

#### 2013 NYPCB Corporate Social Responsibilities Report



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# **About the report**

#### **Overview**

This report is the second corporate social responsibility report that Nan Ya Printed Circuit Board Corporation has ever published. The report published in November 2014, includes the company's profile, governance, environmental sustainable development, employees wellness programs, and charity work that took place at or involved its plants No.1, 2, 5, 6 and 7 (Address: No.388, Sec. 1, Nankan Rd., Luchu Township, Taoyuan County) and plants No.8 (Address: No.57, Weiwang St., Shulin Dist., New Taipei City 238, Taiwan) from January 1st 2013 to December 31st 2013. The financial figures cited in this report were from financial reports verified and signed by accountants.

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.

The Corporate Social Responsibility
Report of 2013 revised benchmarks
and boundaries, but without making
any substantial adjustments from
2012. No major changes or differences
have arisen in the past year regarding
company scale, organization structure
or ownership during the period
analyzed in this report. We will publish
CSR report regularly and the next report
will be published in August 2015.

# **Report Guideline**

The Global Reporting Initiative (GRI) G3.1 Guidelines were used as a reference to develop this report's structure, which has been written according to said instructions and layout. In order to improve both its comparability of performance and report substantiality, all data found in this year's report have been inspected by the British Standard Institution (BSI) and have been given the GRI G3.1 grade of A+. The BSI inspection report can be found as an attachment. The inspection report presented its findings with the International General Index, and any estimation will be mentioned in the respective chapters.

- ◆ Global Reporting Initiative, GRI, ver. G3.1
- ◆ AA 1000 Materiality, Inclusivity and Responsiveness of Accountability Principles (2008)

# Picture 0.1 CSR Organization chart

#### President

Management Representative Coordinate auditing and supervise department performance

#### Executive Representatives -

Director of Human Resource Department Assist management representatives to carry out CSR on labor, human rights, and social responsibility aspects, etc.

#### Executive Representatives -

Director of Environment, Hygiene, and Safety Department Assist management representatives to set up CSR environmental performance indicators Audit and supervise department performance

Department in charge:

Human Resource Department Responsibilities:

GRI Indicators of Labor/ Human Rights/ Society

Department in charge:

Sales Department

GRI Indicators of Marketing and Communication/ Customer Privacy/ Customer Service and Satisfaction

Department in charge:

**IPR** Department Responsibilities:

GRI Indicator of Anti-rivalry actions

Department in charge:

Management Analysis Department Responsibilities:

GRI Indicators of Company Profile/ Governance/ Commitments/ Stakeholders' Communication Channels Department in charge:

**Investor Relations Department** Responsibilities:

Maintain external communication. Release and maintain corporate information. Update Company's website

Responsibilities:

Department in charge:

**Accounting Department** Responsibilities:

**GRI** Indicators of Financial Performance

Department in charge:

Information Technology Department Responsibilities:

**GRI Indicators of Information Security** of Individuals

Department in charge:

**Quality Assurance Department** Responsibilities:

GRI Indicators of Customer Health and Safety/ Product and Service Labeling

Department in charge:

Environment, Hygiene, and Safety Department Responsibilities:

**Environmental GRI Indicators** 

Department in charge:

Material Procurement and Management Department

Responsibilities:

GRI Indicators of Supplier Management/ Raw Material Management/ Package Recycling/ Green Procurement Department in charge:

Administration Department

Responsibilities:

GRI Indicators of Factory Environment Management/ Greening/ Biodiversity/ Eco Protection/ Neighborly Relations/ Communication

2013 Corporate Social Responsibilities Report of NYPCB

## **Methods**

To integrate and promote corporate social responsibility, NYPCB has established a "corporate social responsibility team," led by President, Otto Chang, in 2012. Chang and Associated 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 organization chart is shown on the right side:

## **Contact Information**

Please contact us through the following channels if you have any suggestion or question. Investor Relations Unit of the President's Office, Nan Ya Printed Circuit Board Corporation

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# **Message from the President**

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 commitment to our shareholders, customers, suppliers, employees, country, environment, resources, communities, and society. As a subsidiary of Formosa Plastics Group, NYPCB has followed the Group's CSR policies and focused on five directions, which are corporate governance, environmental protection, procurement policy, labor and ethics, and social welfare.

# **1. Corporate Governance**

(1)Abide by all laws and business ethics, and establish a comprehensive corporate system to maintain positive corporate governance.

- (2)Adopt international standards and practices, continuously improve and enhance competitiveness to benefit our shareholders.
- (3)Steadily supply high quality products at a low price and help our downstream customers to develop new products and increase their competitiveness.
- (4)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

- (1)Continuously improve production processes to reduce energy consumption and carbon emissions.
- (2)Introduce lead-free technology and comply with the RoHS directive of the FU.

### 3. Procurement Policies

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

#### 4. Labor and Ethics

(1)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.

- (2) Abide by laws and business ethics, establish and improve the enterprise system to maintain a sound corporate governance system.
- (3)Strive to attain perfection and do good deeds. Make continuously improvements, enhance competitiveness and give back to the society.

### **5. Social Welfare**

- (1)Address various social issues, and participate in appropriate community and social welfare activities to foster a kind and compassionate society.
- (2)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.



#### 1. NYPCB Overview

## 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 factories in two locations in Taiwan. The Jing Hsin factory is located in the Luchu Township in Taoyuan County while the Shulin factory is in the Shulin District in New Taipei City. As of December

31<sup>st</sup> 2013, the company had a total of 7,078 employees, of which 335 were managers and executives, 1,137 were supervisors, 4,589 were general staff, 215 were service staff, and 802 were foreign workers. Employees that held management roles made up 20.8% of all employees, with 1,472 individuals having such positions.

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		
Establish	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  Shulin factory: No.57, Weiwang St., Shulin Dist., New Taipei City Tel:02-2680-631		
Paid-in capital	NTD 6.462 billion		
Number of common shares in the market	646,165,487 shares		
Employees	7,078 employees (as of December 2013)		
Products  Manufacture and sell conventional PCB, HDI board, Rigid-Flex board, Fli Substrate and Wire Bond Substrate			
Production bases in Taiwan	Jin Hsin factory, Shulin factory		

### 1.2 Market Position

As the popularity of handheld devices increases, the development of printed circuit boards is heading towards high layer counts, high density, and fineline design. The boards are being created slimmer so that they can be installed in portable devices. Since the entry threshold for the industry is relatively low, many manufacturers have entered into the PCB industry; the most intense competition is in the market segment of 4 to 10-layer printed circuit boards used in computers and communication devices. Although new competitors have entered the integrated circuit packaging market, these products are widely applied in such end products as computers, game consoles, communication networks

and digital homes. Furthermore, as the smart mobile device market is ever expanding, the future demand for integrated circuit packaging is expected to grow consistently; therefore, these new competitors are not considered a serious issue. NYPCB's products have been sold to assembly factories around the world and used by world-class companies that manufacture computers, communication and internet devices, consumer electronics, and automobile parts.

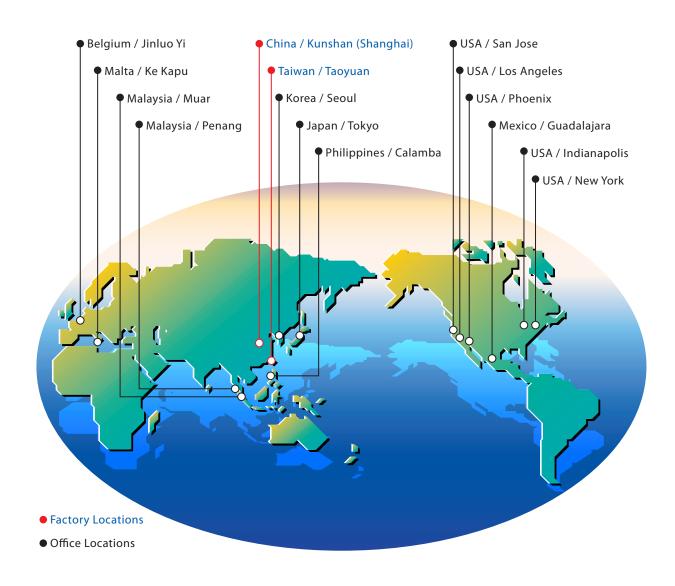


Figure 1.1: Global Offices

NYPCB has conducted research and development in its three main product lines, which have been wellreceived in the market. Its three main products include high-level High Density Interconnection boards, high layer boards, and advanced substrates; they have entered the supply chain of major global manufacturers. As the mobile device market, 4G networks, 4K televisions, internet of things and wearable devices continue to grow and become more popular, the demand for advanced HDI, Wi-Fi Modules, SiP, FC-CSP and advanced CPU boards will also remain high. NYPCB has thereby conducted research and development for this market trend, in order to generate stable revenues. The Company has dedicated to researches for the technology of manufacturing flip chip substrates as the demand for more powerful processors used in cloud computing server has grown

substantially. The Company aims to produce substrates designed for processors with multiple cores to increase its revenues and technological achievements.

# 1.3 Prospects, Opportunities and Challenges to the Industry

There are short and long term sales and development plans in NYPCB. NYPCB's short-term goal is to develop an increased demand for smart mobile devices and the continuous evolution of personal computer professor, and technologies for high-density and thinner circuit boards and enhancements in IC substrates since demands for light, thin, small, and multi-functional electronics continue increasing. The Company has adjusted its product portfolio by evaluating market acceptance and

increased high value productivities to increase production output and profit. In the long run, NYPCB will focus on portable communication, internet devices, and consumer electronics while continuing uphold its belief in sustainability and innovation, and commitment to environmental-friendly production development and production expansion. The long-term goal of its business operation will also focus on widening its customer base by providing high quality and technological advantages.

# (1)Supplies and demands and market growth

The economy was recovering in the U.S. and Europe, and the strong momentum in mobile device's sales. However, the economy in emerging market slowed, leading to consumers' diminishing

buying power. Consequently, lowend mobile device became the majority of sales in these areas and dragged product selling price down. Nonetheless, the Company actively develped products with better margin such as game console and networking application products. Therefore, the Company's deficit in 2013 was narrowing. To look into 2014, the market expected that developed countries' economy will be gradually recovering. In addition, the 4G network infrustructure, wearable devices, and Internet of Things expanded the fileds of products application. Thusly, the Company's operation is expected to be enhanced. NYPCB has also actively made transformation on its business model and developed niche products to increase profit. It has upgraded its factories in Kunshan City in China to produce multilayer boards and highdensity products.

## (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 products are developed successfully by NYPCB and their uses:

### 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 for roduce servers and workstations.

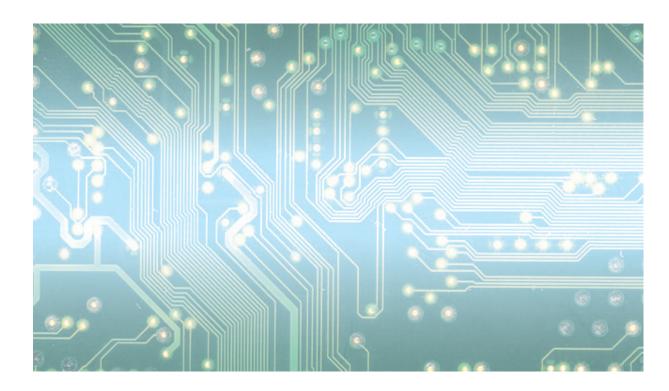
## C.Rigid-Flex board

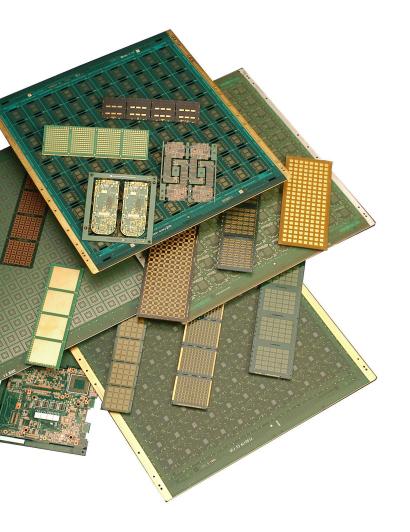
NYPCB has developed the board in various sizes and has controlled production processes. Products utilizing this technology include smartphones, tablets, and MP3 players.

## (1)Printed circuit boards

## A.High Density Interconnect Substrate:

The Company has developed high-level blind-buried holes, Any layer stacked via and electroplating filled via technology and produced various materials used to roduce substrates. These products are applicable on handheld devices such as tablets, smartphones, handheld game consoles, and high-end laptops.





## (2)IC packaging substrate

The Company has produced Wire Bond and Flip Chip Substrates through various packaging methods, which all aims to produce substrates with finer wires and thinner and higher layer count devices.

### A.Wire Bonding

The Company's fine-bonding-finger-pitch wire bonding board is already mass production. NYPCB has been increasing its effort in producing advanced multiplayer packaging substrates such as FC+WBCSP, FC+WBCSP+PoP, and Bump on trace, and developing ultrathin PoP substrates. These products can be applicable on smartphones, tablets, chips for televisions, and standard logic IC. NYPCB also prepares to mass-produce its SIP

products, which are applicable on the RF module in smartphones, internet and communication chips, flash card controllers, and many more products.

## B.Flip Chip

NYPCB has been developing light-weight, thin, short and small form factor and has mass-produced advanced 2.5D and 3D processors. In addition, the Company also develops a highly-accurate multilayered PCB pairing technology for high-level communication substrates. Research has also been carried out on high speed I/O and 90um solder ball pitch technologies to face the technological challenges of new products. The Company has also established mid- and long-term R&D projects to secure its leading position in technological development.

Furthermore, experimentation with new materials is in process, such as highly reliable base materials and ink, large ultra-low CTE core materials with low roughness surfaces, and new dielectric materials.

# (3) Major products and their usage

#### A.Printed circuit boards

The board is a key component in electronic products and is the carrier of a wide range of electronic parts that serves as an interconnection to facilitate communication between parts. It is widely applicable on desktop computers, laptops, workstations, servers, smartphones, tablets, and game consoles. As the demand for portable devices increases, printed circuit boards (PCBs) are becoming more sophisticated

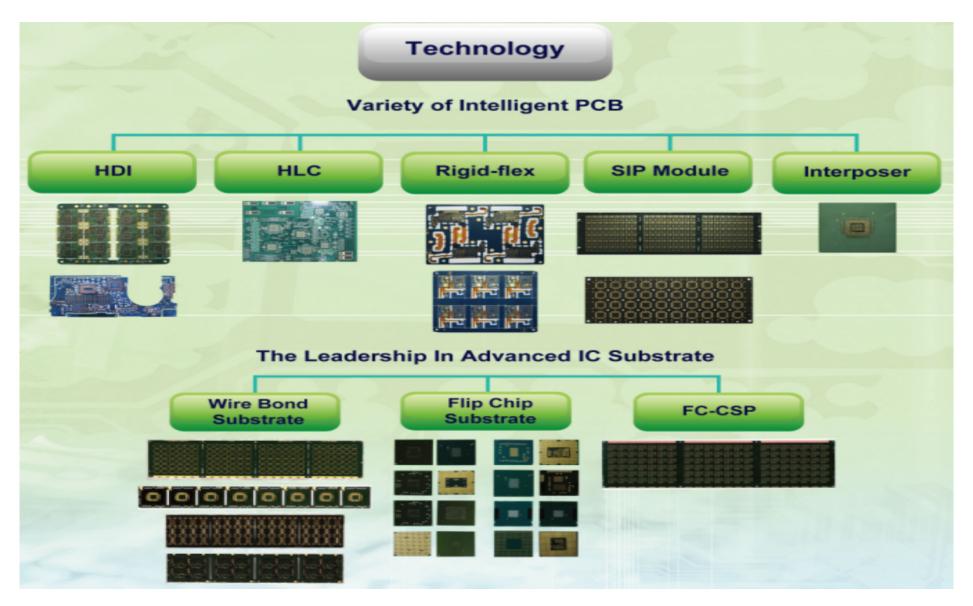
with more layers, high density and finer lines. Therefore, the end products are also becoming sleeker, further increasing the demand for portability. However, the low criteria to enter the PCB market and the high number of manufacturers have made competition intense, especially with regards to 4-10 layered boards for computers and communication devices. Although HDI requires a high level of manufacturing technology, prices have gradually declined because of manufacturers' expansion of production capacity.

# B.ICpackaging substrate

The substrate is used to carry ICs. Its external and internal leads send signals in and out of the chips to facilitate communication between the IC and the system. The product can reduce

heat generated by the IC, and has been used on a wide range of electronics including CPU, chipsets, 3G smart phones, RF modules, internet and communication chips, digital television, and the chipsets of set top boxes. In the past several years, semi-conductor products have been becoming more multi-functional, smaller and with less power consumption. Although new competitors have entered the integrated circuit packaging market, these products are widely applied in such end products as computers, game consoles, communication networks and digital homes. Furthermore, as the smart mobile device market continues to expand, the future demand for integrated circuit packaging is expected to grow consistently; therefore, these emerging competitors are not considered a major issue.

Figure 1.2 Products



# 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.

Types	Items Da		Types Items Date Certification		Certification
	1	1993	ISO9001 Certification		
	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		
Recognitions	8	2009	TOSHMS 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 certified		
	14	2013	TS-16949 certified		

Types	Items	Date	Awards		
	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		
	Awards 7 2000  8 2005  9 2005  10 2003  11 2003	Won a Preferred Quality Suppliers award from Intel			
Awards		2005	Won AsusTek's Environmental-friendly Management System award		
		2005	Won Outstanding Substrate Supplier Certification from Intel		
		2003	Won as a Sony Green Partner		
		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		

Types	Items	Date	Awards
	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.
Awards	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	2013	Awarded Authorized Economic Operators (AEO) by Customs Administration, Ministry of Finance
	25	2014	Named an ASESH Continuous Improvement Supplier of Substrates in 2013
	26	2014	Named ASECL's Best Supplier of Substrate in 2013

# 1.6 Engage with External Associations

To enhance its technologies and competitiveness, NYPCB has actively participated in various major industrial organizations in Taiwan such as the Taiwan Printed Circuit Association 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.

# 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 have provided a variety of simple channels of communication for its stakeholders 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 pf social responsibilities. 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	Meeting Frequency	Issue of Concern	
Employees	1. Internal announcements	Irregularly, at least once a year	Harmonious labor	
	2. Representatives from the Human Resource Department		relations / compensation and benefits / training and promotion / communication channels / workplace safety management/ healthcare for better employment security	
	3. Regular meetings such as union core members seminars/ education seminars/safety conferences /various training seminars/cafeteria quality review conferences	Once a month		
	4. Irregular meetings			
	5. 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		
	6. 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:  1. Shareholders	-	Operating conditions	
	(1)Annual shareholders' meetings	Once a year	/ dividends	
Shareholders and investors	(2)Published annual financial reports as requested and provided them to shareholders during the annual shareholders' meetings	Once a year	/ corporate governance / shareholder services / risk control and management	
	(3)Shareholders can make inquiries through phone calls and emails.	Irregularly		
	2. Corporate shareholders	-		
	(1) Investment seminars in Taiwan and overseas			
	(2) Investor forums held by securities companies (not held regularly)	Irregularly		
	1. Audited by customers		Product quality / post-sale services /	
Customers (Corporate clients)	2. Meeting with customers and dealers			
	3. Regular technological support	Irregularly, at least once a year		
	4. Surveyed client satisfaction	,	green products	
	5. Provided educational training for customers			

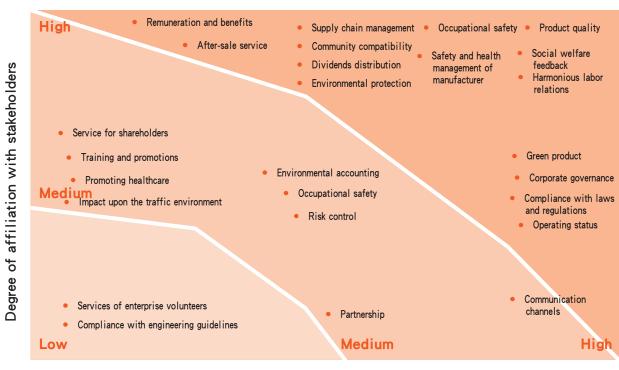
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Suppliers	<ol> <li>Established an information platform for suppliers</li> <li>Held regular meetings and reviewed reports face to face</li> <li>Conducted supplier surveys through questionnaires, and provided audits and consulting services</li> <li>Reviewed material supply stability and quality</li> </ol>	Irregularly, at least once a year	Supply chain management / safety and health management / partnerships	
Communities	<ol> <li>Communicated and informed communities through NYPCB's website</li> <li>Established charity clubs and participated in community volunteering activities</li> <li>Held donation campaigns and provided assistances in light of major natural disasters in Taiwan</li> </ol>	Irregularly, at least once a year	Social welfare contributions / community involvement / corporate volunteer services / environmental impact of transportation	
Government and authorities	<ol> <li>Official documents</li> <li>Meetings introducing and explaining new laws</li> <li>NYPCB's financial statements</li> </ol>	Irregularly, at least once a year Irregularly Once per quarter	Environmental accounting / compliance with	
	<ul><li>4. Provided reports and information as requested by the government, authorities, and regulations</li><li>5. Communicated with government or authorities through industrial associations</li></ul>	Irregularly, at least once a year	laws and regulations / environmental protection	

## 1.8 Identification of Major Issues

The company's General Management Office evaluates shareholders' major issues of concern and classifies the issues based on "stakeholders' level of concern" and "impact on company" into the following categories: high, medium and low. The issues are then prioritized; issues located closer to the top right of the diagram are of greater importance. The company is dedicated to improving such issues and, as such, divulges some issues of concern through this report. The company will continue to communicate well with stakeholders. maintain a good partnership with them and try to resolve their shortcomings.

Figure 1.3 Diagram of Major Issues of Concern



Degree of impact upon the corporate operations



#### 2.Governance

#### 2.1 Governance overview

## (1)Operation of board of directors

The board of the directors, entrusted by shareholders, is the highest-level governance body of the Company. It is responsible for executing the decisions made in annual shareholders' meetings in accordance with the Company Act, corporate regulations, and board procedures. It also follows the Formosa Plastics Group principles and code of conduct for chairpersons, supervisors and managers, and requires its staff to abide by the code in operations and avoid behaviors that may damage the Company and the interests of its shareholders. The main task of the board is to ensure the Company maintains information transparency and is law-abiding as well as following the requirements of the management team. Members of the board are elected and voted for by the shareholders. The board

consists of one chairman, four directors and three independent directors for a total of eight members. The current chairman and general manager are Mr. Wu Jia-Jhao and Mr. Chang Jia-Fang, respectively. Other board members come from a variety of

professional backgrounds and business experiences. The board currently has no female members, and the average age of the board is 70. The backgrounds and experiences of the board members are summarized in the table below:

Title	Name	Education	Concurrent positions in NYPCB or other companies
Chairman	Nanya Plastics Corp. representative Wu Chia-chau	National Chengchi University, Department of Business Administration	Chairman of Nanya Technology & Nanya Plastics Corporation
Director	Nanya Plastics Corp. representative Wong Wen-yuan	Industrial engineering, University of Huston	Chairman of Formosa Chemicals & Fibre Corporation, Formosa Taffeta and Formosa Advanced Technologies
Director	Nanya Plastics Corp. representative Liu, Yuan-shan	Chemistry, National Taiwan University	Senior Vice President of Nan Ya Plastics Corporation
Director	Chang, Chia- fung	Automatic control engineering, Feng Chia University	NYPCB's President Executive Assistant General Manager of Nanya Technology Corporation
Director	Tang, Ann-de	Electrical engineering, National Taiwan University of Science and Technology	Vice President of NYPCB
Independent director	Wang, Cheng-i	MA in Public Finance, National ChengChi University	None
Independent director	Hou, Bei-lieh	Applied Economics, National Chung Hsing University	None
Independent director	Jan, De-ho	Master of Public Administration, University of Southern California	None

(2)Shareholders/employees can provide suggestions for business operations to management teams through the following channels

#### A.Shareholders

NYPCB has established a spokesperson system to facilitate communication between the Company and its shareholders. The system allows shareholders to communicate with the Company's legal representative face to face. Their suggestions and questions to the Company would receive a detailed response, and be handled by specialists who document and forward the issues to senior managers. The system makes the Company's operation and financial status more transparent to shareholders and increases communication between them and the Company.

# B.Employees

NYPCB values harmonious employerlabor relations and respects the rights of employees to express their opinions. The Company has installed suggestions boxes in areas frequented by employees and set up online ones on the intranet. These boxes are managed by specialists who are responsible for facilitating a smooth communication channel. They would seek information to understand more about questions from employees before replying. Employees can submit their questions or suggestions on the Company's regulations or systems if they have any by filling out a Management System Suggestion Form. The form will be forwarded to their supervisors to the most senior management team, facilitating an effective communication channel between employees and the Company.

# (3) Corporate Governance Structure

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

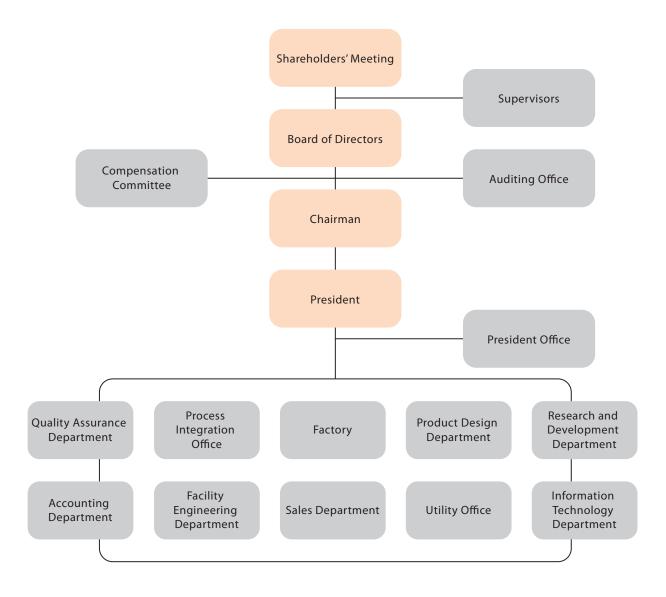


Figure 2.1. Organizational Chart

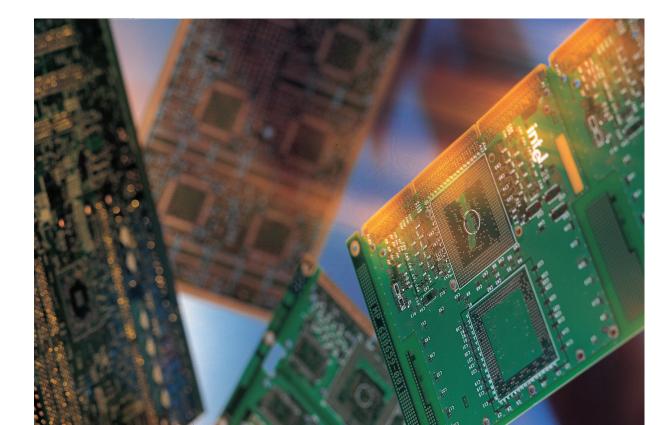
### (4)Board of Directors

The board of the directors, entrusted by shareholders, is the highest level of governance institution in the Company. It is responsible for executing the decisions made by annual general meetings in accordance with the Company Act, corporate regulations, and board procedures. It also follows the Formosa Plastics Group principles and codes of conduct for chairpersons, supervisors, and managerial officers, and requires its staff to abide by the code in operations and avoid behaviors that may damage the Company and the interests of its shareholders.

The main task of the board is to ensure the Company maintains information transparency and is law-abiding, and follows the requirements of the management team. It is also responsible for allocation of profits and supervises the Company's operation. The directors of the board were elected by shareholders.

# (5) Follow Corporate Regulation

NYPCB has followed the Formosa Plastics Group principles and codes of conduct for board members, supervisors and management, and requires its management to abide by the code in operations and avoid unethical behaviors that may damage 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.

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 been fined nor punished for violating any regulations. NYPCB never involves in any political activities and maintains neutral and objective political stand.

## (6)Commission of Salaries

NYPCB established the commission in December 27, 2011 and appointed an independent director, Wang, Cheng-i to be the convener and chairman of meetings, as well as appointing Hou, Bei-Lieh and Jan, De-Ho as commissioners. 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, supervisors and managers, and board directors. This approach prevents the chairman and managers from exposing the Company to risks from salary disputes

## (7) 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.

2013 Annual Audit Plan items: 39. Completed: 39. Rate of Completion: 100%. A. Normal item(s): 38 (97.4%).

B. Item(s) that required improvement: 1 (2.6%), improved.

# (8) 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.

Inspired by the Business Integrity Codes of Publicly Traded Companies, the company developed its own business integrity code in 2014, which will be submitted to the board in November 2014 for approval and subsequent implementation.

# (9)Policies to Maintain Operational Integrity

NYPCB has always been a law-abiding and ethical corporation. It has abided by the Company Act, Securities and Exchange Act, and the Business Entity Accounting Act, and firmly believes in diligence and frugality. It has operated under the principles of honesty, fairness, transparency, and discipline, and implemented various ethics policies. The Company has also established comprehensive corporate governance and risk control mechanisms to ensure sustainable development. It has forbidden its chairman, supervisors, managers, employees, and controllers to directly or indirectly provide, promise, request, or accept any illgotten gain or conduct any behavior that is dishonest, illegal, or breaks their obligations. NYPCB's policies to maintain operational integrity are as follows:

A.A Code of ethical conduct has been established for directors of the board, supervisors, and managers to prevent unethical behaviors that may damage the Company and the interests of its shareholders.

B.A strict code of ethical conduct and regulations has been established to prevent employees from making fraudulent personal gain, engaging in corruption, leaking confidential information, or making false reports. NYPCB has also forbidden its employees from accepting gifts, money, or entertainment from other companies. It has routinely switched the shifts of employees working in units such as sales, procurement, inventory control and warehouse, construction management, and budgeting in order to avoid

corruption.

C.A public and fair procurement and subcontract mechanism has been established. All of its procurements and subcontracts are conducted through a public bidding process via the Formosa Plastics Group's digital trading, procurement, and subcontract platform.

D.A comprehensive and effective accounting and internal control system has been established. Its six main units, human resource, finance, sales, production, inventory control, and construction, are interconnected by computers so that they can perform audits for each other, thus limiting potential irregularities. NYPCB has also established an independent three-level internal auditing system; the first layer is the auditing office of the board of directors; the second layer is the routine and independent auditing performed by the General Managing Department of the Formosa Plastics Group; and the

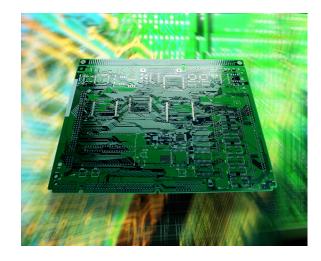
third layer is the internal auditing performed within departments. The Company also requires its entire departments to routinely self-audit their operation since internal auditing is a responsibility shared by the whole company, and is required in order to ensure internal control systems are effectively implemented. Inspired by the Business Integrity Codes of Publicly Traded Companies, the company developed its own business integrity code in 2014, which will be submitted to the board in November 2014 for approval and subsequent implementation.

# (10)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.



#### 2.2 Financial Performance

NYPCB is a professional printed circuit board manufacturer. As of Q4 of 2013, the Company's revenue was NT\$31.72 billion, cost of good sold was NT\$32.07 billion, operating expense was NT\$1.52 billion, retained earning was NT\$5.35 billion, no dividend was paid, income tax was NT\$5 million, and donation was NT\$0.62 million. On March 25th 2014, the board passed the bill of deficit compensated and distributed no employee bonus. The Company's debt ratio was 14%, which suggested a very stable financial condition.

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, supervisors, 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.

#### 2.4 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

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

## (2) Corporate shareholders

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

response, delivery, and cost. Units related to these aspects would seek more information and communicate with customers on items that receive poor scores, bring up improvement plans according to their analysis result, and update customers on the improvements made to raise customer satisfaction.

We realize 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.

# Process of customer satisfaction surveys

Identify target → distribute questionnaires → collect and analyze questionnaires → discuss during internal meetings → make necessary improvements → inform customers about the improvements.

#### 2.5 Customers

## (1) Customer satisfaction surveys

NYPCB regularly conducts customer satisfaction surveys investigating aspects such as technology, quality,

#### (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 trends and products 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.

# 2.6 Supplier and Contractor Management

### (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. Suppliers are not only required to offer quality products, timely delivery and reasonable price, but also shall protect

the environment, improve health and safety, respect human rights, fulfill their corporate social responsibilities, manage their risks, and establish sustainable operation plans.

Nan Ya Printed Circuit Board Corporation uses locally sourced materials to eliminate unnecessary transportation costs and reduce the company's carbon footprint. The percentage of raw materials purchased locally increased from 38.7% in 2012 to 41.7% in 2013 and even higher to 52.1% in 2014. (Note: Principal clients that designate highend products still require the purchase and subsequent shipment of foreign raw materials.)

## A.Quarterly Operation Evaluations

NYPCB evaluates its operations with the senior management of key suppliers every quarter, and discusses the supplier's performance in terms of

technology (T), quality (Q), response (R), delivery (D), costs (C), environment (E), and finance (F). The Company evaluates suppliers through these qualities and requires them to make continuous improvements to meet NYPCB's requirements for suppliers. The supplier base is evaluated and published in quarterly evaluation reports every year, which leads to replacement of unsuitable suppliers and ensures maintaining 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 improvements have been made. The reports will be reviewed by the procurement department as 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 EICC audit standards, the audit ratios for the past two years have both been >80%. The

company has listed 20 major audit companies between September 2012 and August 2014 (almost two years), of which 17 companies have been audited (completion rate of 85%). All 17 of those companies were notified of their shortcomings and have taken improvement measures once enrolled in their respective improvement programs.

The company regularly audits and evaluates its suppliers and requests its suppliers to comply with EICC 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 (EICC)

The Electronic Industry Citizenship Coalition (EICC) has been promoting labor rights in the electronic industry and suppliers in recent years. NYPCB has adopted the EICC 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 to make improvements may be replaced. Smelters are encouraged to participate in the Conflict-Free Smelter Program as a way of achieving third party certification.

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

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

## (2)Contractor Management

NYPCB establishes the following systems for regarding the company's contractors to enforce safety management measures, monitor contractor quality and construction, and avoid occupational injury and illness. The general management office bidding & contracting center is responsible for collecting information about contractors and audit their workshops, equipment and workplace safety measures, techniques and previous projects 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 setting budgets. Contractors must make a list of equipment they used to ensure safety and maintain health. The list will be included in their contracts with NYPCB

to ensure the costs will not be left out of the budget. NYPCB's computer system monitors and controls budget planning would automatically include the safety and health management costs into its budget. When the bidding & contracting center inquiry the price, they set the cost lower than NYPCB's budget are not accepted in order to prevent contractors from sacrificing safety and health for the sake of winning a bid.

#### (3)Contractor Safety

Contractor safety is an important part of corporate safety and health management. NYPCB values its contractors as if they were its own employees, and appreciates and admires their professional skills, their equipment, and their assistance in construction and maintenance projects. In order to ensure trouble-free construction, NYPCB has paid extra attention to

quality, construction progress, and workplace safety, and has promoted and established a construction contract management system, an evaluation system on contractors' safety management, and held construction safety training. The Company also evaluates workers' mental and physical states before construction begins, and has held training programs to ensure workers follow workplace safety regulations to reduce the chance of disasters and accidents.

NYPCB has adopted the Formosa Plastics Group's methods and regulations for contractors, and requires its contractors to meet the same safety and health standards as its own employees. Computers are used to control and manage construction fron planning and designs, budgeting, contract, and operations. Excellent contractors are selected to take part in expansion projects or annual

maintenance. Contractors are also required to take professional tests and training to enhance their skills and raise their work safety awareness to reduce occupational illness and injury. NYPCB also informs contractors of safety and health measures they must take during construction and at the workplace, and requires contractors to implement the measures effectively. Toolbox talks are held before construction begins every day to remind workers of the regulations and measures. Construction is not allowed to proceed if workplace safety cannot be ensured at any time. Temporary safety and health facilities used during construction, pollution prevention measures, and the disposal of wastes and waste construction soil should be dealt with following relevant laws and corporate regulations. Contractors are not allowed to proceed with construction and will be replaced if accidents occurr due to non-compliance of regulations by the contractors.

Outsource	<ul> <li>* Place order</li> <li>* Provide a construction safety checklist. Establish workplace safety</li> <li>measures and identify potential risks</li> </ul>
Budget	*Include safety measures into construction plan and budget  *Provide the checklist to contractors and negotiate costs
Inform contractors NYPCB's safety requirements	Inform contractors NYPCB's requirements for safety after finalization
Apply entry permit	* Contractors who has digitized their systems can apply permit online  * Those who have not fill out application forms. Their information would be digitized in computers by construction management unit
Issue entry permit	* Provide contractors a construction safety notification form (contract number)  *Hold safety education training for contractors (Employee number)



## 3. Environmental sustainability

# 3.1 Commitments to Environmental Sustainability

#### (1) Environmental protection policy

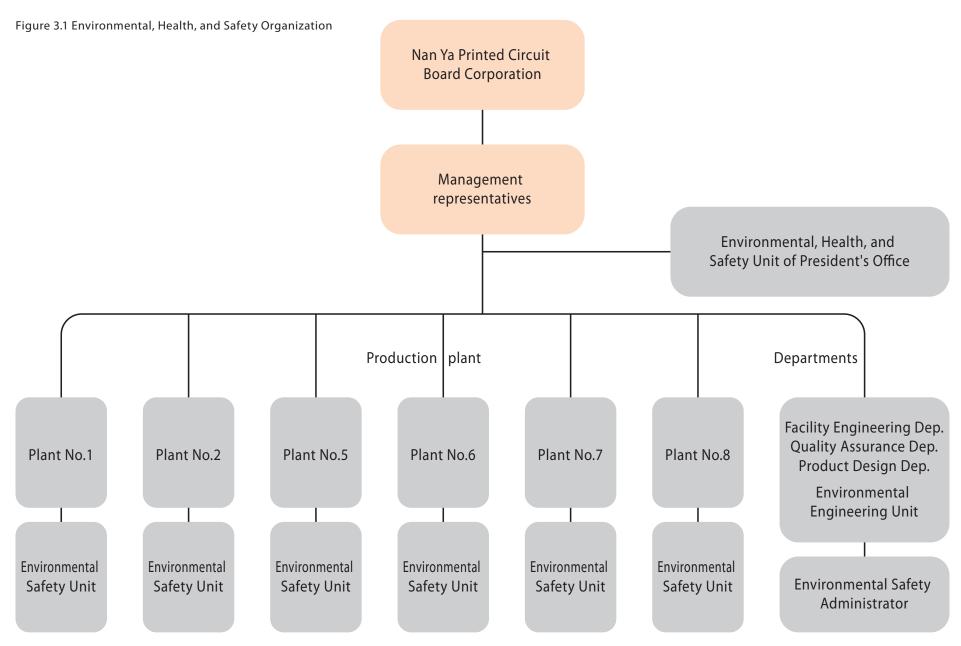
NYPCB is aware of the importance of the environment for human beings. It believes the environment is as important as the economy, and has actively participated in and promoted various environmental protection programs. Measures such as procurement of green raw materials, green product design, production 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:

Cherish resources, reduce pollution and wastes, ensure safety and health, and prevent accidents. Abide by the law, follow standards, facilitate communication, consult and maintain good neighborly relations. Shoulder responsibility, prepare for crisis, discover the truth, and make improvements continuously.

# (2)Organization chart and **Responsibility of the EHS Unit**

To enforce safe, healthy and environmentally friendly management, and to secure sustainable development, NYPCB established a unit that reports directly to the President's Office. The unit is responsible for setting up, integrating, and enforcing environmental policies within the Company and with other companies. The Environmental Safety Units of NYPCB's plants are responsible for enforcing workplace safety, health, and environmental protection measures. The units hold monthly meetings such as Safety and Health Management Meetings, and Energy Management Meetings as well as a quarterly meeting of the Safety and Health Commission (participated by over one third of labor representatives as required by law) to discuss and review workplace safety and health, with the goal of eliminating the possibilities of accidents and hazards, and achieving zero pollution.



# (3) 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 OHSAS 18001 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's Jing Hsin plant was certified by the Electronic Industry Citizenship Coalition in November 2010, and



Figure 3.2 ISO 14001 certifications (Chinese / English)

its Shulin plant was also certified in November 2012. Such recognition highlights NYPCB's efforts in environmental protection and social issues. The Company has pledged to continue the stringent management to monitor industrial impact on the environment to fulfill its social responsibilities, and create a win-win situation.



Figure 3.3 OHSAS 18001 and TOSHMS Certification (Chinese / English)



Figure 3.4 Jing Hsin Plant's Front Gate

# (4) 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 2013. 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.

## 3.2 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. The Company has also listed accounting items and coded them so that its units can categorize their budgets, costs, and expenses accordingly. Nanya PCB Corp.' s environmental conservation cost in 2013 was 216,873,000 NTD. The amount invested this year has decreased compared to previous years due to obtaining and installing a UV-C reactor facility in 2011 to increase efficiency in the management of foul smells and VOC ,and establish the pH monitoring system of transmitters filled washing tower in 2012.



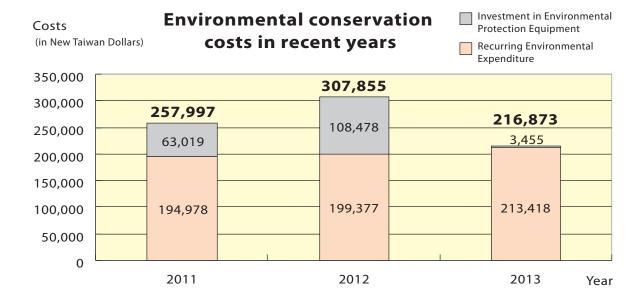


Figure 3.5 Environmental conservation costs in recent years





Figure 3.6 Administrative Office Building

# 3.3 Water and energy conservation and greenhouse gas reduction

#### (1) Environmental Data

NYPCB's 2013 total input (raw materials, energy and water resources) and total output (greenhouse gas, air pollutant, wastes and wastewater) are shown in the following diagram.

# (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.

ergy	Water		Materials	
35.72 Mt	City Water	1,172,754 Mt	Substrate	6,211 Mt
3.75 KI	Canal Water	2 571 623 Mt	Sulfuric acid	4,279 Mt
40.68 KI	Cariai Water	2,371,023 1410	Hydrochloric acid (HCI)	3,044 Mt
0.88 KI			Nitric acid	2,893 Mt
371,349 MWh			Copper Clad Laminate	1,452 Mt
117,049 Mt			Hydrogen peroxide (Hydrogen Peroxide)	949 Mt
			Sodium Persulfate (Micro-corrosion ager	t) 636 Mt
			Copper Balls	544 Mt
			Plastic sheet (Lower plate)	542 Mt
			Sodium Carbonate (developer)	304 Mt
	35.72 Mt 3.75 Kl 40.68 Kl 0.88 Kl 371,349 MWh	35.72 Mt City Water  3.75 Kl 40.68 Kl 0.88 Kl 371,349 MWh	35.72 Mt City Water 1,172,754 Mt 3.75 KI 40.68 KI 0.88 KI 371,349 MWh	35.72 Mt City Water 1,172,754 Mt Substrate  3.75 Kl 40.68 Kl 0.88 Kl Nitric acid Copper Clad Laminate Hydrogen peroxide (Hydrogen Peroxide)  Sodium Persulfate (Micro-corrosion agent Copper Balls Plastic sheet (Lower plate)

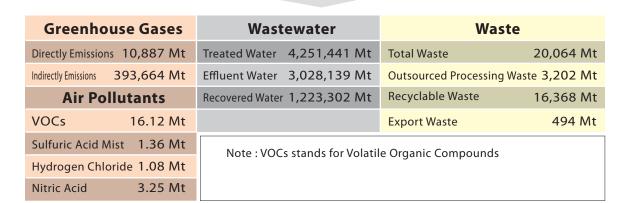


Figure 3.7 Material Flow Analysis

## **Amount and Percentage of Direct Energy**

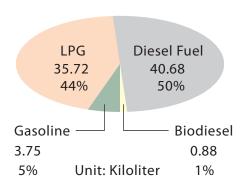


Figure 3.8 Amount and percentage of direct Energy

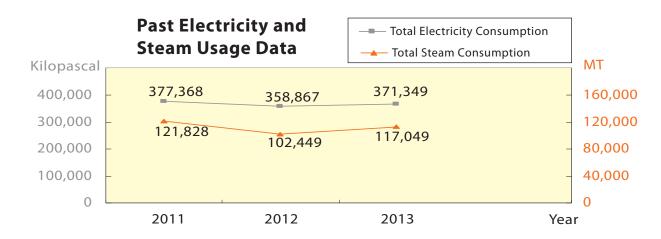


Figure 3.9 Purchased electricity and steam usage in recent years

## B.Direct energy consumption

Most of the fossil fuel consumed by NYPCB in 2013 was used for the emergency power system, forklift trucks, Company cars, ambulance, fire trucks, and the cafeteria (kitchen). Bio-diesel fuel, gasoline, liquefied natural gas, and diesel amounted to 1%, 5%, 44% and

50% of total fossil fuel consumption, respectively.

#### C.Indirect energy consumption

NYPCB's production is focused 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 97% in 2013). They are purchased from Nan Ya Plastics Corporation's Jing Hsin and Shulin plants. The overall consumption of both electricity and steam was slightly higher in 2013 compared to 2012, which is a result of the increased machine usage rate in 2013.

## 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 2013, the company completed 18 power-saving programs, which saved 1,790,000 units of power and 10,073,000 NTD, as well as reduced CO2 emissions by 1,679 tons.



Environmental management targets between 2010 and 2013 (compiled by the EHS Unit /source: NYPCB website)

Туре	Items	Targets	2013 Completion rate
Water	Water consumption per unit of output (ton/NT\$ million)	2% annual reduction since 2010	100.80%
conservation	Effluent recycle ratio	Increase 2% between 2010 and 2011; increase 1% between 2012 and 2013)	100.00%
Energy conservation	Greenhouse gas emissions per unit of output (ton/ NT\$ million)	2% annual reduction since 2010	89.68%
Waste reduction	Waste produced per unit of output (kg/ NT\$ million)	1% annual reduction since 2010	119.00%

Power saving implementation completed in 2013

Note: The investment costs for equipment improvement have been deducted from the improved benefits.

Factory location	Improvement methods	Electricity reduction (1000 units/year)	CO <sub>2</sub> reduction (tons/year)	Improved benefits (1000 NTD/year)
	Less power used during manufacturing	437	432	992
Jinxing	Jinxing Power management		476	7,167
Increased utility efficiency		823	755	1,869
Claudia	Power management	11	9	25
Shulin Increased utility efficiency		9	7	20
Total		1,790	1,679	10,073

### (3) Water resource management and water conservation

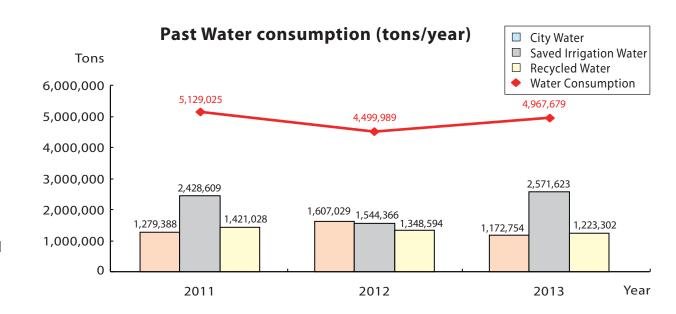
### A. Water resource management

Production activities consumed the most water in NYPCB. The main water sources include city water, recycled water, and (the farm)saved irrigation 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 recharge. Water-saving devices have also been installed on the faucets in offices to reduce office water use and cultivate water-saving culture.

NYPCB has established policies to mitigate impact from potential shortterm, 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 years.

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

Figure 3.10 Water usage in recent years



# B. Water conservation policies yield positive results

Due to our continuous endeavor to promote efficient water use, the unit output value of water usage (tons/ million NTD) and the rate of recycled wastewater have reached the target values from 2011 to 2013. However, the newly installed packed-water cleaning and maintenance facility has increased both total water usage and unit output value of water usage, but the use of tap water has been reduced proportionally. In 2013, the company implemented five water usage reduction programs, with the results of saving 51 tons of water daily and 296,000 NTD annually. NYPCB has pledged to continue promoting and enforcing water conservation, and striving to reduce water consumption and recycle wastewater.

Figure 3.11 Trend of the unit output value of water usage

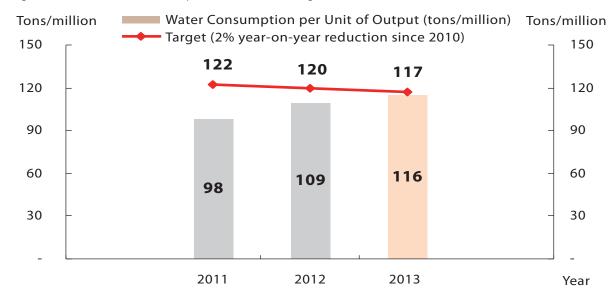
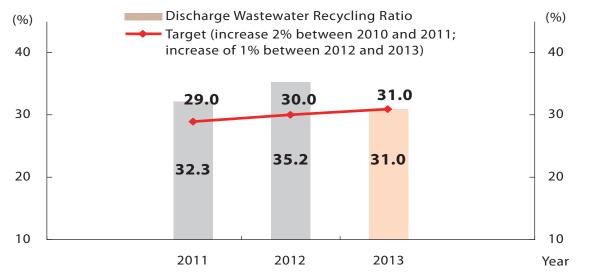


Figure 3.12 Trend of the rate of recycled wastewater



## Water-saving programs implemented in 2013

Factory location	Improvement methods	Amount of water saved (tons/day)	Improved benefits (1000 NTD/year)
Wastewater recycling Jinxing		43	239
factory  Less water used for manufacturing		8	57
Total		51	296



# 3.4 Protect the environment around plants

## (1)Air pollution prevention

The main source of air pollutants generated in NYPCB's plant came from the use of neutral, acidic, alkaline chemicals and volatile organic compounds during production processes. These chemicals have been separated by collecting exhausts during the processes. Specific equipment such as scrubbers, bag filters, and activated carbon towers has been installed to handle each type of exhaust. To enhance air quality and eliminate odors around the plant, NYPCB purchased a UV-C reactor and VOC treatment system in 2011, pH monitoring alarm systems for packed towers in 2012 and a high notification frequency continuous pH monitor facility for packed towers to increase the efficiency of exhaust reduction. The Company also ensures the equipment are maintained regularly so that they can effectively prevent pollution per the following chart. If new equipment is installed or if existing equipment is upgraded, NYPCB has Environmental Protection Administration-certified companies to test air pollutants in their stacks to make sure air pollution prevention is effective. Past test results show NYPCB's air pollutant emissions are far lower than national emission standards.

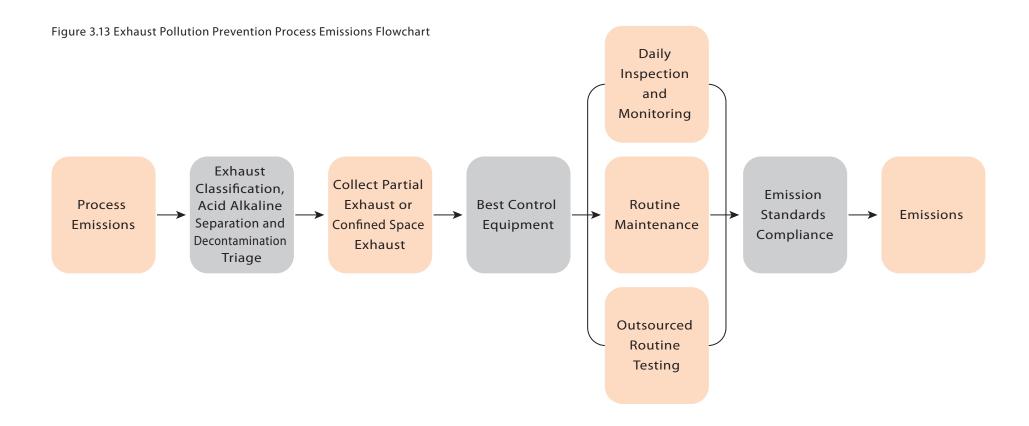


Figure 3.14 Air Pollution Control Equipment (Scrubber, Bag Filter, UVC Reaction Tower and Activated Carbon Adsorption Tower)



### (2)Water pollution prevention

NYPCB has taken into account the characteristics of wastewater and the stability and accessibility of wastewater treatment when designing its wastewater treatment procedures and facilities. A comprehensive treatment process and facilities and wastewater piping system were designed for production lines to treat, recycle, and purify wastewater effectively. Wastewater is stringently and immediately categorized when it is produced by production equipment and machinery. The water is collected through distribution channels to specific water treatment facilities. The Company tests effluents daily to ensure that the quality of treated water is far lower than national standards. 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.

ltem Plant	Factory location	Drinking Water source and water conservation area	Dams and reservoirs	National parks	Wildlife conservation areas	Nature reserve	Protected coastline zone
Jing Hsin plant	Downstream sections of Nankang River	X	×	X	X	X	×
Shulin plant	Downstream sections of Dahan River	X	X	X	X	X	X

Figure 3.15 Wastewater discharge amount in recent years

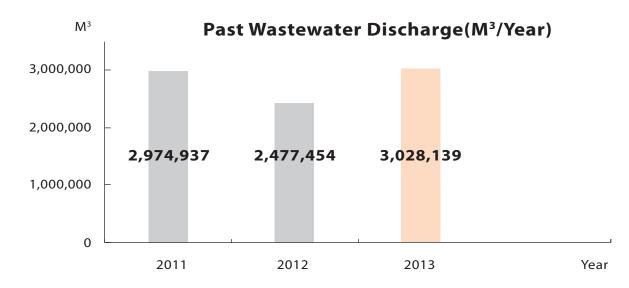


Figure 3.16 2013 Wastewater quality evaluation results

	Test Items	ems Unit Regulations and Standards	Test Results			*	
	icse items	Offic	negalations and standards	Minimum	Average	Maximun	*
Jing Hsin No. 1	рН	-	6~9	6.9	7.5	7.8	Yes
Wastewater	COD	mg/L	<120	28.6	32.1	37.2	Yes
Treatment	Suspended Solids(SS)	mg/L	<50	10.8	14.5	19.5	Yes
Plant	Copper Ions(Cu)	mg/L	<3	0.25	0.8	1.56	Yes
Jing Hsin No. 2	рН	-	6~9	7.8	8.3	8.7	Yes
Wastewater	COD	mg/L	<120	13.1	15.9	19.0	Yes
Treatment	Suspended Solids(SS)	mg/L	<50	4.0	6.5	9.1	Yes
Plant	Copper Ions(Cu)	mg/L	<3	0.2	0.7	1.02	Yes
Shulin	рН	-	6~9	7.7	8.1	8.6	Yes
Wastewater	COD	mg/L	<120	19.5	28.0	34.1	Yes
Treatment	Suspended Solids(SS)	mg/L	<50	8.5	13.4	18.2	Yes
Plant	Copper Ions(Cu)	mg/L	<3	N.D	0.06	0.08	Yes

Note: \* = Whether the Sample Complies with Water Quality Standards?

Figure 3.17 Photographs of Wastewater Treatment Equipment (biological ,coagulation and sedimentation ,and chemical reaction )



#### (3)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.

Figure 3.18 Waste Treatment Methods and Quantity

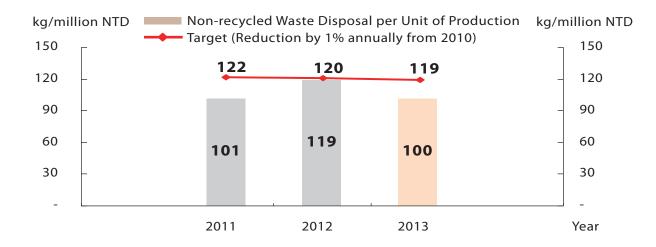
Waste Treatment	Treatment Quantity (tons)
Outsourcing Treatment	3,202
Recycling	16,368
Export	494
Total	20,064

Figure 3.19 Type, Quantity and Percentage of **Disposal Wastes** 

Types of Waste Disposal	Quantity (tons)	Percentage of Total Waste
Printed Circuit Borrad Powder	72.2	0.36%
Copper Foil Scrap	2.3	0.01%
Printed Circuit Borrad Scrap	146.3	0.73%
Copper Plate Scrap	121.4	0.61%
Defective Printed Circuit Board Scrap	138.4	0.69%
Copper Clad Laminate Scrap	13.9	0.07%
Total	494.5	2.46%

NYPCB has strived to recycle its resources and reduce wastes, and has achieved its target for waste reduction per unit of production (kg/\$NT million) for three consecutive years as of 2012. The quantity of waste in 2012 was slightly higher than that of 2011 since its capacity utilization decreased during that period. The Company also produced a lot of waste due to multiple production processes and maintenance of public facilities during that period, which generated a higher amount of waste per unit of production. NYPCB has pledged to continue implementing waste reduction programs and resource recycling measures to minimize waste produced.

Figure 3.20 Unit output value of unrecycled waste generation



NYPCB has strived to recycle its resources and reduce wastes, The unit output value of unrecycled waste generation (kg/ million NTD) met the company's goals from 2011 to 2013. The year of 2012 had a slightly higher index due to the decrease in average capacity utilization.. However, the company will continue to promote various waste-reducing and recycling measures in the future in order to further decrease its creation of waste.

Figure 3.21 Wastes categorizing and collection







# (4) 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 97% 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.

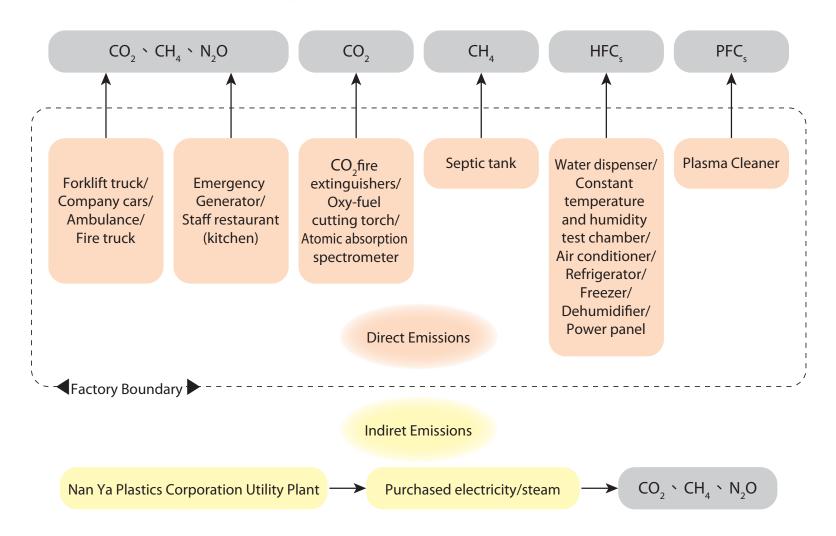
#### A.Evaluation

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.

Figure 3.22 Diagram of Greenhouse Gas Category



## B.Emission analysis

According to NYPCB's audits conducted in accordance with ISO 14064-1 standards, Including indirect emissions, the company's total GHG emissions in 2013 were 407,607.95 tons CO<sub>20</sub>, which are divided into scope 1 emissions, which were 13,743.72 tons CO<sub>2e</sub>, 3.37% of total emissions, and scope 2 emissions, which were 393,864.23 tons CO<sub>2e</sub>, 96.63% of total emissions. All of these figures have been verified by thirdparty external audit institutions. The following diagram shows that NYPCB's main source of CO<sub>2</sub> emission came from purchased electricity and steam. The entire quantity of electricity and steam used in NYPCB's plants were purchased from Nan Ya Plastics Corporation's Jinxing and Shulin plants. Reducing electricity consumption may effectively decrease the amount of CO<sub>2</sub> emission from NYPCB. The company is currently using old refrigerant R11/R22, which creates a fugitive emission of 371 kg/ year.

Figure 3.23 Analysis of greenhouse gas emissions in 2013

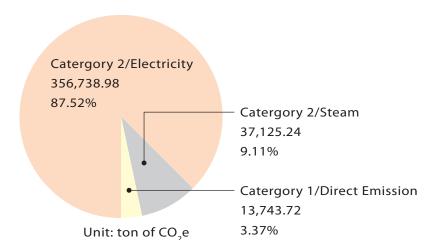


Figure 3.24 Total greenhouse gas emission intensity

Gas Type	Emission Quantity (ton of CO <sub>2</sub> e)	Percentage
CO <sub>2</sub>	392,034.05	96.18%
CH <sub>4</sub>	655.99	0.16%
N <sub>2</sub> O	1,926.14	0.47%
HFC <sub>s</sub>	5,861.91	1.44%
PFC <sub>s</sub>	7,129.85	1.75%
SF <sub>6</sub>	0	0%

Figure 3.25 Total greenhouse gas emissions in recent years

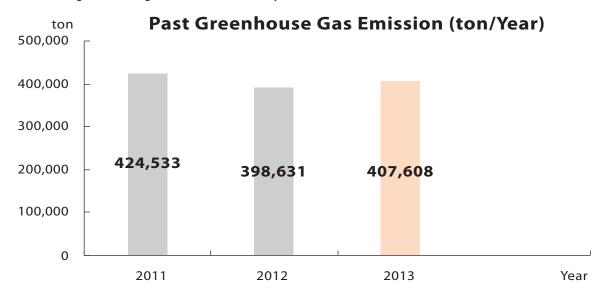
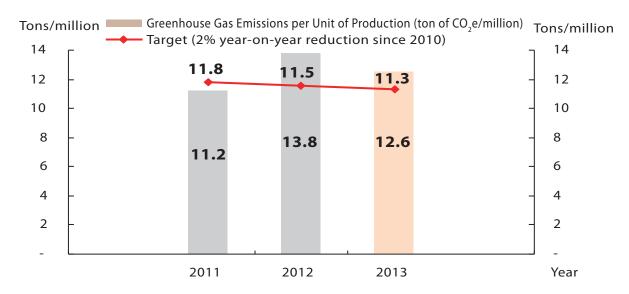


Figure 3.26 Trend of Unit Emission of Greenhouse Gas



The Company's greenhouse gas emissions produced per unit of production (ton/NT\$ million) The company did not meet its goals regarding unit emission of greenhouse gas (ton/million NTD) in 2012 or 2013. The principal reason was due to the economy in those years having caused an apparent decline in average capacity utilization and subsequently poor power efficiency of utilities and production machinery. NYPCB pledged to continue implementing various measures to reduce energy consumption and increase energy use efficiency to reduce greenhouse gas emission.

# (5) 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.

#### A.Management of green products

NYPCB introduced a hazardous substance 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 substances management system in 2004, and regularly reviewed their enforcement.

- •2001- introduced the concept of Green Partners and defined hazardous substances.
- •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 EICC Audit Standards (Product Content)

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 substances. 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.

### B.Restrict use of hazardous substances

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.

## C.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.

#### D.XRF Analysis Process

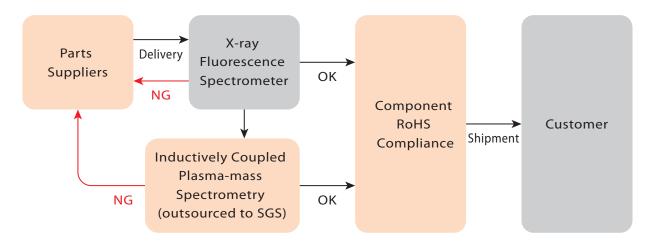
XGT – 1000WR equipment

Figure 3.27 1000 WR Equipment Diagram



#### E.Procedures of managing hazardous substances

Figure 3.28 Hazardous substances Management Process



## F.XRF system can detect and measure hazard element accurately

Hazardous	Method of Analysis			
substances	Shipment Analysis	SGS Analysis		
Cadmium	X-ray	Inductively Coupled		
Lead	Fluorescence	Plasma-mass		
Mercury	Spectrometer	Spectrometry Analysis		
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		

Figure 3.29 Hazardous substance Elemental Table

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.

## G.RoHS regulations and product packaging

(A)Raw materials produced in compliance with RoHS regulations

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.

## (B)Packaging of green products

NYPCB uses a specific label on RoHScompliant products to show customers they are green products. The trays that the Company use to carry shipments are made of recyclable materials. NYPCB has evaluated and tested a tray recycling management system and procedures to recycle the trays. The ratio of recycled tray procurement was raised to 18.1% in 2013 from 2.09% in 2012, which was a significant improvement.



Figure 3.30 RoHS Labels

#### H.SGS product testing

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

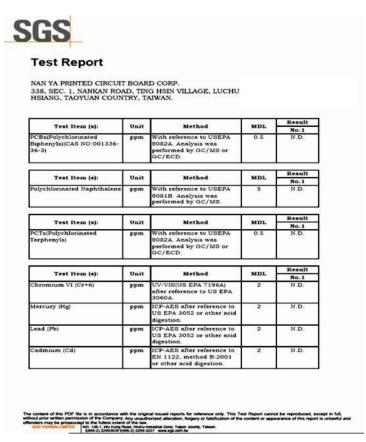


Figure 3.31 Compliance Certifications

# 3.5 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



Figure 3.32 Chinese Banyans near the Offices ▶





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:

◀ Figure 3.33 Blooming Ixora around the Plants

#### (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.The gardens that became barren because of heavy shade will be planted with groundcovers such as the Singapore Daisy and boat lily to increase NYPCB's ratio of green cover.

## (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 selfsufficient, 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 muchneeded 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.



Figure 3.34 Viola Blossoms in front of the Cafeteria



## 4. Employee welfare

#### **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. Workers who have not reached the age of 16 are not permitted to do heavy and hazardous works. NYPCB has complied with the EICC code of conduct and pledged not to hire workers below the age of 16.

# (1) 2013 Nanya PCB Corp. Human Resources Structure

In 2013, the company's human resources department was made up of 99.8% official staff and 0.2% temporary staff (all staff on contract, nine in total),

with no part-time employees. The department was made up of 88.7% domestic employees and 11.3% foreign employees (all from Vietnam). The ratio between male and female employees was 2:1, and the average age was 34.4 years old. The average years of service were 9.4 years.

Unit: person

offic. person							
Category	Group	Female		Male		Total	Percentage
		Number of people	Percentage	Number of people	Percentage		(%)
Position	Managing director and above	-	0.0%	9	0.2%	9	0.1%
	Executives and managers	12	0.5%	350	7.4%	362	5.1%
	Supervisors and general staff	2,113	90.2%	4,375	92.4%	6,489	91.7%
	Service staff	216	9.2%	-	0.0%	216	3.0%
Location	Taoyuan	1,977	84.4%	3,930	83.0%	5,908	83.5%
	Shulin	366	15.6%	805	17.0%	1,170	16.5%
Age	<29	663	28.3%	933	19.7%	1,596	22.5%
	30-39	1,146	48.9%	2,519	53.2%	3,665	51.8%
	40-49	431	18.4%	1,037	21.9%	1,468	20.7%
	50-59	98	4.2%	232	4.9%	330	4.7%
	>60	5	0.2%	14	0.3%	19	0.3%
Years of service	<10	1,176	50.2%	2,652	56.0%	3,828	54.1%
	11-20	956	40.8%	1,747	36.9%	2,703	38.2%
	20-30	206	8.8%	303	6.4%	509	7.2%
	>30	5	0.2%	33	0.7%	38	0.5%
Academic degree	Doctorate	-	0.0%	5	0.1%	5	0.1%
	Master's	49	2.1%	246	5.2%	295	4.2%
	Bachelor's	73	3.1%	431	9.1%	504	7.1%
	Other	2,224	94.9%	4,053	85.6%	6,277	88.7%
Subtotal by gender		2,343	100.0%	4,735	100.0%	7,078	100.0%

## (2) New employees by age and region

Unit: person/%

ome person,					
Category	Group	Female	Male		
	<29	250	432		
	30-39	26	82		
By age	40-49	1	4		
	50-59	0	1		
	>60	0	1		
	Domestic	102	324		
By region	Foreign (Vietnam)	175	196		
Total (person)		277	520		
Percentage (%)		34.8%	62.2%		

<sup>\*\*</sup>Statistics based on employees who started work between 2013.1.1 and 2013.12.31

### (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 2013,

the percentage of local residents holding senior supervisory roles was approximately 10% (the percentage of senior supervisory 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).

### 4.2 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.

Unit: %

	Female	Male
Manager and above	100	109.31
Supervisor and below	100	130.54

### (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:

- A. Year-end bonus and dividend
- B. Indemnity
- C. Wedding and funeral subsidies
- D. Medical cost discounts for employees and their family members seeking medical services at Chang Gung Memorial Hospital.
- E. Labor and health insurances

Figure 4.1 Basement Dinning Area





Figure 4.2 Movie Theater





Figure 4.3 Table Tennis Room





Figure 4.4 Billiard Room





Figure 4.5 Computer/Internet Room





Figure 4.6 Welfare Committee Bulletin Board





F. Uniforms

G. Accommodation for employees who are single or married with children

H.Employee stock option

Figure 4.7 Library





Figure 4.9 Counseling Room





- I. Funds and subsidies for the employee year-end dinner party
- J. Relief payments for employees hospitalized due to illness, gold coins and recognitions for senior employees.

Figure 4.10 Studying Room





Figure 4.11 Health Center





Figure 4.12 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 company provides its employees with special leave, marriage leave, bereavement leave, official leave, work-related injury leave, paternity leave, maternity leave, sick leave, physiological leave, personal leave, family leave, transfer leave, quarantine leave, reunion leave for employees stationed overseas, etc., of which, the pay standards for sick leave, certain types of funeral leave and typhoon leave are higher than required by labor law standards.

### 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. To provide unpaid leave, employees must submit an application. In the past three years, 360 employees (female 292, male 68) applied for unpaid leave. The return rate was 72%, and the retention rate was 82%. Furthermore, in 2013 alone, 119 employees (female 91, male 28) applied for unpaid leave with a return rate of 77% and retention rate of 77%. Note: "Retention Rate" is defined as the percentage of post-parental leave employees that stayed for at least one year.

### Parental-leave application, return rate and retention rate for the past three years (Unit: person)

		2011			2012		2013			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Actual number of employees that applied for parental leave	10	88	98	28	99	127	30	105	135	68	292	360
Number of employees that should have returned(A)	8	51	59	12	71	83	21	115	136	41	237	278
Number of employees that applied for return(B)	8	32	40	7	51	58	17	85	102	32	168	200
Return rate (B/A)	100%	63%	68%	58%	72%	70%	81%	74%	75%	78%	71%	72%
Number of post-parental leave employees who stayed for at least one year(D)	6	31	37	5	41	46	13	67	80	24	139	163
Retention rate (E=D/B) (%)	75%	97%	93%	71%	80%	79%	76%	79%	78%	75%	83%	82%

### (3) 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 1% 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.

## Comparison of Resignation Rate between Nanya PCB Corp. and the Electronic Components Industry over the Past Five Years

(Unit: %)

	2009	2010	2011	2012	2013
Nanya PCB Corp.	0.8	1.5	1.2	1.0	1.0
Taiwanese Electronic Components Manufacturing Industry	2.48	2.72	2.52	2.23	2.00

Source: Accounting and Statistics (time series data search- quit rate)

### 2013 Resigned Staff by Age and Region

(Unit: person)

·				
Category	Group	Female	Male	
	Under 29	108	205	
	30-39	112	199	
By Age	40-49	6	13	
	50-59	1	12	
	Over 60	1	5	
D Da mia n	Taoyuan Factory	176	342	
By Region	Shulin Factory	52	92	
Total (persons)		228	434	
Percentage (%)		34%	66%	

### 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. NYPCB's training program includes the College Management Association Program, basic training, professional training, manager training, and middle and senior management training. This program is integrated with online courses, job rotations, external training, and irregular seminars with guest speakers. NYPCB provides its employees with a working environment full of opportunities for continuous learning and development.

The Company also organizes management classes for its employees as well as the College Management Association Program, basic training, professional training, manager training, English and Japanese language courses, and external training courses to foster a high-quality learning and working environment to develop active and innovative talents. NYPCB has created a comprehensive training plan for different stages of each employee's career to facilitate gradual improvement, allowing employees to excel and become outstanding professionals and managers.

## (2) Employee training and advanced courses

In 2013, NYPCB's employee training course, excluding those held by individual units and the professional training and manager training organized by the President's Office, was conducted 378 times and participated by 10,391 employees. The total duration of the training was 25,176 hours and the cost of the training was NT\$751,210. (This information is partially included for the first time this year with no current gender stratification.)

Rank Year	Executive	Manager	Supervisor	General Staff	Average Hours
2011	23.8	37.4	38.9	24.4	27
2012	37.6	53.5	59.3	27.7	33.6
2013	18	35	30.6	19.9	21.9



Figure 4.13 Photos taken during training



Figure 4.14 Photos taken during training



Figure 4.15 Photos taken during training

### 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 and hotlines for employees.
- 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. The Company has set up an online platform for its employees to discuss and exchange ideas, and rewards those who provide innovative ideas.
- 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)Improve the health and wellness of employees

NYPCB has worked with the Chang Gung Medical Foundation offering regular physical examinations for employees. Those who have performed special operations are required to accept specifically tailored examinations. The Company also offers screening for common types of cancer in Taiwan for employees. Healthcare center has been established, and professional nurses and doctors are stationed in the campus to offer professional medical and consulting services. NYPCB also regularly holds health seminars and provides relevant information to educate employees.

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.









Figure 4.16 Health Education Activities

Figure 4.17 Health Promotion Program Table

	2013 Medical Center Health Promotion Plan of Nan Ya Printed Circuit Board Corporation								
Theme	Season	Content	Activity	Duration	Instructors				
		Seminar: Burns, and Burn Injuries	Seminar	Feb	Luchu Township Public Health Center				
Family Life	1st Quarter	Activity: Blood Donations (jointly held with the Southern Taiwan Science Park)	Activity	Mar	Blood Donation Center in HsinChu/Taipei				
		Emergency Drills Held by the EHS Unit for Departments and Offices	Activity						
		Seminar: Fall Prevention	Seminar	Apr	Luchu Township Public Health Center				
Surrounding Environment	2nd Quarter	Health Checkup: Annual Employee Health Checkup	Activity	May-Jun	Chang Gung Memorial Hospital				
		Emergency Drills Held by the EHS Unit for Departments and Offices	Activity						
		Activity: AIDS/Colon Cancer Screening Testing (jointly held with the Southern Taiwan Science Park)	Activity	May-Jun	Public Health Center				
Balance	3rd	Activity: Pap smear (jointly held with the Southern Taiwan Science Park)	Activity	Aug	Chang Gung Memorial Hospital				
Nutrition	Quarter	Seminar: Three Highs: High Blood Sugar, High Blood Pressure, and High Blood Fat	Seminar	Sep	Luchu Township Public Health Center				
		Emergency Drills Held by the EHS Unit for Departments and Offices	Activity						
		Seminar: How to Prevent Cancer	Seminar	Oct	Luchu Township Public Health Center				
Cancer Prevention	4th Quarter	Activity: Blood Donations (jointly held with the Southern Taiwan Science Park)	Activity	Nov	Blood Donation Center in HsinChu/Taipei				
		Emergency Drills Held by the EHS Unit for Departments and Offices	Activity						

4.Employee welfare

### (2)Contingency plan for infectious diseases

NYPCB has established comprehensive reporting and preventing systems for infectious diseases:

### 1.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.

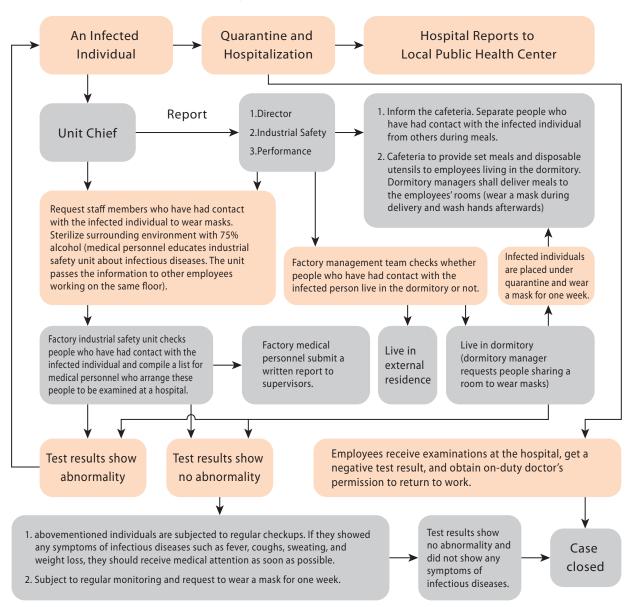
### 2. Reporting of infectious diseases -

Report occurrence of infectious disease to local health bureaus and persuade the infected employees to receive medical attentions or have them hospitalized if necessary.

### 3.Preventative measures -

Provide medical control and preventative leave, implement preventative measures on employees and visitors, and effectively separate infected patients from others.

Figure 4.18 Infectious Disease Contingency Procedures



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

Most accidents are caused by manmade mistakes and negligence. NYPCB thereby places priority on educating its employees to raise their safety awareness at workplace and to increase their contingency response skills.

The industrial safety training classes and number of trainees for 2013 are shown below:

- A. Specific chemical operation manager on-the-job training: 3 sessions, a total of 85 trainees, a total of 75 hours
- B. lonizing radiation on-thejob training: 1 session, a total of 25 trainees, a total of 75 hours

C. First aid on-the-job training: 2 sessions, a total of 61 trainees, a total of 213 hours

D. Contractor pre-training: 24 sessions, a total of 1,867 trainees, a total of 3734 hours

NYPCB views contractors as one of its own employees; therefore, the Company organizes regular pre-work trainings for contractors. The Company holds daily toolbox meetings to promote pre-work employee protection ware inspection and physical and psychological health checks. Through the toolbox meeting, the Company will notify and remind workers about the specific dangerous of

construction, process, and environment of the work on the day. Construction and maintenance departments need to coordinate and collaborate with each other to achieve the goal of zero incidents.

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.







Figure 4.19 Training ▶



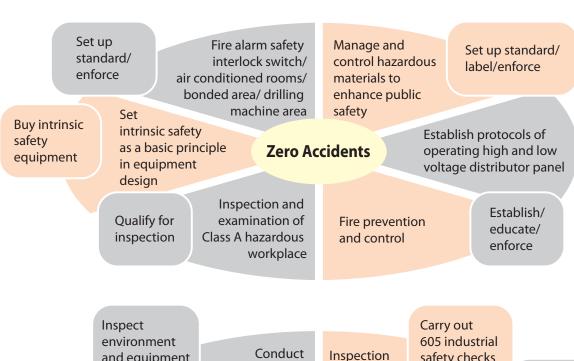




Figure 4.19 Training

2013 Corporate Social Responsibilities Report of NYPCB

Figure 4.20 Occupational Health and Safety Measures





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# (4)Statistic of occupational disasters and accidents and the effect of health and safety management

There was no disabling injury took place at the firm's Shulin factory in 2013. The employee absence rate was 0.601% (male 0.568%, female 0.668%). Employee injury rate was 0; therefore, injury severity and

various injury index were subsequently 0. These results show a marked improvement from previous years. However, the company must continue to manage and control cases of relevant incapacitating injuries. To prevent disabling injury, the firm has initiated a management campaign to identify, review and remove potential causes of disasters and accidents to ensure workers

are not exposed to dangerous working environment. NYPCB also compiled a textbook based on past occupational injuries to educate employees and raise their awareness on workplace safety. It also encourages employees to uncover and to remove potential causes of disasters and accidents to help the firm reaching its zero-disaster and zero occupational-injury goals.

Data		Data	20	11	20	12	20	13
	Date Items		Jinxing plant	Shulin plant	Jinxing plant	Shulin plant	Jinxing plant	Shulin plant
	Serious Injury	Frequency Rate (Incident/per 1,000,000 hours worked)	0.24	0	0.05	0	0	0
	Serious Injury S	Severity Rate (Working days lost/per 1,000,000 hours worked)	3.6	0	0.3	0	0	0
	Frequency-Se	everity Indicator	0.03	0	0.004	0	0	0
	Number	1.Death	0	0	0	0	0	0
Unit	of major	2.Disaster and accidents that caused more than three people injured	0	0	0	0	0	0
	occupational disasters and accidents	3.Spills and leaks of Ammonia, Chlorine, Hydrogen fluoride, Phosgene, Hydrogen sulfide and Sulfur dioxide that resulted in hospitalization of more than one person	0	0	0	0	0	0
	Number of serio	ous injury incidents (excluding major occupational disasters and accidents)	4	0	1	0	0	0
	Working days lost		60	0	6	0	0	0
	Absence rate		40	0	4	0	0	0
	Severe occup	oational hazard mortality rate per 1000 persons	0	0	0	0	0	0

Notes: 1. Absence rate - total number of absences during the reporting period/(number of employees during the reporting period\*255 working days)\*1,000,000 hours.

- 2. Frequency of incapacitating injuries = cases of incapacitating injuries\*1,000,000/total work hours
- 3. Severity of incapacitating injuries = days lost due to incapacitating injuries\*1,000,000/ total work hours
- 4. Various injury index = √ frequency of incapacitating injuries\*severity of incapacitating injury/1,000
- 5. Severe occupational hazard mortality rate per 1000 persons = employee deaths/total number of employees\*1,000

### 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.

The Company has met all local government's laws and regulations regarding to employers and employees. The firm's employee handbook has also been reviewed and certified by the Taipei City Government before being distributed to all NYPCB employees. The Company has over 7,000 employees and 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. Furthermore, no significant investment agreements or contracts relating to human rights were made in the company in 2013.

### 4.7 Security control dynamics

### (1)Personnel safety

- 1. 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.
- 2. NYPCB's security personnel were hired after security checks had been conducted and passed a strict selection process. Newly-recruited security personnel cannot begin performing duties before undergoing training on the entry and exit of employees, vehicles, and items in the campus.

3. 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 key parts supplier, NYPCB has ensured all raw materials used in production processes such as gold, tantalum, wolfram, tin and cobalt are in compliance with the Policy for Conflict-free Materials. The Company has required its suppliers to investigate the place of origin of materials supplied to ensure they are not obtained by non-government warlords or criminal rings, or excavated from conflict zones in the Democratic Republic of Congo or through illegal methods or smuggling.

Metals exported from the Democratic Republic of Congo, Rwanda, Uganda, Burundi, Tanzania and Kenya are considered to be conflict minerals by the Policy of Conflict-free Materials. NYPCB has completed its examinations on its raw material supplies and plans to enhance raw material control within the Company to prevent conflict minerals from entering its production processes in the long run. The Company will continue protecting customer rights, abiding by the EICC code of conduct and striving to fulfill its corporate social responsibilities. In the total of 14 -smelters of Nan Ya, all have been obtained the CFSP qualification and become the CFSP member totally.

Under the backdrop of globalization, major natural disasters or accidents occurring anywhere in the world could affect NYPCB. The Company thereby pays extra attention to potential risks of its supply chain and offers timely and proactive assistance to its suppliers. NYPCB has taken the following factors into account:

### 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 manmade 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 order to meet the international requirements of ISO 28000 in security management systems for supply chains and achieve the Taiwan Customs Authorized Economic Operator Certification, NYPCB has set up guidance and principles to ensure supply chain security and has provided written directives to its departments

to follow. The requirements are implemented to ensure supply chain safety from receiving orders, raw material procurement, producing, processing, packaging and shipping as well as customer-related transportation, information, and logistic safety. The Company has also established a comprehensive and effective supply chain safety management system.

### (3)Information security

No instance of personal information leakage, violation of privacy or leakage of client information occurred in the company in 2013.NYPCB views protecting the communication and information exchanges with its customers and partners as its most important task and has implemented a management system for confidential information for a long time. Depending on the levels of confidentiality of the information, the Company's management system preserves, views, authorizes, distributes, retrieves, and destroys its confidential information

regarding R&D, production, sales, technological cooperation, business, outsourcing, and operation and management in order to protect customers and partners.

The Company has also continued enhancing and upgrading it information security technologies and has ensured the security of information, computer systems, and websites depending on their confidentiality, completeness and values. NYPCB also raises employee awareness in the importance of confidential information and relevant regulations through audits, consulting and educational training to ensure confidential information protection measures have been integrated into daily operation.





### 5.Charity

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. A fund raising campaign was held after the massive earthquake struck in Japan in 2011 and donated money to the victims to rebuild their homes. The Company also sponsored the low-carbon life exhibition and mountain hiking events held by the Taoyuan County government to promote energy saving and carbon

emission reduction awareness. 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 Neighborhood relations

### (1) Engage with communities

The Jing Hsin campus has established a neighborhood public relations team to keep its environment clean, facilitate communication, and provide assistance to nearby residents. The team has organized volunteers to participate in local community activities such as temple fairs, activities at senior centers, neighborhood watch, weddings, and funerals. The team has also invited residents to take part in its activities to maintain a harmonious relationship with local communities.

Figure 4.21 Volunteer to Clean up the Environment

## (2)Organize an environmental protection day and adopt a garden River program

The Jing Hsin campus has organized an environmental protection day since 2007. It gathers volunteers in a morning of one of the last ten days





in a month to clean up the roads around the campus. Approximately 30 NYPCB employees wearing vests cleaned the streets around the campus including the front end of Nankan Road, and other roads around nearby communities. Some local residents have also taken a part in the cleaning activity. The activity has been wellreceived by nearby communities and has helped promote the Company's corporate citizen image. NYPCB has also adopted a triangular park by the Changrong Road near the campus since 2003 and adopted Nankan River Clean Air Zone Wetlands which has become a place for recreational activities for local residents. The Company regularly cleans, maintains, and performs other gardening activities in the park so that local residents can enjoy a clean and beautiful environment; thus, creating a harmonious atmosphere among the communities.

## (3) Hiking and mountain cleaning activities

Hiking is a great opportunity for NYPCB employees to enjoy beautiful scenery and to release stress as well as

Figure 4.22 Photos of Charity Events











enhance relationships with coworkers and their families. Such activities have helped raising people's awareness to environmental protection and strengthening neighborhood relations.

## (4)Labor Day and Mother's Day fairs

The employee welfare committee of NYPCB organizes a Mother's Day fair every year. The activities include a flea market, charity groups, and art exhibitions of street artists. Employees can have an enjoyable time at the fair with their families.

### 5.2 Charity plans

### (1)Charity club

NYPCB's charity club regularly visits education and nursing institutions such as Xindeng, Ark, and Cherngshin. Around 40-50 employees joined these visits. The club has also donated laundry detergent, tissue, books, and mineral water to these institutions. The heads of these institutions have expressed their gratitude and awarded NYPCB appreciation certificates. They have also introduced their services and successes. NYPCB employees have taken a part in various activities such as dumpling making, a charity haircut service, nail art, and the cleaning of the environment, fans, windows and cars.

### (2) Care for disadvantaged groups

Since November 2007, NYPCB's union has encouraged its members to donate money to help pay for the lunches of elementary school students from disadvantaged families in Taoyuan County. About 560 students and 20 elementary schools (such as Jin-xing Elementary School, Tong An Elementary School, Nan-Mei Elementary School, Wen Shan Elementary School, and Gong-Pu Elementary School) have benefited from the donations, which reach NT\$100,000 in average monthly. The charity has increased the number of donors and become a perfect example to draw more people to participate in charity activities.







### (3)International humanitarian aid

NYPCB responded to the Taiwanese government's call, donating materials and providing financial support to victims of the 311 earthquake in Japan.



### Data table 1

### **Appendix 1 Global Reporting Initiative (GRI) table**

The following standards were developed in accordance with the Global Reporting Initiative (GRI) version G3.1. The standards that correspond to the report are explained in the following table:

● Total Disclosure ○ Partial Disclosure

<b>GRI Indicator</b>		Disclosure	Chapter	Others						
1. Strategy a	1. Strategy and Analysis									
1.1	Statement from the most senior decision-maker of the organization.	•	Message from the President							
1.2	Description of key impacts, risks, and opportunities.	•	1.3 Prospects, Opportunities and Challenges to the Industry							
2. Organizat	2. Organizational Profile									
2.1	Name of the organization.	•	1.1 Company profile							
2.2	Primary brands, products, and/or services.	•	<ul><li>1.2 Market Position</li><li>1.4 Major products and Research &amp;</li><li>Development</li></ul>							
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	•	<ul><li>1.1 Company profile</li><li>2.1 Governance overview</li><li>(3)Corporate Governance Structure</li></ul>							
2.4	Location of organization's headquarters.	•	1.1 Company profile							

Data table

GRI Indicator		Disclosure	Chapter	Others
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustain ability issues covered in the report.	•	1.1 Company profile	
2.6	Nature of ownership and legal form.	•	1.1 Company profile	
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	•	1.2 Market Position	
2.8	Scale of the reporting organization.	•	<ul><li>1.1 Company profile</li><li>1.2 Market Position</li><li>2.2 Financial Performance</li></ul>	
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	•	About the report	No major changes were made in the company in 2013.
2.10	Awards received in the reporting period.	•	1.5 Awards and Recognitions	
3. Report Pa	rameters			
	Report Profile			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	•	About the report	
3.2	Date of most recent previous report (if any).	•	About the report	
3.3	Reporting cycle (annual, biennial, etc.)	•	About the report	

<b>GRI Indicator</b>		Disclosure	Chapter	Others
3.4	Contact point for questions regarding the report or its contents.	•	About the report	
	Report Scope and Boundary			
3.5	Process for defining report content.	•	Identification of Major Issues	
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	•	About the report	
3.7	State any specific limitations on the scope or boundary of the report(see completeness principle for explanation of scope).	•	About the report	
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	•	1.1 Company profile	
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	•	About the report	

<b>GRI Indicator</b>		Disclosure	Chapter	Others
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement(e.g.,mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	•	About the report	No such event occurred in the company in 2013.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	•	About the report	
	GRI Content Index			
3.12	Table identifying the location of the Standard Disclosures in there port.	•	Appendix 1 Global Reporting Initiative (GRI) table	
	Assurance			
3.13	Policy and current practice with regard to seeking external assurance for the report.	•	About the report	
4. Governan	ce, Commitments, and Engagement			
	Governance			
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	•	2.1 Governance overview (1)Operation of board of directors	
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	•	2.1 Governance overview (1)Operation of board of directors	

GRI Indicator		Disclosure	Chapter	Others
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	•	2.1 Governance overview (1)Operation of board of directors	
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	•	1.7 Stakeholder Dialogue 2.1 Governance overview (2)Methods with which shareholders/employees can make suggestions or give business directions to the highest authority 2.4 Shareholders	
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance(including social and environmental performance).	•	<ul><li>2.1 Governance overview</li><li>(1) Operation of board of directors</li><li>(3)Corporate Governance Structure</li><li>(4) Board of Directors</li><li>(6) Commission of Salaries</li></ul>	
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	•	<ul> <li>2.1 Governance overview</li> <li>(5) Follow Corporate Regulation</li> <li>(8) Employee Behaviors and Code of Ethical Conduct</li> <li>(9) Policies to Maintain Operational Integrity</li> <li>(10) Anti-corruption</li> </ul>	

GRI Indicator		Disclosure	Chapter	Others
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	•	<ul><li>2.1 Governance overview</li><li>(1) Operation of board of directors</li><li>(4) Board of Directors</li></ul>	
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	•	<ul><li>2.1 Governance overview</li><li>(4) Board of Directors</li><li>(5) Follow Corporate Regulation</li></ul>	
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	•	<ul> <li>2.1 Governance overview <ul><li>(5) Follow Corporate Regulation</li><li>(8) Employee Behaviors and Code of Ethical Conduct</li><li>(9) Policies to Maintain Operational Integrity</li></ul> </li> <li>3.1 Commitments to Environmental Sustain ability <ul><li>(1) Environmental protection</li></ul> </li> </ul>	
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	•	<ul> <li>2.1 Governance overview</li> <li>(4) Board of Directors</li> <li>(5) Follow Corporate Regulation</li> <li>(8) Employee Behaviors and Code of Ethical Conduct</li> <li>(9) Policies to Maintain Operational Integrity</li> </ul>	

GRI Indicator		Disclosure	Chapter	Others	
	Commitments to External Initiatives				
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	•	<ul><li>2.1 Governance overview</li><li>(7) Internal Audits</li><li>(8) Employee Behaviors and Code of Ethical Conduct</li></ul>		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	•	3.1 Commitments to Environmental Sustain ability (1) Environmental protection policy		
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	•	1.6 Engaging with external associations		
	Stakeholder Engagement				
4.14	List of stakeholder groups engaged by the organization.	•	1.7 Stakeholder Dialogue		
4.15	Basis for identification and selection of stakeholders with whom to engage.	•	1.7 Stakeholder Dialogue 1.8 Identification of Major Issues		
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	•	1.7 Stakeholder dialogue		

GRI Indicator		Disclosure	Chapter	Others
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	•	1.7 Stakeholder Dialogue 1.8 Identification of Major Issues	
5. Managem	ent Approach and Performance Indicators			
	Economic Performance			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	•	<ul><li>2.2 Financial performance</li><li>4.2 Salaries and welfare</li><li>5.2 Charity plans</li></ul>	
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	•	<ul><li>3.2 Environmental accountability</li><li>3.3 Water and energy conservation and Greenhouse gas reduction</li><li>3.4 Protecting the environment around factories</li></ul>	
EC3	Coverage of the organization's defined benefit plan obligations.	•	4.2 Salaries and welfare	
EC4	Significant financial assistance received from government.	•	-	The company was financially sound and no governmental assistance was received in 2013.
	Market Presence			

<b>GRI Indicator</b>		Disclosure	Chapter	Others	
EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	•	4.2 Salaries and welfare		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	•	2.6 Supplier and contractor management (1) Supplier management		
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	•	4.1 Employment (3) Local supervisory proportion		
	Indirect Economic Impacts				
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or probono engagement.	•	5.1 Neighborhood relations		
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	•	-	No explanation was given regarding the indirect impact on the economy by the company in 2013.	
6. Environmental Performance Indicators					
	Materials				
EN1	Materials used by weight or volume.	•	2.6 Supplier and contractor management		

<b>GRI Indicator</b>		Disclosure	Chapter	Others
EN2	Percentage of materials used that are recycled input materials.	•	-	Recycled materials were not used by the company in 2013.
	Energy			
EN3	Direct energy consumption by primary energy source.	•	<ul><li>3.3 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>	
EN4	Indirect energy consumption by primary source.	•	<ul><li>3.3 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>	
EN5	Energy saved due to conservation and efficiency improvements.	•	<ul><li>3.3 Water and energy conservation and Greenhouse gas reduction</li><li>(2) Improve energy management and reduce energy consumption</li></ul>	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	•	3.4 Protect the environment around plants (5) Green supply chain	

GRI Indicator		Disclosure	Chapter	Others
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	•	3.4 Protect the environment around plants (5) Green supply chain	
	Water			
EN8	Total water withdrawal by source.	•	<ul><li>3.3 Water and energy conservation and greenhouse gas reduction</li><li>(3)Water resource management and water conservation</li></ul>	
EN9	Water sources significantly affected by withdrawal of water.	•	<ul><li>3.3 Water and energy conservation and greenhouse gas reduction</li><li>(3)Water resource management and water conservation</li></ul>	
EN10	Percentage and total volume of water recycled and reused.	•	<ul><li>3.3 Water and energy conservation and greenhouse gas reduction</li><li>(3)Water resource management and water conservation</li></ul>	
	Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	•	3.5 Greening and tree-planting activities around factories	The factory is not located within an ecological protection zone.
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	•	3.5 Greening and tree-planting activities around factories	The factory is not located within an ecological protection zone.

<b>GRI Indicator</b>		Disclosure	Chapter	Others
EN13	Habitats protected or restored.	•	3.5 Greening and tree-planting activities around factories	The factory is not located within an ecological protection zone.
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	•	3.5 Greening and tree-planting activities around factories	The factory is not located within an ecological protection zone.
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	•	3.5 Greening and tree-planting activities around factories	The factory is not located within an ecological protection zone.
	Emissions, Effluents, and Waste			
EN16	Total direct and indirect greenhouse gas emissions by weight.	•	<ul><li>3.4 Protect the environment around plants</li><li>(4) Examination and reduction of greenhouse gas emission</li></ul>	
EN17	Other relevant indirect greenhouse gas emissions by weight.	•	<ul><li>3.4 Protect the environment around plants</li><li>(4) Examination and reduction of greenhouse gas emission</li></ul>	

GRI Indicator		Disclosure	Chapter	Others
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	•	<ul> <li>3.3 Water and energy conservation and greenhouse gas reduction</li> <li>(2) Improve energy management &amp; reduce energy consumption</li> <li>3.4 Protect the environment around plants</li> <li>(4) Examination and reduction of greenhouse gas emission</li> </ul>	
EN19	Emissions of ozone-depleting substances by weight.	•	<ul><li>3.4 Protect the environment around plants</li><li>(4) Examination and reduction of greenhouse gas emission</li></ul>	
EN20	NOx, SOx, and other significant air emissions by type and weight.	•	3.3 Water and energy conservation and greenhouse gas reduction (1) Environmental Data	
EN21	Total water discharge by quality and destination.	•	<ul><li>3.4 Protect the environment around plants</li><li>(2) Water pollution prevention</li></ul>	
EN22	Total weight of waste by type and disposal method.	•	3.4 Protecting the environment around factories (3) Waste management	
EN23	Total number and volume of significant spills.	•	3.1 Commitments to environmental sustain ability (4) NYPCB environmental protection history	

GRI Indicator		Disclosure	Chapter	Others
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Bas el Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	•	<ul><li>3.4 Protecting the environment around factories</li><li>(3) Waste management</li></ul>	
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	•	<ul><li>3.4 Protecting the environment around factories</li><li>(2) Water pollution prevention</li></ul>	
	Products and Services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	•	<ul><li>1.4 Major products and R&amp;D</li><li>3.4 Protecting the environment around factories</li><li>(5) Green supply chain</li></ul>	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	•	<ul><li>3.4 Protect the environment around plant</li><li>(4) Examination and reduction of greenhouse gas emission</li></ul>	
	Compliance			
EN28	Monetary value of significant fines and total number of non monetary sanctions for non-compliance with environmental laws and regulations.	•	3.1 Commitments to environmental sustain ability (4) NYPCB environmental protection history	
	Transport			

GRI Indicator		Disclosure	Chapter	Others
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	•	3.1 Commitments to environmental sustain ability (4) NYPCB environmental protection history	
	Overall			
EN30	Total environmental protection expenditures and investments by type.	•	3.2 Environmental accountability	
7. Social Per	formance Indicators			
	Employment			
LA1	Total workforce by employment type, employment contract, and region.	•	4.1 Employment (1) 2013 Nanya PCB Corp. Human Resources Structure	
LA2	Total number and rate of employee turnover by age group, gender, and region.	•	4.1 Employment (2) New employees by age and region	
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	•	4.2 Salaries and welfare	
	Labor/Management Relations			

GRI Indicator		Disclosure	Chapter	Others
LA4	Percentage of employees covered by collective bargaining agreements.	•	<ul><li>4.4 Employee relations         <ul><li>(1)Negotiations between employer and employees</li></ul></li><li>4.6 Human rights</li></ul>	
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	•	4.6 Human rights	
	Occupation Health and Safety			
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	•	3.1 Commitments to Environmental Sustain ability (2) Organization chart and Responsibility of the EHS Unit	
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	•	<ul> <li>4.5 Employee wellness program</li> <li>(4) Statistic of occupational         disasters and accidents and         the effect of health and safety         management</li> </ul>	
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	•	<ul><li>4.5 Employee wellness program</li><li>(1)Improve the health and wellness of employees</li><li>(2)Contingency plan for infectious diseases</li></ul>	

<b>GRI Indicator</b>		Disclosure	Chapter	Others
LA9	Health and safety topics covered in formal agreements with trade unions.	•	4.5 Employee wellness program (3)Health and safety education and contingency response training	
	Training and Education			
LA10	Average hours of training per year per employee by employee category.	0	4.3 Training system	
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	•	4.3 Training system	
LA12	Percentage of employees receiving regular performance and career development reviews.	•	4.3 Training system	
	Diversity and Equal Opportunity			
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	•	4.1 Employment (1) 2013 Nanya PCB Corp. Human Resources Structure	
LA14	Ratio of basic salary of men to women by employee category.	•	4.2 Salaries and welfare (1) Employee Salaries	
LA15	Post-parental leave return rate and retention rate by gender	•	4.2 Salaries and welfare (1) Employee Salaries	

GRI Indicator		Disclosure	Chapter	Others		
8. Human Ri	8. Human Rights					
	Investment and Procurement Practices					
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	•	-	No significant investment agreements or contracts relating to human rights were made in the company in 2013.		
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	•	2.6 Supplier and Contractor  Management  (1) Supplier Management			
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	•	4.6 Human rights			
	Non-discrimination					
HR4	Total number of incidents of discrimination and actions taken.	•	4.6 Human rights	No incidents of discrimination were reported in the company in 2013.		
	Freedom of Association and Collective Bargaining					
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	•	<ul><li>2.6 Supplier and Contractor</li><li>Management</li><li>4.6 Human rights</li></ul>			

<b>GRI Indicator</b>		Disclosure	Chapter	Others
	Child Labor			
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	•	2.6 Supplier and Contractor Management 4.6 Human rights	
	Forced and Compulsory Labor			
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	•	4.6 Human rights	
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	•	4.7 Security control dynamics	
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	•	4.6 Human rights	
HR10	Total number and ratio of assessment of human rights and/or activities that may affect the company's evaluation	•	-	The company had no assessment of human rights and/or activities that may have affected its evaluation.
HR11	Number of complaints, complaints being handled, and complaints resolved through official complaint mechanisms regarding human rights	•	-	The company received no complaints through official complaint mechanisms regarding human rights in 2013.

<b>GRI Indicator</b>		Disclosure	Chapter	Others
9. Society				
	Community			
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	•	5.1 Neighborhood relations (1) Engage with communities	
	Corruption			
SO2	Percentage and total number of business units analyzed for risks related to corruption.	•	2.1 Governance overview (5) Follow Corporate Regulation	
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	•	<ul><li>(8) Employee Behaviors and Code of Ethical Conduct</li><li>(9) Policies to Maintain Operational Integrity</li><li>(10)Anti-corruption</li></ul>	
SO4	Actions taken in response to incidents of corruption.	•		
	Public Policy			
SO5	Public policy positions and participation in public policy development and lobbying.	•	2.1 Governance overview (5) Follow Corporate Regulation (2) Employee Roboviers and Code	
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	•	<ul><li>(8) Employee Behaviors and Code of Ethical Conduct</li><li>(9) Policies to Maintain Operational Integrity</li></ul>	
	Anti-Competitive Behavior			

GRI Indicator		Disclosure	Chapter	Others
SO7	Total number of legal actions for anti-competitive behavior, antitrust, and monopoly practices and their outcomes.	•	2.1 Governance overview (8) Employee Behaviors and Code of Ethical Conduct	
	Compliance			
SO8	Monetary value of significant fines and total number of non monetary sanctions for non-compliance with laws and regulations.	•	2.3 Internal Control	
SO9	Preventive and improvement measures for severe or potentially negative influences on the local community	•	-	The company had no severe or potentially negative influences on the local community in 2013.
SO10	Preventive and improvement measures for severe or potentially negative influences on the local community	•	-	The company had no severe or potentially negative influences on the local community in 2013.
10. Product	Responsibility			
	Customer Health and Safety			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	•	<ul><li>3.4 Protect the environment around plants</li><li>(5) Green supply chain</li></ul>	

GRI Indicator		Disclosure	Chapter	Others
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	•	-	The company had no violations in 2013.
	Product and Service Labeling			
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	•	<ul><li>2.5 Customers</li><li>3.4 Protect the environment around plants</li><li>(5) Green supply chain</li></ul>	
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	•		The company had no violations in 2013.
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	•	2.5 Customers	
	Marketing Communications			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	•	2.1 Governance overview (5) Follow Corporate Regulation	
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	•	-	The company had no violations in 2013.

<b>GRI Indicator</b>		Disclosure	Chapter	Others
	Customer Privacy			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	•	-	The company had no violations in 2013.
	Compliance			
PR9	Monetary value of significant fines for non- compliance with laws and regulations concerning the provision and use of products and services.	•	-	The company had no violations in 2013.

## **Contact information**

Please contact us through the following channels if you have any suggestion or question. Investor Relations Unit of the General Manager's Office, Nan Ya Printed Circuit Board Corporation

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## **GRI Certification**

#### INDEPENDENT OPINION STATEMENT

2013 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 NYPCB in this statement) and has no financial interest in the operation of NYPCB other than for the assessment of this report.

This independent opinion statement has been prepared for NYPCB only for the purposes of assessing 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 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 opinion statement may be read.

This independent opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by NYPCB. 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 opinion statement or matters relating to it should be addressed to NYPCB only.

#### Scope

The scope of engagement agreed upon with NYPCB includes the following:

- The assessment covers the whole report and focuses on systems and activities during the 2013 calendar year
  on the NYPCB headquarter and relevant operations in Taiwan only.
- 2. The evaluation of the nature and extent of NYPCB's adherence to GRI G3.1 (2011) A+ level in this report is conducted in accordance with GRI G3.1(2011), however, the data disclosed in the report is not verified through the assessment runess.

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

#### Opinion Statement

We conclude that the 2013 NYPCB Corporate Social Responsibility Report Review provides a fair view of the NYPCB CSR programmes and performances during 2013. We believe that the 2013 economic, social and environmental performance indicators are fairly represented. The CSR performance indicators disclosed in the report demonstrate NYPCB's efforts on the concerns of its stakeholders.

Our work was carried out by a team of CSR report assurors in accordance with the GRI G3.1 (2011). We planned and performed this part of our work to obtain the necessary information and explanations. We conclude that NYPCB provided sufficient evidence to satisfy the description of their approach to GRI G3.1 (2011) and their self-declaration of compliance with the GRI guidelines was fairly stated.

#### Methodology

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

- review of issues raised by external parties that could be relevant to NYPCB policies to provide an assessment on the appropriateness of statements made in the report.
- discussion with managers and staff on NYPCB approach to stakeholder engagement. However, we had
  no direct contact with external stakeholders.
- interview 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 company's reporting and management processes concerning this reporting against the principles described in the GRI G3.1(2011).

#### Conclusions

A detailed review against the GRI G3.1 (2011) is set out below:

#### GRI-reporting

NYPCB provided us with their self declaration of compliance within GRI G3.1 (2011) Guidelines and the classification to align with application level A+. Based on our review, we confirm that social responsibility and sustainable development indicators with reference to the GRI Core Index are reported, partially reported or omitted. In our professional opinion the self declaration covers the NYPCB's social and sustainability issues, however, the future report will be improved by the following areas:

 Along with the newly developed standards, encourage in applying the GRI G4.0 Framework for future reporting

#### Materiality

The NYPCB publishes information completely with materiality analysis that enables its stakeholders to make informed judgments about the company's management and performance. In our professional opinion the report covers the NYPCB's material issues, however, the future report could be further enhanced by the following areas:

 Continually watch latest CSR development to incorporate with the corporate core strategy as to correspond in international society's needs for future reporting

#### Stakeholder Inclusivity

In this report, it reflects that NYPCB has continually made a commitment to its stakeholders, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. 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 NYPCB's inclusivity, however, the future report could be further enhanced by the following areas:

 An approach for stakeholders to be involved in the process for inviting their concerns and expectations as well as improving the related CSR performances

#### Sustainability Context

This report presents the organization's performance in the wider context of sustainability. However, the future report should be further enhanced by the following areas:

 Encouraging update sustainable development trend about PCB industry continuously and integrated with corporate core strategy to ensure sustainable development performance

#### Completeness

Coverage of the material topics and Indicators and definition of the report boundary should be sufficient to reflect significant economic, environmental, and social impacts and enable stakeholders to assess the reporting organization's performance in the reporting period, however, the future report should be further enhanced by the following areas:

 Encouraging systematize the data that cover all partial disclosure performance indicators toward full disclosure in the future in order to strengthen stakeholder's confidence

#### Responsibility

This CSR report is the responsibility of the NYPCB's CEO as declared in his responsibility letter. Our responsibility is to provide an Independent opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

#### Competency and Independence

BSI is a leading global standards and assessment body founded in 1901. The team was composed of Lead Auditors experienced in Engineering sector, and trained in a range of sustainability, environmental and social standards including AA1000AS(2008), GRI G3.1(2011), ISO14001, OHSAS18001, ISO14064 and ISO 9001. The assessment is carried out in line with the BSI Fair Trading Code of Practice. For and on behalf of BSI: bsi. Managing Director BSI Taiwan 23 October, 2014

Taiwan Headquarters: 5th Floor, No. 39, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C. BSI Taiwan is a sabsidiary of British Standards Institution.

# bsi.



## **Opinion Statement**

### SUSTAINABILITY REPORT ASSURANCE

Nan Ya Printed Circuit Board Corporation No. 338 Sec. 1, Nan-Kan Rd. Lu-zhu Township Taoyuan County Taiwan

南亞電路板股份有限公司 台灣 桃園縣 蘆竹市 南崁路一段 338 號

Holds Statement No: SRA-TW-2013039

And participates in the mission of the GRI G3 .1 Guidelines (2011).

Nan Ya Printed Circuit Board Corporation has published the 2013 Corporate Social Responsibility Report, which has been assured by BSI. BSI has assured this report by providing an Independent Opinion Statement. This statement is only valid in connection with the Independent Opinion Statement.

For and on behalf of BSI:

Managing Director BSI Taiwan, Peter Pu

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...making excellence a habit."

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Scope
The assessment covers the whole report and focus on systems and activities during the 2013 calendar year on the NYPCB headquarter and relevant operations in Taiwan only.

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