# 2020. ANNUAL CSR REPORT

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Nan Ya Printed Circuit Board Corporation Corporate Social Responsibilities Report







# Nan Ya Printed Circuit Board Corporation (NYPCB)

2020 Corporate Social Responsibilities Report



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# ABOUT CSR

# • Overview

This report is the nineth corporate social responsibility report that Nan Ya Printed Circuit Board Corporation (hereinafter referred to as the Company or NYPCB) has published. The report was published in June 2021, which includes the company's profile, governance, environmental sustainable development, employee wellness programs, and charity work that took place at or involved NYPCB Plant No.1, 2, 5, and 6 (Address: No.338, Sec. 1, Nankan Rd., Luchu Distict, Taoyuan City) from January 1st 2020 to December 31st 2020. Therefore, the previous corporate social responsibility report was published in June 2020.

All data and statistics divulged in this report have come from the statistical analysis and investigation of the Nan Ya Printed Circuit Board Corporation. Financial data were specifically countersigned by an accountant and transmitted in accordance with relevant laws. Some data have been taken from government websites and stated in a more colloquial way for description purposes. Exceptions are otherwise noted throughout the report.

We will publish the CSR report regularly and the next report will be published in June 2022.

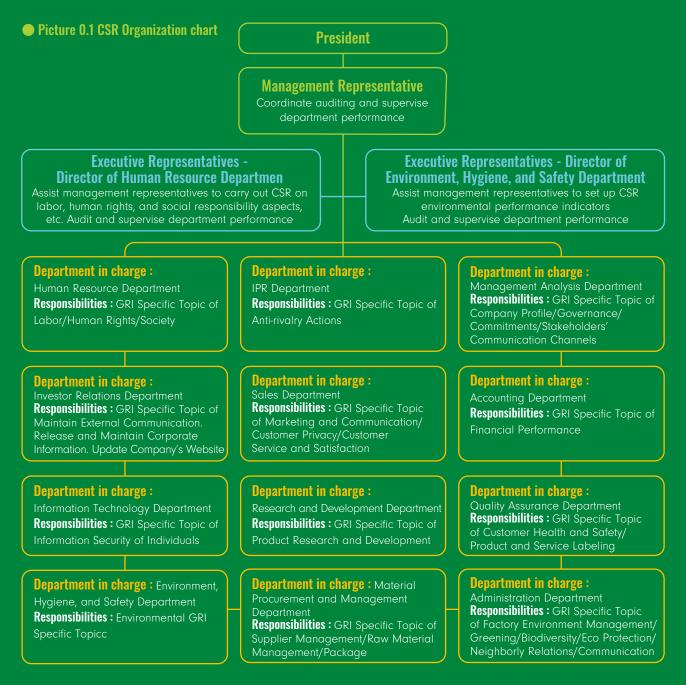
# • Report Guideline

The report content structure adopts the Global Reporting Initiative (GRI Standards 2016) sustainability reporting guidelines and is written pursuant to the guidelines and framework outlined in the "Core Option.".

In order to reinforce the performance comparability and report sustainability, all the information published in this report are checked by the well-established British Standard Institution (BSI), and conform to AA1000 and GRI Standards. The "GRI Standards Check Independent Opinion Statement" of British Standard Institution (BSI) can be found as an attachment. The statement presented its findings with the International General Index, and any estimation will be mentioned in the respective chapters.

- Global Reporting Initiative ,GRI Standards 2016
- Assurance Standard (2008) and its 2018 v3 significance, inclusiveness, reactivity and impact





# Methods

To integrate and promote corporate social responsibility, NYPCB has established a "corporate social responsibility team," (hereinafter referred to as the CSR team) led by General Manager Tang, Ann-De in 2012. General Manager Tang Ann-De and Deputy General Manager Lyu, Lian-ruei, who is the Company's Management Representative, have been responsible for the strategic planning, monitoring, and evaluation of the Company's performance in terms of corporate social responsibility. The organizational chart is presented as above.

# Contact Information

Please contact us through the following channels if you have any suggestions or questions.

Investor Relations Unit of the President's Office, Nan Ya Printed Circuit Board Corporation

Tel : +886-3-3223751 ext.1014

E-Mail: jameshan@nanyapcb.com.tw Website: http://www.nanyapcb.com.tw









The Corporate Social Responsibility (CSR) policy of Nan Ya Printed Circuit Board includes the areas of corporate governance, environmental protection, and social welfare. We have continuously strived to meet the responsibilities of our long-term commitments to our shareholders, customers, employees, suppliers, nearby communities, government units, media organizations, and non-profit organizations. As a subsidiary of the Formosa Plastics Group, NYPCB has followed the Group's CSR policies and focused on five different strategies, which are corporate governance, environmental protection, procurement policy, labor and ethics, and social welfare.

# (1) Corporate Governance

- Abide by all laws and business ethics, and establish a comprehensive corporate system to maintain positive corporate governance.
- Adopt international standards and practices, continuously improve and enhance competitiveness to benefit our shareholders.
- Steadily supply high quality products at a low price and help our downstream customers to develop new products and increase their competitiveness.
- Provide employees with a safe and healthy working environment, quality training programs and systems, and clear targets that they can follow so they can reach their full potential.

# (2) Environmental Protection

- Continuously improve production processes to reduce energy consumption and carbon emissions.
- Introduce lead-free technology and comply with the RoHS Derivative (Restriction of Hazardous Substances Derivative) of EU, pertaining electrical and electronic products.
- Financial impact and risk opportunity of climate change to organization

The climate change would much more likely cause the extreme climate, including the average atmosphere temperature rising and drought time extension, to cause the risk of electricity and water supply shortage, therefore, the Company continuously promotes the energy saving improvement to reduce the resource and energy consumption, to improve the industrial competitiveness while enhancing the friendly environment, and achieve the multiple benefits.

# (3) Procurement Policies

- Procure green materials and reduce resources consumption in order to increase rate of recycling and reusing of resources.
- Enforce strict inspection on raw material supplies to prevent conflict minerals from entering production processes.

# (4) Labor and Ethics

- Provide employees with a safe and healthy working environment, and have high quality training programs and systems, and clear targets that they can follow so they can reach their full potential.
- Abide by laws and business ethics, establish and improve the enterprise system to maintain a sound corporate governance system.
- Strive to attain perfection and do good deeds. Make continuously improvements, enhance competitiveness and give back to the society.

# (5) Social Welfare

- Address various social issues, and participate in appropriate community and social welfare activities to foster a kind and compassionate society.
- Use our corporate spirit of striving for perfection to create efficiency and success in our social welfare endeavors.

To honor our commitments in corporate social responsibilities, Nan Ya Printed Circuit Board upholds a principle of giving back what we gain from society. The Company strongly believes that such responsibilities are part of our valuable assets, an everlasting brand, and a cultural beacon. The Company pledges to shoulder more social responsibilities, take part in more social welfare activities, help minority and disadvantaged groups, promote environmental protection and strive to achieve zero pollution, zero carbon emission, and zero accident target as well as establish a diverse and convenient communication with stakeholders to create the greatest benefit to the Company's investors, employees, society, and country.

Nan Ya Printed Circuit Board Corporation(NYPCB) President Tang Ann-De in 2020



# **CORPORATE INTRODUCTION**

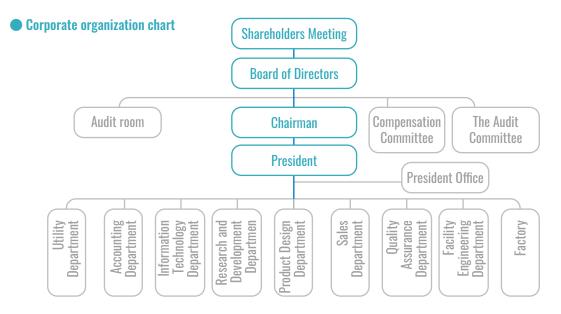
# **1.1 Company profile**

Nan Ya Printed Circuit Board Corporation began operation in 1985. It was a printed circuit board division of Nan Ya Plastics Corporation, belonging to the Formosa Plastics Group, before being separated from the Nan Ya Plastics Corporation. Nan Ya Printed Circuit Board Corporation became an independent company in 1997. The firm has specialized in researching, developing, manufacturing, and selling printed circuit boards and IC substrates (Wire Bond Substrates and Flip Chip Substrates).

In its business operation, NYPCB has focused on improving manufacturing processes and conducting research and development in order to meet customers' needs for high quality products. The Company has gone through a vertical integration in order to reduce production costs and enhance productivity. It also firmly believes that a company cannot meaningfully exist without generating reasonable profits and contributing to the society. Therefore, NYPCB has contributed to social welfare activities for minority and disadvantaged groups while continuously expanding its scale to enhance quality and profits, and upholding corporate responsibilities.

NYPCB has built a factory in Taiwan. The Jing Hsin factory is located in the Luchu Township of Taoyuan County . As of December 31st 2019, the company had a total of 5,774 employees, of which included 297 managers and executives, 740 supervisors, 3,450 general staff, 164 service staff, and 1,117foreign workers. Employees in management positions totaled 1,037, which made up 17.95% of all employees.

Nan Ya Printed Circuit Board Corporation is a member of the Formosa Plastics Group. It has stringently upheld its founder's ideas and protected shareholders' interests. The Company believes a stringent and effective governance mechanism ensures that its operations are lawful, financially transparent, and efficient. To achieve this mechanism, NYPCB's organization has been designed as follows:

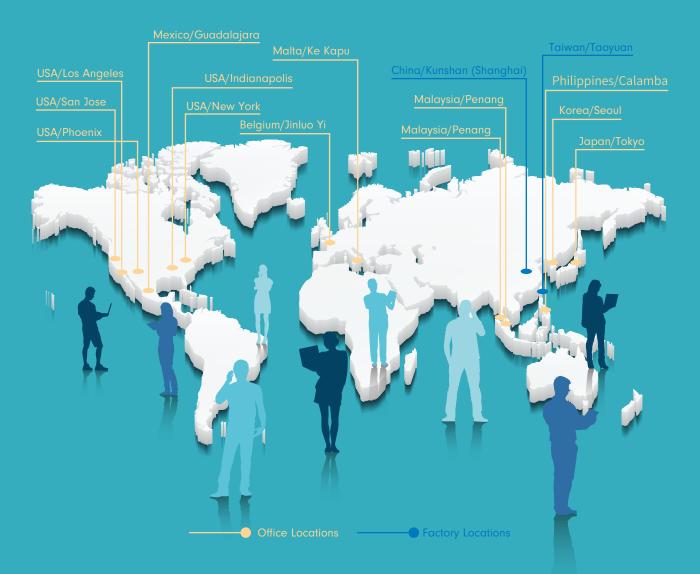


Name	Nan Ya Printed Circuit Board Corporation
Establishment	October 28,1997
Address	Headquarters: 3F., No.201-36, Dunhua N. Rd., Songshan Dist., Taipei City (Tel:02-2712-2211) Jing Hsin factory: No.338, Sec. 1, Nankan Rd., Luchu Township, Taoyuan County (Tel:03-322-3751)
Paid-in capital	NTD 6.462 billion
Number of common shares in the market	646,165,487 shares
Employees	5,998 employees (as of December 31, 2020)
Products	Manufacturing and sales of Conventional PCB, High Density Interconnection (HDI), Rigid-Flex, ABF (Ajinomoto Build-up Film) Substrate, and PP (Prepreg) Substrate
Production bases in Taiwan	Jin Hsin factory

# **1.2 Market Position**

Regarding the IC package substrate market, since the semiconductor industry is developing toward the multifunctional, high-density and small-size chip trend, this kind of product is in a higher technology field with fewer competing firms despite the fact that competitors continue to enter the IC package substrate market. Therefore, pricing is not overly competitive in the IC package substrate market compared to that of the printed circuit board market.

# Clobal Service Centers



NYPCB continues the research and development in the three main products, and gains much in the market. The Company has successfully mass-produced the high-end HDI, high-layer board and high-end substrate, and successfully entered the supply chain of world-level customers. Due to the rising 5G telecommunication, artificial intelligence, and wearable device, there is a high demand for 5G base station and network application substrate, server application circuit board, high-performance computing chip substrate, and system-in-package substrates. Also, the demands in work from home and automotive electronics propel the consumption of IC substrates and PCBs. Thus, the Company shall expand the capacities and continue the research and development aiming at this trend, in the expectation to increase the proportion of high-value products sales and further improve the Company's profitability.



# **1.3 Prospects, Opportunities and Challenges to the Industry**

NYPCB business development plan can be divided into short term and long term plans. In the short-term business plan, due to the increasing demand for solid state disk, memory module, and network device application products, NYPCB must put more emphasis on developing technical capacity for high-density, thin circuit, IC substrate products as well as developing potential customers to meet market acceptance, adjust product combinations, expand production capacity of high value added products, and increase output values and business profits.

While according to the future market development trend, the long-term business development plan is still primarily the internet of things and system-in-package products. The Company adheres to the operation principle of improvement, innovation and sustainable operation, dedicates to the research and capacity expansion of environment-friendly products, and continues to develop the new customers, with the leading quality technology as the advantage, to be the principal axis of long-term business development.

## (1) Future Supply and Demand and Growth of the Market

Looking back on 2019, with the help of the growing global economy and boost in consumer confidence, advanced wearable device and telecom products have enjoyed high volume sales. This allowed the high-value products to have a higher contribution to the Corporation compared to last year. However, because major consumer electronics clients adjusted their inventory in the first half of the year, and the market growth for mid- and low-end smartphones slowed down, the Corporation's operation was affected. In the second half of the year, benefited from increased demand for the system-in-packge packaging product and improved yield of the high-end product, the Corporation's annual profit turned into a positive figure. Looking ahead into 2020, with the development of artificial intelligence and the prosperity of 5G telecommunication technology, high-performance computing products will proliferate rapidly. Combined with cloud computing continuously growing in demand and big data triggering sales from the network and telecommunication products and memories, the Corporation's operation is expected to improve continuously.

#### (2) Competitive Advantages

As a member of the Formosa Plastics Group, NYPCB has undergone a vertical integration with the group, which has made the Company not only an upstream substrate supplier but also obtains the ability to supply other even higher-upstream PCB raw materials such as epoxy, copper foil, and glass fiber materials. They have become the foundation of support in NYPCB's growth in the printed circuit board industry. The Company has also completed its construction projects in Taiwan and China. They will not only provide flexible capacity and balanced product development, but also meet customers' needs for a wide range of printed circuit boards. With its profound experiences and advanced technologies, NYPCB has increased its competitiveness through product price and technology advancement.

## ( 3 ) NYPCB's Competitive Edge of the Future

NYPCB's three long term competitive edges include:

- A. Outstanding technologies, quality, and the ability for mass production: NYPCB is one of the first few companies to produce IC substrate and has accumulated significant experience in product development. Its capability in producing quality products and mass production has been recognized by major global manufacturers. As such, NYPCB has become one of few main global suppliers of comprehensive printed circuit boards.
- B. NYPCB has built a large customer base: The Company's quality products have earned the trust of many multinational electronics producers. Thus, many of them have cooperated with NYPCB in new product development in order to help themselves meet the productivity targets and expand market share.
- C. The stringent and sustainable management system from Formosa Plastics Group: NYPCB is a member of the Group and has inherited its superior management system, style, and philosophy. The Company has maintained stringent management and control on production and costs, and has achieved stable supply of raw materials through resources integration and workforce collaboration in with the Group as well as the ability to negotiate procurements with external parties.

#### (4) Disadvantages and Obstacles

NYPCB has continued to offer high quality products and technologies to its customers. However, since the printed circuit board industry has matured, competition has intensified and the electronics market is changing rapidly. The Company has implemented the following policies to generate reasonable profits and secure sustainable development:

- A. Enhance yield rate and technologies, help customers to produce various niche products, and carry out improvement projects to reduce costs and increase margin. The Company also has increased its efforts in research and development to streamline manufacturing processes and increase capacities to maintain NYPCB's competitive edge in technologies and costs.
- B. The future goals of the company should be continued investment in the development of advanced technologies, timely expansion of production capacity to compete for niche products, and an increase in new customers and opportunities in order to elevate capacity utilization.

# **1.4 Major Products and Research & Development**

NYPCB has conducted extensive research and development. The Company has achieved multiple patents but continue developing new products. The following are products successfully developed by NYPCB and their uses:

# (1) Printed circuit boards:

- A. High Density Interconnect Substrate: The product is mainly a substrate material used to develop the high-end blind & buried vias, high-stacking technology and corresponding applications. Product applications include wearable devices, 5G high-frequency products, high-end notebook computers, and LED displays, etc.
- B. Multilayer PCB: Technologies to pair multiple layers of PCB and perform high aspect ratio electroplating and impedance matching have been developed. These technologies can be used to produce servers and workstations.

#### (2) IC packaging substrate

By process flow, the product can be classified into PP substrate and ABF substrate. Regardless of the packaging type, the design trend is going toward fine line, smaller micro via, thinner and high layers.

- A. PP Substrate: Wire bonding and FC packaging substrates have entered mass production. The coreless substrate and embedded technology currently under development are to be applied in high-end POP packaging, multi-core chips, and smart music box chips. In the meantime, ultra-thin substrate is also under development which can be applied to smartphones, tablets, TV chips, and logic computing and power control chips. In addition, SIP package products have entered the stage of mature mass production, so can satisfy more diverse product requirement, including RF module chip for mobile phones, network telecommunication chips, wearable devices, and memory card control chips.
- B. ABF Substrate: The product design now tends to be more and more lightweight, thinner, and smaller. This year, the development of high layer count and large body size substrate is the focus, in addition to the development of the high-stack precision alignment technology used in manufacturing high-end telecommunication substrates. Another goal is set for the development of high-speed I/O and 90µm pitch technology for solder balls. Based on the future challenges arising from technological products, short/medium/long term R&D projects for key production processes are established to safeguard our leading role in future technology. Moreover, introduction of new materials such as highly reliable substrates and ink, stability substrates with low-roughness surface and of large dimension, and low insertion loss dielectric material are all being developed to meet the needs of high-speed communication products in the future.

#### (3) Major applications and production processes of primary products

Product name	Important use
Printed circuit boards	It is a key component used as a carrier in various electronic devices, and serves as the interconnection between different components to communicate message. Applications include: Notebook computers, workstations, servers, high-end memory modules, game consoles, TV sets, cars, LED displays, mobile phone peripherals, and wireless charging.
	It is applied to the carrying of IC chip (Chip) products, so that the output/input signal of the chip communicates with the system through the internal and external pins on the substrate, and can help the chip heat dissipation
IC packaging substrate	<ul> <li>The categories are as follows:</li> <li>Netcom products: network switches, routers, wireless chipsets, radio frequency, optical fiber communication chips, etc.</li> <li>Server products: cloud servers, data center Al chips, etc.</li> <li>Consumer electronics: digital TV chips, game consoles, set-top boxes, etc.</li> <li>Computer products: central processing unit, graphics chip, etc.</li> <li>Others: car information, audio and video, etc.</li> </ul>
Classifica Intelliger	

# Identified Material Aspects and Management Approach

Corresponding Material Issues	Product innovation and research & development (R&D)
Significance	R&D generally refers to the kind of continuous and systematic activity which has clear objectives for a company to acquire science and technology, creatively apply new knowledge of science and technolo- gy, or substantially improve technologies, products, and services.
Policy and Commitment	To invest in product innovation and R&D by adhering to the operation- al principle of "improvement, innovation, and sustainable operation." To ensure competitive and high quality products are provided to customers.
Responsibilities	R&D Department
Resources	<ul> <li>Manpower: R&amp;D Department, the Engineering/YIP teams of production plants</li> <li>Funding: R&amp;D expenses</li> </ul>
Action	<ul> <li>To develop low CTE substrate</li> <li>To improve inner layer fine line capability</li> <li>To improve Cu thickness uniformity at build up layer.</li> <li>Apply stepper SR exposure machine.</li> <li>High bump count substrate bump yield improvement.</li> </ul>
Communication Channel	<ul><li>Periodic project meetings</li><li>Quarterly visits to clients</li></ul>
Evaluation Method	Increase in the number of trial production that leads to mass production
Target (Short/Medium/ Long Term)	<ol> <li>Short-term (within 3 years):         <ul> <li>To develop low loss dielectric build up film.</li> <li>To develop low Cu roughness chemical solution.</li> <li>Apply SR stepper exposure machine.</li> </ul> </li> <li>Medium and long term (3~7 years):         <ul> <li>Yield improvement of dielectric material.</li> <li>High reliability dry film SR development</li> </ul> </li> </ol>
	High quality & performance substrate development.
Overall Performance	<ul> <li>1.In 2020:</li> <li>High performance ABF lamination machine development</li> <li>Vacuum etching machine development.</li> <li>To apply new plating solution.</li> <li>To apply automatic line of reflow &amp; flux clean machine.</li> <li>Al condition set up for B/E process.</li> </ul> 2. Number of patents obtained: <ul> <li>10 in 2018, 8 in 2019, 6 in 2020.</li> </ul>



# **1.5 Awards and Recognitions**

NYPCB has followed the Formosa Plastics Group's corporate spirit in conducting final analyses and improving continuously until accomplishing perfection. We face problems head on and resolves them using practical solutions, and believe in hardwork, sincerity and honesty, society contribution, and sustainable development. This is the reason that we have continuously made improvements in corporate governance, environmental protection, and public welfare, and upheld our commitments to make the society better. NYPCB's efforts have been recognized by the Taiwanese government as well as by non-governmental organizations. The following certifications and awards have encouraged the Company to keep streamlining its management and emphasizing environmental protection and reservation.

# Recognitions

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	•	
Items	Date	Certification
1	1993	ISO9001 Certification(Note1)
2	1996	ISO14001 Certification
3	1998	UL-QS-9000 Certification
4	2001	OHSAS-18001 Certification
5	2002	TL-9000 Certification
6	2003	Green Product/RoHS Certification
7	2004	TS-16949 Certification(Note2)
8	2009	CNS15506 Certification
9	2010	ISO-14064-1 Certification
10	2010	EICC Certification (Grade: yellow)
11	2011	A bronze medal from the Taiwan Training Quality System
12	2012	EICC Certification (Grade: green)
13	2013	ISO9001 Certification(Note3)
14	2013	TS-16949 Certification
15	2013	Awarded Authorizes Economic Oprrators(AEO) by Customers Administration, Ministry of Finance
16	2014	EICC Re-Certification (Grade: green)
17	2016	Awarded Authorized Economic Operators (AEO) by Customers Administration, Ministry of Finance
18	2017	Passed OHSAS-18001 reassessment certification
19	2018	Passed ISO14001(2015) revision certification
20	2018	Transfer from TS 16949 to IATF 16949 (Note 4)
21	2018	Passed 9001(2015) revision certification
22	2021	Conversion from OHSAS 18001 to ISO 45001
Note 2	: In 2004,	Product Type PCB/WB passed ISO 9000 certification and will be recertified once every 3 years. Product Type PCB/WB passed TS-16949 certification and will be recertified once every 3 years. Product Type ABFS passed ISO 9000 / TS-16949 certification and will be recertified once every
Note 4		Product Type PCB/WB/ABFS passed IATF 16949 certification and will be recertified once every

Note 4: In 2018, Product Type PCB/WB/ABFS passed IATF 16949 certification and will be recertified once every 3 years.

# Awards

Items	Date	Award
1	1998	Won an award from Intel for obtaining Secc certifications
2	1999	Honored by Xerox as one of its world-class certified suppliers
3	1999	Won a Preferred Quality Suppliers award from Intel
4	1999	Won the Supplier Continuous Quality award from Intel
5	1999	Won an award from Intel for obtaining Secc certifications
6	2000	Won the Strategic Supplier Award from Jabil
7	2000	Won a Preferred Quality Suppliers award from Intel
8	2005	Won AsusTek's Environmental-friendly Management System award
9	2005	Won Outstanding Substrate Supplier Certification from Intel
10	2003	Won as a Sony Green Partner
11	2003	Won an award from Intel for contributing to the development of Calexico
12	2004	Won an Outstanding Service and Support award from AMKOR
13	2004	Won a Preferred Quality Suppliers award from Intel
14	2005	Recognized as a Sony Green Partner
15	2008	Received the Taiwan Ministry of Economic Affairs award for achieving the fastest export growth in Malaysia, one of the key markets selected by the Ministry
16	2008	Received the Taiwan Ministry of Economic Affairs award for achieving the second fastest export growth to South Korea, one of the key markets selected by the Ministry
17	2008	Received the Taiwan Ministry of Economic Affairs award for rapid export growth in key markets
18	2010	Won a corporate social responsibilities award from Taiwan's Global Views magazine.
19	2010	Won the Taiwan Executive Yuan's Entrepreneurship Award in Q1 2010
20	2011	Won the Taiwan Executive Yuan's Entrepreneurship Award in Q4 2010.
21	2012	Ranked in the Top 100 Taiwanese Technologies in 2012 by BusinessNext Magazine
22	2012	Ranked among the Top 5000 for Taiwan's Large Enterprises in 2012 by China Credit Information Service
23	2012	Named Trader of Excellence by Taiwan External Trade Development Council
24	2014	Named an ASESH Continuous Improvement Supplier of Substrates in 2013
25	2014	Named ASECL's Best Supplier of Substrate in 2013 Through Taiwan Ratings Corporation's rating, enterprise long-term credit rating: twA+, enterprise short-term credit rating: twA-1, rating prospect: stable
26	2015	Through Taiwan Ratings Corporation's rating, enterprise long-term credit rating is A+, enterprise short-term credit rating is twA-1, and rating prospect is stable
27	2016	<ul> <li>Won the 2015 GM Supplier Quality Excellence Award</li> <li>Evaluation by Taiwan Ratings Corp., enterprise long-term credit rating: twA+; enterprise short-term credit rating: twA-1; rating outlooks: stable.</li> <li>Received the Execution of CSR Award issued by the British Standards Institution.</li> </ul>
28	2017	<ul> <li>Received the 2016 Key Supplier Program Award issued by Translarity.</li> <li>Received the Supplier Sustainability Award issued by ASE Group.</li> </ul>
29	2019	Awarded Authorized Economic Operators (AEO) by Customers Administration, Ministry of Finance
30	2020	First Taiwanese PCB company to make the A-Leadership List 2019 for corporates acting to address climate change recognized by Carbon Disclosure Project (CDP)

# **1.6 Participating Organization and Standard**

To enhance its technologies and competitiveness, NYPCB has actively participated in various major industrial organizations in Taiwan such as the Taiwan Printed Circuit Association (in which NYPCB took posts as Executive Director and Director ever since 1998) and the Taiwan Electrical and Electronic Manufacturers' Association (TEEMA). The Company has also attended major seminars held both domestically and overseas in order to keep it updated with the latest global trends and to seek opportunities for further exchange and cooperation. The Company promises to follow the Responsible Business Alliance (RBA), to provide the safe working environment for the staff, and ensure to provide the respect and dignity, as well as assuring the environmental responsibility and abiding by the moral rule in the enterprise operation process.

# **1.7 Stakeholder Dialogue**

Since globalization has significantly changed the society, environment, business, and economy, and has profoundly affected the lives of people across different sectors and from all pace of life such as agriculture, transportation, economy, trade, finance, safety, hygiene, and gender equality, NYPCB believes that establishing a friendly and convenient environment for communication is the responsibility of an outstanding corporation.

To create such an environment and show the Company's determination, we provide a variety of simple channels of communication and sets Stakeholders Engagement sector on NYPBCB's website for its stackholders in order to better understand their thoughts, demands, and issues of concern. Their voice provides not only an additional reference for this report, but also important suggestions regarding strategy and goal planning for the company's future development of social responsibilities. Based on attributes, the proposal of feedback sent to Stackholder Engagement will be assessed by the functional teams of President's Office and determined whether the issue causes significant impacts to our stakeholders. After the assessment, the case will be classified by the level of impact and delivered to the board meeting. Later chapters will provide the detailed responses to the issues of concern. The table sets forth the issues of concern and the channels of communication between the company and its stakeholders.



# **Stakeholder Communication Channels**

Stakeholder	Communication Channels	Meeting Frequenc	y Issue of Concerr	
	Internal announcements	Irregularly, at least once a year	Harmonious labor relations /	
	Representatives from the Human Resource Department		compensation and	
	<ul> <li>Regular meetings such as union core members seminars/ education seminars/safety conferences /various training seminars/cafeteria quality review conferences</li> </ul>	Once a month	benefits / training and promotion /communication	
Employees	Irregular meetings		, channels /	
0 0 0	• The Administration Department has established communication channels such as suggestion boxes. Medical professionals stationed at the factory provide emergency medical assistance.	Irregularly, at least once a year	workplace safety management/ healthcare for better employment security	
Őğā	Internal publications, online platforms and questionnaires     (e.g. questionnaires on training satisfaction).	,		
	NYPCB has appointed a spokesperson and deputy spokesperson system, and a specialized unit for handling investors' affairs. The Company has also communicated with its shareholders and corporate shareholders by setting up the following communication channels:		Operating	
	Shareholders	Once a year	conditions / dividends /	
	(1) Annual shareholders' meetings	Once a year	corporate gover-	
Investors (Shareholders)	(2) Published annual financial reports as requested and provided them to shareholders during the annual shareholders' meetings		nance / shareholder	
	(3) Shareholders can make inquiries through phone calls and emails.		services / risk control and	
0	Corporate shareholders		management/	
<u>ovo</u>	(1) Investment seminars in Taiwan and overseas	Irregularly	Industry Prospect	
(∽□ᠽ)	(2) Investor forums held by securities companies (not held regularly)			
	Audited by customers			
	Meeting with customers and dealers	Irregularly, at least once a year	Product quality / post-sale services / green products	
Customers	Regular technological support			
	Surveyed client satisfaction			
	Provided educational training for customers			
	Established an information platform for suppliers		Supply chain management / safety and health management / partnerships	
Suppliers	Held regular meetings and reviewed reports face to face	Irregularly, at least once a year		
Q	<ul> <li>Conducted supplier surveys through questionnaires, and provided audits and consulting services</li> </ul>			
	Reviewed material supply stability and quality		puttiersnips	
Non-Profit	• Established charity clubs and participated in community volunteering activities	Irregularly, at least once a year	Social welfare contributions / corporate volunteer services	
Organizations	<ul> <li>Held donation campaigns and provided assistances in light of major natural disasters in Taiwan</li> </ul>			
Media	Shareholders will visit after the annual shareholders meeting	Once a year	Operating status / dividend distribu- tion / corporate	
Ar.	News interview	Irregularly, at least once a year	govérnan'ce / risk control / industry outlook	
Nearby Communities/ Government Units vernment Nearby its Communities	Communicated and informed communities through NYPCB's website	Irregularly, at least once a year	Social welfare contributions / community involvement / corporate voluntee services / environ- mental impact of transportation	
	Official documents	Irregularly, at least once a year	Environmental	
Nearby Co Governme Government Units	Meetings introducing and explaining new laws	Irregularly	accounting / compliance with	
nits	NYPCB's financial statements	Once a year	laws and regula-	
	<ul> <li>Provided reports and information as requested by the government, authorities, and regulations.</li> <li>Communicated with government or authorities through industrial associations</li> </ul>	Irregularly, at least once a year	tions / environmental protection	

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# **1.8 Identification of Major Issues**

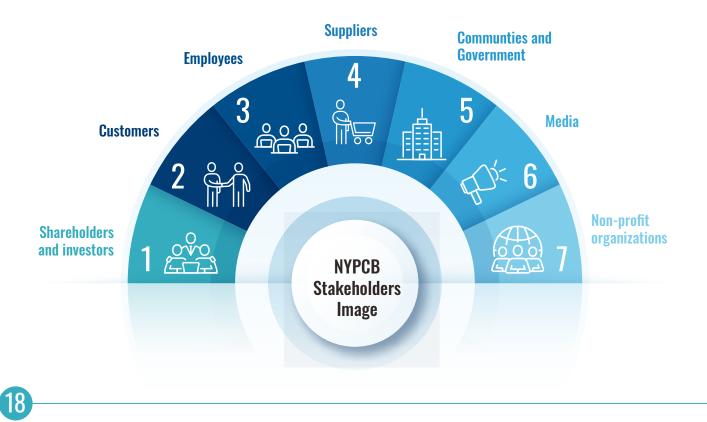
# Stackholder identification and communication

Along with the social environment change and climatic environment change, the world changes variously, and influence our lives of all aspects, such as the agriculture, transportation, economy, trade, finance, safety, sanitation, and gender equality. How to construct a friendly environment is the duty of an enterprise to keep in mind at any time.

In order to provide a friendly environment, NYPCB starts from the practice of stakeholder relationships, including the connections with external supply chains, shareholders / investors, and customers as well as internal company staff. We expect that external partners could cooperate with NYPCB to contribute to the entire environment and society, while internal staff could be treated with respect and dignity. To ensure that all production process and product pose no harm to the environment, NYPCB established a working group to promote corporate social responsibility, closely working with the internal and external stakeholders and exchanging the opinions and thoughts on a timely basis. The working group shall identify the stakeholder according to the work feature of each unit, incorporate issues of concern into the routine work and annual plan, and cooperate with relevant unit depending on the issue of concern.

#### A. Stackholder identification

Based on global trend, industrial feature, experiences generated from daily interactions with stakeholders, and degree of impacts stakeholders pose on corporate operation, NYPCB CSR working group has identified a total of 7 stakeholder categories (investors/ stakeholders, customers, employees, suppliers, nearby communities, government, media, and non-profit organizations) according to specific features such as responsibility, impact, intimacy, representativeness, and strategic intention.



#### B. Major Topic Identification Procedure

In addition to multiple daily communication channels, significant issues of 2020 were selected from the screened list based on the priority, confirmation, and review process of different significant issues. CSR working group is responsible for integrating the initial list of significant issues before distributing questionnaires to collect different voices from the stakeholders.

# Major Topic Identification Procedure



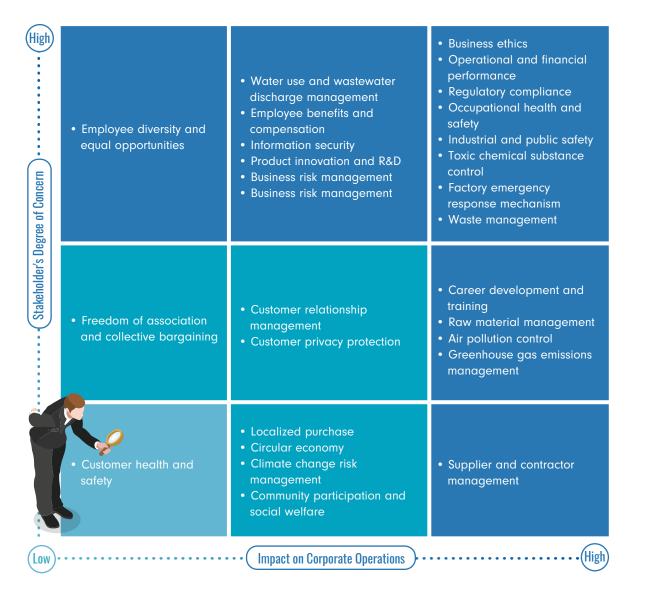


#### C. Sustainable topic collection:

To identify the critical issues that concern our stakeholders, we successfully issued questionnaires to a total of 209 stakeholders (with a questionnaire return rate of approximately 99%). Through intensive discussion from internal meetings, we can determine the impact that these issues have on our corporation. According to "Stakeholders' Level of Concern" and "Impact on the Company", each category is analyzed and classified according to its level of impact and arranged in sequential order. With a total of 19 items, the area on the upper right signifies topics with the greatest significance and on the lower left those with the least significance.We will discuss the significant issues and items that need improvement later in this report.

We will discuss the significant issues and items that need improvement later in this report. By making such improvement, we seek to maintain effective communication channels and partnerships with all of our respective stakeholders.





# Material Topics and Value Chain

	Торіс	Value Chain								
Category		NYPCB	Share- holders	Media	Suppli- ers	Commu- ni- ties/Gov ernment	Cus- tomers	Non-pro fit organi- zations	Corresponding GRI Disclosure	Management Approach / Chapter
	Operational and financial performance		0						GRI 201-1	2.2 Financial Performance
	Business ethics		0		•		•		Custom theme	Message from the President 1.3 Prospect, Opportunities, and Challenges to the Industry
Economy	Business risk management	•							GRI 201-1	Message from the President 2.1 Governance Overview 3. Environmental sustainability 3.2 Environmental Accountability 3.4 Water and Energy Conservation and Greenhouse Gas Reduction
Ê	Product innovation and R&D						•		Custom theme	1.2 Market Position 1.4 Major Products and R&D
1	Supplier and contractor management				•		•		GRI 308-1~2 GRI 414-1~2	2.6 Supplier and Contractor Management 4.7 Crisis Management
	Regulatory compliance			O		Δ			GRI 419-1	2.1 Governance Overview 2.3 Internal Control
0	Information security		0						GRI 419-1	4.7 Crisis Management
	Water use and wastewater discharge management			0		$\bigtriangleup$			GRI 303-1~3 GRI 306-1,5	<ol> <li>Environmental sustainability</li> <li>Water and Energy Conservation and Greenhouse Gas Reduction</li> </ol>
	Air pollution control	•		0					GRI 305-1~2,4,5,7	3.4 Water and Energy Conservation and Greenhouse Gas Reduction
lent	Waste management			$\bigcirc$		$\triangle$		$\triangle$	GRI 306-2,3	
Environment	Greenhouse gas emissions management			Ô		Δ			GRI 305-1~2, 4, 5	3. Environmental sustainability
	Raw material management								GRI 308-1~2	2.6 Supplier and Contractor Management
	Toxic chemical substance control	•				$\triangle$			GRI 305-7	3.8 Toxicity and concerned chemical substances
	Factory emergency response mechanism					Δ			GRI 403-1~4	4.5 Employee Wellness Program (Occupational safety and health)
	Employee diversity and equal opportunities								GRI 405-1	4.1 Employment
	Industrial and public safety	•			•				GRI 403-1~3	3.1 Commitments to Environmental Sustainability
Society	Occupational health and safety	•			•				GRI 403-1~3	4.5 Employee Wellness Program (Occupational safety and health)
	Career development and training	•							GRI 404-1	4.3 Training System
	Employee benefits and compensation	•							GRI 401-2,3 GRI 405-2	4.2 Salaries and Welfare

Notes:

1. Level of involvement of the organization with this shock

• : Direct impact  $\bigcirc$  : Contributing impact  $\triangle$  : Throught business relationships 2. After review, a total of 19 material topics have been established, an decrease of 1 issues compared to 2019. Mainly, the topics "Customer privacy protection," has been deleted.





# **CORPORATE GOVERNANCE**



# Identified Material Aspects and Management Approach

Corresponding Material Issues	Ethical management, operational and financial performance, business risk management, and regulatory compliance
Significance	The Corporation is a strict practitioner of regulations and business ethics. In addition to complying with the Company Act, the Securities and Exchange Act, and the Business Entity Accounting Act, the Corporation acts upon the corporate culture spirit of "Diligence and Simplicity." Based on the business philosophy of honesty and sincerity, fairness and transparency, and self-discipline and accountability, the Corporation has formulated and implemented various ethic policies in order to create good corporate governance and risk control mechanisms and seek for sustainable corporate development.
Policy and Commitment	<ul><li>To implement ethical management.</li><li>To abide by business ethics and pursue sustainable management.</li></ul>
Responsibilities	Board of Directors
Resources	<ul> <li>The board of directors is the highest governance unit.</li> <li>Actions are taken by adhering to the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" and other related regulations.</li> </ul>
Action	<ul> <li>Establish an effective and comprehensive accounting system and internal control mechanism to fully promote computerization across all operational processes; the six major management functions – personnel, finance, business, production, materials, and engineering – should be interconnected by computers to enable trench auditing layer by layer as well as abnormality management.</li> <li>Establish a professional and independent internal audit operation structure.</li> </ul>
Communication Channels	<ul> <li>Reporting to independent directors should be conducted at least once a year jointly with the CPAs about the financial status and the overall operation of the Corporation as well as its domestic and overseas subsidiaries, together with the internal control auditing status. The impact of the revision of laws should be fully communicated with independent directors; if necessary, a meeting shall be convened at any time.</li> <li>Various statements and reports prepared by the board of directors are audited by the CPAs appointed by independent directors, and a review report is presented in accordance with regulations.</li> </ul>
Evaluation Methods	<ul> <li>Implementation effect and improvement continuity is reviewed by the board of directors at any time to ensure corporate social responsibility policies are fulfilled.</li> <li>The board of directors authorizes the senior management to handle the economic, environmental, and social issues generated from the Corporation's business operations, and report the status back to the board.</li> </ul>
Targets (Short/ Medium/ Long Term)	<ul> <li>Short-Term: To act upon relevant practices ruling the information declaration and major information filing of public listed companies. There should be no such situation to occur regarding corrections by the competent authority or defaults recorded by the Stock Exchange.</li> <li>Medium- and Long-Term: There should be no such situation to occur regarding the violation of ethical management principles, corporate social responsibilities, and the internal control system, or other situations not in compliance with the corporate governance principles.</li> </ul>
Overall Performance	<ul> <li>From 2016 to 2020: The Corporation received no correction notice from the Stock Exchange.</li> <li>The Corporation has established a dedicated (adjunct) unit for promoting corporate social responsibilities and ethical corporate management. The operation and execution status of the established unit is also disclosed in the Corporation's annual reports and on the corporate website, and reported regularly to the board of directors.</li> </ul>

# 2.1 Governance overview

# (1) Professional board operation

Under the corporate governance structure, the board of directors is the highest governance unit responsible for setting operational strategies. Entrusted by the shareholders, the board of directors is mainly responsible for ensuring legality and transparency in the business's operational information, designating business managers to integrate operational affairs, drafting profit distribution plans (so that shareholders can share in the business's operational results), and supervising and guiding daily business operations. The board of directors carries out its operations according to relevant regulations stipulated by the domestic "Company Act", "Articles of Association", and "Rules & Procedures of Board of Directors Meetings". The "Moral Standards for Members of the Board, and Managers" and "Business Integrity Guidelines" have also been stipulated to ensure that relevant personnel consider moral standards while performing their duties, which in turn prevents corporate and shareholders' benefits from being damaged.

The Nan Ya Printed Circuit Board Company's board member selection process shall follow Company Law, the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies and the Nan Ya Printed Circuit Board Company's 'Board Member Selection Procedures' and other regulations. Current term board members are appointed by shareholders at the shareholders meeting in June 2020, and consist of nine members (one board chairman, five directors and three independent directors) whose appointment periods are from June 2020 to June 2023. The present Board Chairman, Mr. Wu Chia-Chao, General Manager, Mr. Tang Ann-De. Our directors are all highly-specialized personnel with rich experiences in the industry. They provide the most professional guidance on the Company's strategic planning for future developments. Their average age is about 70 years old. To fortify the independence and diversity of its corporate governance, the Company currently has three independent directors; however, there are no female directors at the moment. The education and work experience of the board members are listed below:

Title	Name	Education	Concurrent positions in NYPCB or other companies
Chairman	NYPCB representative Wu Chia-Chau	National Chengchi University, Department of Business Administration	Chairman of Nanya Plastics Corporation and Nanya Technology Corporation
Director	NYPCB representative Wong Wen-yuan	Industrial engineering, University of Huston	Chairman of Formosa Chemicals & Fibre Corporation, Formosa Taffeta and Formosa Advanced Technologies
Director	NPC representative Tzou Ming-Ren	Taipei Tech Chemical Engineering Department	General Manager of Nanya Plastics Corporation
Director	NPC representative Chang Chia-Fung	Automatic control engineering, Feng Chia University	NYPCB Deputy General Manager of NPC
Director	Tang Ann-De	Electrical engineering, National Taiwan University of Science and Technology	NYPCB's President
Director	Lu Lien-Jui	Chemical Engineering, National Taiwan University of Science and Technology	NYPCB's Vice President
Independent director	Wang Cheng-I	MA in Public Finance, National ChengChi University	None
Independent director	Lin Ta-Sheng	M.S. of Chemistry, Texas Southern University in Houston, Texas, USA	China Electric Director
Independent director	Chien Shyur-Jen	M.S. of Chemical Engineering, Massachusetts Institute of Technology	Independent Director of Wistron Corp., Chairman of Fuchu Corp.



The Company's board of directors all possess professional backgrounds in business management, leadership and decision-making, industrial knowledge, international perspective, and financial and accounting analysis, and have an abundance of business management experience. The board has nine directors, among whom three are independent directors. Their educational background, gender, professional qualifications, and work experience are listed in the following chart:

	Nationality	Gender	Business Management Background and Management and Decision-Making Ability				
Name			Doontooo	Leadership and Decision-Making	Industrial Knowledge	International Perspective	Financial and Accounting Analysis
Wu Chia-Chau	R.O.C	ļ	•	•	•	•	٠
Wong Wen-yuan	R.O.C	ţ.	•	•	•	•	•
Tzou Ming-Ren	R.O.C	ţ	•	•	•	•	۲
Chang Chia-Fung	R.O.C	ţ.	•	•	•	•	•
Tang Ann-De	R.O.C	ţ	•	•	•	•	۲
Lu Lien-Jui	R.O.C	ţ.	•	•	•	•	•
Wang Cheng-I	R.O.C	ţ	•	•	•	•	•
Lin Ta Sheng	R.O.C	ŧ	•	•	•	•	•
Chien Shyur-Jen	R.O.C	ļ	•	•	•	•	۲

# There totally held 6 Board of Directors meetings in 2020, attendance rate 96% and the assessment to the target and execution condition of Board of Directors function is as below:

- A. The operation of Board of Directors is according to the laws, and the provision of Articles of Association and resolution of shareholder meeting decide the executive authority, that all the directors shall create the maximum benefit for the shareholders in the principle of loyalty and good faith, except for the necessary professional knowledge to fulfill the duty.
- B. For the selected and appointed independent directors, and in order to construct the good governance system of Board of Directors for the Company, it has formulated the discussion specification for Board of Directors depending on the provision of security authority, including the major discussion content, operation procedure, items to be stated in the minute, announcement and others to be followed, which shall all be handled according to this code.
- C. Except the Company shall periodically handle the self-check for the operation of Board of Directors, to reinforce the function of Board of Directors, the internal auditing personnel shall make the audit report for the operation condition of Board of Directors, to meet the authority requirement.

# ( 2 ) Corporate Management Structure

NYPCB's governance is designed in accordance with its organization chart and their responsibilities are outlined as follows:

D	epartments	Responsibilities
Au	diting Office	Review internal control systems and regulations to ensure the system has been effectively enforced.
	Human Resource Unit	Organize human resources, establish articles of association, handle employee transfers, and perform employee evaluation, recruitment, education, and training. Ensure fair management, access employ- eesp online ones on to employee opinions, and compile the corporate social responsibility report.
	Management Analysis Unit	Organize board meetings and annual general meetings. Plan and implement tax exemptions. Review and compile data.Evaluate performance and analyze costs.
	Public Relations Unit	Industry Information Collection ,Market Competition Analysis, Investor Relations Establishment, Maintenance Operation Planning.
0	Management Unit	Oversee production, sales, and operation.
erna	Equipment Unit	Equipment Unit Establish and implement maintenance systems.
Presidentternal	Material Procurement and Management Unit	Plan the usage of raw material. Purchase raw material and control inventory. Ensure the usage of raw material is reasonable and cost-effective. Manage inventory and warehouses.
Ľ	Projects Unit	The construction and expansion of plants in China. Plan and arrange new production and install new equipment, conduct trials, and manage production.
	Production and Sale Unit	Oversee the expansion of the flip chip project, mass production, trial production, and delivery. Estimate the consumption of jigs and raw materials.
	Legal Affairs Unit	Manage the Intellectual Property Rights and legal affairs of NYPCB. Apply for patents.
	EHS Unit	Implement and manage measures to prevent pollution. Organize required training on workplace safety, environmental protection, and hygiene.
	counting partment	Establish, plan, supervise, and implement an auditing system. Review the legality and legitimacy of transactions. Handle daily accounting reports, file taxes, and analyze the profit and loss of products
Те	ormation chnology partment	Oversee the Management Information system, establish an intranet, and manage Company websites. Evaluate and develop information systems, manage the intranet, and develop applications
Research and Development Department		Establish and review production regulations, new materials, and technologies. Establish and review new product production processes. Evaluate and execute plans to satisfy customer requirements for processing technologies and tests. Conduct trial production for new products before entering mass production.
	oduct Design partment	Design, produce, and improve jigs. Integrate and review production technologies. Manage and execute trial production of films and screen plates. Compile new customer data.
Sales Department		Carry out marketing initiatives and analyze the market. Plan and implement sales plans. Expand the customer base.Responsible for customer service. Analyze markets for new products.
Quality Assurance Department		Establish a quality control system, audit customers, obtain UL certification, conduct reliability tests, analyze quality, and make timely improvement. Make quality control plans and review resume.
Construction Department		Plan and analyze engineering projects. Manage parts and materials for construction. Supervise construction projects.Develop competitive products. Subcontract, examine, and verify expansion projects.
Utility Department		The utilities, wastewater treatment equipment fault management, statistical analysis, betterplanning, power system operation execution, operation management.

# (3) Follow Corporate Regulation

NYPCB has stipulated the "Directors and Managers Code of Ethics" and requires that its management abide by the code in operations and avoid unethical behaviors that may damage both the Company and the interests of its shareholders. The Company has adopted an online platform for procurement, which increases efficiency as well as ensures a fair and reasonable procurement process that could avoid malpractice. The platform provides a win-win situation for both NYPCB and its suppliers. In addition, a comprehensive auditing system has been established to maintain financial transparency and legality. Audit reports are submitted to the board. The Formosa Plastics Group Headquarters, formed by the subsidiaries of Formosa Plastics Group, is an independent auditor and thus increases the profession and efficacy of the auditing system. The independent auditing facilitates the effectiveness of supervision.

NYPCB firmly believes in honesty, accountability, and abiding laws, and as such, its management, operations and strategies have been made in accordance with domestic and foreign laws, regulations, and policies. The Company has held irregular law-related trainings and seminars for employees and has established a regulation to obey anti-trust laws. A list of summaries and prohibited conducts for each regulation has been produced, and Company requires employees to read and sign it which is the principle of all business activities. NYPCB strictly requests employees, management, and board members to obey all regulations.

Furthermore, NYPCB consults legal opinions from both Department of Legal Affairs of FPG Headquarters internally and Formosan Brothers Attorney-At-Law and Lee and Li Attorney-At-Law externally regarding to the Company's ethics and lawful behaviors along with organizational integrity. NYPCB has established a "Stakeholder Engagement" on its official website to provide a communication channel for stakeholders to propose opinions, raise questions, or give suggestions online. Designated personnel handle and pass those comments according to their characteristics to a specific person, who is in charge, replies and takes all necessary actions.

The Company also strives to ensure all commercial activities and sales strategies in compliance with the laws, trade conventions, and social norms to against any illegal, unfair and injustice affairs. The Company has never sold the products that had been prohibited or arguable and been punished for violating any regulations. NYPCB never involves in any political activities and maintains neutral and objective political stand.

Nothings corrected by the stock exchange in 2020.

# (4) Commission of Salaries

To ensure corporate governance and build a healthy salary structure for the board members and managers, NYPCB established Commission of Salaries on December 27, 2011, and the commission consists of three independent directors. The appointment is in compliance with the regulations of the Securities and Futures Bureau of the Financial Supervisory Commission. The Commission has made suggestions for the salaries of the Company's chairman, and managers, and board directors. This approach prevents the chairman and managers from exposing the Company to risks from salary disputes. Discussion bills from Compensation Committee, such as salary adjustment and annual bonus related topics shall be all put forward to Compensation Committee for a second discussion after a consensus has been reached by the personnel department and labor union. The Commission of Salaries meetings were held tree times in 2020, and the average actual attendance rate reached 100%.

# (5) Independent Internal Audit Unit

To strengthen the supervising function of the Board, the Company has established an internal auditing unit consisting of the three independent directors. Four meetings were held in 2020 with a 100% attendance rate. The internal auditing unit is responsible for overseeing the Company's financial statements, choosing the accountants based on their level of independence and performances, ensuring the effective implementation of internal controls, making sure that the Company follows relevant laws and regulations, and assessing the existing and potential risks of the Company.



## (6) Internal Audits

The Company has established an internal auditing unit, reporting exclusively to the board of directors, with the task of hiring professional internal auditors. Recruited staff members have to attend auditor training programs held by professional auditing institutions every year to continuously improve their auditing skills.

Internal audits are not the sole responsibility of the independent audit unit. Every department has to conduct audits for specific items and regularly audit their operations. The independent audit unit reviews their audits and conducts additional regular and irregular audits to ensure that the department has conducted the audit effectively.



# (7) Employee Behaviors and Code of Ethical Conduct

NYPCB has defined employees' and employer's rights and obligations to maintain order in the workplace. Pursuant to the law, a code of conduct has been established and was published after having been reviewed by relevant authorities. The Code has acted as the guideline for employee management. It has specified clear regulations regarding employee transfers, working hours, salaries, regulations and punishments, dismissal, severance pay, retirement, training, performance appraisals, and compensation for occupational injury and disease, and social welfare.

In order to ensure staff members following the Code of conduct, NYPCB has required that engineers, managers, and the management team sign a statement that specifies the operational policies that NYPCB employees should follow. The policy summary is as follows:



A. Illegal competition is banned (Antitrust policy) :

Employees must abide by all regulations of the Fair Trade law. They should always gain profit through honest means and ensure their conduct is in compliance under the law.

B. Conflict of interest policy :

Employees should avoid damaging the interests of the Company during operation. They should never directly or indirectly request or accept gifts, entertainment, or any form of personal gain from the customers or competitors of the Company.

C. Data security policy :

Employees handling the Company's data should not reveal confidential data or other information that has not been published without NYPCB's written permission. They should not use the information for personal gain or use it for any purpose that is not relevant to the Company's operation. Employees should hand over all technological information that they worked on leaving the Company.

#### D. Participation in political activities

Employees should not directly or indirectly donate money, provide services, or give valuable items to any candidates or political parties. They should not conduct any behavior forbidden by the law or give any ill-gotten gain to legislators, political figures, or government officials that may prevent them from performing their duties.

#### E. Integrity business code

The Company reached the solution to draft the "Corporate Good Faith Business Code" on the Board of Directors meeting on November 11, 2014, which modified a little according to the Company practice, but the stipulated code agrees with the spirit of "Listed Company Good Faith Business Code".

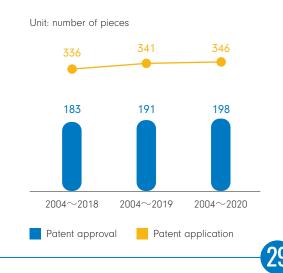
# (8) Anti-corruption

The company upholds the spirit of diligence and sincerity synonymous with the Formosa Plastics Corporation and has established rigorous ethical standards. Employees are expected to be responsible in both their speech and behavior not only in their work but also in their daily lives by observing all common behavioral and ethical standards. The company has always employed rigorous standards to prevent employees from leaking trade secrets, misstating facts, starting rumors, sabotaging work or violating gender equality principles in the workplace. Specific actions that have been taken in the past include establishing labor and ethical management policies and advocating the company philosophy "Create Values, Honest Business, Teamwork and Shared Prosperity". Furthermore, the company has advocated for anti-corruption practices. Such advocacy will continue to be held annually during holidays. The company has also arranged annual staff ethics cross assessment. A number of members of every department are chosen to be interviewed according to the size of the department. These interviews will emphasize on-site management, staff leave management, work hour management, etc. for staff rights and anti-corruption practices.

Since 2016, the project (administration) has added a "rule of law promotion" course to enable employees to fully understand the relevant corporate regulations and legal responsibilities involved in the company's damage caused by bribery or illegitimate benefits during the period of employment. The personnel responsible for the contracting, procurement, import and export departments must not only understand the course, but also sign the "Procurement and Contracting Person Self-discipline Convention" to standardize the discipline and attitude of the position in charge, and to abide by the law.

#### (9) Innovative R&D patents and intellectual property protection

In order to encourage innovation and strengthen the protection of intellectual property rights, the company has formulated "Research and Development Management Measures" and set up related computer operations, and stipulated rewards for key product research and development and patent approval in the "Research and Development Achievement Award for R&D Personnel" to encourage research and development. Personnel innovate and develop and conduct active research to enhance the company's competitiveness, and have a number of protection measures for patents, confidential information, etc., use a digital management system to reduce the occurrence of harm risks, and report to the board of directors at least once a year on the operation of intellectual property management , please refer to the company's official website "Intellectual Property Management" for details. The accumulated patents over the years are as follows:



# **2.2 Financial Performance**

Stable profits are the roots of a company. NYPCB is a professional circuit board manufacturing company and focuses on operational developments. The incomes and profits are mainly from operational activities. The Company continues to win more clients and enhances manufacturing processes to strengthen financial performances. In 2020, the Company's revenues were NT\$ 38,512 million, operating costs were NT\$ 32,760 million, operating expenses were NT\$ 1,644 million, retained earnings were NT\$ 8,580 million, dividends were NT\$ 3.40 per share, business income tax paid were NT\$ 337 million, and donations and community investments were NT\$1,930,000. Additionally, in 2020, the liability / total asset rate was 20.6%, demonstrating a stable financial situation. NYPCB staff salaries in 2020 are presented on Page 184 of the 2020 annual report.

To maintain a stable operation, NYPCB has appointed supervisors to oversee its operations and conduct financial audits. Professional external auditors have been brought in to conduct financial auditing to ensure the financial status remains transparent. In addition, NYPCB's monthly revenue report is published by the 10th of each month on the Market Observation Post System as required by law. The information is also updated onto NYPCB's website at the same time. The Company holds an annual general meeting in Q2 every year to inform shareholders of its operational and financial status, and show the Company's commitment to safeguard the interests of its shareholders.

# **2.3 Internal Control**

# (1) Prevent insider trading

NYPCB's board of directors, managers, employees, and consultants, have upheld their obligations and ethics as prudent administrators. They have signed non-disclosure agreements to keep crucial internal information in confidence prior to official Company announcements. If any leak of information is discovered, the abovementioned personnel should immediately report it to internal auditing department. Upon receiving such reports or after personally discovering a leak, the audit department would prepare a response policy under legal advisement and help from the finance department. The incident would be documented for future reference.

In order to avoid leaked information affecting stock prices and to ensure all employees follow the regulations against insider trading, NYPCB has followed Article 8 of the Regulations Governing Establishment of Internal Control Systems by Public Companies to establish an anti-insider trading regulation, and has included it in its internal control system to ensure it is effectively enforced.

# (2) Establish a Complete and Effective Accounting System and Internal Control Mechanisms

NYPCB's management can be categorized into the following six management mechanisms: human resources, finance, operations, production, materials, and engineering. After on-site personnel inputs basic data into their computers, the data is then delivered and repeatedly applied. Respective mechanisms mutually retrieve and connect to each other's data, with a checkpoint arranged between any two pieces of data. Through computer logic, data can be automatically articulated and debugged.

NYPCB has also established an internal auditing structure, which can be separated into three major aspects, with the first aspect executed by the Auditing Office under the Board of Directors, the second aspect routinely and professionally audited by FPG Headquarters, and the third aspect voluntarily and routinely audited by the Company's respective department.



# **2.4 Shareholders**

NYPCB has established a spokesperson and deputy spokesperson system, and a unit specializing in handling investor affairs. The following communication channels have also been established for shareholders and institutional shareholders.

# (1) Shareholders

- Annual general meeting
- Compile annual financial report and distribute it to shareholders during the annual general meeting
- Shareholders can make inquiries through phone calls and emails.

## (2) Corporate shareholders

- Participate in investment
- seminars in Taiwan and overseas.Participate in investor forums
- held by securities companies (not held regularly).



# **2.5 Customers relationship**

# (1) Customer satisfaction surveys

NYPCB regularly conducts customer satisfaction surveys to investigate aspects such as technology, quality, response, delivery, and cost. Each individual department would communicate with customers regarding items that scored poorly and propose improvement plans to customers based on the analysis results in order to raise customer satisfaction. Please refer to the questionnaire results over the past three years, in which the average score of 2020 reached more than 4 points, which indicates that our customers are satisfied with the performance of our company.

We dedicate the improvements of internal production process and operations as well as customer satisfaction with PDCA ( Plan,Do, Check and Action ) management model in all activities to ensure all departments have a common principle to follow.



# • Customer Satisfaction Questionnaire:

Customer Satisfaction Process

Note : 1. Grade - Excellent (5 points), Good (4 points), Fair (3 points), Need Improvement (2 points), Poor (1 point) 2. Number of Samples Collected : 2018 - 10 households; 2019 - 14 households; 2020 - 14 households (Top 14)

#### Discuss Inform **Distribute Collect and** Make Identify during customers **L**STEP STEP question-STEP analyze necessary STEP internal target about the naires questionnaires improvements mprovements meeting

# (2) Customer Service

NYPCB has always been a trustworthy business partner who has grown side by side with its business partners. To enhance customer service, we are not only providing products with quality that exceeds customer expectation, but also establishing an outstanding communication system to provide timely responses to customer requests, and to ensure on time delivery of shipments.

Furthermore, in the aspect of understanding customers' valuable evaluation, the sales visit customers regularly to communicate and exchange opinions to obtain information about the latest product in the market. Such communications with customers are valuable information which will be taken into consideration of the company's operation.

NYPCB has strived to maintain good relations with its customers with the aim to increase its competitiveness along with the customers, raising customers' loyalty, developing potential customers, and achieving final goal- enlarge the company's profit.

# (3) Fair and reciprocal principles

Based on our business values of integrity and reciprocity, our company is personally led by the senior management. From contract establishment, qualification, manufacturing, marketing, customer service to customer complaint handling, we apply this principle to all our customers. At the same time, we also strictly follow the international quality standards to provide our customers with fast service and good quality. Actual measures taken are provided below:

#### *j*.....

- A. Provide educational training to employees regularly to ensure understanding customer needs and related regulations. Before selling the product, we will communicate with our customers on product design and relevant risk to provide the most suitable products.
- B. Business and customer service units are required to collect information related to customer satisfaction on TQRDC (technology, quality, response, delivery, and cost). These units are also asked to discuss such issues and improvement measures with the relevant manager. Through a dedicated counseling window, the company's official website and multiple complaint channels, our customer's rights are fully secured.
- C. Internal and external supervision and operations are regularly carried out to ensure the implementation of company policy as well as fair and reciprocal principles.



# **2.6 Supplier and Contractor Management**

# Identified Material Aspects and Management Approach

Corresponding Material Topics	Supplier management
Significance	The Corporation regularly interacts with suppliers for technical, quality, response, delivery, cost, and environment (TQRDCE) issues in order to enhance the product competitiveness from both sides, and to compete for and increase business opportunities.
Policy and Commitment	The Corporation is committed to become suppliers' trustworthy partner for business growth.
Responsibilities	Materials Department
Resources	Quarterly business review (QBR) meetings are regularly arranged to directly commu- nicate and to exchange opinions with suppliers; NT\$648 thousand has been invested
Action	Action Regularly review the satisfaction level of suppliers' TQRDCE execution and AIP improvement plan
Communication Channels	Supplier visits, QBR meetings, online and conference call platforms
Evaluation Methods	Supplier assessments (in the aspects of technical, quality, response, delivery, cost, and environment)
Targets (Short- / Medium- / Long-Term)	<ul> <li>Short-Term (within 6 months): At least B rating (inclusive), or 81 points or above</li> <li>Medium- and Long-Term (over 6 months): Suppliers that receive C or D ratings will be given regular training, and QBR meetings and discussions will be arranged quarterly until improvement has been made.</li> </ul>
Overall Performance	All suppliers have received B rating or above in the 2020 assessment.
Corresponding Material Topics	Raw material management
Significance	To increase material turnover and reduce idle materials and scrap through regularly reviewing and discussing the reasonableness of inventory and material use, thereby increasing the Corporation's competitiveness.
Policy and Commitment	The Corporation is committed to optimizing material use and to introducing the 3Rs of circular economy, namely Reduce, Reuse, and Recycle, to fulfill its social responsibilities.
Responsibilities	Materials Department
Resources	Convene monthly review and improvement meetings; NT\$248 thousand has been invested.
Action	<ul> <li>Conduct Plan-Do-Check-Act (PDCA) on material procurement, material use HL, and idle materials to ensure the reasonableness of material use.</li> <li>Develop competitive products from the source to reduce material use per unit and procurement cost in order to reduce resource wastage.</li> </ul>
Communication Channels	Regular monthly meetings and production line inspection and technical exchange forums from time to time
Evaluation Methods	Aperiodic factory audit is also carried out to confirm the validity of various improvement programs.
Targets (Short- / Medium- / Long-Term)	<ul> <li>Short-Term (monthly): Ensure that key performance indicators (KPI) for inventory, idle stock, scrap, and competitive products are met.</li> <li>Medium- and Long-Term: Regular review of items whose KPIs are not met until improvement has been made.</li> </ul>
Overall Performance	<ul> <li>Decrease the purchasing amount up to ninety million NT dollars.</li> <li>The inventory turnover achievement rate in 2020 was smaller than 3 weeks</li> <li>The competitive product achievement rate was 91%</li> <li>The scrap achievement rate was 100%.</li> </ul>

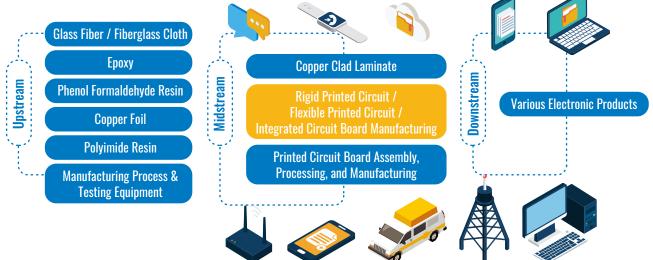
# (1) Supplier Management

NYPCB executes procurements through "public bidding" via the Formosa Plastics Group's online platform, where suppliers can request quotes and make offers, place orders, and make deliveries.

The Company considers its suppliers as important partners, and therefore, it strives to facilitate long-term cooperation with them to establish a stable and sustainable supply chain. Except to ensure the supplied product quality, delivery time, and price, the Company shall also urge the environmental protection, safety and sanitation improvement, emphasis on human rights, to jointly perform the corporate social responsibility, and require the supplier signing the "Letter of Commitment of Supplier of Formosa Plastics Group for Corporate Social Responsibility", and make the risk management and business continuity plan. In 2020, there were 335 new suppliers, and 48% of them completed the screening of environmental standards. The response rate of the 2020 social responsibility commitment letter and questionnaire reached 98%.

NYPCB positively implements and practices material purchasing localization in order to reduce unnecessary air transportation and ocean freight costs as well as the related carbon footprint generated from transportation. The local raw material purchasing rate increased from 43.0% in 2017 to 64% in 2018, 64% in 2019. In 2020, it still kept the rate in 61%. (Note: the raw materials for primary customers' appointed high-level products are still imported from abroad).

# • Organization of Supply Chain



Note: Among the company products that use raw materials from the upstream supply chain, copper foil accounted for about 30% of the volume, build up film accounted for about 10-15% of the volume, and the rest belongs to related chemicals and consumables.



Note: Internal purchases are defined as suppliers purchased in Taiwan and the corresponding purchase amount, and reverse outsourcing is Taiwan outside.

#### A. Quarterly Operation Evaluations

Before introducing new materials and developing corresponding products, NYPCB evaluates its operations with the senior management of key suppliers every month and discusses the supplier's performance with regard to technology (T), quality (Q), response (R), delivery (D), costs (C), environment (E), and finance (F). Meanwhile, new suppliers are also required to receive ISO9000 or ISO14000 certificates. In addition, through regular evaluation of existing suppliers every six months, suppliers are required to pay attention to environmental and social governance (ESG, Environment, Social, and Governance indicators account for 10% of the overall evaluation), and actively require our suppliers to obtain RBA (Responsible Business Alliance) Certification, ISO 45001 certificate, AEO (Authorized Economic Operator) certification.

The company evaluates suppliers through these qualities and requires that they make continuous improvements to meet NYPCB's supplier requirements. The suppliers are evaluated and published in quarterly evaluation reports every year, which leads to the replacement of unsuitable suppliers and ensures maintenance of long-term partnerships with outstanding suppliers.

Suppliers are required to make improvements based on NYPCB's evaluation reports and are regularly audited by the Company to ensure that necessary improvements have been made.

The reports are reviewed by the procurement department for future reference.

#### B. Management System Certification

NYPCB requires that its raw materials suppliers follow the TS 16949 standard. Suppliers are also required to achieve ISO 9001 and other international certifications.

#### C. Evaluation

NYPCB visits its major suppliers every year according to its annual plan and review supplier quality. As a result, suppliers are required to make improvements if non-compliances are found. The suppliers would be given a clear schedule and target to make improvements.

In accordance with RBA audit standards, the audit rate of the past two years has been greater than 80%. The Company listed 11 significant manufacturers for auditing in 2020, of which an 82% audit rate was achieved. In addition, all audit short falls have been successfully addressed.

The company regularly audits and evaluates its suppliers and requests its suppliers to comply with RBA requirements and other relevant environmental regulations, as well as to carry out self-assessments and on-site audits. On-site audits emphasize quality systems, human rights and working conditions, environmental safety, green partnerships, etc. of actual operation status. Any of the aforementioned issues that do not meet the established criteria will be asked to create an improvement plan. The company will also provide suppliers with necessary assistance in order to promote corporate social responsibility.

#### D. Suppliers and labor rights

The Responsible Business Alliance has been promoting labor rights in the electronic industry and suppliers in recent years. NYPCB has adopted the RBA Code of Conduct and requires its suppliers to meet the code's requirements in environmental protection, health and safety, labor rights, and labor conditions.

#### E. Conflict minerals management

NYPCB requests its suppliers to promise not to use mineral and metals mined from conflict zones. Suppliers must disclose the information of its smelters to obtain a new material certificate prior to commencement of supply.

Suppliers who do not provide complete information or work with illegal smelters shall be replaced. Smelters are encouraged to participate in the Responsible Minerals Initiative (RMI) as a way of achieving third party certification.

#### F. AEO (Authorized Economic Operator) Supply chain management

The Company applied for AEO certification from Customs Administration in order to ensure that the supply chain environment of the Company can swiftly pass through customs during trading operations, thus providing customers with rapid delivery. The Company became an official AEO member on December 20, 2013.



# ( 2 ) Contractor Management

#### Identified Material Aspects and Management Approach

Corresponding Material Topics	Contractor management
Significance	A safe construction environment free from concern should be provided, and construction should be completed on time to ensure the sustainable development of the Corporation.
Policy and Commitment	Relevant occupational safety and environmental protection laws should be complied with to ensure the safety of contractors during construction.
Responsibilities	Engineering Department
Resources	Education and training are carried out by the occupational safety personnel; safety protection is examined by supervisors and guards; factory entrance control is examined and controlled by supervisors and guards; punishment regarding occupational safety is executed by supervisors and the occupational safety personnel; safety inspection is carried out by the first-level (deputy) supervisors and the occupational safety personnel on shifts.
Action	Hold coordination meetings for the run-up to construction, sign the safety notice of the construction site daily, conduct safety analysis of the construction site by the person in charge of the contractor before a construction starts, and carry out safety promotion for the construction personnel with a signature confirmation.
Communication Channels	Monthly security agreement organization meetings with contractors, implementation of daily pre-construction toolbox meetings, monthly indoor toolbox meetings, and the promotion of safety, quality, and legal regulations.
Evaluation Methods	Supervision and management of the construction personnel of contractors
Targets (Short- / Medium- / Long-Term)	<ul> <li>Short-Term (within 3 years): To implement education and training of corporate safety and health, and the update of environmental protection laws and regulations for vendors' occupational safety and health management personnel.</li> <li>Medium- and Long-Term (3-7 years): To encourage contractors' construction personnel to obtain licenses through certification in line with corporate rules and policies.</li> </ul>
Overall Performance	Zero work injuries of contractors; the number of cases about vendors' work-related injuries, work suspended due to the violation of environmental regulations, or penalties imposed by government agencies: From 2015 to 2020:0 cases.

#### A. Supplier and contractor relationship Corporate Social Responsibility

Formosa Plastics adheres to the stance of sustainable management and abides by the principle of fair trade, and requires that the manufacturers that cooperate should also meet the needs of environmental protection, industrial safety and human rights. Understand the company's concept of continuous promotion of social responsibility and jointly promote the implementation. Since 2019/10/1, "Supplier/Contractor Social Responsibility Commitment Letter" and "Supplier/Contractor Social Responsibility Question-naire" have been added to the manufacturer's login platform. Send a letter to ask the manufacturer to sign a reply during the plastic electronic trading market or after ordering, and abide by the relevant regulations

#### B. Vendor evaluation:

Contractors who want to apply for dealings with our company must first pass the written evaluation and review of the Outsourcing Center of the General Management Office of Formosa Plastics. Third-party manufacturers that can be included in the transaction. During the construction process, if there are subsequent delivery (project) overdue, poor quality, violation of industrial safety, environmental protection and other regulations, it will be reported by personnel and confirmed by the manufacturer. , the monthly system accounting score  $\leq$  74 points, the contractor will stop exchanges, in order to filter out high-quality partner manufacturers suitable for long-term cooperation

#### C. Contractor Management Tiered System

To reinforce safety management, control the quality of contractors, improve contractors' occupational safety standards, and preventive in the remployees from injuries, the Company implemented a tiered system for contractor management. The general management office bidding & contracting center is responsible for collecting information about contractors and inspecting their workshops, equipment and workplace safety measures, techniques, etc. Contracted projects are used to rate their capabilities and performances according to three levels: A, B, and C. The cost of safety and health management is also included as a compulsory item when the engineering budget department sets its budgets. Contractors must make a list of equipment they will use to ensure safety and maintain health. The list will be included in their contracts with the Company to ensure the costs will be included in the budget. To avoid the possibility of the budget department's overlooking the health and safety management costs, the Company's computer system monitoring and controlling budget planning would automatically include the health and safety management costs. When the bidding and contracting center makes a price inquiry, the cost of health and safety management cannot be lower than the budget. This is to prevent contractors from sacrificing health and safety management for the sake of winning a bid.





#### (3) Contractor Safety Management

The Corporation believes that all work-related injuries and occupational diseases could be prevented. Contractors are NYPCB's partners at work, and managers are responsible for providing a safe construction environment where contractors can be assured of their safety at work. Furthermore, as accidents are mostly related to human errors, to ensure the occupational safety of all partners, in recent years, the Corporation has been reinforcing contractors' safety training, promoting various contractor safety management mechanisms, and organizing seminars so as to foster a safety-first mind-set and habit in contractors at work. In 2020, NYPCB has trained a total of 2,440 contracted personnel.

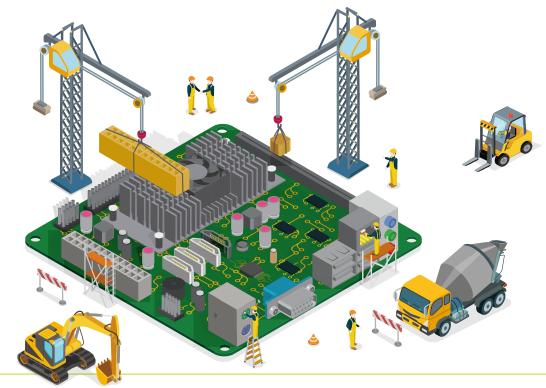
On top of implementing continuous training to educate contractors on relevant safety management, FPG believes it is more crucial for contractors to be aware of self-initiated management to prevent accidents at the construction site. To promote contractors to put management into practice, contractors are required to abide by the Occupational Safety and Health Act and other applicable laws and occupational safety and health organizations shall be established. In addition, one to five dedicated occupational safety and health management personnel with qualified licenses and necessary qualifications are required to be appointed by the contractors for each construction project. The dedicated personnel are required to implement safety and health management activities at the construction site to ensure workplace safety and environmental health.

#### (4) Training Safety Supervisors

To ensure safety during construction, the Corporation has assigned dedicated safety supervisors for all construction work throughout all plants on top of adhering to all applicable laws and regulations. The dedicated position is set up to remind vendors of construction safety at all times and to improve their safety awareness. In addition, the safety supervisors also assist contractors and suppliers in voluntary safety management before, during, and after construction, thereby actively maintaining the safety of contractors and construction processes.

To ensure the performance of safety supervisors and that contractors are being effectively educated, professional knowledge and hazard identification skills training courses have been offered to safety supervisors since 2011. The professional competencies of the safety supervisors are strengthened through a combination of in-class training and practical hands-on training. Currently, the training has been offered to 242 persons.





## Construction operation flow chart





# Identified Material Aspects and Management Approach

Corresponding Material Issues	Water use and wastewater discharge management, air pollutant management, waste management, and greenhouse gas emissions management
Significance	<ul> <li>Water use and wastewater discharge management: This represents the level of attention an enterprise pays to resource utilization and the reduction of the impact of wastewater on the environment.</li> <li>Air pollution control: This means to reduce substances that directly or indirectly impair human health or the living environment.</li> <li>Waste management: This means to reduce waste and make the most effective use of resources and materials</li> <li>Greenhouse gas emission management: This means to lower electricity consumption and reduce greenhouse gas emissions.</li> </ul>
Policy and Commitment	To cherish resources, eliminate pollution, and reduce waste. To implement safety and health control to prevent hazards. To comply with regulations and standards. To consult and communicate with neighbors for building good relationship. To understand responsibilities and respond to risks. To trace the root and cause of a problem, and continue to improve.
Responsibilities	Safety and Health Environment Team
Resources	• Manpower: Safety and Health Environment Team, the Safety and Health personnel in each factory and division.
Action	<ul> <li>Integrate regulation requirements and corporate management policies to set up an environmental management system which is in line with the clauses prescribed in the ISO14001 Standard.</li> <li>Promote wastewater census and re-classify wastewater for pipeline adjustment in order to improve the overall effectiveness of wastewater treatment.</li> <li>Set up an instant text notification system for informing about abnormal pH level in the water tower.</li> </ul>
Communication Channel	<ul> <li>Participate in government sessions with regard to environmental protection</li> <li>Participate in the circuit board association and share and learn information related to system management technology with other industrial members.</li> </ul>
Evaluation Method	<ul> <li>Corrections made to be in line with government regulations and customer requirements.</li> <li>Inspection made in accordance with the Nan Ya Printed Circuit Board Corporation's environment concern and assessment performed in accordance with regulations regarding environmental impact assessment procedures.</li> </ul>
Target (Short/Medium/ Long Term)	<ul> <li>Short-term (within 3 years): To achieve the rate of passing the audit of competent authority at 100%.</li> <li>Medium and long term (3<sup>7</sup>7 years):</li> <li>(1) Use renewable energy.</li> <li>(2) Use reclaimed water in the manufacturing process.</li> <li>(3) To improve management systems and facilities towards the direction of sustainable development of the Corporation.</li> </ul>
Overall Performance	Zero safety and environmental accidents

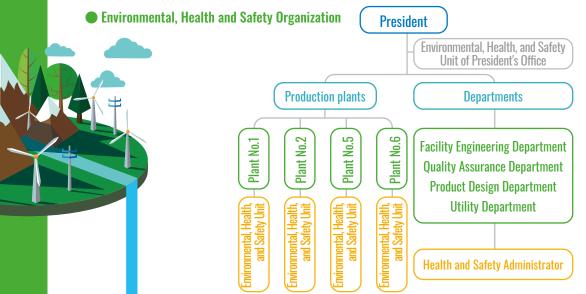
# **3.1 Commitments to environmental sustainability**

## (1) Environmental protection policy

NYPCB is aware of the importance of the environment for human beings. It believes the environment is as important as the economy, and has actively participated in and promoted various environmental protection programs. Measures such as procurement of green raw materials, green product design, production process improvements, factory management, the process of packaging and shipments, and so on have been implemented. Through setting up performance evaluation indicators, annual targets, and a strict monitoring system on energy and resources consumption, NYPCB has continuously made improvements and upheld its founder's philosophy to strive for good deeds and perfection. To fulfill social responsibility, control risks, reduce energy consumption and emission, and protection of the environment, NYPCB has established the following environmental, safety and health policies:

1. Cherish resources, 2. reduce pollution and wastes, 3. ensure safety and health, 4. prevent accidents, 5. Abide by the law, 6. follow standards, 7. facilitate communication, 8. consult and maintain good neighborly relations, 9. Shoulder responsibility, 10. prepare for crisis, 11. discover the truth, 12. make improvements continuously.

A.Organization chart and responsibility of the EHS unit : To ensure safe, healthy, and environmentally friendly management and sustainable development, the Company has established a EHS unit that reports directly to the President's Office. In 2009, the EHS unit was evaluated by the Council of Labor Affairs (Executive Yuan) as the first-tier Labor EHS Management Unit. On the other hand, the general manager is responsible for integrating and stipulating company policies and standard operating procedures, while providing relevant services to external parties. Each plant has established an environment and safety department responsible for the plant's internal safety, sanitation, and promotion of environmental protection through the monthly "safety and sanitation management meeting", monthly "environmental protection and energy saving meeting", quarterly "safety and sanitation committee meeting" (the required rate of labor representatives is at least 1/3), and the annual "EHS Management Review Meeting" shall be held to discuss and review workplace safety and health, with the goal of eliminating potential accidents and hazards and achieving zero pollution.



B. Environmental, health, and safety management system : NYPCB has strived to protect the environment and ensure the safety of employees, and promote their health. The Company has achieved the ISO 14001 certification of the environmental management system in November 1996, and passed the ISO45001 assessment in 2001. Since then, NYPCB has established an EHS Management System to promote and manage the environment and occupational health and safety within the company. In 2007, the Company consulted the TOSHMS regulation and integrated it into its existing Environmental, Health, and Safety Management System. The TOSHMS certification has also been achieved, and continues to enhance its comprehensive care and management methods to its stakeholders.

NYPCB formulated the Environment, Safety, and Health Management Manual pursuant to the content of ISO 14001, ISO45001, TOSHMS, and RBA, and implemented it after training to ensure that all of its employees possess the proper knowledge and skills to carry out the environment, safety, and health policies of the Company.

C. Management review operation procedure : In order to reinforce the company constitution, promote its administrative and operation capacity, establish a reasonable environment, safety, and health management system, and effectively develop activities related to environment, safety, and health targets, NYPCB continues making improvements to ensure the applicability, applicableness, and effectiveness of environment, safety, and health management.

NYPCB annually holds the "environment, safety, and health management review meeting" to review and assess the environment, safety, and health management plan of the previous year (tracking measures), the performance of target and object implementation, and target achievement degree, as well as set the annual environment, safety, and health management targets, target values, and the environment, safety, and health management plan, and the ESH team shall supervise the relevant implementation departments. We shall manage the effects of industry on the environment with strict management methods to fulfill our social responsibility and create a win-win situation.

#### (2) NYPCB environmental protection history

NYPCB has implemented various relevant environmental protection jobs in pollution prevention, operation management, monitoring management and reporting. No violation of any environmental protection regulation has been made, nor has any major leakage that damages the environment occurred in 2020. The Company has participated in the government's environmental improvement programs, promoted waste reduction, reuse of resources, and reduced green house gas emissions. Furthermore, the Company has been developing eco-friendly products and managing them to follow the growing eco-friendly trend.

#### ( 3 ) Environmental problem complaint mechanism

NYPCB has set up a feedback mailbox on its global website and stipulated an external complaint and suggestion box in the public relations section, thus allowing for complaints to be delivered to the corresponding functional team for handling depending on the complaint type. The statistics show that no complaints were made regarding external environment problems of the Company in 2020.

NYPCB has also set up a mailbox on the internal website to receive employee feedback. The statistics show that no complaints were made regarding internal environment problems of the Company in 2020.

## Internal / External Feedback Mailbox



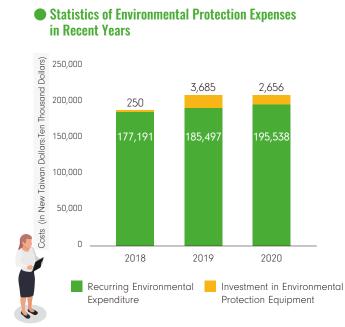


## ISO 14001 Certificate & ISO45001 Certificate

# **3.2 Environmental accounting**

NYPCB has computerized its management and operations system. To computerize its environmental management, the Company has integrated Environmental Accounting to its systems and to control relevant expenses and evaluate costs, analyze the cost effectiveness of environment protection measures, and inform stakeholders of NYPCB's contributions to environmental protection accurately and clearly.

The accounting system identifies and quantifies the impact of corporate operations on the environment as well as the cost of measures undertaken by corporate operations to alleviate, reduce or prevent their environmental impact. NYPCB adopted the accounting system in 2008, and has divided its environmental expenses into six categories per the diagram below in accordance with environmental accounting. According to the data, the Company demonstrates having the following environmental protection expenses from 2018 to 2020. In 2020, investment in environmental protection totaled NT\$ 198,194,000.



# Statistics of Environmental Protection Expenses in Recent Year



#### Green Environment Code

XXXX	XXXX Non-Environmental Costs
E111	E111 Air Pollution Control Costs (including acid rain prevention)
E112	E112 Water Pollution Prevention and Control Costs
E113	E113 Soil and Groundwater Pollution Prevention Costs
E114	E114 Noise and Vibration Control Costs
E115	E115 Land Subsidence Control Costs
E116	E116 Toxic Substance Pollution Control Costs
E117	E117 Soil and Water Conservation
E118	E118 Ocean Pollution Prevention Costs
E121	E121 Metigating Climate Change Costs
E122	E122 Metigating Ozone Depletion Costs
E12Z	E12Z Other Global Environmental Protection Costs

# 3.3 Climate change risk management

## (1) Climate change risk management strategies

Greenhouse gas emissions have been proven to have a great correlation with the increasingly frequent extreme weather around the world. For the sustainable development of the company, carbon neutrality is also the promotion goal of the company's greenhouse gas management. In order to achieve the long-term goal of "carbon neutrality", formulate a management strategy, promote the implementation of three phases Through inventory  $\rightarrow$  reduction  $\rightarrow$  green electricity introduction, and analyze and evaluate the risks and opportunities brought about by climate change, in order to achieve a low-carbon economy Transformational Vision.

Item	Management strategies
Promote greenhouse gas (GHG) inventory verification	Establish an ERP information management system for greenhouse gas emissions; third-party agencies are commissioned to conduct inventory verification each year to keep greenhouse gas emissions under control.
Promote energy and water conservation programs	Formulate energy and water conservation evaluation methods to encourage each department to submit conservation proposals through incentive/disincentive measures; internal/external positive examples are also regularly shared while evaluation and improvements are implemented across the Corporation.
Promote the response mechanism to limate change	Voluntarily join the Carbon Disclosure Project (CDP) rating to inspect the complete- ness of the Corporation's climate change response system and to establish energy conservation and carbon reduction goals to fulfill social responsibilities.

Dimen- sions		and opportu- impacts	Response measures	Implementation status for 2020
ations		Greenhouse gas inventory	<ul> <li>Promote greenhouse gas inventory and outsource related verification to British Standards Institution (BSI)</li> <li>Voluntarily participate in CDP rating</li> </ul>	<ul> <li>Passed GHG inventory verificatio</li> <li>First PCB company in Taiwan to make the A- Leadership List recognized by CDP</li> </ul>
Regulations	Risk	Renewable Energy Development Act	Short-Term: NYPCB does not purchase electricity from Taipower and is thereby exempted from the first batch of controlled targets. Long-Term: NYPCB will either apply for and purchase renewable energy certificate or to pay relevant fees after becoming a controlled target	Promoted energy conservation measures and enhanced power usage effectiveness (PUE)
Natural disasters		Extreme weather (typhoons or droughts) leading to reduced or suspended production	<ul> <li>Establish a typhoon emergency response team</li> <li>Establish a water consumption plan and control measures</li> </ul>	<ul> <li>Established the typhoon emergency response team and business continuity plan (BCP) to enhance responsiveness</li> <li>Promoted water conserva- tion measures and reduced consumption of externally-procured water</li> </ul>
Others	opportunities	Respond to market demand for green products	<ul> <li>Establish a hazardous substance management system</li> <li>Promote Green Partner verification</li> </ul>	Received Green Partner certification from clients
	0	Import energy-saving equipment	Replacing old public system equipment with new energy-saving equipment	Introduction magnetic suspension blower and refrigerator

## (2) Short, medium and long-term management goals

Current goals (2020 goals)							
Туре	Items	2020 Target	2020 Actual value	2020 Completion rate	Description		
Water conservation	Water consumption per unit of output (ton/NT\$ million)	125.9	116.9	100	Reduced by 2% per year based on actual usage in the previous year.		
	Effluent recycle ratio	28.3	30.0	100	Increase by 1% per year based on the actual recovery rate for the previous year.		
Energy conserva- tion	Greenhouse gas emissions per unit of output (ton/ NT\$ million)	11.6	9.6	100	Reduced by 2% per year based on actual emissions in the previous year		
Waste reduction	Waste produced per unit of output (kg/ NT\$ million)	49.2	47.3	100	Decrease by 1% per year based on the actual amount generated in the previous year		

#### Short-term goals (goals for 2021) :

• Continue to promote water-saving, energy-saving, and waste reduction operations.

• Set a comparison target for unit output value consumption between 2021 and 2020:

Water consumption is reduced by 2%, electricity is reduced by 2%, and the amount of unrecycled waste is reduced by 1%, Reduce the intensity of greenhouse gas emissions by 2%.

- The recovery rate of discharged wastewater will increase by 1% compared with 2020.
- In 2021, the Carbon Disclosure (CDP) "Climate Change" questionnaire rating maintains the "Leadership Level".
- Import external reclaimed water for use.

#### Medium and long-term goals (2022~2030 goals) :

- Continue to promote water-saving, energy-saving, and waste reduction operations, and participate in external evaluations to improve energy-saving technology and effectiveness.
- Add RO purification treatment system to increase waste water recovery.
- Increase the proportion of external reclaimed water.
- Purchasing green electricity and increasing the proportion of renewable energy
- Continue to fill out the CDP questionnaire to understand the trend in response to international climate change.
- The absolute target for greenhouse gas reduction is 2030, which is expected to be reduced by 6% compared to the base year 2014.
- The safety, health and environmental system continues to promote "digitalization" to facilitate real-time monitoring and reduce the occurrence of abnormalities.

#### Note :

- Effluent recycle ratio= recovery/( Effluent recycle volume+ recovery volume)
- CO<sub>2</sub> suppression volume is calculated based on the emission coefficient conversion as provided by the Jinxing Plant, which is the power supply unit of Nan Ya Plastics.
- The output value is based on the amount of consolidated revenue.



# 3.4 Water and energy conservation and greenhouse gas reduction

# (1) Environmental data

NYPCB's total input (raw materials and energy and water resources) and total output (greenhouse gases, air pollution wastes, and wastewater) for 2020are shown in the following diagram.

## Material Analysis Flow Chart

Energy		Water		Materials	
LPG	23.96/Kiloliter	Tap Water	4,150,852⁄ton	Substrate	6,046⁄ton
Gasoline	1.02 / Kiloliter	Clear Water	351,005⁄ton	Sulfuric acid	8,233⁄ton
Diesel Fuel	34.55 / Kiloliter	Recovered	1,300,687⁄ton	Hydrochloric acid (HCl)	4,316⁄ton
Electricity	378,567 /	Water		Nitric Acid	1,517⁄ton
· ·	Thousand degrees			Plastic film	1,288⁄ton
Steam	88,968⁄ton			Copper Ball	1,357⁄ton
				Hydrogen peroxide (Hydrogen Peroxide)	2,004/ton
				Sodium Persulfate (Micro-corrosion agent)	3,289⁄ton
				Copper Clad Laminate	215⁄ton
				Sodium Carbonate (developer)	449/ton
				* Main Raw Material Usage	

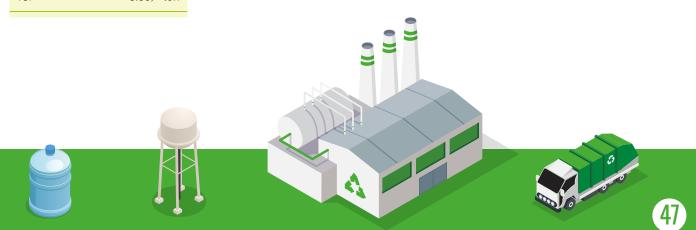
Greenhouse Gases		Wastewater	Waste	
Direct Emissions	10,016/tonCO2e	Treated Water 4,370,723/tor	Total Waste	21,146⁄ton
Indirect Emissions	399,987/tonCO2e	Effluent Water 3,070,036/tor	Recyclable Waste	19,323⁄ton
			Unrecyclable waste	1,822/ton

Air Pollutants		1
VOCs	59.96⁄ton	
TSP	0.06⁄ton	

#### Note :

• VOCs stands for Volatile Organic Compounds

• No exhaust emissions of nitrogen oxides, sulfur oxides and ozone-depleting substances.



#### (2) Improve energy management and reduce energy consumption

A. Energy management : Greenhouse gas emissions have become one of the most important issues on Earth. Since energy use generates carbon dioxide and causes global warming and climate change, effective management of energy use has become NYPCB's priority. The Company's energy usage includes fossil fuels, and purchased steam and electricity, we also keep track of usage.

B. Direct energy consumption : Most of the fossil fuel consumed by NYPCB in 2020 was used for the emergency power system, forklift trucks, company cars, firetrucks, and the cafeteria (kitchen). Gasoline, liquefied natural gas, and diesel fuel accounted for 1%, 55% and 44% total fossil fuel consumption, respectively.

C. Indirect energy consumption : NYPCB's production focuses on printed circuit boards, which are mostly powered by purchased electricity and steam. The two energy sources are also the biggest source of the Company's greenhouse gas emissions (over 98 percentage in 2020) and are purchased from Nan Ya Plastics Corporation's Jing Hsin plants.

#### **Out-purchased Electric Power and Steam Usage Amount** Gasoline 1% **Statistics in Recent Years** 450,000 335 441 **Direct Energy** 319.042 300.000 **Usage Amount** Unit : MWh / ton and Proportion 150,000 89,219 87,182 **Diesel Fuel** LPG 0 55% 44% 2018 2019 2020 Total Electicity Consumption Total Steam Consumption

D. Reduce energy consumption : NYPCB has strived to reduce energy costs and increase energy efficiency. Annual environmental management targets and incentives have been established to encourage employees to review and improve the efficiency of their energy usage. In addition, an energy management unit has been established to manage and implement measures, as well as hold monthly energy management meetings to examine whether employees have reduced their energy usage or not.

In 2020 the Company completed a total of <mark>38</mark> energy saving projects, with a daily reduction of **10,560** kilowatt hours and an annual benefit of NT\$ **9,162,000**.

#### Power saving implementation completed in 2020

Item	Improvement	mprovement Energy saving amount C (KWH / day)		Improved benefit (NTD 1,000 / year)	
1	Processing energy use reduction	174	59	151	
2	Energy management	4,512	1,540	3,915	
3	Public utility efficiency promotion	5,874	2,005	5,097	
	Total	10,560	3,604	9,162	

Note : The improved benefit is determined after deducting the improvement equipment investment cost.

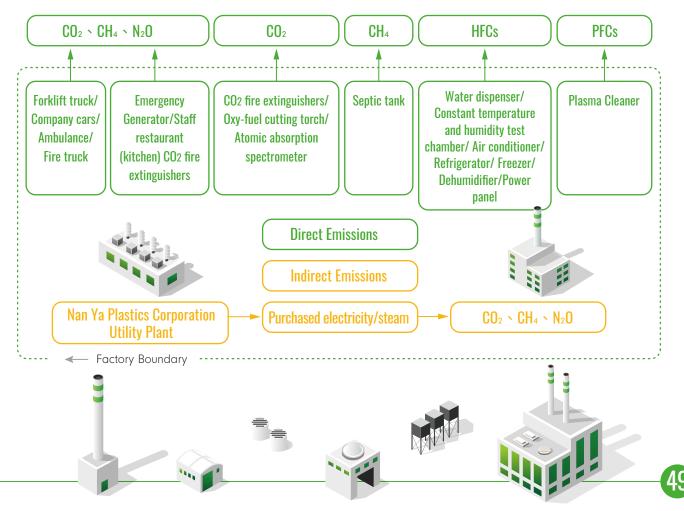
48

#### (3) Examination and reduction of greenhouse gas emission

Global warming and climate change has become a key obstacle for sustainable development. Increase of greenhouse gases raises temperatures around the world and causes abnormal climate changes and unpredictable impact on the environment. NYPCB has recognized the importance of these issues and has conducted comprehensive examinations and evaluation of its greenhouse gas emissions since 2005 in accordance with the principles of ISO 14064-1 to reduce its greenhouse gas emissions and achieve sustainable development. As an electronic processing industry, over 95% of NYPCB's greenhouse gas emissions were generated by the indirect discharge of its purchased electricity. Reducing electricity consumption thereby is the most effective way to reduce greenhouse gas emissions. The Company also adopted the Plan-Do-Check-Act management model to improve its facilities and reduce its emissions continuously and increase competitiveness.

A.Evaluation : The main source of greenhouse gas emitted by NYPCB came from indirect discharge of electricity use at its plants. To reduce greenhouse gas emissions, alleviate global warming, and fulfill its responsibilities as a global citizen and abide by the Kyoto Protocol that became effective in 2005, the Company has planned and promoted the reduction of greenhouse gas emissions and controlled its greenhouse gas source. It has also set reduction targets based on the plan every year, implemented measures to reduce energy consumption, and reviewed the results on a monthly basis. NYPCB also inspects the amount and quality of its direct and indirect greenhouse gas emissions (Scope 1 and 2) in accordance with the ISO 14064-1 standard. Scope 3 is only examined for its quality since it involves employee transportation between home and work and for business. NYPCB has also established a ridesharing system for business trips, encouraging the use of video conferencing and production support to reduce the exhaust generated from the vehicles employees used for transporting goods or commuting.

Note: Scope 3 refers to the exhaust generated by employee commuting and business trips, outsourced waste treatment, and contractor vehicles.

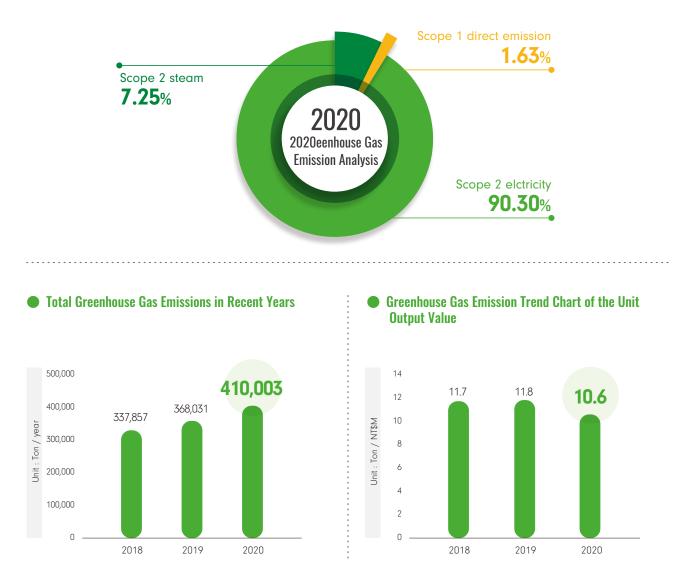


## Diagram of Greenhouse Gas Emission Category

B.Emission analysis : According to ISO 14064-1 standards, the total GHG emissions of the entire Company in 2020 totaled 410,003.8856 tons of CO<sub>2</sub>e, of which 10,016.4512 tons of CO<sub>2</sub>e were Scope 1, occupying 2.44of total emissions, and 399,987.4344 tons of CO<sub>2</sub>e were Scope 2, occupying 97.56% of total emissions. The emissions load statistic data is calculated based on the coefficient of 2019, and it is estimated that the emission load statistic data will be verified by a third-party external verification organization before August 2021. As shown in the following table, out-purchased electric power and steam utilization is the main emission source, and the electric power and steam used in NYPCB are purchased from NPC Jingxing Plant . Therefore, in order to effectively restrict CO<sub>2</sub>e, the Company should start by saving electric power.

Note 1: In the base year of 2011, emissions were 385,652 tons. Note 2: The greenhouse gas emission coefficient is quoted from the EPA Greenhouse Gas Emission Coefficient Management Table Version 6.0.4, and the global warming potential coefficient is quoted from the IPCC Fourth Assessment Report.

The company's total greenhouse gas emissions (tons/year) in 2020 increased compared to 2019 mainly due to increased production, resulting in increased steam and electricity use, resulting in increased greenhouse gas emissions.



The company's unit output value of greenhouse gas emissions (ton / million Taiwan dollars) decreased compared to 2019 (based on the actual annual emissions of the previous year as a benchmark of 2% reduction), we will continue to promote energy-saving improvement measures in the future, Efforts to improve energy efficiency and reduce greenhouse gas emissions.



# 3.5 Water resource management and water conservation

## (1) The main source of water intake

The main water company uses tap water, recycled water and other purchased water, and does not use groundwater. The tap water source comes from Shimen Reservoi.

			Units:	Units: Thousand Tons/Yea		
Plant area/Source	地表水	Surface well water (Groundwater)	Third party (Tap water)	Other		
Jinxing plant	0	0	4,150	351		

Note : Externally purchased water is provided by the Jinxing Plant of Nan Ya Plastics.

# ( 2 ) Water resource management

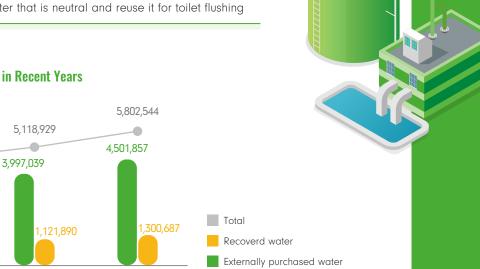
The Company's plant uses water categorized as processing water, whose main sources include tap water, recycled water, and other externally purchased water, but no underground water. Since NYPCB does not use groundwater, it has strived to reduce water consumption by reducing water used during production and recycle the water used in cleaning during production process. The Company has also invested heavily on an effluent recycling and treatment system, and has reduced wastewater in all of its plants. Recycled water that is neutral or alkaline is reused in pollution prevention. Purified recycled water is directly reused by plants and stored at pure water storage reservoirs to reduce water use and cultivate water-saving culture.

NYPCB has established policies to mitigate impact from potential short-term, mid-term, and long-term drought, and to respond to insufficient water supplies, water price hikes, and water conflicts with stakeholders. Water-saving measures have been implemented to reduce consumption and secure water supply. As a result, costs associated with purchased water have reduced in recent

Water conserva-	Reduce water consumption during production
tion	Reduce office water use
	Recycle wastewater and purify water
Increase water	Recycle alkaline waste water and reuse it on acidic scrubbers
sources	Recycle waste water that is neutral and reuse it for toilet flushing

2019

2020



#### Water Consumption Statistics in Recent Years

4.628.976

2018

3,665,452

7,000,000

6,000,000

5,000,000

4,000,000

3,000,000

1,000,000

0

Ton

Unit

#### (3) Environmental data

NYPCB considered the characteristics of wastewater and the stability and accessibility of wastewater treatment procedures and facilities. A comprehensive treatment process, treatment facilities, and wastewater piping system were designed for production lines to effectively treat, recycle, and purify wastewater. Wastewater is stringently and immediately categorized when produced by production equipment and machinery. The water is collected through distribution channels and sent to specific water treatment facilities. The Company tests effluents daily to ensure that the quality of treated water is far lower than national standards. Due to the long-term drought that persisted in the first half of 2015, water restrictions were enacted in Taoyuan District from March to May. With the restricted water supply, the Company internally agreed to postpone the annual repair and maintenance of its wastewater purification and recycling system. Through system overloading operations, the wastewater recycling rate was increased while wastewater effluent was decreased in order to reduce the overall wastewater discharge.

#### Photographs of Wastewater Treatment Equipment



biological

52

coagulation and sedimentation

chemical reaction

The company's factories are located in or near class B industrial land set aside for industrial purpose only and thus are not within any ecological protection zones. NYPCB pledges to persistently improve its production processes and equipment to reduce wastewater discharge and enhance wastewater treatment to reduce its impact on the environment.

Item Plant	Factory location	Drinking Water source and water conservation area	Dams and reservoirs	National parks	Wildlife conservation areas	Nature reserve	Protected coastline zone
Jinxing plant	Downstream sections of Nankang River	Х	Х	Х	Х	Х	Х

Note :  $\lceil X \rfloor$  : the company is not in the above protected area.

The company's Wastewater Discharge in 2020 increased compared to 2019 mainly due to increased production

#### Wasrewater Discharge Amount in Recent



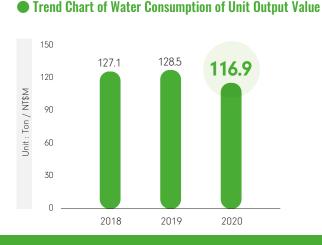
In addition, the waste water generated by each process is strictly classified and managed at the process machine or equipment side, and then collected through the diversion pipeline to various waste water treatment systems. The company also takes daily discharge water sample testing to ensure the water quality of the treatment. It is far lower than the existing statutory emission standards. The statistics of the inspection results in 2020 are as follows, and they all meet the requirements of the regulations .

#### • 2020 Wastewater quality evaluation results

Item		Regulations Test Results		;	Does the Sample Comply with Water		
Plant	Test Item	Unit	and Standards	Minimum	Average	Maximum	Quality Standards?
Jing Hsin No. 1 Wastewater Treatment Plant	рН	—	6-9	7.1	7.6	8.3	•
	COD	mg/L	<120	32.1	35.5	41.6	•
	Suspended Solids	mg/L	<50	4.5	6.4	7.3	•
	Copper lons	mg/L	<3	0.24	0.37	0.53	•
Jing Hsin	рН	_	6-9	7.2	7.6	8.6	٠
No. 2 Wastewater Treatment	COD	mg/L	<120	28.1	44.8	65.1	•
	Suspended Solids	mg/L	<50	<2.5	3.6	3.9	•
Plant	Copper lons	mg/L	<3	0.32	0.43	0.54	•

Note: The regulatory standard is "Appendix 5 of the Standard for Discharge Water - Items and Limits of Discharge Water Quality in Basic Metal Industry, Metal Surface Treatment Industry, Electroplating Industry and Printed Circuit Board Manufacturing Industry".

C.Promotion of water-saving improvement: After continuous promotion of relevant water-saving improvement measures, the water consumption per unit of output value in 2020 will be reduced compared with 2019 (the target achievement rate is 100%), as shown in Figure below; The achievement rate is 100%), which is caused by the expansion of the plant process area and the increase in the amount of alkaline recycled water in the second wastewater field, as shown in Figure below.



#### Discharged Wastewater Recovery Rate Trend Chart



In 2020, the company continued to promote water conservation and improvement, and completed 18 water reduction projects throughout the year, which can reduce water consumption by 346 tons per day in total, with an annual benefit of 2,422,000 yuan. In the future, we will continue to implement various water-saving improvement measures, and strive to reduce water consumption and increase the recovery rate of discharged wastewater.

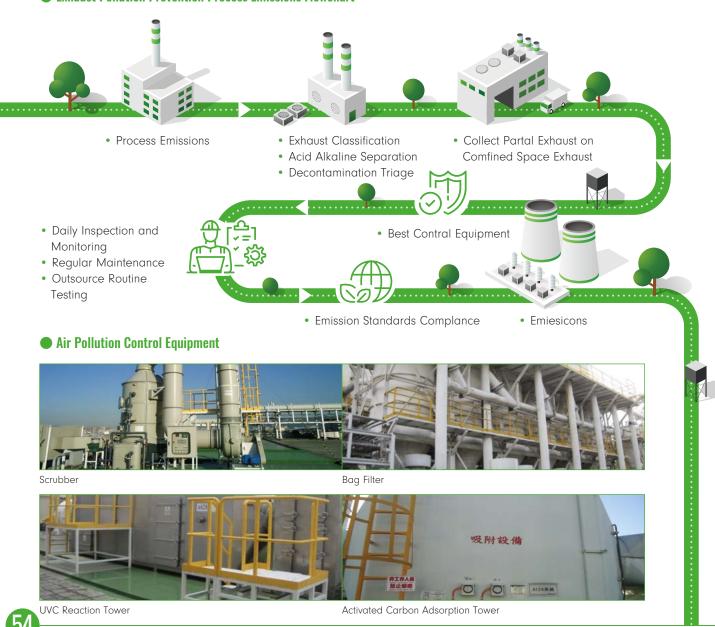
#### • Completed water saving improvement activities in 2020

ltem	Improvement	Water consumption saved amount (ton/day)	Improved benefit (NTD 1,000/year)
1	Waste water recovery and reuse	/ 19	84
2	Processing water consumption deduction	on 327	2,338

# 3.6 Protect the environment around plants

The main source of air pollution of the company is the use of acid and alkali and chemicals containing volatile organic compounds in the manufacturing process. Therefore, in addition to implementing the acid-base separation design at the source of the process waste gas collection pipeline, we also plan and set up treatment equipment according to the characteristics of various waste gases. , including packed scrubbers, baghouses, activated carbon adsorption towers and other air pollution control equipment. In order to improve the air quality around the factory area, the company purchased a UV-C reaction tower in 2011 to improve the effect of odor and VOC treatment. In 2012, a pH abnormality reporting system for a packed scrubber was installed to instantly improve system deviation and improve waste gas treatment efficiency. At the same time, it cooperates with the implementation of inspection maintenance and maintenance work, so that all equipment can play the best performance and effectively do pollution control work, as shown in the flowchart of exhaust gas pollution control below.

Whenever the process equipment is added or changed, the company entrusts an organization approved by the Environmental Protection Agency to conduct flue pollutant testing during the commissioning to ensure the effect of pollution control. The company's flue test results have always met the statutory emission standards (the test results have been published on the Environmental Protection Agency's "Fixed Pollution Source Management Information Disclosure Platform ").



# • Exhaust Pollution Prevention Process Emissions Flowchart

# 3.7 Waste management

NYPCB has established multiple waste collection points within its plants to reduce wastes and make the best use of its resources and materials. The Company also continuously improves its production processes and operations for this purpose. For the first is reducing wastes from the beginning of the process. Second is considering reused. And the last, categorizing and renew them to recycle for the resource.

Certified Taiwanese recyclers have been commissioned to handle its wastes, which are mostly treated at certified waste treatment plants in Taiwan. Only a few of them have been treated abroad. Regarding domestic waste management contractors, the company follows up the hired contractor to ensure that they properly manage the waste. Those that have been transported to other countries have obtained legal permission from those countries and treated in accordance with local laws.

Treatment	General Business Waste		Hazardous E	Business Waste	Total		
Methods	weight(Tons)	Percentage(%)	weight(Tons)	Percentage(%)	weigh (Tons)	Percentage(%)	
Recycling	3,726	18%	15,597	74%	19,3231	91.4%	
Incineration	1,734	8.2%	89	0.4%	1,822	8.6%	
Landfill	0	0.0%	0	0.0%	0	0.0%	
Total	5,460	<b>25.8</b> %	15,685	74.2%	21,146	0.0%	

#### Waste Treatment Methods and Quantity

In terms of the effectiveness of resource recovery, through continuous promotion of relevant waste reduction measures, the amount of unrecovered waste per unit output value of the company (unrecovered: refers to the annual amount of waste generated by incineration and landfill disposal), the achievement rate in 2020 is 100 %, in the future, we will continue to implement various waste reduction and resource reuse measures, and strive towards the goal of reducing the amount of waste.



#### Wastes categorizing and collecting



# **3.8 Toxicity and concerned chemical substances**

The company's management and use of toxic and concerned chemical substances are mainly potassium cyanide and sodium cyanide, and in accordance with environmental protection regulations, management and reporting are carried out for the stages of purchase/transportation/use/storage/disposal.



# 3.9 Green supply chain

Nanya PCB Corp. takes client health and safety very seriously at every one of its stages, from the procurement of raw materials to the sale of products. In order to meet the demands of both market trends and downstream customers, the company is moving towards manufacturing non-toxic green products that conform to EU RoHS regulations. Nanya PCB Corp. has also met the requirements of product statement and third party assessment report from the top 20 suppliers in order to ensure that new generation circuit boards are used in green appliances, thus further reducing the environmental burden.

#### (1) Management of green products

NYPCB introduced a hazardous material management system in 2001, and has been promoting the concept and certification of Green Partners. The Company has since conducted internal audits for this purpose. To promote the concept of Green Partners, the Company established a Green Partner standard procedure and began implementing waste reduction plans and developing a hazardous materials management system in 2004, and regularly reviewed their enforcement.

- 2001- Introduced the concept of Green Partners and defined hazardous materials.
- 2004- Established Green Partner SOP and updated relevant information.
- 2005- Achieved Green Partner certification. (2005-2007)
- 2006- The EU established Restricted of Hazardous Substances (RoHS) Directive
- 2008- Achieved Green Partner certification. (2008-2010)
- 2009- Developed and adapted a RoHS management system
- 2010- Achieved Green Partner certification. (2010-2012)
- 2011- Installed x-ray fluorescence devices to detect hazardous materials in products
- 2012- Achieved Green Partner certification. (2012-2014)
- 2013-The company passed the RBA Audit Standards (Product Content).
- 2014 -Received the customer's green partner certificate (2014 2016).
- 2015-The company passed the RBA Audit Standards (2015-2017).
- 2016 -Received the customer's Green Partner certificate (2016-2018)
- 2018 Obtained the Green Partner Certificate from a customer (2018~2020).

NYPCB has been promoting green procurement and has required its raw material suppliers to provide written assurances to ensure their products do not contain hazardous materials. They are also required to provide annual test reports to prove their products meet the requirements of customers and are in compliance with relevant laws.



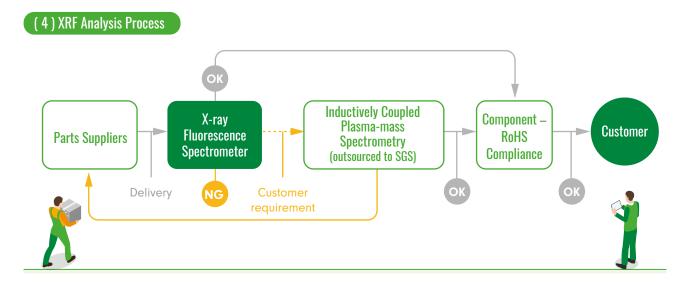


## (2) Restrict use of hazardous materials

NYPCB has produced documents and designed management principles for its green partners and effectively monitored the sources of its raw materials and other relevant materials to make sure they are in compliance with RoHS, REACH, international laws, customer requirements and the standards of green products, and to reduce their impact on the environment.

## ( 3 ) Hazardous Substance Free policies

NYPCB has established a Hazardous Substance Free system and required its green partners to comply and enforce it : The Company has set up groups and specified their responsibilities to manage green partners effectively. Its environmental safety and quality assurance units are responsible for promoting green products and ensuring they comply with relevant laws and customer requirements. Other relevant departments were required to integrate the system into their operations in compliance with NYPCB's HSF management target.



## ( 5 ) XRF system can detect and measure hazard element accurately

The XRF system can accurately measure hazardous substances such as Cd, Pb, Cr,Hg, Br, and Cl. The system helps NYPCB to meet customer requirements to include such data in shipment reports, in order to be in compliance with EU RoHS regulations.

## Hazardous Material Elemental Table

Hazardous	Analytical Pattern				
Materials	Shipment Analysis	SGS Analysis			
Cadmium					
Lead	X-ray Fluorescence Spectrometer	Inductively Coupled Plasma-mass Spectrometry Analysis			
Mercury					
Hexavalent Chromium	X-ray Fluorescence Spectrometer	Use UV/VIS Spectroscopy to Measure Absorbance of Liquid Samples			
Halogens – Chlorine Halogen - Bromine	(analyzes chrome)	Ion Chromatography Analysis			

#### ( 6 ) RoHS regulations and product packaging

All raw materials used by Nanya PCB Corp in the manufacturing of all its products (ABFS, PCB, PPS) conform to RoHS regulations through the management of suppliers.NYPCB has monitored its suppliers to ensure the raw materials they supply are RoHS compliant.

The elements that RoHS bans are cadmium, lead, mercury and mercury compounds, Chromium VI and Chromium compounds, and PBB and PBDE. Furthermore, RU published RoHS 2.0 instructions on December 17, 2014, adding four phthalates (DEHP, BBP, DBP, and DIBP) to the banned substance list, and the Company has listed them in its control scope.

## RoHS Labels

P/N 845PP01689A002				
OT NO NBAC90210012	1	,	3	
INCOMENTAL INCOMENTS			0	
Exp. Date. 2017/11/21				1946948
OM: 2016/11/22	SHIPPIN	G Dø	te 201	6/11/22
C 4500086853-1				RoHS/HF
uppler: NanYa:11G4F5CJYKK01A IT NO	Receiving	ng loo	ation:	PB1

#### (7) SGS product testing (Frequency:Per year one time)

All of NYPCB's products are in compliance with SGS standards and do not contain materials hazardous to the environment.

#### Compliance Certifications



測試報告

#### Test Report

IEST REPORT 敏媒(No.): ETR21400501 日秋(Date) C 素空楽筋板板受打限公司 (NAN YA PRINTED CIRCUIT BOARD CORPORATION) □10 (Date) 09-Apr-2021 弇默(Page): 2 of 17

被重击置"2)虽构线路一段338號 (NO. 338, SEC. 1, NANKAN RD, LUTHU DISTRICT, TAOYUAN CITY 338, TAIWAN)

制試能位敘述 (Test Part Description) No.1 : 認色過板 (GREEN SUBSTRATE)

#### 測試結果 (Test Results)

測試項目	测试方法	單位	MDL	結果
(Test Items)	(Method)	(Unit)		(Result)
		· ·		No.1
荡 (Cd) (Cadmium (Cd)) (CAS No.: 7440-	参考IEC 62321-5: 2013 以快座時合筆機设定先	m <b>o</b> /kg	2	n.d
43-9)	語佛分析・(With reference to ISC 62321-5:			
	2013, analysis was performed by ICP-OES.)			
វែធ (Pb) (Lead (Pb)) (CAS No.: 7439-92-1)	參考IEC 62321-5: 2013 以家應時合電鍍發射光	mg/kg	2	n.d
	講漢介語 + (With reference to ISC 62321-5:			
	2013, analysis was performed by ICP-OES.)			
a: (Hg) (Mercury (Hg)) (CAS No.: 7439-	登考IEC 62321-4: 2013 + AMD1: 2017 - 以應應耗	mg/kg	2	n.d.
97-6)	合單態發射先建依合析。[Wilb reference to IEC			
	62321-4: 2013 - AMO1: 2017, analysis was			1
	performed by ICP_OES.)			
六條於 Cr(VI) (Hexavalent Chromium	参考IEC 62321-7-2:2017、沙索外先于 复力分光	mg/kg	8	n.d.
Cr(VI)) (CAS No.: 18540-29-9)	光度計分析。(With reference to IEC 62321-7-2: -			
	2017, analysis was performed by UV-VIS (			
=.须≫亲 (Monobromolsiphenyl)		mg/kg	5	n.d.
二次計算 (Dibromobiphenyl)		mg/kg	5	n.d.
上(別別年 (Tr biomobiphenyl)		mg/kg	5	n.d.
語線は多く(Tetrauronicbiphenyl)		mg/kg	5	n.d.
五字 35条 (Pentabromob;phenyl)	変発IEC 62321-6: 2015、沙葉福岡杯蘭/毎港債分。	nig/kg	5	n.d,
来点理论 (Hexabromobiphenyl)	が - (With reference to IEC 62321-6: 2015,	n:g/kg	5	n.e.
… (身間筆 (Heptabromobiphenyl)	analysis was performed by GC/MS.)	mg/kg	5	n.d.
小洗】# & (OctabromoSuphenyi)	]	mg/kg	5	n.d.
た(第552) (Nonab: pinobiphenyl)	]	mg/kg	5	n.d,
十〇認来 (Decabrontobiphenyl)	]	mg/kg	5	n.d.
多沒幫苯認和 (Sum of PBBs)		mg/kg		n.d.

800 Leward M - パイン ローマング (1-20 パイン) - 25 (1-20 / 2000 - 2000 - 2







# 3.10 Greening and tree-planting activities around plants

NYPCB has designed a comprehensive greening plan for its limited land resources. The plants and flowers planted in the Company include tropical foliage such as Chinese Banyans, Royal palm, Formosan Nato Tree, Chinese rain tree, weeping fig, Buddhist Pine, Blackboard tree, Indian rubber bush, Madagascar Almond, Common Garcinia, Sea Fig and cotton tree, and shrubs such as Pink Ixora, Rhododendron, Golden Dewdrop, Chinese hibiscus, China rose, umbrella tree and Golden Banyan tree as well as seasonal plants such as Impatiens walleriana, scarlet sage, Wax Begonia, petunia, New Guinea Impatiens, Torenia, and Egyptian Starcluster.

The greening plan divided the Company into three zones, the administrative zone, production and plant zone, and the dormitory and living zone. The 30-year-old Chinese Banyan trees in the plants and the habitats of wild birds such as wild quail, Chinese Bulbul, and Japanese White-eye have been preserved and protected. The production and plant zone has been afforested. Chinese Banyan trees were planted alone Nanjing 1st Road and Nanjing 2nd Road. The gardens along lanes, according to their sizes and characteristics, were planted with Hoop Pine, Terminalia mantaly H. Perrier, weeping fig, Common Garcinia, and round banyan trees. Seasonal plants and flowering shrubs were planted in front of the plant gate, improving surrounding landscape. To make the three men and women's dormitories in the dormitory and living zone more hospitable and more homely, the plants around these buildings were specially selected. Large tropic foliage such as the blackboard tree and Formosan Nato Tree as well as seasonal flowers and shrubs such as Impatiens walleriana, Bougainvillea, viola and China Rose were planted around these buildings. During their blooming seasons, their flowers are not only pleasant to employees' eyes but also help them to relax.

NYPCB's greening plans at its plants and on its land are as follows:

## (1) Greening

- A. The Chinese Banyan trees that have existed since 1983 when the plants were built will be preserved. The areas that have been left untouched will be planted with blackboard trees, Hoop Pine, and Indian rubber bush depending on the characteristics of the gardens there.
- B. Offer free tree seedlings through government departments such as the department of agriculture and forestry bureau.
- C. Insufficient shade and sunlight on the flower terraces in the plant area will affect the turf growth area. Shade-tolerant ground cover plants, such as South American weed chrysanthemum and mussels, are used to improve the green coverage rate of the plant area.

## (2) Gardening

- A. NYPCB has been growing its own seedlings since 1995 and has produced plants and flowers that are used in the gardens across its plants and buildings. The Company has made its plantation entirely self-sufficient, saving costs of purchasing flowers and plants every season.
- B. The lawns and gardens in the administrative zone were specially designed and are gardened carefully and planted with seasonal flowers and plants.
- C. The miss-planted rate of seasonal flowers and plants cultivated across the Company is kept below 10%. The percentage of flowers that blooms every season reach 80% and above. Physical and metal strengths are much-needed in technology industry. The strengths work its best in a workplace that is beautiful, full of culture, leisure, and relaxation. NYPCB's greening management will continue to focus on creating a beautiful environment that values quality of life and nature of the future.

In 2020, the Company autonomously nurtured more than **86,800** seasonal flowers and grasses with daily maintenance costs totaling **NT\$ 1,302,000**.



Exquisite landscape of administrative district



Seasonal grass flowers in factory production area



Chinese Banyans near the Offices



Flower Terrace in a corner of Nanjin 1st Road in the factory





# EMPLOYEE WELFARE



# Identified Material Aspects and Management Approach

Corresponding Material Issues	Employees' salaries, benefits, diversity and equal opportunities for the employees, career development and education & training,.
Significance	Employees are the most important asset of the Corporation. The Corporation should endeavor to ensure every employee can work safely and are willing to be fully fledged in contributing their talent. To attract talented employees, the Corporation offers not only stable and competitive salaries, but also a comprehensive training and promotion system in order to fully utilize the work force.
Policy and Commitment	To set up reasonable and competitive salary remuneration in accordance with the labor market, establish the employee appeal system, formulate work rules and personnel management rules, and promotes diversified employee care measures.
Responsibilities	The Human Resource Team of President's Office
Resources	<ul> <li>Manpower : The Human Resource ,Administration Department</li> <li>Funding : Employee welfare fund.</li> </ul>
Action	Establish comprehensive training and promotion development system, sound internal communication mechanism, and regular salary adjustment review mechanism; promote work performance bonus; and hold various employee leisure activities.
Communication Channel	Trade union forums, online opinion platform, employees suggestion box, hotline for feedbacks
Evaluation Method	<ul><li> Employee satisfaction survey</li><li> Review and improvement of staff retention rate</li></ul>
Target (Short/Medium/ Long Term)	<ol> <li>Salary :         <ul> <li>Short-term (within 3 years): To achieve women to men salary ratio at 1:1.</li> <li>Medium and long term (3~7 years): To achieve equal pay for equal work at competitive salary levels.</li> </ul> </li> <li>Benefits :         <ul> <li>Short-term (within 3 years): To achieve 9 points in employee satisfaction survey.</li> <li>Medium and long term (3~7 years): To promote employee care plan and promote the development of balance between work, health, and life.</li> </ul> </li> <li>Career development :</li> </ol>
	<ul> <li>Short-term (within 3 years): To achieve a turnover rate below 1.5%.</li> <li>Medium and long term (3~7 years): To recruit suitable talents for suitable positions, and stabilize manpower status.</li> </ul>
Overall Performance	<ul> <li>Salary ratio of women to men: 1:1.2 in 2017 and 1:1.2~1.30 in 2018, 2019 and 2020.</li> <li>Employee satisfaction level: 8.53 points in 2017, 8.71 points in 2018, 8.71 points in 2019, 8.86 points in 2020.</li> </ul>

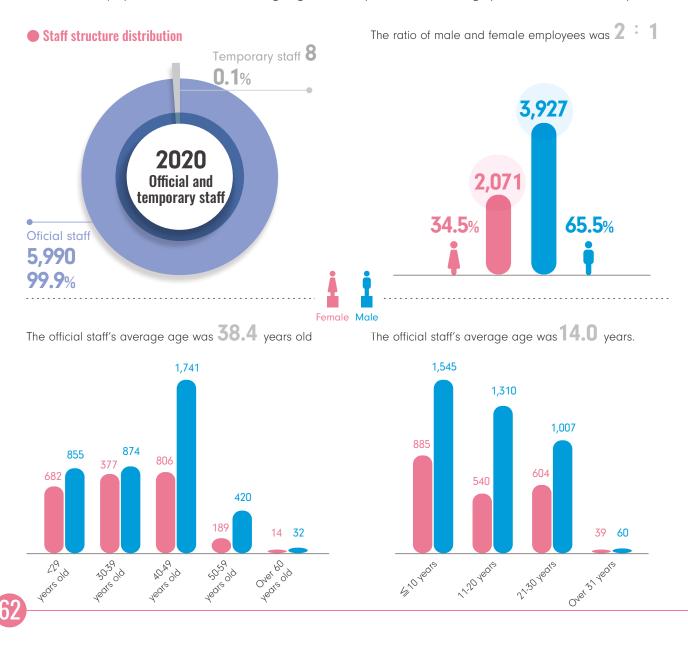
# **4.1 Employment**

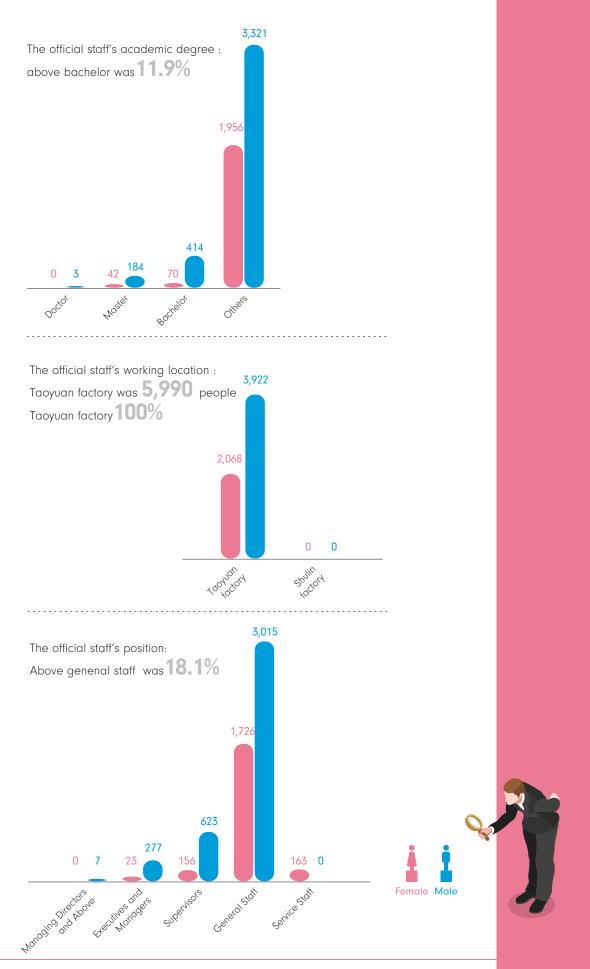
Employees are the most important asset of a company. Every company should strive to ensure every employee can work safely and are willing to contribute his/her talent. To recruit talented employees, NYPCB offers stable and competitive salaries and benefits, comprehensive training, and promotion system.

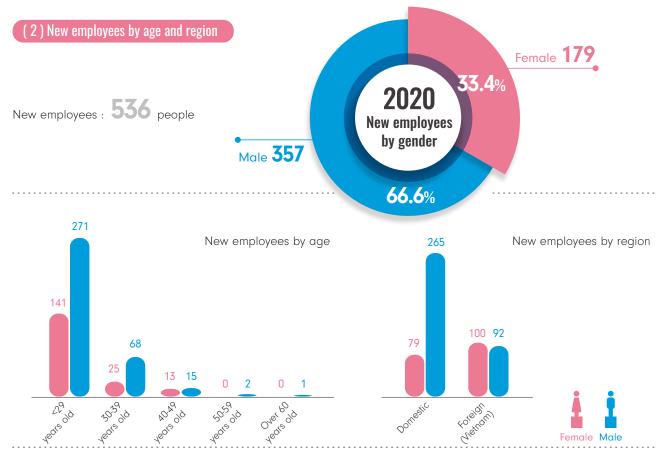
NYPCB selects candidates for positions under the principle of fairness, justice, and equality. Every candidate has equal opportunity to apply for a job. The Company also ensures the personal qualities and ability of its newly-recruited employees fit the requirements of his/her position. Taiwan's Labor Standard Act specifies that employers are not permitted to hire workers aged below 15. Child labor (15 years of age and under 16 years old) and workers between the ages of 16 and 18 are not permitted to carry out heavy or hazardous work. NYPCB has complied with the Responsible Business Alliance(RBA). No child labor is currently employed.

#### (1) 2020 PCB Human Resources Structure

In 2020 the company's human resources department consisted of 99.9% official staff and 0.1% temporary staff (all 8 staff were on contract including 5 males and 3 females, all working places are Taoyuan factory area), with no part-time employees. The department consisted of 81.4% domestic employees and 19.6% foreign employees (all from Vietnam). The ratio of male and female employees was 2:1, and the average age was 38.4 years old. The average years of service was 14.0 years.







#### Note:

1. Statistics based on employees who started work between 2020.1.1 and 2020.12.31(including formal and informal staff)

2. Percentage of new employees ratio= Total new employees/(Total new employees+ Service employees)\*100

#### ( 3 ) Local supervisory proportion

In order to develop stable working opportunities, local residents are given priority in the recruitment of new general employees. Furthermore, the Company trains local residents to become competent leaders. In 2020, the percentage of local residents holding senior supervisory roles was approximately 4.8% (the percentage of senior supervisory roles is defined as the proportion of employees working as a supervisor or above, who have held the position for at least five years and have the same household registration as the factory).

#### ( 4 ) Number of Physically and Mentally Disabled Recruitments

In order to safeguard the rights and interests of physically and mentally handicapped individuals, our Company protects their equal participation in social, political, economic, and cultural activities to promote their self-reliance and personal development. According to Article 38 of "People with Disabilities Rights Protection Act", a certain number of job vacancies shall be opened to physically and mentally handicapped individuals. By the end of 2020, a total of 46 physically and mentally handicapped individuals (28 male and 18 female) were recruited, among which 12 have severe disabilities, 7 have moderate disabilities, and 27 have mild disabilities

Number of Physically and Mentally Disabled Recruitments		Project		2017	2018	2019	2020
	Gender		19	19	18	18	18
	Cender		35	26	26	28	28
		Severe disabilities	10	8	9	11	12
	Degree of obstacle	Moderate disabilities	8	6	7	9	7
		Mild disabilities	36	31	28	26	27



# 4.2 Salaries and welfare

## (1) Employee Salaries

NYPCB not only complies local labor laws but also joins local associations that survey salaries and welfare to ensure its salaries are competitive. In addition, it is ensured that employee salaries are not gender biased, therefore, the salaries of male and female workers are equal. The company advocates the idea of the "same pay for the same work". The base salary ratio between male and female employees with the same position and rank is 1 : 1. Once hired, employees will have their salaries adjusted annually and may be promoted based on their performance.



Position	i.	į
Manager and above	1	1.31
Supervisor and below	1	1.22

#### The number and average pay of non-administrative staff

Year	2019	2020	Differences (%)
Number of full-time non-administrative staff (person)	5,622	5,745	123
Total pay (in NT\$1,000)	4,863,218	5,868,240	20.7
Average annual salary (in NT\$1,000)	865	1,021	18.0
Median salary (in NT\$1,000)	830	990	19.3

In 2020, the company has 5,745 non-supervisor full-time employees (excluding those who have been employed for less than 6 months). The total salary is NT\$5,868,240,000, the average annual salary is NT\$1,021,000 , and the median salary is NT\$990,000.

## ( 2 ) Employee welfare

The Company values its employees, respects their rights to work, and offers reasonable salaries. It also strives to alleviate employee concerns and burdens in their lives so that they can fully develop and utilize their talents and thereby enhance the Company's performance. In order to ensure that all employees feel secure in their work and utilization of their profession, the company advocates the idea of "treating employees as family" and has set up excellent facilities for food, accommodation and leisure. Furthermore, the company has taken into consideration the long-term benefits of its employees and has planned various comprehensive benefit systems. Furthermore, a variety of benefit measures have been provided for our employees:

Δ	Year-end	bonus	and	dividend

- B. Indemnitv
- C. Wedding and funeral subsidies
- D. Medical cost discounts for employees and H. Employee stock option at Chang Gung Memorial Hospital. J. Relief payments for employees hospitalized due to illness,
- E. Labor and health insurances

#### F. Uniforms

\_\_\_\_\_

- G. Accommodation for employees who are single or married with children
- their family members seeking medical services I. Funds and subsidies for the employee year-end dinner party
  - gold coins and recognitions for senior employees.

Employee benefits for the past three years			Unit: NT\$ 1,000
Item	2018	2019	2020
Expense on Employee Welfare (salary / labor & health insurance / pension / other)	4,862,436	5,271,499	6,642,470



Staff canteen



Movie Theater





Billiard Room



Table Tennis Room



Library



Healthcare Center



現做惠早午 I I I I I I

Bread department

6



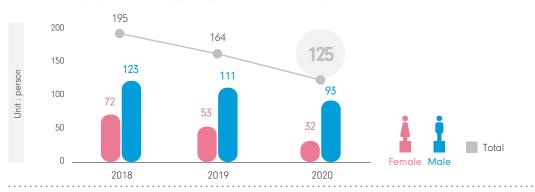
Basketball Court





The company offers a variety of employee benefits and incentives based on Formosa Plastics Group and goes above and beyond many legal standards. Such benefits include:

- A. Leave benefits : The Corporation provides a variety of leave to employees, ranging from personal leave, family leave, newcomer leave, menstrual leave, sick leave, tocolysis leave, marriage leave, bereavement leave, work-related injury leave, official leave, pregnancy checkup leave, maternity leave, paternity leave, childcare leave, transfer leave, expatriate leave, leave for employees stationed in Vietnam, aborigine leave, election leave, and special leave. In particular, the pay standards for sick leave, certain types of bereavement leave, and typhoon leave are higher than the legally stipulated levels indicated in the Labor Standards Act.
- B. Insurance benefits : In addition to helping employees with their labor insurance and national health insurance, the welfare committee member of each factory provides accident and medical insurance or provides employees with discounted group insurance (accident, medical, cancer) so that employees have more comprehensive insurance freedom.
- C.Retirement benefits : The company will pay monthly labor pension and retirement reserve fund. When an employee meets retirement criteria, the company will pay his/her pension according to the law, in addition to a retirement gift.
- D. Marriage and childbearing benefits :
- D1. In the occasion of a marriage or funeral of the employee or a family member of the employee, the company will provide an incentive (funeral offerings) and subsidize managers at all levels for the incentive (funeral offerings).
- D2. The company offers nursing rooms for employees to use during work hours.
- D3. According to relevant laws, in order to provide parental leave, employees that meet the required criteria must adjust their work hours according to childcare needs.
- D4. The number of people who can apply for parental leave in the past three years can be as follows:



#### Number of people who can apply for parental leave in the past three years

D5.To provide unpaid maternal or paternal leave, employees who have served in the Company for half a year and have children under 3 can file their application depending on their needs. In the past three years, 124 employees (female 104, male 20) applied for unpaid maternal or paternal leave. The return rate was 65%, and the retention rate was 787%. Furthermore, in 2020 alone,22 employees (female 19, male 3) applied for unpaid maternal leave, with a return rate of 54% and retention rate of 69%.

				1.1							Uni	it : person
ltem		2018			2019		2020			Total		
		į	Total	i	į	Total	i	į	Total	i	į	Total
Actual number of employees that applied for parental leave	52	9	61	33	8	41	19	3	22	104	20	124
Number of employees that should have returned (A)	30	16	46	31	9	40	29	4	33	90	29	119
Number of employees that applied for return (B)	20	13	33	19	7	26	15	3	18	54	23	77
Return Rate (B/A)	67	81	72	61	77	65	52	75	54	60	79	65
Number of post-parental leave employees who stayed for at least one year	10	13	23	17	9	26	13	5	18	40	27	67
Retention Rate (%)	76	92	85	85	69	79	68	71	69	77	79	78

#### Parental-leave application, return rate and retention rate for the past three years



Note: "Retention Rate" is defined as the percentage of post-parental leave employees that returned and stayed for at least one year.

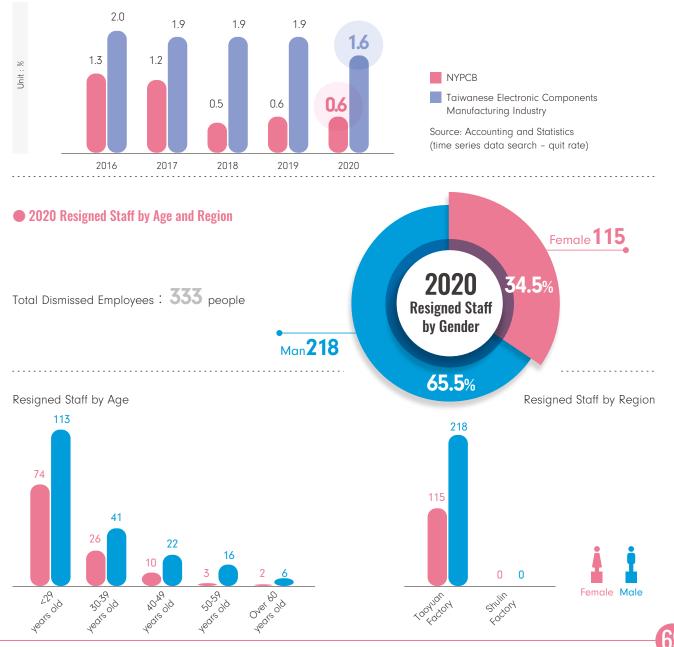
## (3) Staff evaluation

All NYPCB employees shall be periodically evaluated according to the "Evaluation Method", and the year-end performance grade shall be determined according to the periodic evaluation, attendance, reward and punishment, and case disposal time to serve as a reference for salary adjustment and year-end bonus, as well as for future development, promotion, and transfers. Employees with evaluation results of grade B or C shall be interviewed periodically by their supervisor to track the abnormality improvement plan and results.

## (4) Good Work Protection

In order to adapt to the rapidly changing business environment and constantly innovated technology, the company continues to rationalize management and keep its organization simple. However, even in the most difficult economic times, the company prioritizes the working rights of its employees. The company has established human resources integrative mechanisms to replace paid leaves with transfers. The resignation rate of the company has been around 08% for the past five years. Compared to the Taiwanese electronic components manufacturing industry, this company's resignation rate is considerably lower. This reflects the effectiveness of employee care and work protection provided by Nanya PCB Corp., and the strong trust in company management and the sense of identity of the employees.





Note : 1. Statistics based on employees who started work between 2020.1.1 and 2020.12.31(including formal and informal staff) 2. Percentage of dismissed employees ratio= Total dismissed employees/Service employees\*100

# 4.3 Training system

# (1) Training

NYPCB has established a comprehensive training system with quality working and learning environment, aimed to inspire employees' proactive attitudes and innovative views. In addition, a comprehensive training plan for different stages of each employee's career has been created to facilitate gradual improvement, allowing him/her to excel and become outstanding and practical professional. The complete training program includes: New employee training, job training of shifts and basic work practice for new junior college recruits, basic job training, job specialty training, first/secondary level reserved supervisor training, cross-functional training for middle and high level supervisors, etc., and accompanied with external training and job certification available for acquisition.Online lessons, language training, training to develop internal lecturers, combined with promoting and job rotation, ad hoc invitations of external experts to come for teaching, the creation of good work and study environment, and the amplification of training energy; all of these are to satisfy those requirements in personal career planning and corporate operation growth.

### ( 2 ) Employee training and advanced courses

In 2020, NYPCB's employee training courses, including those held by individual units and professional and manager training courses organized by the President's Office, were conducted 1,923times and attended by 5,991 employees(not included Managing Directors). The total duration of the training was 119,055 hours (an average of 19.9 hours for each individual), and the cost of the training was NT\$ 1,455,217.

#### • Average training hours per employee in the most recent three years

Unit : hrs/person										
Position	Executive		Manager		Supervisor		Genero	al Staff	General Staff	
Year	Number of People	Total Hours								
2018	71	720	223	2,405	705	13,465	4,624	105,293	5,623	121,882
Averag	10	10.1 10.8		19.1		22.8		21.7		
2019	72	319	225	1,775	574	15,162	4,897	125,750	5,768	143,006
Averag	4.	4 7.9		26.4		25.7		24.8		
2020	74	277	228	2,095	608	12,049.5	5,081	104,633.5	5,991	119,055
Averag	3.	7	9.	2	19	.8	20	).6	19	7.9

#### Average training hours for per male and female employee in the most recent three years

Year	Gender	Number of People	Total Hours	Average
2018 —	i i	1,943	35,566	18.3
2010	3,680	86,316	23.5	
2019 —	i.	1,995	37,814	19.0
2019	3,773	105,192	27.9	
2020	2,071	34,323	16.6	
	ţ	3,920	84,732	21.6

Note : 1. Number of people is not included Managing Directors

2. The number of people is based on the comparison table of the number of people in December of that year.

#### Training Scene



# 4.4 Employee relations

#### (1) Negotiations between employer and employees

- A. Establish a complaint system to improve employer and employee relations.
- B. Establish clear regulations and a human resource management system to specify employees and employer obligations and administrative matters so that employees can understand and protect their rights.
- C. Organize regular physical examinations in accordance with labor safety and health law, assign a labor safety and health coordinator, and set up relevant management systems and regulations to avoid accidents and protect employees.

#### (2) Care for employees

Organize campaigns to encourage employees and improve their welfare. Encourage employees to seek a balance between work, health, and life.

- A. Diverse employee welfare : Provide medical fee discounts for employees and their family members at Chang Gung Memorial Hospital, scholarships for employees' children, encouragement bonus for stock purchasing, birthday coupons, wedding and funeral subsidies, holiday gifts and coupons, and comprehensive living facilities. The Company offers paid sick leave and indemnity that exceeds what is required by law. It also organizes various leisure activities such as sports game, domestic travel, and a variety of clubs.
- B. Salary : Offer reasonable salaries and bonuses that are competitive. Set up a regular salary adjustment system. Provide bonuses during the Dragon Boast Festival, Lunar Festival, and at the end of a year depending on the Company's overall performance.
- C. Communication : Hold regular management meetings and publish an internal magazine every quarter. Set up recommendation boxes, hot lines, and sexual harassment prevention hot lines for employees. In 2020, there is 1 complaints related to human rights infringement were made through the official complaint channel. The case has been properly handled.
- D. Encourage innovation : Offer incentives for good suggestions and encourage employees to report excursions at work and offer their improvement advises. Incentives are provided if the suggestions have made significant improvement. In 2020, a total of 679 improvement suggestions were made and a total of NT\$ 200,800 were given out as rewards. The Company have set up an online platform for its employees to discuss and exchange ideas, and rewards those who provide innovative ideas.

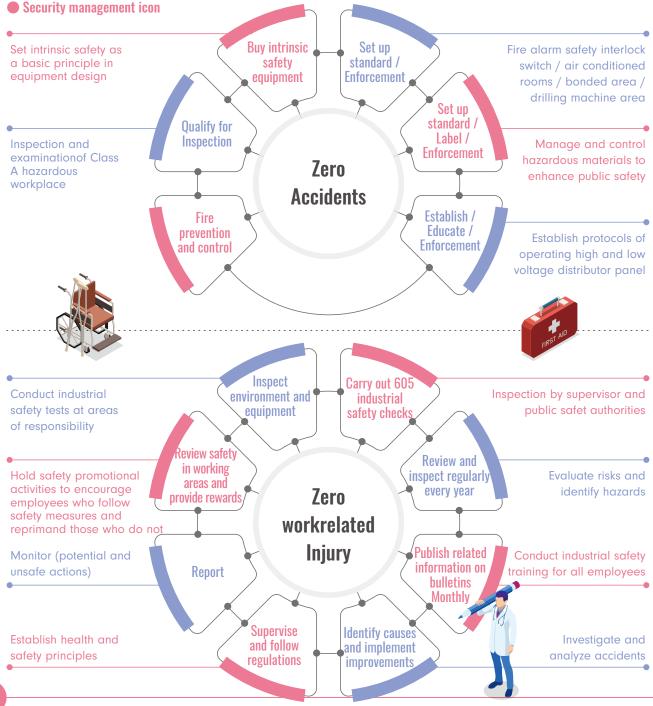
Item	2016	2017	2018	2019	2020
Totoal number of improvement proposals	1,207	823	802	742	679
AWARD amount	374,600	250,500	245,400	227,100	200,800

E. Employee Assistance Program (EAPs) : Resources can be sought through the county's health bureau mental health center to senior managers and employees if they have management, psychological, family, or relationship problems. The Company offers services to reduce the damage caused by man-made, natural factors, or inappropriate treatments.

# 4.5 Employee wellness program

#### (1) Hazard identification, risk assessment and accident investigation

The company promotes workplace safety, and has established a clear occupational safety and health organization. The factory area has set up occupational safety and health committees in accordance with laws and regulations (the proportion of labor representatives is more than 1/3 according to law ) to jointly participate in the optimization and improvement of the occupational safety and health system. ISO45001 occupational safety and health management system certificate, in order to continuously control and prevent the occurrence of related disasters and public injuries, and promote a series of process safety management activities (process hazard analysis, change management, work safety analysis, etc.), in order to identify hazards from the workplace, Evaluate hazards, control hazards, avoid exposure of workers to hazardous environments, and make occupational injury cases into teaching materials to promote and educate colleagues, so that colleagues can improve safety awareness and prevent them, and encourage colleagues to explore potential hazards to improve prevention, so as to achieve " Safety management goals of " zero disaster" and "zero public injury".



## ( 2 ) Occupational Hazard Statistics , Safety and Health Management Effectiveness

In 2020, there was 1 disability injury in Jinxing of the company (clamping, being caught), the disabled employee has been reinstated, and the accident investigation basic cause has been investigated and improved, and there is no recurrence, employee injury frequency 0.08 (women and men are 0, 0.08, respectively), injury severity 0.1 (women and men are 0, 0.1, respectively), comprehensive injury index 0.01 (women and men are 0, 0.01, respectively), the contractor has no in 2020. Occupational accidents occur.

Occupation	al Safety Performance Index	2018 Jinxing plant	2019 Jinxing plant	2020 Jinxing plant
Total Working	Hours	11,643,619	12,041,744	12,364,880
Incapacitating	g Injury Frequency	0.17	0.08	0.08
Disabling Inju	ry Severity	1.48	0.83	0.1
Comprehensiv	ve Injury Index	0.02	0.01	0.01
	• Death	0	0	0
Number of major	•.Disaster and accidents that caused more than three people injured	0	0	0
occupational disasters and accidents	<ul> <li>Spills and leaks of Ammonia, Chlorine Hydrogen fluoride, Phosgene, Hydrog sulfide and Sulfur dioxide that resulted in hospitalization of more than one person</li> </ul>	jen	0	0
Number of serious injury incidents (excluding major occupational disasters and accidents)		2	1	1
Working days	lost	17	10	5
Male absence	e rate (%)	0.7	0.05	0.000315
Female abser	nce rate (%)	0.8	0	0

Calculation rule :

- 1. Disabling injuries frequency=Disabling injuries cases\*1,000,000/Total experienced work hours
- 2. Disabling injuries severity=Disabling injuries days not worked\*1,000,000/Total experienced work hours
- 3. Comprehensive injuries indicator=√disabling injuries frequency\*disabling injuries severity/1,000

4. Absence rate (%) = Total Absence days / Total working days  $\times$  100%

5. No operation of Shulin plant from 2018 to 2020.



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## ( 3 ) Improve the health and wellness of employees

Since parts of the NYPCB workplace uses various chemicals, including sulfuric acid, manganese, plumbum, nickel, potassium cyanide, and sodium cyanide, while some processes use non-ionizing radiation related devices or make considerable noise, in order to maintain employees' health, the Company shall stipulate a sampling plan depending on the current situation of each processing area and carry out environmental detection every six months. Furthermore, NYPCB cooperates with Chang Gung Hospital to periodically provide its staff with health examinations and yearly provide special operation personnel with special health examinations, with an emphasis on screening for common cancers depending on the personal demand.

In addition to organizing health examination for employees, NYPCB's plants also offer breast-feeding rooms for female employees. Other workers can enjoy medical services and a smoking quitting assistance at the healthcare center in campus. Since NYPCB has partnered with the Chang Gung Medical Foundation, it is able to provide medical center-level services and health care. Employees and their family members can also enjoy discounts if they seek medical services, health examinations, or services not covered by health insurance at the Chang Gung Medical Foundation. The Company's welfare committee also organizes irregular leisure activities to help employees relax and promote health. Group insurance has also been purchased for employees to offer financial support if employees suffers from serious illness or injuries due to accidents.

#### Health Education Activities



Prevention advocacy



## (4) Contingency plan for infectious diseases (Industry and Public Safety)

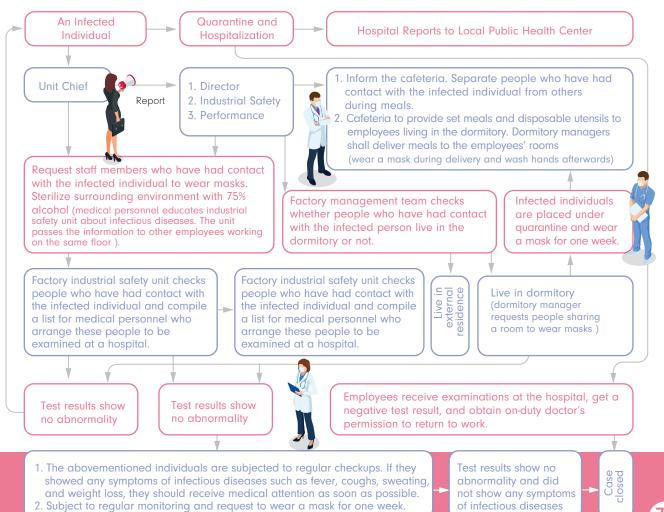
#### A. NYPCB has established comprehensive reporting and preventing systems for infectious diseases

- Prevention of infectious diseases : Increase employee awareness to infectious diseases prevention and educate employees about the preventative measures against infections through air, droplets, and contact.
- Reporting of infectious diseases : Report occurrence of infectious disease to local health bureaus and persuade the infected employees to receive medical attentions or have them hospitalized if necessary.
- Preventative measures : Provide medical control and preventative leave, implement preventative measures on employees and visitors, and effectively separate infected patients from others.

#### **B. COVID-19 Pandemic Prevention Measures**

- A joint pandemic prevention team was set up and pandemic prevention meeting is held twice daily to review relevant preventive measures and to stay on top of current pandemic developments. Status of employees under home quarantine, staff attendance, and workers returning to work are also monitored.
- Temperature is taken at entrances to factory plants.
- Domestic and overseas business trips are halted.
- Frequency of environmental disinfection has been increased.
- Meals at staff canteens are served in boxes to prevent gathering of large crowds.
- The Corporation pays attention to the health of employees and manages and tracks the health conditions of employees taking sick leave.

## Infectious Disease Contingency Procedures



#### (5) Health and safety education and contingency response training

Most accidents are related to human negligence. Therefore, how to educate employees, improve their safety awareness and ability to respond to emergencies is the primary focus of the company's safety education and training.

Below lists the occupational safety training classes held in 2020 and the corresponding numbers of participants:

- Manufacturing process or hazardous material usage: There were 24 sessions of training held in total which were participated by 572 people. The total number of hours was 1,716.
- Radioactive substance on-the-job training: 4 sessions held in total and participated by 137 people. The total number of hours was 411.
- Emergency rescue on-the-job training: 2 sessions held in total and participated by 38 people. The total number of hours was 114.
- Supervisor on-the-job training for specific chemical substances: 2 sessions held in total and participated by 48 people. The total number of hours was 288
- Contractor pre-entry training: 24sessions held in total and participated by 1,405 people. The total number of hours was 1,405.
- On-the-job training for supervisors of organic solvent operations: 2 sessions held in total and participated by 4 people. The total number of hours was 24.
- On-the-job training for operators of forklifts with loaded weight over 1 ton: 1 sessions held in total and participated by 16 people. The total number of hours was48
- On-the-job training for operators of fixed forklifts under 3 tons: 1 sessions were held with a total of individuals and 3 hours.
- On-the-job training for anoxic work supervisors: 2 echelons, 9 people in total, 54 hours in total (6 hours per person)
- Occupational safety and health management personnel on-the-job education: open 3 echelons, there are 11 people, a total of 132 hours (12 hours per person)
- On-the-job training for lead work supervisors: 2 steps, 3 people in total, 18 hours in total (6 hours per person)

The company also regards the contractors who enter the factory as a part of the employees. In addition to regularly holding pre-factory education and training for the contractors, if there are new measures or lack of auditing, the contractors will be reviewed in the "toolbox meeting" every day. Publicity/supervision, education and training content includes: construction safety, classification and waste reduction standard operating procedures and lack of guidance, through constant reminders, so that contractors have a deep , and can actually cooperate with the company to implement, achieve the expected benefits.

# (6) Disaster prevention drill

The Company has also established detailed contingency response policies and has held drills in preparation for various emergencies such as earthquakes, fires, chemical spills and leakages, and other natural disasters. The Company has trained its employees to be familiar with contingency response measures such as reporting, reaction, and containment of incident, and medical aid.

#### **Training Scene**



# 4.6 Human rights

NYPCB believes employee should be respected and treated equally. The Company provides equal job opportunity to every jobseeker and employee and protects individual's basic human rights. The Company does not discriminate employees due to their race, skin color, age, gender, sexuality, disability, pregnancy, religious beliefs, political stance, club members, or marital status at work in terms of compensation, promotion, training or hiring. Employees are not forced to accept discriminatory medical examinations. In addition, recruitment is always conducted in a public way both internally and externally, and the firm does not restrain its employees or recruit forced labor through coercion, debt, fees, or contract. NYPCB also provides sexual harassment training to its managers and employees to prevent sexual harassment.

New recruits are provided with labor and ethics training so that newcomers will understand their rights and obligations. Such training is conducted to ensure that all employees are treated fairly and are able to uphold a responsible attitude in following the moral codes and ethical standards of the Company.

The Company has met all local government laws and regulations regarding employers and employees. The Company Employee Handbook has also been reviewed and certified by the Taipei City Government before distribution to all NYPCB employees. The employees has strived to do its best to peacefully resolve any labor disputes through fair, just, reasonable, and humane measures and to maintain a harmonious employer and employee relationship.

The company's labor employees have the option to freely participate in a union and run for representative without the fear of harassment, threats or retaliation. The company's labor employees can openly discuss issues regarding work with management.

The total people participating in the collective bargaining agreement of the Company in 2020 were 59.7% of total employees. The Company's labor union also holds regular director and supervisor meetings, and, to avoid colleagues' doubts, the Company does not intervene in the union's practical operations and member lists. Furthermore, it will give full play to the labor union under legal and reasonable scope in order to make wide discussions on labor issues and shall implement policies after reaching an agreement and making an agenda, which considerably helps to improve employee-employer relations and the planning of labor welfare.

NYPCB closely adheres to the line of national labor specifications and international Declaration of the Rights of Man and of the Citizen, and seeks fair treatment to and respect of all employees, including:

- Providing work conditions in accordance with the government's labor related laws and regulations.
- Offering equal work opportunities for all job seekers according to the Employment Services Act.
- Setting up complaint channels for employees when their legal rights are damaged or inappropriately handled.
- Setting up an "Employee Rewards and Punishment Review Committee" for reviewing employees to received significant rewards or punishments.
- Providing "Sexual Harassment Prevention, Complaint, and Punishment Measures in the Workplace" to prevent employees and job seekers from a sexual harassment work environment and to respond to any related issues.

Furthermore, no significant investment agreements or contracts relating to human rights were made in the company in 2020



# 4.7 Security control dynamics

## (1) Personnel safety

- A. To ensure personnel safety in campus, NYPCB has requested it employees to wear uniforms and carry ID cards to enter and exit its campus in accordance with its factory entry and exit regulations. In addition, workplace safety training is provided to contractors to help them become familiar with NYPCB's security control system. Visitors are escorted within the campus by staff members of the unit they intended to visit.
- B. All security personnel shall be strictly selected through safety investigations and pursuant to stringent conditions and shall pass the administrative methods related to personnel, vehicle and article factory entering, human right policies (such as: labor ethical policies), and other training.
- C. To prevent burglars and criminals from entering the Company's premises and endangering employee safety, emergency response drills are regularly held in the campus. Security monitoring system has also been installed around the plant gates, perimeter, and key areas. The system can monitor employees and detect abnormalities in a timely fashion and respond appropriately.

## (2) Supply chain safety

As a part of the supply chain of key components, any major natural disasters or accidents around the world may affect the company. Therefore, the company pays attention to the risks of supply chain manufacturers, and proactively provides guidance and assistance in a timely manner.

Our considerations include:

- A. Business continuity management plan : NYPCB has requested its main suppliers to set up contingency policies and standard reaction procedures for potential natural disasters or man-made threats that may damage their operations in order to reduce the impact from such major incidents to NYPCB.
- B. Risks exposed to natural disasters : NYPCB has identified the geographical connections between its suppliers around the world with past major disasters and accidents. The Company has reviewed and designed risk reduction plans with its suppliers and has requested them to increase the numbers of their plants. Suppliers have also been required to prepare contingency reaction policies such as making production in other countries and increasing inventory to reduce the impact of disasters and accidents.
- C. Risks from the suppliers' suppliers : NYPCB requires its suppliers to manage the risks of their own supply chain and suppliers and helps them to establish a business continuity management policy to secure the stability of NYPCB's supply chain.
- D. Manage IT disruption risks : NYPCB requires its suppliers to set up a remote backup system and ensure standard protection measures have been implemented on their data centers in order to reduce the impact of disasters and accidents.

In accordance with the Taiwan Customs high-quality enterprise AEO requirements, it serves as the guiding principles and specific written , and provides the basis for all departments to follow to ensure that the supply chain receives customer orders, raw material procurement, manufacturing, and processing. , Loading, unloading and delivery and transportation safety, safety information, and safety of goods circulation in the scope of services related to customers, so as to establish a complete and effective supply chain safety management and operation system.





# (3) Information Security

Corresponding Material Issues	Information security
Significance	Due to rapid development of information technology in recent years, the survival and growth of companies have now become interconnected with information systems, which have completely changed the business models of enterprises. Additionally, the continuous operation and security of information systems have also become crucial to these enterprises.
Policy and Commitment	To achieve continuous operation of information systems and to strengthen the protection and authorization of internal data.
Responsibilities	Information Systems Division
Resources	<ul> <li>Manpower : Information Systems Division, HR Department</li> <li>External resources : Information security consulting firms</li> </ul>
Action	<ul><li>Regularly review server drill plans</li><li>Implement and review information security audit procedures</li></ul>
Communication Channels	Online opinion platforms, employee mailboxes, business continuity management (BCM) meetings
Evaluation Methods	<ul> <li>Information system satisfaction surveys</li> <li>Server recovery drill plans</li> <li>Information security progress meetings</li> </ul>
Target (Short- / Medium- / Long-Term)	<ul> <li>Server backup transition speed</li> <li>(1) Short-Term (within 3 years): avg. 15 min/machine</li> <li>(2) Long-Term: Establish a stable and secure hardware environment to achieve 24-hour continuous operation</li> <li>Information leaks: zero leak</li> </ul>
Overall Performance	<ul> <li>1. Server backup transition speed drill :</li> <li>2019: avg. 13.5 min/machine</li> <li>2020: avg. 14.6 min/machine</li> <li>2. Information leak incident :</li> <li>2019: 0 incident</li> <li>2020: 0 incident</li> </ul>

The Corporation had no incident of information leakage, invasion of customers' privacy, or leaks in customer information in 2020. In addition, the Corporation understands and considers the protection of customers' and business partners' information as top priority and therefore, has implemented a long-term confidentiality management system. The storage, access, authorization, dissemination, recovery, and termination of various information ranging from R&D, production, manufacturing, sales, technical partnership, business inquiry, outsourcing/contracting, operation, to management are adequately managed based on pre-established levels of confidentiality. Such mechanisms are established to protect the rights and interests of the Corporation's partners and customers, as well as to fulfill the Corporation's commitment to these stakeholders.

NYPCB continues to advance and to enhance information and technical security. To establish a reliable information environment, the Corporation continues to strengthen and ensure the safety of various information, systems, and networks under the three major principles of confidentiality, completeness, and usability. In addition, auditing, coaching, and training are carried out to help employees understand the Corporation's emphasis on confidentiality and related rules, thereby strengthening the staff's awareness of information security and to implement protective measures for confidential information in their day-to-day work.

Furthermore, four key management tasks have been designed to prevent possible harms to the Corporation from misuse of information, leaks, disruptions, and damage due to human errors, intentional theft and natural disasters.

#### A. Physical and Environmental Security

An uninterruptible power system (UPS) has been installed in the server room, and is regularly inspected and tested by maintenance personnel or external vendors based on the maintenance cycle of the UPS. Thermal and humidity thermometers, water leak detectors, smoke detectors, fire extinguishers, fire alarms, and a fire alarm central controller have also been installed to ensure the operation and safety of the server room.

#### B. Information System Backup Drill

A mainframe and equipment failure backup drill is periodically carried out each year to ensure the completeness and usability of backup procedures. In the case that temporary backup or restore is needed for any application system, an application shall be filed, and the Information System Division will process the request upon approval from the departmental supervisor.

#### C. Antivirus Management and Vulnerability Detection

Antivirus software has been installed across all computers on the internal network, and the status of virus infection and virus database update are monitored by a centralized management center. Windows security update is set as an automatic update, and Windows security update files are distributed by the mainframe to fix known loopholes. When system update is installed by computer vendors for the factory plant computers, the storage device (a USB flash drive or hard drive) that contains the program to be installed needs to be scanned for virus before it could be connected to the Corporation's network.

The mainframe system is regularly scanned each year to manage and integrate program patches and to analyze any loopholes, as well as to find out any potential risks in the system to reduce network threats and the chances of mainframe from being attacked.

#### D. Access Control

The Corporation has formulated management procedures that regulate the management over information access, including restricted authorization over computer use and information protection. The scope of such authorization includes management over users' Internet use, e-mail account, information system, access and authorization of relevant information in the database.





The creation of company culture occurs over the long term and is developed by operation principles, and, in summary, Formosa Plastics Group's operating concept is to pursue the rationalization of everything with a "diligent and simple" attitude and with "strive for perfection" as the ultimate goal. Since the objective environment is changing and nothing can ever actually reach "perfection", but through the endless pursuit of all, these principles have become the original drive force for the Company to constantly improve business performance and competitive conditions, thus achieving the purpose of "sustainable operation" and "contribution to society" based on the aim of "Take from society, and give back to society". The Formosa Plastics Group founder said "one can only hold so many things in his/her hands but if one opens the hands, he/she can hold the world." The remark stressed the importance of contributing to society which appears to be a one-way action; but in fact, people who can give more to the society will get more in return. The more they can contribute to the society, the more they can achieve. Therefore, the founder has helped many people in need with the same passion and zealousness he had while leading the Company. NYPCB has been contributing to society and engaging positively with neighboring communities. NYPCB believes that people are depending on each other, and that the one who is strong should help the weak, and the rich should help the poor. If people contribute their strengths, society and the world would be a better place to live in day by day.



# **5.1 Employment**

The Corporation has taken in-depth participation in local community. It also cares for the life at the neighborhood. There are Neighborhood Relations Team and volunteer teams set up in the Administration Department. They have reached out and visited and communicated with local residents to establish a channel for mutual trust. At the same time, the Corporation takes a contributory part in community and the earth by paying care for the elderly, the youth, and other disadvantaged groups, assisting local or devoted social welfare organizations in holding festive activities or non-profit second hand market, and encouraging employees to be an environmental protection volunteer. With the promotion of various activities, Nan Ya Printed Circuit Board Corporation expects to spread love and hope into every corner of society and strengthen the tie between the Corporation and local community.

Each of the Corporation's campuses promotes community outreach by following local Administration Department's planning. Take the plants in the north area as an example, the community outreach works actually conducted in 2020 are listed as follows:

Item	Cooperative Units	Promotional Methods	2020 Implementation Performance
Visits and communi- cation	<ul><li>Neighborhood offices</li><li>Local residents</li></ul>	<ul> <li>Ad hoc visits to create communica- tion channels</li> <li>Invitation to participate in factory activities to harmonize relationship</li> </ul>	The plants have maintained good relationship with local communities and residents. There have been no complaints or suggestions arising therefrom.
Traditional culture promotion	<ul> <li>Apple Theater Company (Shulin factory)</li> <li>Ming Hwa Yuan Arts &amp; Cultural Group (Jin Hsin factory )</li> </ul>	<ul> <li>Sponsor cultural/arts groups to perform in plants</li> </ul>	Sponsor cultural/arts groups to perform in plants Affected by the COVID-19 epidem- ic, the large-scale activities of the family in the factory and township have been suspended, and they will be held at a later date after the epidemic is over.
Neighbor- hood relation- ship	<ul> <li>Township offices</li> <li>Neighborhood offices</li> <li>Community development associations</li> </ul>	Actively participate in activities held by township offices, neighborhood offices, and community development associa- tions in order to maintain good relationship between each other.	Accumulated sponsorships: NT\$2,693,280
Environ- mental protection volunteerin	• Plant employees and their families	<ul> <li>Plant employees and their families are encouraged to act as volunteers for environmental protection works to jointly maintain the environment around the factory plants.</li> <li>On 11/15 and 11/28, we organized the Jingxi Love Garden Tour in conjunction with the Neighborhood and Love Association, to contribute to the community and environmental protection.</li> <li>Participated in the 12/12 Taishan Miracle Home "Love is in Miracles, Happy Living for the Elderly and Fundraising Garden Fair", donated second-hand toy boxes and led the elderly to dismantle second-hand toys and recycle plastic</li> </ul>	<ul> <li>Environmental protection volunteering activity was organized once a month at each plant, and a total of 34 rounds were organized with 1,405 volunteers participating.</li> <li>Invite Jinxingli to purify the Nankan River together , and participate in the Taoyuan City Maji Love Association to jointly raise charity funds to help more disadvantaged groups. A total of 3,000 employees and family members participated in the activity.</li> <li>Participated in the activity.</li> <li>Participated in the Taishan Miracle House event on 12/12 to promote the concepts of "plastic recycling" and "circular economy", the event attracted more than 3,000 community members</li> </ul>

Item	Cooperative Units	Promotional Methods	2020 Implementation Performance
Charity service	<ul> <li>Charity Service Club of the Welfare Committee</li> <li>Labor unions</li> <li>Local charity groups</li> </ul>	<ul> <li>Make regular visits to orphanages and nursing homes and collect goods to be donated to social welfare institutions.</li> <li>Hold second-hand markets in collabo- ration with the Charity Service Club of Welfare Committee and local charity groups. All proceeds were donated.</li> <li>Assist disadvantaged groups to apply for emergency relief from FPG's CHING PAO P.D. Charitable Founda- tion</li> <li>Promote donations for disadvantaged schoolchildren in Taoyuan City who are unable to pay for school lunch</li> </ul>	<ul> <li>A total of 27 charity service activities were held with 744 persons participating. Accumulated donations amounted to NT\$2,971,580.</li> <li>The hard-working foundation's emergency relief fund is NT\$ 213,000 yuan</li> <li>A total of 648 individuals collective- ly donated NT\$1.53 million toward 25 elementary schools.</li> </ul>



Group photo of environmental volunteers



Corporate volunteers take senior citizens on a day trip to Shilin official residence



Volunteers lead the elderly and the public to dismantle toys and recycle plastics



Caring for Vulnerable Families to Apply for Emergency Assistance



Donated toy recycling boxes to Miracle Home in Taishan District, New Taipei City



Clean River Environmental Volunteer Activities



# **5.1 Healthcare Promotions**

## (1) Chang Gung Medical Care System

Seeing the lack of medical resources in Taiwan in the 1970s, the two founders of the parent company of the Corporation, Formosa Plastics Group, had resolved to build a non-profit "Chang Gung Medical Foundation" (hereinafter called Chang Gung Memorial Hospital), which began to provide medical services in December 1976. After 40 years of hard work, Chang Gung Memorial Hospital now provides integrated healthcare that includes preventive healthcare, emergency medical care, chronic medical care, traditional Chinese medicine, long-term care, and a Health and Culture Village. At the same time, Proton Therapy Centers have also been set up at Linkou and Kaohsiung respectively to provide pioneering cancer treatment.

Presently, Chang Gung Memorial Hospital is one of the largest general hospitals throughout Asia and has achieved international standards whether in terms of medical equipment or medical service. It is widely recognized and trusted by the public.

## ( 2 ) Domestic and Overseas Medical Care

#### A. Emergency Relief

Chang Gung Memorial Hospital is committed to helping the government enhance its emergency medical care capability and responsiveness at times of major disasters. Each of our hospitals participates in important tasks ranging from emergency relief and rescue missions, regional initial training for disaster relief, to training seed mentors. In addition, Chang Gung Memorial Hospital is also a first-rate emergency hospital designated by the Ministry of Health and Welfare.

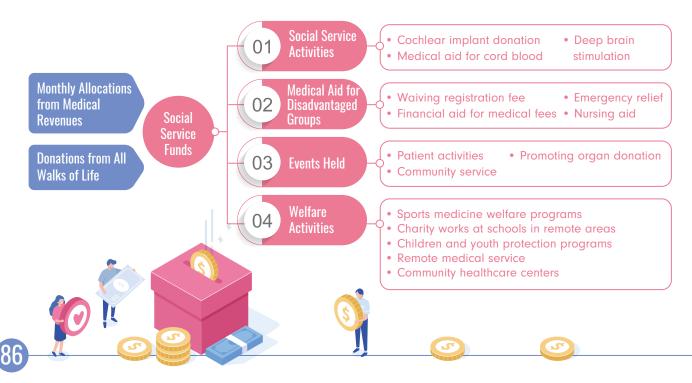
#### B. Medical Assistance and Caring for the Disadvantaged

Chang Gung Memorial Hospital has always been committed to providing necessary medical assistance to areas with insufficient medical and healthcare resources. The scope of our medical assistance covers all mountainous regions, remote areas, and aboriginal tribes and villages throughout Taiwan. Medical personnel from various departments will provide regular or aperiodic volunteer medical consultations and host healthcare promotions, on top of assisting regional hospitals and clinics to enhance their medical facilities, services, and quality.

## C. International Assistance and Medical Diplomacy

Upholding a principle of helping people worldwide, Chang Gung Memorial Hospital has also reached out to other developing countries as well as joined the government's diplomacy policy. Over the years, the Hospital has demonstrated its vision for borderless medicine through continuously assisting numerous nations to establish craniofacial centers and organ transplantation centers, and through organizing free medical consultations and facilitating the training of overseas medical personnel.

## D. Social Service, Medical Aid, and Welfare Activities



#### E. Health Promotion - Community Services

Chang Gung Medical Hospital has acted according to national policies and conducts various free health counseling sessions, preventive services and screenings, and health promotion events every year. These community events help local residents to identify health issues prior to experiencing advanced complications and thus allows them to seek treatment at an early stage.

#### F. Plant Health Promotion Activities

In association with the Chang Gung Medical Care System, our Company makes good use of the hospital resources and arranges several health promotion activities at our industrial complexes so that our colleagues are updated with the latest healthcare and medical information to help them maintain their good health. By striving for a perfect balance between daily work and personal health, our employees are leading better lives in terms of safety and quality.

- Physical examinations for our employees(once a year).
- Four major cancers screening for our employees (once a year).
- Professional nutritionists from Chang Gung Memorial Hospital were invited to design healthy menus for our employees (once a month).
- Medical physicians from Chang Gung Memorial Hospital were invited to be stationed at our industrial complexes to provide our employees with medical consultation services (4 times each week).
- Public health education information from Chang Gung Memorial Hospital was provided to our employees to ensure their healthy habits (once a month).
- Chang Gung Monthly Medical Journal was printed every month to provide our employees with the latest health information (1 journal per month).
- Lectures about the '4 Major Cancers Screening' and '3 Highs' (high blood pressure, high blood sugar, and high blood cholesterol) prevention were delivered at our industrial complexes(Irregular).

# **5.3 Education Undertaking**

## (1) Founded three schools

In order to cultivate the special talents in the industrial field, Formosa Plastics Corporation established Ming Chi Technical College (Ming Chi University of Technology now) in 1963, and established Chang-Gung Medical University(Chang-Gung University now) and Chang-Gung Institute of Nursing (Chang-Gung University of Technology now) in 1987 and 1988 successively along establishment of Chang-Gung Medical University in 1976 in order to cultivate the outstanding medical talents. Three universities take "Be diligent and plain" as motto and implements cooperative education and work-and-study internship system to cultivate the independence and hardworking of the students and achieve the objective of theory combining with practices while training the special talents having outstanding knowledge and skills.



## (2) Help the native young people to receive education and find the jobs

In order to care for the native vulnerable groups, FORMOSA Plastics Corporation has been sparing no effort to help the native students to receive education to acquire the professional skill since 1995. Chang-Gung University of Technology recruits native young girls to receive the courses with major of nursing in order to train the professional nursing personnel, then Ming Chi University of Technology starts the technical training class for native people and special technical and vocational class for native people to help the native young people not continuing their study in school to train their employability and offer the opportunity to receive education to the students wanting to continue study. Moreover, in order to make the native students to study wholeheartedly, two founders donate to pay all tuition and incidental fees during the students' school years; at the same time, the two founders offer the work-and-study internship opportunity in order to lighten their financial burden; and the total number of students receiving the benefit has exceeded 5,500 so far, and the total amount of grant money has also exceeded TWD 1.7 billion.



# Appendix 1 Global Sustainability Reporting Guidelines (GRI Standards Comparison List)

GRI Standard Number	Disclosure Number	Disclosure Title	Reference chapter	Page	Con me
	102-1	Name of the organization	1.1 Corporate profile	09	(
	102-2	Activities, brands, products,	1.2 Market position	10	(
		and services	1.4 Major products and R&D	12	
			2.1 Governance overview	24	
			(3) Follow corporate regulation	27	
	102-3	Location of headquarters			(
	102-4	Location of operations	1.1 Corporate profile	09	(
	102-5	Ownership and legal form			(
	102-6	Markets served	1.2 Market position	10	(
	102-7	Scale of the organization	1.1 Corporate profile	09	
			1.2 Market position	10	
			2.2 Financial performance	30	
	102-8	Information on employees and other workers	4.1 Employment	62	
	102-9	Supply chain	2.6 Supplier and contractor management	33	
	102-10	Significant changes to the organization and its supply chain	About the report	04	
GRI 102	102-11	Precautionary Principle or	2.1 Governance overview		
General		approach	(3) Follow Corporate Regulation	27	
Disclosures 2016			(6) Internal Audits	28	
2010			<ul><li>(7) Employee Behaviors and Code of Ethical Conduct</li></ul>	29	
	102-12	External initiatives	1.6 Participating organization and standard	16	
	102-13	Membership of associations	1.6 Participating organization and standard	16	
	102-14	Statement from senior decision-maker	Message from the President	06	
	102-15	Key impacts, risks, and opportunities	1.3 Prospect, opportunities, and challenges to the industry	11	
	102-16	Values, principles, standards, and norms of behavior	2.1 Governance overview (8)Anti-corruption	29	
	102-17	Mechanisms for advice and concerns about ethics	2.1 Governance overview	24	
	102-18	Governance structure	2.1 Governance overview (1)Operation of board of directors	24	
	102-20	Executive-level responsibility for economic, environmental, and social topics	About the report	04	
	102-21	Consulting stakeholders on economic, environmental, and social topics	1.7 Stakeholder dialogue	16	
	102-23	Chair of the highest governance body	2.1 Governance overview (1)Operation of board of directors	24	

Note:  $\lceil \star \rfloor$  :Major Issues '  $\lceil \bullet \rfloor$  :General Discloure of Core Options

GRI Standard Number	Disclosure Number	Disclosure Title	Reference chapter	Page	Com- ment
	102-26	Role of highest governance	About the report -Methods	04	
		body in setting purpose, values,	1.1 Corporate profile	09	
		and strategy	2.1 Governance overview	24	
			(1)Operation of board of directors		
	102-32	Highest governance body's role in sustainability reporting	2.1 Governance overview	24	
	102-37	Stakeholders' involvement in remuneration	4.2 Salaries and welfare	66	
	102-40	List of stakeholder groups	1.7 Stakeholder dialogue	16	
	102-41	Collective bargaining agreements	4.6 Human rights	77	
	102-42		1.7 Stakeholder dialogue	16	
			1.8 Identification of Major Issues	18	
	102-43	Approach to stakeholder engagement	1.7 Stakeholder dialogue	16	•
	102-44	Key topics and concerns raised	1.7 Stakeholder dialogue	16	
		.,	1.8 Identification of Major Issues	18	
GRI 102 General	102-45	Entities included in the consolidated financial statements	1.1 Corporate profile	09	•
Disclosures 2016	102-46	Defining report content and topic Boundaries	1.8 Identification of Major Issues	18	
	102-47	List of material topics	1.8 Identification of Major Issues	18	
	102-48	Restatements of information	No Restatements	-	
	102-49	Changes in reporting	No significant change	-	
	102-50	Reporting period	About the report	04	
	102-51	Date of most recent report	About the report	04	
	102-52	Reporting cycle	About the report	04	
	102-53	Contact point for questions regarding the report	About the report	04	٠
	102-54	Calms of reporting in accordance with the GRI Standards	Appendix 1 Global Sustainability Reporting Guidelines (GRI Standards Comparison List)	88	•
	102-55	GRI content index	Appendix 1 Global Sustainability Reporting Guidelines (GRI Standards Comparison List)	88	
	102-56	External assurance	Appendix 4 Assurance	96	
	103-1	Explanation of the material topic and its Boundary	Appendix 4 Assurance	18	•
GRI 103	103-2	The management approach and	1.4 Major products and R&D	12	
Management		its components	2. Governance	22	
Approach			3. Environmental sustainability	40	
2016			4. Employee welfare	60	
	103-3	Evaluation of the management approach	1.8 Identification of Major Issues	18	

GRI Standard Number	Number	Disclosure Title	Reference chapter	Page	
	201-1	Direct economic value	2.2 Financial performance	30	
		generated and distributed	4.2 Salaries and welfare 5.1 Neighborhood relations	66 84	
GRI 201 Conomic Performance	201-3	Defined benefit plan obligations and other retirement plans	4.2 Salaries and welfare	66	
2016	201-4	Financial assistance received from government	The Company has complete financial status and received no financial support from the government in 2020.	-	
GRI 202 Market Presence 2016	202-2	Proportion of senior management hired from the local community	4.1 Employment (3) Local supervisory proportion	62 64	
GRI 203 Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	5.1 Neighborhood relations	84	
GRI 204 Procurement Practices 2016	204-1	Proportion of spending on local suppliers	2.6 Supplier and contractor management (1) Supplier Management	33	
	205-2	Communication and training about anti-corruption policies and procedures	<ul><li>2.1 Governance overview</li><li>(3) Follow corporate regulation</li><li>(7) Employee Behaviors and Code of Ethical Conduct</li></ul>	27 29	
GRI 205 Anti-corruption 2016			(8) Anti-corruption	29	
	205-3	Confirmed incidents of corruption and actions taken	<ul><li>2.1 Governance overview</li><li>(3)Follow corporate regulation</li><li>(7)Employee Behaviors and Code of Ethical Conduct</li></ul>	27 29	
			(8)Anti-corruption	29	
GRI 206 Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<ul> <li>2.1 Governance overview</li> <li>(7) Employee Behaviors and Code of Ethical Conduct</li> <li>※ The Company did not have any lawsuit related to anti-competitive behavior, antitrust, and monopoly behavior in 2020.</li> </ul>	29	
GRI 301	301-1	Materials used by weight or volume	<ul> <li>3.4 Water and energy conservation and Greenhouse gas reduction</li> <li>(1)Environmental data</li> </ul>	47	
Materials 2016	301-2	Recycled input materials used	The Company did not useRecycled input materials in 2020.	_	
	301-3	Reclaimed products and their packaging materials	3.9 Green supply chain (6) RoHS regulations and product packaging	58	
GRI 302 Energy 2016	302-1	Energy consumption within the organization	<ul> <li>3.4 Water and energy conservation and Greenhouse gas reduction</li> <li>(1) Environmental Data</li> <li>(2) Improve energy management and reduce energy consumption</li> </ul>	47 48	
GRI 303	303-1	Water withdrawal by source	3.5 Water and energy conservation and Greenhouse gas reduction (1) 取水來源 (2) 水資源管理措施	51 51	
Water 2016	303-2	Water sources significantly affected by withdrawal of water	<ul> <li>3.5 Water and energy conservation and Greenhouse gas reduction</li> <li>(3) Water resource management and water conservation</li> </ul>	52	

GRI Standard Number	Disclo Numb		Reference chapter	Page	Com- ment
GRI 303	303-3	Water recycled and reused	<ul><li>3.5 Water and energy conservation and Greenhouse gas reduction</li><li>(1) Water resource management</li></ul>	51	*
Water 2018	303-4	Displacement	<ul><li>3.5 Water and energy conservation and Greenhouse gas reduction</li><li>(3) Water conservation policies yield positive res</li></ul>	52 ults	*
	305-1	Direct (Scope 1) GHG emissions	<ul><li>3.4 Protecting the environment around factories</li><li>(3) Examination and reduction of greenhouse gas emission</li></ul>	49	*
	305-2	Energy indirect (Scope 2) GHG emissions	<ul><li>3.4 Protecting the environment around factories</li><li>(3) Examination and reduction of greenhouse gas emission</li></ul>	49	*
GRI 305 Emissions 2016	305-4	GHG emissions intensity	<ul><li>3.4 Protecting the environment around factories</li><li>(3) Examination and reduction of greenhouse gas emission</li></ul>	49	*
	305-5	Reduction of GHG emissions	<ul><li>3.4 Protecting the environment around factories</li><li>(3) Examination and reduction of greenhouse gas emission</li></ul>	49	*
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	<ul><li>3.4 Water and energy conservation and Greenhouse gas reduction</li><li>(1) Environmental Data</li></ul>	47	*
	306-1	Water discharge by quality and destination	<ul><li>3.5 Protecting the environment around factories</li><li>(3)Water conservation policies yield positive result</li></ul>	52 ults	*
GRI 306	306-2	Waste by type and disposal method	3.7Waste management	55	*
Waste 2016	306-3	Significant spills	3.1 Commitments to environmental sustainability (2) NYPCB environmental protection history	43	*
	306-5	Water bodies affected by water discharges and/or runoff	<ul><li>3.5 Water resource management and water conservation</li><li>(3) Water conservation policies yield positive res</li></ul>	52 ults	*
GRI 307 Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	3.1 Commitments to environmental sustainability (2) NYPCB environmental protection history	43	
GRI 308 Supplier	308-1	New suppliers that were screened using environmental criteria	2.6 Supplier and contractor management	33	*
Environmental Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken	2.6 Supplier and contractor management	33	*
	401-1	New employee hires and employee turnover	<ul><li>4.1 Employment</li><li>(2) New employees by age and region</li></ul>	64	
GRI 401 Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2 Salaries and welfare	66	*
	401-3	Parental leave	4.2 Salaries and welfare	66	*
GRI 402 Labor/ Management Relations 201	402-1 6	Minimum notice periods regarding operational changes	4.6 Human rights (No latest date has yet been set)	77	*
GRI 403 Occupational	403-1	Workers representation in formal joint management-worker health and safety committees	4.5 Employee wellness program (Occupational safety and health)	72	*
Health and Safety 2018	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	4.5 Employee wellness program (Occupational safety and health) (1) 危害辨識、風險評估及事故調查	72	*

GRI Standard Number	Number	Disclosure Title	Reference chapter Pa	age	
	403-3	Workers with high incidence or high risk of diseases related to their occupation	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(3) Improve the health and wellness of employees</li></ul>	74	
	403-4	Health and safety topics covered in formal agreements with trade unions	4.5 Employee wellness program (Occupational safety and health) (1) 危害辨識、風險評估及事故調查	72	
GRI 403 Occupational	403-5	Worker training on occupational health and safety	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(5) Health and safety education and contingency response training</li></ul>	76	
Occupational Health and Safety 2018	403-6	Promotion of worker health	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(3) Improve the health and wellness of employees</li></ul>	74	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<ul> <li>4.5 Employee wellness program(Occupational safe and health)(Occupational safety and health)</li> <li>(5) Health and safety education and contingency response training</li> <li>(6) Disaster prevention drill</li> </ul>	ty 76 76	
	403-9	Work-related injuries	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(2) Occupational Hazard Statistics and Safety and Health Management Effectiveness</li></ul>	73	
	404-1	Average hours of training per year per employee	<ul><li>4.3 Training system</li><li>(2) Employee training and advanced courses</li></ul>	70	
GRI 404 Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	<ul><li>4.3 Training system</li><li>(2) Employee training and advanced courses</li></ul>	70	
2016	404-3	Percentage of employees receiving regular performance and career development reviews	<ul><li>4.2 Salaries and welfare</li><li>(3) Staff evaluation</li></ul>	69	
GRI 405 Diversity and Equal	405-1	Diversity of governance bodies and employees	4.1 Employment (1) 2020 NYPCB Human Resources Structure	62	
Opportunity 2016	405-2	Ratio of basic salary and remuneration of women to men	4.2 Salaries and welfare (1) Employee Salaries	66	
GRI 406 Non-discriminatic 2016	406-1 on	Incidents of discrimination and corrective actions taken	4.2 Salaries and welfare (1) Employee Salaries	66	
GRI 407 Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<ul><li>2.6 Supplier and contractor management</li><li>4.6 Human rights</li></ul>	33 77	
GRI 408 Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	<ul><li>2.6 Supplier and contractor management</li><li>4.6 Human rights</li></ul>	33 77	
GRI 409 Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	4.6 Human rights	77	
GRI 411 Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	4.6 Human rights (The company had no related to aborigines' rights infringement and measures adopted by the organization in 2020)	77	
GRI 412 Human Rights Assessment 2016	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	4.6 Human rights	77	

GRI Standard Number	Disclosure Number	Disclosure Title	Reference chapter	Page	Com- ment
GRI 413 Local	413-1	Operations with local community engagement, impact assessments, and development programs	5.1 Neighborhood relations	84	
Communities 2016	413-2	Operations with significant actual and potential negative impacts on local communities	The Company had no significant or potentially negative influence on the local community in 202	20. —	
GRI 414 Supplier Social	414-1	New suppliers that were screened using social criteria	2.6 Supplier and contractor management (1) Supplier Management	33	*
Assessment 2016	414-2	Negative social impacts in the supply chain and actions taken	2.6 Supplier and contractor management	33	*
GRI 415 Public Policy 2016	415-1	Political contributions	<ul> <li>2.1 Governance overview</li> <li>(3) Follow Corporate Regulation</li> <li>(7) Employee Behaviors and Code of Ethical Conduct (The Company is free of political contribution donations in 2020.)</li> </ul>	27 29	
GRI 416 Customer Health	416-1	Assessment of the health and safety impacts of product and service categories	3.9 Green supply chain	56	
and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	The Company had no violation in 2020.	-	*
	417-1	Requirements for product and service information and labeling	2.5 Customers relationship 3.9 Green supply chain	31 56	
GRI 417 Marketing and Labeling 2016	417-2	Incidents of non-compliance concerning product and service information and labeling	The Company had no violation in 2020.	-	
2016	417-3	Incidents of non-compliance concerning marketing communication	The Company had no violation in 2020. ons	-	
GRI 418 Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer date	The Company had no violation in 2020. a	-	
GRI 419 Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	2.3 Internal control (The Company did not have any sanctions due to violation of laws or regulations in 2019.)	30	*

# Appendix 2: Comparison Table for ISO 26000 Articles

	Major issue	Corresponding section in report	Page	comment
Organization management	Decision-making and implementation system for target delivery	2. Governance	22	
	Conventional check	2. Governance	22	
	Risky position of human rights	4.6 Human rights	77	
	Prevent accomplices	2. Governance	22	
Human rights	Solve complaints	4.6 Human rights	77	
nonian ngins	Discrimination and disadvantaged group	4.6 Human rights	77	
	Citizen and political rights	4.6 Human rights	77	
	Economic society and cultural rights	4.5 Employee wellness program (Occupational safety and health)	72	
	Basic work rights	4.5 Employee wellness program (Occupational safety and health)	72	
	Employment and employment relations	4.1 Employment	62	
	Work conditions and social protection	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(3) Improve the health and wellness of employees</li></ul>	74	
Labor practice	Social dialogue	<ol> <li>1.7 Stakeholder dialogue</li> <li>1.8 Identification of Major Issues</li> </ol>	16 18	
	Work health and safety	<ul><li>4.5 Employee wellness program (Occupational safety and health)</li><li>(3) Improve the health and wellness of employees</li></ul>	74	
	Labor development and training	4.3 Training system	70	
	Pollution prevention	3. Environmental sustainability	40	
	Sustainable resource utilization	Message from the President	06	
Environment	Climate change relief and adaptation	Message from the President 3.3Climate change risk management	06 45	
	Natural environment protection and restoration	3.Environmental sustainability	40	
	Anti-corruption	2.1 Governance overview (3) Follow Corporate Regulation	27	
	Responsible political participation		-	Not involved in a political activ
Fair business	Fair competition	2.1 Company management (3) Follow Corporate Regulation	27	ponticul dell
practice	Promote influence circle's social responsibility	<ul><li>2.5 Customers relationship</li><li>2.6 Supplier and contractor management</li></ul>	31 33 82	
	Respect intellectual property rights	5. Charity	02	Not involved in c
	Fair marketing, information, and contract	2.1 Company management	- 27	political activ
Consumer issues	Protect consumer's health and safety	(3) Follow Corporate Regulation		Does not provi any final prod to consum
	Sustainable protection		_	Does not provi any final prod to consume

	Major issue	Corresponding section in report	Page	Comments
	Consumer service, support and complaint settlement	2.5 Customers relationship	31	
Consumer issues	Consumer data protection and privacy	2.5 Customers relationship	31	Does not provide any final product to consumers
	Provide necessary service	1.4 Major products and R&D	12	
	Education and new knowledge	1.4 Major products and R&D	12	
	Community participation	5. Charity	82	
	Education and civilization	5. Charity	82	
Community	Employment creation	Message from the President	06	
participation and	Science and technology development	5. Charity	82	
development	Create wealth and revenue	5. Charity	82	
	Health	4.5 Employee wellness program (Occupational safety and health)	72	
	Responsible investment	5. Charity	82	

# Appendix 3: Comparison Table for United Nations Global Compact

Category	Ten principles	Corresponding section in report	Page Comments
Human rights	Business circles shall support and respect internationally recognized human rights	4.6 Human rights	77
	Guarantee and does not associate with violators of human rights	4.6 Human rights	77
	Business circles shall support freedom of association and actually recognize the right of collective bargaining	4.6 Human rights	77
Labor standards	Eliminate all forms of forced labor	4.6 Human rights	77
	Actually abolish child labor	4.6 Human rights	77
	Eliminate employment and occupational discrimination	4.6 Human rights	77
Environment	Business circles shall support the adoption of preventive methods to protect the environment	3. Environmental sustainability	40
	Act on their own initiative in promoting the most responsible things to do for the environment	3. Environmental sustainability	40
	Encourage the development of and promote environmentally friendly technology	3.9 Green supply chain	56
Anti-corruption	Business circles shall try their best to fight again all forms of corruption, including extortion and bribery	2.1 Company management (8) Anti-corruption	29

# **Appendix 4: Assurance**

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# INDEPENDENT ASSURANCE OPINION STATEMENT

2020 Nan Ya Printed Circuit Board Corporation Corporate Social Responsibility Report

The British Standards Institution is independent to Nan Ya Printed Circuit Board Corporation (hereafter referred to as Nan Ya PCB in this statement) and has no financial interest in the operation of Nan Ya PCB other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of Nan Ya PCB only for the purposes of assuring its statements relating to its corporate social responsibility (CSR), more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by Nan Ya PCB. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

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

#### Scope

- The scope of engagement agreed upon with Nan Ya PCB includes the followings:
- 1. The assurance scope is consistent with the description of 2020 Nan Ya Printed Circuit Board Corporation Corporate Social Responsibility Report.
- The evaluation of the nature and extent of the Nan Ya PCB's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

This statement was prepared in English and translated into Chinese for reference only.

#### **Opinion Statement**

We conclude that the 2020 Nan Ya Printed Circuit Board Corporation Corporate Social Responsibility Report provides a fair view of the Nan Ya PCB CSR programmes and performances during 2020. The CSR report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the Nan Ya PCB and the sample taken. We believe that the 2020 economic, social and environmental performance information are fairly represented. The CSR performance information disclosed in the report demonstrate Nan Ya PCB's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR report assurors in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that Nan Ya PCB's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

#### Methodology

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

- a review of issues raised by external parties that could be relevant to Nan Ya PCB's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 5 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

#### Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and GRI Standards is set out below:

#### Inclusivity

This report has reflected a fact that Nan Ya PCB has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the Nan Ya PCB's inclusivity issues.

#### Materiality

Nan Ya PCB publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of Nan Ya PCB and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the Nan Ya PCB's management and performance. In our professional opinion the report covers the Nan Ya PCB's material issues.

#### Responsiveness

Nan Ya PCB has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for Nan Ya PCB is developed and continually provides the opportunity to further enhance Nan Ya PCB's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the Nan Ya PCB's responsiveness issues.

#### Impact

Nan Ya PCB has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. Nan Ya PCB has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the Nan Ya PCB's impact issues.

#### **GRI Sustainability Reporting Standards (GRI Standards)**

Nan Ya PCB provided us with their self-declaration of in accordance with GRI Standards: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the Nan Ya PCB's social responsibility and sustainability topics.

#### Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

#### Responsibility

The CSR report is the responsibility of the Nan Ya PCB's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

#### Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

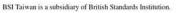
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Peter Pu, Managing Director BSI Taiwan

...making excellence a habit."

Taiwan Headquarters: 2nd Floor, No. 37, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.







# Nan Ya Printed Circuit Board Corporation

Investor Relations Unit of the President's Office Address: No.338, Sec. 1, Nankan Rd., Luchu District, Taoyuan City Tel: +886-3-3223751 ext.1014 Fax: +886-3-3218-470

E-mail : jameshan@nanyapcb.com.tw http : //www.nanyapcb.com.tw