

FORMOSA PLASTICS GROUP

Introduction



Formosa Ha-Tinh Steel Corporation—Respecting nature and creating friendly environment



Managing an extraordinary company which has respect
for Mother Nature and emphasize eco-friendliness

CONTENTS

.....

- 1 History of Development
- 5 Organization and Operational Structure
- 7 Major Businesses in Taiwan
- 12 The Sixth Naphtha Cracker Project
- 22 The Sixth Naphtha Cracker Project Investments
- 23 Environmental Protection & Circular Economy
- 25 Overseas Production
- 31 Education and Medical Care
- 35 Major Products and Sales Departments
- 45 Organization Structures
- 51 2017 Financial Highlights



Formosa Ha-Tinh Steel Corporation:

Respecting nature and creating friendly environment

The second blast furnace of the steel mill of Formosa Ha-Tinh Steel Corporation smoothly in 2018, which is the largest overseas direct investment project in Vietnam as well as the first steel mill with consistent operation. Through the combination of relevant industries of midstream and downstream, we drive the development of domestic steel industrial chain to make aggressive contribution for the gross domestic product and industrial development of Vietnam. As pursuing for the economic development and coexistence and mutual prosperity of natural environment, regardless of water quality, air, ecology and the health of employees and residents, we are making our best effort to protect and care about our environment for the purpose mutual benefit of industrial development of environment protection.

History of Development

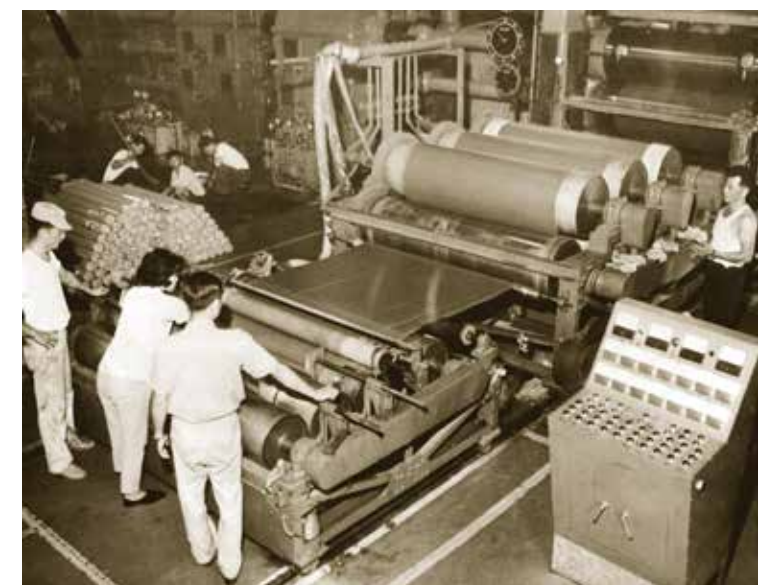


In the 1957, the ox-towing carts were used to transport the PVC resins to Kaohsiung Port for exporting to other countries.

Formosa Plastics Corporation was founded in 1954. At start-up in 1957, its plant produced 4 tons per day of polyvinyl chloride (PVC) resin, the smallest PVC plant in the world at that time. With such a small production volume, product costs were comparatively high. Due to the lack of a local downstream industrial base, sales remained stagnant, resulting in the stockpiling of finished goods. To ameliorate this situation, it was decided to increase production volume in order to lower unit costs. Simultaneously, manufacturing plants were founded to consume PVC resins, and the export of products was thus promoted.

PVC production volume went up from 4 tons per day to 40 tons per day. At the same time, plans were made to construct downstream processing facilities to help consume the PVC resins. Nan Ya Plastics Corporation was set up in 1958 to produce secondary products such as PVC pipes, PVC film, and PVC leather. Soon afterwards, the New Eastern Corporation was formed to help consume Nan Ya's products by making such tertiary products as handbags, luggage, shoes, curtains, raincoats, and inflatables for the export market. The strategy was enormously successful in solving the problem of slow sales of PVC resins. With the following expansions of Formosa Plastics Group and the encouragement of the founding of new businesses by ex-employees of New Eastern Corporation, an incomparably lucrative tertiary processing industry was created. This led to the prosperous development of the local petrochemical industry and contributed significantly to the economic development of Taiwan.

Since it has established a solid base its plastic material and manufacturing, the Formosa Plastics Group started to operate diversified industries. In 1965 it set up Formosa Chemicals and Fibre Corporation (FCFC) to produce rayon staple

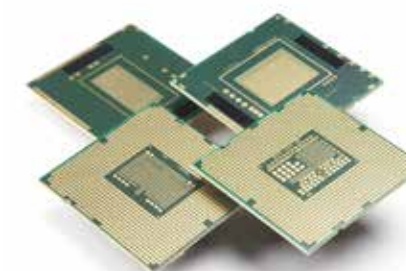


Nan Ya Plastics Processing Corporation was founded to establish a secondary processing industry of plastics.

fiber, yarn, fabric, and garments from wood materials left on the mountains after lumbering. Nan Ya expanded in 1968, setting up plants to produce polyester staple fibre. The same year Formosa Plastics Corporation (FPC) set up plants to produce acrylic fiber. In 1974, FCFC added nylon filament and fabric to its product lines. To offer better service to downstream customers, large-scale dyeing and finishing plants were set up to add to the value of the textile products. The companies were the only ones in Taiwan that produced four kinds of fibers and offered finishing and dyeing services. The Formosa Plastics Group had become one of the largest fiber producers in the world.



FCFC Nylon fiber product



Nan Ya set up a PCB plant in 1984, the first step FPG took to cross into the electronics industry.



The first plant of the fledgling Formosa Plastics Group - the old Kaohsiung factory



In view of the rapid development of the electronics and information industries in Taiwan, and with major components greatly relying on imports, Nan Ya began investing in 1984 in the manufacture of printed circuit boards and copper-clad laminates as the first step in participating in the electronics industry. NanYa had been in the petrochemical, plastic, and fiber textile industries for a long time and was unfamiliar with the electronics and information technology industries.

However, the printed circuit board was still recognized as the most basic component of the electronics and information technology industries as well as having a long product life and few variations, and thus was selected for market entry and production. The key to success would lie in the control of quality, manufacturing processes and costs, which all involve management expertise on the part of the Group. Through ongoing involvement in the industry, the Group became familiar with business operations of the electronics and information technology industries and sought future expansions accordingly. After more than 10 years of assiduous efforts, the Group established a successful vertically-integrated



Wan Chan-yung Memorial Park in Mailiao Ecology Industrial Park

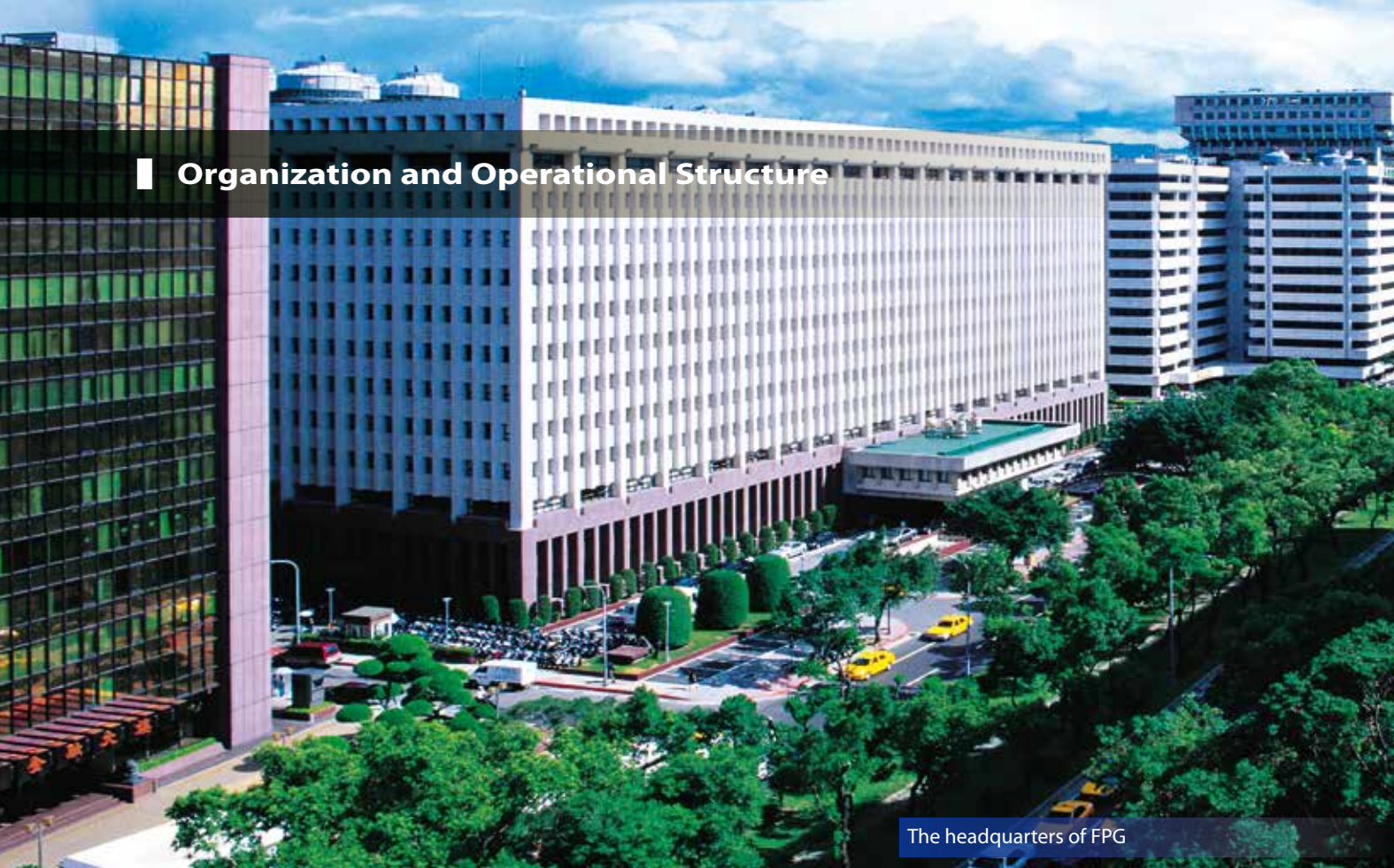
production of electronics raw materials and implemented further investments in upstream key components such as dynamic random access memory chips (DRAMs) and wafers. This move significantly contributed to the self-sufficiency of the nation's electronics and information industries.

Observing Taiwan's chronic shortage of upstream petrochemical materials, in 1973 the Formosa Plastics Group proposed the Naphtha Cracking Project. Following several rejections by the government, final approval was obtained in 1986 to build the Sixth Naphtha Cracker Project. In coordination with this giant undertaking, Formosa Petrochemical Corporation was founded in 1992 to take charge of the construction of the oil refinery, naphtha cracker plant and co-generation plant. All three plants have since been completed and begun manufacturing operations. This achievement, as well as the continuous output from petrochemical related factories of affiliated companies, has realized the value of vertical integration of the Sixth Naphtha Cracker Project and has advanced the operational abilities of the Group.

With over 60 years of development, the Formosa Plastics Group is now one of the largest private enterprises in Taiwan. The Group includes Formosa Plastics Corporation, Nan Ya Plastics Corporation, Formosa Chemicals & Fibre Corporation, Formosa Petrochemical Corporation, Formosa Ha Tinh Steel Corporation, and more than 100 other investments in Taiwan, the United States, China, Vietnam, Philippine, and Indonesia, in addition to several large educational and medical organizations.



Organization and Operational Structure



The headquarters of FPG

To pursue the rationalization of management, the Group Administration, functioning as a professional staff and service unit, was set up to coordinate resources and perform the cooperative function in the Group. In addition to pursuing management implementation and improvement, the Office is also in charge of group-wide strategy, computerized management systems, business auditing, material procurement, financing, engineering construction, legal affairs and public relations. Each group company maintains a President's Office, each division a Vice President's Office and each plant a Plant Manager's Office, constituting a complete vertical line of staff organization. In addition, each company has its own accounting, administration, warehousing and shipping, technical and labor safety and health departments.

To improve efficiency, the following concepts have been implemented:

1. Business Division System:

To prevent the growth of the Companies from hampering the efficiency of operations, the Group realized the division system to correspond to the principles of producing and marketing unification, as well as responsible operation. The Group is composed of several divisions, with the purpose of arranging its own sales and production operations and set its own targets according to the needs of its organization, manufacturing processes, and product lines. In addition, the profit center concept is implemented throughout. Each center is grouped by plant or by product, with independent profit and loss statements. Through comparative analysis of financial reports, costs and revenues, areas for improvement can be easily identified for further operational rationalization.

2. Management by Objective:

To ascertain the effectiveness of each department, we place great importance on the management of costs and performance. By analyzing the difference between the objective and actual performance, we can identify issues causing the gap, organize improvement measures and achieve the goals of cost control and financial performance. The key lies in the unit cost analysis, whereby each element in product cost is deeply analyzed and cost objectives established. Improvement is achieved by finding solutions to the difference between actual costs and objective costs. Once an improvement is implemented, a new objective cost is set, leading to the most rational cost structure possible.

3. Individual Performance Reward System:

To rationalize rewards for employees' efforts and to make them feel that they are integral to the Company's success, we implement an Individual Performance Reward System for all levels of employees. Bonuses are given as a reward to an employee in proportion to performance. At the same time, performance is also used as a factor in each employee's annual evaluation. This system is designed to promote employees' work quality and production efficiency.



To rationalize management and pursue even greater operational efficiency, all of FPG's management systems are completely computerized.

In order to achieve sustainable development and high growth, FPG engages in business diversification and multilateral development. At the same time, to implement managerial and operational rationalization in the pursuit of higher business performance, various management systems such as materials, production, operation, engineering, human resources, finance, performance analysis, and even medical affairs have been fully computerized and an online real-time operation is implemented. Our production plants are also gradually moving toward intellectualization by extensively collecting critical production data and performing data analysis to determine the conditions for adopting an optimized production process. Simultaneously, AI technology is introduced to instantly improve and enhance production efficiency and product quality.

In response to technological evolution, we are constantly introducing new thoughts and new technologies on top of our solid management foundation to enhance our competitive edge and grasp new opportunities in the ever-changing global market to pursue sustainable development.

Major Businesses in Taiwan



Formosa Plastics Group Mailiao Ecology Industrial Park

In addition to Formosa Plastics Corporation, Nan Ya Plastics Corporation, Formosa Chemicals & Fibre Corporation and Formosa Petrochemical Corporation, the Formosa Plastics Group in Taiwan includes more than 50 other companies, including Formosa Heavy Industries Corporation, Formosa Sumco Technology Corporation, Nanya Technology Corporation, Nan Ya PCB Corporation, Nan Ya Photonics Incorporation, Formosa Biomedical Technology Corporation. We are engaged in such businesses as oil refining, petrochemicals, plastic raw materials, secondary processing of plastics, fiber and textile, electronic materials, machinery, and transportation.

Oil Refining, Petrochemicals and Plastic Raw Materials

At present, Formosa Petrochemical Corporation runs Taiwan's only privately owned oil refinery and naphtha cracker plant. In September 2000, gasoline and diesel produced in the refinery began to be sold in gas stations across Taiwan, marking FPCC's formal entry into the gasoline market. By December 2017, the company had already taken a 19.6% share of that market.

Construction of Formosa Petrochemical's first and second naphtha cracker plants were completed in 1999 and 2000 respectively. Plant No.3 was completed in 2007; Formosa Petrochemical's total ethylene production capacity currently stands at 2.9 million tons per year.



FPCC Oil Refinery in Mailiao Ecology Industrial Park

At present, the Formosa Plastics Group's total annual PVC resin capacity has reached 3.237 million metric tons, ranking it one of the largest PVC producer in the world.

Nan Ya Plastics produces PVC pipes, PVC leather and film, etc. It is the world's largest secondary plastics processor.

Aside from ethylene, propylene, PVC resin and plastic processing, we also produce dozens of petrochemical intermediate materials, including liquid caustic soda, VCM, EDC, MBS, POM, HDPE, EVA, LDPE, LLDPE, PP, AN, MMA, MAA, ECH, MTBE, B-1, DEHP, AE, NBA, ABS, PS, PC, PTA, PTMG, PIA and SM. Each of these products enjoys a leading position in its respective market.



NPC 2-EH Plant in Mailiao Ecology Industrial Park



FPC is one of the world's largest PVC producers

Fibers, textiles and carpets

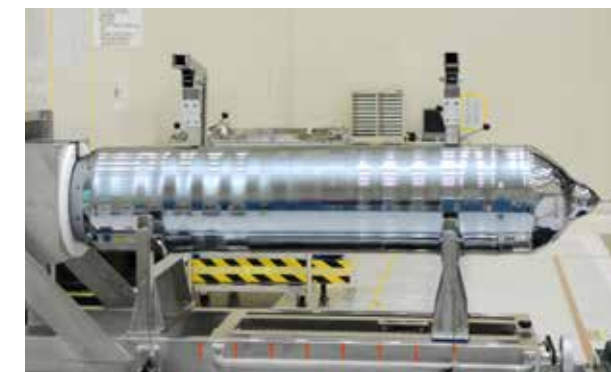
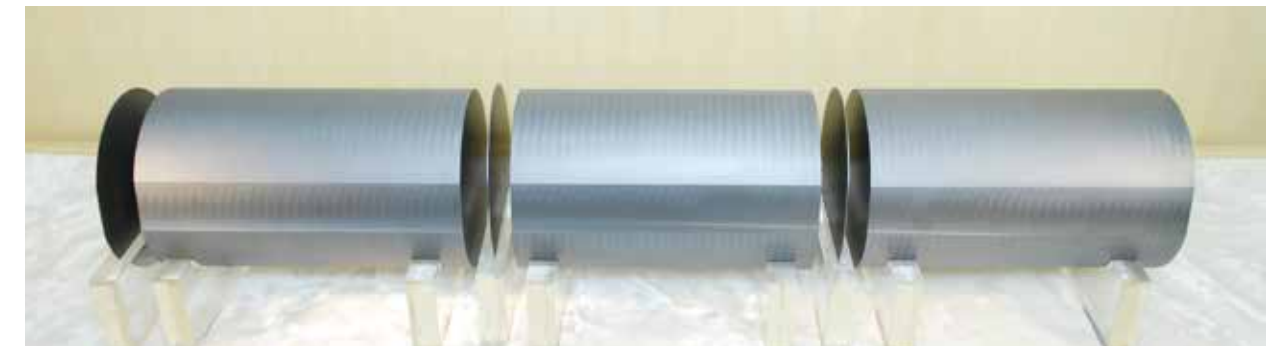
At present, FPG produces six types of fibers: polyester, nylon, rayon, carbon, fiberglass and spandex. Production output is among the world's highest for most of these fibers.

FPG has also become one of the largest textile and dyeing producers in Taiwan, producing different kinds of greige yarn, dyed yarn, greige fabric and dyed fabric.

The carpet factory is currently one of the largest single-product business in Asia. With over 70% of its raw materials are supplied by subsidiaries within the Group, the factory possesses a self-production system from raw materials to products and is equipped with the most up-to-date computer-controlled embroidering and dye-transfer systems. It has the capability to produce finely- patterned jacquard woven carpet tiles, broadloom and artificial turf. These products have been received positive customer acceptance world-wide.



Available in various with high-value added manmade filaments



Formosa Sumco Technology Corporation

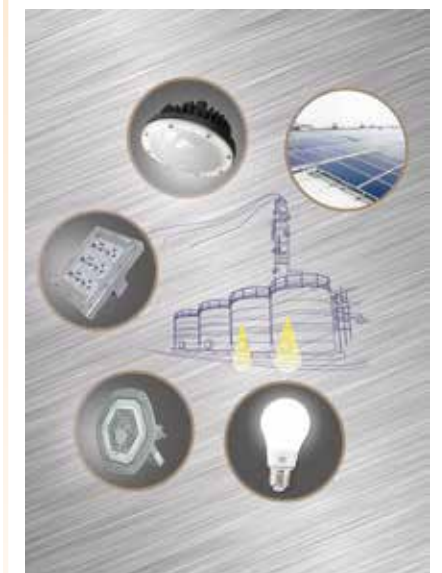
Electronic Materials

FPG has established a vertically integrated production system ranging from printed circuit boards, copper-clad laminates to upstream products such as epoxy resin, bisphenol-A, copper foil, glass fiber cloth and yarn.

Meanwhile, the Group has made additional investments to manufacture basic computer components such as DRAMs, wafers and LEDs. Completion of these projects will further enhance the self-sufficiency of Taiwan's computer and information systems industries.



Nan Ya Copper foil



Nan Ya LED product

Machinery Products

As the largest machinery shop in Taiwan, FPG's products and services include co-generation power plant, automated warehousing systems, refinery and petrochemical equipments, heavy load transportation and installation, gear reducers and large precision gears, industrial rollers, linings, metal roll electroplating and electropolishing

Transportation

In addition to Formosa Fairway Corporation, Formosa Plastics Transport Corporation, Formosa Petrochemical Transportation Corporation, and Su Hua Transport Corporation in 1981, we established the first chemical tanker fleet in Taiwan. This fleet was expanded to meet the needs of transportation of mass amounts of raw materials to and from the Sixth Naphtha Cracker Project, such as oil products, petrochemical materials, and coal for the group's power plant. It currently forms a huge self-owned fleet of 65 ships, including 16 highly advanced chemical/oil tankers, 11 oil product tankers, 9 crude oil tankers (ranging from 280,000 to 300,000 tons), 20 bulk carriers (ranging from 37,000 to 205,000 tons), 2 gas carriers and 7 container ships.



The Sixth Naphtha Cracker Project

A land expansion project that elevates national competitiveness.



■ The Sixth Naphtha Cracker Project



Total occupied area **2,603** hectares

Total Investment US\$**27.84** billion

As noted earlier, to alleviate Taiwan's long-term shortage of basic petrochemical materials that hindered the development of midstream and downstream petrochemical industries, Formosa Plastics Group proposed the Sixth Naphtha Cracker Project for several times, beginning in 1973. It was eventually approved in 1986, resulting in the Sixth Naphtha Cracker Project that we see today.

Site selection was the first issue faced after project approval. The first site selected for the project was a 280-hectare property in Lizi, Yi-Lan. Due to environmental objections at that site, another site in Guanyin, Taoyuan was selected in 1988. Similar reasons then drove subsequent site selections at AuKu, ChiaYi and TaiShi, Yunlin. In 1991, after resolving a couple of problems and changes, a final selection was made to locate the project at Mailiao, Yunlin.

The Mailiao Zone and the Haifong Zone of the project were established at the estuary of Chuoshui Creek at the northern end of Yunlin County, with the total length of 8 kilometers from south to north, and extension 4 kilometers out from the coastline, with most of the land below the sea level. The Cracker Project required massive land reclamation efforts to improve the geographical character and to shore up the foundation for plant construction, eventually creating 2,255 hectares of new land with the waterway segregated from the fishery farms along the coast.

Mailiao is located in a region that is commonly dubbed “head of the windstorm and end of the waterfowl,” with the northeast monsoon blowing half of the year. Inconvenient transportation and poor weather made the reclamation work doubly formidable.

The Project includes: oil refinery plants with capacity to refine 25 million tons of crude oil annually, naphtha cracker plants for producing 2.94 million tons ethylene per year, and other petrochemical plants, heavy machinery plants, a co-generation plant and the Mailiao Industrial Harbor. A thermal power plant has been connected into the Taiwan Power Company (TPC) electrical grid to help alleviate the serious power shortage in Taiwan.

The total investment of the Sixth Naphtha Cracker Project (including the industrial harbor and the power plant) is US\$27.84

billion. All 54 plants that comprise the Project have been completed and have begun production.

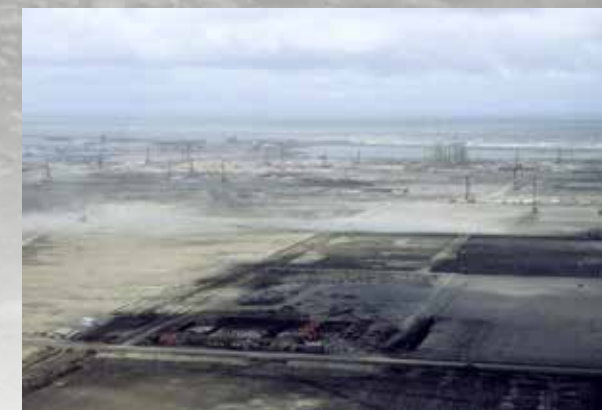
With the completion of the Project, Taiwan’s ethylene self-sufficiency ratio was raised to over 100% in 2017 from 38% in 1994, and the annual increment on production values has reached US\$40.45 billion. The Project has increased the government annual tax revenues by over US\$603 million.

Due to successful advanced planning, the Project has efficiently reduced operating costs through its integration with the power generation unit, industrial harbor and other facility infrastructure systems. Further, integration with upstream and downstream petrochemical raw materials and products in the Project have reduced transportation costs and secured a stable supply of raw and intermediate materials.

The fifty four plants that comprise the Project are briefly described below:



Ground Improvement



Transformed the ocean into land as the plant base.



Laborers simultaneously worked on the construction site.

1. Civil Works

- **Land reclamation** : 109.15 million cubic meters of sand were poured to create land, sufficient in volume to construct a three story tall, eight-lane wide building along the 373 km-long stretch of freeway from Keelung to Kaohsiung. The total area of reclaimed land is 2,255 hectares, about 8% the size of Taipei City (27,180 hectares) or equal to 0.062% of Taiwan's land area.
- **Engineering foundation** : The total length of piles driven amounted to 4.7 million meters and the total amount of concrete used reached 8.97 million cubic meters (approximately 1.96 million tons).
- **Plant construction** : Fifty three plants were built within a single complex, including oil refineries, naphtha cracker plants, co-generation plants, power plants, heavy machinery plants, boiler plants, wafer fabrication plants and petrochemical-related plants. Piping inside the plant area alone extends for 3,000 km.
- **Complex area** : The area of the entire complex totals 2,603 hectares, more than four times the total of the Linyuan (403 ha), Dashe (109 ha), and Toufen (95 ha) petrochemical industrial zones.



Pipeline end of land reclamation



Ground Improvement



2. Mailiao Port

The Project's Mailiao Port occupies an area of 476 hectares. With a water depth of 24 meters during mid-tide, the Port can accommodate 300,000 ton vessels. Therefore, it is Taiwan's deepest port and the first privately funded industrial port. The Mailiao Port has the ability to handle up to 70 million tons of cargo a year, second only to Kaohsiung Harbor. Although Mailiao Port was constructed for industrial purposes, its operations in Yunlin County incorporates the vast adjacent hinterland area into the port zone. Consequently, the access to convenient marine transportation promotes development of local industry.

3. Independent Power Plant

The Project includes a large thermal power plant equipped with three power generation units that each generate 600,000 kW of electricity, for a total generating capacity of 1.8 million kW. All electricity generated has been sold to the Taiwan Power Company and incorporated into the national power grid. This contribution has helped ease Taiwan's power shortage.





4. Oil Refinery

Upon the completion of the Phase IV expansion, refining 540 thousand barrels of crude per day, the equivalent of 25 million tons of petroleum annually, the naphtha capacity increased to 3.75 million tons/year, which is sufficient to supply for the entire Mailiao Complex. Other petroleum products, including gasoline, diesel and kerosene are exported to overseas markets.

5. Naphtha Cracker Plant

There are three naphtha cracking plants (NCP,) producing ethylene, propylene, and butadiene. Ethylene capacity is 2.935 million tons annually, the biggest capacity in Taiwan and the largest single-plant area capacity in Asia, supplying people's livelihood, special chemicals, information, high-tech and other industries. The plants are industrial infrastructure of national importance.



6. Co-generation plant

The plant is designated to generate electricity, steam, and water for industrial use, as well as produce hyperpure water, nitrogen, oxygen, and compressed air for use by plants within the complex. As the largest co-generation plant in Taiwan, it has 16 generation sets with a total capacity of 2.75 million kW. After supplying onsite manufacturing needs, excess electricity is sold to Taiwan Power Company to ease Taiwan's power shortage.

7. Machinery Shop and Boiler Shop

The machinery shop mainly engages in the design, manufacture, installation, and construction of oil refining and petrochemical process equipment such as reactors, towers, pressure vessels, earth covered tanks, etc. The overall manufacturing capability is 10MØx100Lx1000MT, it means the actual capability of producing a single equipment is up to 10 meters in diameter, 100 meters in length and 1,000 tons in weight. The project team and the boiler shop participate in the planning, design, manufacture, installation, and construction of the 50-150MW co-generation power plant and the 600MW independent power plant.



8. Silicon Wafer Plant

This wafer plant is a joint venture owned by Formosa Plastics, Asia-Pacific Investment and Japan's SUMCO TECHXIV CORPORATION for the production of silicon wafers used in semiconductor, with an annual capacity of 3.84 million pieces for 200mm and 3.36 million pieces for 300mm. Silicon wafers are the most important substrate materials for integrated circuit of semiconductors and are also supplied for use as solar battery substrate material.

9. Formosa Asahi Spandex Co, Ltd.

Formosa Asahi Spandex Co. Ltd., with an annual capacity of 5,000 MT for spandex and 21,000 MT for polytetramethylene ether glycol (PTMG), is a joint venture between Formosa Plastics and Asahi Kasei of Japan. Spandex is widely used in functional clothes and medical products and has become an indispensable added fiber in manmade fibers.



10. The Sixth Naphtha Cracker Project Investments

Investing Company	Item	Factory	Product	Capacity (10000 MT/Y unless otherwise noted)
Formosa Plastics Corp.	1	Acrylic Acid & Ester plant	AA/AE	10.8/15.4
	2	Polyvinyl Chloride plant	PVC	49.8
	3	Vinyl Chloride Monomer plant	VCM	80
	4	Caustic Soda plant	Caustic Soda	133
	5	High Density Polyethylene plant	HDPE	35
	6	Carbon Fiber plant	Carbon Fiber	0.88
	7	Ethylene-Vinyl Acetate plant	EVA	24
	8	Acrylonitrile plant	AN	28
	9	Linear Low Density Polyethylene plant	LLDPE	26.4
	10	Methyl Methacrylate plant	MMA	9.8
	11	C4 plant	MTBE/B-1	17.4/3.2
	12	Epichlorohydrin plant	ECH	10
	13	NBA plant	NBA	25
	14	SAP plant	SAP	6
Nan Ya Plastics Corp.	1	Plasticizer plant	DEHP	35
	2	Epoxy Resin plant	EPOXY	16
	3	Propionic Anhydride plant	PA	22.8
	4	Isooctanol plant	2EH	20
	5	Bisphenol A plant	BPA	42
	6	Ethylene Glycol plant	EG	144
	7	Hydrogen Peroxide plant	ESO/H ₂ O ₂	2/2
	8	1,4-Butylene Glycol plant	1,4BG	10
	9	Iso-nonyl Alcohol plant	INA	11.5
	10	Maleic Anhydride plant	MA	6
Formosa Chemicals & Fibre Corp.	1	Aromatic Hydrocarbon plant	BZ/PX/OX/MX	133/197/48/10
	2	Styrene Monomer plant	SM	132
	3	Purified Terphthalic Acid plant	PTA	110
	4	Phenol Synthesis plant	PHENOL/ACETONE	44/27.1
	5	Polypropylene plant	PP	60
	6	PABS plant	PS/ABS/PBT	20/14/3
	7	Polycarbonate plant	PC	20
Formosa BP Chemicals Corp.	1	Acetic Acid Plant	HAC	30
Formosa Petrochemical Corp.	1	Refinery plant	Naphtha, gasoline, diesel	2,500(Refinery)
	2	Naphtha Cracker plant	Ethylene	293.5
	3	Utilities Supply plant	Steam Electricity	11,580 T/H 2,754MW
Mailiao Power Corp.	1	Power station	Electricity	600MW X 3
Formosa Heavy Industries Corp.	1	Equipment for Machinery Shop	Equipment for refinery, petrochemical plants	4.3
	2	Boiler Shop	Equipment for Cogeneration and utility power plants	500T/H X 45T
Formosa Sumco Technology Corp.	1	Wafer fabrication plant	8-inch wafers	3.84million pcs.
			12-inch wafers	3.36million pcs.
Formosa Asahi Spandex Co.	1	Spandex plant	SPANDEX/PTMG	0.5/2.1
Nan Chung Petrochemical Corp.	1	Ethylene Glycol plant	EG	36
Simosa Oil Co, Ltd.	1	Asphalt plant	Asphalt	30

Environmental Protection & Circular Economy



To reinforce environmental protection, FPG established a Safety Health & Environment Center to monitor and control the air, wastewater, waste, noise and ecological environment conditions. We adopted most advanced Best Available Control Technology (BACT) to reduce the negative impacts on the environment. The invested budget for pollution control and prevention is about US\$4.13 billion. The outcome is very significant; it not only surpasses our national official standards but also meets the standards of the most developed countries.

For example, in the thermal power plant we adopted sealed systems for coal transportation and storage to prevent the coal dust or ash blown out of the system to cause pollution. All of the emitted gas is subjected to various treatments, such as ventilated denitrification and desulfuration, static electricity dust collection, to ensure pollutants are eliminated. Also, we set up 8 comprehensive wastewater processing pools before being discharged, all of the wastewater is treated in chemical and biological process units. In addition, Mailiao Industrial Complex is the only petrochemical complex in Taiwan that can process



its own waste. The complex has two incinerators that can process 150 tons of waste daily, a immobilization factory, a landfill site and an ash pond.

Circular Economy at Mailiao Industrial Complex

In order to achieve the best profit-making point between economic development and environmental ecology, FPG established the "Energy Saving and Carbon Reduction and Pollution Prevention Promotion Organization" in 2017, with a long-term investment in human resources and material resources, promote energy saving and emission reduction and cross-company, cross-factory energy resources integration work.

The organization has conducted several projects to reduce water consumption, including process water reduction and wastewater and rainwater recycling. As a result, the complex has attained a water recycling rate (R1) of 98%. According to calculation, the Mailiao complex uses every drop of water 7.3 times. In addition, 1,484 water saving projects have reduced 96.1 million tons of water consumption per year. This amount is equivalent to the water consumed by 1,053,000 people in one year. This is also equivalent to conserving water of 43,000 Olympic-size swimming pools.

On the energy front, task groups also put in a lot of efforts to slow global warming effect and to improve energy efficiency, as well as to improve heat recovery and to develop alternative energy such as wind turbines. Up to the end of 2017, FPG has conducted 4,652 energy saving projects at Mailiao Industrial Complex. It has reduced 9.7 million tons of CO₂ emissions, which is equivalent to 1,293 million trees' carbon uptaking for one year. This is also equivalent to carbon capture of 26,151 Daan Forest Park.



FPG Global Production Bases :



US Region

In 1978 we began investing in production capability in the United States to supply petrochemical materials to the North American marketplace. We selected the United States as the location for our overseas investments because, in addition to rich natural resources and well-established legal, political, and economic systems, the country possessed an excellent infrastructure and a well-educated workforce.

After years of effort, Formosa Plastics Corporation, U.S.A. (FPCUSA), Nan Ya Plastics Corporation USA (NPCUSA), and Nan Ya Plastics Corporation, America (NPCA) were established. Presently, we own several large petrochemical plants, secondary and tertiary processing plants, and natural gas production wells.

Beginning by producing polyvinyl chloride (PVC) resin and its related products, FPCUSA has its headquarters in Livingston, New Jersey and three chemical manufacturing sites in Delaware City, Delaware, Baton Rouge, Louisiana and Point Comfort, Texas. To further vertically integrate our production, in 1990 we invested US\$ 1.9 billion to build our first olefins plant and eight related petrochemical intermediate plants. In 1994 we successfully completed those facilities and added polyethylene and polypropylene resin products in our product lines. Following the completion of a second olefins' plant in early 2002, FPC USA is now a major U.S. supplier of PVC, polyethylene, polypropylene resins and caustic soda.



Baton Rouge Aerial



Point Comfort Aerial.

NPCUSA was founded in 1979. It produces PVC and A-PET rigid film in Wharton, Texas and SMC Door in Houston, Texas.

NPCA was founded in 1989 and produces PVC flexible film, ethylene glycol (EG), and polyester fiber in Batchelor, Louisiana, Point Comfort, Texas, and Lake City, South Carolina respectively.

In recent years, the development technology of shale gas in the U.S. has become matured and mass-produced. Several billions of dollars have been invested to build a third olefins production unit, propane dehydrogenation, polyethylene, EG and other associated downstream petrochemical plants in Texas complex. It also plans to build large-scale petrochemical complex in Louisiana to take full advantage of low-price natural gas and ensure our company's sustainable growth.

China Region

After the 1980s, China gradually opened itself to the global market and developed a strong 'magnetic effect' due to its low-cost labor and broad import market to attract investments from countries all over the world. We perceived the trend and invested in China after 1994, starting with Nan Ya's downstream manufacturing facility. To meet market demands for materials and complete the vertical self-supply stream production, in 2001 we established a petrochemical special district in Ningbo City of Zhejiang Province.



Ningbo Plant in China



Kunshan Plant in China



Formosa Industries Corporation in Vietnam

Currently, FPG has over ten manufacturing bases spread across Guangzhou, Xiamen, Nantong, Kunshan, Ningbo and Zhangzhou , with investments and businesses ranging from primary petrochemical materials and secondary plastics processing to electronic materials, heavy machinery, generation and stainless steel.

Vietnam Region

Formosa Ha-Tinh Steel Corporation (FHS), formed by joint venture from 3 groups of Formosa, considering the competitive

advantages including the steel market,the geographical location, the national policies in Vietnam and the preferential tariffs in ASEAN, etc. , CSC and JFE, selects Vung Ang Economic Zone in Ha-Tinh Province of Vietnam as factory site to build an integrated steel mill and the Son Duong deep-water port. Currently, it is the largest foreign direct investment (FDI) project in Vietnam and the first integrated steel mill in Vietnam as well.

Total investment amount of 1st phase is 12,800 million USD 2 sets of blast furnace are planned to be working. The 1st blast furnace, with the annual productivity over 3.5 million tons, started hot commissioning on 29th May 2017 and produced the 1st batch of hot metal on 30th May. The first slab and bloom of FHS were produced on 1st Jun. The 2nd blast furnace with same capacity started hot commissioning on May 18th 2018 and produced hot metal smoothly on May 19th.

With these, the integrated steel mill with its annual capacity of 7.1 million tons of crude steel in Phase I is completed. The Son Duong Poart, which was being built simultaneously, welcomed its opening for 11 wharves for shipment. It meets the needs of FHS to import raw materials and export slab or crude steel products.

With the completion of construction in Phase I, FHS is now the largest integrated steel mill in ASEAN.Located at the heart of Ha Tinh province, FHS will bring Vietnam considerable economic benefit by combining the industry chain and boost the development as well as export to ASEAN countries.

Ha Tinh Province will transform into a industry region with highest potential thanks for the edge of constructions such as integrated steel mill, power plant and harbor.With the inception of the 3rd blast furnace, the production scale over one thousand tons will help develop Ha Tinh Province become an international steel region in the future.



Blast Furnace view of FHS.



On 22nd April 2016, the General Secretary of Communist Party of Vietnam, Nguyen Phu Trong, visited and instructed at Ha Tinh construction site.



1st Blast Furnace started hot commissioning on 29th May 2017.



Hot metal produced from 1st Blast Furnace on 30th May 2017.



Hot metal charged into converter(BOF) and blowing on 1st Jun 2017.



1st slab produced on 1st Jun 2017.



The Prime Minister of Vietnam , Nguyen Xuan Phuc , inspected the factory and was taken a photo with FPG Chairman, WenYuan Wong, in the front of the 1st hot roll coil of FHS in July 2017.



The hot commissioning opening ceremony for #2 Blast Furnace on May 18th, 2018.The group photo of FPG Chairman with Vietnamese government officials and FHS shareholders.



Chang Gung Memorial Hospital

Chang Gung Memorial Hospital

Aiming to “take from the society and use it for the society”, FPG has established several medical and educational nonprofit organizations. Chang Gung Memorial Hospital was funded in 1976 when Taiwan was in great shortage of medical facilities, as there were only 19 medical beds for every per 10,000 persons, it was far lesser than 40 beds per 10,000 people standard in modernized nations. To address the problem, we built big hospitals in Taipei, Linkou, Keelung, Kaohsiung, Taoyuan, Chiayi and Yunlin. At present, Chang Gung treats 31,500 outpatients daily and has 9,000 beds available for inpatients. It is one of the largest, best equipped, and best-preformed general hospitals in the Far East.

To provide children with more professional medical care, Chang Gung Memorial Hospital established a major children medical center in Linkou and Kaohsiung in 1993 and 1994 respectively, with a total capacity of 800 inpatient beds. In order to attain the best efficiency for the use of medical resources, we founded Nursing Home in early 2001, and established Taoyuan Branch for both acute and chronic medical care in December of 2003, to target chronic medical and long-term nursing services and to provide people with complete medical treatments.

While the population of people over 65 years old has now exceeded 14% of total population, our health culture village has been completed and opened for service since January 2005 to provide an ideal community for older people to spend the rest of their lives. Furthermore, in order to promote Traditional Medicine by combining it with the modern and scientific techniques and approaches of Western Medicine, we have established the first medical-center-grade Chinese medicine department in Taiwan. In order to optimize our medical services, we also established a cancer center to develop our critical-disease-based specialist medical service. We invest billions of dollars to set up the Asian first and largest proton



With 9,000 beds available for inpatients, it is one of the largest, best equipped, and best-performed general hospitals in the Far East.

radiation therapy center at Linkou Y.C.WANG Center for Advanced Medicine, Had started service since Nov 2015.

Corresponding to the insufficiency of medical resources in Yunlin and Chiayi areas, our Chiayi Branch started services by the end of 2001. It is the first hospital in Taiwan to apply full electronic medical records and enabled us to win the National Biomedical Technology Quality Award in 2003. Our Yunlin branch was opened in December 2009, aiming to provide the most suitable medical services for greater numbers of patients.

A special fund was set up to subsidize low-income and handicapped patients with medical expenses. In 2017 our subsidy exceeded US\$ 18.07 million.

Chang Gung Memorial Hospital has paid great attention to both clinical and basic medical research since the beginning. Based on established systems in research resources, we continuously devote our resources in recruiting potential scholars and physicians to set up branch research centers across all areas, and core laboratories, and research platforms. The research centers include The Institute of Stem Cell and Translational Cancer Research, Institute for Radiological Research, Animal Molecular Image Center, Kidney Research Center, Molecular Infectious Diseases Research Center, Neuroscience Research Center, Gynecologic Cancer Research Center, and Liver Research Center; and platforms of core laboratories include Tissue Bank, Biobank, Microscopy Core Laboratory, Clinical Proteomics Core Laboratory, Genomic Medicine Research Core Laboratory, DNA Sequencing Core Laboratory, and Resource Center for Clinical Research. These facilities provide highly qualified sources and are user-friendly resulting in excellent achievements.

In 2017, Chang Gung Memorial Hospital invested US\$121.7 million in 3,502 intra-funds; and published 2,717 SCI qualified papers. The academic research results and published manuscripts contribute greatly in the academic fields.



Chang Gung Health and Culture Village



Chang Gung University has received many recognitions and awards from the Ministry of Education and other organizations for the dedication and achievements in becoming a first-rate and internationally renowned university that prepares high standard professional talents in the fields of medical science, high technology, and knowledge management.

Chang Gung University

Chang Gung University (CGU) was established in April 1987 as Chang Gung Medical College. The school expanded and later changed its name to Chang Gung College of Medicine and Technology, and eventually to CGU in August 1997. To meet the needs of the country's development, the school has vigorously recruited outstanding scholars and experts from both Taiwan and abroad to join our faculty community. The school has also instituted an extracurricular practicum system and worked closely with Chang Gung Memorial Hospital, the Formosa Plastics Group, and other institutions to conduct internship and work-study programs. Over the last 30 years, CGU has established a solid foundation in both research and teaching, as well as cultivated talent for Taiwan's medical, engineering, and management industries. CGU currently consists of the College of Medicine, College of Engineering, and College of Management, including a total of 27 departments and graduate institutes, 7,187 students, 596 full-time and 584 adjunct faculty members.

CGU is at the forefront of high-quality education. In order to educate and shape our students to be "diligent, perseverant, frugal, and trustworthy" and well-versed in both theory and practice, CGU continues improving the quality of education, equipment, and instruction, as well as to encourage students to engage in humanistic care.

Our stellar research performance has positioned CGU in the top echelons of the world's universities. CGU used the Shengen Research Center model to coordinate research teams and resources and cooperate with top research institutions abroad, in order to establish an international research network. Six university-level research centers, including the Molecular Medicine Research Center and the Healthy Aging Research Center, have been established in recent years. In addition, numerous research projects of CGU have been sponsored and funded by various government departments or agencies. Furthermore, CGU is the only private university in Taiwan that has received the Aiming-for-Top-University funding from the Ministry of Education consecutively since 2005 to 2017. Over the last two years, our university has been ranked within the top 400 universities according to the Academic Ranking of World Universities released by the Shanghai Jiaotong University. Among all public and private universities in Taiwan, CGU is the 4th highest ranked. Our overall academic performance has been outstanding, and our research excellence has been highly recognized worldwide.

Ming Chi University of Technology

Ming Chi University of Technology was founded in 1963 as Ming Chi Institute of Technology, upgraded in 1999, and then approved for further transformation into a university in 2004. Currently, the University has Colleges of Engineering, Environment and Resources, and Management and Design, offering 11 Masters' courses in the Graduate Institute, one Ph.D. program and 10 Departments. The University currently hosts 4,559 students, 192 faculty members. All the Departments and Graduate Institutes have passed the certifications of IEET (Institute of Engineering Education Taiwan) and ACCSB (Accreditation of Chinese Collegiate School of Business). Through the years, MCUT has been receiving excellent Ministry of Education evaluation results. In addition, MCUT ranked number one in 2017 for securing the highest average amount of funding per project director of Industry-Academy Cooperation projects among

the private colleges/universities. Also, according to the data collected from Web of Science, MCUT ranked the second in the year of 2017 among all the technological universities and colleges in producing SCI/SSCI papers per author including assistant professors and above.

Since its establishment, Ming Chi has implemented "residential schooling" and "co-op practical training" systems. To live on campus in groups helps students keep regular hours and get stronger physically. Based on the ideal of holistic education, the system of working outside the school for one year enables students to integrate theory with practice to become higher-level industrial talents.

In these years, "academic-industrial research and development" has been the focus of school development. MCUT has been honored by the Chinese Institute of Engineers for several years as one of the best partners of Industry-Academy Cooperation. Ming Chi has attempted to integrate interdisciplinary resources and has built seven featured research centers, including Center for Plasma and Thin Film Technologies, Organic Electronics Research Center and so on. It is expected that, by closely cooperating with industries, the University will achieve a "win-win situation": accomplishing functions of education and improving technological energy in industries.

Chang Gung University of Science and Technology

Group founders the Wang brothers established the Chang Gung Institute of Nursing in 1988 to increase the number and quality of nursing personnel. The institute initially offered two-year and five-year clinical nursing courses to provide education and training for clinical nursing personnel. Since 1995, the institute has offered free tuition to five-year nursing students of aboriginal background to provide them with education and employment opportunities. To enhance the level of vocational education, the institute was restructured in 2002 into the Chang Gung Institute of Technology (CGIT). In August 2011, CGIT was again renamed, to Chang Gung University of Science and Technology (CGUST). Presently, the university has two colleges: Nursing and Human Ecology, under which there are three graduate schools, six departments, and one division. The University currently has approximately 340 full-time teachers, and has more than 6,700 students enrolled.

To enhance ties with the industry and promote academic research, the University strongly encourages and supports teachers participating in applied research projects and cooperation with industry. CGUST established Taiwan's first domestic nursing Clinical Competency Center, Research Center for Food and Cosmetic Safety, and Research Center for Chinese Herbal Medicine; and the Chronic Diseases and Health Promotion Research Center. In a recent Accreditation for University of Science and Technology by the Ministry of Education, our departments were all ranked first in terms of achievement. The registration rate and graduate employment rate were top among all universities.

CGUST upholds its motto, "Diligence, Perseverance, Frugality, and Trustworthiness" and our educational philosophy: "be human-oriented; derive truth from facts." Our vision, founded on a core development principle of providing healthcare, is to be a top-tier university and a high quality institution for the teaching of healthcare that pursues teaching excellence, provides employment for graduates, and endows industries with the best professionals.



Ming Chi University of Technology



Chang Gung University of Science and Technology

Major Products and Sales Departments

PETROLEUM PRODUCTS

Product	Capacity (Y)	Company	Division	Tel	FAX
Gasoline	6,000,000KL	FPCC	International Trading Dept.	02-271 22211#7280	02-27189001
			Oil Product Division	02-271 29038 02-271 29228 02-271 29387 02-271 29070	02-27129848
Diesel	10,000,000KL	FPCC	International Trading Dept.	02-271 22211#7280	02-27189001
			Oil Product Division	02-271 29038 02-271 29228 02-271 29387 02-271 29070	02-27129848
Aviation fuel/kerosene	2,500,000KL	FPCC	International Trading Dept.	02-271 22211#7280	02-27189001
			Oil Product Division	02-271 22211 #7491/7492	02-27178383
Fuel Oil	1,000,000KL	FPCC	International Trading Dept.	02-271 22211#7241	02-27189001
			Oil Product Division	02-271 22211#7705	02-27178383
LPG	730,000MT	FPCC	Oil Product Division	02-271 22211#7701	02-27178383
Lube Base Oil	650,000MT	FPCC	International Trading Dept.	02-271 22211#7238	02-27189001
Food Grade White Oil	50,000MT	FPCC	International Trading Dept.	02-271 22211#7238	02-27189001

PETROCHEMICALS & CHEMICAL PRODUCTS

Product	Capacity (MT/Y)	Company	Division	Tel	FAX
PVC Resin	1,265,000	FPC	Plastics Div.	02-27175880	02-27137012
VCM	1,644,000	FPC	Plastics Div.	02-27178123	02-27135423
Caustic Soda (liquid)	1,700,000	FPC	Plastics Div.	02-27178129	02-27137012
Caustic Soda (flake)	50,000	FPC	Plastics Div.	02-27178129	02-27137012
Micro Prills Caustic Soda	100,000	FPC	Plastics Div.	02-27178129	02-27137012
Chlorine	366,700	FPC	Plastics Div.	02-27178129	02-27137012
Hydrochloric Acid	126,700	FPC	Plastics Div.	02-27178129	02-27137012
MBS	19,700	FPC	Plastics Div.	02-27178130	02-27137012
Chlorosolvents	48,900	FPC	Plastics Div.	02-27178131	02-27137012
Processing Aids	25,000	FPC	Plastics Div.	02-27178130	02-27137012
HDPE	566,000	FPC	Polyolefin Div.	02-27122211#6143	02-27178176
EVA	240,000	FPC	Polyolefin Div.	02-27122211#6143	02-27178176
LLDPE	264,000	FPC	Polyolefin Div.	02-27122211#6143	02-27178176
AA	159,000	FPC	Tairylan Div.	02-27122211#6101	02-27134818
NBA	250,000	FPC	Tairylan Div.	02-27122211#6208	02-27134818
SAP	110,000	FPC	Tairylan Div.	02-27122211#6106	02-27134818
AN	280,000	FPC	Chemicals Div.	02-27122211#7115	02-27178340

Product	Capacity (MT/Y)	Company	Division	Tel	FAX
ACN	5,500	FPC	Chemicals Div.	02-27122211#6754	02-27178340
MMA	98,000	FPC	Chemicals Div.	02-27122211#7111	02-27178340
MAA	20,000	FPC	Chemicals Div.	02-27122211#7111	02-27178340
ECH	100,000	FPC	Chemicals Div.	02-27122211#7109	02-27178340
MTBE	174,000	FPC	Chemicals Div.	02-27122211#7109	02-27178340
B-1	32,000	FPC	Chemicals Div.	02-27122211#7115	02-27178340
Lime	250,400	FPC	Calcium Carbide Div.	02-27122211#6153	02-27193261
Calcium Carbonates	258,000	FPC	Calcium Carbide Div.	02-27122211#6155	02-27193261
Taical	14,400	FPC	Calcium Carbide Div.	02-27122211#6153	02-27193261
White masterbatch, Calcium carbonate masterbatch	27,420	FPC	Calcium Carbide Div.	02-27122211#6155	02-27193261
Light Master Batch	36,000	FPC	Calcium Carbide Div.	02-27122211#6153	02-27193261
PP	434,000	FPC	Polypropylene Div.	02-27133655	02-27181230
POM	45,000	FPC	Polypropylene Div.	02-27133655	02-27181230
PTMG	21,000	FASC	Business Div.	02-27122211#6794	02-27128718
BPA	420,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
1,4BG/THF	100,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
H ₂ O ₂	20,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
ESO	20,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
Plastic Stabilizer	12,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
MA	60,000	Nan Ya	Petrochemicals 2nd Div.	02-27178244	02-27138248
Plasticizers	350,000	Nan Ya	Petrochemicals 1st Div.	02-27178165	02-27178534
THPA/HHPA	18,000	Nan Ya	Petrochemicals 1st Div.	02-27178127	02-27178534
PA	228,000	Nan Ya	Petrochemicals 1st Div.	02-27178165	02-27178534
2EH	200,000	Nan Ya	Petrochemicals 1st Div.	02-27178272	02-27178534
INA	115,000	Nan Ya	Petrochemicals 1st Div.	02-27178272	02-27178534
EG	1,620,000	Nan Ya	Petrochemicals 3rd Div.	02-27122211#6880	02-25475259
Benzene	1,330,000	FCFC	Petrochemicals 1st Div.	02-27122211#5475	02-27180358
PX	1,970,000	FCFC	Petrochemicals 1st Div.	02-27122211#5475	02-27180358

Product	Capacity (MT/Y)	Company	Division	Tel	FAX
OX	480,000	FCFC	Petrochemicals 1st Div.	02-27122211#5475	02-27180358
MX	100,000	FCFC	Petrochemicals 1st Div.	02-27122211#5475	02-27180358
SM	1,320,000	FCFC	Petrochemicals 2nd Div	02-27122211#5561	02-27127173
Phenol	440,000	FCFC	Petrochemicals 2nd Div	02-27122211#5561	02-27127173
Acetone	271,000	FCFC	Petrochemicals 2nd Div	02-27122211#5561	02-27127173
PTA	1,700,000	FCFC	Petrochemicals 3rd Div.	02-27122211#5580	02-25148198
PIA	200,000	FCFC	Petrochemicals 3rd Div.	02-27122211#5580	02-25148198
PS	340,000	FCFC	Plastics Div.	02-27178405	02-27131649 02-25471382
ABS	410,000	FCFC	Plastics Div.	02-27178405	02-27131649 02-25471382
PP	600,000	FCFC	Plastics Div.	02-27178355	02-27131649 02-25471382
PC	200,000	FCFC	FIPC	02-27122211#6617	02-25473133
Anhydrous Sodium-Sulfate	50,400	FCFC	Rayon Div.	02-27178358	02-27175283
Sulphuric Acid	72,900	FCFC	Rayon Div.	02-27178358	02-27175283
Ethylene	2,935,000	FPCC	Olefin Div.		
Propylene	2,367,500	FPCC	Olefin Div.		
Butadiene	447,000	FPCC	Olefin Div.		
Isoprene	60,800	FPCC	Olefin Div.		
Electron-grade hydrofluoric acid	16,700	FDAC	Business Div.	02-27122211#7403	02-27129281
NH4F	5,200	FDAC	Business Div.	02-27122211#7403	02-27129281
Buffer hydrofluoric acid	1,800	FDAC	Business Div.	02-27122211#7403	02-27129281
HAC	300,000	Formosa BP Chemicals Corp.	Business Div.	02-27122211#6576	02-27180053

PLASTICS

Product	Capacity (MT/Y)	Company	Division	Tel	FAX
Flexible PVC Film	118,800	Nan Ya	Plastics 1st Div.	02-27178202	02-27178532
Rigid PVC Film	48,000	Nan Ya	Plastics 1st Div.	02-27178214	02-27126113
Metallized Film	6,600	Nan Ya	Plastics 1st Div.	02-27178214	02-27126113
A-PET Film	22,800	Nan Ya	Plastics 1st Div.	02-27178214	02-27126113
PP Synthetic Paper	33,000	Nan Ya	Plastics 1st Div.	02-27178214	02-27126113
Rigid PVC Pipe	163,700	Nan Ya	Plastic 3rd Div.	02-27178231	02-25140628
Extruded Products	22,300	Nan Ya	Plastic 3rd Div.	02-27178226	02-25140628
Injected Products	17,800	Nan Ya	Plastic 3rd Div.	02-27178231	02-25140628
Plastic Pallet	16,400	Nan Ya	Plastic 3rd Div.	02-27178173	02-25140628
PVC Plate	32,900	Nan Ya	Plastic 3rd Div.	02-27178226	02-25140628

Product	Capacity (MT/Y)	Company	Division	Tel	FAX
Wrap Film	11,500	Nan Ya	Plastic 3rd Div.	02-27178233	02-27166899
PVC Tile	11,900,000m ²	Nan Ya	Plastic 3rd Div.	02-27178226	02-25140628
BOPP & CPP Film	84,000	Nan Ya	Plastic 3rd Div.	02-27178233	02-27166899
PVC Compound	53,500	Nan Ya	Plastic 3rd Div.	02-27178229	02-25140628
PU Leather	10.8 million yards	Nan Ya	Plastics 1st Div.	02-27178248	02-27126113
SMC (Sheet Molded Compound)	27,000	Nan Ya	Plastic 3rd Div.	02-27178507	02-27198661
Engineering Plastics	24,000	Nan Ya	Plastic 3rd Div.	02-27178507	02-27198661
Unsaturated Polyester Resin	24,000	Nan Ya	Plastic 3rd Div.	02-27178507	02-27198661
Vinyl Windows & Doors	12,400	Nan Ya	Plastics 2nd Div.	02-27178169	02-27178512
SMC Door	14,800	Nan Ya	Plastics 2nd Div.	02-27178169	02-27178512
SMC Fire proof Door	2,000	Nan Ya	Plastics 2nd Div.	02-27178169	02-27178512
Sound Absorber (AL,SMC)	1,000	Nan Ya	Plastics 2nd Div.	02-27178169	02-27178512
PE Bag	8,400	Inteplast Taiwan	Business Div.	02-27178113	02-27193262

FIBER, TEXTILE AND DYEING

Product	Capacity(Y)	Company	Division	Tel	FAX
Carbon Fiber	8,750 MT	FPC	Tairylan Div.	02-27122211 #6189	02-27134818
Spandex	5,000MT	FASC	Business Div.	02-27122211 #6795	02-27128718
Polyester Staple Fiber	134,700 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
Polyester Chips	564,600 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
Polyester Spin Drawn Yarn	78,500 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
Polyester POY	228,600 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
Polyester Textured Yarn	106,300 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
Polyester Dyed Yarn	1,800MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
SPP Chip	197,640 MT	Nan Ya	Polyester Fiber Div.	02-27178324	02-25454065
PET Film	108,000MT	Nan Ya	Polyester Film Div.	02-27178333	02-25454065
Polyester Release Film	180,000KSM	Nan Ya	Polyester Film Div.	02-27178333	02-25454065
Polyester Woven Fabric	18,000KY	Nan Ya	Polyester Fiber Div.	02-27178346	02-27124448
Knitted Fabric	1,800MT	Nan Ya	Polyester Fiber Div.	02-27178346	02-27124448
Rayon Staple Fiber	78,840MT	FCFC	Rayon Div.	02-27178358	02-27175283
Blended Spun Yarn	76,000 bales	FCFC	Textile Div.	02-27178367	02-27178544
Nylon 6 Chip	84,000MT	FCFC	Nylon Div.	02-27178371	02-27175285
Nylon 6 Filament for Textile Use	49,800MT	FCFC	Nylon Div.	02-27178371	02-27175285
Nylon 6 Stretch Yarn	4,560MT	FCFC	Nylon Div.	02-27178371	02-27175285
Nylon 6 Filament for Industrial Use	39,600MT	FCFC	Nylon Div.	02-27178371	02-27175285
Carpet Roll	1,200,000 ping	FCFC Carpet Corp.	Business Div.	02-27178552	02-27182221
Carpet Tile	600,000 ping	FCFC Carpet Corp.	Business Div.	02-27178552	02-27182221

ELECTRONICS

Product	Capacity(Y)	Company	Division	Tel	FAX
Distributed Computer Control System	36 ST	FPC	Electronic Dept.	07-3711411 #5163	07-3727026
Printed Circuit Board, IC substrate	5,940K sft	Nan Ya PCB	Sales Dept.	03-3223751 #1038	03-3223802
Copper-clad Laminates	27.96 million sheets	Nan Ya	Electronic Materials Div.	02-27178261	02-27178260
Copper Foil	36,000 MT	Nan Ya	Electronic Materials Div.	02-2712211 #5828	02-27182258
Epoxy Resin	220,000 MT	Nan Ya	Electronic Materials Div.	02-27178258	02-27182258
Glass Fabrics	324 million meters	Nan Ya	Electronic Materials Div.	02-27122211 #5831	02-27182258
STN-LCD,Touch Panel	1,200,000 PCS	Nan Ya	Electronic Materials Div.	03-3223751 #2713	03-3125803
Glass Yarn for Electronic Use	75,000 MT	PFG Fiber Glass Corporation	Business Div.	02-27178502	02-27189468
Chopped Strand & Roving	15,000 MT	PFG Fiber Glass Corporation	Business Div.	02-27178502	02-27189468
8 inch Wafer	3,840,000 PCS	Formosa Sumco Technology	Business Div.	02-27122211 #6113	02-27178567
12 inch Wafer	3,360,000 PCS	Formosa Sumco Technology	Business Div.	02-27122211 #6113	02-27178567
DRAM	816,000 PCS	Nanya Technology	Sales Div.	02-2904-5858 #6320	02-2908-0326
LED Hazardous Location Lights	50 thousand sets	Nan Ya Photonics, Inc.	Sales Div.	02-27122211 #5913	02-27199187
			International Trading & Marketing Dept.	02-27122211 #5918	02-27185596
LED Industrial Lights (Flooding Lights/Bay Lights/Street Lights)	18 thousand sets	Nan Ya Photonics, Inc.	Sales Div.	02-27122211 #5913	02-27199187
			International Trading & Marketing Dept.	02-27122211 #5918	02-27185596
LED Commercial Lights (Panel Lights/Tube/ Downlights)	900 thousand sets	Nan Ya Photonics, Inc.	Sales Div.	02-27122211 #5913	02-27199187
			International Trading & Marketing Dept.	02-27122211 #5918	02-27185596
PV System	Project based	Nan Ya Photonics, Inc.	International Trading & Marketing Dept.	02-27122211 #5918	02-27185596

OTHERS

Product	Capacity(Y)	Company	Division	Tel	FAX
Switch Gear & Control Panel	5,000 ST	Nan Ya	Engineering Div.	02-27122211 #6329~6337	02-27178530
Cast Resin Transformer	359,000 KVA	Nan Ya	Engineering Div.	02-27122211 #6329~6337	02-27178530
Gear Reducer	1,000 ST	Formosa Heavy Industries	Gear Div.	07-3738164	07-3721748
Large Precision Gear	4,000 PCS	Formosa Heavy Industries	Gear Div.	07-3738164	07-3721748
Petrochemical Process Equipment/ Power Plant Auxiliary Equipment	30,000 MT	Formosa Heavy Industries	Machinery Div.	07-3711411#5276	07-3717476
Automatic Storage/ Retrieval System	15 ST	Formosa Heavy Industries	Automation Div.	07-37111411 #5902~5904 02-27122211 #6158,6159	07-3715148 02-27135519
Rubber Roller	6,000 PCS	Formosa Heavy Industries	Rubber Div.	07-3738165	07-3719801
Rubber and Flake Lining	15,000 m2	Formosa Heavy Industries	Rubber Div.	07-3738165	07-3719801
Hard Chrome Plating Hot Grinding, Polishing for Metal Roll	150 PCS	Formosa Heavy Industries	Rubber Div.	07-3738165	07-3719801
Cogeneration System and Power Generation Equipment	8 ST	Formosa Heavy Industries	Cogeneration Div.	07-3711411 #6406~6407	07-3721833
Cooling Tower	60 ST	Formosa Heavy Industries	Cogeneration Div.	05-6812130	05-6812576
Flue Gas Desulfurization System	5 ST	Formosa Heavy Industries	Cogeneration Div.	07-3711411 #6406~6407	07-3721833
Alkyl Benzene Sulphonic Acid	24,000	Formosa Biomedical Co.	Business 1st Div.	02-27122211#8353	02-27178381
Detergent Powder	66,000	Formosa Bio-medical Co.	Business 1st Div.	02-27122211#8353	02-27178381
Detergent Liquid	34,500	Formosa Bio-medical Co.	Business 1st Div.	02-27122211#8353	02-27178381
Personal Clean Products	6,480	Formosa Biomedical Co.	Business 1st Div.	02-27122211#8353	02-27178381
Skin Care Products	3,456,000 PC	Formosa Biomedical Co.	Business 2nd Div.	02-27122211#7829	02-27178381
Diagnostics	400 million set/Y	Formosa Biomedical Co.	Business 3rd Div.	02-27122211#7828	02-27178381

MAJOR PRODUCTS OF US COMPANIES

Product	Capacity (MT/Y)	Company	Tel	Fax
PVC Resin	1,502,318	FPC-USA	1-973-992-2090	1-973-422-7724
VCM	1,430,464	FPC-USA	1-973-992-2090	1-973-422-7724
Caustic Soda	1,061,258	FPC-USA	1-973-992-2090	1-973-422-7723
Chlorine	935,808	FPC-USA	1-973-992-2090	1-973-422-7723
EDC	1,224,172	FPC-USA	1-973-992-2090	1-973-422-7723
Ethylene	1,671,358	FPC-USA	1-973-992-2090	1-973-716-7230

Product	Capacity (MT/Y)	Company	Tel	Fax
Propylene	294,923	FPC-USA	1-973-992-2090	1-973-716-7230
HDPE	844,371	FPC-USA	1-973-992-2090	1-973-422-7737
PP	913,907	FPC-USA	1-973-992-2090	1-973-422-7856
LLDPE	413,907	FPC-USA	1-973-992-2090	1-973-422-7737
EG	360,000	NPC-A	1-843-389-7800	1-843-389-6889
Fiber Grade Polyester Chip	94,700	NPC-A	1-843-389-7800	1-843-389-6889
Bottle Grade PET Chip	378,000	NPC-A	1-843-389-7800	1-843-389-6889
Polyester Staple Fiber	216,000	NPC-A	1-843-389-7800	1-843-389-6889
Partially Orientated Yarn	144,000	NPC-A	1-843-389-7800	1-843-389-6889
Polyester Spin Drawn Yarn	18,000	NPC-A	1-843-389-7800	1-843-389-6889
Polyester Textured Yarn	13,300	NPC-A	1-843-389-7800	1-843-389-6889
Flexible PVC Film	48,000	NPC-A	1-225-492-2141	1-225-492-2818
Rigid PVC Film	88,800	NPC-USA	1-281-727-7300	1-281-727-7309
A-PET Rigid Film	10,800	NPC-USA	1-281-727-7300	1-281-727-7309
SMC Door	40,000 Units	NPC-USA	1-713-674-7822	1-713-674-7823
Natural Gas	1,980,302 MMBTU	Neumin	1-361-987-8900	1-361-987-2283
Condensate	101,303 BBL	Neumin	1-361-987-8900	1-361-987-2283
Oil	101,303 BBL	Neumin	1-361-987-8900	1-361-987-2283
Ethane/Propane/Butane	37,358,856 BBL	FHC	1-361-987-8900	1-361-987-2283

MAJOR PRODUCTS OF CHINA COMPANIES

Product	Capacity(MT/Y)	Company	Tel	FAX
PVC Resin	470,000	Formosa Industries (Ningbo)	86-574-86902999 #3129	86-574-86902942
AA	320,000	Formosa Industries (Ningbo)	86-574-86902999 #3151	86-574-86902967
SAP	90,000	Formosa Industries (Ningbo)	86-574-86902999 #3365	86-574-86902987
PP	450,000	Formosa Industries (Ningbo)	86-574-86902999 #2711	86-574-86902983
EVA	72,000	Formosa Industries (Ningbo)	86-574-86902999 #3019	86-574-86029999 #3975
Distributed Computer Control System	12 ST	Formosa Electronics (Ningbo)	86-574-86902999 #3683	86-574-86902939
Stainless Steel plate/Coil	780,000	Fujian Fuxin Special Steel	0596-6057000	86-596-6057889
Flexible PVC Film	46,800	Nan Ya Plastics (Guangzhou)	86-20-36413900 #2806	86-20-36413900-28053
	42,000	Nan Ya Plastics (Nantong)	86-513-85291811 #111	86-513-85291903
Flexible PVC Film for Building Material	19,200 KY	Nan Ya Kyowa Plastics (Nantong)	86-513-85291811 #262	86-513-85291963
PVC Leather	21,600 KY	Nan Ya Plastics (Guangzhou)	86-20-36413900 #2806	86-20-36413900-28053
	39,600 KY	Nan Ya Plastics (Nantong)	86-513-85291811 #111	86-513-85291903

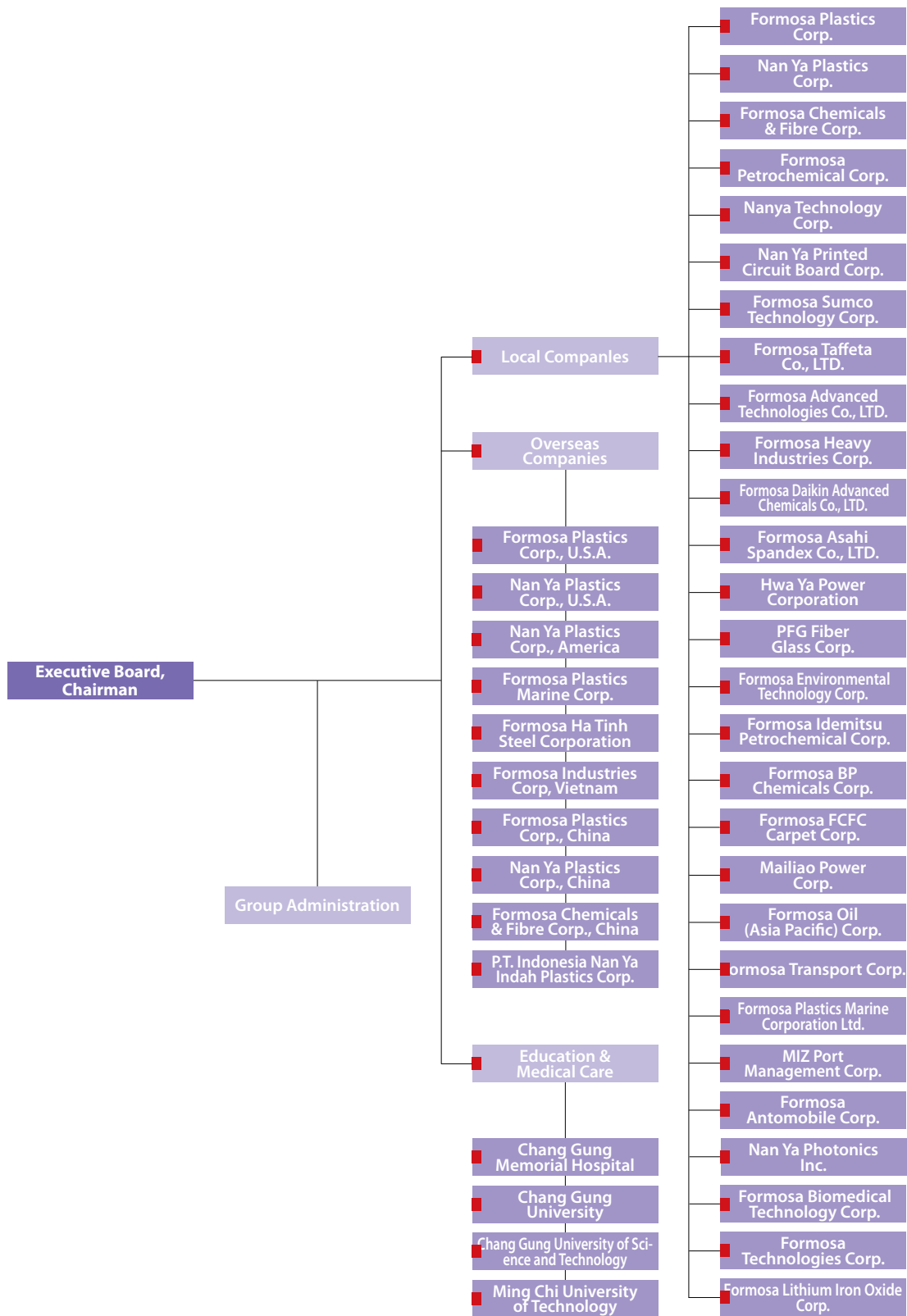
Product	Capacity(MT/Y)	Company	Tel	FAX
PU Leather	14,400 KY	Nan Ya Synthetic Leather (Nantong)	86-513-89100128	86-513-85284989
	14,400 KY	Nan Ya Plastics (Huizhou)	86-752-6926202	86-752-6926888-62021
PVC Casting	10,200 KY	Nan Ya Plastics (Huizhou)	86-752-6926202	86-752-6926888-62021
Rigid PVC Film	52,800	Nan Ya Plastics Construction Materials (Nantong)	86-513-85291811 #613	86-513-85291575
	38,400	Nan Ya Rigid Film (Guangzhou)	86-20-36413262	86-20-36413360
Metallized Rigid PVC Fill	4,800	Nan Ya Rigid Film (Guangzhou)	86-20-36413262	86-20-36413360
Engineering Plastics	14,400	Nan Ya Plastics (Huizhou)	86-752-6926210	86-752-6926699
Rigid PVC Pipe	49,700	Nan Ya Plastics (Xiamen)	86-592-6510371#150	86-592-6518907
	49,800	Hua Ya Wu Hu Plastic	86-553-5841111	86-553-5843939
	75,100	Hua Ya Dongying Plastic	86-546-8305238	86-546-8307178
	21,100	Nan Ya Plastics Construction Materials (Guangzhou)	86-20-36413900 #5801	86-20-36416205
	31,050	Nan Ya Plastics (Zhengzhou)	86-371-6777886	86-371-6777889
PVC Fitting	12,000	Nan Ya Plastics (Xiamen)	86-592-6510371 #150	86-592-6518907
Plasticizer (DOTP)	150,000	NanYa Plastics (Ningbo)	86-574-86902999 #6060	86-574-8602-9999 #6003
BPA	130,000	NanYa Plastics (Ningbo)	86-574-86902999 #6060	86-574-8602-9999 #6003
PVC Film	21,000	Nan Ya Plastics Film (Nantong)	86-513-85291811 #291	86-513-85281936
	6,000	Nan Ya Plastics Film (Huizhou)	86-752-6926104 #6850	86-752-6926888 #6851
PVC Compound	12,000	Nan Ya Plastics Construction Materials (Guangzhou)	86-20-36413900 #5801	86-20-36416205
Switchgear & Control Panel	3,600 ST	Nan Ya Electric (Nantong)	86-513-85291811 #669~673	86-513-85291575 #500
Copper Clad Laminates	32.4 million sheets	Nan Ya Electric Materials (Kunshan)	86-512-57357080 #3188	86-512-57357081 #31861
	12 million sheets	Nan Ya Electric Materials (Huizhou)	86-752-6926799	86-752-6926888 #67833
Glass Fabrics	348 million meters	Nan Ya Electric Materials (Kunshan)	86-512-57357080 #3333	86-512-57357081 #33332
Copper Foil	60,000	Nan Ya Electric Materials (Kunshan)	86-512-57357080 #3213	86-512-57357081 #32132
Epoxy Resin	237,000	Nan Ya Electric Materials (Kunshan)	86-512-57357080 #3410	86-512-57357081 #34152

Product	Capacity(MT/Y)	Company	Tel	FAX
Glass Yarn for Electronic Use	128,400	PFG Fiber Glass (Kunshan)	86-512-57357080 #3506	86-512-57369016
Chopped Strand	15,000	PFG Fiber Glass (Kunshan)	86-512-57357080 #3506	86-512-57369016
Printed Circuit Board, IC Substrate	25,200 K sft	Nan Ya Printed Circuit Board (Kunshan)	86-512-57357080 #5900	86-512-57369002
Polyester Chips	216,000	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
Polyester POY	47,160	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
Polyester Spin Drawn Yarn	10,200	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
Polyester Textured Yarn	21,600	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
Polyester Dyed Yarn	7,200	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
Knitted Fabric	3,972	Nan Ya Draw-Textured Yarn (KUNSHAN) CO., LTD.	86-512-57723888	86-512-57723883
PTA	1,200,000	Formosa Chemical Industries (Ningbo)	86-574-86902999 #2506	86-574-86902953
ABS	450,000	Formosa ABS Plastics (NINGBO)	86-574-86902999 #2119	86-574-86902922
PS	200,000	Formosa PS (NINGBO)	86-574-86902999 #2119	86-574-86902922
Phenol	300,000	Formosa Chemical Industries (Ningbo)	86-574-86028931	86-574-86029999 #2931
Acetone	185,000	Formosa Chemical Industries (Ningbo)	86-574-86028931	86-574-86029999 #2931
IIR	50,000	FORMOSA SYNTHETIC RUBBER(NINGBO) CO.Ltd.	86-574-86902999 #6618	86-574-86029999-6620

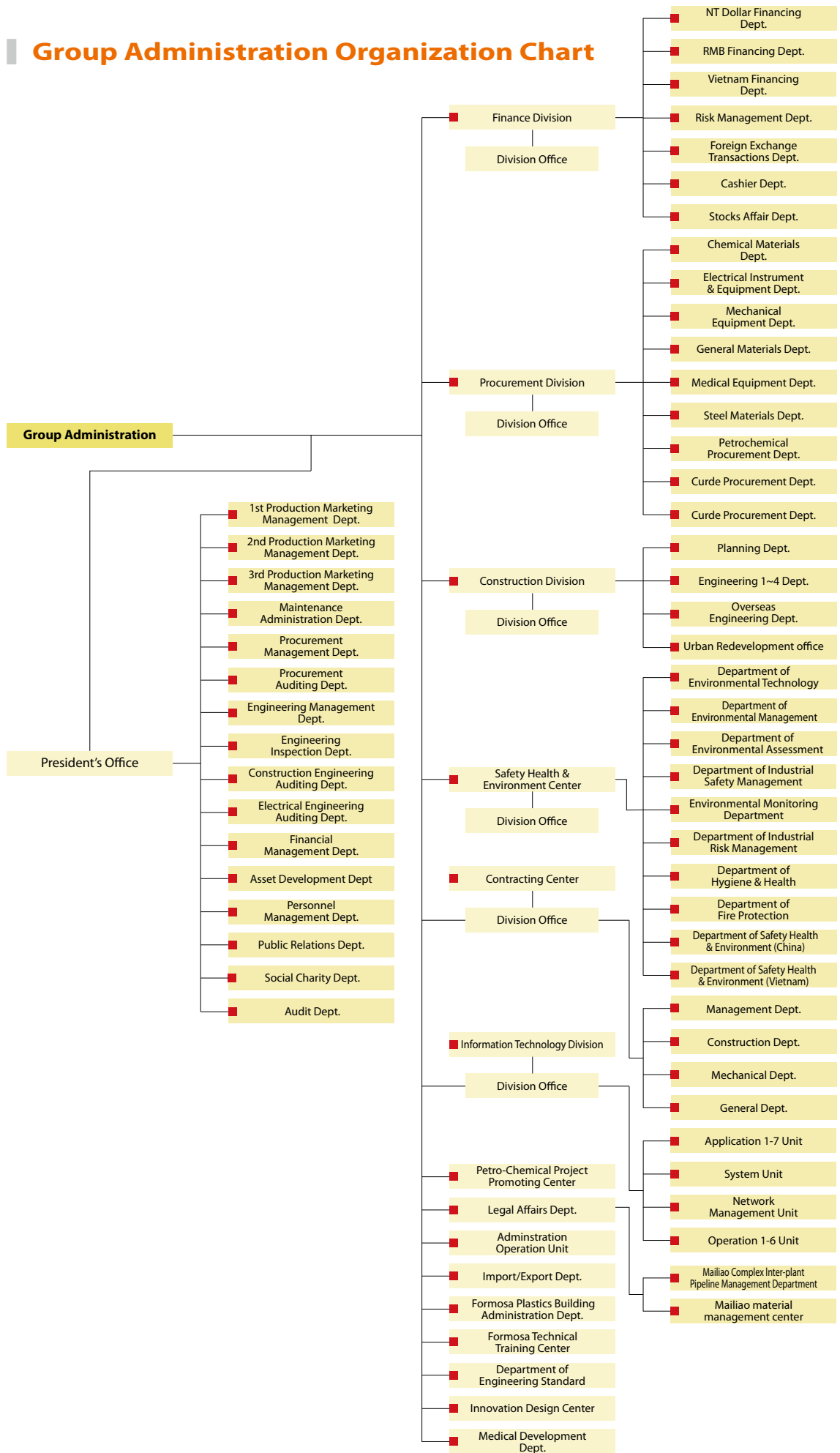
MAJOR PRODUCTS OF VIETNAM COMPANIES

Product	Capacity(MT/Y)	Company	Tel	FAX
Blended Spun Yarn	410,000 bales	Formosa Industries	84-251-3560309#2901	84-251-3560667
Polyester Staple Fiber	108,000	Formosa Industries	84-251-3560309#5901	84-251-3560666
Polyester Chips	162,000	Formosa Industries	84-251-3560309#5901	84-251-3560666
SPP Chip	162,000	Formosa Industries	84-251-3560309#5901	84-251-3560666
Polyester POY	50,600	Formosa Industries	84-251-3560309#5901	84-251-3560666
Polyester Spin Drawn Yarn	26,900	Formosa Industries	84-251-3560309#5901	84-251-3560666
Polyester Textured Yarn	50,600	Formosa Industries	84-251-3560309#5901	84-251-3560666
BOPP Film	90,000	Formosa Industries	84-251-3560309#7901	84-251-3560665
PVC Film	9,000	Formosa Industries	84-251-3560309#7906	84-251-3560665
Flexible PVC Film	24,000	Formosa Industries	84-251-3560309#7301	84-251-3560995
Nylon-6 Chips	50,400	Formosa Industries	84-251-3560309#1006	84-251-3569190
Nylon-6 Filament	36,000	Formosa Industries	84-251-3560309#1006	84-251-3569190
Hot Rolled Coil	5,200,000	Formosa Ha Tinh Steel Corporation (Ho Chi Minh,Southern Vietnam)	84-2854-138688#101	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ho Chi Minh, Oversea)	84-2854-138688#115	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ha Noi,Nothern Vietnam)	84-2432-393393#120	84-2433-2353637
Wire Rod	1,200,000	Formosa Ha Tinh Steel Corporation (Ho Chi Minh,Southern Vietnam)	84-2854-138688#101	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ho Chi Minh, Oversea)	84-2854-138688#115	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ha Noi,Nothern Vietnam)	84-2432-393393#120	84-2433-2353637
Billet	1,800,000	Formosa Ha Tinh Steel Corporation (Ho Chi Minh,Southern Vietnam)	84-2854-138688#101	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ho Chi Minh, Oversea)	84-2854-138688#115	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ha Noi,Nothern Vietnam)	84-2432-393393#120	84-2433-2353637
Slab	5,300,000	Formosa Ha Tinh Steel Corporation (Ho Chi Minh,Southern Vietnam)	84-2854-138688#101	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ho Chi Minh, Oversea)	84-2854-138688#115	84-2854-138-689
		Formosa Ha Tinh Steel Corporation (Ha Noi,Nothern Vietnam)	84-2432-393393#120	84-2433-2353637

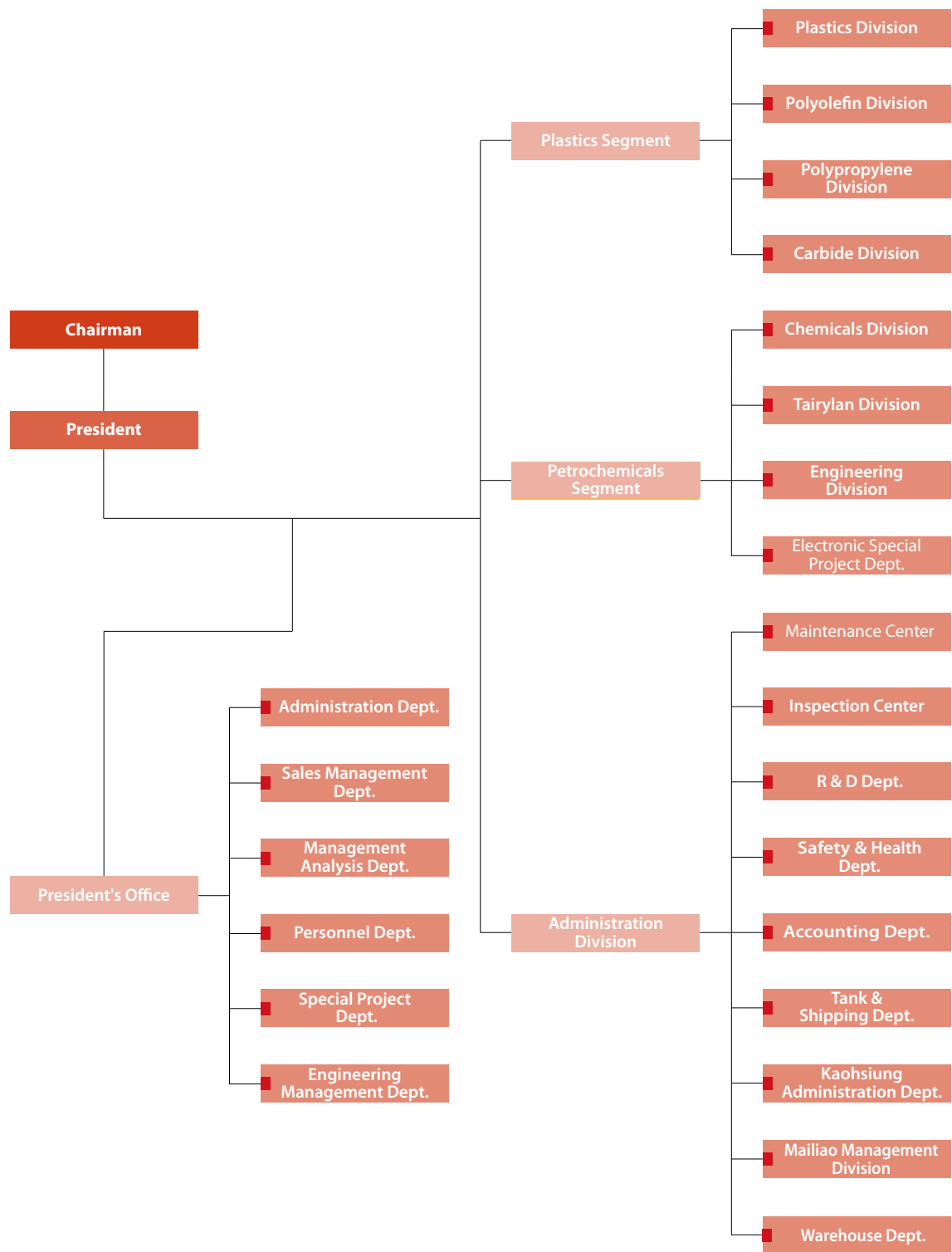
Formosa Plastics Group Organization



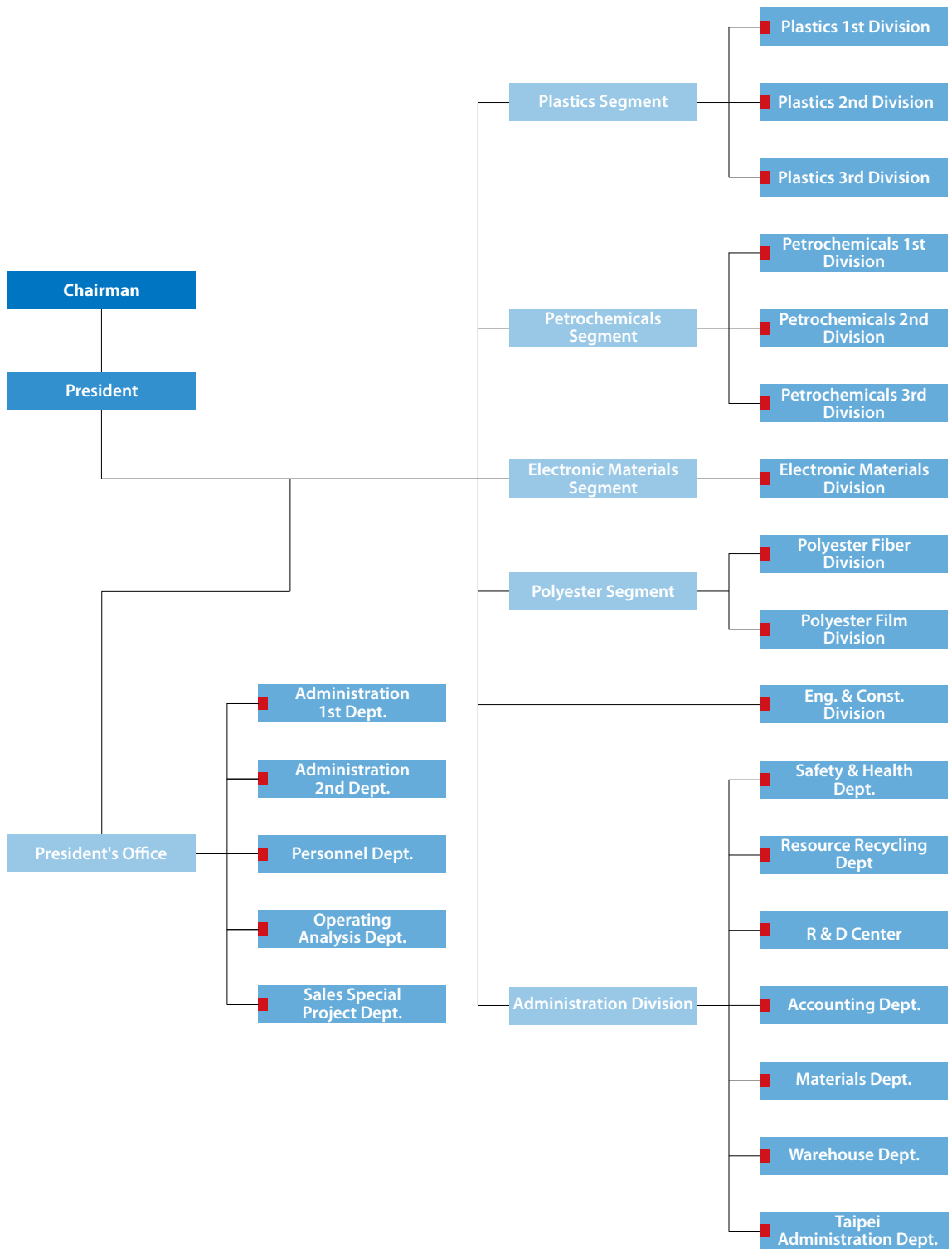
Group Administration Organization Chart



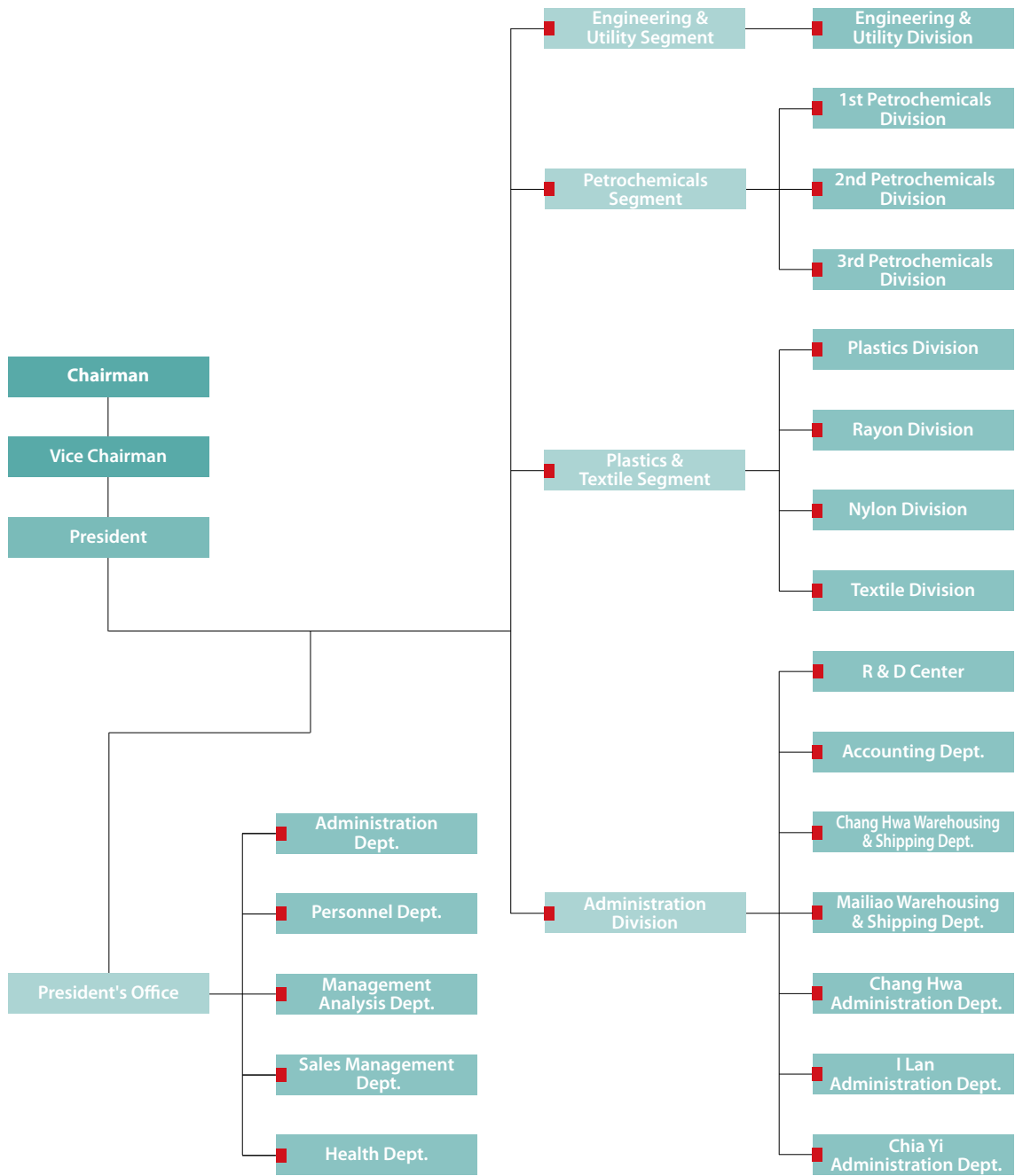
Formosa Plastics Corp. Organization Chart



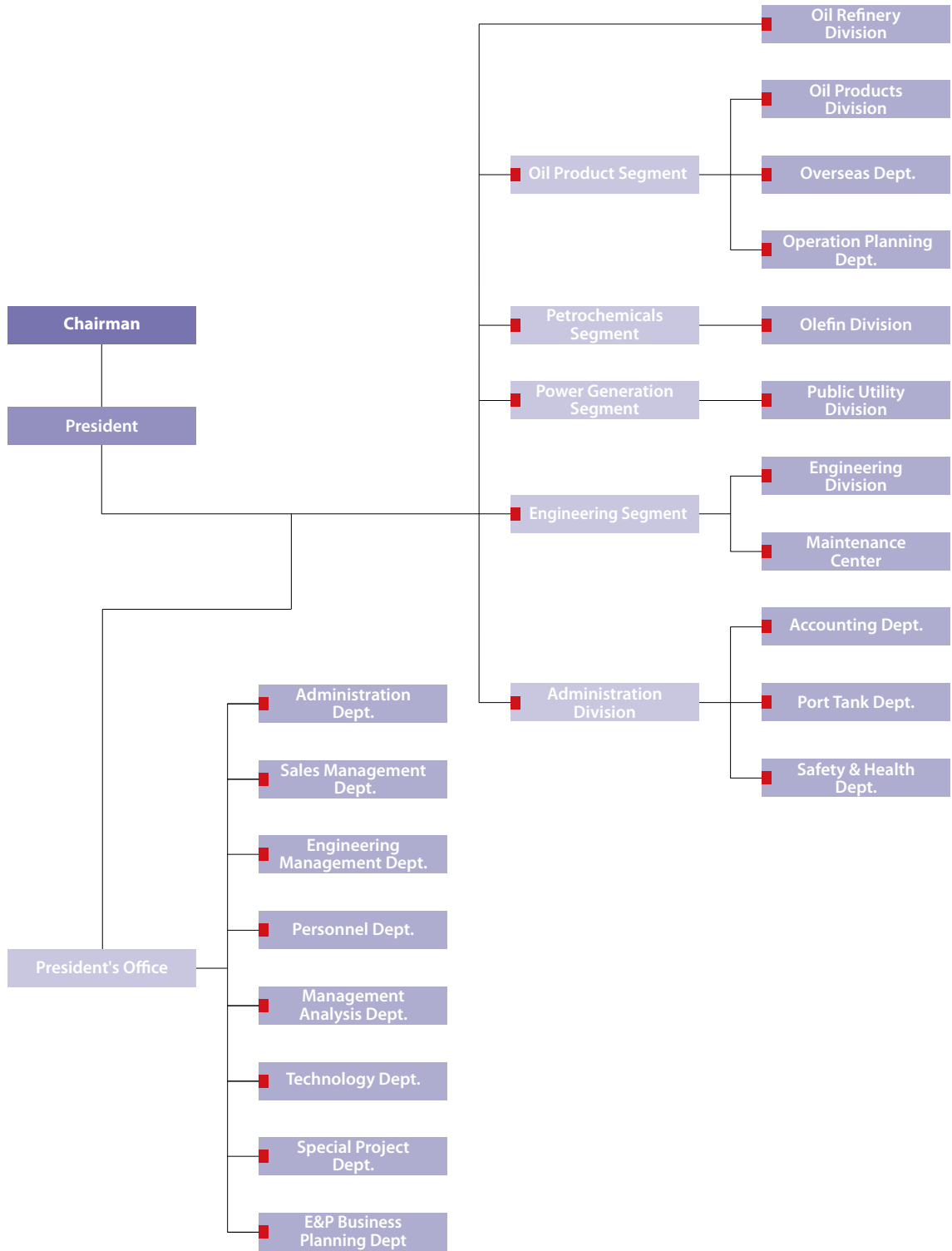
Nan Ya Plastics Corp. Organization Chart



Formosa Chemicals & Fibre Corp. Organization Chart



Formosa Petrochemical Corp. Organization Chart



2017 Financial Highlights

(In Thousands of US Dollars, persons)

Company	Capital	Assets	Equity	Sales	Income Before Income Tax	Number of Employees
Formosa Plastics Corp.	2,132,719	15,259,702	11,558,904	5,704,702	1,838,291	6,135
Nan Ya Plastics Corp.	2,657,070	16,708,190	11,914,361	5,809,515	1,971,639	12,248
Formosa Chemicals & Fibre Corp.	1,963,678	15,206,178	11,983,043	7,898,667	1,971,617	4,921
Formosa Petrochemical Corp.	3,191,490	14,285,050	11,434,153	20,846,848	3,216,830	5,179
Nan Ya Technology Corp.	993,011	5,042,763	4,422,402	1,812,056	1,400,197	2,923
Nan Ya PCB Corp.	216,485	1,223,460	1,030,437	721,222	-65,518	5,331
Formosa Sumco Technology Corp.	259,882	812,628	726,079	425,926	87,042	1,328
Formosa Taffeta Co., Ltd.	564,415	2,864,653	2,324,424	861,493	150,208	4,741
Formosa Advanced Technologies Corp.	148,158	407,906	371,264	264,289	53,121	2,379
Mai-Liao Power Corp.	734,790	1,744,347	1,456,975	682,859	34,386	416
Subtotal of Public Companies	12,861,698	73,554,877	57,222,042	45,027,577	10,657,813	45,601
Other Domestic Companies	1,464,795	18,748,446	16,362,006	5,257,405	960,626	29,850
Subtotal of Domestic Companies	14,326,493	92,303,323	73,584,048	50,284,982	11,618,439	75,451
Companies in U.S.A	1,142,906	11,579,696	10,043,563	5,677,651	1,096,248	4,080
Companies in China	4,961,018	11,121,521	6,026,197	9,379,936	608,691	19,235
Other Foreign Companies	6,133,916	16,710,406	6,922,887	1,812,015	-206,665	14,230
Subtotal of Foreign Companies	12,237,840	39,411,623	22,992,647	16,869,602	1,498,274	37,545
Total of Formosa Plastics Group	26,564,333	131,714,946	96,576,695	67,154,584	13,116,713	112,996

• NOTE: The financial data shown above is extracted from the individual financial statements of each company.

HEADQUARTERS

No.201, Dunhua N. Rd.,
Songshan Dist.,
Taipei City 10508,
Taiwan (R.O.C.)
Tel : 886-2-27122211
Fax : 886-2-27178412
[http: //www.fpg.com.tw](http://www.fpg.com.tw)

FORMOSA PLASTICS CORPORATION, U.S.A.

9 Peach Tree Hill Road,
Livingston, NJ 07039, USA
Tel : 1-973-992-2090
[http : //www.fpcusa.com](http://www.fpcusa.com)