlike the electronic industry, there are hardly statistics of worldwide market shares of respective enterprise’s various products. Under such circumstances, what FTC pursues is clients’ orders with maximum fulfillment of their demand. With worldwide sales and distribution network, FTC has no risks of client concentration, but there are risks of major client switching and changing companies. The resulting excess production capacity can be immediately distributed to other domestic or foreign demanding branded customers, but the room for price negotiation will be small. For great flexibility in distribution and resolving excess capacity, FTC, for a long time, has endeavored to form strategic alliance with local branded clients with growth potential in a country.



(iv) Manpower gap of rank-and-file workers and managerial staffers

Due to difficulty in seeking fresh blood, caused by the trend of less offspring and young people flocking to service sector and abroad, the Company has been confronted with the problem of aging workforce, whose age, excluding foreign works, averages 44.6, with average service years of 20.2. In order to mitigate impacts of such risks, suffice manpower, especially solicitation of young employees and cultivation of basic-level cadres, for sustainable development, the Company has been improving significantly pays, fringe benefits, promotion opportunities, and education/training in recent three years.

(v) Risks of investigation and penalties by the customs for inconsistency in the recorded volumes for reception, release, and storage of imported tax-bonded materials

1. Since 2017, only about 6% of the Zhong-Shan Plant's purchased polyamine filament yarn has been imported via bonded operations as the material of gray for exclusive export to a specific Japanese client. The volume of this bonded material was so little that few risks could be incurred. As of August, 2018, no more materials were imported via bonded operations. As for the Chang-Shu Plant, it has no worries about such risks in that no bonded operations are employed for imported goods.
2. The Vietnamese Plant should intensify warehousing management for the reception, release, and storage of tax-bonded imported materials to avoid risk and periodically regulate the import volume. Most of its polyamine yarn for export purpose after processing with 0% nominal tariff was imported via DDP (Delivered Duty Paid), which thereby reduced the quantity of bonded materials and cut the related risk.

Environmental Aspect

(vi) Risks of Climate Change

The extreme weather and climate changes may cause influential chain reactions among food, energy, water resources, hygiene and health, ecology, flood, forest fires, fluctuations in materials prices, and so forth. Before these incidents escalate into Butterfly effect disasters, the advantages of product sales still outweigh their disadvantages after risk evaluation, which is explained as below:

1. The extreme weather, especially blizzards induced by polar vortex and extreme heat waves as a result of global warming, will be beneficial to the widespread application of the Company's main products, functional fabrics—fabrics for cold-resistant down coats, thermal retention finished fabrics, Intelligent temperature control clothing, high-end waterproof and breathable laminated fabrics, fabrics made of cooling yarn, etc.—by the consumers.
2. Global warming generates adverse impacts on sales of cold-resistant down fabric. This risk is about to be addressed through the marketing of autumn clothes and alleviation of the burden of manpower deployment during off and busy seasons.
3. Climate change may lead to an upward trend in consumption volume and costs of water, electricity and oil, however, such trend will not bring severe impacts in that prices of water and electricity, under the government's control, will not skyrocket and the influence of oil prices can be much more directly and obviously attributed to American extraction costs of shale oil and the geopolitical conflicts among Middle East, Northeast Asia, and South China, rather than to climate changes.
4. Energy conservation/waste reduction policies and the related hardware facilities and software management systems have been put into practice for years, and the expected effectiveness is being carried out. Water consumption of production units of 5 plants in 2018 was, as the target requires, decreased by over 20% through the installation of new water-saving equipment, etc., which is responsive to international banded customers' advocacy of annual 5% water conservation in the recent years. The cost of water accounts for a small proportion of the total overall production costs, which suggests that the emphases of water conservation are on the cherishing of resources and mitigation of ecological impacts rather than on cost saving.
5. In 2018, AI talents are cultivated and AI technology is deployed for improvements on dyeing fault (color deviation, uneven dyeing, etc.), redo/rework, re-make/start over, late delivery, etc., which can contribute to less input, such as water, electricity, raw materials, labor effort, etc., that is incurred by product failures, fewer emissions and less water consumption.



(vii) Risks of Effluent Discharge and Air Emissions

For discharge and emissions, FTC's most concerns are the lack of legality, potential damages to the environment, and failure at fulfilling the corporate responsibility. To address these issues, FTC has taken the subsequent actions. In the fourth quarter of 2017, the Bumblebee Plant and the Processing Plant were equipped with regenerative thermal oxidizers (RTOs) to enable emissions with less VOCs (volatile organic compound); in recent years, to boost the boiler efficiency and reduce fuel-oil consumption, heating-medium boilers were equipped with combustion control systems with an oxygen sensor and a microcontroller, which made oxygen trimmed to 2-3%, down from 6% originally. In January 2015, 24-hour detection and quality analysis instruments of discharged dyeing wastewater were activated and connected to the Environmental Protection Bureaus (EPB) of Yunlin County; data of the quality of wastewater is updated every 15 seconds. For alarms about any abnormalities, timely reactions will be taken to reduce the hazards of industrial discharge. For corporate sustainability, FTC has striven to prevent its neighbors, who have paid close attention to and kept an eye on FTC's discharge and emissions, from harm of those pollutants and maintain the long-term relations with them.

(viii) Restricted Use of Raw Coal and Petroleum Coke by Yunlin County Government:

Based on the local government statute, Yunlin County Government will either issue no use permits of bituminous coal and petroleum coke or establish a review panel, consisting of scholars in environmental protection, for strict review of the application of a permit to enforce a ban on big enterprises' burning coal and carry out less pollution sources. Such ban will increase production costs because of unstable supply of electricity and steam of substitute fuels; without a solution to the unstable supply, the Company prefers to follow its own environmental protection policy to upgrade its equipment with approximate costs of NT\$ 100 to 200 million instead of the deployment of substitute fuels. A petition for such ban has been submitted to the Environmental Protection Administration (EPA) by the Formosa Plastics Group, to which it is subordinate, in the expectations of consistency of the energy policy throughout the country. For the time of being up in the air for this ban, the step the Company is taking is to strive for intensive communications with the local government and extension of the term of a permit while the upgrade will be annually carried out as planned.

Social Aspects

(ix) Risks of Public-Safety Hazard for Petroleum Stations

1. Regular safety check for equipment: conduct safety checks for vehicles, tanks, and equipment related to the filling of oil storage tanks, as well as car-washing machines, electric-circuit boxes, auto shut-off device for nozzles, and breakaways according to SOP.
2. Personnel management: forbid station staffers to use fire, keep their cell phones during working hours, ask them to wear anti-static uniforms, and require them to follow SOP in providing service.
3. Control of customers and vehicles: ask, via posters or oral reminding, customers not to smoke, not to use cell phones for making or receiving calls, to turn off engine in filling, and to keep away from filling islands with necessary pause of service if a customer's behavior impacts daily operation. Such management is doing better than harm and is conducive to the image and repute of petroleum stations.
4. Carry out joint uniform improvement, calling for improvement of the other 100-plus stations entirely whenever one of them is penalized.

(x) Risks of Worker Strikes and Anti-Chinese Protests

The employment of labor in 5 Plants is conducted in accordance with local labor laws and regulations. Over the past decade, the Zhong-Shan Plant in China and the Vietnam Plants only once suffered from worker strikes due to internal ethnic conflicts and labor wage disputes. To avoid later occurrences of similar incidents, the Company has taken provincial balance and adequate modulation of wages, rewards and benefits into consideration in employment. Strikes have been rare through the raise of wages; take the Vietnam Plants for instance, strikes here had seldom occurred in recent years following mandatory pay hike of at least 7% required by the Vietnamese government. Furthermore, employees are encouraged to express their opinions through provided communication channels, which have also been strengthened to prevent discontent from festering. In the wake of the anti-Chinese riot smashing Chinese-invested factories in May 2014, the Vietnam Plants have intensified communication with the local government and police and won their pledge to help uphold the safety of the factory premises by installing barriers, bring rioting people to justice, and remove political risk by distinguishing Taiwanese-invested plants from Chinese-invested ones.

**(xi) Product Liability Risks**

1. FTC is a midstream manufacturer in the supply chain while Formosa Petroleum Stations (FPS), its subsidiary, whose business mode is B2C with sales of ready-made merchandises and plastic shopping bags that are free from processing. FTC's main products are textiles, which are intermediate goods rather than final ones, like garments, the edible, and the medicinal. Unlike FPS, which has to pay attention to consumers' safety thanks to their products sold in the form of final goods, FTC does not have to worry about such issue.
2. Tire cord fabrics are used in the tire casing by our tire manufacturing clients. The whole tire must pass production certification and tire safety inspection, both of which will be conducted at those clients' manufacturing end.
3. Produce and test temperature-enduring fire-retardant industrial cloth (commonly known as fire-proof cloth) in various grades according to customers' requirements.
4. Bulletproof fabric is tested by the military in a professional manner, in order to meet the criteria of suppliers of materials or branded customers, such as DuPont, that much more regard highly the maintenance of long-term reputation than FTC.

(xii) Risk of infringement on intellectual properties (IP)

1. Patents for FTC's textile technologies are applied in the name of the R&D team and their ownership is registered in the name of FTC, which seldom results in individual patent theft. In addition, textile technologies, unlike invention ones of the technology industry, are mostly of the nature of application, which hardly causes dispute on IP infringement.
2. In May 2017, the Company transferred four patents to its Chinese subsidiary, for the sake of governmental incentives available for high and new tech enterprises, alongside the signing of a contract for that subsidiary (the assignee) authorizing the parent Company (FTC) and FTC's other subsidiaries for production.
3. Although IP infringement of patented technologies by mistake, quite frequent for renowned international electronic enterprises, is rare in the textile industry, we still endeavor to prevent such incidents via intensified education and patent application. In August 2017, the Company invited staffers expert in IP field of Lee and Li Attorneys-at-Law to be instructors for two shifts of training, which were attended by 80 employees.
4. As for the prevention of the infringement of trademark and copyright for pattern prints, the Company demands customers to have adequate authorization for the patterns to be printed on the fabric they purchase, a practice, carried out according to SOP, already in place for about 30 years. In fact, printed cloth is a marginal business of ours, unworthy of risking violation of law.

(xii) Risk of regional politics--risk of Sino-U.S. trade war over trade imbalance

On March 22, 2018, actions that the U.S. took against its main trade deficit country include heightened use of Section 301, intensified investigations on goods from these countries and on high-tech espionage, loose foreign equity cap, taxation of 25% tariffs on specific products from China, etc. What have been sparked off, such as mutual retaliatory measures, the prohibition of the American 5G telecom products into China, fluctuation of exchange rates, etc., have impacted the global trade and the supply chain. To be immune from disruption of the supply chain and from the levy of high tariffs, the solution to the distribution of MIT (made in Taiwan) products that are originally circulated between China and the U.S. is mutual trade among countries in charge of the assembly of end products. As for the tire cord fabrics manufactured in FTC's Taiwan Plant, they are facing more severe price competition; fortunately, textiles, FTC's main products, have not been the target on which tariffs will be imposed. To alleviate the impact of the price competition and leap at the advantageous new supply chain, orders indirectly exported to the U.S. that account for 20% ~ 30% of two FTC's Chinese Plants' sales can be transferred to its Vietnam Plants or their downstream apparel/export factories for production and export if necessary.

Conclusion: Enterprise Risk Ratings:

The overall rating assessed by the Taiwan Ratings is as follows:

Year	Long-term Rating	Short-term Rating	Rating Outlook
2018	twA+	twA-1	Stable
2017	twA+	twA-1	Stable
2016	twA+	twA-1	Stable

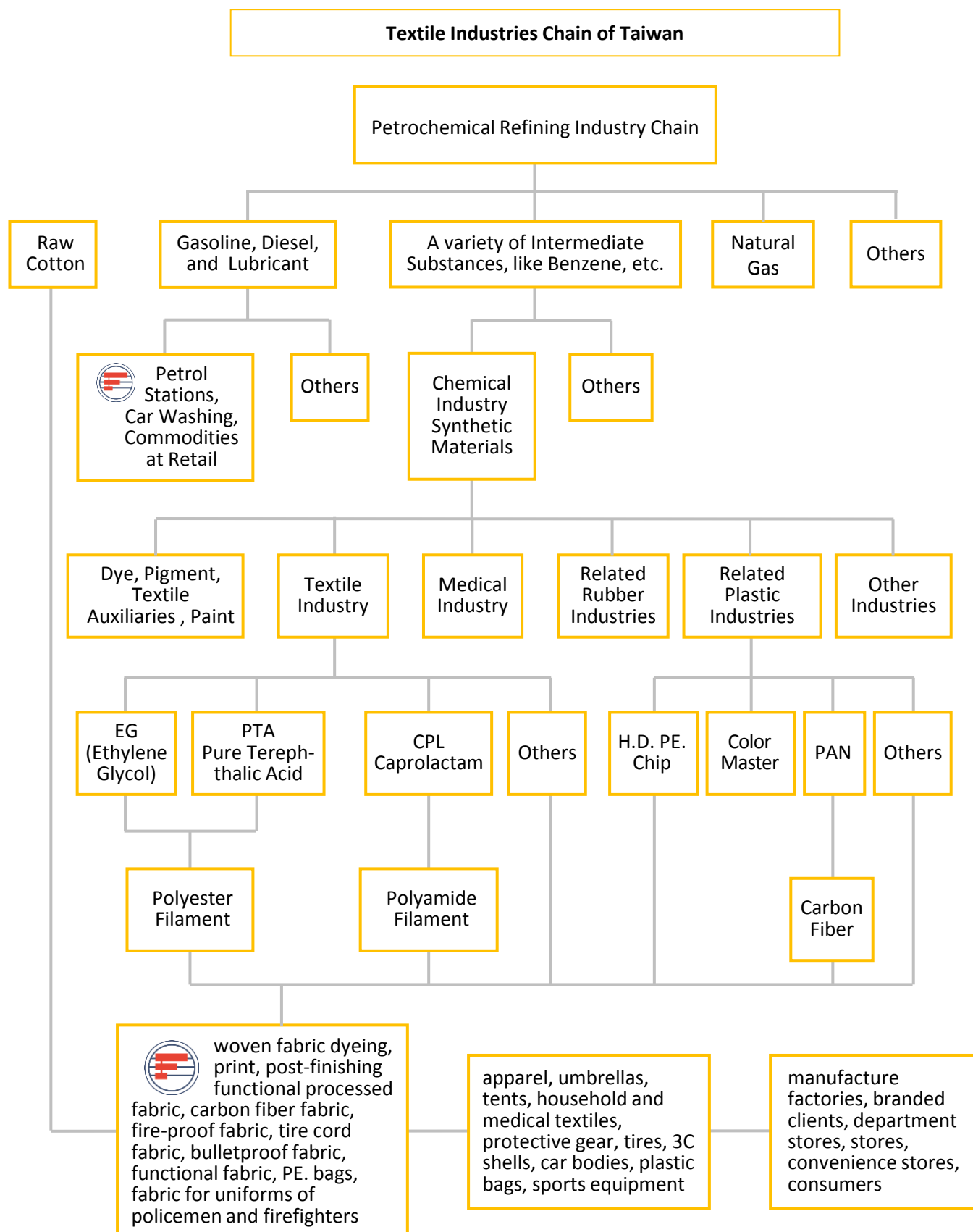
Note:

The evaluation result of the credit rating reveals that FTC's financial structure, competitiveness, and sustained profitability are excellent, and it has below-average risks.



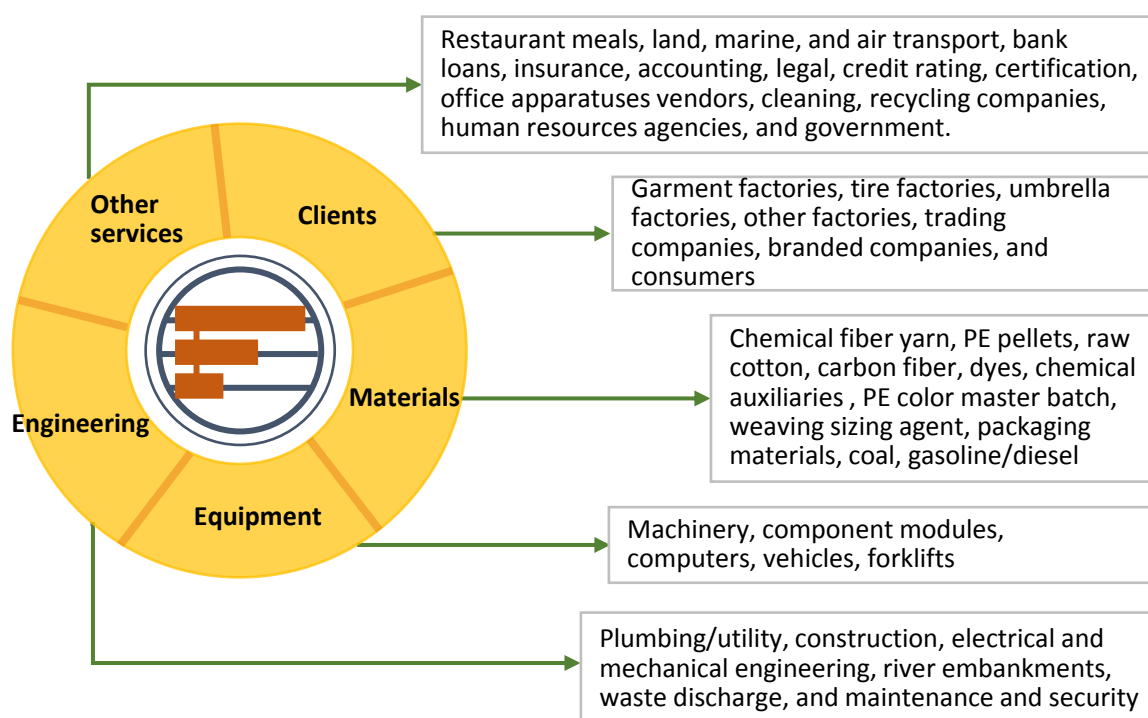
(III) Relation with the Textile Industry Chain

i. The Supply Chain of Raw Materials and Products



ii. Overview of the Supply Chain

As a midstream player in the textile industry, the Company must rely on not only a large number of clients' orders but also the cooperation of the entire industry chain in multi-lateral and multiple trade/services, such as the construction of plants, the arrangement of production line equipment, regular maintenance, the procurement of raw materials, the provision of before- and after-sales services, etc., to maintain the required energy for daily operations. The diversification, customizability and a wide scope of applications—functional apparel, flame retardant fabric derivatives, umbrellas/parasols, cleanroom suits, medical expendable items, tires, electronic product cases made from carbon fiber, carbon fiber auto accessories, etc.—of FTC's products lead to its complex supply network, whose operation is summarized below:



(i) Proportion of Local Suppliers and that of Spending on them

1. A supplier is defined as a local one based on its nationality and its eligibility requires its submission of its profile, official registration documents issued by local government authorities, including its business/factory registration certificates, incorporation registration form, registration amendment form, etc., and remittance account; from 2019, to sign an anti-bribery undertaking becomes a requirement for such eligibility. On passing the eligibility assessment, it is qualified to trade with FTC in line with FTC's procurement procedures. To propagate the vision of green materials and green products, it is anticipated that all suppliers and FTC can co-take the social responsibility for protecting the environment; therefore, FTC, from 2019, strongly suggests the main existing suppliers, except Formosa Petrochemical Corporation, of raw materials—yarn, dyes, and auxiliaries—to follow the global environmental criteria for their environmental protection practices. For the selection of new suppliers, the priority will be given to those who are willing to sign the commitment to annual careful examination of the gap between their performances and targets of energy/water conservation, waste reduction and decreased use of hazardous substances.
2. The amount and proportion of local procurement of 5 plants in 3 countries are displayed in the following table:

The Amount and Proportion of Local Procurement of 5 Plants in 3 Countries in 2018 Unit: NT\$/%

	Taiwan Plant	Zhong-Shan Plant	Chang-Shu Plant	Long-an Plant	Dong-nai Plant
Amount	21,048,736,82	503,244,025	860,376,857	723,487,686	834,337,552
Proportion	82.40	51.50	88.17	54.00	46.20



- Given the needs for proper and safe inventory, rapid delivery, avoidance of tariffs, and after-sales service, local sourcing is a top priority, while insisting on the requirement for quality and functionality. As of Dec. 31, 2018, the number of suppliers, along with their locations, for the Company's five plants in three countries are listed in the following table:

The Number of Local Suppliers and Proportion in 2018_Taiwan, China

Plant		Taiwan Plant					Zhong-Shan Plant					Chang-Shu Plant		
Types of Raw Material		Yarn	Sizing Agent	Dye	Auxiliary	Total	Yarn	Sizing Agent	Dye	Auxiliary	Total	Dye	Auxiliary	Total
Number of Supplier		99	8	40	117	264	22	6	21	46	95	16	30	46
Locations of Suppliers	Taiwan	70	8	38	109	225	11	6	4	10	31	3	8	11
	China	5	-	-	-	5	11	-	17	36	64	13	22	35
	Vietnam	-	-	-	-	-	-	-	-	-	-	-	-	-
	USA	6	-	1	-	7	-	-	-	-	-	-	-	-
	Hong Kong	2	-	1	6	9	-	-	-	-	-	-	-	-
	German	16	-	-	2	18	-	-	-	-	-	-	-	-
Proportion of Local Supplier (%)		70.70	100.00	95.00	93.16	85.22	50.00	0	80.95	78.26	67.37	81.25	73.33	76.08

Notes: The price of yarn of Taiwan is higher than that of China, which makes that it is inevitable to augment the procurement of yarn of China and gradually decrease the proportion of Taiwanese local suppliers.

The Number of Local Suppliers and Proportion in 2018_Vietnam

Plant		Long-an Plant					Dong-nai Plant				
Types of Raw Material		Yarn	Sizing Agent	Dye	Auxiliary	Total	Yarn	Sizing Agent	Dye	Auxiliary	Total
Number of Supplier		21	7	17	36	81	31	7	14	27	79
Locations of Suppliers	Taiwan	13	6	13	27	59	17	6	10	19	52
	China	4	-	-	-	4	10	-	-	-	-
	Vietnam	4	1	4	9	18	4	1	4	8	17
Proportion of Local Supplier (%)		19.05	14.29	23.52	23.08	22.22	12.90	14.29	28.57	29.63	21.52

(ii) Economic Benefits of sourcing Locally (refers to procurement from domestic suppliers)

- The local procurement proportion (the local procurement amount of the plant to the total procurement amount of the plant) of the main raw materials (Yarn, Sizing Agent, Dyes, Auxiliaries) required by Taiwan Plant, Zhong-Shan Plant, Chang-Shu Plant, Long-an Plant, Dong-nai Plant in recent years is summarized in the following table:

Local Sourcing Proportion of Yarn (Unit: %)

Year	Taiwan Plant	China Plants		Vietnam Plants	
		Zhong-Shan Plant	Chnag-shu Plant	Long-an Plant	Dong-nai Plant
2018	79.9	43.5	No woven plant	53.2	13.27
2017	65.5	50.1	No woven plant	58.3	14.9
2016	80.3	39.0	No woven plant	66.4	20.9

- In recent years, international branded clients have preferred local sourcing and manufacturing; thus, the local sourcing proportions of yarn vary in regions based on the volume clients order.
- The local sourcing proportion of yarn for tire cord in Dong-nai Plant is lower owing to no high denier polyamide production plants in Vietnam currently.
- Clients' demand for products with high functionality swells; such products are still mainly manufactured in Taiwan Plant because of the consideration of high-tech transfer, which results in relatively higher local sourcing proportion of materials for those products.

Local Sourcing Proportion of Auxiliaries for Weaving and Dyeing in 2018 (Unit: %)

Year	Plant	China Plants		Vietnam Plants	
		Taiwan Plant	Zhong-Shan Plant	Chang-Shu Plant	Dong-nai Plant
2018		93.1	87.1	86.8	21.4
2017		87.4	81.2	85.6	15.9
2016		93.7	73.1	86.3	13.8

- The local sourcing proportions of auxiliaries in Vietnam Plants are relatively low due to the limited number of local suppliers and their incompetence in the supply of quality materials to meet the demand for diversified products.

- Given the requirements of safe inventory, consistent quality, short delivery time etc., local sourcing is a top priority and carried out with adequate quality, volume, and prices for the 5 plants in 3 countries.
- For the reduction of overseas transportation costs/time/tariffs/insurance fees of raw materials, environmental protection, the increase of the local industry cluster and social benefits, to augment the local sourcing proportion of the 5 plants in 3 countries has been the Company's goal all along.
- A material, conforming to quality requirements, will be listed in the candidate list for procurement through irregular comparisons of raw materials supplied by local suppliers.

Local Sourcing Proportion of Dye in 2018 (Unit: %)

Year	Plant	China Plants		Vietnam Plants	
		Taiwan Plant	Zhong-Shan Plant	Chang-Shu Plant	Dong-nai Plant
2018		95.0	76.5	73.3	15.0
2017		99.8	80.5	80.7	14.3
2016		99.9	67.9	71.4	17.5

- The local sourcing proportions of dyes are determined by types of yarn; the more purchase of one kind of yarn, the more consumption of corresponding dyes.

Local Sourcing Proportion of Sizing Agent in 2018 (Unit: %)

Year	Plant	China Plants		Vietnam Plants	
		Taiwan Plant	Zhong-Shan Plant	Chang-Shu Plant	Dong-nai Plant
2018		100	0	No woven plant	2.3
2017		100	0	No woven plant	4.2
2016		100	0	No woven plant	6.0

- Due to the use of the weaving processes and techniques of Taiwan Plant, the Zhong-Shan Plant procures the sizing agents from Taiwan.

Local Sourcing Rate of Dyeing Auxiliary of the 2nd Business Segment (Unit: %)

Year	Plant	Raw Material	Latex	Resorcinol	Bridging Agent	HDPE.L-LDPE	Color Master Batch	Ink	Epoxy
2018	Taiwan Plant	Tire Cord Plant	100	0	99.5	-	-	-	-
		Carbon Fiber Plant	-	-	-	-	-	-	100
		Plastic Plant	-	-	-	100	100	100	-
	Vietnam Plants	Tire Cord Plant in Dong-nai	0	0	0	0	-	-	-
2017	Taiwan Plant	Tire Cord Plant	100	0	96.9	-	-	-	-
		Carbon Fiber Plant	-	-	-	-	-	-	100
		Plastic Plant	-	-	-	100	100	100	-
	Vietnam Plants	Tire Cord Plant in Dong-nai	0	0	0	-	-	-	-
2016	Taiwan Plant	Tire Cord Plant	100	0	96.4	-	-	-	-
		Carbon Fiber Plant	-	-	-	-	-	-	100
		Plastic Plant	-	-	-	100	100	100	-
	Vietnam Plants	Tire Cord Plant in Dong-nai	0	0	0	-	-	-	-

- Resorcinol must be 100% imported for both the tire cord plant in Taiwan Plant and that in Dong-nai of Vietnam, that is, no local sourcing takes place, since it is not produced locally.



iii. Material Management and Assessments of Suppliers' Environmental Conformity

(i) Raw Materials

Material procurement is mainly the procurement of raw materials (yarn/cotton) and chemicals (sizing agents, dyes, auxiliaries). Suppliers of 5 Plants in 3 countries are assessed in quality, delivery and price that respectively account for 50%, 35%, and 15%; the results in 2018 is shown as below.

2018 Suppliers' Rating of 5 Plants in 3 Countries

Unit: number/%

Plant	Taiwan				Zhong-Shan				Chang-Shu				Long-an				Dong-nai			
Grade	RM		C		RM		C		RM		C		RM		C		RM		C	
	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P	N	P
A	69	100	197	98.99	10	100	0	0	28	90.3	7	100	16	100	58	100	23	95.8	20	95.2
B	0	0	2	1.01	0	0	59	0	3	9.7	0	0	0	0	0	0	1	4.2	1	4.8
C	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	69	100	199	100	10	100	59	100	31	100	7	100	16	100	58	100	24	100	21	100

Legend:

- RM: Raw material
- C: Chemicals
- N: Number
- P: Proportion

Grade	Bracket	Frequency of Rating/Description
A	100-90	Twice a year
B	89-80	Once a year
C	79-70	Every half year, improvements needed
D	69-60	Every half year, potential candidate and improvements needed
E	Introduced for trial , unified assessment every June	
F	Below 59	Termination of inquiries

Materials that are provided by suppliers must

- be verified via
 - OEKO-TEX Standard 100 Specification Guarantee;
 - EU REACH Substances of Very High Concern (SVHC) Qualification Certificate;
 - Organotin-free Certificate;
 - APEO-free Certificate;
 - ZDHC – Inventory of Restricted Chemical Substances;
- earn manufacturers, consumers and users' trust;
- meet national transportation safety regulations for being deliverable if transported materials are hazardous;
- be increasingly certified, for instance, an increase of 0.59%--from 51.61% for 2107 to 52.2% for 2018—in the volume of procured Bluesign-certified materials after a seminar on “encouragement to follow Bluesign standard” with 36 chemicals suppliers' participation, which was held by FTC on September 5th, 2017 in view of responsibilities for environment protection that must be taken by both buyers and sellers; despite the slightness of the increase that is attributed to the time-consuming process and high expenses of certification, a joint effort between FTC and its suppliers to gradually approach overall product certification is ongoing on account of the environment-oriented principle;



5. pass regular examinations and/or irregular on-site inspections of related processes and their quality to ensure their conformity to government environment protection regulations;
6. be safe to use through terminating business with suppliers who violate government environment protection regulations.

(ii) Materials

1. Regarding material procurement, priority is given to materials that conform to international environmental protection regulations, and to
2. Materials that are certified with the Green Mark by the EPA or Energy Label by the Ministry of Economic Affairs, or renewable/helpful to lower pollution/recyclable/ beneficial to the society or the reduction of social costs, or the like. The amount spent on the procurement of these (genre) products in Taiwan Plants in recent years are shown below:

Expenditures of Products with Green Mark (Taiwan Plant)

Year	Amount (NT\$)	Explanation
2018	2,272,810	Such products, like energy-saving equipment and eco-friendly products, are mostly purchased irregularly; the gradual replacement of old ones has been carried out in recent years, which results in fluctuations in expenditures incurred exactly by the replacement of the damaged parts.
2017	1,090,878	
2016	1,472,723	

Type Year	Yarn Made from Non-reclaimed Materials		Yarn Made from Reclaimed Materials		Total
	Quantity (Tons)	Proportion of Procurement (%)	Quantity (Tons)	Proportion of Procurement (%)	
2018	11,167	88.25	1,487	11.75	12,654
2017	11,265	92.36	932	7.64	12,197
2016	12,011	96.78	400	3.22	12,411

iv. Selection of Suppliers and Extended Collaboration

- (i) The existing screening criteria are adopted for reviewing a supplier's qualification for business, and an advance notice is required if the supplier is incapable of supply, e.g. stoppage of production or shutdown, etc., so as to assure stable production quality and uphold customers' rights.
- (ii) Less usage of packaging is another requirement, including:
 1. the replacement of packing method for auxiliaries whose monthly usage reaches an economical bulk—4,000 kg—with bulk packages (Capacity: 1,000 kg) to reduce packaging usage, and
 2. the adoption of eco-friendly/recyclable substances as raw materials for packaging.
- (iii) The extended collaboration between a supplier and FTC's R&D department on development of high-performance dyes is strongly recommended for less consumption of dyes and energy, less generation of effluent, and so on. The year by year declining purchase of dyes in Taiwan Plant is the best evidence to demonstrate the effectiveness of such collaboration.

Year	Purchase Volume of Dyes for Weaving/Dyeing in Taiwan Plant (Ton)
2018	422
2017	445
2016	439



v. Client Policies and Rights Protection

(i) Client Policies: Sharing Benefits of Market Growth with Clients

1. Creating a Sound and Healthy Growing Supply and Demand Relationship

The more an enterprise and its clients can mutually benefit, the better extent of co-prosperity they can reach. Therefore, for an enterprise, creating a sound and healthy supply and demand relationship is an important management theme for sustainable development. In view of the emphasis on the long-term development and maintenance of the industry supply chain and dependence on the international marketing of clients, the Company has devoted to transaction integrity, reasonable pricing, fair trade, stable supply and demand, long-term cooperation, mutual benefits, co-prosperity while cooperating with clients in a manner of mutual trust in the long-run.

2. Enhancing the Competitiveness of Middle- and Down-stream Clients

Only by sharing the benefits of market growth with midstream and downstream clients can the Company ensure sustainability. Before developing new products, the R&D Center of the Company will first communicate with midstream and downstream branded clients to develop mutually beneficial market strategies, ensure smooth promotion of the supply chain of new products, and simultaneously boost the competitiveness of the customers.

3. Electronic Commerce Saves Costs and Increases Efficiency

To increase the service efficiency for clients, the Company has established a Company website that includes a client online service system and internet promotion system in order to improve rapid services and provide real-time information, such as an online product information inquiry system, order and production progress, inspection reports, and warehousing and transportation tracking. Furthermore, the system also established a dedicated client performance evaluation mechanism, client order prediction and tracking system, and product inspection system to improve the service standards and clients' satisfaction and reduce the costs of negligence in operations.

(ii) Protection of Client Information and Rights

For long-term co-prosperity among FTC and clients, FTC has actively maintained clients' rights through avoiding infringing on their rights or leaking confidential information in the commercial transactions, stipulating relevant regulations and establishing standard operation procedures (SOP). In 2018, no reported cases of client rights infringement were received.

1. Personal Information Management

When collecting, utilizing, or processing the information of non-Company parties, especially of clients, all personnel of five Plants in three countries will adhere to the relevant corporate bylaws and national legal regulations to prevent the abuse, tampering, damage, loss or leak of personal or legal persons' information. To implement relevant safety measures and guard clients' critical information and rights, items such as privacy, trademark rights, patent rights, copyrights, and business secrets, etc., are protected targets, and so is relevant units' data of the client order system and inferior quality product warehousing system.

2. Management of Printing Plates and Patent Rights of the Pattern of Plates

Through the configuration and specifications of the relevant information of the rights of the order system in the Company, the product items will be secured by the system and will require specific rights protocols and certification before they can be approved for production. Regardless of model type, sample fabrics, fabrics in excess, or inferior fabrics, information will not be leaked.

3. Inferior Quality Product Warehousing Management

Regarding inferior products produced in the manufacturing process, the inferior products that are registered in their rights protection system will be stored and controlled until their rights expire. The registration will be conducted by relevant personnel, and the restriction can only be lifted with the approval of the clients and President-level staff in order to prevent these inferior products from entering the market.

(iii) Information and Communication Security Management

The Company has taken all the necessary security and management measures for the information system and equipment, installed anti-virus software, firewalls and access restriction software/hardware, and implemented access control and user registration inspections to monitor the security of all information systems and prevent unauthorized access, leakage, infiltration, tampering, theft, or damage in order to ensure continuous operation and protection of client confidentiality and rights. In the case of emergency, such as earthquakes, fires, typhoons, power shortages, or lightning strikes, swift response measures will be taken to resume normal operations as quickly as possible; perpetual backup will be retained under normal conditions in order to reduce the threats to client rights and prevent damage to the sustainability of the operations.

Result (Average Points) of Client Satisfaction Survey of the 1st Business Segment (Unit: Point)

Significance/ Satisfaction Level \ Item	Quality	Delivery Punctuality	Complaint Handling	Packaging Maintenance	New Product Development	Product Sample Marketing	color matching	Service
Significance to Business Development (Max: 8 points)	7.6	6.8	4.3	3.0	4.5	4.3	4.8	3.5
Evaluation of Satisfaction Level (Max: 6 points)	4.9	4.8	4.8	5.2	4.9	4.7	4.9	5.4

2. Client Satisfaction with the Tire Cord Division (External Survey)

Result (Average Points) of Client Satisfaction Survey of FTC's Tire Cord Business Division (Unit: Point)

Significance/ Satisfaction Level \ Item	Year	Quality	Delivery Punctuality	Complaint Handling	Packaging Maintenance	New Product Development	Service
Significance to Business Development (6 points)	2018	5.2	4.2	3.4	1.9	2.5	2.3
	2017	5.15	4.38	3.23	2.08	1.92	2.08
	2016	6.0	5.0	3.6	3.0	2.5	2.4
Evaluation of Satisfaction Level (6 points)	2018	5.1	4.8	5.3	5.3	4.9	5.3
	2017	5.4	5.3	5.2	5.4	5.2	5.6
	2016	5.2	5.1	5.2	5.2	5.0	5.1

- Information of client satisfaction of the 1st Business Segment is fetched via questionnaire-based survey from 2018 for objectivity while that information prior to 2017 is a self-assessment conducted by FTC's president's office based on major branded clients' feedback on the Segment's products and services.
- Clients' major concerns of the 1st Business Segment and the Tire Cord Business Division that respectively correspond to 8 and 6 survey items listed in the upper and lower tables. Those concerns, accompanied with clients' suggestions are reviewed by managers in the Taiwan Plant respectively on April 30 and March 20. Both conferences focused on working on items with relatively low average points, i.e. delivery time, client complaints, and sales samples of the 1st Business Segment and delivery punctuality and new product development of the Tire Cord Business Division so as to live up to clients' expectation.
- The highest scores of "Significance to Business Development" are 8 points and 6 points respectively for the 1st Business Segment and the Tire Cord Business Division. The highest represent the most significant while the lowest indicate the least significant.
- 6 points in "Evaluation of Satisfaction Level" represent "much satisfied" while 1 point means "much dissatisfied."
- Major branded clients point out that quality and punctual delivery are most critical for their businesses development that have been key performance indicators (KPIs), on which the Company has been working for a long-term time. The Company will endeavor to increase the response rate for survey on customer satisfaction so as to make data sufficient enough to be as the base for enhancement of customer services.
- Besides delivery punctuality, quality, for clients of the Tire Cord Business Division, is inevitably considered much influential for their business development since driving safety is everyone's most concern. All components/parts involving driving safety, requiring replacement, need to pass a series of testing, inspections and trial use, which is quite time-consuming and leads to significant difficulty for new product development and new customer solicitation.
- For the well-known branded clients without a great deal of transactions, the Company should dig into the reasons and strive for their trust, trial orders and satisfactions.



(IV) Formosa Petroleum Stations (FPS)

Main businesses of FPS' are the retail of gasoline and diesel and service of car wash. All oil products are 100% from Formosa Chemical & Fiber Corporation, a member of Formosa Plastics Group (FPG), which is a steady supply source. To maintain the quality conformity, a lot of efforts are made to execute source management—to regulate that samples of gasoline/diesel in each tank truck must be taken and stored, that standard operating procedures must be obeyed for the transportation and unloading, and that periodic oil quality inspections must be made by certification bodies accredited by the government. By March 2019, there are 106 domestic operation locations, and where they are located are shown below.

Employees of petroleum stations must adhere to “five don’ts and five dos” in refueling to reduce the escape of gasoline vapors.

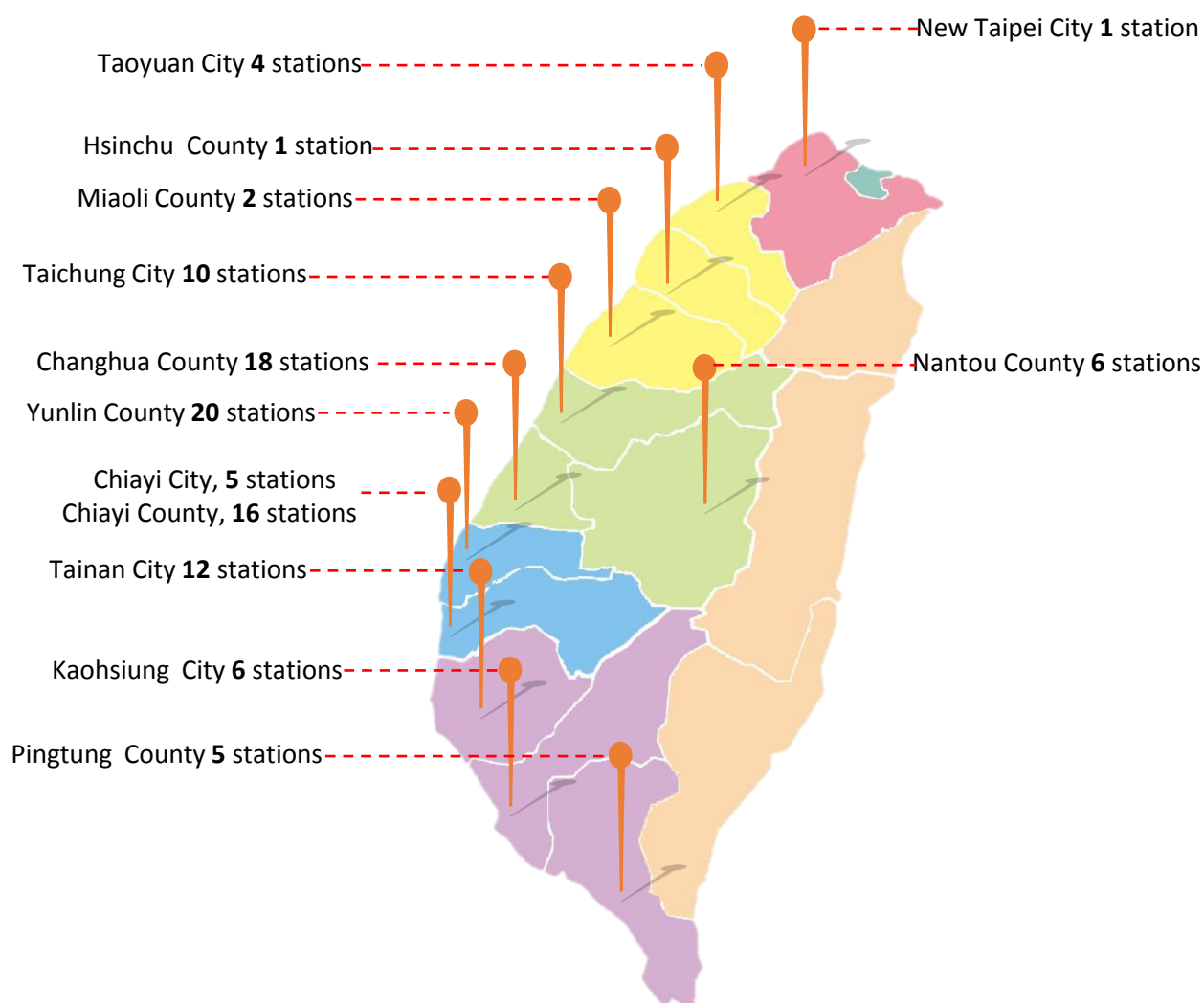
Five Don’ts during Refueling

- Ø Do not force refueling.
- Ø Do not lift the lever up and/or lower it with a pump nozzle.
- Ø Do not slam pump nozzle or hit it hard.
- Ø Do not let the last few drops be left in the pump nozzle.
- Ø Do not press the barrel of a pump nozzle with your hand.

Five Dos during Refueling

- Ø Stop refueling when self-stopping mechanisms are triggered.
- Ø Lift the lever up with a hand for activating the pump.
- Ø Keep a pump nozzle from being hit when in use.
- Ø Let any last drops fall in before removing the nozzle from the gas tank.
- Ø Keep pump nozzles and rubber hoses clean all the time.

106 Locations of Formosa Petroleum Stations





i. FPS' Environmental Protection Measures

Besides growth in sales, FPS also attaches importance to environment protection and sustainability through incorporating energy/electricity/water conservation, reduction of air pollution, etc., into daily management, to social concern, and to realization of the social responsibility. The related environmental measures are as follows:

(i) Energy Conservation Measures

From July 2nd 2015, the electronic invoice system is introduced into 105 petroleum stations one after another across Taiwan; on December 25th of the same year, the development of such system and updates of related equipment are completed. Overall application of such system to 106 petroleum stations was attained on December 12, 2017, which brought the following energy conservation effects and economic benefits:

- Compared to conventional duplicate/triplicate cash register uniform invoices and computer uniform invoices, the adoption of electronic ones in 2018 consumes 1.98 million pieces of paper pre month, which can save the paper expenditure of NT\$ 84 thousand per month.
- Manual jobs of collating, securing and checking paper invoices are much fewer.
- The usage of electronic invoices can cut warehousing costs through being free from the constraint of filing for reference for 5 years.

To conserve energy and reduce carbon, it is planned to take membership cards as carriers to replace paper electronic invoices.

(ii) Electricity Conservation Measure

From 2012 onwards, energy-consuming Fu-Le lights, projection lamps and conventional fluorescent tubes are replaced with energy-saving LED lights produced by Nan Ya Photonics Inc.; after such replacement, power saving is getting better year by year, shown as follows:

Year	2011 (base year)	2015	2016	2017	2018
Consumed electricity (KWH/KL)	14.0	9.1	8.7	9.5	9.8
Proportion of conserved electricity (%)	-	-35.0	-37.9	-32.1	-30.0

Note: Electricity-saving ratio = (consumed electricity of the current year – consumed electricity of the base year) / consumed electricity of the base year

(iii) Water Conservation and Discharge Measures

1. Tap water is the main water source of each petroleum station for clients' and employees' usage and car washing. Wastewater generated from car washing cannot be discharged into public sewers without treatment in conformity to drainage standards. In 2018, 17 petroleum stations have secured usage right for ground water and the remainder will also apply for the right successively. The discharge of sewage in 2018 gains accreditations of EPBs and irrigation associations of respective cities and counties.
2. Due to increase of car washing services, total water consumption increased by 8,645 tons to 82,036 tons in 2018. Till 2018, 21 water-saving car-washing machines in total were introduced for greater water conservation. Wastewater recycling and reuse systems were installed at the Wen-xinon May 10, 2017, Pei-ming and Hsin-kung stations in 2018. For less consumption, wastewater, and fewer discharges, such systems will in succession be installed in the other stations depending on wastewater recycling benefits, and the aggregate wastewater recycling performances of these three stations are as follows:

Year	Consumption Water for Car Washing (T/Month)	Recycling Volume (T/Month)	Recycling Rate (%)
2018	4,168	3,702	88.8



(iv) Underground Pollution Prevention Measures

Prevention Measures	Implementation Contents	Implementation Cycle	Implementation Effectiveness
Declaration of Equalization Control over Total Oil-Input/Output Quantity	According to the Regulations Governing Facilities for the Prevention of Groundwater Pollution of Underground Storage Tank Systems and Monitoring Equipment, FPS has been daily filling out the total oil-input/output quantity control form and regularly declaring.	Complete total oil quantity control form/ daily Declaration / every 4 months	The 2018 declarations of all petroleum stations have been verified that no abnormalities take place by respective local EPBs.
Underground Pollution Monitoring	FPS mostly adopts the soil vapor monitoring for the underground pollution monitoring. Besides monthly soil vapor self-inspections, FPS further outsources such inspections to a qualified environmental protection inspection institution every four months, and declares the results online. The regular cooperating institution for 2018 is Top Team Professional Co., Ltd.	Outsourced inspections / every 4 months Declaration / once every January, May, September	Ditto. Both PID and FID* meet criteria; no need for further inspections of soil or groundwater.
Self-Inspections of Operation Equipment	FPS conducts self-inspections and self-measurements of fuel dispensers, pipelines of underground storage tanks system, vapor volume of catch basins of oil tanks, volume of oil tanks, etc.	Periodical circular sample inspections / daily, monthly, biannually	Results of 2018 irregular inspections of the EPA and the local EPBs reveal that inspected items meet criteria—no generation of pollution.

*: Install a flame ionization detector and a photoionization detector for detecting the oil-gas density of the soil-gas monitoring well of underground storage tank (monitoring well, for short), to determine leakage in underground storage tanks or pipelines (in reference to the "oil-gas detection method for the soil-gas monitoring well of underground storage tank", announced by Taiwanese EPA).

(v) Petroleum Vapor Recovery Measures

1. According to the provisions of paragraph 3, Article 22 of the Air Pollution Control Act, air-to-liquid volume ratio testing and vapor leak testing shall be performed by professional testing personnel twice a year and once every two years respectively. To avoid vapor leak, all refueling islands are equipped with refueling guns with gasoline vapor recovery facilities, refueling guns are replaced regularly, and the residue gasoline within guns is cleaned. Each area is equipped with gasoline vapor recovery detectors, and monthly self-inspections are conducted to calibrate gasoline vapor recovery pumps to the optimal ratio of 1:1 to sustain the stability of gasoline vapor ratio and extend the service life of equipment. In 2018, the EPBs conducted sampling inspection of air-to-liquid volume ratio testing of refueling guns of 27 Formosa Petroleum Stations, 99.5% of which pass testing—a rate much higher than the required 70%.
2. FPS requests its employees to conform to refueling principles—the five Dos and five Don'ts, conduct frequent equipment checks, trigger timely notification for any abnormality, and replace damaged or malfunctioned equipment. To ensure safety and increase the vapor recycling rate, routine inspections that must be performed include checks on connectivity between a oil tank car and a vapor recycling pipe in the daily first stage oil unloading, functionality of vapor recycling motors, signals and/or noises for motor abnormalities, existence of oil residues in the rubber tubes of the pump nozzles, etc.

In addition to the aforementioned environmental protection measures, FPS also actively provides many offers to clients to increase their loyalty, reliance, satisfaction, and retention rate, and has fulfilled its duty to disclose the information of those offers to reduce consumer disputes. What FPS pays back to clients and the society are as follows:

Discounts vary according to payment methods—by cash or by credit card. In 2018, clients, eligible for discounts on account of the credit card payment, are those whose cards are issued by Cathay United Bank, E.SUN Commercial Bank, Union Bank of Taiwan, Taichung Bank, Yuanta Bank, and HSBC Bank. Besides, another discount will be given to clients who pump self serve gas.

Applying for VIP membership enables a client to earn reward points for gift redemption.

With smooth and autonomous channels, discounts will be irregularly given to clients on goods such as various motor oils, tissues, bottled water, cleaning supplies, Spring Festival gift boxes, and affiliated companies' products (warmth retention garment, umbrellas for both sunny and rainy use, waterproof and breathable jackets, etc.) .

愛 加油做公益

21週年慶 抽大獎

福懋累計週年慶期間所有顧客加油數量，每公秉就捐10元給：

- 新竹縣國語文學教育發展中心
- 台中市中華管理發展協會
- 愛群戲院
- 愛群戲院小書院
- 愛群戲院小書院
- 愛群戲院小書院

您的愛心越大，他們的希望也就越大～讓我們一起為愛加油。

活動期間：自107年7月1日起至8月26日止

活動方式：於福懋加油站加滿汽油26公升或柴油50公升以上，可獲得一張抽獎券（數量為止）

得獎通知：一律以簡訊主動通知得獎者（得獎者核對遺失恕無法報獎）。



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Environmental Aspect





(I) Operation Overview of Development of Sustainable Environment

The textile industry is closely related to the daily lives of the public. FTC is a midstream Company of the textile industry whose main businesses are weaving and dyeing finishing. The proportion of the various energy costs consumed in the production process accounts for 4~6% of the total revenue. The Company has promoted the ISO 14001 Environmental Management System for ongoing improvement and the avoidance of potential environmental impacts.

Established in 2007, the energy-saving promotion team was expanded and reorganized as the “Energy Management Committee” in 2015 to integrate the human, materials, and energy resources, propose energy-saving targets, and develop and promote various viable plans to increase efficiency of energy usage, reduce energy consumption, greenhouse gas emissions, and waste discharge.

For the purpose of sustainability, reduction of environmental impacts derived from production, and out of the thought of befriending the environment, we especially notice key environmental issues, such as energy, water, pollution, and waste, etc., and adopt the following measures:

- Keep effective operation of the Energy Management Committee, set up energy-saving targets, stipulate policies and inspect implementation performance
- Set benchmarks for water, electricity, and steam consumption and pollution discharge, and conduct mutual comparison and verification
- Set benchmarks of energy consumption for equipment procurement/replacement decisions through evaluation of benefits and feasibility
- Implement and promote the reuse of recyclable resources such as water, steam, and thermal energy to improve benefits of energy and facilitate circular economy
- Implement and promote pollutant and waste management to reduce pollutant discharge and endeavor to keep clean
- Procure qualified raw materials, chemical dyes, and auxiliaries to establish safe and eco-friendly green processes

(II) Energy and Water Conservation and Pollutant Management Measures

Based on “Green Design and Clean Production” concepts, FTC has been not only promoting various resource conservation projects in water, steam, electricity, and fuel consumption energy-saving and carbon reduction technology, but also participating in external technology exchanges. Furthermore, it actively plans visits to various guiding projects every year to enhance communication with other industries and stimulate transposition thinking, which inspires employees to propose and promote feasible projects through brainstorming.

The number of improvement projects is 72 in Taiwan Plant; the total accumulated number from 2007 is 634, amounting to NT\$ 342,638 thousand; the self-estimated accumulated volume of reduced CO₂ emissions is 114,548 tons. For better performance of environment protection, green policies such as decrease in procurement, restriction on employment, reduction of discharges, etc., are gradually promoted. In view of the vision of good neighborliness and co-sustainability with communities, FTC has designated the HR section, the Industrial Safety & Hygiene office, Administration Department, and the Energy & Civil Construction Division as the windows for handling environment-related complaints of stakeholders according to procedures of complaints.

i. Energy Conservation, Discharge/Emission Reduction, and Circular Economy

Climate change due to global warming has threatened the survival of both animal species and mankind. In order to effectively control CO₂ emissions and alleviate the impacts of global warming, FTC’s Taiwan Plant decided to implement the ISO 15001 Energy Management System in 2015 to reduce both direct and indirect energy consumption and waste, precisely grasp energy conversion demands, improve the energy utilization efficiency, and enhance the re-utilization rate of energy. The specific measures are shown as follows:

- **Oil Conservation:**
 - (i) Installing waste heat recovery devices and oxygen control equipment onto exhaust chimneys of boilers and of production machinery
 - (ii) Installing condensed steam/hot water recycling devices for production equipment
 - (iii) Replacing fuel with natural gas as the source of thermal energy for boilers and setting machinery
- **Air Conservation:**
 - (i) Designing well air circulation pipelines, installing gauges to measure on-site leakages, and regularly inspecting the air pipelines to avoid leakages
 - (ii) Managing compressors loads, splitting high and low pressures for use, and inhibiting the “false needs” of air compression for better operation efficiency of compressors and energy conversion efficiency



- **Gas Conservation:**

- (i) Recycling waste heat and condensed steam, using steam power cogenerations, and improving combustion efficiency of generation boilers.
- (ii) Improving efficiency of boilers for consumption reduction of all kinds of fuel

- **Electricity Conservation:**

- (i) Applying special materials and designs to the wind turbines of air conditioners and fan blades of cooling towers for less power consumption
- (ii) Reducing electricity consumption by shortening the second-round circulation routes of all kinds of cooling water
- (iii) Installing power saving devices in various motors
- (iv) Using energy-saving lighting
- (v) Using high efficiency and energy-saving air compressors and chiller, cooling tower, etc.

ii. Water Conservation Measures

Because of the increase of the global population and industrialization, water resources everywhere are becoming increasingly relatively limited. Compared to other countries, Taiwan is more likely to face water shortages issues during winter and spring in that rainwater of rainy seasons cannot be stored as a result of its geographical factors. As water shortage is a severe problem, to avoid lapsing into water shortage situations and increasing water costs, water conservation has become a critical theme in sustainability.

The following are three main water conservation themes of 5 plants in 3 countries:

- **Reduce:** using novel technology and equipment for production and dyeing with lowest water ratio to significantly reduce water consumption
- **Recycle:** recycling and reusing condensed steam, cooling water, and low polluted water of processes by means of energy-saving machinery for consumption reduction both of fresh water and wastewater
- **Reuse:** Reusing recycled wastewater and steam for less consumption of fresh water

iii. Measures for Reducing Effluents

In accordance with the government's environmental protection regulations, the Company has stipulated management criteria for the prevention and control of wastewater pollution. The Company has also promoted policies for the reduction of wastewater discharge in the plants, enforced the management of wastewater discharge, and stipulated criteria for effluent discharge to ensure the conformity of the quality of the wastewater discharged to the national criteria and to mitigate impacts of pollution on ecological environment.

The wastewater treatment methods of 5 plants in 3 countries are as follows:

- **Taiwan Plant:** the pure oxygen aeration and biodegradability method in biochemistry as the primary treatment method to dispose wastewater to meet the national criteria
- **Zhong-Shan Plant (China) and Long-an Plant (Vietnam):** the Anaerobic and Aerobic decomposition methods in biochemistry as primary treatment methods to dispose effluents to meet national criteria that are directly discharged to the river because of being outside the industrial zone
- **Chang-Shu Plant (China) and Dong-nai Plant (Vietnam):** establishment of wastewater treatment facilities because of being inside the industrial zone to dispose wastewater to meet criteria for indirect discharge before commissioning with a fee the central wastewater treatment plant of the industrial zone for further processing
- **Ultrafiltration membrane filtration devices** are installed in 5 plants in 3 countries in 2018 for wastewater reclamation, which brings about targeted 20% reduction of water consumption

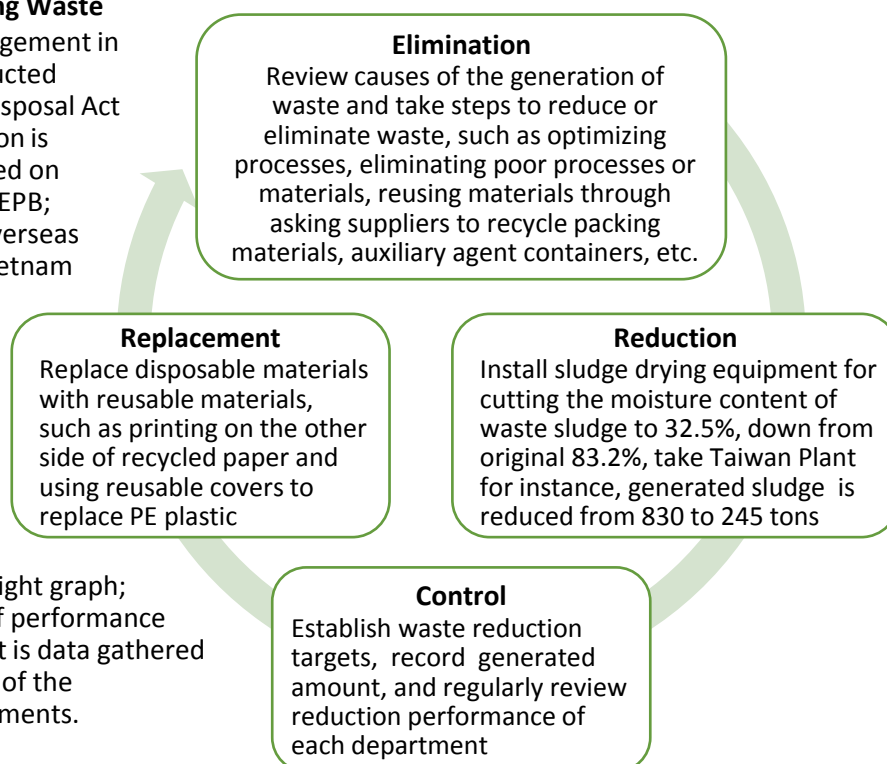
Regarding collection, transportation, and treatment facilities of wastewater of 5 plants in 3 countries, the Company has stipulated several operation and monitoring specifications for wastewater management and control over the quality and volume of wastewater. Wastewater management includes:

- (i) Collect, transport and pretreat wastewater generated from processes
- (ii) Collect, transport and pretreat domestic wastewater
- (iii) Collect, transport and pretreat other wastewater
- (iv) Monitor the quality and volume of each flow of treated wastewater
- (v) Procure low energy, low pollution level, and advanced production equipment with high performance and green energy and materials
- (vi) Research and develop green/eco-friendly products



iv. Measures for Reducing Waste

The waste management in Taiwan Plant is conducted according to Waste Disposal Act and related information is registered and declared on the website of Yunlin EPB; waste treatment in overseas Plants in China and Vietnam is performed in line with government requirements. Moreover, the Company further stipulates "Rules Governing Waste Management," whose procedures are illustrated in the right graph; related information of performance of waste management is data gathered from daily operations of the corresponding departments.



v. Measures for Reducing Emissions

(i) Organization Greenhouse Gas Inventory and Voluntary Reduction Promotion Project

In accordance with the specifications stipulated in the ISO and the GHG Protocol of the World Business Council for Sustainable Development, the Company has developed the Formosa Taffeta Systematic Greenhouse Gas Inventory Program, reduction projects, and relevant management and audit systems. With inventory results as the basis for those voluntary projects and PDCA Circulation Management, effective greenhouse gas emission management has been in progress to allow the production processes to drift towards low carbon emissions. Meanwhile, the Company and its up- and downstream contractors can spur each other to the limitation of global warming to well below 2°C and realization of corporate social responsibility for energy conservation and emissions reduction by letting those contractors understand the carbon dioxide emissions during the lifecycle of products.

(ii) Management of Ozone Depleting Substances (ODS)

The management of ozone depleting substances is implemented in accordance with the Air Pollution Management Regulations of the Company, "Regulations Governing Restricted Chemical Substances listed in the Montreal Protocol", and "Regulations Governing Hydrochlorofluorocarbon Consumption" of the EPA. In response to the current demands of legal regulations and social responsibilities, the Company will gradually replace machine models/equipment, generating Chlorofluorocarbons (CFC), Hydrochlorofluorocarbons (HCFC), etc., for zero ODS emissions.

(iii) Environmental Monitoring and Inspection

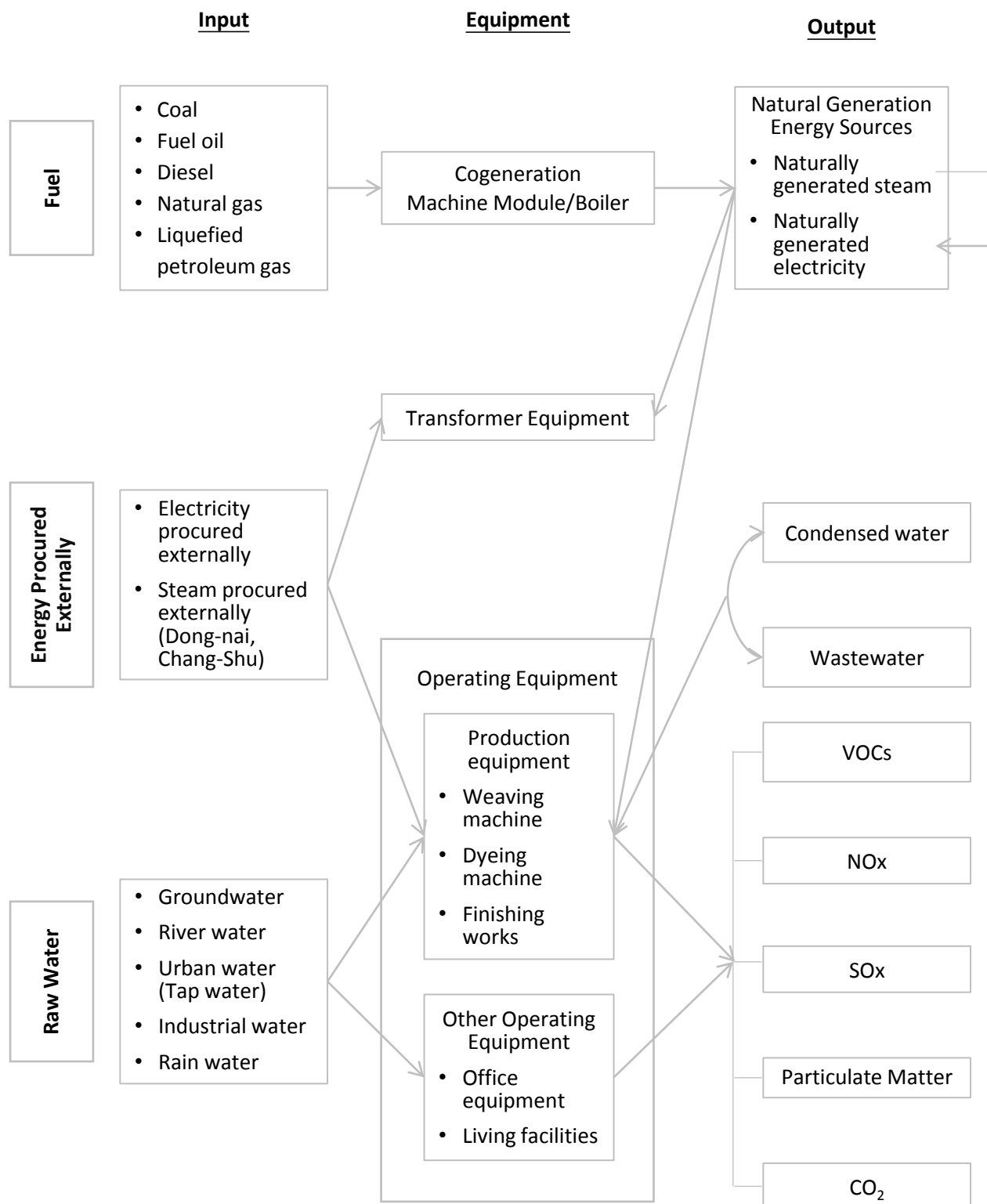
The operation of all relevant production processes is based on air pollution operation permits obtained in respect to legal obligation; the expiry and application for such permits are handled via the computer system. Regarding stationary pollution sources (two chimneys for steam power cogeneration processes), a constant monitoring system is connected in real-time to the Yunlin Environmental Protection Bureau and under the full supervision of the authorities; regular inspections are conducted on all emission chimneys, and the inspection results will be declared to the EPB.

(iv) Green Electricity and Green Procurement

Priority is given to the procurement of products awarded with environmental protection labels (Green Label, Energy Label, Water Label, Green Building Material Label, etc.); in 2018, the amount spent on green procurement was NT\$ 2,272,810.



(III) Input and Output of Energy and Water Resources

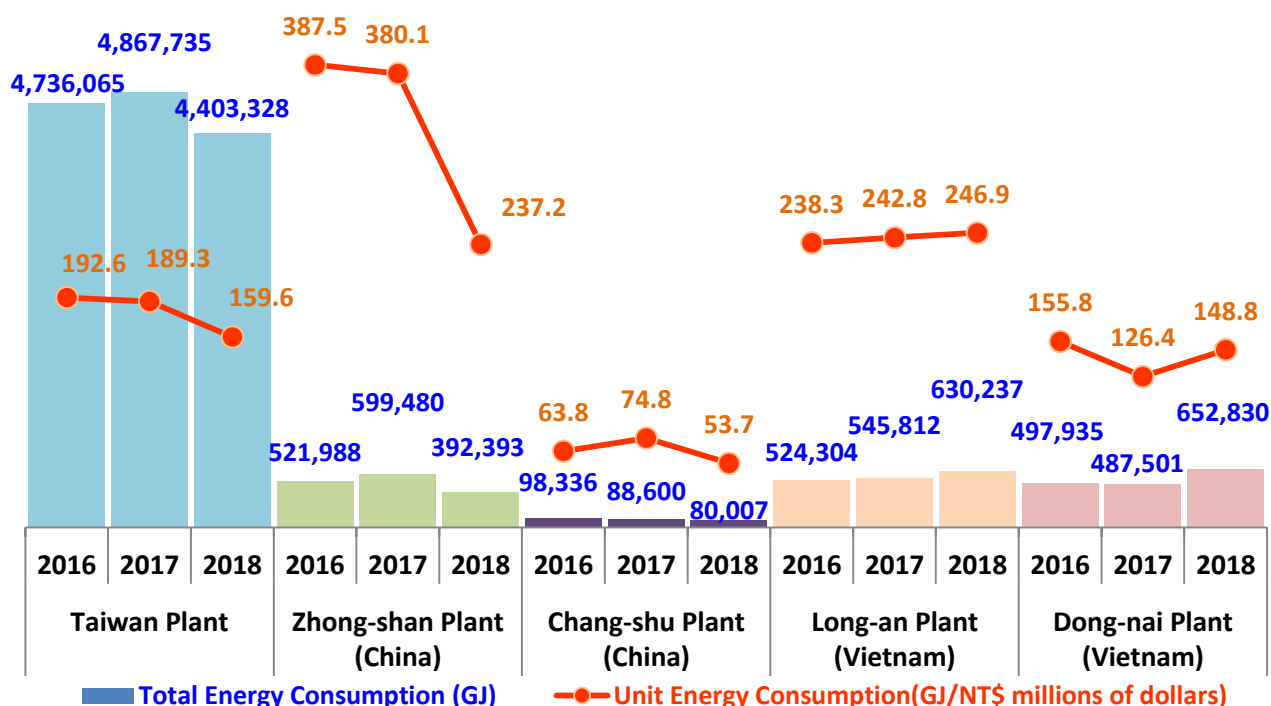




i. Input and Output of Energy

(i) Energy Consumption of the Five Plants (In Three Countries)

Annual Energy Consumption of the Five Plants between 2016~2018



Consumed Energy Items of the Five Plants in Three Countries between 2016~2018 Unit: GJ

Item	Plant Year	Taiwan Plant			Zhong-Shan Plant (China)			Chang-Shu Plant (China)		
		2016	2017	2018	2016	2017	2018	2016	2017	2018
Coal		3,206,476	3,380,193	2,946,885	364,234	423,176	0	-	-	-
Fuel oil		806,432	673,052	644,208	-	-	-	-	-	-
Diesel		4,693	2,192	1842	2,968	1,083	898	-	-	-
Natural gas		-	-	104,367	41,678	57,613	258,547	62,791	49,413	39,915
Purchased electricity		718,464	812,298	706,026	113,108	117,608	132,948	35,393	39,017	39,882
Purchased steam		-	-	-	-	-	-	152	170	210
Total Consumption		4,736,065	4,867,735	4,403,328	521,988	599,480	392,393	98,336	88,600	80,007

- Taiwan Plant: Total energy consumption increased along with a rise of output but unit energy consumption dropped, thanks to the benefit of energy conservation.
- Zhong-Shan Plant (China): In response to requirements of local Bureau of Ecology and Environment, natural gas fired boilers are substituted for coal-fired boilers to generate steam used in production, which swells natural gas consumption while total energy consumption decreases and specific energy consumption declines at almost the same output owing to higher combustion efficiency.
- Chang-Shu Plant (China): In 2018, desizing and calendaring processes increases respectively by 3.89% and 2.15%, the reduction in natural gas consumption exceeds increments in power and steam consumption, and the proportion of the use of small vats for dyeing rises, all of which drive total energy consumption to decline. Specific energy consumption also dropped, along with increase in output and sales.

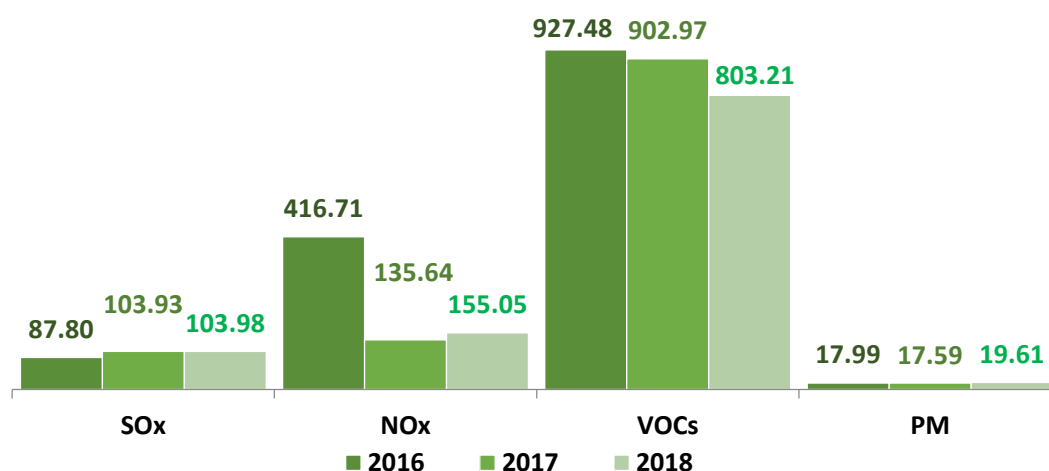
Item \ Plant	Year	Long-an Plant (Vietnam)			Dong-nai Plant (Vietnam)		
		2016	2017	2018	2016	2017	2018
Coal		333,373	381,563	406,289	-	-	-
Fuel oil		46,278	13,819	51,929	-	-	-
Diesel		-	-	-	-	-	-
Natural gas		52	52	60	-	-	-
Purchased electricity		144,601	150,377	171,959	256,821	279,176	388,958
Purchased steam		-	-	-	241,113	208,324	263,872
Total Consumption		524,304	545,812	630,237	497,935	487,501	652,830

- Long-an Plant (Vietnam): Due to increase in output and sales and expansion of capacities by 12 million yards/year, consumption of fuel coal, fuel oil, natural gas, and electricity all increased.
- Dong-nai Plant (Vietnam): In line with increased output and sales, external purchase of power and steam grew, boosting total energy consumption.

2. Air Pollution

1) SO_x, NO_x, VOCs, PM Emissions

Tons SO_x, NO_x, VOCs, PM Emissions in Taiwan in Previous Years



- Source: Information declared to EPA of Executive Yuan by Formosa Taffeta Co., Ltd. (Taiwan Plant).
- To adjust to the more stringent "Emissions Limits for the Electric Generating Units," announced by EPA, the Company's steam power cogeneration units (M01, M02) were shut down respectively in December 2106 and March 2017 for installation of selective catalytic reduction (SCR). Following the resumption of the operation of the cogeneration units in 2018, overall fuel-coal consumption increased by 13,353 metric tons and emissions of SO_x, NO_x, PM and Scope I GHG slightly increased while NO_x plunged.
- In line with changes in orders, output of products featuring water-proof acryl coating process decreased by 10.11%, cutting toluene consumption, as a result of which total VOCs emission dropped by 99.76 metric tons, or 11.05%.
- Due to absence of requirements for declaration and charges by host governments, voluntary inventories and disclosure of information on emissions of sulfur oxide (SO_x), nitrogen oxide (NO_x), volatile organic compound (VOCs), and particulate matter (PM) of the four overseas Plants have been made under the assistance of the industrial safety and hygiene office of Taiwan Plant since 2019. Meanwhile, voluntary greenhouse gas emissions inventories have been commissioned to consulting firms and developed based on local emissions factors for disclosure.



2. Greenhouse Gases

Three main sources of greenhouse gases are as follows:

(1) Emissions from Stationary Sources:

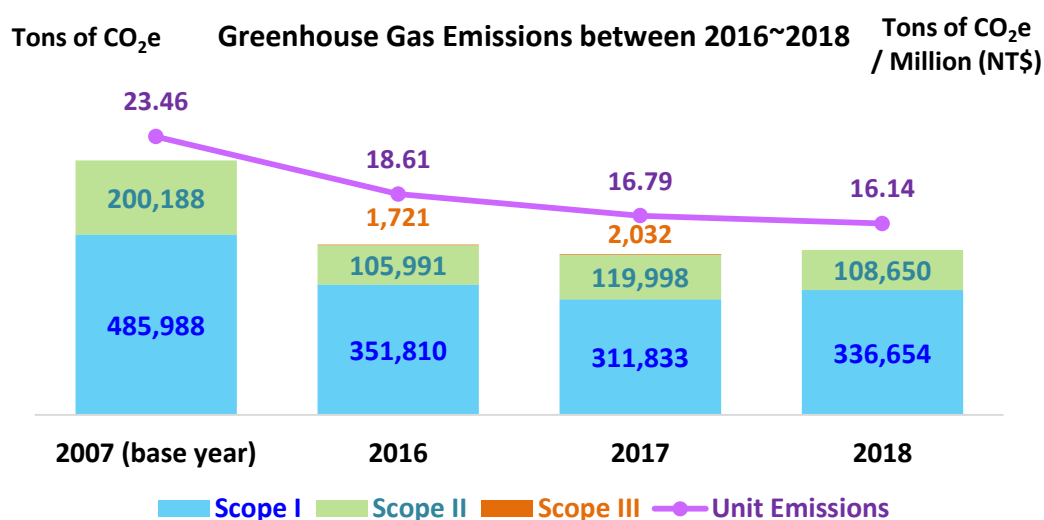
Emissions generated from usage of cogeneration, hot coal oil boiler, emergency generator, diesel oil engine generator, steam boiler, etc., and from the preparation of meals in cafeteria

(2) Emissions from Mobile Sources:

Emissions generated from the energy usage of vehicles, such as autos, trucks, and forklifts during transportation

(3) Emissions from Fugitive Sources:

Emissions generated from the operation of facilities, such as internal freezers, air conditioners, refrigerators, Very High Voltage Generator Circuit Breaker (GCB), carbon dioxide fire extinguishers, septic tanks, etc.



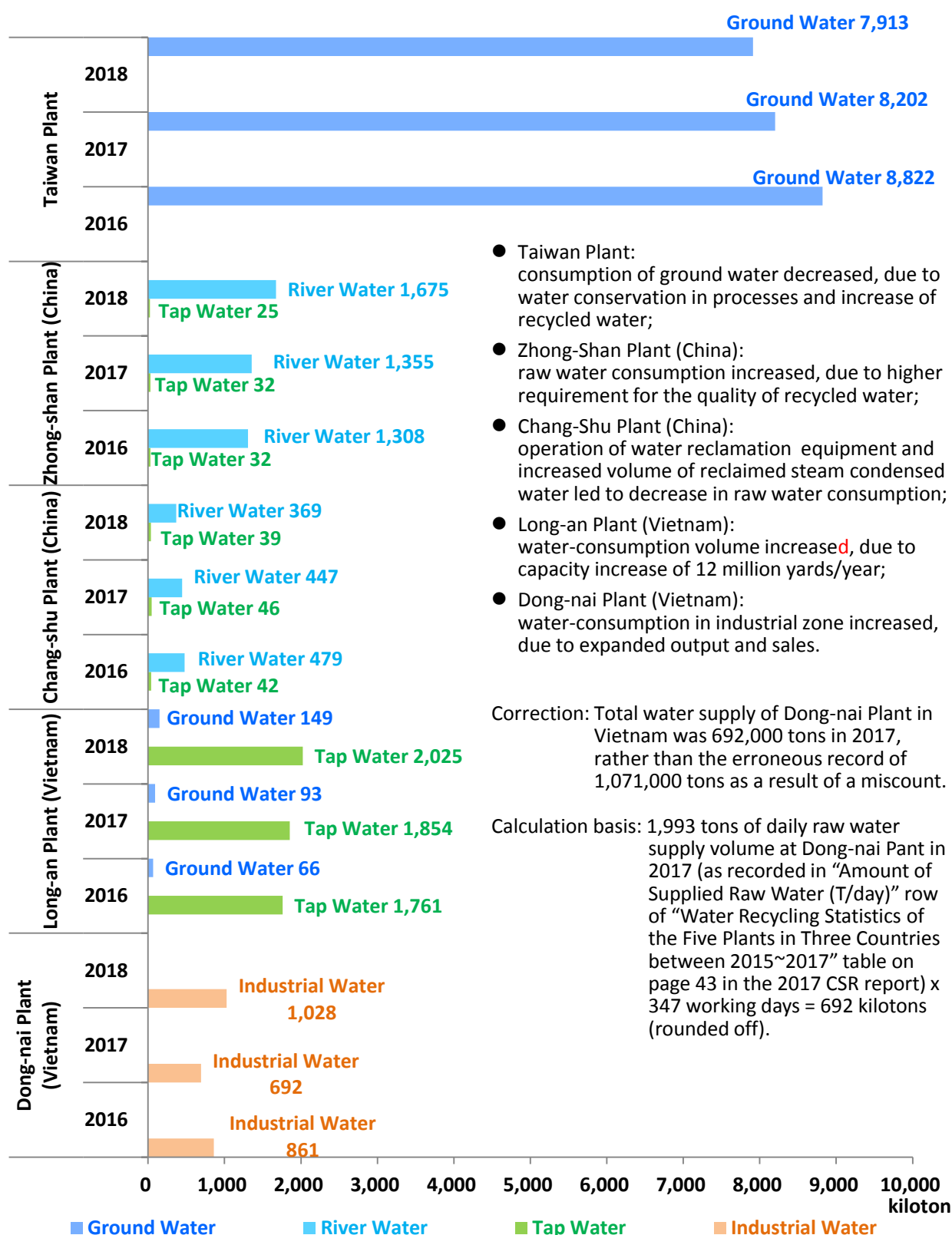
- Emissions per unit = $\frac{\text{Total Annual greenhouse gas Emissions (Tons of CO}_2\text{e)}}{\text{Annual Sales Revenue of the Taiwan Plant (NT\$ Million)}}$
- Source: Information declared to EPA by Formosa Taffeta Co., Ltd. (Taiwan Plant).
- Global-warming Potential (GWP) refer to the IPCC Fourth Assessment Report, 2007.
- Scope 3 GHG emissions contains the following three figures only:
 - Waste generated in operations (Category 5): emissions of indirect disposal and final disposal, excluding, though, emissions of transportation for disposal and those of reuse;
 - Business Travel (Category 6): emissions of air transportation;
 - Employee Commuting (Category 7): emissions of commuting by cars only.
- The figure above shows the figures of Taiwan Plant, as for information of GHG emissions at four overseas plants, it will be disclosed in the 2019 CSR report.

Under the operational control approach, Scope 1/Scope 2 Emissions respectively account for 75.6%/24.4% of the total GHG emissions of the Taiwan Plant for 2018; the main emission source of Scope 2 is procured electricity. In response to the requests of investors and stakeholders, the Company took part in the questionnaire survey of Carbon Disclosure Project (CDP) in 2017. In 2018, the Company commissioned SGS to conduct inventory of scope 3 emissions of 2016 and 2017 that verifies figures of three emission factors—waste generated in operations, business travel and employee commuting. Another four emission factors—purchased goods and services, fuel- and energy-related activities (not included in scope 1 or scope 2), upstream transportation and distribution, downstream transportation and distribution—were included in 2018 inventory of scope 3 emissions. If the completion of the inventory, scheduled at the end of June 2019, is later than the public disclosure time of the report, the results will be disclosed in 2020.

ii. Input and Output of Water Resources

(i) Raw Water Consumption of the Five Plants

Total Raw Water Consumption of the Five Plants between 2016~2018



- Taiwan Plant: consumption of ground water decreased, due to water conservation in processes and increase of recycled water;
- Zhong-shan Plant (China): raw water consumption increased, due to higher requirement for the quality of recycled water;
- Chang-shu Plant (China): operation of water reclamation equipment and increased volume of reclaimed steam condensed water led to decrease in raw water consumption;
- Long-an Plant (Vietnam): water-consumption volume increased, due to capacity increase of 12 million yards/year;
- Dong-nai Plant (Vietnam): water-consumption in industrial zone increased, due to expanded output and sales.

Correction: Total water supply of Dong-nai Plant in Vietnam was 692,000 tons in 2017, rather than the erroneous record of 1,071,000 tons as a result of a miscount.

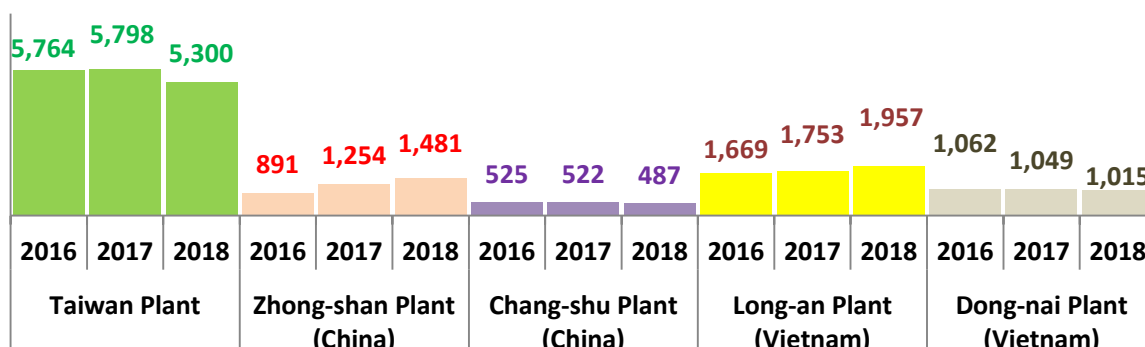
Calculation basis: 1,993 tons of daily raw water supply volume at Dong-nai Plant in 2017 (as recorded in "Amount of Supplied Raw Water (T/day)" row of "Water Recycling Statistics of the Five Plants in Three Countries between 2015~2017" table on page 43 in the 2017 CSR report) x 347 working days = 692 kilotons (rounded off).



(ii) Wastewater

kiloton

Wastewater Discharge of the Five Plants between 2016~2018



- Taiwan Plant:
Wastewater discharge decreased, due to increase in conserved water in processes and reclaimed water. The final destination for the discharged wastewater is Dapu River. Chi Mei Inspection Tech Co., Ltd. is commissioned to conduct inspections on the quality of the discharged wastewater. Such statistics as water temperature, pH value, ADMI value, suspended solids, chemical oxygen demand, biochemical oxygen demand, and anionic surfactants in the inspection report are lower than the officially allowed standards.
- Zhong-Shan Plant (China):
Water reclamation rate declined for better quality of reclaimed water; thus, wastewater discharge increased. Wastewater from processes is discharged into Xijiang River after inner bio-treatment to the extent in conformity with local discharge standards.
- Chang-Shu Plant (China):
Water consumption decreased, as reclaimed water increased on normal operation of water reclamation equipment, leading to reduction of wastewater discharge. Daily-life and process-generated wastewater is channeled to wastewater treatment in factory premises for treatment into a level meeting the standard for discharge to the wastewater treatment plant in the industrial zone for further treatment.
- Long-an Plant (Vietnam):
Wastewater discharge increased, due mainly to increase of capacity by 12 million yard/year. With the attainment of wastewater discharge standards for the industry (QCVN40:2011) and for textile plants (QCVN13:2015MT), treated wastewater was discharged into Wangudong River.
- Dong-nai Plant (Vietnam):
Despite expansion of output and sales, wastewater discharge decreased, due to operation of water reclamation system for looms at full capacity. With the conformity to discharge standards the industrial zone required, treated wastewater was transmitted to the zone's wastewater treatment plant for centralized discharge.

(iii) Water Resource Recycling Effects:

Water Recycling Statistics of the Five Plants in Three Countries between 2016~2018

Type	Plant	Taiwan Plant			Zhong-Shan Plant (China)			Chang-Shu Plant (China)		
	Year	2016	2017	2018	2016	2017	2018	2016	2017	2018
Amount of Supplied Raw Water (T/day)		12,947.8	11,744.4	11,647.0	1,422.6	1,462.4	1,069.6	1,504.7	1,468.8	1,182
Amount of Condensed Steam (T/day)		804.2	714.7	781.3	199.4	221.1	113.9	167.5	191.2	203
Amount of Reclaimed Water (T/day)		8,286.8	8,323.9	9,459.1	1,485.6	1,369.9	939.6	893.3	1,134.7	1,391
Total Consumed Water (T/day)		18,083.1	16,714.6	16,236.0	2,976.5	2,920.8	1,698.8	2,565.5	2,794.7	2,777
Water Reclamation Rate (%)		45.8	49.8	58.3	49.9	46.9	55.3	34.8	41.3	50.1
Amount of Wastewater Discharged (T/day)		8,031.3	7,443.7	7,216.7	1,524.8	1,515.1	1,623.5	1,595.2	1,611.9	1,502.8



Type \ Plant	Long-an Plant (Vietnam)			Dong-nai Plant (Vietnam)		
	2016	2017	2018	2016	2017	2018
Amount of Supplied Raw Water (T/day)	4,170.9	4,389.1	6,376.0	1,458.3	1,922.6	2,855.0
Amount of Condensed Steam (T/day)	221.5	246.3	90.0	249.4	264.3	321.8
Amount of Reclaimed Water (T/day)	3,686.3	3,667.6	3,489.0	942.9	1,556.5	2,084.1
Total Consumed Water (T/day)	7,337.2	7,753.4	9,955.0	2,650.6	3,743.3	5,260.9
Water Reclamation Rate (%)	50.2	47.3	35.0	35.6	41.6	39.6
Amount of Wastewater Discharged (T/day)	3,558.6	3,218.8	5,738.0	1,688.0	2,178.1	2,818.1

- Water reclamation rate (%) = amount of reclaimed water /amount of total consumed water
- Water reclamation rate and explanations in 2018 and 2017 for each Plant are stated below:
 - Taiwan Plant:
In line with branded customers' strategy of localized delivery, Taiwan Plant has transferred some orders to Vietnamese Plants for production, driving down total water consumption in 2018.
 - Zhong-Shan Plant (China):
Reclaimed water volume dropped in 2018, due to the requirement of higher quality. The second UF filter was installed in 2019, and more reclaimed volume in the second half year is going to be carried out with its operation that started in June.
 - Chang-Shu Plant (China):
Part of the augmented total reclaimed volume came from greater reclaimed water volume thanks to normal operation of water reclamation equipment; the other part was from increased reclaimed condensed water as a result of increased consumption of steam.
 - Long-an Plant (Vietnam):
Total water consumption volume increased in 2018, due to inauguration of the second dyeing plant, which raised output and sales.
 - Dong-nai Plant (Vietnam):
Reclaimed water volume increased on operation of water reclamation system for looms at full capacity.

(IV) Waste Disposal

Disposed Amount of Toxic/Non-Toxic Waste of
the Five Plants in Three Countries in 2018_by Handling Methods Unit: Ton

Handling Method \ Plant	Taiwan Plant		Zhong-Shan Plant in China		Chang-Shu Plant in China		Long-an Plant in Vietnam		Dong-nai Plant in Vietnam	
	Toxic	Non-Toxic	Toxic	Non-Toxic	Toxic	Non-Toxic	Toxic	Non-Toxic	Toxic	Toxic
Reusing	-	29,647	-	1,865	-	22	-	2,068	-	-
Recycling	-	-	-	-	-	40	-	-	8	4,895
Recovery (including recovery of renewable energy)	-	-	-	-	-	40	-	-	-	-
Incineration	-	1,777	-	-	-	65	-	118	453	-
Burying	-	321	-	-	-	-	-	4,699	1	4,863
Outsourced Disposal	-	-	56	-	35	1984	-	-	54	-
Cleaning	-	-	-	-	-	-	-	-	-	-
Other 1	-	-	-	-	-	-	3,244	-	-	-
Other 2	-	-	-	-	-	-	7	-	-	-
Other 3	-	-	-	-	-	-	33	-	-	-
Total Disposed Waste	-	31,745	56	1,865	35	2,151	3,284	6,885	516	9,758



(V) Violations and Environmental Protection Expenditures

i. Incurred Penalties derived from Environmental Pollutions and Employees' Injuries in Workplace in the last 3 Years

Year	2018		2017	2016
Item	Environmental Protection Penalty	Occupational Safety Penalty		
Enforcement Organization /Penalty Category	Bureaus of County/City Government	Occupational Safety and Health Administration Ministry of Labor of the Central Area	Bureaus of County/City Government	Occupational Safety and Health Administration Ministry of Labor of the Central Area
Amount of Penalty	NT\$802,000	NT\$120,000	NT\$ 502,000	NT\$ 60,000

Violations of non-environmental protection regulations in 2018:

- NT\$189,492 in total for violation of regulations, including NT\$20,000 for a gas station's violation of Water Resource Act, NT\$100,000 for a gas station's violation of Rules Governing Gas Stations, NT\$42,000 for violation of Building Act, NT\$5,000 and NT\$20,992, each for violation of Labor Insurance Act, and NT\$1,500 for illegal parking
- RMB¥1,000 for Chang-Shu Plant's violation of "Regulation on the Safety Management of Hazardous Chemicals"
- RMB¥10,000 for Zhong-Shan Plant's typographical error of mistaking export value in US dollar for that in Hong Kong dollar in the export declaration even with Zhong-Shan Plant's self-correction and voluntary declaration to Zong-shan City's customs
- A penalty was imposed on the Long-an Plant by the customs for inconsistency in the recorded volumes for reception, release, and storage of imported tax-bonded materials. The Plant already lodged an appeal against the aforesaid penalty, but was not updated on the final appeal result and thus no exact amount of penalty available for disclosure so far.

ii. Achievement s of Execution of Conservation Programs

Completed conservation Projects in 2018

Plant	Total Projects	Effectiveness of Completed Conservation Projects						Invested Amount (Thousands of NTD)
		Conserved Steam (MT/HR)	Conserved Water (MT/Day)	Conserved Electricity (KW)	Conserved Fuel (KG/HR)	Reduced Emissions of CO ₂ (Tons/Year)	Accumulated Amount (Thousands of NTD/Year)	
Taiwan Plant	72	0.28	1440.43	603.11	6.25	4529.619	20812.55	43783.5
Zhong-Shan Plant	6	0.00	283.00	27.10	0.00	332.00	810.50	13.80
Chang-Shu Plant	7	0.53	13.72	12.23	0.58	1,475.02	4,828.84	153.56
Long-an Plant	14	3.75	771.00	60.16	48.89	2,752.06	6,163.32	10,518.00
Dong-nai Plant	5	0.00	688.00	0.00	0.25	170.80	4,180.72	7,360.00

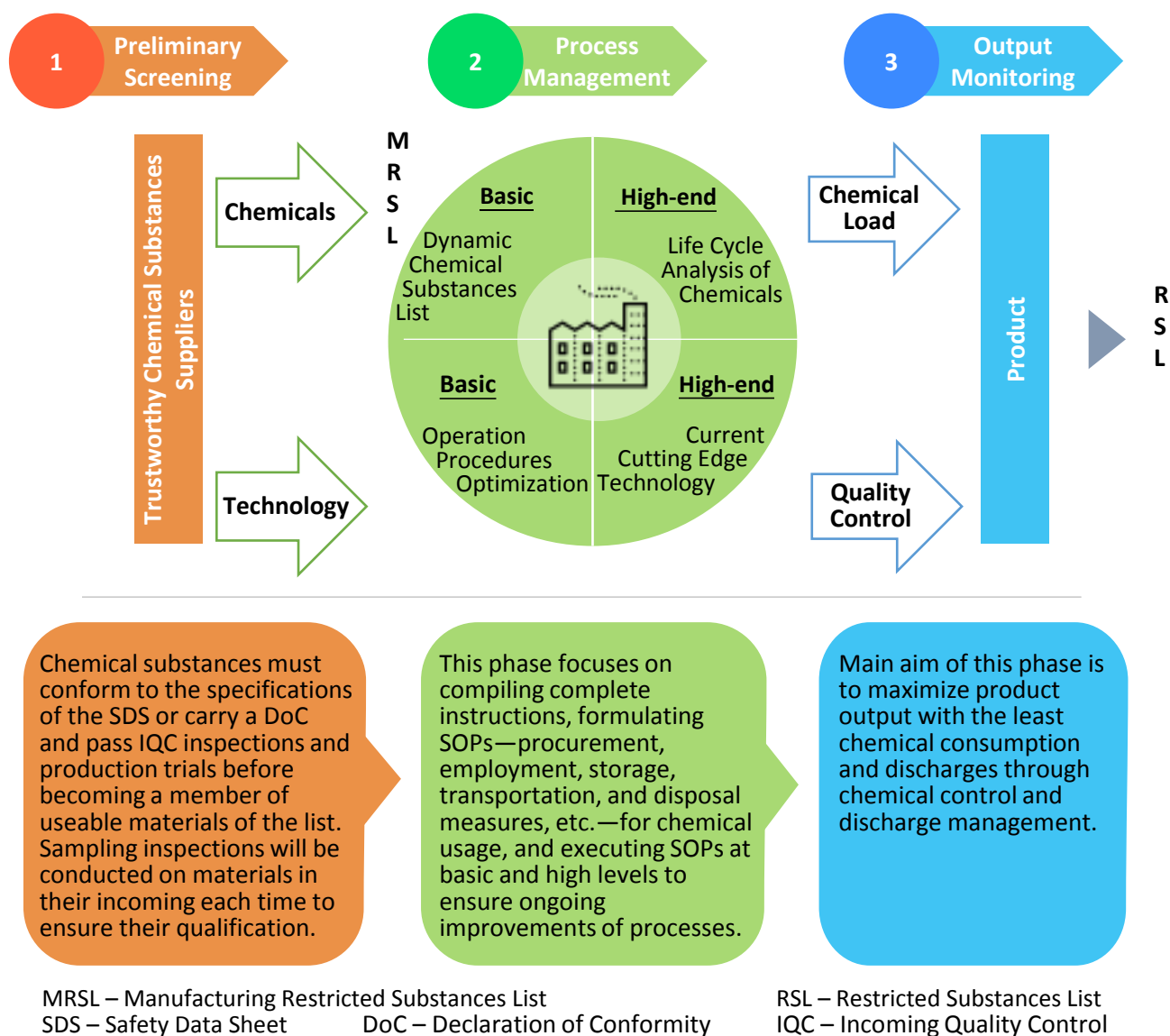
Explanation:

1. Cells with "zero" in the table above indicate no improvement programs in 2018.
2. Five improvement programs were in progress at the Dong-nai Plant in 2018, those of the Tire Cord plant will be subject to intensified supervision and disclosed in 2019.



(VI) Cultivation of Green Sustainability

To fulfill the social responsibilities of protection of environment and consumer safety and implement sustainable policies, stringent tests and experiments are conducted on the chemicals applied to fabrics to evaluate and ensure that the quality and composition of these chemicals comply with the requirements of the clients and regulations. Semi-finished goods and finished products will also be annually sent to third-party laboratories for inspections to ensure that used materials and products are safe for use. The chemical management measure includes three phases and two themes shown below:



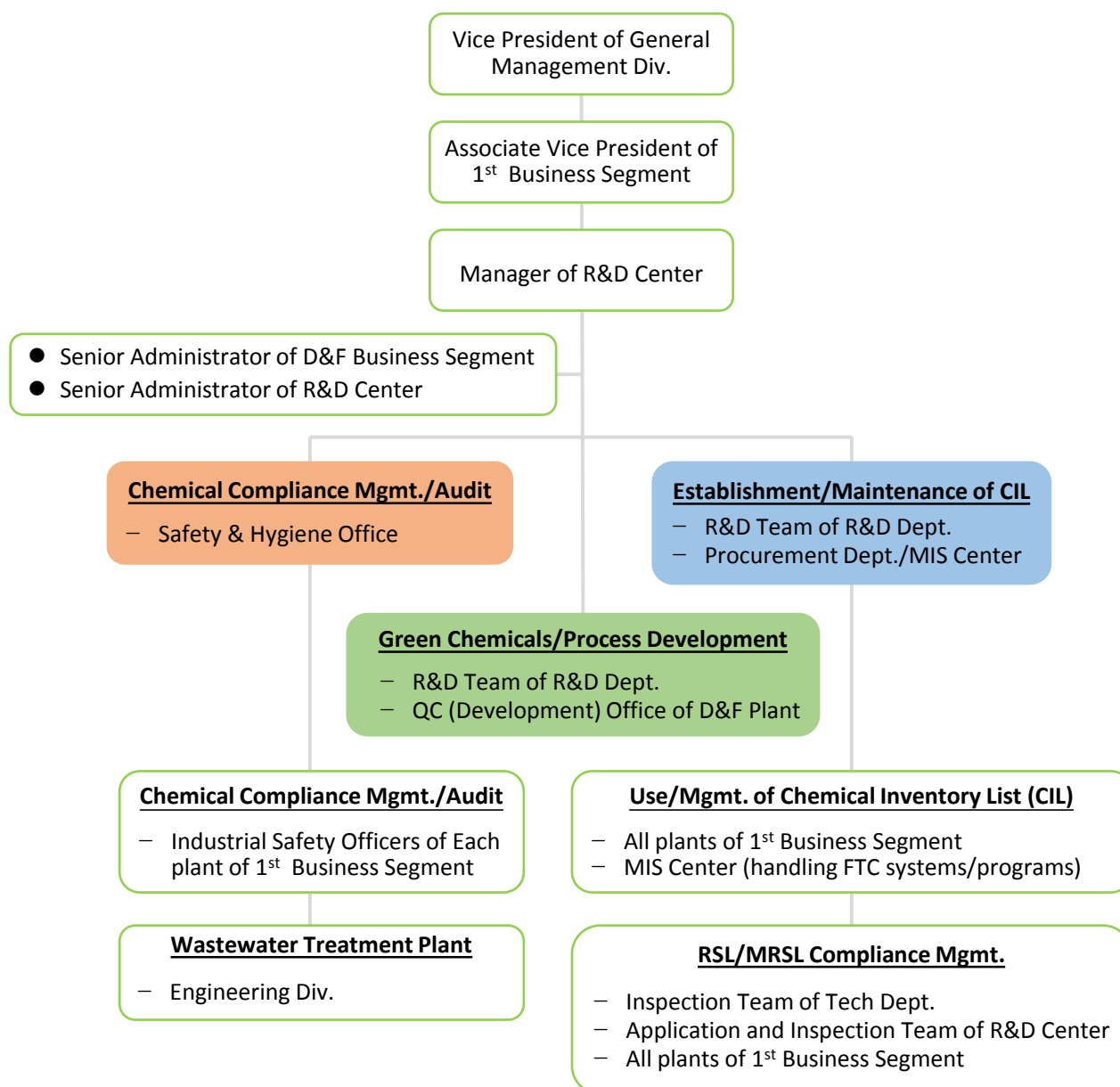
Two Themes

1. In the aspect of chemical control, missions are to maintain the Dynamical Chemical Substances List at the basic level and to incorporate Life Cycle Analysis of Chemicals into criteria for employment at the high-end level that includes analysis of the final environmental chemical substances load.
2. From the perspective of processes and technology, Operation Procedures Optimization at the basic level and the utilization of Current Cutting Edge Technology at the high-end level are tasks for process management and optimization.

The above chemical management framework can further enhance user product safety and the quality of green materials of the textile supply chain and facilitate the gradual approach of the objective of ZDHC by 2020.



To realize ZDHC by 2020, the Company signed a declaration warranty in 2013, pledging no inclusion of specific hazardous chemicals in used raw materials. To keep the information of raw materials open and transparent, more communication with suppliers is required. The structure of the ZDHC Project Committee is as follows:



The above structure was approved by the 1st Business Segment at a meeting on May 9, 2014; the job responsibilities will remain unchanged even with minor adjustment of the structure of this committee in subsequent years. Operations and responsibilities of relevant departments are as follows:

1. R&D center: responsible for creating files for safety criteria of raw materials, inspecting dyes/chemicals listed as items requiring control in the FTC's standard form of a guarantee letter submitted by suppliers
2. Procurement department: responsible for creating files for suppliers' basic profiles of dyes/chemicals
Note: Materials in Category 12 and Category 13 requires full inspection; the on-site procurement department must submit a signed application to the President Office for approval if a supplier would like to apply for partial inspection exemption.
3. Technology department: responsible for the management of Oeko-Tex Standard 100 certifications, compilation of Restricted Substances List (RSL) of each branded clients, and the endorsement of guarantee letters required by the clients



ZDHC Short-, Mid-, and Long-term Plans

Short-term Objectives:

1. Check the stock of Chemicals
2. Establish a ZDHC database, including such information as SDS (Safety Data Sheet)/TDS (Technical Data Sheets)/detailed profiles of suppliers/Chemical Oxygen Demand COD)/consumption, volume etc. of the GHS (Globally Harmonized System)
3. Have the 16 prohibited chemicals of ZDHC listed as items requiring control
4. Request suppliers to offer the 3-in-1 guarantee letter¹/16 prohibited substances guarantee letter
5. Screen and select the incoming chemicals in line with MRSL
6. Increase gradually utilization ratio of eco-friendly water repellent agents
7. Check finished fabrics by the Technology Department to assure the conformity to criteria of RSL
8. Establish SOPs for Chemicals Management.

Note:

3-in-1 guarantee letters

- Guarantee of compliance with Oeko-Tex Standard 100 Specifications
- Guarantee of compliance with SVHC Specifications of EU REACH
- Guarantee of compliance with ZDHC/MRSL

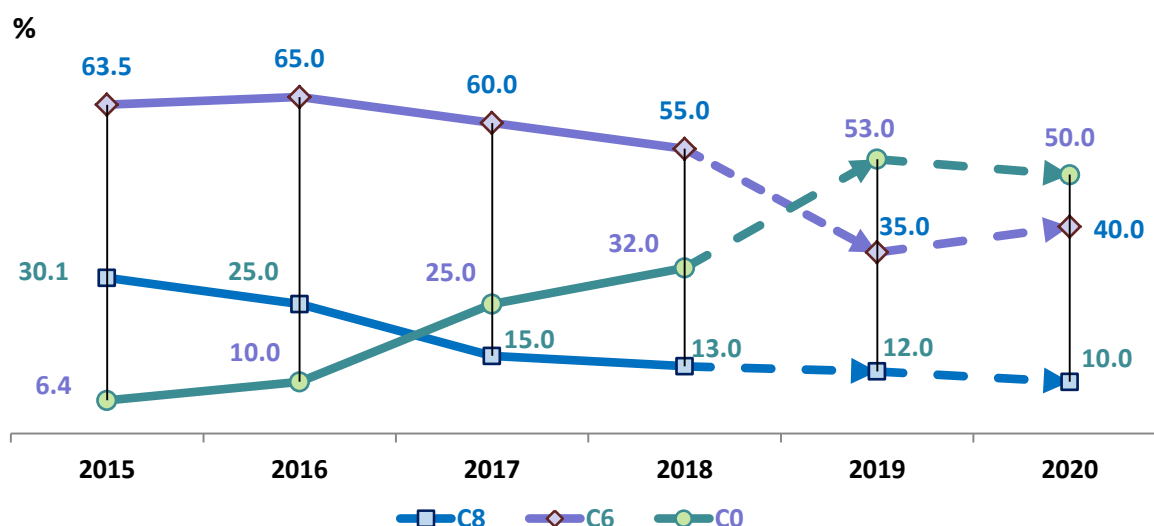
Mid-term Objectives:

1. Decrease adopted categories and the consumption of chemicals and increase reuse
2. Compare toxicity of chemicals in procurement and request comparison reports from suppliers
3. Calculate the COD (Chemical Oxygen Demand) of the discharged, establish targets, and reduce the COD content
4. Establish production lines in eco-friendly processes

Long-term Objectives:

1. Equip all fabric with product traceability to track detailed information of every batch of chemicals
2. Manufacture all products in compliance with eco-friendly and non-poisonous discharge criteria of ZDHC; taking water repellent agents for example, to gradually replace long-chained fluoropolymer agents with short-chained ones and eventually with fluorine-free ones
 - Decrease gradually the use of long-chained C8 in conjunction with the PFOA/PFOS draft regulation proposed by the United States EPA; for umbrella fabric, with a share of around 10%, that still needs C8, perform necessary treatment for recycled waste liquid
 - Substitute C6 or C0 for C8 to satisfy branded clients' demand for environmental protection
 - The dotted lines represent the projected consumption targets from 2018 to 2020.
3. Realize ZDHC by 2020

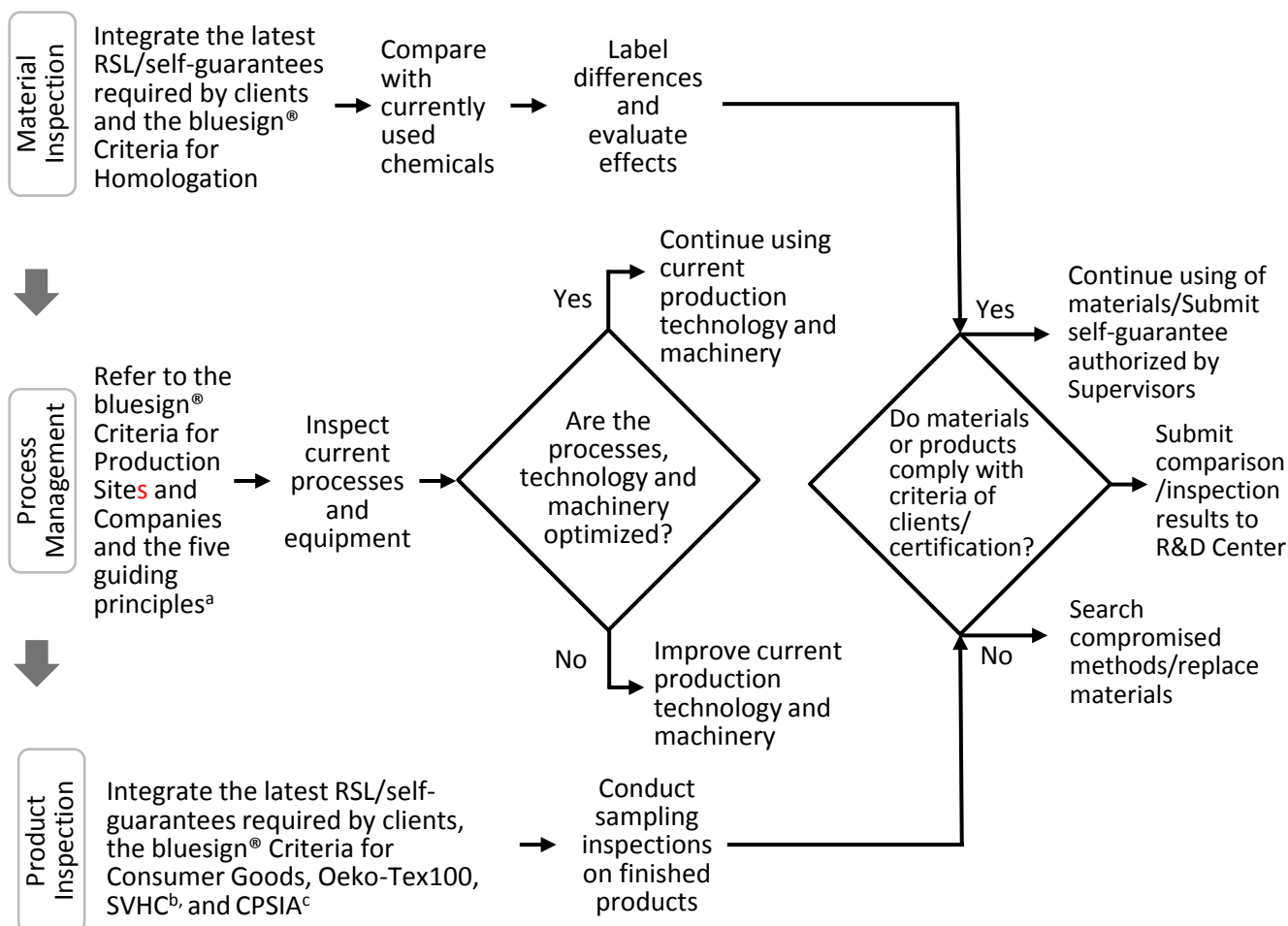
Current and Planned Consumption of Long- and Short-chained Water Repellents





Implementation Measures for the Three Phases

The conduction of hazardous chemicals management procedures for materials, production processes, and finished products begins with specifying criteria, managing implementations, and end up with inspecting manufactured goods, which is illustrated as follows:



Notes:

- a. Five Guiding Principles of bluesign® :
 - (a) Resource productivity: the ecological and economical willingness to manufacture products of defined quality and added value with a minimum required resources and the lowest environmental impact possible
 - (b) Consumer safety: offer of ecologically high-quality textiles to consumers with the holistic approach of the bluesign® system and a clear conscience
 - (c) Wastewater discharge: elimination of hazardous chemical substances to reduce water pollution and promotion of the use of advanced wastewater treatment systems
 - (d) Air emissions: active involvement of weather protection, including the use of low emission components, optimization of energy consumption, and strict monitoring of emission limits of whole production processes
 - (e) Occupational health and safety: a commitment to cooperate along the entire production and supply chain—and throughout the product lifecycle—with the aim of passing on up- and downstream environmentally relevant and health-related data and ensuring responsible handling of various chemical products
- b. SVHC: substances of very high concern, announced by the European Chemicals Agency (ECHA); 197 items of FTC's products in such inventory at present
- c. CPSIA: consumer product safety improvement act, a United States law signed on August 14, 2008 by President George W. Bush that requires manufacturers and importers to submit documentation of testing by recognized third-parties.



i. Using Green Materials

To provide guidance on safety management for the use, storage, and transportation of hazardous chemicals, and on assurance of the safety of the operating personnel and equipment, the Company develops management document and stipulates Standard Operation Procedures (SOPs) according to relevant legal regulations of occupational safety, fire control, and transportation. The aforesaid actions allow of reduction of hazards of chemicals through strengthening safety management, control operations, safety and health facility establishment, emergency management, and supervision inspections.

(i) Procedure Manuals for Chemical Management Stipulated by Formosa Taffeta

Chemical Management Item	Management Regulations Stipulated by FTC
Management of Hazardous Chemical Labeling and General Knowledge	Regulations Governing Hazardous Chemical Labeling and General Knowledge
Management of Dangerous Objects	Regulations Governing Public Hazardous Objects
Management of Chemical Operations	Regulations Governing Hazardous Chemical Operations
Personnel Management Training	Regulations Governing Personnel Training
Hazardous Chemical Operating Environment	Regulations on Monitoring of the Operating Environment

(ii) Risk Ranking Management of Hazardous Chemicals

In conjunction with the provisions of the “Occupational Safety and Health Act” and the increase in demands of chemical management by the stakeholders, the Industrial Safety & Hygiene Office stipulated regulations on risk ranking management for hazardous chemicals, which provide the bases for assessing the degrees of risks the chemicals pose and risk ranking management procedures based on hazards to health, distribution, quantity of use and other conditions. Each Plant will establish the “Hazardous Chemicals Assessment and Risk Ranking Table”, schedules for the implementation of risk ranking management in accordance with their specific needs, and file assessment methods, risk ranking management measures, and implementation logs for future reference to facilitate the institutionalization and traceability of the implementation of such management.

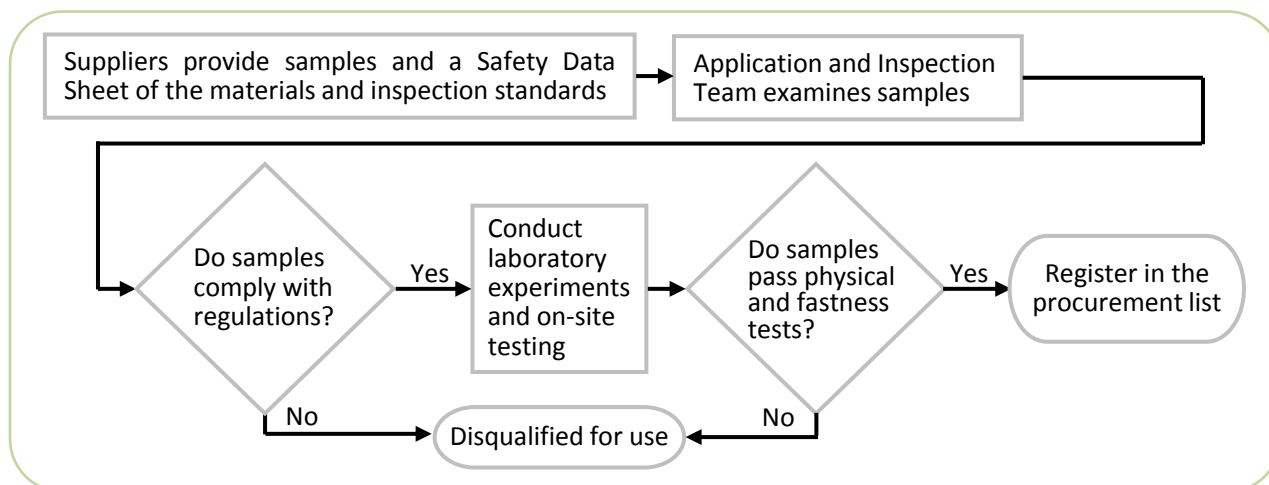
(iii) Hazardous Chemicals Inventory Management

The Application and Inspection Team of the R&D Center specializes in the stipulation of standards for the composition/quality of dyes, auxiliary agents, and packaging materials, as well as the conduction of incoming quality control, through which quality conformity of the incoming can be guaranteed through source control. With stringent reviews, inspections, and tests on currently used materials, all products comply with clients’ requirements. Suppliers without environmental protection certificates will be required to present guarantee letters to prove that their products meet criteria of Oeko-Tex® 100 Standards and the SVHC inventory management of the EU REACH. Without such letters, their supplied materials will not be registered in the procurement list; without subsequent improvements or further corrective measures, that supplier will be excluded from the collaboration list.

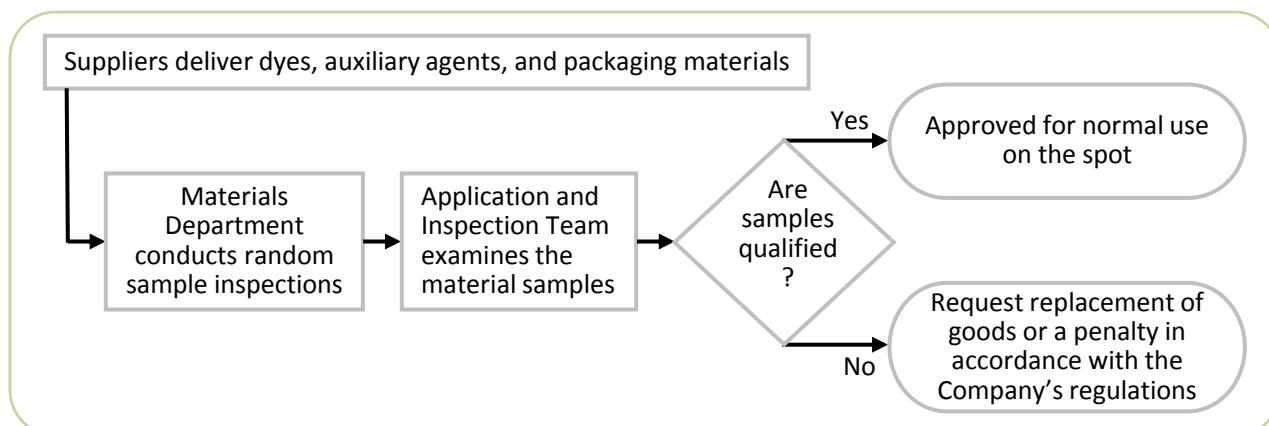




Establish Chemical Inventory Management



Feed Material Inspection



(iv) Transportation and Storage Management of Chemicals

In addition to establishing clear warning signs and labels for storage in order to increase the awareness of onsite personnel regarding potential hazards and self-protection, the Company has also installed anti-overflow embankments of suitable height or leakage prevention devices with similar functions in the vicinity of the transportation facilities, storage tanks, and pumps to prevent hazards related to chemical spills and pollution. Inspections of the transportation facilities and storage tanks will be irregularly conducted by the Standards Team and Industrial Safety & Hygiene Office of the President Office. If any leakage or abnormality is discovered, a basic quarantine will be established on the premises, and the responsible personnel will be requested to conduct detection at the site of the reported abnormality and reinforce protection measures in order to ensure prompt response to the crisis and effective control of hazards and damages.

(v) General Knowledge of Hazards

In order to ensure that the onsite personnel have full understanding of the different types of hazardous chemicals and that chemical usage conforms to the "Regulations for the Management of Hazardous Chemical Labeling and General Knowledge", the Company has stipulated the General Knowledge of Hazards Plan to standardize the professional knowledge of relevant operating personnel so that they can fully recognize the properties of the hazardous chemicals, emergency response measures, and preventive measures within the scope of their duties and consequently prevent the incidence of disasters or reduce the degree of damage.

The planning and promotion of the General Knowledge of Hazards is conducted by the Industrial Safety Office. In reality, the promotion of the plan requires the supervision and promotion of relevant departments, plants, and plant directors, as well as the cooperation of relevant departments, plants, and Industrial Safety & Hygiene Officers in the implementation of the following items:



1. Compilation and organization of the "Hazardous Chemical Inventory"
2. Preparation of the floor layout of the plant for the storage location of hazardous chemicals
3. Preparation of the labeling for hazardous chemicals
4. Examination of the "Safety Data Sheet" of the hazardous chemicals and review of the accuracy of the contents in the Safety Data Sheet and timely updates as required by the actual conditions. Such reviews should be conducted at least once every three years.
5. Supervision of personnel training for the "General Knowledge of the Manufacturing, Handling, and Usage of Hazardous Chemicals"
6. Stipulation of the Accident Prevention and Emergency Response Measures Table
7. Assisting the Industrial Safety & Hygiene Office in the General Knowledge of Hazards promotion campaign
8. Other necessary measures to ensure that employees are fully aware of the information regarding the hazardous chemicals.



Drill on Leakage of Chemicals inside Factories



Joint Toxic Disaster Drill

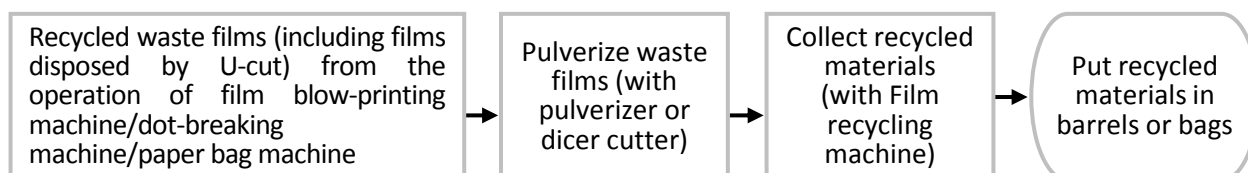


Yunlin Fire Control Dept. _
Douliou Branch
Disaster Prevention Drill
on Chemicals

(vi) Personnel Training and Emergency Response Drills

The Company shall organize regular training for the general knowledge of hazards and require that all personnel involved in the handling or exposed to the operation site of hazardous chemicals should receive training, and training information should be kept complete for inspection and reference. The hazardous chemical operating departments will conduct emergency response drills in accordance with their duty shifts once per year through simulating various potential disasters that may arise from hazardous chemicals, training personnel to understand and be familiar with the emergency response handling procedures, techniques, and use of firefighting equipment, and record any mistakes and improvements in the drills.

Flow chart for reuse of recycled materials at plastic processing factory



Use and sales of recycled materials

Year	Annual recycled quantity (tons)	Own use by the factory		External sales	
		Qty (tons)	Recycled rate (%)	Qty (tons)	Recycled rate (%)
2018	1205.3	1125.9	93.4	79.4	6.6
2017	1105.6	998.2	90.3	107.4	9.7
2016	1059.0	1045.6	98.7	13.4	1.3



Film recycling machine



Dicer cutter



Pulverizer



Waste films in bags (including films disposed by U-cut)



Recycled materials in barrels (for own use)



Recycled materials in bags (for own use or sale)



Recycled materials in bags (for sale)



ii. Green Production Processes

Adhering to the management philosophy of green sustainability, the Company has made extensive use of recycled/reusable and biomass materials, improved its production processes, installed energy conservation devices, and enhanced energy/resource exploitation efficiency in the hopes of reducing carbon emissions and environmental impacts. To achieve this objective, the Company has already implemented the following measures, whose weight among production processes will be annually adjusted depending on market demand and circumstances in the future.

Annual Practices for Green Production Processes

<ul style="list-style-type: none">● Develop recycled polyamide and polyester fabrics In 2018, the proportions of recycled fabrics to total output in Taiwan Plant were 1.3% for polyamide and 6.4% for polyester respectively (GRS Reg. No.: CU 816779)	<ul style="list-style-type: none">● Introduce short-chain C6 fluorine water repellent and fluorine-free water repellent to shun PFOA and PFOS These repellents have a combined share of 70-80%, and are scheduled to hit 100% by 2020																																			
<ul style="list-style-type: none">● Introduce Teijin Morphotex®, optical coloring fiber that reveals trendy colors based on the chromogenic principle of Morpho butterflies rather than with the dyeing process or the use of dyes or pigments	<ul style="list-style-type: none">● Promote the first-time success rate/lower rework level by upgrading equipment, improving processes, and enhancing productivity																																			
<ul style="list-style-type: none">● Establish product series in paper transfer	<ul style="list-style-type: none">● Promote eco-friendly, water-saving, energy-saving and carbon-reducing processes and products																																			
<ul style="list-style-type: none">● Use and promote organically planted cotton yarn and fabrics (GOTS and OE Reg. No.: CU809578)	<ul style="list-style-type: none">● Use Halogen-free and Antimony-free flame retardants for all fireproof processing																																			
<ul style="list-style-type: none">● Introduce dyeing & finishing chemicals extracted from morally planted plants that generate no negative impacts on food crops to reduce the consumption of petrochemical feedstock	<ul style="list-style-type: none">● Recover waste heat and reclaim wastewater to actively convert waste at the front end into resources at the back end																																			
<ul style="list-style-type: none">● Replace traditional solvent-based adhesives with water-based Acrylic and Polyurethane adhesives	<ul style="list-style-type: none">● Develop and introduce water-free water repellent processes; progress towards entirely water-free processes																																			
<ul style="list-style-type: none">● Request suppliers of dyes and auxiliaries used in processes in all production lines to provide guarantee letters for conformance to the EU REACH specifications, Oeko-Tex® Standard 100, and ZDHC/MRSL requirements, and commission accredited third-party certification bodies to carry out irregular sampling inspections	<ul style="list-style-type: none">● Make the most of the (wet) breathable and waterproof process, with the advantage of capabilities of reclamation and reuse of dimethylformamide (DMF), for the enhancement of equipment utilization																																			
<ul style="list-style-type: none">● Introduce and implement the ZDHC project																																				
<ul style="list-style-type: none">● Research and introduce water-free dyeing and finishing processes and technology, for example, the introduction of the dyeing process in supercritical CO₂ fluid and the research on atmospheric pressure plasma finishing	Progress of Overall Replacement of Long-chain Fluorochemical Water Repellents with Short-chain Fluorine-free Ones_ Target vs. Actual Consumption Unit:%																																			
	<table><tr><td></td><td colspan="2">C8</td><td colspan="2">C6</td><td colspan="2">FC free</td></tr><tr><td>Year</td><td>Target</td><td>Actual Value</td><td>Target</td><td>Actual Value</td><td>Target</td><td>Actual Value</td></tr><tr><td>2018</td><td>13</td><td>11</td><td>55</td><td>57</td><td>32</td><td>32</td></tr><tr><td>2017</td><td>15</td><td>17</td><td>60</td><td>58</td><td>25</td><td>25</td></tr><tr><td>2016</td><td>25</td><td>23</td><td>65</td><td>64</td><td>10</td><td>13</td></tr></table>		C8		C6		FC free		Year	Target	Actual Value	Target	Actual Value	Target	Actual Value	2018	13	11	55	57	32	32	2017	15	17	60	58	25	25	2016	25	23	65	64	10	13
		C8		C6		FC free																														
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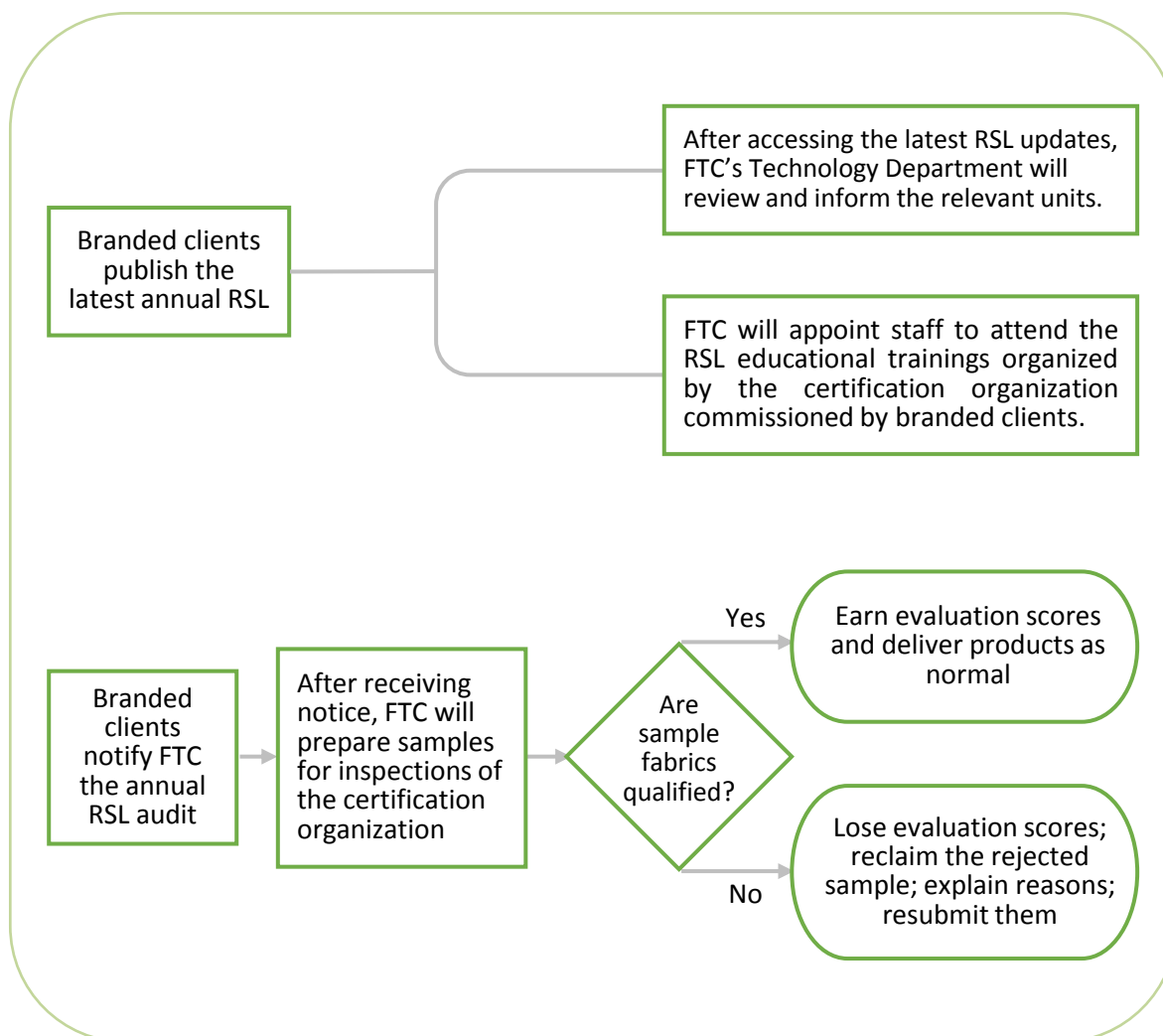


iii. Green Products

(i) Finished Product Inspection – RSL Review of Each Brand

To fulfill the commitment to sustainable social responsibility of environmental protection and consumer safety, the Company follows Restricted Substances Lists (RSL) of respective branded clients, such as NIKE, adidas, PUMA, Vf, etc., every year, and demands downstream firms' attendance at relevant illustration conferences, so as to acquaint them with updates in RSLs and the latest international control mechanisms.

In order to ensure compliance with branded clients' RSL specifications, FTC has implemented the following self-management process:



All fabrics of 5 Plants in 3 countries meet international quality standards, those of local governments, and branded clients' control criteria on hazardous substances. Products need annually inspected not only by accredited third-party certification bodies but also by branded clients; as of the end of the fiscal reporting year (on a calendar year basis) for the CSR report, all samples passed branded clients' sampling inspections. Oeko-Tex® Standard 100 is another certification for the assurance of the product quality. Furthermore, materials (including new dyes and auxiliaries) in conformity with bluesign® criteria are given the priority for use. The formulation of "regulations governing chemicals (510-20-M003)" and "standards for the development of new auxiliaries for the R&D section (808-40-A001)" attests the Company's high regard for products regarding customers' health and safety. In the future, we will continue to uphold this belief, strive to maintain clients' health and safety and the environmental sustainability, and seek more rigorous monitoring and control processes.



(ii) 24 Product Categories that have passed Product Carbon Footprint Certification

With the promotion and planning of the Sustainable Development Section and R&D Center, in 2012, the Company conducted the Product Carbon Footprint Certification for 24 product categories in accordance with the PAS 2050: 2011 to estimate the total amount of greenhouse gas emissions generated by products, from the import of their raw materials to the final manufacturing phase. This enables the Company to implement energy management and efficiency improvement plans, enhance energy exploitation efficiency, and reduce carbon dioxide emissions in order to achieve the objectives of low carbon production and reduction of environmental impacts. Through the guidance offered by the carbon footprint counseling team of the Taiwan Textile Research Institute (TTRI), the Company has passed the BSI Certification and obtained the Product Carbon Footprint Assurance Statements of reasonable level of assurance for 24 product categories. This has created a world record for the most number of statements obtained in a single inspection.

The 24 product categories are various functional fabrics that can satisfy 80% of market and client demands. The functions and uses of the products are summarized below:

Processing Item	Functions	Uses
Polyamide/Polyester Dyeing & Setting Process for Woven Fabrics	General dyeing and setting	Linings, shell fabrics (Clients may opt for finishing and laminating)
Polyamide/Polyester Dyeing & Absorbent Process for Woven Fabrics	Moisture absorbent and quick drying	Sportswear, jackets, golf wear
Polyamide/Polyester Dyeing & Water Repellent Process for Woven Fabrics	Stain-proof, waterproof, air permeability	Shell fabrics, inner tent layer, sports and leisure wear, jackets
Polyamide/Polyester Dyeing & Water Repellent & Finishing Process for Woven Fabrics	Down-proof, waterproof, soft texture	Vests, coats, jackets, sport jackets, fashion wear
Polyamide/Polyester Dyeing & PU Coating Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant, colored plastic, glossy	Raincoats, coats, sport jackets, fashion wear, mountaineering jackets
Polyamide/Polyester Dyeing & Acrylic Coating Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant	Umbrellas, tents, sport jackets, fashion wear
Polyamide/Polyester Dyeing & Lamination Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant, warm	Raincoats, coats, sport jackets, fashion wear, mountaineering jackets
Polyamide/Polyester Printing & Water Repellent Process for Woven Fabrics	Printing, stain-proof, waterproof, air permeability	Umbrellas, shell fabrics, sports and leisure wear, beach pants, fashion wear
Polyamide/Polyester Printing & Water Repellent & Finishing Process for Woven Fabrics	Embossing, down-proof, water-proof, soft-texture	Linings, shell fabrics, coats, jackets, sport jackets, fashion wear
Polyamide/Polyester Printing & PU Coating Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant, colored plastic, glossy	Raincoats, coats, sport jackets, fashion wear, mountaineering jackets
Polyamide/Polyester Printing & Acrylic Coating Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant	Umbrellas, tents, sport jackets, fashion wear
Polyamide/Polyester Printing & Lamination Process for Woven Fabrics	Waterproof, moisture permeability, wind resistant, warm	Raincoats, coats, sport jackets, fashion wear, mountaineering jackets



iv. Eco-friendly Production Processes and Product Certification

Based on the mission of environmental protection and the objective of sustainability, FTC has respected life and committed to the maintenance of the ecological environment, local charities and giving back to society. The specific action FTC (including its overseas Plants) took for this was to make effort to obtain certificates since 2009, such as OHSAS 18001 & TOSHMS, ISO 14001, product carbon footprint certificate, and ISO/CNS 14064-1:2006 Inventory. The certificates obtained by Plants are summarized in the following table:

Certification Items		Certified Plants				
		Taiwan	Chang-Shu	Zhong-Shan	Dong-nai	Long-an
Certificates of Eco Products & Production Processes: Oeko-Tex® Standard 100 Certification		✓	✓	✓		✓
GOTS Organic Cotton Certification		✓				
OE Organic Cotton Certification		✓				
GRS Polyester Recycle Standards		✓				
Organization Quantification and Reporting of Greenhouse Gas (GHG) Emissions (ISO 14064-1)		✓				
Occupational Health and Safety Administration System Certification (OHSAS 18001), 2007		✓	✓	✓	✓	✓
Taiwan Occupational Safety and Health Management System (TOHMAS Certification)		✓				
Environmental Management System	(ISO 14001:2015)	✓	✓	✓	✓	✓
	(ISO 14001:2004)					
Quality Management System	(ISO 9001:2015)	✓	✓	✓	✓	✓
	(ISO 9001:2008)					
bluesign® Standard Certification		✓	✓	✓	✓	✓
Product Carbon Footprint Certification PAS2050, 2011		✓				
Energy Management System (ISO 50001), 2011		✓				
International Automotive Task Force 16949 (IATF 16949) certification, 2016		✓				

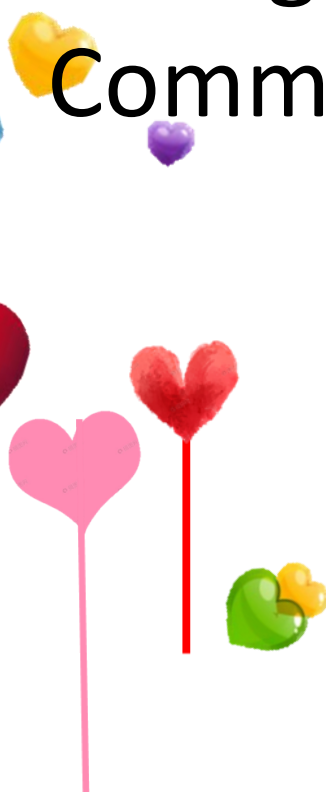
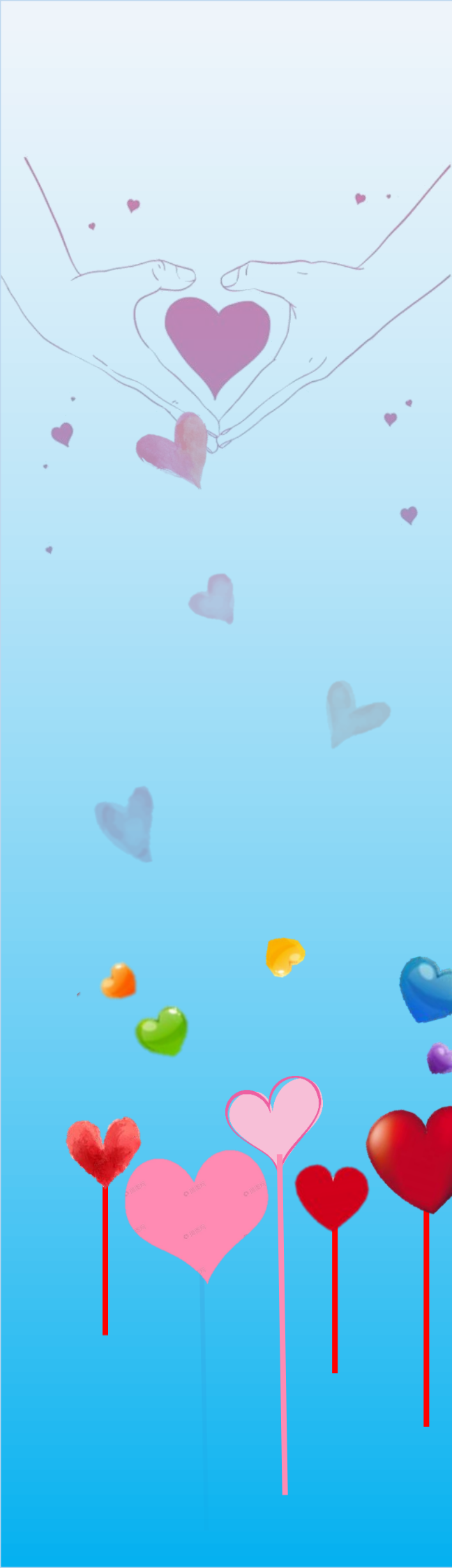
※ For validity of all above certificates, their renewals and related certifications are commissioned to third parties before their expiry.

※ The Taiwan Plant already passed the certification of the new edition of ISO 14001, ISO 14001:2015, in Dec. 2017, and so will overseas Plants by Aug. 2018 entirely.

The self-supervision in the acquisition of certificates has demonstrated FTC's execution and determination to environment protection, client satisfaction, sustainability, mitigation of the impact of global climate change, promotion of green supply chain, a pioneer in the textile industry. This implies that exertions and effectiveness of energy conservation and emission reduction will have been co-created by clients and users while they choose FTC's products.



Corporate Social Responsibility and Giving Back to the Community





(I) Creating Healthy and Safe Workspace with Enablement of Self-growth

Knowing how to make everyone work at ease and give full play to their expertise has always been an objective of Formosa Taffeta. In order to attract outstanding talents, the Company offers stable and competitive salaries in accordance with Company regulations, as well as complete training programs and career development planning that allow employees to upgrade their professional capacities. Together with the comprehensive welfare benefits and the creation of a safe and healthy work environment, the physical and mental health of the employees can help achieve the best utilization of human resources. Furthermore, multiple communication channels have been established to solicit employee suggestions and safeguard employee rights, thus establishing a firm foundation for the sustainable development of the Company.

i. Human Rights Protection

FTC has always ensured strict compliance with both domestic and international labor and human rights regulations and has always treated all employees equally, and the related information is disclosed on <http://www.ftc.com.tw> and FTC's annual report that includes the following:

- Declaration of "Human-rights Policy" (<http://www.ftc.com.tw/newftc/regulations.php>): support and in conformity to all labor laws/regulations, creation of a working environment with equal appointment and without discrimination and harassment, eradication of forced labor and employment of child labor, respect for privacy and employees' freedom for association, maintenance of smooth communications channels between labor and management, and implementation of complaint system °
- "Work Regulations:" regulating and protecting all employees' working conditions and rights
- Open recruitment information and impartial selection: The Company provides open, fair, and just employment opportunities to all job seekers in compliance with provisions of the "Employment Service Act".
- "Regulations Governing Grievance for Inner and Outer Stakeholders": The Company has established various reporting channels, including suggestion boxes, reporting forms, a direct line (05-5577011), and e-mail (t1000@ftc.com.tw), etc. for employees to report a complaint at any time when they feel that their rights are being infringed or they are subject to inappropriate treatment. Three types of reporting channels—the level-by-level report, the next-level report, and the inter-departmental report—are provided. Complaint materials are handled by designated staffers in a confidential manner and complainers are well protected against any revenge afterwards. There was no complaint on employees' interests and human rights in 2018. Suggestions on daily-life affairs were handled and responded by the administrative department immediately (http://www.ftc.com.tw/doc/ftc_e1.pdf).
- Status for the operation of "Reward and Penalty Committee:" discussion and determination of major reward or penalty cases by representatives of high level managerial staff of each unit and the committee members
- "Regulations for Sexual Harassment Prevention:" the establishment of "Sexual Harassment Appeal and Review Committee" and reporting channels, such as a direct line, fax, e-mail, etc., and the advocacy of sexual harassment prevention to keep employees from
- physical and emotional abuse
- "Regulations governing personal data:" proper custody and use of employees' personal data without breach
- "Specifications for employee rights protection": in compliance with the regulations pursuant to the prohibition of forced labor, such as the Labor Standards Act and the Occupational Safety and Health Act; in 2018, no incurred violations.
- Status for the operation of trade union: establishment of the trade union in 1976, regular conduction of committee and supervisor meetings and member meetings, and negotiation with the Company on labor issues to protect employees' rights and promotion of a harmonious labor/management relations
- Information on labor-management consultation: holding four labor-management meetings in 2018 to maintain and enhance the labor/management relations

(i) Employment

The recruitment operation of Formosa Taffeta has always abided by the principles of fairness, justness, and openness. Employee candidates are determined based on the performance of each batch of interviewees, in complete compliance with the Labor Standards Act. The Company's policies forbid the employment of child laborers; at the same time, based on equal employment rights, consideration for employment is based on personal professional capabilities and experiences, instead of such factors as age, ethnicity, sexual orientation, religion, political standing, birthplace, marriage, appearance, or disability. After individuals are hired, their promotion, assessment, training, and reward/punishment system are regulated by clear regulations to ensure equal treatment for all employees. No incidents of human rights violations or discrimination among the hired employees and of employed child laborers were reported in 2018. The analysis of the age groups and proportion of new employees in 2018 is as follows:



Age Group of New Formal Employees in the 5 Plants in 3 Countries in 2018 Unit: headcount/%

Age Group	Plant	Taiwan Plant			Taiwan FGS			Zhong-Shan Plant in China		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
	Under 29	9	45	54	20	25	45	37	62	99
	30 to 39	3	12	15	10	4	14	35	54	89
	40 to 49	4	3	7	2	1	3	15	35	50
	50 to 59	0	1	1	0	0	0	1	6	7
	Over 60	0	1	1	0	0	0	0	1	1
	Subtotal	16	62	78	32	30	62	88	158	246
	Total employees	846	1,877	2,723	281	309	590	257	307	564
	Proportion of New Employees (Annual accumulated) (%)	1.9%	3.3%	2.9%	11.4%	9.7%	10.5%	34.2%	51.5%	43.6%

Age Group of New Formal Employees in the 5 Plants in 3 Countries in 2018 Unit: headcount/%

Age Group	Plant	Chang-Shu Plant in China			Long-an Plant in Vietnam			Dong-nai Plant in Vietnam		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
	Under 29	13	67	80	80	132	212	167	197	364
	30 to 39	6	29	35	22	56	78	16	21	37
	40 to 49	1	9	10	5	7	12	10	0	10
	50 to 59	0	3	3	0	2	2	1	0	1
	Over 60	0	0	0	0	0	0	0	0	0
	Subtotal	20	108	128	107	197	304	194	218	412
	Total employees	113	196	309	449	597	1,046	509	569	1,078
	Proportion of New Employees (Annual accumulated) (%)	17.7%	55.1%	41.4%	23.8%	33.0%	29.1%	38.1%	38.3%	38.2%

- Definition of new employees: New formal employees who report to the job after completing the necessary procedure (excluding contract workers and foreign laborers)
- Formula for the proportion of new employees: Total number of new employees for the year / Year-end (December) formal employee population * 100%



(ii) Workforce Structure

1. Ratio of Male Employees to Female Employees, and Average Years of Service

Ratio of Male to Female Employees, and Average Years of Service
of the Five Plants in 3 Countries between 2016~2018

Year	Item	Plant	Taiwan Plant	Taiwan FPS	Zhong-Shan Plant in China	Chang-Shu Plant in China	Long-an Plant in Vietnam	Dong-nai Plant in Vietnam
2018	Formal Employees	Average Years of Service (years)	20.2	7.9	7.5	6.1	8.4	3.8
		Male (headcount)	1,877	309	307	196	597	569
		Female (headcount)	846	281	257	113	449	509
		Male:Female	2.2:1	1.1:1	1.2:1	1.7:1	1.3:1	1.1:1
	Informal Employees	Male (headcount)	419	365	0	0	0	0
		Female (headcount)	475	188	0	0	0	0
	Total		3,617	1,143	564	309	1,046	1,078
2017	Formal Employees	Average Years of Service (years)	19.6	7.3	7.3	5.9	8.6	3.5
		Male (headcount)	2,009	305	308	177	551	543
		Female (headcount)	905	277	276	115	425	476
		Male:Female	2.2:1	1.1:1	1.1:1	1.5:1	1.3:1	1.1:1
	Informal Employees	Male (headcount)	339	378	0	0	0	0
		Female (headcount)	393	175	0	0	0	0
	Total		3,646	1,135	584	292	976	1,019
2016	Formal Employees	Average Years of Service (years)	18.6	3.4	5.7	4.1	7.6	2.6
		Male (headcount)	2,104	255	371	175	516	532
		Female (headcount)	957	236	276	111	423	433
		Male:Female	2.2:1	1.1:1	1.3:1	1.6:1	1.2:1	1.2:1
	Informal Employees	Male (headcount)	326	453	0	0	0	0
		Female (headcount)	336	220	0	0	0	0
	Total		3,723	1,164	647	286	939	965

- Statistics of male to female employment ratio, and average years of service are based on formal employees, excluding informal employees.
- In 2018, the percentage of formal employees in the Taiwan Plants is 75.3%, while informal employees (such as consultants, contract workers, migrant workers, and part-time student workers) account for 24.7%. In the past five years, the percentage of formal employees has been maintained above 75% on average, amongst which the ratio of male to female employees has been 2.2:1, with average age by 44.6 years old, and average years of service by 20.2 years.
- The Petroleum Business Division in Taiwan runs 106 gas stations, a kind of retail service. Due to the need of two-shift works and the employment of some students, in 2018, non-regular employees account for 48.4% of the workforce, a rate that is not low enough while the rate of regular employees is 51.6% only.
- In 2018, Taiwanese employees accounted for 53% of the Company's total workforce, followed by Chinese with 13% and Vietnamese with 34%. The Company has tailored its operations to local circumstances in terms of races, national situations, laws/regulations, and cultures.

2. Ratio of Female to Male in different positions and at different ages

Ratio of Female to Male in different positions and at different ages in 2018 Unit: headcount/%

TYPE	Groups	Gender	Taiwan Plant				Taiwan FPS				Zhong-Shan Plant in China			
			Female	Male	Total	Ratio	Female	Male	Total	Ratio	Female	Male	Total	Ratio
Position	Managerial staff (and above)		0	23	23	0.8	0	1	1	0.2	0	〈3〉	〈3〉	-----
	1 st and 2 nd level supervisors		15	325	340	12.50	1	15	16	2.70	18	46	64	11.30
	Base-level supervisors		82	570	652	23.90	39	77	116	19.70	74	92	166	29.40
	Base-level employees		749	959	1,708	62.70	241	216	457	77.50	165	169	334	59.20
	Subtotal		846	1,877	2,723	100	281	309	590	100	257	307	564	100
Age	Under 29		75	202	277	10.20	89	130	219	37.10	57	71	128	22.70
	30 to 39		204	355	559	20.50	114	100	214	36.30	126	106	232	41.10
	40 to 49		402	567	969	35.60	61	47	108	18.30	65	109	174	30.90
	50 to 59		157	675	832	30.60	17	30	47	8.00	8	20	28	5.00
	Over 60		8	78	86	3.20	0	2	2	0.3	1	1	2	0.40
Subtotal			846	1,877	2,723	100	281	309	590	100	257	307	564	100

Ratio of Female to Male in different positions and at different ages in 2018 Unit: headcount/%

TYPE	Groups	Gender	Chang-Shu Plant in China				Long-an Plant in Vietnam				Dong-nai Plant in Vietnam			
			Female	Male	Total	Ratio	Female	Male	Total	Ratio	Female	Male	Total	Ratio
Position	Managerial staff (and above)		0	〈2〉	〈2〉	-----	0	〈4〉	〈4〉	-----	0	〈3〉	〈3〉	-----
	1 st and 2 nd level supervisors		15	22	37	12.00	22	21	43	4.10	9	11	20	1.90
	Base-level supervisors		46	64	110	35.60	55	68	123	11.80	54	60	114	10.60
	Base-level employees		52	110	162	52.40	372	508	880	84.10	446	498	944	87.60
	Subtotal		113	196	309	100	449	597	1,046	100	509	569	1,078	100
Age	Under 29		42	76	118	38.20	163	246	409	39.10	375	422	797	73.90
	30 to 39		60	84	144	46.60	156	227	383	36.60	108	138	246	22.80
	40 to 49		10	23	33	10.70	107	100	207	19.8	21	7	28	2.60
	50 to 59		1	13	14	4.50	22	21	43	4.10	5	2	7	0.60
	Over 60		0	0	0	0	1	3	4	0.40	0	0	0	0
Subtotal			113	196	309	100	449	597	1,046	100	509	569	1,078	100

- Definition of positions: managerial staffers (senior supervisors) refers to positions of managers and above; 1st level management supervisors refer to plant director-level; 2nd level management supervisors refer to section chief-level
- Managerial staffers (senior supervisors) of the Zhong-Shan plant and the Chang-Shu plant in China and the Long-an plant and the Dong-nai plant in Vietnam are dispatched from Taiwan, so the number of dispatched managerial staffers is calculated in the total number of workforce of the Taiwan Plant; such number is excluded from calculation and displayed as 〈headcount(s)〉, representing the number of those staffers who are not the native.
- With an operation in labor- and capital-intensive industry, the Company still has no female managers but will intensify training and promotion of female employees in the future.



(iii) Health and Safety

FTC has been endeavoring to take good care of employees' health and safety; the reason is quite straightforward. In the human nature respect, cohesion can only be created with employees' realization of the corporate care. From the reasonableness aspect, workforce's health and safety closely correlates with production and sustainable development—any hygiene/safety risk may weaken workforce productivity, damage the corporate reputation, further bring heavy loss to the Company in economic or social aspect, and thereby lowering the Company's competitiveness. From the lawful perspective, the announcement of "labor health protection rules" by Ministry of Labor reveals that employees' health is a corporate inevitable responsibility. With such realization, since June 2009, the Taiwan Plant obtained the OHSAS 18001/TOSHMS certificate and passed that certification annually after that; by 2013, and the other four overseas plants in Zhong-Shan, Chang-Shu, Long-an, and Dong-nai passed certification of the OHSAS-18001/TOSHMS or/and ISO-14001 one after another. Furthermore, FTC sets up the following measures and plans:

1. Environment, Health, and Safety Policies

In order to ensure effective health and safety management, the Company has stipulated the following safety, health, and environment policies:

- Ensure compliance with relevant safety, health, and environment regulations and other reasonable demands of stakeholders.
- Make good use of the Safety, Health, and Environment Administration System to strengthen pollution prevention and reduce hazardous impacts.
- Promote hazard identification, risk evaluation, and risk control to prevent damage and health hazards.
- Promote energy conservation and reduction to reduce the impacts of environmental damage and hazards to health and safety.
- Strengthen neighboring relationships, establish good communication channels, enforce routine inspections, ensure reviews, and seek continuous improvements.

2. Occupational Safety and Health Management Plans

In accordance with the "Occupational Safety and Health Act", both the parent plant and the 2nd plant of FTC have established the Occupational Safety and Health Committee, both of which are headed by the vice chairman, while the labor representatives assisting in the supervision and proposal of relevant plans account for 40% (the main plant) and 44.4% (the 2nd plant), respectively. Each plant conforms to the legal regulation, which stipulates that labor representatives must account for one-third of the committee. For many years, we have adhered to our management philosophy of "Balancing Environmental Safety and Health with Economic Development" and established Occupational Safety and Health Management Plans that comply with relevant regulations. Through the effective operation of the Occupational Safety and Health Committee and risk evaluation, the Company has incorporated hazard identification and risk management strategies for implementation. Through constant inspection and issue identification, prompt corrective measures can be taken to ensure continuous improvements and increase Safety and Health Management performance.

3. Hazard Identification, Risk Evaluation, and Stipulating Control Measures

In order to identify potential hazard factors in the environment, as well as the potential impacts of such hazards to the operations, facilities, products, and services, the Company (Taiwan Plants) has conducted evaluations to identify and classify potential risks and has stipulated response control mechanisms/measures for the various types of risks. In order to ensure that risk management can be improved with time and appropriately adjusted, the Company will not only conduct full-scale risk evaluations before the annual internal audit, but will also conduct irregular inspections on the changes in production processes, activities, equipment, raw materials, and operating environments to evaluate whether any new risks should be included in the hazard factor list and then shall stipulate corresponding measures.

Statistics of Hazard Identification, Risk Evaluation, and Control Measures of the Taiwan Plant in 2018

Number of identified/evaluated hazards	Number of Unacceptable (High) Risk Cases After Evaluation	Number of Improvements with Specific Targets	Number of Amended/Stipulated Management Documents
5,150	13	13	11



List of Objectives, Targets, and Improvements of Unacceptable (High) Risks and Progress in Taiwan Plants in 2018

No	Objective	Target	Improvement/management program	Progress
1	Prevention of entanglement at the transmission part of KU112 machine	Prevention of entanglement injury by KU calender zero case/year	Modification of switch and emergent shutdown of KU112 machine	Completed
2	Prevention of entanglement at the rear parts of machines in the factory	Installation of protective covers at the transmission section of the rear part of machines 53 protective covers/half a year	Installation of protective covers and optical-induction switch for transmission section at the rear part of machines	Completed
3	Prevention of entanglement or squeezing injury by drying machine	Entanglement or squeezing injuries by drying-machine operators, zero case/year	Installation of safety guard rails for drying machines	Completed
4	Prevention of entanglement or squeezing injuries by AJ batching machines	Entanglement or squeezing injuries by AJ batching machines Zero case/year	Installation of safety guard rails for batching machines	Completed
5	Prevention of tripping by operators of knife loading/unloading device for circular screen printer circular screen printer	Prevention of tripping by soft pipe in knife loading/unloading operation, Zero accident/year	Revision of procedure for knife loading/unloading for circular screen printer and management program for training and education for related operation	Completed
6	Prevention of injuries caused by vehicles	Vehicle-caused injuries Zero case/year	Installation of autonomous detection and warning devices for vehicles in movement	Completed
7	Prevention of injury from entanglement in the operation at the end of machine	Injury caused by entanglement in operation at the end of machine, zero case/year	Installation of protective cover for the rear part of machine	Completed
8	Prevention of entanglement injuries caused by erroneous handling of workers	Entanglement injury caused by erroneous handling of workers Zero case/year	Installation of protective partition for GP printing machine	Completed
9	Prevention of burning injury of workers for high-temperature fluid pipes	Prevention of injuries of high-temperature device operators Zero accident/year	Provision of protective gear for operators of high-temperature fluid pipes, plus intensified education and training	Completed
10	Prevention of cutting injuries caused by fabric cutter	Cutting injuries caused by fabric cutter Zero case/year	Installation of protective board for fabric cutter to prevent falling of operator	Completed
11	Prevention of drowning for waterfront operation	Prevention of drowning by waste-water treatment workers Zero accident/year	Placement of personal protective gears (lifejacket) at waste-water treatment facilities	Completed
12	Prevention of squeezing injuries in the operation of impregnators	Prevention of squeezing or entanglement injuries Zero accident/year	Installation of optical induction switch for impregnators	Completed
13	Prevention of squeezing injury in the operation of impregnator	Prevention of squeezing or entanglement injury Zero accident/year	Installation of safe optical induction gate at the rear part of impregnator and PVC coiling door in the operating area	Completed



4. Hazard identification and risk evaluation and management for contracting operations

- ❖ Regular implementation of education and training for contractors' construction personnel, overseers, and safety supervisors;
- ❖ Entrance control over contractors' construction personnel and equipment;
- ❖ Toolbox talks & safety meetings
- ❖ Control over hazardous operations, including exploitation of open flames, elevated operation, excavation, provisional power consumption, working in confined space, and use of hazardous substances, and over operating environment;
- ❖ Notification of the work environment, potential hazardous elements, and required safety and health Regulations to the contractors and their construction personnel
- ❖ Meetings convened by a consultative organization for joint operations
- ❖ Control over application for permits for job safety;
- ❖ Inspections of workplace and guidance/assistance in improvement in deficiencies in safety
- ❖ Periodic evaluation of contractors' safety and health performances

FTC's Procedural Documents of Safety & Health Management for Contractors

Category	Management procedures
Safety and health management for contractors	Regulations governing environment, health, and safety for contractors
Hazard analysis of contracted operations	Regulations governing job safety analysis
Notification of requirements of safety & health for contracted operations	Regulations governing environment, health, and safety for contractors
Entrance control over contractors	Regulations governing factory access
Control over contracted operations	Regulations governing job-safety permit
Accident reporting and handling	Regulations governing accident handling
Violations/fine handling and tracking	Regulations governing environment, health, and safety for contractors, Regulations governing inspections of environment, health, and safety
Performance evaluation of contractors	Regulations governing evaluation of contractors



Safety & Health education and training for contractors' construction personnel



Entrance inspection of a contractor's construction equipment



Education and training for overseers and safety supervisors

5. Management of Operating Environment

Before monitoring the work environment, hazardous factors should first be identified. Depending on the actual conditions of the work environment and the evaluation of the exposure of the employees, after conducting sample strategic planning, specialized third-party monitoring companies will be commissioned to conduct regular monitoring of the work environment to understand the actual work environment and protect the safety and health of the operation personnel. Analysis of the monitored results shows that, due to the characteristics of the industry, the work environment is subject to excessive noise hazards. The Company has already procured appropriate and effective soundproof protective gear (earmuffs and earplugs) and will continue to conduct training and inspection to enforce the wearing of protective gear by the workers, as well as request all departments to strengthen the isolation of the noise sources to prevent noise hazards. Furthermore, in monitoring carbon dioxide, dust particles, organic solvents, and specific Chemical in the work environment, the monitored results of 2017 show that the detected levels of the monitored items are lower than the detectable limits, about 1/2 of PEL (permissible exposure level). The Company will continue to enhance equipment automation and preventive equipment to improve the operating environment and ensure that workers are educated in the correct operation methods, gearing of protective equipment, and management methods in order to protect the health and safety of operation personnel.



Summary of Monitored Items of Workplace in 5 Plants in 3 Countries in 2018

Plant	Monitored Operating Site	Monitored Item	Monitoring Cycle	Number of Monitoring Sites for the Whole Year	Results
Douliu Plant (Taiwan)	Indoor central air-conditioned operating site	CO ₂	Once/half year	36	Lower than 1/5 tolerance for standard value
	Noisy operating site	Noise (dB)	Once/half year	77	85(dB)~98(dB) Outfitted with soundproof gear (earmuff, earplug)
	Dusty operating site	4 th Category Dust, 4 th Category Respirable Dust	Once/half year	22	Lower than 1/10 tolerance for standard value
	Operating site for organic solvent	Organic Solvents	Once/half year	82	Lower than detectable limit-1/2 tolerance for standard value
	Operating site for specific chemical	Specific chemical	Once/half year	30	Lower than detectable limit-1/2 tolerance for standard value
Chang-Shu Plant (China)	Noisy operating site	Noise (dB)	Once / year	8	85(dB)~98(dB) Outfitted with soundproof gear (earmuff, earplug)
	High-temperature operating site	High temperature (°C)	Once / year	6	Lower than tolerance for standard value
	Operating site for specific chemical	Specific chemical	Once / year	12	Lower than tolerance for standard value
	Dusty operating site	4 th Category Dust, 4 th Category Respirable Dust	Once / year	9	Lower than 1/4 tolerance for standard value
Zhong-Shan Plant (China)	Operating site for organic solvent	Organic Solvents	Once / year	6	Lower than detectable limit-1/4 tolerance for standard value
	Operating site for specific chemical	Specific Chemical	Once / year	9	Lower than detectable limit-1/5 tolerance for standard value
	Dusty operating site	4 th Category Dust, 4 th Category Respirable Dust	Once / year	2	Lower than 1/10 tolerance for standard value
	Noisy operating site	Noise (dB)	Once / year	8	85(dB)~98(dB) Outfitted with soundproof gear (earmuff, earplug)
	High-temperature operating site	High temperature (°C)	Once / year	8	Standard 31°C, measured temperature in summer 28.1°C



Summary of Monitored Items of Workplace in 5 Plants in 3 Countries in 2018 (Continued)

Plant	Monitored Operating Site	Monitored Item	Monitoring Cycle	Number of Monitoring Sites for the Whole Year	Results
Long-an Plant (Vietnam)	Noisy operating site	Noise (dB)	Once / year	37	85(dB)~98(dB) Outfitted with soundproof gear (earmuff, earplug)
	Dusty operating site	4 th Category Dust, 4 th Category Respirable Dust	Once / year	37	Lower than 1/4 tolerance for standard value
	Operating site for organic solvent	Organic Solvents	Once / year	3	Lower than the lowest detectable limit ~ 1/3 of PEL
Dong-nai Plant (Vietnam)	Noisy operating site	Noise (dB)	Once / year	41	85(dB)~98(dB) Outfitted with soundproof gear (earmuff, earplug)
	Operating site for organic solvent	Organic Solvents	Once / year	-	Lower than the lowest detectable limit ~ 1/3 of PEL
	Hazardous Gases	CO ₂ 、 SO ₂ 、 NH ₃	Once / year	11	Lower than the lowest detectable limit ~ 1/3 of PEL
	Dusty operating site	4 th Category Dust, 4 th Category Respirable Dust	Once / year	40	Lower than 1/4 of PEL

6. Health Management and Health Promotion

(1) General Health (Physique) Examination

Before reporting for work, new employees must proceed to designated certified hospitals or medical institutions for general health examination and complete the "Employee Health Examination Booklet". Present employees should regularly undergo general health examinations according to the following:

Implementation Summary of General Health Examination Conducted in 5 Plants in 3 Countries in 2018

Plant	Age Groups of Employees	Physical Examination Period	Number of Examined Employees
Taiwan Plant	Under 40 years old	Once every 5 years	1097 employees in 2015
	Between 40 and 65 years old	Once every 3 years	1789 employees in 2017
	Above 65 years old	Once every year	2 employees in 2018
Zhong-Shan Plant in China	New and existing operators	Once every 2 years	250 employees in 2018
Chang-Shu Plant in China	New and existing operators	Once every year	120 employees in 2018
Long-an Plant in Vietnam	Workers in common environment	Once every year	903 employees in 2018
Dong-nai Plant in Vietnam	Workers in common environment	Once every year	987 employees in 2018



The Company arranged general physical examination for employees according to their age groups, in line with the "regulation on protection of labor health." The results should that the top three health problems are, in descending order, overweight (BMI>24), eyesight, and cholesterol. Return outpatient visits were arranged for those with abnormal results, plus follow-up concern and provision of health education. The Company also integrated internal and external resources in holding various health-promotion events, in the hope of encouraging employees to embrace healthy diet and exercise habit.

(2) Special Health (Physique) Inspection

For new employees working in especially hazardous operations, they should undergo a Special Health (Physique) Inspection at designated certified hospitals for inspection items stipulated by the regulations of the special hazard workplace within one week of reporting for work. The results of the inspection will be used for comparison with the "Diseases Deemed Unfit for Operation" as the basis for dispatching work. For current employees working in especially hazardous workplaces, the Company will implement the Special Health (Physique) Inspection annually in accordance with regulations.

Statistics of Special Health Examination Results in 5 Plants in 3 Countries in 2018
Unit: headcount

Plant	Special Health Examination Items	Grade 1	Grade 2	Grade 4	Number of Examined Personnel
Doulou Plant (Taiwan)	Noise (Hearing)	562	151	14	727
	Dust	40	10	0	50
	Dimethylformamide	95	13	0	108
	Diisocyanate	22	1	0	23
	Hyperthyroidism	19	0	0	19
	Nickel and its compounds	2	0	0	2
	Subtotal	740	175	14	929
Zhong-Shan Plant (China)	Noise (Hearing)	211	0	0	211
	Dust	7	0	0	7
	Chemicals + Dust	15	0	0	15
	Noise + Chemicals + Dust	0	0	0	0
	Noise + Chemicals	5	0	0	5
	Noise + Dust	1	0	0	1
	Chemicals	11	0	0	11
Chang-Shu Plant (China)	Subtotal	250	0	0	250
	Other Dust	12	1	0	13
	Toluene, Dimethylformamide	14	0	0	14
Long-an Plant (Vietnam)	Subtotal	26	1	0	27
	Noise (Hearing)	20	0	0	20
	Dust	412	0	0	412
Dong-nai Plant (Vietnam)	Subtotal	432	0	0	432
	Noise (Hearing)	472	0	0	472
	Subtotal	472	0	0	472
Total		3840	352	28	4220

- ※ Explanation for special graded physical examination
- grade 1 management: For those with normal result for all items of special physical examination or follow-up examination, or judged by doctors as normal, despite abnormal result for some items
 - grade 2 management: For those with abnormal result for all or some items of special physical examination or follow-up examination, or judged by doctors as abnormal, without being related to works.
 - grade 3 management: For those with abnormal result for all or some items of special physical examination or follow-up examination, which are not certain to be related to works and need evaluation by doctors specialized in occupational medicine
 - grade 4 management: For those with abnormal result for some or all items of special physical examination or follow-up examination, which are determined by doctors via general judgment as abnormal and related to works.



In 2018, for special health examination results that need Class 2 Health Management, the infirmary will interpret the health report and arrange an interview, advise these employees to regularly visit outpatient clinics for continuous treatment or to take medicine as therapy. There are 14 staffers in the Taiwan Plant found in audition examination as ones needing grade 4 management. In line with the advice of doctors specialized in occupational medicine, eight of them have been transferred to works in low-noise sites, and the others—one from the Engineering Affairs Department and five from the Tire Cord Plant—whose hearing loss is milder because of early detection are taken care of with less exposure to noise through restricting the amount of time they spend at a noise source via “Access Registration for Workers Whose Hearing Needs Grade 4 Management” and through isolating the noise source by wearing hearing protection devices.

3. Labor Health Protection Measures

In line with the "Occupational Safety and Health Act," factory dispensary and the safety and hygiene office jointly pushed program for protecting physical and mental health of laborers in 2018:

- 1) program for protecting health of maternal laborers: The Company publicized "measures governing protection of the health of maternal laborers" in 2016, to safeguard the physical and mental health of female laborers in pregnancy, after child birth, or in breast feeding. Lectures on the health of such female laborers were held from April 24 to December 25, 2018, which were attended by 15 person/times. Health status of the attendees were recorded and put in file for follow-up tracking. Contents of the lectures included principles for diet during pregnancy, fundamental knowledge and noticeable points for life and health maintenance during pregnancy, pregnancy-induced diabetes, preparation for child birth, labor symptoms, breast feeding, post-child birth diet, post-child birth exercise, methods for alleviating maternity blue, and consumption of non-staple food.
- 2) Lecture on prevention of cardiovascular diseases: On Jan. 29, 2018, lecture on "prevention of cardiovascular diseases" was held and attended by 133 persons, to increase the knowledge on heart health among employees.

4. On-site Clinical Service

From Jan. 2018, two contracted physicians, one on occupational medicine and the other on labor health, have started to provide clinical service at Tounan plant, seven times a month and three hours each time, offering free consulting on vocational diseases, health care, pharmaceuticals, mental health, and domestic violence, as well as making on-line appointment for outpatient treatment at hospitals. In line with the "Occupational Safety and Health Act," the Company has instituted precautionary measures against potential worksite hazards, identifying potential hazard factors for removal and preventing hazards via the interactions among humans, instrument, machines, equipment, and environment. Effective implementation of education and training courses and health promotion activities can increase employees' knowledge on preventive human-factors engineering. Related preventive human-factors engineering works include employee-association activities (such as aerobic dance club, yoga club, and calisthenics club), which can increase the muscle strength and physical strength of employees, thereby preventing muscle and bone injuries. Activities such as health education, hygiene instruction, and related health promotion programs have been held every year. In addition, one-on-one health education and consulting services and follow-up tracking have been carried out for high-risk employees, to augment the general health status at workplaces.

5. Occupational health service

To help with identification and removal of occupational hazards inside and outside plant, a questionnaire survey on musculoskeletal disorder caused by repetitive works was carried out, which covered 2,252 employees, with 63 found to be potential risk for the disease. In addition, physician on occupational disease, in-house nurse, and employees in charge of safety and hygiene affairs made irregular on-site inspection. In 2018, 25 employees received assistance for prevention of musculoskeletal disorder.

Staffing of Physicians and Nurses Offering Labor Health Services and On-site Health Service Frequency in Taiwan Plant:

Plant	Number of Laborers	Nurse Staffing	Physician On-site Service Frequency
Parent Plant	2264	2 Full-time Nurses	6 Visits / Month
2 nd Plant	459	1 Full-time Nurse	1 Visit / Month

※ “Number of Labors” is the number of regular workers in the parent plant and second plants, excluding non-regular ones, such as advisors, term contract workers, foreign workers, and student workers.



Health Education for health of maternal employees



Health-education lecture on prevention of cardiovascular diseases



On-site health service_ergonomic hazards prevention project



On-site health education _abnormal workload prevention project

Summary of Health Promotion Activities Organized in Taiwan Plant in 2018

Event Date	Event	Number of Participants
2018/04/24-12/25	Lecture on pregnancy, childbirth, and breastfeeding of female laborers	15
2018/01/29	Health-education lecture on prevention of cardiovascular diseases	133
2018/01/01-12/31	Guidance for employee health	200 attendances/year
2018/03/03	Badminton competition	43
2018/03/26	Basketball competition	18
2018/05/28	Volleyball competition	63
2018/07/19	Table Tennis competition	47
2018/04/23	Sepak takraw competition	27
2018/04/16	Billiard competition	12
Irregular	Subsidies for various employee clubs in holding outdoor activities	19 clubs, including mountaineering clubs outing club, bike club, and dancing club



Outdoor activity of the mountaineering club



Volleyball competition



6. Emergency Response and Rescue

(1) Emergency Response

In accordance with the “Fire Services Act,” all employees in 5 Plants in 3 countries are requested to participate in drills of fire fighting, notification, and evacuations over a regular period as the local fire departments require; and these departments must be informed before the conduction of such drills. To strengthen the management of emergency response operations and provide a guidance for each unit, the “Regulations Governing Emergency Response Measures” were stipulated, calling for setup of emergency response organizations and task force, formulation of emergency response plans, compilation of rescue norms, and management of emergency response drills, in the hope of cultivating capability for rapid crisis management, for deterrent to deterioration of disasters, and for loss control via regular drill, education, and training.

Summary of Emergency Response Drills in 5 Plants of FTC in 3 Countries in 2018

Plant	Times of Simulated Emergency Response Drills	Drill Cycle	Drill Duration	Number of Participants
Taiwan Plant	44 times	Twice / Year	4 Hr / Drill	2723
Zhong-Shan Plant (China)	17 times	Twice / Year	4 Hr / Drill	564
Chang-Shu Plant (China)	4 times	Twice / Year	4 Hr / Drill	309
Long-an Plant (Vietnam)	In conjunction with fire-fighting and industrial-safety drill in Vietnam	Once / Year	16 Hr / Drill	1046
Dong-nai Plant (Vietnam)	In conjunction with fire-fighting and industrial-safety drill in Vietnam	Once / Year	16 Hr / Drill	1078
Equipment Used in the Response Drills	Wireless radio, broadcast equipment, fire engines, firefighting turrets, fire extinguishers, portable smoke removal fans, emergency generators, torchlights, fire suits, respirators, stretchers, first-aid kits, ambulances, etc.			

(2) Medical Care

Given increasing threat of cardiovascular diseases on the health of Taiwanese people, in addition to arrangement for emergent medical care and rescue, AED (automate external defibrillators) have been installed in the security rooms of the parent plant and the second plant in Taiwan, which will notify medical personnel and employees of safety and hygiene office and summon ambulance upon receiving report on occurrence of emergent cases by various units. AEDs will be checked, maintained, and managed by dispensary and education and training on CPR and use of AED will held every year.

7. Occupational Disaster Statistics and Prevention

The Company has a sound Safety, Health, and Environment Management and Promotion Department responsible for the implementation of safety and health management, so the Company has had no incidents of occupational diseases that arose due to work-related reasons. Regarding potential occupational disasters, the Company will plan and organize activities, such as health education, health guidance, General/Special Health (Physique) Inspections, Physician Onsite services, Emergency Rescue, and other health promotion activities every year. The occupational disaster statistics of the Formosa Taffeta Plants in the past three years are summarized below:



Occupational Injury and Fatality Statistics between 2016-2018_Taiwan

Item	Year Gender/Total	Parent Plant									FPS								
		2016			2017			2018			2016			2017			2018		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Number of Fatalities (Headcount)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Disabling Injury Incidents (Case)		4	3	7	15	0	15	11	1	12	0	0	0	0	0	0	1	3	4
Frequency Rate (FR) (%)		0.53	0.39	0.92	2.01	0	2.01	1.55	0.14	1.68	0	0	0	0	0	0	0.46	1.37	1.83
Lost Days (LD) (Day)		45	16	61	130	0	130	375	89	464	0	0	0	0	0	0	7	100	107
Severity Rate (SR) (%)		6	2	8	17	0	17	53	12	65	0	0	0	0	0	0	3	46	49
Occupational Disease Rate (ODR) (%)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Absenteeism rate (AR) (%)		0.44	0.19	0.63	0.37	0.14	0.52	0.37	0.18	0.55	0.69	0.42	1.11	0.58	0.47	1.05	0.48	0.41	0.89

- No injuries or fatalities for FPS in Taiwan in 2016 and 2017

Occupational Injury and Fatality Statistics between 2016-2018_China, Vietnam

Item	Year Gender/Total	Plants in China									Plants in Vietnam								
		2016			2017			2018			2016			2017			2018		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Number of Fatalities (Headcount)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Disabling Injury Incidents (Cases)		8	1	9	6	0	6	3	0	3	3	0	3	2	1	3	1	3	4
Frequency Rate (FR) (%)		2.98	0.37	3.36	2.31	0	2.31	1.22	0	1.22	0.73	0	0.73	0.42	0.21	0.63	0.19	0.58	0.77
Lost Days (LD) (Day)		339	40	379	185	0	185	40	0	40	140	0	140	75	4	79	31	3	34
Severity Rate (SR) (%)		126	15	141	71	0	71	16	0	16	34	0	34	15	1	16	6	1	7
Occupational Disease Rate (ODR) (%)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Absenteeism rate (AR) (%)		0.67	0.79	1.46	0.43	0.43	0.86	0.26	0.41	0.67	1.04	0.69	1.73	0.92	0.67	1.59	0.97	0.68	1.65

- Disabling Injury Frequency Rate (FR): number of disabling injuries per million hours of exposure;
FR = Number of disabling injuries * 10⁶ / Work hours / Total hours of exposure
- Lost Days: number of days that the affected person was unable to resume work temporarily (or permanently), excluding the day the incident occurred and the day the person returned to work, but it does include all intervening days (including Sundays, days off, and plant shut-down), as well as the number of days unable to work subsequent to the affected person's return to work.
- Disabling Injury Severity Rate (SR): number of lost work days per million work hours; SR = the total number of lost work days * 10⁶ / Total work hours
- Occupational disease rate (ODR): total cases of occupational diseases/total working hours x 200,000
- Absenteeism Rate: percentage of absent work days (personal leave, sick leave, hospitalized, absent from work) to number of work days; AR = total number of absent hours / total number of work hours * 100%



In prevention and management of occupational disasters, the Company has established a mechanism on notification, investigation, analysis, and statistics of occupational disasters and accidents, requiring related units and managerial office to write investigative report within 14 days after occurrence of accidents, which would be reviewed by safety and hygiene office for compilation into reference cases and submitted to monthly meeting of unit chiefs for the knowledge of attendees. To encourage discovery of abnormalities for improvement, employees will be awarded for discovering potential hazards (including false alarms) in their works and offering IE improvement suggestions, according to "measures governing encouragement of proposals for work improvement."

According to the finding of the Company's statistical analysis on occupational disasters in 2018, most accidents are caused by "unsafe actions and behaviors." The Company, therefore, has held education and training on safety and hygiene, to help operators form the habit of conforming to SOP (standard operating procedure) in works, and periodic drills on emergent response to disasters, to enhance the emergent response capabilities of various plants and divisions. Since there were cases of injuries caused by squeezing and entanglement in 2018, optical switches or protective rails at spots of entanglements, to avoid or lower cases of injuries, on top of intensified inspection and promotion by various unit chiefs, to root out occurrence of occupational disasters.

Statistics of Occupational Accidents in 5 Plants of FTC in 3 Countries in 2018

Plant	Accident Type	Num of Accidents	Reasons		
			Unsafe Behavior and Activities	Unsafe Operating Equipment / Environment	Personal Health Factors
Taiwan-Parent Plant	Entanglement injuries	4	4	-	-
	Bruise, slipping	7	-	7	-
	Slicing, cutting, scratching	1	1	-	-
Taiwan FPS	Slicing, cutting, scratching	1	-	1	-
	Crush injuries	2	-	2	-
	Slipping	1	1	-	-
China	Slicing, cutting,	1	1	-	-
	Electric shock	1	1	-	-
	Burn injury	1	1	-	-
Vietnam	Entanglement injuries	1	1	-	-
	Slicing, cutting	1	1	-	-
	Crush injuries slipping	2	2	-	-
Total		23	13	10	0

9. Personnel Training

Due to the need of related certificates for some operations, the safety and hygiene office has formulated "annual education and training courses and schedule for safety and hygiene" and required related units to put forth training plan for safety, hygiene, and environmental protection for next year by Nov. every year, according to the Company's "measures governing education and training" and actual needs. The plans will be keyed into the Company's computerized management system for education and training (TN1), as guidance for the implementation and control of various units' annual education and training on safety/hygiene/environmental protection/fire fighting.



Fire Rescue and Emergence Response Drill



Emergency Firefighting Education and Training



CPR+AED Education Training



Summary of EHS Training Implemented in Taiwan Plant in 2018

Type	Main Training Course	Target Groups (Hours)	Training Hours / Participants
Safety and Health	Safety and health education and training (including the use of protective equipment)	All employees	1018 hours/ 5483 participants
	Hazardous chemical substance labels and general knowledge training	Chemical substance operation departments	
Environmental Protection	Operation personnel environmental protection training	All employees	328 hours/ 5236 participants
	Chemical substance (including wastewater) leakage and handling training	Public works department, chemical substance operation departments	
	Air pollution, water pollution, waste and toxic operations training	All environmental protection operation departments	
Fire-fighting	Firefighting education and training (including the use of protective equipment)	All employees	242 hours/ 5499 participants

ii. Employees' Rights and Benefits

(i) Employee Remuneration

To provide employees stable and reasonable living protection, FTC has stipulated the "Regulations for Personnel's Wage" for the salary structure according to positions, ranks, and monthly appraisal results; salary/bonus hikes will be irregularly done in line with operation performances, changes in business circumstances and consumer price index, etc.

(ii) Employee Performance Appraisals

Appraisals of all employees' performance are conducted on monthly, quarterly and annual bases according to the "Regulations for Performance Appraisals of Employees"; the results are served as the basis for pay hike and issuance of year-end bonus, and reference for the cultivation of management trainee, promotion and job reassignment.

(iii) Job Security

In response to rapidly changing business environments and constant technological innovations, the Company has continued to streamline its business operations. However, based on the priority of protecting employees' labor rights, it has insisted on overcoming difficulties together with its employees, even in difficult times or circumstances. By establishing a human resource integration mechanism, it has managed to use employee transfers as a replacement for severance. In the past few years, no incidents of severance or dismissal disputes have been reported. When transferring employees to different departments or positions, the department supervisor will first communicate with the employee and then conduct the transfer in accordance with relevant regulations. The transfer procedures take an average of seven days to be completed. In 2018, 19 employees at Taiwan Plant were laid off, due to year-end performance appraisal rating C, accounting for 0.53% of the Plant's regular workforce of 3,617.

Minimum notice periods regarding substantial operational changes :

According to Labor Standards Act, the minimum periods of advance notices on termination of a labor contract are governed as follows:

- Where a worker has worked continuously for more than three months but less than one year, the notice shall be given ten days in advance.
- Where a worker has worked continuously for more than one year but less than three years, the notice shall be given twenty days in advance.
- Where a worker has worked continuously for more than three years, the notice shall be given thirty days in advance.



(iv) Maintaining Employee Resignation at Appropriate and Reasonable Levels

Age-group Analysis of Formal Employee Resignation in 2018

Unit: headcount, %

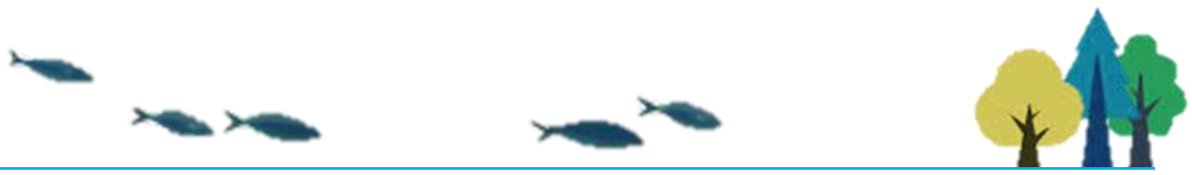
Group	Taiwan Plant (excluding Oil Product Business Division)						Oil Product Business Division of Taiwan Plant						Zhong-Shan Plant in China					
	Female		Male		Total		Female		Male		Total		Female		Male		Total	
	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate
Under 29	11	30.6	32	36.0	43	34.4	29	63.0	42	76.4	71	70.3	42	51.9	53	43.8	95	47.0
30 to 39	23	63.9	42	47.2	65	52.0	14	30.4	10	18.2	24	23.8	27	33.3	45	37.2	72	35.6
40 to 49	2	5.6	12	13.5	14	11.2	3	6.5	3	5.5	6	5.9	9	11.1	17	14.0	26	12.9
50 to 59	0	0	2	2.2	2	1.6	0	0	0	0	0	0.0	3	3.7	4	3.3	7	3.5
Over 60	0	0	1	1.1	1	0.8	0	0	0	0	0	0.0	0	0	2	1.7	2	1.0
Sub-total	36	100	89	100	125	100	46	100	55	100	101	100	81	100	121	100	202	100
Total number of employees	846		1,877		2,723		281		309		590		257		307		564	
Turnover rate (annual accumulated)	4.3		4.7		4.6		16.4		17.8		17.1		31.5		39.4		35.8	

Age-group Analysis of Formal Employee Resignation in 2018

Unit: headcount, %

Group	Chang-Shu Plant in China						Long-an Plant in Vietnam						Dong-nai Plant in Vietnam					
	Female		Male		Total		Female		Male		Total		Female		Male		Total	
	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate	Number of resignations	Rate
Under 29	15	68.2	63	65.6	78	66.1	59	68.6	83	59.7	142	63.1	132	79.0	169	83.7	301	81.6
30 to 39	7	31.8	29	30.2	36	30.5	24	27.9	37	26.6	61	27.1	24	14.4	31	15.3	55	14.9
40 to 49	0	0	3	3.1	3	2.5	2	2.3	16	11.5	18	8.0	7	4.2	1	0.5	8	2.2
50 to 59	0	0	1	1.0	1	0.8	0	0.0	3	2.2	3	1.3	4	2.4	1	0.5	5	1.4
Over 60	0	0.0	0	0.0	0	0.0	1	1.2	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0
Sub-total	22	100	96	100	118	100	86	100	139	100	225	100	167	100	202	100	369	100
Total number of employees	113		196		309		449		597		1,046		509		569		1,078	
Turnover rate (annual accumulated)	19.5		49.0		38.2		19.2		23.3		21.5		32.8		35.5		34.2	

- Statistics resignation rates are based on formal employees, excluding informal employees
- Formula for employee resignation: total number of employee resignations for the year ÷ formal employee population as of Year-end (December) × 100% (excluding retirement, severance, death, and dismissal)
- As part of the labor- and capital-intensive industry featuring higher turnover, the turnover rate of the Taiwan Plant reached 4.6% in 2018, a relatively low and stable level.
- Reasons for high turnover in 2018 in oversea Plants:
 - China Plants (Zhong-Shan, Chang-Shu): manpower shortage in the coastal provinces of China has caused a high labor mobility rate.
 - Vietnamese Plants (Long-an, Dong-nai): surged foreign investment in Vietnam resulted in increased demand for manpower, thereby causing a high labor mobility rate.



(v) Employee Welfare Benefits

Treating employees as members of our corporate family, the Company has provided employees various fringe benefits in the fields of accommodations, leisure, and literary and exercise facilities, so that employees can contribute their abilities in a safe and stable environment. In line with laws/regulations, corporate culture, public opinions, international trend, and universal value, the Company has taken good care of employees in the aspects of eating, clothing, lodging, transportation, child care, and recreation, so as to enhance the sense of well-being among employees. Meanwhile, committees for employees' welfare have been established at the five plants in three place, in charge of conducting travel, providing "welfare money" for two festivals a year, offering birthday gift money and travel subsidy, organizing exercise and entertainment activities, and subsidizing employee clubs, on top of scholarship for employees' offspring, and setting up kindergarten for employees' offspring.

● Employee Welfare Measures Implemented in Accordance with Relevant Regulations:

1. Established the Employee Welfare Committee
2. Regular Employee Health Inspections (Once every five years for employees under the age of 40, once every three years for employees between 40~65 years old, once every year for employees above 65 years old)
3. Half pay for sick leave of six months or less for outpatient and inpatient sick leave every year (According to the law, half pay only has to be given for sick leave within 30 days, but sick leave exceeding 30 days would not be entitled to pay.)
4. In reference to the Labor Standards Act, employee deaths in the line of duty are entitled to bereavement pay of five months of average monthly salary and compensation pay of 40 months of average monthly salary. Employee deaths not attributable to work duties are also eligible to receive consolation payment of six months of average monthly salary.
5. Employees suffering from death, disabilities, injuries, or diseases as a result of occupational accidents are entitled to compensation in accordance with the law.
6. Work jumpsuits and protective leather footwear
7. Health education and information, lectures and on-site medical consultation by professional doctors couple times per month
8. Parental leave (In 2018, a total of 19 employees, 4 males and 15 females submitted such application)
9. Employee retirement system, offering protection for employees' retired life
10. Labor insurance and health insurance

● Employee Welfare Measures Better than Regulations:

1. Established the mutual aid committee
2. When employees and their families seek medical services at Chang Gung Memorial Hospital, they are entitled to discounts for the medical expenses unsubsidized by the health insurance policy, as well as discounts for health inspections.
3. Outstanding employees are nominated each year and awarded with prizes and rewards.
4. Employee travel allowance
5. Staff fitness equipment, parking lot
6. Employees are provided with opportunities of comprehensive training, as well as continuing education
7. Meal subsidy for employees on weekdays and gift money as a substitute for year-end dining party
8. Birthday cash gifts, well-fare money for Dragon Boat Festival/Moon Festival, scholarship for employees and offspring; Labor Day gifts given via the trade union
9. Established recreational buildings, canteens, hostels, single dormitories, and family dormitories
10. Discounts at contracted clinics and merchants, convenience stores established in the Taiwan Plant in March 2019
11. Air round-trip tickets to employees stationed in overseas plants or their families for visiting provided by the Taiwan Plant



iii. Respecting Employees' Suggestions and Creating a Harmonious Labor Relationship

Given the positive correlation between employee performance and corporate performance, the Company has been pursuing a harmonious labor-management relationship, having high regard for employees' opinions and right of expression, for which it has maintained smooth plural communications channels to facilitate proposal of innovative ideas by employees.

With most employees being labor-union members, labor-management meeting has been taken place regularly, for offering suggestions to the Company. Related unit chiefs are present at the regular meetings of labor-union directors and supervisors, for exchanges of opinions. In 2018, the trade union convened four meetings of its directors and supervisors and one general meeting for union members. For labor-management issues, the Company would listen to the opinions of the trade union first, followed by meeting and consultation between ranking managers and union representatives, for attaining a consensus to assure an win-win arrangement between labor and management. Employees have often expressed opinions on employee welfare directly or via the committee for employees' welfare. Physical mailboxes have been installed at spots frequented by employees and designated persons would retrieve proposals dropped into the box regularly for perusal and discussion before giving answers to the employees of the proposals.

The Company has been long pushing "system for job improvement proposal by employees" (IE proposal), encouraging employees to put forth job-related innovative ideas or improvement suggestions, especially on manufacturing process as basis for discussion, thereby facilitating identification of problems and discovery of innovative or improvement solutions. Award money will be available to those who present proposals evaluated to be feasible and beneficial and the proposals will be forwarded to units in charge for mapping out concrete measures for implementation, in line with the Company's management concept of "probe of root cause of problems, relentless quest for perfection." To have a firm grip on the implementation of IE proposals, revision was made on "measures encouraging job-related improvement proposals" in 20p18, according to which awards will be available only to those proposals which have resulted in actual benefits, so as to enhance the quality of proposals and prevent random proposals. To retain interest of employees in presenting proposals, standards for issuance of award money have been loosened, though, abolishing condition of 60 points in the evaluation results for the proposals.

Statistics of Work Improvement Proposals in the Past Five Years (Unit: New Taiwan Dollars)

Year		2014	2015	2016	2017	2018
Number of Proposals		4,476	4,738	4,297	3,218	3,550
Reward Amount		404,100	413,750	377,000	347,300	316,800
Achievement Rewards	Number of Improvements	6	4	2	3	1
	Rewards	25,512	27,646	13,551	18,431	4,330
	Annual Benefits	4,949,208	13,140,369	1,351,992	3,054,856	401,760

iv. Personnel Training

Concerted effort of all the employees is indispensable for the Company in the quest for sustained growth and development. Therefore, the quality of human power is of critical importance, for which the Company has held various education and training courses, either by its own or in cooperation with external parties, to boost the expertise of employees. The courses cover actual cases at work sites, to augment the actual benefits of education and training for works. In addition, the Company has formulated guidelines on ethnical behaviors of employees, banning bribe taking, irregular collusion, and leakage of secrets.



PCL training courses for electricians



Statistics and analysis for SPC process



Training for employees at Vietnamese plant



Training for employees at Chinese plant

(i) Main Categories of Education & Training held by the 5 Plants in 3 countries:

Training Classification	New Employee Orientation	Basic Training of Work Duties	On-job Professional Training	Management Staff Reserve Training	Project Training
Target Group	New employees	New employees and staff mobilization management staff under the position of Foremen / Team Chiefs	Plant Directors, Directors, and the employees below them	Foremen / Team Chiefs / Section Managers / Plant Directors, and Directors / Managers	All business-related employees
Implementation Timing	Before new employees are assigned to their work positions	Within three months of starting work	When work conditions or the department needs to stipulate a training plan	Conducted in accordance with the management needs of the Company.	Irregularly conducted in accordance with operation strategies

Various units have to submit their education and training programs for the next year every Dec., which will be incorporated after approval into the "education and training management system" for implementation. The system will notify persons in charge before the courses, whose results will be entered into the system.

In line with the need of management, the Company has held aforementioned training according to kinds and rankings of jobs, to be carried either by the Company itself or by external institutions, so as augment employees' expertise. In response to the effort of Formosa Plastics Group for AI application in the automation and optimization of process, the Company dispatched eight employees, after passing admission examination, to attend the "class for cultivation of AI technology leaders," organized by the Taiwan AI Academy, during August through Dec. for a total of 384 hours/person. After graduation, the trainees have been engaged in AI-related planning and spreading of AI knowledge among employees.

The Company has insisted on the continuing transfer of knowledge, technology, and experience and taken pains, during the execution of education and training programs, to help with employees' career development, inspire their potential, and assist them in constant improvement of knowledge and skills, so that they can cope with challenges of workplace and create opportunities for career advancement.

(ii) Implementation of Educational Training

1. Inner/External Educational Training Hours, Attendances, Expenses in 2018

(1) Taiwan Plant (including 106 FPS' petroleum stations)

Taiwan Plant	Category	Total courses	Total attendances	Total training hours	Training expenses	Average training hours per attendance	Average training expenses per attendance
	Management	459	6,611	30,404.5	6,117,682	4.60	925.38
	Environment, health & safety (EHS)	396	16,192	48,678	30,528,986	3.01	1,885.44
	Continuing education programs (CEP)	196	4,593	14,373	1,485,950	3.13	323.52
	Quality control (QC)	42	1,225	5,182	385,417	4.23	314.63
	Techniques	232	3,039	9,150	1,235,949	3.01	406.70
	IT	3	4	7	2,664	1.75	666.00
	Electrical engineering (EE)	11	149	1,332	53,915	8.94	361.85
	Other	35	1,164	2,168	180,633	1.86	155.18
	Special Expertise	9	106	264	42,054	2.49	396.74
	External Training	98	435	8,120	995,010	18.67	2,287.38
	Total	1,488	33,518	119,679	41,028,260	3.57	1224.07
On Average		Total employees of Taiwan Plant 4,760 (as of 2018/12/31, including foreign workers)				25.14 hours /per employee	NT\$ 8,619/per employee/per year



(2) China Plants

	Category	Total courses	Total attendances	Total training hours	Training expenses	Average training hours per attendance	Average training expenses per attendance
Zhong-Shan Plant	Management	176	814	1,828.5	296,643	2.25	364.43
	EHS	16	455	730	106,438	1.60	233.93
	QC	29	331	460.5	73,111	1.39	220.88
	Total	221	1,600	3,019	476,192	1.89	297.62
Chang-Shu Plant	Management	104	747	1,935	320,160	2.59	428.59
	EHS	7	43	119	30,193	2.77	702.16
	QC	5	34	71	13,322	2.09	391.82
	IT	2	4	8	2,740	2.00	685.00
	Total	118	828	2,133	366,415	2.58	442.53
Average		Total employees of China Plant 873 (as of 2018/12/31)				5.9 hours /per employee	NT\$ 965/per employee/per year

(3) Vietnam Plants

	Category	Total courses	Total attendances	Total training hours	Training expenses	Average training hours per attendance	Average training expenses per attendance
Long-an Plant	Management	93	1,496	7,184	1,034,447	4.80	691.48
	EHS	37	1,732	4,950	605,784	2.86	349.76
	QC	17	695	2,144	210,330	3.08	302.63
	Total	147	3,923	14,278	1,850,561	3.64	471.72
Dong-nai Plant	Management	115	3,561	11,174	1,514,779	3.14	425.38
	EHS	41	3,384	14,493	1,869,359	4.28	552.41
	QC	23	521	1,376	192,201	2.64	368.91
	Total	179	7,466	27,043	3,576,339	3.62	479.02
Average		Total employees of Vietnam Plant 2,124 (as of 2018/12/31)				19.45 hours /per employee	NT\$ 2,555/per employee/per year

(4) Statistics of All Plants (by Plant)

Plant	Total employees of each Plant	Total attendances	Total training hours	Training expenses	Average training hours per attendance	Average training expenses per attendance
Taiwan Plant	1,488	33,518	119,679	96,046,453	3.57	1224.07
China Plant	339	2,428	5152	842,607	2.12	347.04
Vietnam Plant	326	11,389	41,321	5,426,900	3.63	476.50
Total	2,153	47,335	166,152	102,315,960	3.51	999.21
Average of all plants	Total employees of all plants 7,757 (as of 2018/12/31)				21.42hours /per employee	NT\$ 6,097/per employee/per year



(5) Statistics of All Plants (by Category)

Category	Total courses	Total attendances	Total training hours	Training expenses	Average training hours per attendance	Average training expenses per attendance
Management	947	13,229	52,526	9,283,711	3.97	701.76
EHS	497	21,806	89,143	33,140,760	4.09	1,519.8
CEP	196	4,593	14,373	1,485,950	3.13	323.52
QC	116	2,806	9,233.5	874,381	3.29	311.61
Techniques	232	3,039	9,150	1,235,949	3.01	406.70
IT	5	8	15	5,404	1.88	675.50
EE	11	149	1,332	53,915	8.94	361.85
Other	35	1,164	2,168	180,633	1.86	155.18
Special Expertise	9	106	264	42,054	2.49	396.73
External Training	105	435	8,120	995,010	18.67	2,287.38
Total	2,153	47,335	166,152	47,297,767	2.45	999.21

- Average training hours per attendance for various categories (hours/attendance) = total training hours for various categories ÷ total trained attendances for various categories;
 - Average training hours of each plant's/the Company's employees (hours/person) = total training hours of each plant/the Company ÷ total number of each plant's/the Company's employees.
- Total attendances may be larger than total persons as the same employee may attend several training courses.

2. In 2018, the Company's education and training covered on-the-job basic training for rank-and-file operators (including orientation training for newcomers), occupational training, multi-tasking training, SOPs training, job rotation, and such items as industrial safety/environmental protection, energy management, information security, training for Taiwanese cadres dispatched abroad, managerial training at various levels, and education on rights of and concerns about employees and the underprivileged, etc. In 2019, several new courses on work/life management are provided for foreign workers in respective languages, in the hope of attaining a harmonious relationship between management and labor and enabling employees to share fruits of corporate growth through the integration of planning/implementations of education and training and corporate business policies, realization of a balancing act among all employees regardless their nationality, the institutionalization of the promotion of education and training.
3. The Company's training courses have been planned on the basis of its management needs and job categories; it is mandatory and with equal opportunities for all employees to receive training. In 2018, no statistics by gender were available in the training management system, and it is infeasible to let such statistics manually come out so no breakdown of those figures into female and male was made in this report. A request for corresponding revision was transferred to MIS center, and it is planned to disclose the makeup of genders for trainees in 2109.
4. The Company's various training courses are tailored to the needs of various business divisions according to the industrial category of their operations, and their benefits for production performance are evaluated, as basis for improvement of the courses before being applied in subsidiaries. In 2019, in line with the policy of localized management, the training courses at the parent plant in Taiwan will be spread to overseas plants, to enhance the expertise and productivity of their employees.



(II) Sustainable Social Care

i. Philosophies and Social Responsibility Policies

Friendly communal relationship

Guided by the founder's teachings, of "Be industrious, honesty and upright," the Company strives to realize the management philosophy, "Harmony, innovation, service, and contribution," which includes honestly paying taxes, valuing environmental safety, and showing concern for employees, etc., and to fulfill its corporate social responsibility and give back to the community/ society by maintaining a good public image and corporate reputation.

Due to the permanent land connection between FTC and its neighboring communities, FTC has been endeavoring to maintain a good relationship with neighboring residents, stepping up communications with them and offering various assistances, including the maintenance of the community environment, sponsorship of charities, etc. Further, it has tried its best to expand the scope of its humanity concerns and responsibility that aims for the establishment of a harmonious community and co-prosperity between it and its neighboring community through prolonged and close attention of it, its relevant clubs and voluntary employees.

ii. Social Charity Measures

Through related activities organized by the Company and its 19 clubs organized by its employees, such as adopting roads of three villages for cleanup and bare land for afforestation, and participating in the community development and charities, the Company has cared for the local community and maintained friendly relationship and good interaction with them.

Over the years, the Company has continued to offer social care and assistance to vulnerable groups, donate to impoverished families and other vulnerable groups, be committed to education and charities.

(i) Education:

The Company has operated Formosa Taffeta Kindergarten for 39 years, which brings convenience, emotional security and benefits—subsidized tuition by a 50% discount—to parents. Besides employees' children, children living in the neighborhood also benefit from this measures; 58 children attended the kindergarten in 2018.

(ii) Enterprise road adoption

Since 2005, the Company has adopted 9.5 km of the road in the surrounding vicinity for cleanup activities every Friday to establish good neighboring ties with the community and ensure the cleanliness of the community by reducing the amount of dust and the spread of particulates; which annually took 8,112 hours (three hours per week of two employees from each of the 26 units.) According to the "Disposal Directions on Review of Air Pollutant Emission Increase offset for Development Activities by the EPA, Executive Yuan," promulgated on July 28th 2009, the amount of the annual reduced particulate and dust is 13.634 tons.



Kindergarten vegetable planting



Kindergarten Halloween activities



Kindergarten graduation ceremony





(iii) Adoption of bare lands for afforestation

The Company annually adopts 0.6620 hectares of bare lands since September, 2000 to give back to society through afforestation, beautification of the community environment, reduction of dust on the bare lands, and maximization of benefits of the afforestation.

(iv) Giving back to local communities – participation in social charities

No.	Type of Donation	Number of Events
1	Temple and festival activities in neighboring communities	13
2	Consultation for the neighborhood volunteer civil defense force	8
3	Welfare activities and celebrations organized by the Longevity Club of the Development Associations in the neighboring communities	14
4	Activities organized by community vulnerable group foundations	9
5	Donations to charities and events of neighboring schools and organizations	11
6	Sponsoring other environmental protection activities and events in neighboring communities	9
Total number of sponsoring events and donations made in 2018		64

Certificates of appreciation/merit for sponsoring or participating social charities in 2018:



Help with the Workforce Development Agency, under the Ministry of labor, in the inauguration ceremony for the agency's Huwei employment center and the manpower recruitment fair held by the center



Sponsorship for recreational camps for parents/offspring and teachers/students



Assumption of responsibility for environmental protection and sweeping of roads in Yunlin County



Donation to Mother's Day series events held by Yunlin County Government

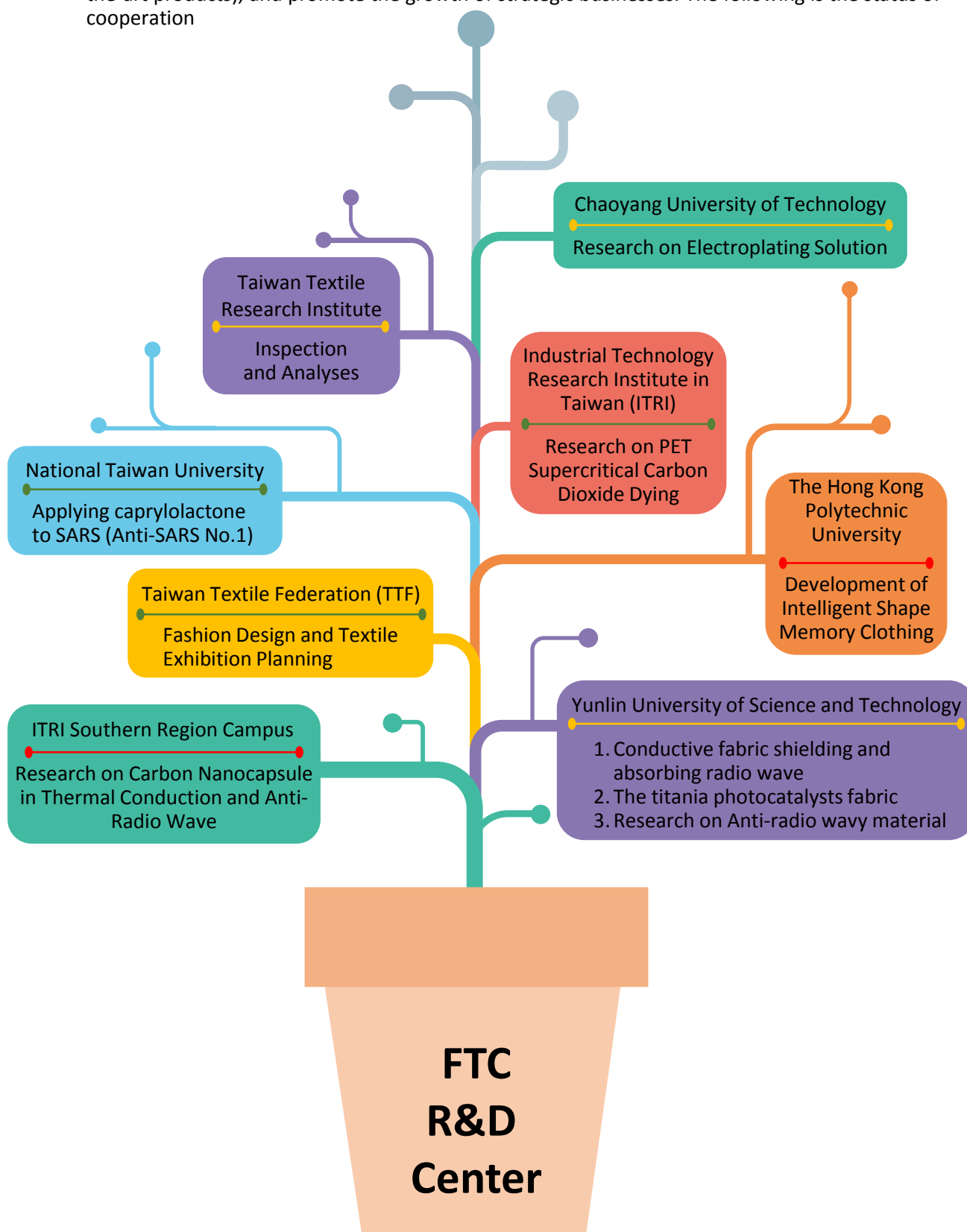


Donation to Father's Day series events held by Yunlin County Government



iii. External Industry, Academic, and Research Cooperation Projects in Previous Years

We engage in joint planning with some academic institutions and industrial associations to enhance our levels of techniques, production capacity, and management, strengthen our innovation capability, develop high value-added products with market potential (or state-of-the-art products), and promote the growth of strategic businesses. The following is the status of cooperation





Cooperative Partners	Project	Amount (NT\$)	Number of Participants	Duration
Department of Applied Chemistry, Chaoyang University of Technology	Composition analyses and formula development of stability reagents and chelating agents of electroless nickel plating solution	450,000	25	2014~2017
Department of Chemical and Materials Engineering, National Yunlin University of Science and Technology	Research on high functionality fabric coating technology and optimum production processes	500,000	25	2014~2015
	Research on water-repellent functionality of fabric by atmospheric pressure plasma and coating technology after fluorine-free water-repellent processing	500,000	30	2015~2017
Department and Graduate School of Visual Communication Design, National Yunlin University of Science and Technology	Application design of woven fabrics	350,000	20	2014~2016
Taiwan Textile Federation	Planning of garment design and textile exhibition	6,000,000	55	2014~2016
Taiwan Textile Research Institute	Testing and development of functional fabrics and protective fabrics	1,800,000	50	2014~2016

iv. Participation in External Associations

On top of effort for upgrading technology and competitiveness, the Company has also joined several industrial associations and taken part in major domestic and overseas seminars to keep up with the latest global development , promote interactions between FTC and association members and create cooperative opportunities.

Participating Associations		Qualification
<ul style="list-style-type: none"> ● Chinese Association for Industrial Technology Advancement ● Society for the Advancement of material and Process Engineering ● Textile Information Partnership 	<ul style="list-style-type: none"> ● Taiwan Technical Textiles Association ● Textile NET in Taiwan ● Cradle to Cradle Platform ● Taiwan Silk & Filament Weaving Industrial Web 	Member



Appendix

Appendix I GRI Content Index

GRI Standard	Disclosure		Page number(s) and/or URL(s)	Omission
Universal Standards				
GRI 102 : General Disclosures 2016	Organizational profile	102-1 Name of the organization	15	
		102-2 Activities, brands, products, and services	19-20, 102-105	
		102-3 Location of headquarters	15, 17	
		102-4 Location of operations	15-17	
		102-5 Ownership and legal form	15	
		102-6 Markets served	19	
		102-7 Scale of the organization	15-17, 21, 68-70	
		102-8 Information on employees and other workers	68-70	
		102-9 Supply chain	29-34	
		102-10 Significant changes to the organization and its supply chain	21	
		102-11 Precautionary Principle or approach	25-28	
		102-12 External initiatives	-	Commitment to CDP’s initiatives by responding to its questionnaire
		102-13 Membership of associations	92	
	Strategy	102-14 Statement from senior decision-maker	1-6 & Annual Report 91-94	
	Ethics and integrity	102-16 Values, principles, standards, and norms of behavior	1-6	
	Governance	102-18 Governance structure	18, 23	
	Stakeholder engagement	102-40 List of stakeholder groups	10	
		102-41 Collective bargaining agreements	-	None
		102-42 Identifying and selecting stakeholders	10	
		102-43 Approach to stakeholder engagement	10	

GRI Standard	Disclosure		Page number(s) and/or URL(s)	Omission
Universal Standards				
GRI 102 : General Disclosures 2016	Reporting practice	102-44 Key topics and concerns raised	10-12	
		102-45 Entities included in the consolidated financial statements	9, 16-17	
		102-46 Defining report content and topic Boundaries	9, 12	
		102-47 List of material topics	12	
		102-48 Restatements of information	9, 50	
		102-49 Changes in reporting	-	No obvious changes on topics and boundaries
		102-50 Reporting period	9	
		102-51 Date of most recent report	9	
		102-52 Reporting cycle	9	
		102-53 Contact point for questions regarding the report	9	
		102-54 Claims of reporting in accordance with the GRI Standards	9	
		102-55 GRI content index	95-99	
		102-56 External assurance	100-101	
		Topic-specific Standards		
GRI 200 : Economic				
Economic Performance				
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary		21	
	103-2 The management approach and its components		21	
	103-3 Evaluation of the management approach		21	
GRI 201 : Economic Performance 2016	201-1 Direct economic value generated and distributed		21	
	201-3 Defined benefit plan obligations and other retirement plans		Annual Report 173	
	201-4 Financial assistance received from government		21	

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
Procurement Practices			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	30	
	103-2 The management approach and its components	30-34	
	103-3 Evaluation of the management approach	30-34	
GRI 204: Procurement Practices	204-1 Proportion of spending on local suppliers	30-32	
GRI 300: Environmental			
Materials			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	33	
	103-2 The management approach and its components	33, 55-59	
	103-3 Evaluation of the management approach	33	
GRI 301: Materials	301-2 Recycled input materials used	34	
Energy			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	43-44	
	103-2 The management approach and its components	43-44	
	103-3 Evaluation of the management approach	47-48, 53	
GRI 302 : Energy	302-1 Energy consumption within the organization	47-48	
	302-3 Energy intensity	47	
Water			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	43-44	
	103-2 The management approach and its components	43-44	
	103-3 Evaluation of the management approach	43, 53	
GRI 303 : Water	303-1 Interactions with water as a shared resource	50	
	303-3 Water withdrawal	51-52	
Emissions			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	45	
	103-2 The management approach and its components	43,45	
	103-3 Evaluation of the management approach	48-49, 53	
GRI 305: Emissions	305-1 Direct (Scope 1) GHG emissions	49	
	305-2 Energy indirect (Scope 2) GHG emissions	49	
	305-4 GHG emissions intensity	49	
	305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	48	

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
Effluents and Waste			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	43-45	
	103-2 The management approach and its components	43-45	
	103-3 Evaluation of the management approach	52	
GRI 306: Effluents and Waste	306-1 Water discharge by quality and destination	51	
	306-3 Significant spills	-	No relevant event
Supplier Environmental Assessment			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary		Assessment is omitted in that main raw materials, including gasoline/diesel oil, polyamine/polyester filament , polyethylene, carbon fiber, wafers, and coal, etc., are entirely supplied by affiliates of Formosa Plastics Groups, all of which are listed firms with publication of CSR reports and rigorous management of sustainability targets. As for the auxiliary materials, they are mostly chemicals, supplied by small and medium enterprises. "Passing Bluesign Certification is a Positive." seminar was held on September 5, 2017, and 36 SME suppliers were invited to attend. The growth in the proportion of Bluesign-certified products was not pretty obvious—from 51.6% in 2017 to 52.2% in 2018-- , which can mainly attribute to protracted process and high cost for certification. Since 2018, new suppliers with environmental assessment have received priority consideration in adoption, which is expected to deepen impacts of green materials and green products.
	103-2 The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 308: Supplier Environmental Assessment	308-1 New suppliers that were screened using environmental criteria		
GRI 400: Social			
Employment			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	67	
	103-2 The management approach and its components	67	
	103-3 Evaluation of the management approach	68-70, 83	

GRI Standard	Disclosure	Page number(s) and/or URL(s)	Omission
GRI 401: Employment	401-1 New employee hires and employee turnover	68-70, 83	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	84	
Occupational Health and Safety			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	71	
	103-2 The management approach and its components	71, 73-77, 79, 81-82	
	103-3 Evaluation of the management approach	71, 72, 75-78, 80-82	
GRI 403: Occupational Health and Safety	403-1 Occupational health and safety management system	71	
	403-2 Hazard identification, risk assessment, and incident investigation	80-81	No injury and work-related fatalities for all workers (excluding employees)
	403-3 Occupational health services	72	
Training and Education			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	85-86	
	103-2 The management approach and its components	82, 85-86	
	103-3 Evaluation of the management approach	86-88	
GRI 404: Training and Education	404-3 Percentage of employees receiving regular performance and career development reviews	82	
Customer Health and Safety			
GRI 103 : Management Approach	103-1 Explanation of the material topic and its Boundary	27, 62	
	103-2 The management approach and its components	27, 62	
	103-3 Evaluation of the management approach	63	
GRI 416: Customer Health and Safety	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	-	No relevant event

Appendix II SGS Assurance Statement



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE FORMOSA TAFFETA CO., LTD.'S CORPORATE SOCIAL RESPONSIBILITY REPORT FOR 2018

NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Formosa Taffeta Co., Ltd. (hereinafter referred to as FTC) to conduct an independent assurance of the Corporate Social Responsibility Report for 2018 (hereinafter referred to as CSR Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in this report.

The information in the FTC's CSR Report of 2018 and its presentation are the responsibility of the management of FTC. SGS has not been involved in the preparation of any of the material included in FTC's CSR Report of 2018.

Our responsibility is to express an opinion on the report content within the scope of verification with the intention to inform all FTC's stakeholders.

The SGS protocols are based upon internationally recognized guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for accuracy and reliability and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

This report has been assured using our protocols for:

- AA1000 Assurance Standard (2008) Type 1 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2008) at a moderate level of scrutiny; and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with.

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant. Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of this assurance process.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from FTC, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

VERIFICATION/ ASSURANCE OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within FTC's CSR Report of 2018 verified is accurate, reliable and provides a fair and balanced representation of FTC sustainability activities in 01/01/2018 to 12/31/2018.

The assurance team is of the opinion that the Report can be used by the Reporting Organisation's Stakeholders. We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting. In our opinion, the contents of the report meet the requirements of GRI Standards in accordance with Core Option and AA1000 Assurance Standard (2008) Type 1, Moderate level assurance.

AA1000 ACCOUNTABILITY PRINCIPLES (2008) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

Inclusivity

FTC has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns.

Materiality

FTC has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

Responsiveness

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS

The report, FTC's CSR Report of 2018, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, FTC is expected to initiate environmental due diligence as early as possible in the development of a new relationship with a supplier. It is recommended to inform stakeholders about the percentage of suppliers selected or contracted subject to due diligence processes for environmental impacts. Also, it is proposed to explain the mechanisms for evaluating the effectiveness of the management approach specifically. More descriptions about the results of the evaluation of the management approach and specific actions aimed at improving performance are also encouraged.

Signed:

For and on behalf of SGS Taiwan Ltd.



David Huang
Senior Director
Taipei, Taiwan
17 June, 2019
WWW.SGS.COM



AA1000
Licensed Assurance Provider
000-8

Appendix III Main Brands

Product Name	Usage/Features
 abletex® Microporous Breathable Water-proof Fabric	<p>abletex® is a high-performance, breathable, and water-proof laminated fabric. Our Company uses the combination of high-tech micro-porous breathable water-proof PU membrane and various materials to create a durability that offers a new generation of high-performance, breathable, and water-proof fabric. The abletex® collection has high water-proof rating of 10,000 mm H₂O and high breathability of 6000 g/m²/24hr (by JIS L1099-A1) or more. The fabric can keep you dry and comfortable under any weather conditions and thus is the best choice for cloth used in outdoor activities and leisurewear.</p>
 BOOMETEX™ Next Generation of Green Products	<p>Under globalization and resource depletion, the Company feels responsible for environmental protection and is thus committed to developing various eco-friendly fabrics with the concept of recycling and environmental protection. Using PET bottles or recycled polyester materials to make polyamide and polyester fiber products helps reduce resource and energy consumption, as well as CO₂ emissions, and is regarded as the next generation of green eco-friendly products. The extreme delicate texture combined with various special rework processes, e.g. PFOA/PFOS Free water repellent, complies with EU 2006/122/EC standards, including functions like water-proof, wind-proof, down-proof, breathable, quick-dry, etc.</p> <p>Applications: Athletic and leisurewear, e.g. windbreakers, raincoats, and down jackets.</p>
 Caladans™ Cloudy Dyed Fabric	<p>Caladans™ fabrics are produced via a special technique resulting in shadowy prints simulating a "cloud-dye" effect. They can be treated with a crinkle finish to enrich the texture and touch, thus rivaling expensive fabrics. Airy, soft, lightweight, and stylish, Caladans™ fabrics can be applied to diverse design styles, from high-end fashion to sportswear, acting like the icing on the cake.</p>
 FONEWR Nano® Super Durable Water Repellent Fabric	<p>Produced by Nano technology, FONEWR Nano® fabric features super durable, water repellent, oil repellent, self-cleansing, and anti-staining properties with a Nano surface structure. The preliminary water repellent rating can reach 100(AATCC-22) and the oil repellent rating to 4 degrees (AATCC-118); even after 100 washes, the water repellent rating still reaches 80, and the oil repellent rating reaches 3 degrees, thus showing excellent dry-clean durability. The fabric can work with microfiber materials with a double weave to create an easy care feature. Regardless of the activity, users can stay clean, dry, and comfortable. It can even work with other processes, such as antibacterial or UV-protection processing, to further increase the fabric's value.</p>
 Microfeel® Microfeel Fabric	<p>Microfeel® fabric is made from polyamide or polyester microfibers. The thickness of such fiber is less than 1/100 of the diameter of a human hair, which provides a fine touch and soft texture thanks to the extremely fine thickness of the fabric. With the excellent capillary action of the microfiber, it is a superb breathable and quick-drying material when coordinated with the wicking process.</p>

Product Name	Usage/Features						
 <p>Nanodermis* Santiny and Skin Friendly Fabric</p>	<p>Made by the Company's latest special processing technology, Nanodermis* products can provide Nano-structure to fabric, creating a delicate and soft touch and a fabric surface that looks like natural materials. The processing technology can be applied to a variety of polyamide and polyester fabrics – especially on ultra-fine fiber fabrics to provide a more delicate touch. Key applications: Jackets, down apparel, sleeping bags, clothing for dust-free/sterile room, etc.</p>						
 <p>PERMACOOL™ Cooling Fabric</p>	<p>In recent years, we have all been facing worsening global warming and greenhouse effects with extreme cold and hot weather on the rise. Cooling and energy conservation fabrics have been widely promoted among eco-friendly fabrics, which provide wearers the full coolness and comfort of the fabric. Our cooling fabric is made from special cooling fiber materials with a textured design using high-level post-processing technology. This series of products will generate an instant cooling feeling (Q-max) of 0.17 W/m² or more when contacting the skin. The water-absorbing and quick-dry properties can transmit sweat quickly from the skin's surface to outside the fabric through capillary action and diffusion. It provides consumers with dry, comfortable, moisture-absorbing, and sweat-releasing functions even in scorching hot weather.</p>						
 <p>PERMADRY® Quick-drying Fabric</p>	<p>PERMADRY® adopts a special cross section synthetic fiber or ultra-fine fiber, which is made using high-level processing technology. This series of products can absorb moisture and dry quickly. It has high permeability and launderability, which is an excellent quick-drying and durable material. When doing sports or leisure activities, the water-absorbing and quick-dry properties can quickly transmit sweat from the skin's surface to outside the fabric through capillary action and diffusion. It provides consumers with dry, comfortable, moisture absorbing, and sweat releasing functions even in scorching hot weather.</p>						
 <p>SmarYa™ Memory Smart Fabric</p>	<p>SmarYa™ fabric is different from general fabrics in that SmarYa™ will maintain its shape even after being washed in hot water or dried by home dryers. Wrinkled fabrics will also be able to restore their original shape using the above method. If the fabric was originally creased, then the creases will also be maintained. Thanks to the Thermally Induced Shape Memory property of the product, the fabric offers the convenience of easy care.</p> <p>Product properties:</p> <table> <tr> <td>1. Form memory</td><td>4. Launderability</td></tr> <tr> <td>2. Size invariability</td><td>5. Pilling resistant</td></tr> <tr> <td>3. Excellent touch and moisture absorption</td><td>6. Shape retention (memory)</td></tr> </table>	1. Form memory	4. Launderability	2. Size invariability	5. Pilling resistant	3. Excellent touch and moisture absorption	6. Shape retention (memory)
1. Form memory	4. Launderability						
2. Size invariability	5. Pilling resistant						
3. Excellent touch and moisture absorption	6. Shape retention (memory)						
 <p>SUN-ECO® Nano Photocatalytic Antimicrobial & Deodorizing Fabric</p>	<p>SUN-ECO® is a special functional fabric resulting from the TiO₂ photocatalyst dual deodorant mechanism, which contains both deodorant and anti-bacteria effects. It can effectively absorb the odors of ammonia, hydrogen sulfide, ammonia trimethyl, methyl mercaptan, cigarettes, and 2-norenal and further decompose them into H₂O and CO₂ with more anti-bacteria effect. After multiple washes, the fabric will still maintain its antibacterial and deodorizing effects. SUN-ECO® is an eco-friendly fabric with the longest effectiveness and most safety.</p>						

Product Name	Usage/Features
 <p>Trans-Uno[®] One-way Moisture Transfer Fabric</p>	<p>The polyester/polyamide one-way moisture transfer fabric can quickly diffuse sweat to outside of the fabric from the skin's surface and reduce the viscous sense between the wet clothes and skin, as well as the uncomfortable feeling of cold skin, so that the wearer can continuously feel dry and comfortable for a long time. Furthermore, the sweat is transmitted to outside of the fabric one-way so the air drying time can be shortened.</p>
 <p>Warmth Retaining Fabric</p>	<p>Our Company has leveraged far infrared material to design and develop the lightweight far infrared functional fabric, with the emissivity of far infrared reaching as high as 80%. The fabric can absorb the energy of visible light and short waves emitted from the human body, convert it into the far infrared, emit the "living light" (4~14 μm in wavelength), which is the most beneficial light to the human body, and possess the warmth retaining function. Applications: Sports apparel, down apparel, sleeping bags, and lining cloth.</p>
 <p>Eco-friendly Coating Fabric</p>	<p>Our water-soluble PU & Acryl coating fabrics do not include the organic solvent that may cause harm to the environment. Instead, it uses a C6 water repellent agent without PFOS or PFOA. It is an eco-friendly concept product that can be used in umbrellas, down-proof leisure apparel, and snow clothing.</p>
 <p>PERMAWARM</p>	<p>Our Company uses forward-looking processing technology to develop new and soft thermal insulation fabric. Its compound structure (trace metal element + carbon material) will turn environmental energy and body temperature into heat energy to achieve real thermal insulation. It is the best new technological material for warm clothing in cold winters.</p>
 <p>e-decay[™] 持久性抗靜電織物</p>	<p>Our Company uses advanced durable high-specialty anti-static fibers to develop fabric that can effectively reduce static accumulation. It can be coordinated with water repellent processing, and the friction voltage will still remain under 1000 Volt after multiple washes. The fabric does not easily absorb dust caused by static while being worn in dry weather, thus reducing that uncomfortable feeling while taking off the clothes. Major applications include sports and leisure clothing, down apparel, jackets, various garment linings, etc.</p>
 <p>UVoutex[®]</p>	<p>Wearing the UVoutex[®] series of fabric can effectively protect the skin from harmful ultraviolet rays. The fabric has launderability properties, and its protection is not affected by color or times of washing. Its UPF rating can be as high as 30+ (AS/NZS 4399:1996). Applications: Sportswear, leisure jackets, sun umbrellas, hats, etc.</p>
 <p>Sansquito[™]</p>	<p>Sansquito[™]-Mosquito repellent processing fabrics are produced by special post processing technology. The natural pyrethrin extract can effectively repel mosquitoes. Sansquito[™] fabric will not cause skin allergies or serious reactions and is a safe mosquito repellent processed fabric. Mosquito repellent effect remains even after being washed 25 times.</p>

Product Name	Usage/Features				
	<p>Hi-Sett* refers to products where our Company uses microfibers with a high-end weaving process and excellent dyeing and finishing techniques to give the fabric high-performance waterproof functions without coating. The fabric contains soft, breathable, UV resistance, and windbreaker features. It is a high-quality and eco-friendly fabric.</p>				
	<p>M2PTEx[®]e adopts electroless plating technology to deposit metals like copper and nickel on polyester and polyamide fabrics. It is a metalized conductive fabric with excellent softness and flexibility and outstanding anti-electromagnetic interference capacity. The M2PTExe conductive woven fabric line has passed RoHS (2002/95/EC) standard, and its shielding capacity of 50dB+ has been certified by an internationally recognized inspection organization.</p> <table border="0"> <thead> <tr> <th data-bbox="587 831 986 864">Product Series:</th><th data-bbox="1007 831 1390 864">Applications</th></tr> </thead> <tbody> <tr> <td data-bbox="616 869 986 1249"> <ul style="list-style-type: none"> - Conductive woven fabric with various plastic surface colors - Plastic-coated, colored conductive fabric - Thermal adhesive conductive fabrics - Single/double-sided fire retardant conductive fabric & flame-resistant thermal adhesive conductive fabric (UL-94V0) </td><td data-bbox="1035 869 1390 1283"> <ul style="list-style-type: none"> - Anti-electromagnetic interference for precision instruments - PC EMI shielding material - Conductive gasket - Conductive tape - Anti-electro detection - OA work suit - Architectural shielding material/curtain - Anti-electromagnetic interference for communication equipment </td></tr> </tbody> </table>	Product Series:	Applications	<ul style="list-style-type: none"> - Conductive woven fabric with various plastic surface colors - Plastic-coated, colored conductive fabric - Thermal adhesive conductive fabrics - Single/double-sided fire retardant conductive fabric & flame-resistant thermal adhesive conductive fabric (UL-94V0) 	<ul style="list-style-type: none"> - Anti-electromagnetic interference for precision instruments - PC EMI shielding material - Conductive gasket - Conductive tape - Anti-electro detection - OA work suit - Architectural shielding material/curtain - Anti-electromagnetic interference for communication equipment
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	<p>To provide clients with products made from eco-friendly, energy conserving, low-carbon emission, and environmentally friendly production processes, the Company has introduced supercritical CO₂ water-free dyeing processes and procured relevant equipment and integrated it into the production process, which was officially utilized in 2014.</p> <p>The benefits of products made from the supercritical CO₂ water-free dyeing processes are:</p> <ol style="list-style-type: none"> 1. Zero water resource consumption 2. Zero wastewater discharge 3. Reduced CO₂ emissions 4. Auxiliary agents are no longer required 5. Energy conservation (Reduced thermal consumption in dyeing and drying) 				

Appendix IV FTC's Certificates of Eco-friendly Production Processes & Products

- ◆ Oeko-Tex® Standard 100
- ◆ GOTS Organic Cotton (Control Union Certifications)
- ◆ OE Organic Cotton (Control Union Certifications)
- ◆ GRS Polyester Recycle Standards (Control Union Certifications)
- ◆ Greenhouse Gases Emissions Certification Opinion Statement (ISO 14064-1)
- ◆ Occupational Health and Safety, Assessment Series (OHSAS 18001:2007)
- ◆ Taiwan Occupational Safety and Health, Management System (TOHMAS Certificate)
- ◆ Environment Management System (ISO 14001:2004)
- ◆ Quality Management System (ISO 9001:2008)
- ◆ bluesign® Standard Certificate
- ◆ Energy Management System (ISO 50001)





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