

NANPAO

NANPAO RESINS
SUSTAINABILITY REPORT 2022



NANPAO

NANPAO RESINS
SUSTAINABILITY REPORT 2022



CONTENTS

0	0.1 Message from the Chairperson	04	3	INNOVATION AND SERVE		6	COMMUNITY ENGAGEMENT	
	0.2 About NANPAO and Key Performance Indicators for ESG	05		3.1 Innovation Capacity	37		6.1 Community Safety and Health	86
	0.3 Materiality and Stakeholder Engagement	11		3.2 Business Units and Technology Core	39		6.2 Child Education	87
	0.4 Sustainable Development Blueprint of NANPAO	18		3.3 Accountable Chemical Management	44		6.3 Elderly Care	88
				3.4 Good Customer Relationship	46		6.4 Care for the Underprivileged	89
							6.5 Charity Service	90
1	CORPORATE GOVERNANCE		4	GREEN MANUFACTURING AND LOW CARBON TRANSFORMATION		7	Appendix	
	1.1 Board of Directors	22		4.1 Risk and Opportunity of Climate Change	52		7.1 SASB Index	92
	1.2 Board Composition and Governance	24		4.2 Greenhouse Gas Emission and Management	53		7.2 GRI Standard Index	93
2	INTEGRITY AND ACCOUNTABILITY			4.3 Energy management	55		7.3 Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies	95
	2.1 Internal Control and Internal Audit	29		4.4 Water resources	58		7.4 Climate-related information by TWSE Listed Companies	96
	2.2 Anti-Corruption and Ethical Corporate Management	29		4.5 Air Pollution Prevention	62		7.5 Assurance Report	96
	2.3 Strengthening Risk Culture Awareness	31		4.6 Waste management	64		7.6 Report issued information	100
	2.4 Conflict of Interest	34	5	CO-CREATION OF VALUE				
	2.5 Information Security Management	34		5.1 Human Rights Policy	69			
				5.2 Employee and Welfare	70			
				5.3 Employee Communication and Development	77			
				5.4 Safe Occupational Environment	78			
				5.5 Good Supplier Management and Relationship	83			



Introduction

By The Chairman

NANPAO has been established for a century, is dedicated to creating reliable chemical products, advancing technology, and improving services. Leading the industry, NANPAO invests heavily in the development of eco-friendly and sustainable products such as water-based and low-VOC products with low pollution, low carbon emissions, and low energy consumption. As the world pays more attention to sustainable business operations and environmental protection, NANPAO continues to deepen its corporate sustainability concepts and promote multiple sustainable projects internally and externally to reduce environmental impacts and enhance human rights awareness. In 2021, we have set it as the Group's ESG (Environmental, Social, and Governance) year and committed to achieving the net zero carbon emissions goal by 2050, with a carbon-neutral roadmap to clarify our mission and objectives for the future.

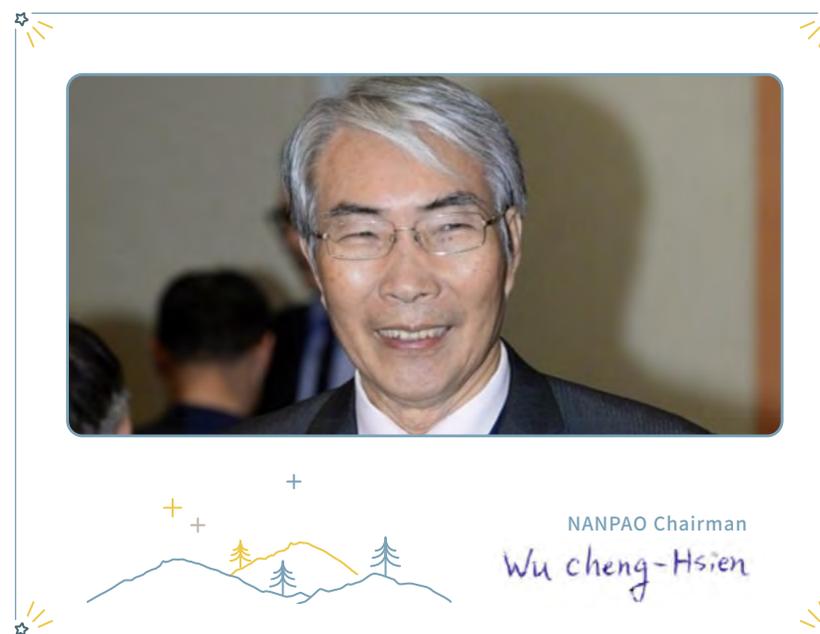
The Following are the Important Dimensions of NANPAO's Sustainable Initiatives :

1. NANPAO strives for symbiosis and mutual prosperity with the supply chain, not only continuously creating high production efficiency for the supply chain but also emphasizing chemical safety management, and ensuring that all exported products meet the EU RoHS and REACH regulations.
2. NANPAO values collaboration with partners and has become a bluesign® SYSTEM PARTNER and ZDHC Contributor, sharing its chemical management experience to benefit the industry.
3. To reduce the impact of raw material mining and synthesis on the environment, NANPAO invests heavily in research and development of bio-based and recycled materials, and continuously promotes sustainable products made from bio-based and recycled materials in the market to achieve a stronger competitive position. We also reduce the use and discharge of chemicals and protect the natural environment and ecosystems by optimizing product design, production, and logistics.
4. As a chemical factory, we regard the safety and health of employees as one of the company's top priorities. In addition to introducing and following the ISO 45001 international occupational safety standard, with the goal of minimizing workplace accidents, we also attach great importance to the safety of contractors who work on the factory premises. NANPAO's occupational safety guidelines are "zero danger and no chaos." We believe that prevention is better than remediation, so we conduct risk assessment management for potential risks in the working environment and continuously educate and train employees to establish safety awareness and create a safe and zero-disaster working environment.
5. Community relations : The environmental and operational risks of the chemical industry are higher than those of other industries. To provide a peaceful living environment for the communities around our factory, NANPAO makes every effort to prevent harmful exhaust gas,

wastewater, and waste from being discharged into the community environment. In addition, we prioritize providing job opportunities for community residents and have long-term funded community childcare activities and elderly care.

6. Continuous Improvement: We will continue to focus on environmental protection, safety production, and employee health and welfare issues, continuously optimizing our relevant policies and measures to achieve a win-win situation for the company, employees, and society. We will listen to the suggestions and opinions of employees and the community, establish a feedback mechanism, and continuously improve our environmental, safety, and health management strategies.

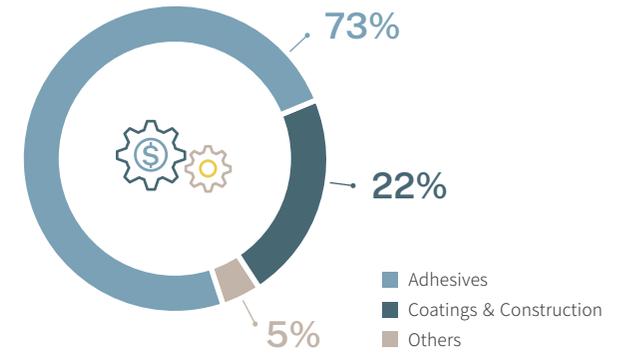
NANPAO hopes to contribute to creating higher industrial value for all stakeholders and making sustainable management a driving force and a source of assistance for our continued growth.



About NANPAO

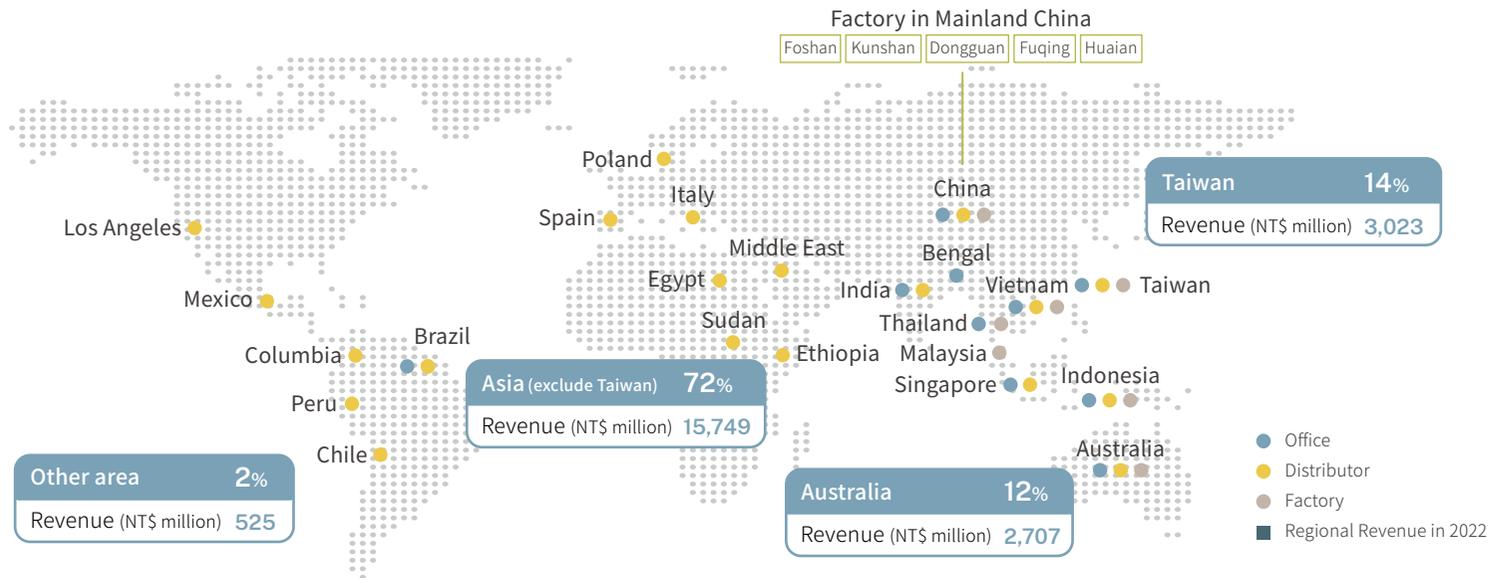
1. Main products : Adhesives and specialties, powder and liquid coatings, footwear materials and construction material
2. In 2022, the global sales amounted to **NT\$22 billion**
3. In December 2022, the market value of the Company amounted to **NT\$16 billion**
4. The Group has over **3,000** employees
5. The Company has **23** factories in seven countries
6. In 2022, the Company invested an expenditure equally to **2.3%** of the total sales for research and development (R&D)

Sales Percentage of Business Units in 2022



The production volume information for the year 2022 has been disclosed in the Annual Report of the Shareholders' Meeting. Please refer to page 91 of the 2022 Annual Report.

Sales Percentage of Locations of Operation in 2022



Economic Performance

2022 Consolidated Financial Statements included more than 60 subsidiaries, namely Nan Pao Resins Chemical Co., Ltd., ITLS International Development Co., Ltd., Prince Pharmaceutical Co., Ltd., Phymed Bio-Tec Co., Ltd., Biorich Biotechnology Co., Ltd., Nan Pao Advanced Materials Co., Ltd., Nan Pao Resins (China) Co., Ltd., Nan Pao Resins (Dongguan) Co., Ltd., Nan Pao Resins (Foshan) Co., Ltd., Fuqing Nan Pao Resins Co., Ltd., Changshu Yu Bo Polymer Materials Co., Ltd., Thai Nanpao Resins Chemical Co., Ltd., Nan Pao Resins Viet Nam Enterprise Ltd., Pt. Indo Nan Pao Resins Chemical, Nan Pao Resins India Pvt. Ltd., Philippines, Inc. Nan Pao Resins International Ltd., Nan Pao Advanced Materials Vietnam Co., Ltd., NP Australia Pty. Ltd., etc.

Note : Due to the reorganization of the organization within the group, ProPlus Technology Co., Ltd. and Nan Pao Electronic Material Co., Ltd. were merged into Nanpao Resins & Chemicals Co., Ltd. on December 31, 2022.

Item/Year	Unit: NT\$ in thousand				
	2018	2019	2020	2021	2022
Operating revenue	16,022,220	17,113,546	15,551,344	17,980,007	22,004,313
Cost of revenue	12,214,806	12,396,017	11,181,051	13,877,962	16,716,776
Gross profit	3,807,414	4,717,529	4,370,293	4,102,045	5,287,537
Operating expenses	2,906,404	3,035,500	2,868,593	3,049,851	3,463,162
Operating income	901,010	1,682,029	1,501,700	1,052,194	1,824,375
Non-operating income and expenses	134,802	110,653	104,392	150,347	561,039
Income before income tax	1,035,812	1,792,682	1,606,092	1,202,541	2,385,414
Income tax expense	(319,182)	(477,458)	(338,970)	(273,188)	(522,686)
Net income from continued operations	716,630	1,315,224	1,267,122	929,353	1,862,728
Net income	716,630	1,315,224	1,267,122	929,353	1,862,728
Other comprehensive income (loss) for the year (net)	(267,886)	(482,222)	23,934	4,972,725	(1,738,825)
Total comprehensive income	448,744	833,002	1,291,056	5,902,078	123,903
Basic earnings per share (NT\$)	6.15	10.19	10.12	7.26	14.44

Note 1 : For the list of companies included in the consolidated financial statements, please refer to the annual report's consolidated financial statements data.

Note 2 : Information on NANPAO production for the year 2022 has been disclosed in the Shareholder's Meeting Annual Report, please refer to the 2022 Shareholder's Meeting Annual Report.

Acceptance of Government Financial Subsidies

	Project	Subsidy Unit	Subsidy Amount
Taiwan	Taiwan Salary Subsidy for Maternity and Paternity Leave and Accompanying Maternity Checkups Department of Labor	Ministry of Labor	41,859 (Thousand NT\$)
Foshan, China	Foshan Incentive Subsidies for Gazelle Enterprises, Champion Enterprises, Unicorn Enterprises (Potential and Seed Stage)	Foshan High-tech Industrial Development Zone Administration of Sanshui Park	4,150 (Thousand RMB ¥)
	Foshan Special Incentive Awards for Promoting High-quality Economic Development, Special Subsidies for Enterprise Electricity Use, and Central Government Funding for Foreign Trade and Economic Development	Foshan Sanshui District Bureau of Economy and Technology Promotion	3,923 (Thousand RMB ¥)
	Foshan Support for Quality Improvement of Industrial Products in Foshan (Quality Development Category)	Foshan Fuchitong Government Subsidy Fund Account	1,330 (Thousand RMB ¥)
Other : Primarily consists of subsidies from various governments for labor, research and development, and innovation.			2,231 (Thousand RMB ¥)

Changes in Location or Operations

The company, considering the future trends in the carbon fiber composite market and technological developments, on December 27, 2022, approved by the board of directors of its subsidiary, Nan Pao Advanced Investment Co., Ltd., acquired a 70% equity stake in Changshu Yu Bo Polymer Materials Co., Ltd., a mainland China-based investment entity held by an overseas company, ARTUS COMMERCE LTD., for RMB 115,416 million.

Yu Bo specializes in the production of epoxy resins primarily for carbon fiber composite applications, with a focus on end-use applications in sports equipment and the development of industrial applications such as flame retardants, hydrogen tanks, and electronic materials. The company targets niche markets. While NANPAO also produces epoxy resins, its application areas differ, allowing for the sharing of technology and resources. The acquisition is expected to provide a foothold in the mainland Chinese carbon fiber resin market, seize opportunities in import substitution, lightweighting, and new energy, and promote the development of the carbon fiber business.

In the future, the company will continue to comply with relevant regulations, approach assessments of various benefits, and manage risks with a prudent attitude, aiming to achieve maximized overall operational profitability and minimized risks for the company.

Tax Governance

NANPAO is committed to complying with local tax laws and international tax standards in all operating areas, accurately calculating income tax obligations and filing tax returns in accordance with the law. In 2022, NANPAO's global income tax payment amounted to NT\$ 331 million, mainly consisting of profit-seeking enterprise income tax and additional tax on undistributed earnings. Tax payments in Taiwan accounted for 24% of the company's global tax payments.

In 2023, NANPAO completed the development of the "NANPAO Resins Group Tax Policy," committing to financial transparency and disclosing tax information in accordance with relevant regulations and standards to control tax risks and pursue sustainable development. NANPAO has not yet reached the country-by-country reporting (CbCR) threshold (consolidated income exceeding NT\$27 billion in the previous year and not meeting the safe harbor provisions), so no country-by-country report has been issued. No political donation issues were reported in 2022.

NANPAO Resins Group Tax Policy

In order to support policies that contribute to business innovation, research and development, and to control tax risks and pursue sustainable development, NANPAO Resins Group upholds the following principles and commitments :

1. Conduct all operating activities in accordance with local tax laws and regulations in each operating area and fulfill tax obligations.
2. Consider tax risks and impacts in making important business decisions.
3. Do not engage in transactions for the purpose of tax evasion.
4. Do not use tax havens for transactions with the purpose of tax evasion.
5. Do not transfer profits created by the company to low-tax countries.
6. Establish a relationship of mutual respect with tax authorities based on mutual trust and good faith.
7. Ensure financial information transparency and disclose tax information in accordance with relevant regulations and standards.
8. Transactions between related companies are conducted in accordance with customary transaction principles and in compliance with the internationally recognized transfer pricing standards published by the Organization for Economic Cooperation and Development (OECD).



Relaxing Break Area



Industry Collaboration

NANPAO is committed to contributing to and promoting mutual growth in the industry. We continue to actively engage in industry collaboration efforts and participate in public association platforms to exchange and share practical experience in the vertical industry chain.

Name of Organization	Position Assumed		
	Board of Directors	Special Interest Committee	Member
bluesign®SYSTEM PARTNER			✓
ZDHC Contributor			✓
E.SUN COMMERCIAL BANK Sustainable Advocacy Initiatives			✓
SATRA Technology			✓
Taiwan Synthetic Resins & Adhesives Industrial Association, R.O.C.	✓		✓
Taiwan Footwear Manufacturers Association			✓
Taiwan Footwear Manufacturers Association - Youth Center			✓
Taiwan Circular Economy 100 (TCE 100)			✓
Taiwan Chemical Industry Association			✓
Association of Bio-based Material Industry			✓
Chemical Society Located in Taipei – Kaohsiung Branch	✓		✓
Hierarchical Green-Energy Materials Research Center			✓
Taipei Building Material T.A.			✓ (Honorary Director)
Importers & Exporters Association of Taipei			✓
Taiwan Institute for Sustainable Energy			✓
Taiwan Center for Corporate Sustainability			✓ (Initial Judge)
CSRone			✓
Yi Tsai Club			✓
Tainan Cultural Foundation	✓		✓
Guangdong Adhesives Industry Association	✓		✓
China Adhesives and Tape Industry Association			✓
Jiangsu Flooring Material Association			✓
China Association for Quality Inspection			✓
Kunshan Passive Building Alliance			✓
Society of Automotive Engineers of China			✓
Dongguan Security Production Association	✓		✓
Dongguan Precursor Chemicals Management Industry Association			✓
China Chemical Industry Environmental Protection Association			✓
China National Building Waterproof Association			✓
China National Household Paper Industry Association			✓
Shouguang City Waterproof Industry Association			✓
Guangdong Chamber of Commerce of Sanitary Products			✓

NANPAO also invests in expenses to support industry development, and hopes that businesses and industries can support each other for mutual growth. In 2022, NANPAO did not make any political donations or incur lobbying expenses.

Category	Object	Amount (in thousands of NTD)	Description
Business Activities	Taiwan Business Association	481	Related to industry operation
	BCI Media	301	Subscription to building material information
	GS1 (Global Standard One)	157	Issuance of company prefix numbers for domestic manufacturers, wholesalers, and retailers, and provision of professional quality testing services for international barcode carriers used by manufacturers for labeling purposes.
	Concrete Institute (Concrete Institute in Australia)	96	Research related to concrete
	Taiwan Science and Technology Park Industries Association	90	Membership fee for setting up a factory in the science park
	Other	1,109	The main focus is the membership fees paid by various subsidiary companies to participate in public or industry associations.

Key Performance Indicators for ESG



Governance

- Sustainalytics ESG Risk Rating (100-0; 0 being the lowest risk)
July 2020 - 36.0 / July 2021 - 31.1 / August 2021 - 23.4
March 2023 - 26.7 (The company ranks 146th in terms of risk among 549 chemical companies globally)
- S&P CSA Global ESG Ranking
February 2022-32
February 2023-49 (Ranked 10th among 497 global chemical companies in terms of ESG performance.)
- FTSE Russell ESG Rating
June 2022 - 2.6 (0-5, with 5 being the best)
June 2023 - 3.4 (Ranked at 42nd percentile, surpassing the global specialty chemicals industry average of 2.7)
- Corporate Governance Evaluation TWSE Top 6%~20%
- Sustainability Accounting Standards Board (SASB) indicators on disclosure and third-party assurance



Social

- Made a cumulative welfare donation of NT\$72,754,852
- Assigned experts from NANPAO to conduct chemistry and science courses in the community to produce mutual benefits.
- One third of employees in Taiwan factory attended online self-learning to increase corporate competitiveness.
- Accorded "2022 Happiest Employees Award" by 1111 Job Bank.
- Held "Factory Open Day", inviting the community to visit the factories to facilitate social security interaction.
- Invited social welfare organizations to hold a "Secret Santa" Christmas gift event, to celebrate the warm Christmas with employees and fulfill their dreams of gifts.



Environment

- Officially committed to achieve carbon neutrality by 2050
- Established zero-carbon roadmap
- Inventory of greenhouse gas emissions from three scopes in various operating chemical plants under the NANPAO Group.
- Installation of renewable energy equipment for self-use, with solar power generation equipment already being installed in the Taiwan, Foshan, Thailand, Kunshan, Vietnam, Vietnam Advanced Materials, and Dongguan plant areas.
- NANPAO(Vietnam) conferred certification of Higg Facility Environmental Module, Higg FEM
- Conferred certification of bluesign®SYSTEM PARTNER.
- Conferred certification of ZDHC Contributor, more than 80% of the products shipped from Foshan, Dongguan, Vietnam, and Indonesia plants to well-known sportswear brands have obtained the highest level 3 certification.
- By 2030, reduce the number and usage of high concern chemicals by 50%. As of 2022, the usage has been reduced by 62% compared to the previous year, achieving the target ahead of schedule.



Preparation Principles

2021 was set to be the first ESG year for NANPAO. From 2022 and onward, sustainability reports are prepared from the perspective of the Group in accordance with Global Reporting Initiative (GRI) Core Options and standards for Chemicals Industry developed by Sustainability Accounting Standards Board (SASB). The data of the Report is collected and compiled by the Sustainability Management Team of Planning Department. Each year, the Report shall be issued in both Chinese and English versions. For the complete report, please download from NANPAO official website.

<https://www.nanpao.com.tw/csr.aspx?id=16>

Period and Scope Covered by the Report

January 1, 2022



December 31, 2022

The Report covered the period between January 1, 2022 and December 31, 2022. The previous report was released in September 2022. The current Report shall be released in September 2023. The next report is forecast to be released in September 2024.

The Report discloses financial information pertaining to Nan Pao Resins Chemical Co., Ltd. and all its subsidiaries (hereinafter, NANPAO). The entities covered includes NANPAO Taiwan (the 1st factory, Pao-Li factory, the 5th factory, Guiren factory, Dongguan factory, Foshan factory, Fuqing factory, Kunshan factory, Indonesia factory, Vietnam factories, Thailand factory), Foshan Nan Pao Great-will Advanced Materials Ltd., Nan Pao Advanced Materials Vietnam Co., Ltd. and Nan Pao Materials Viet Nam Co., Ltd.

In the fourth quarter of 2022, NANPAO Operations and R&D Headquarters was officially completed and put into use. The operational activities within this scope have been disclosed in this report.

The appearance of the NANPAO Operations and R&D Headquarters



The appearance of the NANPAO Operations and R&D Headquarters



International Conference Hall



Lobby



NANPAO museum



Third-Party Assurance

The disclosure in this report follows the Sustainable Reporting Guidelines for Listed Companies, as stipulated in Article 4, Appendix 1-2 of the "Operating Procedures for the Preparation and Submission of Sustainability Reports by Listed Companies." It encompasses eight sustainability indicators from both the Sustainability Accounting Standards Board (SASB) disclosure standards. The information has undergone an independent limited assurance review conducted by Ernst & Young, in accordance with the Foundation for the Development of Accounting Research (FDARF) Criteria No. 3000, "Assurance Engagements on Non-Historical Financial Information." A confirmation statement is provided at the end of this report.

Contact Information

For any advice or recommendation regarding the report, we welcome your input. Kindly reach out to us :

ESG Team, Planning Department,
Nan Pao Resins Chemical Co., Ltd.

No. 519, Chungshan Rd., Xigang Dist.,
Tainan City, Taiwan (R.O.C.)

Telephone number : +886-6-796-5888

E-mail : info@nanpao.com

Materiality and Stakeholder Engagement

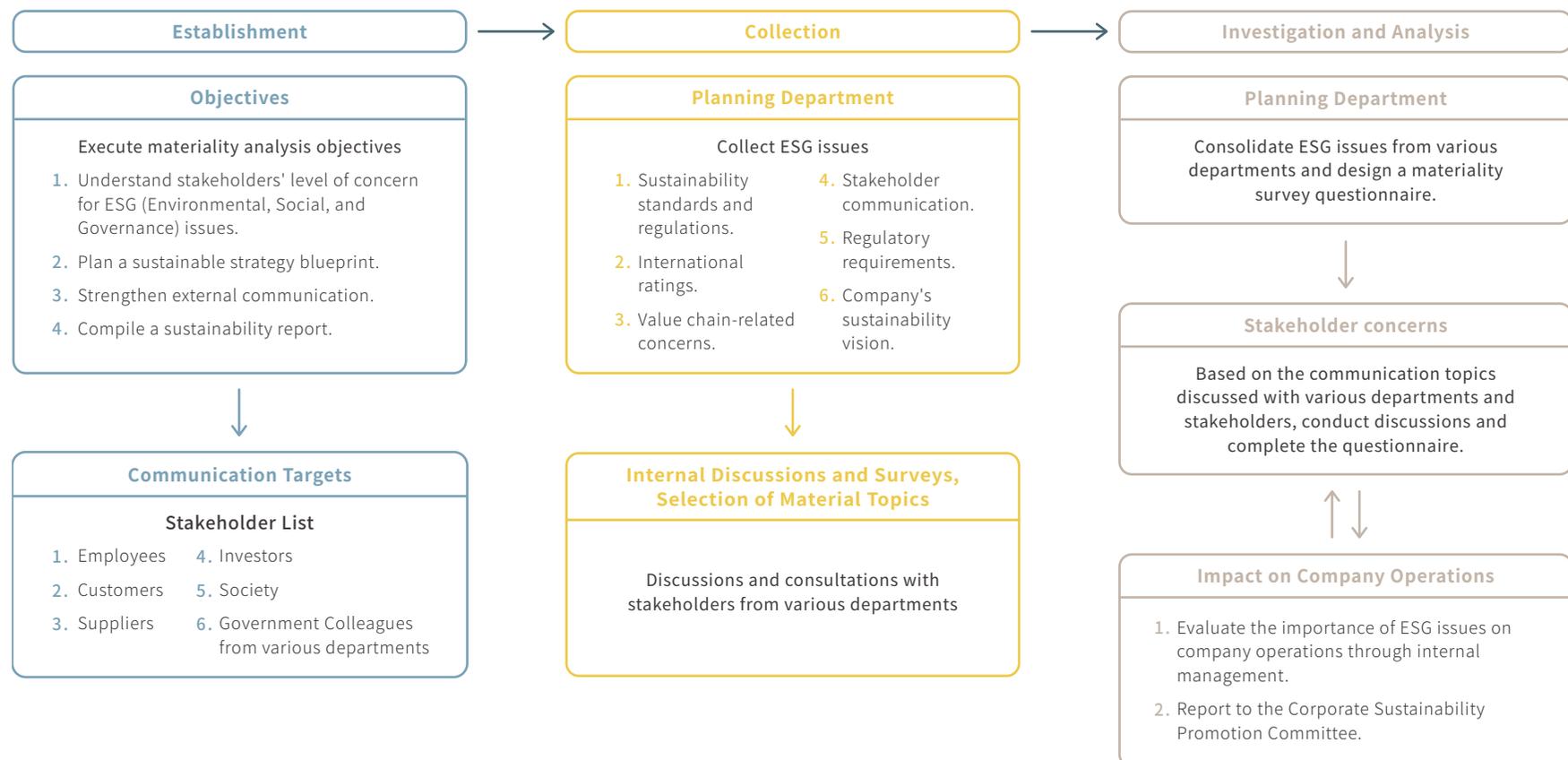
Roles in Materiality Analysis

NANPAO refers to the Global Sustainability Standards Board (GSSB) and executes Materiality Analysis based on the GRI 3 Material Topics (GRI 3 : Material Topics 2011) of the GRI Universal Standards 2021, announced in October, 2021.

The GRI 3 Material Topics provide guidance for companies to progressively identify material topics and define "material topics" as follows: "Topics that represent significant impacts on the organization's economy, environment, and society, including human rights impacts." These impacts represent the positive or negative influence of the organization on sustainable development.

Process of Materiality Analysis

NANPAO refers to the four principles of materiality identification from AA1000 Accountability Principle (2018) and GRI Standards (2021): Inclusivity, Materiality, Responsiveness, and Impact. Through the steps of "establishment, collection, investigation, and analysis," sustainability issues are examined, and materiality analysis is conducted.



Sources of Sustainability Issues

These include international sustainability standards and frameworks (GRI Standards, SDGs, SASB, TCFD), sustainable investment institutions (DJSI, MSCI, Sustainalytics), industry themes along the value chain (peers, key customers), domestic and international policies and regulations, and stakeholder feedback. These sources are consolidated into 17 sustainability issues. In the current year, NANPAO conducted a materiality assessment through meetings, involving internal sustainability committees and external consultants. This assessment considered the company's risk analysis reports, stakeholders' regular concerns about ESG sustainability issues, and the potential impact on company operations. Seven material sustainability issues were identified and evaluated using a materiality scoring system. A materiality matrix was created as a reference for information disclosure in the sustainability report, facilitating effective communication with stakeholders. This process enables the company to develop sustainable strategies and enhance its sustainable competitiveness.

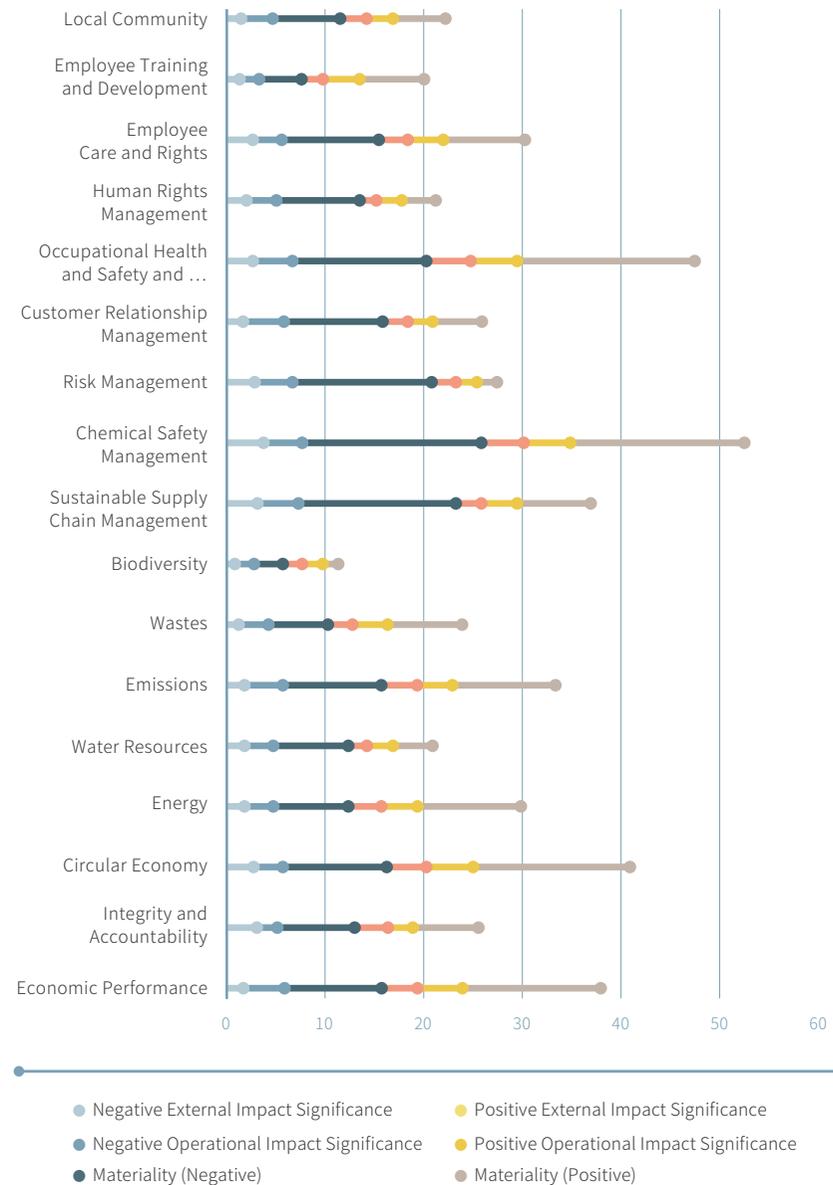
Quantifying Impact

The degree of impact and probability of occurrence of material issues on the economy, environment, and people (including human rights) are rated on a scale of 1 to 5. This assessment is conducted annually in conjunction with the risk identification process, and ratings are provided by relevant departments. The impact on stakeholders is also evaluated. In accordance with the definition of GRI 3 Material Topics, an additional 20% weight is applied to human rights-related issues. Negative and positive thresholds are set for the impact scores of each issue. The average score of the two sides is calculated to determine the impact level. The Planning Department consolidates the scores.

Number of Stakeholder Impacts :

Category	Numbers	Category	Numbers
Consumers	7	Unions	1
Customers	11	Government	12
Suppliers	8	Local communities (society)	9
Contractors	3	Shareholders (investors)	15
Outsourcing partners	2	Financial institutions	4
Business partners	11	Non-governmental organizations	7
Employees and other workers	10	Vulnerable groups	4
		Others	1

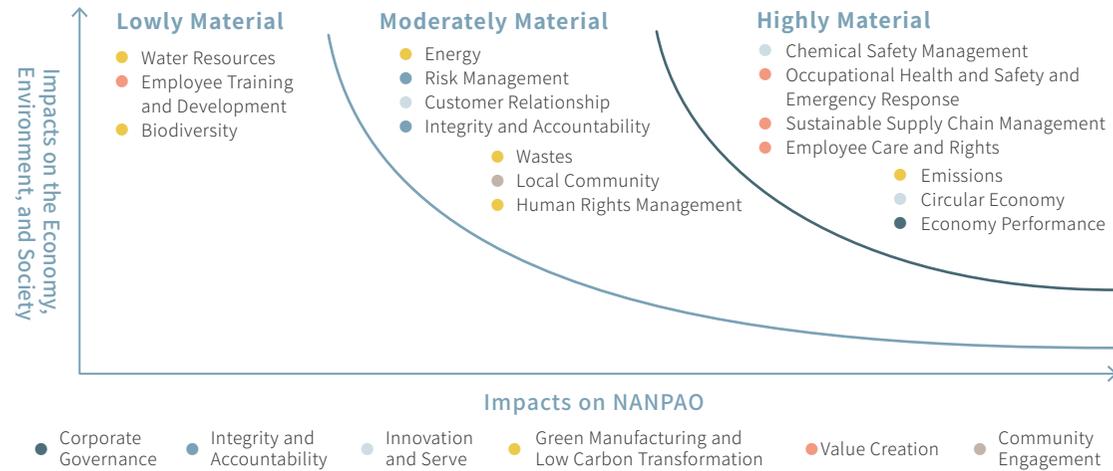
The Results of the Significant Issue Assessment



Materiality Topic Identification Results

Based on the compiled impact indices and alignment with stakeholder discussions, we have identified topics that have significant impacts on both NANPAO and the economy, environment, and people. These topics are defined as "Highly Material Topics." The following are the definitions and management strategies for each level of materiality :

- **Highly Material :**
Set goals and regularly monitor management efforts.
- **Moderately Material :**
Establish management policies and assign dedicated units for control.
- **Lowly Material :**
Low short-term impact, but continuous monitoring is maintained.



Materiality and Impacts

NANPAO refers to the Global Sustainability Standards Board (GSSB) and evaluates the economic, environmental, and social impacts, as well as human rights impacts and their scope, based on the GRI 1 Foundation and GRI 3 Material Topics standards announced by the GSSB in 2021. These impacts can have both positive and negative effects and may be potential or actual occurrences that happen at different stages of the value chain, such as upstream procurement, company operations, and customer usage.

Materiality	Actual and Potential Impacts				Scope of Impacts		
	Economy	Environment	Social(People)	Human Right	NANPAO	Upstream	Downstream
Chemical Safety Management		Hazardous chemicals	Human health	Health	●	○	●
Occupational Health and Safety and Emergency Response			Human health	Health	●	○	
Circular Economy	Resource circularity	Renewable resources	Hazardous industrial waste	Climate change and environment	●	●	○
Economy Performance	Industrial value		Quality of life	Business and human rights	●		○
Sustainable Supply Chain Management	Industrial value	Renewable resources	Working conditions	Business and human rights	○	●	
Emissions	Resource circularity	Particles	Human health	Climate change and environment	●	●	○
Employee Care and Rights			Creating employment opportunities	Business and human rights	●		○

Note : The order of material topics is primarily based on the scores assigned by stakeholders, sorted from high to low.

● Direct impacts ○ Indirect impacts

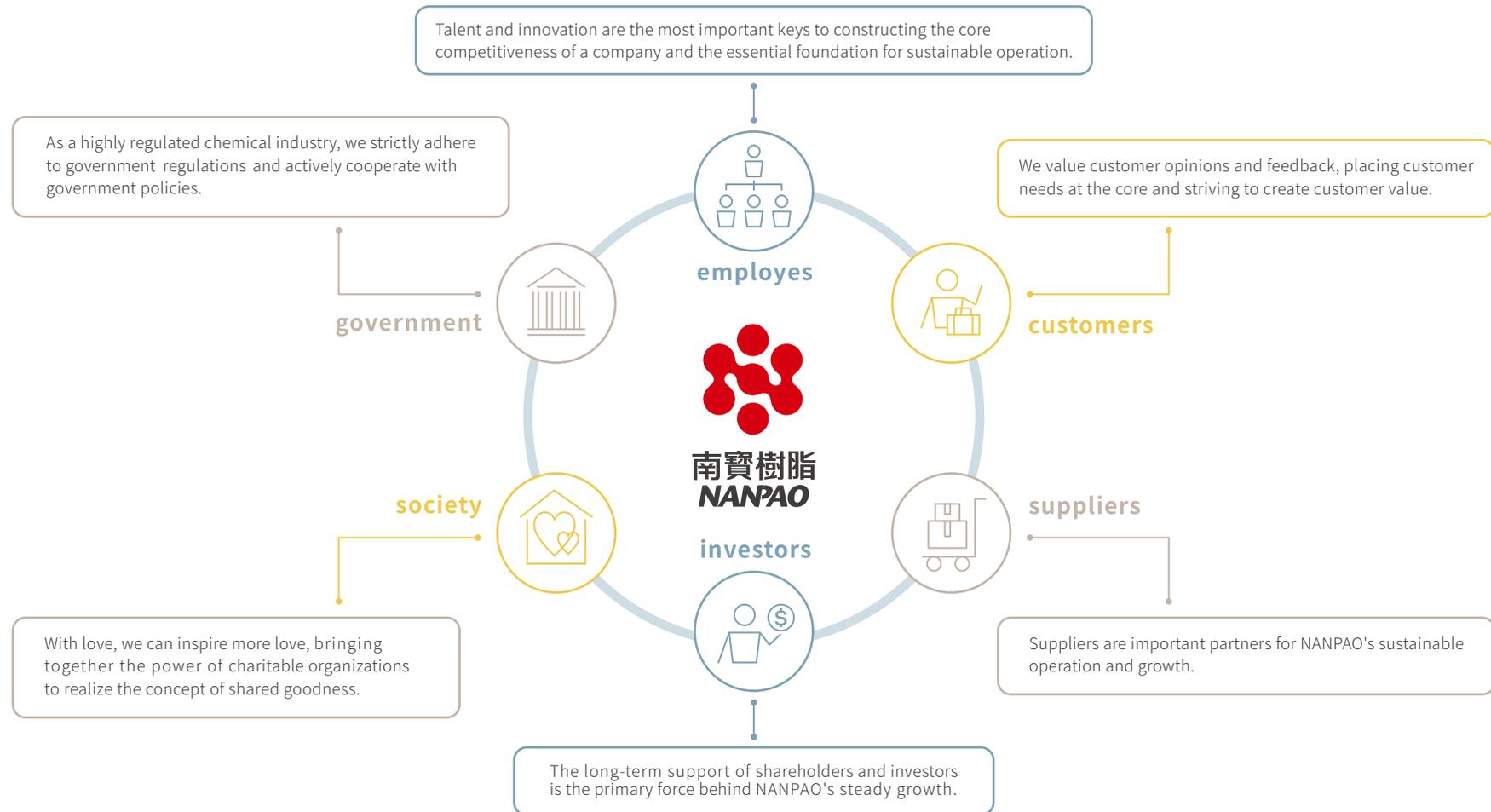
Materiality	Management Policy			
	Importance to NANPAO	Primary Management Mechanisms	Strategies	Chapters
Chemical Safety Management	<ul style="list-style-type: none"> Chemical management is one of the fundamental pillars of development for NANPAO. With a product lifecycle mindset starting from the design and development stage, we assist customers in developing alternatives and avoid using chemicals that pose potential risks to human health during the product design phase. We also strive to minimize employee exposure to chemical risks. To effectively manage quality, all footwear products from NANPAO undergo rigorous inspections based on international Restricted Substances List (RSL) standards before being allowed for shipment. 	<ul style="list-style-type: none"> International RSL (Restricted Substances List) inspection standard Bluesign inspection standard (for chemicals in textiles) ZDHC (Zero Discharge of Hazardous Chemicals) Level 3 inspection standard (for chemicals in footwear) 	<ul style="list-style-type: none"> Chemical hazard and risk assessment Communication of chemical safety information Development of alternatives 	Innovation and Serve
Occupational Health and Safety and Emergency Response	Talent is a valuable asset for the company's development. NANPAO is committed to creating a safe and healthy working environment for employees and contractors, implementing a safety culture from top to bottom.	<ul style="list-style-type: none"> ISO 45001 occupational health and safety management system certification Safety performance indicators ESG committee 	<ul style="list-style-type: none"> Promoting safety culture Comprehensive health management Human factors engineering evaluation and improvement 	Value Creation
Circular Economy	<ul style="list-style-type: none"> By implementing resource minimization (Reduce), prioritizing in-house reuse and recycling (Recycle & Reuse), and delaying the disposal of materials, we actively reduce environmental impacts. We collaborate with suppliers to develop waste recycling and reuse technologies, promoting a circular economy and maximizing resource utilization. We actively explore applications of recycled materials and biomaterials to reduce the extraction and synthesis of chemical raw materials at the source and minimize resource consumption. 	<ul style="list-style-type: none"> ISO 14001 environmental management system certification ESG committee 	<ul style="list-style-type: none"> Continuously increasing the proportion of biomass and recycled materials usage Enhancing waste recycling and reuse quantities Strengthening industry-academia collaboration 	Innovation and Serve
Economy Performance	NANPAO is committed to the principle of "creating greater economic value with fewer energy and resource inputs" and directs its operational performance towards chemicals with lower environmental and human impacts.	<ul style="list-style-type: none"> ISO 9001 quality control system Corporate governance assessment S&P Global Corporate Sustainability Assessment 	<ul style="list-style-type: none"> Sustainable operation risk management Enhancing quality culture Quality management 	Corporate Governance
Sustainable Supply Chain Management	Sustainable supply chain helps reduce operational disruption risks. NANPAO adheres to supplier codes of conduct and encourages suppliers to promote labor rights, occupational health and safety, environmental protection, business ethics, and management system performance, enhancing core management capabilities.	<ul style="list-style-type: none"> Supplier code of conduct Supplier questionnaires S&P Global Corporate Sustainability Assessment ESG committee 	<ul style="list-style-type: none"> Promoting green and low-carbon supply chain Risk management for non-disruptive operations 	Value Creation
Emissions	Extreme weather conditions pose potential significant impacts on production and operations. NANPAO is committed to process improvements for mitigation and adaptation, as well as increasing the use of renewable energy, gradually moving towards a zero-carbon transformation.	<ul style="list-style-type: none"> ISO 50001 energy management system ISO 14064-1 greenhouse gas inventory management system 	<ul style="list-style-type: none"> Promoting low-carbon manufacturing Utilizing renewable energy Enhancing energy efficiency 	Green Manufacturing and Low Carbon Transformation
Employee Care and Rights	<ul style="list-style-type: none"> Nurturing talent, actively attracting and retaining talent, is the foundation for strengthening the company's research and development, manufacturing, and service capabilities. Providing employees with quality job opportunities, including competitive overall compensation, stable workplace benefits, and a safe and healthy working environment, to enhance employee dedication and a sense of belonging to the company, ensuring a rich pool of talent resources. 	<ul style="list-style-type: none"> Employee feedback channels ESG committee 	<ul style="list-style-type: none"> Building future talent capacities Empowering employee learning abilities 	Value Creation

NANPAO utilizes diverse communication channels to understand the materiality, which serves as an important reference for the management policies and implementation plans. This report also addresses stakeholders' other concerns. The Sustainable Development Committee, under which the ESG team (Planning Department) operates, annually consolidates the results of stakeholder identification and communication to report to the Board of Directors.

Stakeholder Engagement

Identifying Communication Targets

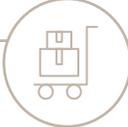
Following the principles of AA1000 Stakeholder Engagement Standard, stakeholders are classified into six categories based on their importance and the five dimensions: influence, concern, responsibility, dependency, and diverse perspectives. The six stakeholder groups are employees, customers, suppliers, investors, society, and government.



Communication and Issues of Concern of Stakeholders

 <p>Employee</p>	<p>Issue of Concern</p> <ul style="list-style-type: none"> • Employee compensation and benefits • Performance assessment mechanisms • Talent cultivation and development • Physical and mental health and workplace safety • Labor-management relations • Operational performance
<p>Communication Channel(s) and Frequency</p> <ul style="list-style-type: none"> • Employee suggestion box (real-time) • Whistleblower reporting procedures (real-time) • Company's internal electronic bulletin board (irregular) • Email announcements and internal poster promotions (irregular) • Employee education and training (irregular) • Internal communication meetings (weekly/monthly) • Labor-management meetings (quarterly) • Employee performance assessment operations (semi-annually) 	<p>Response methods and communication achievements</p> <ul style="list-style-type: none"> • Annual distribution of year-end bonuses and employee rewards, along with salary adjustments. In 2022, the average employee salary expense increased by 11% compared to the previous year. • Regular review of employee performance and promotion recommendations for outstanding performers. • In 2022, a total of 5,859 participants attended courses offered by the company's learning and development platform, with a total training duration of 10,606 hours, averaging 15.78 hours of training per person. • Quarterly safety and health committee meetings and bi-weekly internal safety meetings to discuss and improve upon audit findings. • Annual general health examinations for employees and special hazard-related health examinations. • Five labor-management meetings were held in 2022. • Managers at all levels share company operational updates and developments with employees during communication meetings.

 <p>Customer</p>	<p>Issue of Concern</p> <ul style="list-style-type: none"> • Service/product quality • Innovation and circular economy • Information security • Customer protection and communication • Regulatory compliance
<p>Communication Channel(s) and Frequency</p> <ul style="list-style-type: none"> • Customer service hotline and email (real-time) • Business contact points (real-time) • Official website, social media platforms (irregular) • Customer meetings (irregular) • Customer satisfaction surveys (annual) • Technical innovation exhibitions (annual) 	<p>Response methods and communication achievements</p> <ul style="list-style-type: none"> • The technical service team provides professional support and solutions for customer product and technical issues. • Quarterly technical seminars and annual customer satisfaction visits are conducted. • Participation in INNO FAIR, an important technical presentation event for customers, is held annually. • Regular updates of announcements and promotional information on the official website and Facebook community page. • In 2022, no records of any customer complaints regarding information security or privacy breaches were received. • Participation in the 2022 Taipei Textile Exhibition.

 <p>Suppliers & Contractors</p>	<p>Issue of Concern</p> <ul style="list-style-type: none"> • Supplier management • Business ethics • Product quality • Regulatory compliance
<p>Communication Channel(s) and Frequency</p> <ul style="list-style-type: none"> • Supplier contact points (real-time) • Supplier questionnaires and declarations (irregular) • Supplier meetings (irregular) • Supplier evaluations (annual) 	<p>Response methods and communication achievements</p> <ul style="list-style-type: none"> • Contracts are signed with suppliers, specifying relevant terms and regulations to ensure compliance with requirements. • Establish a supplier assessment mechanism and conduct annual supplier evaluations. • In 2022, 91% of the group's suppliers completed the signing of the Supplier Code of Conduct. • In 2022, the proportion of locally sourced materials for production was 79%.



Shareholders & Investors

Issue of Concern

- Operational performance and financial information
- Shareholder equity
- Corporate governance
- Sustainable development strategy
- Risk management
- Regulatory compliance
- Corporate image

Communication Channel(s) and Frequency

- Investor relations contact point (real-time)
- Spokesperson and proxy spokesperson (real-time)
- Announcement disclosures and significant news (regular/irregular)
- Information disclosure on official website (regular/irregular)
- Shareholders' meetings and annual reports (annual)
- Corporate briefings (quarterly)
- Domestic and international investor forums (irregular)
- Financial reports (quarterly/annual)
- Sustainability reports (annual)

Response methods and communication achievements

- Regular issuance of financial information press releases : monthly revenue press release (monthly), financial report press release (quarterly).
- Regular disclosure of financial and business-related information on the Public Information Observation System and the official website.
- Irregular publication of significant news on the Public Information Observation System.
- Participated in **6** corporate briefings in 2022.
- Participated in the 2022 Asia-Pacific Sustainable Action Expo.



Government

Issue of Concern

- Regulatory compliance
- Corporate governance
- Risk management
- Communication with regulatory authorities

Communication Channel(s) and Frequency

- Regulatory authority contact point (real-time)
- Correspondence and visits with government agencies (irregular)
- Communication platforms with public associations (irregular)
- Special meetings such as briefings, seminars, and workshops (irregular)

Response methods and communication achievements

- Irregular participation in regulatory advocacy meetings or seminars hosted by government agencies.
- In 2022, cooperated with the Stock Exchange to complete the assessment of financial reporting capabilities and on-site review of Q2 financial data.
- Timely response to questionnaires from the Stock Exchange, with a total of **24** questionnaires completed in 2022.
- In 2022, ranked in the **6-20%** range among listed companies in the 9th Corporate Governance Evaluation by the Stock Exchange.
- In 2022, **ranked 10th** out of 497 chemical companies globally in the S&P CSA assessment with a score of **49**.
- In 2022, **ranked 146th** out of 549 chemical companies globally in the Substainalytics assessment with a score of **26.7** for risk.



Social

Issue of Concern

- Corporate image
- Community engagement and care
- Social welfare

Communication Channel(s) and Frequency

- NANPAO Social Welfare and Charity Foundation (real-time)
- ESG contact mailbox (real-time)
- Volunteer service activities (irregular)
- Project donations and sports sponsorships (irregular)
- Annual sustainability report

Response methods and communication achievements

- Continuing to organize "Community Factory Visits' events", inviting community residents to visit the factory and promote community safety communication.
- Awarded the "2022 Happiness Enterprise Gold Award" by 1111 Human Resources Bank through popular vote.
- From the establishment of NANPAO Social Welfare Foundation at the end of 2007 to 2022, the accumulated donation amount reached **72.75 million NT dollars**.
- In 2022, NANPAO Foundation's expenditures were distributed as follows by category :

Unit: NT\$

	Primary Education	Elderly Welfare	Vulnerable Care	Volunteer Services	Other	Total
2022	2,429,600	730,000	1,583,113	109,400	1,245,030	6,097,143
	40%	12%	26%	2%	20%	100%

Sustainable Development Blueprint of NANPAO

NANPAO has determined 2021 to be the first year of sustainability for the Company. In accordance with the vision and mission of the "Sustainable Development Committee Charter", the Company has designated the Sustainable Development Committee as the highest level decision making center for ESG and is chaired by the Chairperson. Whereas, the "ESG team" comprises senior executives of different areas and multiple professional background, reviewing the core operational capabilities of the Company collectively, establishing short, medium and long-term ESG development directions and fostering the core competitive advantage of NANPAO concertedly.

NANPAO has designated CSR as a separate an independent issue since 2012 and established "CSR Management Committee" in 2020 for reporting the results and programs for sustainable development to the Board of Directors. The committee reports the relevant development issues and international trends pertaining to economic, environmental and social aspects to the Board of Directors, and arranged sustainable business development related lectures for the Board of Directors to enhance the knowledge on sustainability management of NANPAO' s highest governance authority.

NANPAO implements a governance structure and operating system that includes the board of directors, management, and various operational departments. This structure utilizes both vertical management and horizontal communication to ensure the smooth implementation and response to various issues, including economic, environmental, and social issues related to corporate social responsibility and stakeholder concerns.

Core of Sustainable Management



Initiate and support from senior management :

The Chairperson and CEO take part and promote ESG work in-person, where senior management leads the organizational teams of various functions to get involved in sustainable programs that are rooted in core capabilities of the Company. The senior management is committed to perform its best in completing these assignments.



Sustainable development platform :

ESG sustainability management platform, greenhouse gas platform and environmental data management platform are established to monitor the sustainability progress and performance of various unit in real-time. Furthermore, meetings between the Sustainable Development Committee and ESG Team are convened regularly to formulate strategies and undertake cross-departmental coordination so as to cultivate the momentum for actions within the organization for achieving sustainability.



Middle management participation :

Middle management is the most important driving force for NANPAO's sustainability initiatives. The issues involved in sustainability initiatives are diverse and complex. After the ESG strategy unit proposes a project, each department is responsible for its own part and leads cross-organizational and inter-departmental communication and cooperation, deepening NANPAO's sustainability genes and generating a continuous stream of progress energy.

Achieving SDGs

For the stiff challenges facing all humanity, NANPAO is keen to achieve Sustainable Development Goals (SDGs). Under the leadership of the Sustainable Development Committee, NANPAO has established four sustainability policies and selected nine main Sustainable Development Goals (SDGs). The ESG team takes charge in coordinating cross-departmental resources and forces, and formulating 18 measurable and time-sensitive long-term goals to incorporate SDGs into the organizational culture and routine operational activities. The team collaborates with internal and external stakeholders to consistently explore and research on governance/economic, environmental and social development opportunities so as to co-create values and share a sustainable future.

Circular Economy



- Water resource management and reuse water
- Powder coating for water pipes provides higher quality and sustainable tap water
- Using recycled carbon dioxide derivatives as raw materials, it has excellent flexibility and breathability.
- Recycling and reusing of solvents and waste.
- (Degradable) Products and chemicals of circular economy.
- Recycle and reuse of material resources, sustainable packaging, etc. (packaging materials, etc.)



Social Inclusivity



- Community building : After-class tuition, chemical courses, environmental courses
- Environmental protection and public welfare : Enhance the passion and number of facets of employee participation
- Prioritize providing job opportunities for community residents
- Industry-academia collaboration
- Provide building materials and funds for infrastructure repairs



Low-carbon Mission



- ISO50001 energy management system and measures to reduce energy consumption
- Installation of renewable energy equipment
- Low carbon products (reduce production processes, eco-friendly raw material, etc.)
- Collaborating with upstream and downstream partners to promote sustainable projects



Co-creation of Value



- Strengthen sustainability connection with strategic partners
- Supplier chain management on environment and social aspects
- Co-procurement management
Implement Task Force on Climate-Related Financial Disclosures (TCFD)



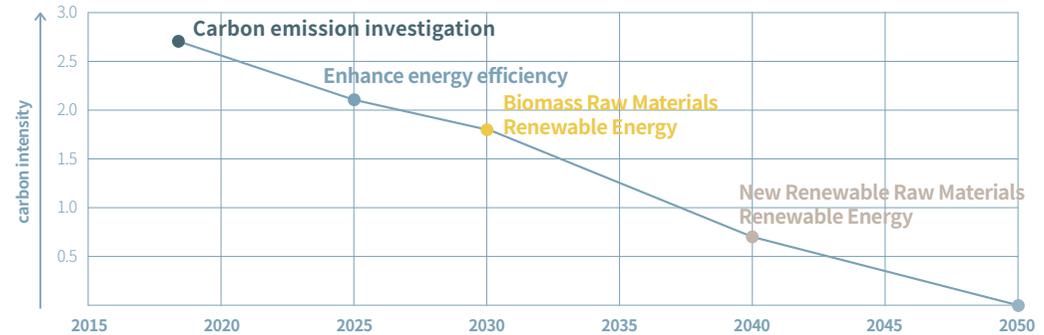
SDGs	Sustainable Goals of NANPAO
	Consistently donate over NT\$600,000 each year for servicing elderly living alone.
	<ol style="list-style-type: none"> 1. Consistently support the after-class tuition, and summer and winter camps for six elementary schools. 2. Provide more than two chemistry courses for elementary students by utilizing the Company's core chemistry competence
	<ol style="list-style-type: none"> 1. The Taiwan factory has adopted ISO 46001 water efficiency management systems and introduced a filtration system to increase water recycling. 2. Launch powder coating for water piping, which is able to prevent the piping from releasing chemical substances into tap water and assist in promoting the direct drinking water policy, hence providing better quality and sustainable tap water to users.
	Complete the construction of renewable energy facilities with a capacity of 4,800 kW by 2025 in the chemical manufacturing plant area.
	<p>Sustainable supply chain :</p> <ol style="list-style-type: none"> 1. Require suppliers to sign on "Supplier ESG Commitment Declaration". The completion rate exceeds 90%. 2. The completion rate for local raw material suppliers exceed 70%. <p>Facilitate safety of working environment :</p> <ol style="list-style-type: none"> 1. Lower disabling injury to zero occurrence. 2. Regularly conduct disaster exercises each year
	<ol style="list-style-type: none"> 1. Consistently make investment to stay ahead technologically. The R&D expenditure amounted to 2.5~3% of the revenue 2. Providing construction materials and funds for infrastructure repair.
	<p>Chemical Management</p> <p>In the Taiwan plant, there was a 62% reduction in the use of high-concern chemicals in 2022 compared to the previous year. The company has actively sought alternative materials such as formaldehyde-free, nonylphenol-free, and boron-free formulations.</p> <p>Promoting Health Management</p> <p>Maintain zero occupational diseases caused by chemical exposure.</p>
	<ol style="list-style-type: none"> 1. Consistently reduce carbon emission, and curtail carbon intensity by 10% in 2025 to fulfil reduction target that is based on life cycle in 2050. 2. All subsidiaries to adopt Task Force on Climate-related Financial Disclosures (TCFD) to enhance the resilience of supply chain against climate change risks.
	<ol style="list-style-type: none"> 1. Joined as a contributor to ZDHC and provided over 80% of chemical products verified by Level 3 for well-known sports brands. 2. Became a bluesign® SYSTEM PARTNER and obtained bluesign certification for multiple textile chemicals.

Commitment to Net Zero by 2050

Starting from 2022, NANPAO will introduce greenhouse gas inventory work based on ISO14064-1 in all production plants, calculating carbon emissions of operational factories and analyzing carbon hotspots, examining all changes in energy resources of the process, and considering which parts can be recycled and reused to reduce the carbon footprint per unit product. We must also adjust the process and product mix and accelerate transformation, focusing on process and technological innovation and seeking low-carbon raw materials. We will further work on greenhouse gas reduction and widely deploy renewable energy power generation equipment, and purchase green energy certificates as appropriate to accelerate the development and deployment of low-carbon chemical production processes. By improving transparency and offering products to systematically and gradually reduce the carbon footprint of NANPAO products in the entire value chain, we help customers in various industries reduce the carbon footprint of their own products.

The core of the medium- and long-term goals is to use new technologies and renewable energy to replace fossil fuels such as natural gas. These technologies mostly rely on external partners for joint development, and their implementation can only be gradually realized after 2030. Before that, in order to accelerate the reduction of greenhouse gas emissions, NANPAO will continue to systematically improve the process of existing production facilities.

NANPAO's Net-Zero Pathway

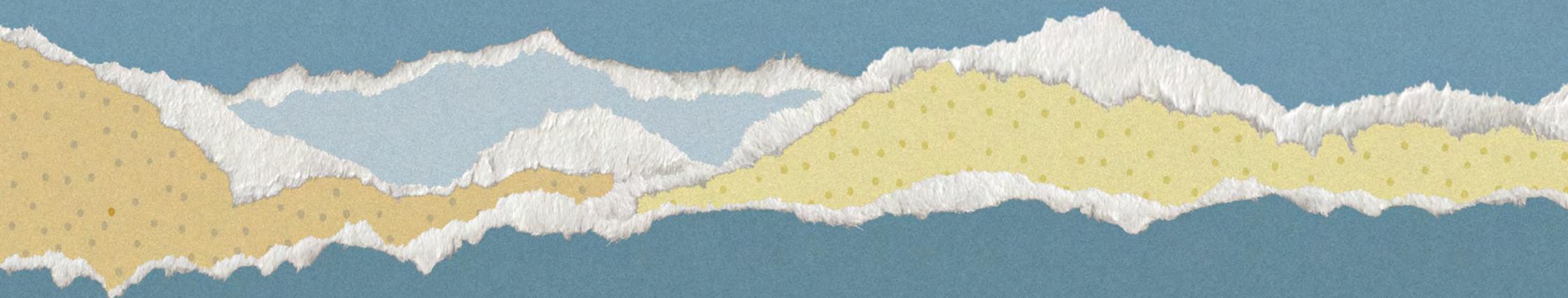


Carbon dioxide equivalent :
Emission volume(metric ton)Co2e/Revenue(NT\$ million)

Carbon emission investigation	Enhance energy efficiency	Biomass Raw Materials Renewable Energy	New Renewable Raw Materials Renewable Energy
<ul style="list-style-type: none"> ISO 50001 Energy Management System Greenhouse Gas Scope 1 and 2 Chemicals with Environmental Impacts Carbon Footprint Certification Product Carbon Disclosure 	<ul style="list-style-type: none"> Greenhouse Gas Scope 3 Installation of Energy-saving Equipment Shortening Process Time Improving Product Yield Rate Waste Heat Recovery Using Natural Gas 	<ul style="list-style-type: none"> Recycling of Raw Materials Using Biomass and Low-carbon Materials Installation of Solar Power Generation Equipment Carbon Pricing 	<ul style="list-style-type: none"> Carbon Capture Technology Hydrogen Power Generation Technology

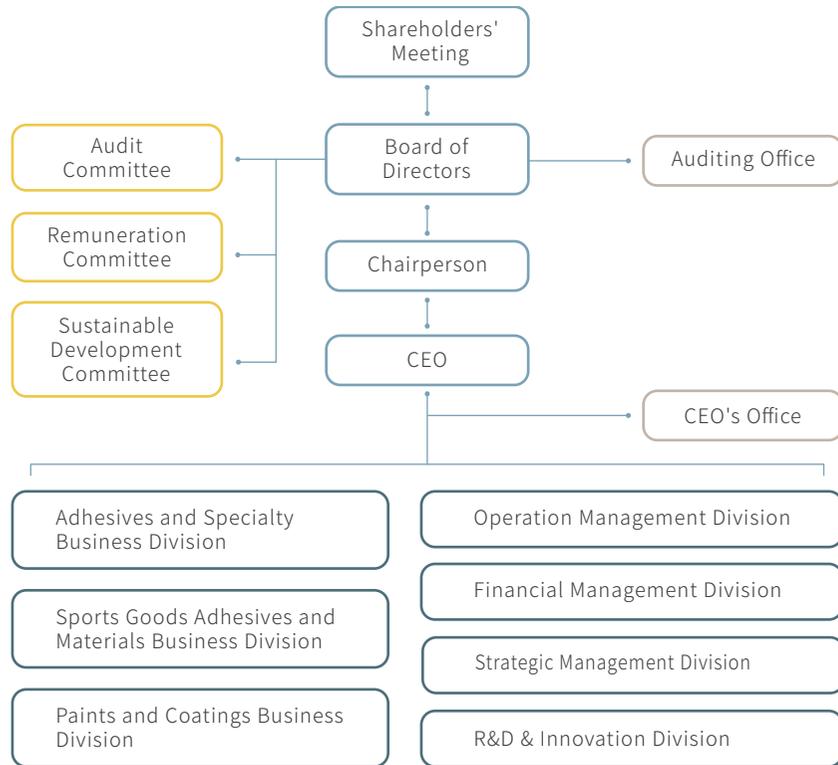
1. CORPORATE GOVERNANCE

1.1	Board of Directors	22
1.2	Board Composition and Governance	24



01 Corporate Governance

Business Operation and Management Framework



1.1 Corporate Governance Practices

NANPAO firmly believes that a robust and efficient Board of Directors is the foundation of good corporate governance. Meanwhile, the Company has also established internal audit unit which regularly performs audit on the operational procedures and efficiency of the headquarters, subsidiaries and affiliated companies each year. Meanwhile, it also reports its operation to the Board of Directors.

For the nomination and election of Directors, the Director election procedures are undertaken in accordance with the Company Act and the relevant regulations in a fair, just and transparent manner. The composition of the Board of Directors shall take into consideration the organizational culture, business model and long-term development, as well as implementing the diversity policy for the Board members. The Board members shall possess the knowledge, skills and competence required for performing their duties. Of which, they shall possess capabilities in the following fields, namely business judgment, accounting and financial analysis, business management, crisis management, industrial knowledge, international market perspective, leadership and decision-making.

The Board of Directors is led by the Chairperson, Cheng-Hsien, Wu. Each quarter, the management team shall report to the Board regarding the business performance, environmental safety, investment results, etc. The Board shall offer appropriate recommendations pertaining to business strategies proposed by the management team. The management team and the Board of Directors maintain a smooth communication. Both parties seek to achieve the goals of the Company so as to optimize stakeholder interests.

To enhance the supervisory function and strengthen management mechanism, there are three functional committees operating under the Board of Directors :

All committee member positions are held concurrently by independent directors.



Audit Committee
established in 2017
Assist the Board of Directors in performing the supervisory duties pertaining to accounting, audit, financial reporting procedures and the quality and integrity of financial control.



Remuneration Committee
established in 2017
Assist the Board of Directors in executing and evaluating the overall salaries and benefit policies and remunerations of directors and managers.



Sustainable Development Committee
established in 2020
Coordinate and execute the overall sustainable policy and strategic goals of the Company.

Note : Regarding the professional qualifications, experience, diversity, and independence of the board members, please refer to the 2022 annual report.

Functional Committee Member Information

Position	Chairperson	Board member	Independent director	Independent director	Independent director
Name	Cheng-Hsien, Wu	Ming-Hsien, Hsu	Yun, Chen	Yung-Cheng, Chiang	Yi-Hsi, Lee
	ESG committee member	ESG committee member	Chairperson of the Audit Committee Remuneration Committee ESG Committee	Board member of the Audit Committee Remuneration Committee ESG Committee	Board member of the Audit Committee Remuneration Committee ESG Committee
Professional Qualifications and Experience	<p>1. Mr.Cheng-Hsien, Wu obtained a M.S. degree in Applied Chemistry from National Tsing Hua University. Mr. Wu has over 40 years work experience. Since joined the NANPAO Research Department in 1977, he has served as the director of Bao Li Plant, the general manager of the R&D Department, the executive general manager of the Adhesive Business and general manager of NANPAO. He served as the chairman of Nan Pao Resins Chemical Co., Ltd. from 2013. He is professionally proficient in industry knowledge and corporate operating leadership.</p> <p>2. Without cases mentioned in various clauses of Article 30 of Company Law.</p>	<p>1. Mr. Ming-Hsien, Hsu obtained a M.S. degree in Industrial Engineering from National Cheng Kung University. Mr. Hsu has over 30 years work experience. Since joined the NANPAO Enterprise Management Office in 1986, he has served as manager of the General Management Office and deputy general manager of the Planning Office. He served as the CEO of Nan Pao Resins Chemical Co., Ltd. from 2017. He is professionally proficient in industry knowledge, corporate operating leadership and business strategy</p> <p>2. Without cases mentioned in various clauses of Article 30 of Company Law.</p>	<p>1. Mr. Yun, Chen graduated from Industrial Chemistry of Tung Hai University and subsequently obtained a M.S. degree in Macromolecule from National Tsing Hua University and a Ph.D. degree in Synthetic Chemistry, Faculty of Engineering from University of Tokyo, Japan. Mr. Chen has over 40 years work experience. He has served as distinguished professor in the Department of Chemical Engineering at National Cheng Kung University. He is now serves as an honorary professor in the Department of Chemical Engineering at National Cheng Kung University, he is professionally proficient in industry knowledge.</p> <p>2. Without cases mentioned in various clauses of Article 30 of Company Law.</p>	<p>1. Mr. Yung-Cheng, Chiang graduated from Faculty of Law of Soochow University. Mr. Chiang has over 30 years work experience. He has served as Judge of Taiwan Kaohsiung District Court and Taiwan High Court Kaohsiung Branch Court. Currently he serves as the lawyer of Attorney of Cheng Bang & Cheng Yang Joint Law Firm and the Independent Director of Taiwan Secom Co., Ltd. and Top High Image Corp. He is professionally proficient in legal. With over 20 years of experience practicing in a law firm, he also hold positions as independent directors in Long Da Construction & Development Corporation, Taiwan Secom Co., Ltd., and Top High Image Corp.</p> <p>2. Without cases mentioned in various clauses of Article 30 of Company Law.</p>	<p>1. Mr. Yi-Hsi, Lee graduated from Operating and Management of Tung Hai University and subsequently obtained a Ph.D. degree and a M.S. degree in Finance from National Sun Yatsen University. Mr. Lee has over 20 years work experience. He has served as Advisor at Global Capital Market Division of CTBC Bank and Supervisor of Du Dong Technology Co., Ltd. Currently he serves as the Deputy CEO of AI Innovation Lab, FinTech Center at College of Commerce in National Cheng Chi University, the researcher of Risk and Insurance Research Center at College of Commerce in National Cheng Chi University, the supervisor of Taiwan Risk and Insurance Association and the Executive Supervisor of Asia Pacific RegTech Association. He is professionally proficient in accounting, financial management, financial investment and blockchain technology.</p> <p>2. Without cases mentioned in various clauses of Article 30 of Company Law.</p>
Independence Status	Not applicable	Not applicable	<p>All independent board members meet the following criteria :</p> <ol style="list-style-type: none"> 1. They comply with the relevant provisions of Article 14-2 of the Securities and Exchange Act as promulgated by the Financial Supervisory Commission, as well as Article 3 of the "Regulations Governing the Establishment of Independent Directors in Publicly Traded Companies" 2. Neither themselves (or using others' names), their spouses, nor their minor children hold any shares of the company. 3. They have not received any remuneration from the company or its affiliated enterprises in the past two years for providing services in business, legal, financial, accounting, or other fields. 		

As per Articles of Incorporation, the Board of Directors meeting is convened at least once every quarter to oversee and gain an understanding of the execution of operational planning, representation of financial reporting, and audit report as well as its follow-up. In 2022, six Board of Directors meetings were convened to implement supervision and gain an understanding of the execution of business planning. The average in-person attendance rate amounted to 100%, exceeding the target attendance rate for board meetings of over 95%. The board of directors shall diligently oversee and gain insight into the execution of the operational plan. Important resolutions of the Board meetings are announced on the Investor Relations section on the Company website regularly.

1.2 Board Composition and Governance

Board Diversity

NANPAO specifies the policy of board member diversity in the "Corporate Governance Practice Guidelines," emphasizing the equal composition of board members based on two main criteria, including but not limited to :

- Basic Conditions and Values : gender, age, nationality, race, and culture, etc.
- Professional Knowledge and Skills : professional backgrounds (such as law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience, etc.

In the 2020 Annual Shareholders' Meeting, the company elected a total of seven directors (including three independent directors). The board members have diverse and complementary industry experiences, financial, accounting, legal, and other professional abilities, in line with the management objectives of board member diversity policy.

To further achieve the goal of board member diversity, the company plans to appoint at least one female director in the board election in 2023.

Board Independence

The company's board of directors has considerable independence :

1. There are seven directors, of which three are independent directors (representing 42.86% of the total), which meets all the conditions for independence, all three independent directors meet the independence criteria outlined in the "Regulations Governing the Appointment and Compliance Matters of Independent Directors of Public Companies."
2. The tenure of independent directors does not exceed three terms, and the number of independent directors who also serve on the boards of other publicly traded companies does not exceed three. Three independent directors have served for 4-6 years.
3. There are no situations among directors that involve spouses or relatives within the second degree of kinship (as stipulated in Article 26-3, paragraphs 3 and 4 of the Securities and Exchange Act).

Board's Collective Knowledge

NANPAO enhances the familiarity of its directors with the company, its industry, and the unique responsibilities of directors through the following methods :

1. In addition to regular board and committee meetings, the board members are provided with annual operational team reports and corporate sustainability progress reports to enhance their overall knowledge on economic, environmental, and social issues.
2. The company arranges training courses for board members on operation-related issues as needed and in alignment with annual strategic priorities. Directors may also attend external training courses on relevant subjects as per their individual requirements.
3. NANPAO is a member of the Yee Jih Association, composed of publicly listed companies in Tainan. Through the association's publications and organized courses, directors gain access to relevant updates and assist in enhancing their competencies.

Additionally, the board members' overall knowledge of economic, environmental, and social issues is enhanced through regular quarterly reports from the management team and an annual report on sustainable development initiatives. Please refer to the "annual report" for information on the training programs for directors and supervisors.

Board of Directors Performance Evaluation and Compensation

To implement corporate governance, our company revised the "Board of Directors Performance Evaluation Measures" on March 24, 2022. We conduct an internal board of directors' performance evaluation at least once a year, and an external evaluation every three years. By clearly defining performance goals, we aim to improve the functionality of the board of directors and strengthen its operational efficiency.

Evaluation of the Board of Directors' Performance :

Cycle	Period	Scope	Method	Content
Perform once a year	2022.01.01 ↓ 2022.12.31	Board of Directors as a whole	The self-evaluation questionnaire for board performance assessment	Assessment includes five major dimensions and a total of 50 evaluation indicators : participation in company operations, improvement of the quality of board decisions, composition and structure of the board, selection and ongoing education of directors, and internal control.
Perform once a year	2022.01.01 ↓ 2022.12.31	Individual Board Members	The self-evaluation questionnaire for board performance assessment	Assessment includes 27 evaluation indicators across four dimensions : understanding of the company and awareness of responsibilities, level of involvement in company operations, directors' expertise and continuous education, and internal controls.
Perform once a year	2022.01.01 ↓ 2022.12.31	Functional Committees: <ul style="list-style-type: none"> • Audit Committee • Compensation Committee • Corporate Sustainability Promotion Committee 	The "Functional Committee Performance Evaluation Self-assessment Questionnaire" is conducted internally within each functional committee.	There are five dimensions in total : level of involvement in company operations, awareness of functional committee responsibilities, enhancing decision-making quality of functional committees, composition and appointment of functional committee members, and internal controls.
Once every three years	2021.08.01 ↓ 2022.07.31	The assessment conducts following indicators <ul style="list-style-type: none"> • Composition • Guidance, • Authorization, • Supervision, • Communication, • Internal control and risk management • Self-discipline of the Board of Directors, as well as other issues such as board meetings and support systems. 	Engage the Chinese Corporate Governance Association to conduct an external evaluation and analysis report using methods such as "data review," "online self-assessment questionnaire," and "on-site visit and evaluation."	<ol style="list-style-type: none"> 1. The Board of Directors should plan for the succession and development of the board, and regularly review the composition, division of labor, selection, nomination, and appointment process of existing board members to ensure that they are rigorous and comprehensive. 2. The Board of Directors should establish and adjust company goals and corresponding strategies, and effectively manage and ensure that the management department implements the strategy execution to achieve the goals. 3. The Board of Directors should ensure that the company implements established policies, systems, goals, and strategies by dividing responsibilities and authorizing the management department. An effective real-time feedback mechanism should be established as a reference for decision-making or management adjustments. 4. The supervision of the Board of Directors should be implemented through the establishment of independent internal audit personnel, leveraging external professional accountants, and other effective mechanisms to ensure that the company operates in compliance and effectively. 5. The communication of the Board of Directors should include its own members, the management department, shareholders, and other stakeholders. Attention should be paid to communication issues, communication and feedback mechanisms, and the board meeting culture. 6. The Board of Directors should identify important risk issues, define risk tolerance, and establish a sound internal control system to ensure the company's operating results. In addition, the training and succession of senior management personnel are also important issues to ensure stable business operations and reduce risks of discontinuity. 7. The Board of Directors should constantly enhance its governance knowledge and actively participate in relevant training to improve the effectiveness of governance. Additionally, the board should evaluate its own performance and promote continuous improvement to enhance corporate governance. 8. The board of directors should have a professional and sound board meeting support system, including the establishment of corporate governance personnel, planning of agendas, preparation of meetings, provision of information, recording of meetings, and post-meeting tracking and management in order to assist in enhancing the effectiveness of the board of directors.

In 2022, the self-evaluation of the Board of Directors and Functional Committees' performance was conducted and the results showed that it was good. The overall operation was still effective. The evaluation results were submitted to the Board of Directors' report on March 27, 2023. Additionally, an external professional and independent organization, the Chinese Corporate Governance Association, was commissioned to conduct a performance evaluation in 2022. The overall assessment and recommendations have been submitted to the Board of Directors' report on November 9, 2022, as a basis for review and improvement.

Compensation Policy

NANPAO established a Compensation Committee on June 19, 2017 to assist the Board of Directors in implementing and evaluating the company's overall compensation and benefits policies, as well as the compensation of directors and executives.

The main responsibilities of the Compensation Committee are as follows :

1. Regularly review the organizational regulations of the Compensation Committee and propose revision suggestions.
2. Establish and regularly review the company's annual and long-term performance goals and policies, systems, standards and structures for the compensation and benefits of directors and executives.
3. Regularly evaluate the achievement of performance goals for the company's directors and executives, and establish the content and amount of their individual compensation and benefits.

The policies, standards, and combinations for remuneration payment provided by NANPAO, as well as the procedures for setting remuneration and the correlation between business performance and future risks are as follows :

1. Directors : Director remuneration is determined in accordance with Article 25 of the company's articles of association, which stipulates that before distributing profits, directors' remuneration should be allocated with profits not exceeding 3% during the period. In order to link director performance with the company's vision and strategic goals, core competencies and accountability are evaluated, and performance and compensation are implemented through the Compensation Committee according to the "Board of Directors Performance Evaluation Measures." The sustainable business strategy goals are flexibly included in the director remuneration consideration items, and the individual director's performance evaluation results are used as a reference for determining their individual compensation, effectively achieving a win-win situation through substantial linkage effects.
2. General Manager and Deputy General Manager : The remuneration of the CEO, General Manager, and Deputy General Manager includes salaries, bonuses, and employee compensation, and the salary level is determined based on the position held, the responsibilities assumed, and the contribution to the company, taking into account the industry standards. The distribution of employee compensation is in accordance with Article 25 of the company's articles of association, with 2% to 6% of the profits earned during the period allocated as employee compensation before profit distribution.
3. For senior management, the company has established relevant compensation policies and the "Managerial Performance Evaluation Measures" to support the company's sustainable business strategy. The Compensation Committee establishes and regularly reviews the company's annual and long-term performance targets for directors and managers, as well as policies, systems, standards, and structures for remuneration, and evaluates the achievement of their performance targets on a regular basis, determining the content and amount of their individual compensation.

The company's remuneration procedures are established based not only on the overall operational performance of the company, industry future business risks, and development trends, but also on individual performance achievement rates and contribution to the company's performance, providing reasonable remuneration that is positively correlated with business performance. The relevant performance assessments and compensation justifications are reviewed by the Compensation Committee and the Board of Directors, and the remuneration system is reviewed in a timely manner according to the actual business situation and relevant laws and regulations to seek a balance between sustainable business and risk control.

Strengthening the Functions of the Board of Directors

1. To continuously enhance the professional knowledge and legal literacy of directors and assist the board in operating effectively, the shareholding unit assists in arranging continuing education courses for the directors. In 2021 and 2022, all directors completed the required hours of continuing education in accordance with the "Guidelines for Continuing Education for Directors and Supervisors of Listed and OTC Companies."
2. To establish an effective risk management mechanism, the Audit Committee Organization Regulations will be amended in 2023 to include supervisory authority over risk management matters. Additionally, the Risk Management Policy and Procedures will be revised in accordance with the "Practical Guidelines for Risk Management in Listed and Over-the-Counter Companies," and operational updates will be reported to the Board of Directors.

Based on the recommendations in the "Board of Directors Performance Evaluation Report" (2022.09.20) by the external expert, the Chinese Corporate Governance Association, the following improvement projects will be implemented :

1. Starting in 2023, AQI information will be obtained from the signing certified public accountants (CPAs) every year, and the independence and suitability assessment of the CPA will be completed for 2023. Additionally, this information will be taken into consideration for the subsequent appointment or renewal of the signing CPA.
2. We plan to disclose the email addresses of independent directors on the company website in 2023, in line with the revision of our internal control measures and the schedule for board member elections. This will further strengthen our whistleblower mechanism.

Shareholder Interests

The Board of Directors is the highest governance authority and the center of major business decision making. Its duties include appointing and overseeing the management echelon, business performance, legal compliance, and conformity to the Articles of Incorporation and resolutions of the Shareholders' Meeting so as to maximize the shareholder interests. The Board meeting is convened at least once every quarter. It can also be convened as and when necessary in the event of an emergency. To the best of their ability, all members shall perform the duties of the Board in evaluating business strategies, risk management, yearly budget and business performance, and supervising major capital expenditure and investment decisions.

NANPAO pays close attention to the interests of each shareholder and treats all shareholders equally. The Company implements electronic voting in Shareholders' Meeting and encourages shareholders to participate in corporate governance. Shareholders may participate in the decision making of the Company via voting in the Shareholders' Meeting. Ratification, discussion and election proposals are resolved one by one and the results of each resolution are announced promptly in the Shareholders' Meeting. The Company has provided a diverse range of voting avenues to facilitate the shareholders in exercising their rights and enhance corporate governance effectively.



Image : NANPAO Operations and R&D Headquarters

2. INTEGRITY AND ACCOUNTABILITY

2.1	Internal Control and Internal Audit	29
2.2	Anti-Corruption and Ethical Corporate Management	29
2.3	Strengthening Risk Culture Awareness	31
2.4	Conflict of Interest	34
2.5	Information Security Management	34



02 Integrity and Accountability

The business philosophy of NANPAO is "Leading, Integrity, Teamwork, and Efficiency". They uphold an honest and upright attitude towards management and integrate sustainable genes into the company. As they move towards global commercialization, they adhere to domestic and foreign commercial practices and ethical norms, invest in R&D patents, prioritize information security and data privacy protection, and gradually establish a solid foundation for sustainable business operation.

2.1 Internal Control and Internal Audit



Internal Control

The internal control policies are formulated in accordance with the Regulations Governing Establishment of "Internal Control Systems by Public Companies" promulgated by Financial Supervisory Commission (FSC) and by taking into consideration the design of actual operating activities which is approved by the Board of Directors by resolution. The policies are executed and the processes are managed by the Board of Directors, Managers and other employees. The internal control policies include control mechanism for corporate and operational levels. The objective of the policies is to delineate the scope and standard of internal control system of various business units to ensure the effectiveness of internal control design and execution, thus facilitating a robust management.



Internal Audit

NANPAO has established an Auditing Office, which is under the supervision of the Board of Directors, to assist the Board and Managers in inspecting and evaluating the effectiveness of internal control, measuring results and efficiency of business management, as well as reliability, timeliness and transparency of reporting and legal compliance. The Auditing Office also proposes recommendations on improvement measures to reasonably ensure that the internal control system is implemented in an effective manner, and serve as the basis for reviewing amendments made to the internal control system.

Based on the scale of investment, operation status, management needs and other regulatory requirements, the group-wide Auditing Office is designated to have one executive, and internal audit personnel capacity who meet the job requirements and perform internal audit assignments in an independent, objective, and fair manner. The internal audit personnel consistently attend training to enhance their auditing quality and capability. They also consistently improve the

auditing procedures and skills, proactively developing audit supporting tools to increase the effectiveness of the audit.

The Auditing Office has established a risk-oriented internal control system and performed auditing based on the yearly audit plan, in which, the scope covers the internal control system of the Company and its subsidiaries. It also reviews the self-evaluation report on internal control of the Company and its subsidiaries, which shall serve as the basis for evaluation on the overall internal control system and the issuance of Internal Control Statement by the Board of Directors and Managers, along with findings on internal control weaknesses and improvements on anomalies.

The head of internal audit reports to the Independent Directors on a regular basis and communicate the audit results to them. Furthermore, the head of internal audit also updates on the internal audit operation in the Board Meeting. In the event of a special circumstance, the head of internal audit shall also report to the Independent Directors. In 2022, there was no such circumstance. Meanwhile, the head of internal audit also needs to consistently follow up on the requirements and recommendations proposed by the Independent Directors, Audit Committee and Board of Directors, and completes and reports the actions taken therein within a given time period.

2.2 Anti-Corruption and Ethical Corporate Management

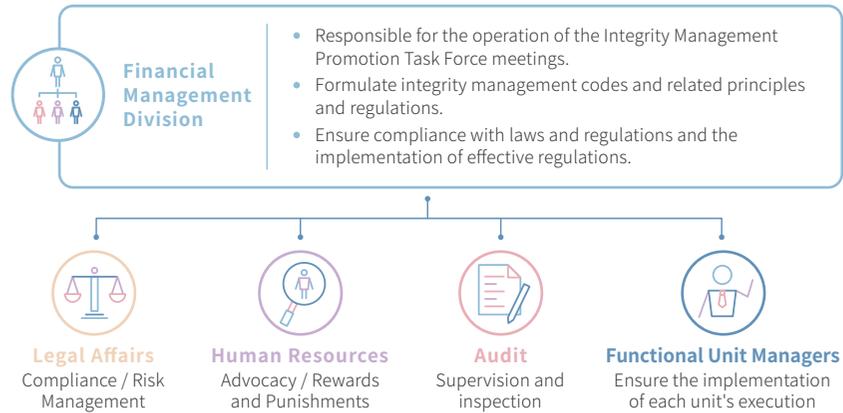
Integrity is fundamental to NANPAO's operations. To create an ethical working environment and atmosphere, the company requires all employees to have a clear understanding of and adhere to ethical norms in their professional conduct. In order to actively implement its integrity-driven policies, NANPAO has established the "Code of Conduct and Guidelines for Ethical Operations" as its integrity policy. Additionally, the company has formulated an "Internal and External Reporting Procedure" that provides a mechanism for reporting complaints and encourages employees and stakeholders to report any suspicious or unethical behavior within the organization or involving business partners. The related internal regulations and procedures are regularly revised to align with evolving social and international governance trends. For more details, please refer to the company's website and the Taiwan Stock Exchange's Market Observation Post.

NANPAO also places a strong emphasis on anti-corruption management, adopting a zero-tolerance policy toward corrupt practices. Any actions that sacrifice the company's interests for personal gain are strictly prohibited. The company communicates its anti-corruption policies through push notifications on the internal email server, website announcements, and educational training. Internal control systems, including accounting procedures, are established in compliance with relevant laws and regulations. These systems are evaluated for their effectiveness in design and execution annually through self-assessment and are subject to audit reviews. Externally, before establishing business relationships with agents, suppliers, customers, or other business counterparts, the company conducts assessments to ensure the legality of their business conduct, their adherence to integrity-related policies, and whether there are any records or potential instances of unethical behavior.

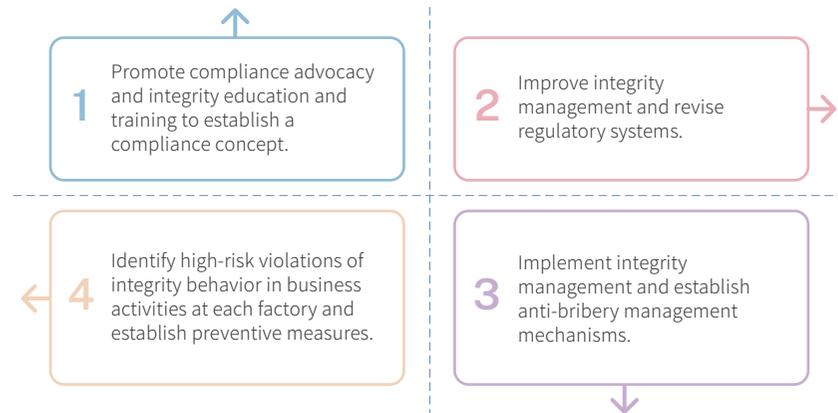
Integrity Management Principle

NANPAO has always upheld the principles of integrity management, adhering to government regulations, implementing corporate governance, and fulfilling corporate responsibilities. Therefore, the company has established an "Code of Ethics" internally, requiring employees to comply with this code of ethics in terms of business ethics, labor relations, health and safety, environment, internal control, and corporate governance which is also published on the company's website and internal information sharing platform to promote the importance of integrity management.

Integrity Management Organization



Integrity Management Promotion Strategy



Implementation and Execution of Code of Ethics

1. Strengthening the professionalism of the directors

To enhance the effectiveness of corporate governance, NANPAO arranges regular training courses for directors and assists them in keeping abreast of the development of relevant regulations at home and abroad.

2. Focusing on compliance with regulations

Encouraging employees to actively participate in professional courses held in Taiwan or other countries, to stay up-to-date with the latest legal and policy changes, and to keep abreast of the latest developments in various legal fields.

3. Determination to combat corruption

To achieve the sustainable development of the supply chain, suppliers must sign the "NANPAO Supplier Code of Conduct" and make commitments and actions against corruption and bribery at external events such as contractor conferences and briefings. The company's website also provides a complaint channel for stakeholders.

4. Strengthening compliance with regulations and risk management in subsidiaries

Through regular review and revision of important regulations such as the Code of Ethics and Rules of Conduct, all subsidiaries are required to adhere to the principles of ethical management.

5. Deepening education and training on ethical management

Starting in 2022, NANPAO provides various education and training courses on ethical management, corporate governance, and legal knowledge through its internal website and the "NANPAO e-Academy" platform to deepen employees' awareness of compliance.

6. The implementation and execution of ethical management initiatives in 2022 were reported to the board of directors on August 10, 2022.

Multiple Reporting Channels

Our company has established an "Internal and External Personnel Reporting and Handling Procedure" and set up a stakeholder communication section on our company website. Stakeholders can use the communication channels provided to provide suggestions and file complaints to our company. After receiving feedback, our company's relevant units will investigate and handle the matter accordingly.

Our colleagues can also provide suggestions through our company's "Suggestion Box".

We encourage employees or stakeholders to report any suspicious or illegal behavior within our organization or with our trading partners, including but not limited to :

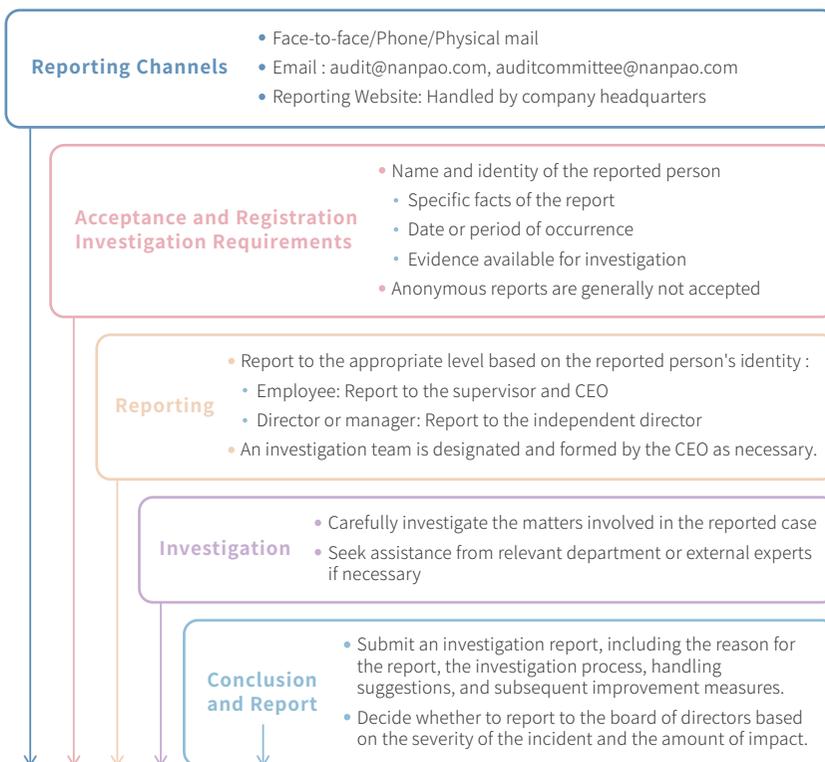


To strengthen the whistleblower mechanism and the connection with the board of directors (independent directors), our company amended the "Internal and External Personnel Reporting and Handling Procedure" during the board meeting on December 22, 2021. We have also set up a reporting channel that forwards whistleblower letters to the independent directors.

Reporting Channels

- **Letter** : No. 519, Zhongshan Road, Xigang District, Tainan City, addressed to the Audit Supervisor.
- **Email** : 1. audit@nanpao.com
(The recipient is the Audit Supervisor, and the email will also be automatically forwarded to the independent director's mailbox.)
2. auditcommittee@nanpao.com (recipient : Independent Directors)

Complaint and Whistleblowing Mechanism



2.3 Strengthening Risk Cultural Awareness

The objective of risk management is to prevent operational disruption, enhance customer service quality and increase shareholder interests. Furthermore, risk management is an effort that seeks to contain risks produced by various functions within a manageable scope and achieve the goal of managing risk and generating reward to a reasonable level whilst ensuring capital adequacy. As such, risk management is able to serve as a reliable support for operational development. Therefore, to effectively identify, measure, oversee and control various risks, NANPAO upholds the principle that "no operational process is above risk", which is the most important underlying principle of risk management.

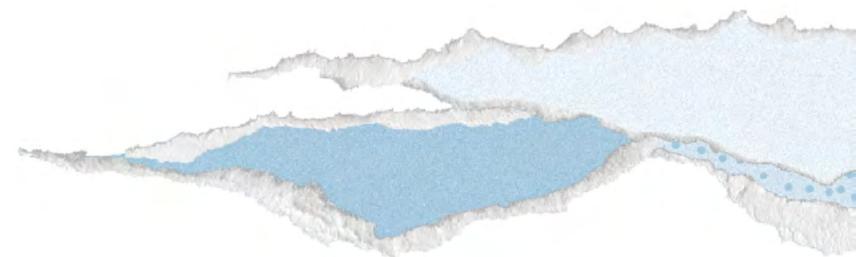
Risk Management Policy and Procedures

NANPAO has established "Risk Management Policy and Procedures" which is approved by the Board of Directors by resolution and serves as the highest guiding principle for risk management. From 2021 onward, risk assessment is performed regularly each year, whilst different risk management policies are formulated and implemented to mitigate different risk type, covering management goals, organizational structure, accountability and risk management procedures. Furthermore, effective identification, measurement and mitigation of various risks must be performed to contain risks produced by various business activities within a manageable scope.

Scope and Organizational Structure of Risk Management

To implement checks and balances of risk management, the Company consolidates and manages different types of strategies, and potential operational, financial and hazardous risks by establishing corporate risk management procedures. The objective of the exercise is to provide appropriate risk management for all stakeholders, assessing the frequency of risk event occurrence and the severity of impact on the Company using a risk matrix, delineating the order of priority of different risks and risk levels, and undertaking the corresponding risk management strategy according to risk levels.

The Company starts off from three risk issues of concern pertaining to ESG to further identify risk items. The main scope of risk management includes four aspects, namely "environmental safety", "information security", "legal compliance", and "corporate governance".



In 2021, the Company had consolidated various risk management units and established "Risk Management Task Force", which is under the purview of the Board of Directors. The CEO serves as the convener of Risk Management Task Force. The highest executive of each functional unit serves as member of the task force. Each functional unit regularly undertakes identification of risk items and risk control. Each year, the task force regularly reports on the risk assessment results and operation of risk management of the preceding year to the Board.



Emerging Risks and Response

In line with the principles of sustainable development, NANPAO annually refers to the World Economic Forum's "Global Risks Report" and MSCI's annual "ESG and Climate Trends Outlook Report" to identify emerging risk areas. The core management unit discusses and confirms the industry environment background, risk assessment, and executes risk disposal and monitoring to identify and control emerging risks. The group also examines risk issues and devises risk mitigation measures that the organization faces operational impacts and challenges.

Emerging Risks in 2022	 Energy Management and Alternative Energy Risk	 Information Security Risk	 Key Talent Risk
 Description	Climate change has intensified, and global efforts are underway to reduce greenhouse gas emissions and achieve carbon neutrality by 2050.	There has been a significant increase in cyber-attacks and ransomware incidents against governments and businesses worldwide.	Due to the COVID-19 pandemic and international geopolitical tensions, there is an increase in demand for semiconductors, which has led to a decrease in hiring for other manufacturing industries and increased recruitment difficulties.
 The potential business impacts	International laws are increasingly being enacted to require carbon-emitting sectors to pay carbon fees, acquire zero-carbon emission through carbon trading, reduce total emissions, or adopt green energy due to the intensifying climate crisis.	This can potentially cause serious operational risks as production and data confidentiality are affected.	Near the Southern Science Park, a semiconductor cluster, recruiting entry-level workers has proven to be challenging. In recent years, there has been an active effort to enhance salary and benefits packages, as well as to introduce foreign labor to mitigate the impact.
 Adjustment Action	Develop greenhouse gas reduction plans, continue to establish solar power systems in subsidiary factories, and plan for carbon cost calculation.	Establishing a Cybersecurity Committee and formulating an Information Security Policy, the "Information Protection Task Force" comprising units from both the Taiwan factory and overseas subsidiaries utilizes a management cycle mechanism based on PDCA (Plan-Do-Check-Act) to review the applicability of information security policies and protective measures. This ensures the achievement of reliability objectives and continuous improvement.	Establish a talent database, implement retention plans for important talents, implement employee trust shareholding plans, and conduct campus recruitment.

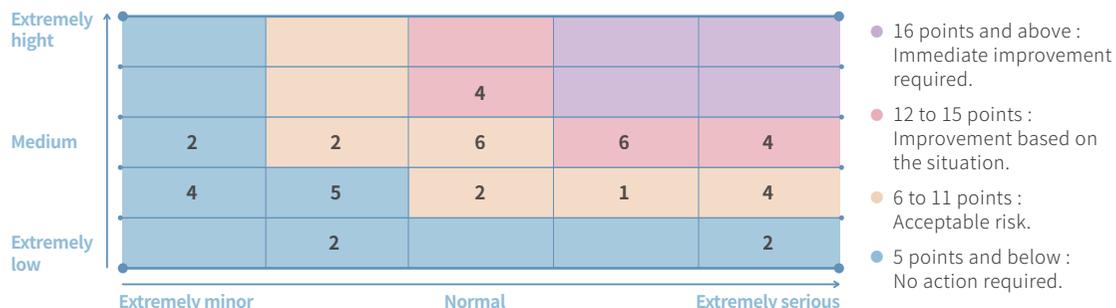
Risk Categories and Identification

NANPAO conducts an annual risk assessment to identify potential risk factors. In 2022, the responsible units confirmed a total of 44 risk factors, which were categorized into 22 distinct risk categories as follows :

Risk Issues	Potential Risks
Operational Risks	<ul style="list-style-type: none"> Inadequate Power or Water Supply : 2 items Gas or Air Pollution Leakage : 2 items Abnormal Waste Disposal : 2 items Chemical Spills : 1 item Supply Chain Disruptions: 6 items Product Labeling : 1 item Human Resources Management : 2 items Violation of Ethical Business Policies : 6 items Fire Hazard : 1 item Employee Health and Safety : 2 items Carbon Tax Imposition : 1 item Customer Order Adjustments : 1 item
Legal Risks	<ul style="list-style-type: none"> Legal and Regulatory Compliance: 1 item Human Rights Management: 2 items
Information Security Risks	<ul style="list-style-type: none"> Information Leakage and Security : 3 items Inadequate Computer Software and Hardware : 1 item
Financial Risks	<ul style="list-style-type: none"> Company Business Credit : 2 items Financial Liquidity : 4 items Market or Exchange Rate Interest : 1 item
Product Risks	<ul style="list-style-type: none"> Chemical Labeling Non-compliance : 1 item Human Error : 1 item
Technical Risks	<ul style="list-style-type: none"> Inadequate Technical Expertise : 1 item

Risk Matrix Chart

After identifying 44 risk factors, the distribution of risk coefficients is shown in the following table.



After the assessment in the year 2022, there were no items requiring immediate improvement. However, items that were identified for improvement based on the situation have had mitigation measures proposed by the responsible units. The effectiveness of the annual review plan will be evaluated according to the actual circumstances.

Risk Items for Improvement Based on the Situation	Mitigation Measures
Delayed New Product Development	<ul style="list-style-type: none"> Collaborate with customers quarterly to align with their needs and adjust the direction of new product development based on marketing insights. Engage in discussions and testing with external partners on a quarterly basis to refine and adjust the development direction.
Supply Disruption	<ul style="list-style-type: none"> Implement investigations into the origin of suppliers and secondary suppliers. Maintain a list of at least three suppliers for each type.
Foreign Exchange Rate	<ul style="list-style-type: none"> Implement risk-neutral strategies by incorporating exchange rate fluctuations into routine financial decisions. Execute natural hedging through foreign currency financing.
Spread of Infectious Diseases	<ul style="list-style-type: none"> Implement various prevention and control measures, and mandate vaccination. Enforce the wearing of masks for external personnel before entering the premises. Whenever possible, limit the entry of external individuals to the premises unless essential.

In order to mitigate potential environmental impacts, personnel injuries, and property losses resulting from unforeseen accidents, an "Emergency Response Plan" operational procedure has been established. This plan encompasses procedures for handling emergency events such as toxic gas leaks, fires, odors, chemical spills, earthquakes, natural disasters, and power outages. The Occupational Health and Safety Office is responsible for conducting emergency response training within the facility. Regular drills are conducted to familiarize personnel with emergency response measures, reporting procedures, and command systems.

2.4 Conflict of Interest

NANPAO has included provisions related to directors' conflict of interest in both the Board of Directors Meeting Rules and the Audit Committee Organization Regulations. In cases where a director has a vested interest in a meeting agenda item, either personally or as a legal representative, they are required to disclose the essential details of their conflict of interest during the board meeting. If there is a potential harm to the company's interests, they are prohibited from participating in the discussion and voting on that matter. Furthermore, they must abstain from discussions and voting and are not allowed to represent other directors in exercising their voting rights.

The company has established independent directors who provide recommendations from an objective and impartial standpoint based on their expertise and experience. When the board discusses any agenda item, due consideration is given to the opinions of independent directors. Their agreement or disagreement, along with the reasons for their stance, is recorded in the meeting minutes, ensuring compliance with conflict of interest principles and effectively safeguarding the company's interests. Additionally, there are no instances of board members holding cross-shareholdings with major suppliers. The company also has a spokesperson system and maintains a corporate website as a communication channel for various company information dissemination. An investor relations mailbox is also in place to handle shareholder suggestions and inquiries by professional staff.

Under the high ethical standards and integrity mechanisms of the board of directors, NANPAO has not experienced any conflicts of interest events since its establishment.

Note 1: For information regarding directors' abstentions from conflict of interest matters, please refer to the 2022 Shareholders' Meeting Annual Report.

Note 2: For information on directors' concurrent positions, please refer to the 2022 Shareholders' Meeting Annual Report.

Prevention of Insider Trading

NANPAO has established a "Management and Operation Procedures for Preventing Insider Trading and Handling of Significant Internal Information" that clearly stipulates that directors, managers, and employees shall not engage in any activities that involve insider trading or take advantage of market information asymmetry to profit. NANPAO values the rights of shareholders and strictly complies with relevant regulations on information disclosure. The company frequently and promptly provides information to shareholders on its financial, business, insider shareholdings, and corporate governance situations through public information observation stations or the company's website.

Directors, managers, and employees are prohibited from disclosing significant internal information to others and from asking or collecting company undisclosed internal information unrelated to their job responsibilities from individuals who have knowledge of significant internal information. They are also prohibited from disclosing internal information that they have learned through means other than carrying out their job responsibilities to others. At the same time, insiders are prohibited from trading securities with material non-public information. In the "Management and Operation Procedures for Preventing Insider Trading and Handling of Significant Internal Information," it is clearly stated that directors are prohibited from trading the company's issued securities they hold during the thirty-day period prior to the announcement of the annual financial report and the fifteen-day period prior to the announcement of the quarterly financial report. The directors were informed of the above information via email on October 24, 2022.

Legal Compliance

NANPAO seeks to ensure that its business activities are compliant with relevant regulations. To ensure the implementation of legal compliance, we shall consistently pay attention to any domestic or overseas policies and regulations that may affect the operation of the Company and foster a corporate culture that enshrines and deepens legal compliance into each and every location of operation. The corporate governance officer and legal department assist Directors in legal compliance and supervision of legal compliance operation of subsidiaries so that relevant operating activities are compliant with regulatory requirements. Furthermore, adoption of control mechanism for legal compliance risk in risk management evaluation shall assist the assessment of potential legal compliance risk exposure of relevant operations. Meanwhile, the Company requires all subsidiaries to make timely report on punishment imposed for failure to observe regulations. Afterward, legal compliance and audit departments shall require subsidiary in question to propose improvement measures and supervise the implementation so as to strengthen the corporate governance system. For domestic regulations, "Securities and Exchange Act", "Securities Investor and Futures Trader Protection Act", "Labor Standards Act", "Enforcement Rules of the Occupational Safety and Health Act", "Regulations on Occupational Safety and Health Management", "Air Pollution Control Act Enforcement Rules" and "Trade Secrets Act" are the main focal statutes for legal compliance, which are adopted and utilized for amendments made to internal regulations after evaluation. Education and training are also conducted to further enable Directors, Managers or employees of NANPAO and its subsidiaries to gain more understanding in abiding the relevant law and regulations. In 2022, the Company had ensured the compliance with the Company Act, Fair Trade Act and other important regulations pertaining to corporate governance and public firms. No violation of the aforementioned regulations was noted. For all legal compliance items pertaining to operation, the Company aims to have zero punishment.

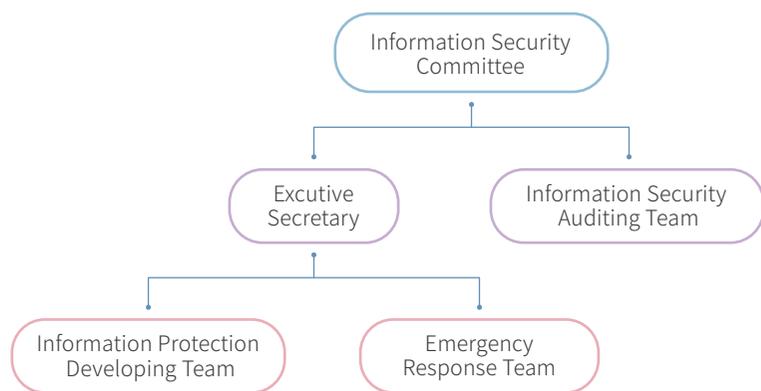
2.5 Information Security Management

NANPAO is committed to promoting digital transformation and fully implementing information security management mechanisms to ensure the accuracy and availability of information processing, as well as the security of information-related systems, equipment, and networks. Regular internal drills and education and training on information security are conducted to enhance colleagues' awareness and vigilance regarding information security and ensure the security of customer and product information. To fulfill the requirements of the ISO 27001 Information Security Management System, the company focuses on process regulations, legal compliance, personnel training, and technology application to enhance the security and protection capabilities of data, information systems, equipment, and network communication. This effectively reduces the risks of information asset theft, misuse, leakage, tampering, or destruction caused by human error, intentional or natural disasters, and ensures the commitment to shareholders and customers, achieving the purpose of ensuring the sustainable operation of the company's business. The "NANPAO Information Security Policy" is established as the highest management basis, and the "Information Security Committee Organization Regulations" are formulated. The company continues to pay attention to information security issues and plans to respond and strengthen security protection software

and hardware procurement, including updating new anti-virus software, establishing a global security network for joint protection, upgrading internal operating systems, and fixing vulnerabilities. The confidentiality, integrity, and availability of important assets are maintained to ensure the safe operation of information systems, equipment, and networks and achieve the purpose of sustainable management.

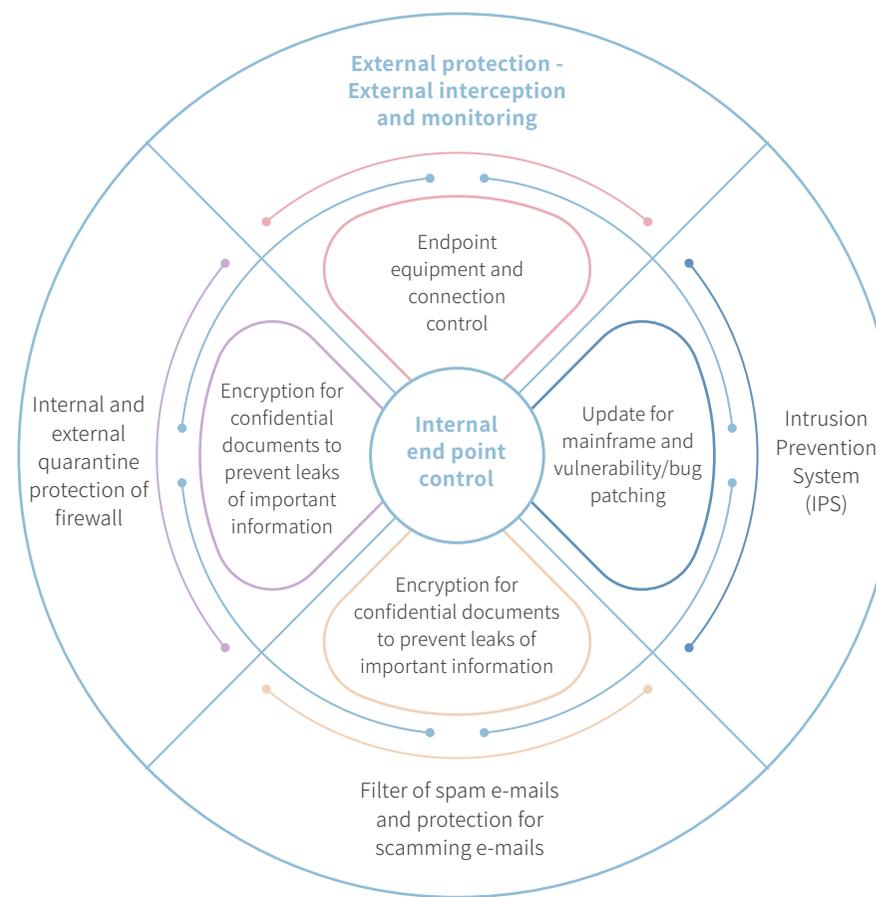
Information Security Committee and Dedicated Units

Since 2022, the headquarters of NANPAO has adopted ISO 27001, i.e. certification for information security management system, to strengthen the awareness for information security and implement prevention, correction and improvement measures generated from audit work. Furthermore, the Company has established Information Security Organizational Framework, in which Ming-Hsien, Hsu (CEO) serves as the designated Director for information security, and Pei-Yi, Kuo (Assistant Manager) serves as head and executive secretary of information security. Whereas, internal audit unit comprises Auditing Office and other members, and takes charge of producing audit report and following up on improvement status.



To effectively implement information security management, the Information Security Committee has established the "Information Protection Developing Team" which includes units from Taiwan and overseas subsidiaries. The team follows the management cycle mechanism of planning, executing, checking, and taking action (Plan-Do-Check-Act, PDCA) to review the applicability of information security policies and protection measures, ensuring reliable achievement of goals and continuous improvement. The company continuously introduces innovative technologies for information security defense and integrates information security control mechanisms into daily operations. The company systemically monitors information security to maintain the confidentiality, integrity, and availability of important assets, ensuring secure operation of information systems and networks, and achieving sustainable business objectives.

Information Security Protection Map



3. INNOVATION AND SERVE

3.1	Innovation Capacity	37
3.2	Business Units and Technology Core	39
3.3	Accountable Chemical Management	44
3.4	Good Customer Relationship	46



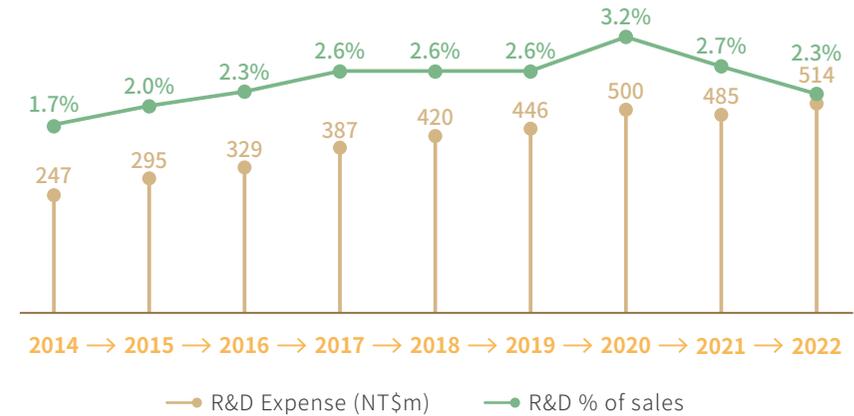
03 Innovation and Serve

3.1 Innovation Capacity

In 1971, NANPAO established "NANPAO R&D Center", whose objectives are to consistently achieve breakthroughs, innovate and proactively conduct R&D, integrating R&D talents and resources to accelerate the development of new, high value-add products, strengthening competitive advantage, creating new value for the Company, promoting the position of NANPAO as a high-tech adhesive company and marching toward the mission of becoming a leading global enterprise.

Afterwards, the institute was restructured into R&D & Innovation Division. Currently, the R&D & Innovation Division consists of five research and development departments, bringing together 320 talented research and development professionals. Among them, the "Polyester Polyol R&D Technology Department" focuses on the synthesis and application technology of polyester polyols made from recycled PET bottles, aiming to develop high-end functional materials. The center also continues to expand its research and development in green and environmentally friendly materials, high-performance chemicals, and other new products and technologies. In the short term, the main research direction and goal are high-performance and low-carbon chemicals, utilizing the polymer synthesis and application technology accumulated by NANPAO as the cornerstone, continuously enhancing the value-added industries.

R&D Investment



Innovative development section



Adhesives R&D section



Footwear R&D section



Coatings and materials R&D section



Polyester polyol R&D technology section

R&D Collaboration Performance

In order to achieve sustainable economic development goals, the R&D & Innovation Division actively collaborates with external research organizations, combining its own expertise with that of external professional units. Through this collaboration, the center aims to jointly develop bio-based products, high-performance products, and more, in order to enhance academic and industry exchanges and share resources. This collaboration also fosters technological innovation and talent development, creating a win-win cooperation among businesses, schools, and research institutions.

R&D Collaboration Performance Collaborating in 2022	Synthesis and Application of Low-Carbon Bio-based Resins	Stability of DM-629MDS Process	Development of UV-dissolvable Oil-based Pressure Sensitive Adhesive
Partner	Industrial Technology Research Institute	Department of Chemical Engineering, National Cheng Kung University	Japanese Technical Consultant
Focus	By leveraging the analytical techniques, testing equipment, and vendor resources of the Industrial Technology Research Institute (ITRI), we have connected upstream, midstream, and downstream manufacturers in the industry chain, accelerating the acquisition of special raw materials and the on-machine testing process for end products. This significantly shortens the timeline for innovative product development.	By utilizing nuclear magnetic resonance (NMR) analysis techniques for molecular structure analysis, we identified the causes of product abnormalities based on the NMR analysis results. This serves as the basis for improving the production process.	The consultant provided information on Japanese patents, allowing NANPAO to understand the manufacturing method for UV-dissolvable adhesives. The company then used its existing formulations to adjust and create adhesives with different properties.
Performance	Bio-based raw materials vary in their carbon content, with most having higher prices, while a few, such as wood cellulose, have lower prices. This collaboration allows NANPAO to understand the types and characteristics of bio-based materials, as well as their contribution to sustainable environmental health.	By combining the analytical techniques, testing equipment, and vendor resources of the Department of Chemical Engineering at National Cheng Kung University, we expedite the acquisition of special raw materials in the front-end and the on-machine testing process for end products, significantly shortening the timeline for innovative product development.	By combining the company's testing equipment and coating vendor resources with the on-machine testing process of downstream electronics manufacturers, the timeline for innovative product development was significantly shortened.
Value	By utilizing NANPAO's expertise in resin synthesis and coating formulation design, we incorporate bio-based resin derivatives into related products, enhancing product performance and added value.	If we eliminate factors such as recycling and contamination, the yield of DM-629MDS can be improved to 100% and extended to various product lines, enhancing product performance and added value.	In a short period, suitable materials and methods were identified, and on-site trial production was completed, reducing unnecessary research and development costs. Applied in the electronic wafer industry, it increased product selling prices and gross profit.
Result	NANPAO has applied for the Taiwan patent (I509034). Various bio-based materials are applied in products such as bio-based polyol, polyurethane dispersion (PUD), polyurethane (PUR), polyacrylate, PU foam, and hot melt adhesive (HMA).	Based on clear analytical evidence, we can conceive improvement plans, conduct experimental verification, and enhance process know-how, ultimately improving product competitiveness.	Based on the consultant's patent, different UV-dissolvable products with various properties were developed, such as SD-488, 5680, and 5987.°
Sales in 2022	-	Sales volume: 1,427,742 kg.	Total sales in 2022 amounted to NT\$145,600.

Process Innovation

NANPAO is committed to green innovation and quality improvement in production process technology, aiming to minimize resource usage. Continuous process improvements are implemented for key products to reduce labor and energy consumption.

Process improvement projects in 2022 include :

Product	Process improvement	Revenue in 2022
WR-17	After the process improvement, the equipment was changed to a three-axis mixer, which greatly improved dispersion efficiency. The thickening process, which used to take about 1 hour, can now be shortened to 15-30 minutes. During packaging, the entire reaction kettle can be removed from the mixing equipment, allowing another reaction kettle to continue production. The removed reaction kettle is moved to a physical pressurization device for packaging. Since there is no gap between the pressurization device and the kettle wall, residual glue on the kettle wall can be scraped off during pressurization. The high pressure applied significantly reduces packaging time, increases productivity (approximately 98%), and reduces wastewater during tank cleaning. The original process required three working days from feeding to packaging a batch, while the new process can complete three batches in a maximum of one working day.	Manpower cost savings amount to approximately NT\$260,000 , and the increased profitability from improved productivity is about NT\$1,035,000 .
DM-629MDS	The new process uses a high-temperature reducing agent that allows oxidation-reduction to take place without the need for cooling, thereby reducing high-temperature cooling time (especially for high-viscosity products). Actual tests have shown a reduction in process time by approximately 1.5 to 2 hours, resulting in a process time reduction of about 16%.	Manpower cost savings amount to approximately NT\$48,000 .

3.2 Business Units and Technology Core

Footwear and sportswear R&D and Business Unit

Endorsement and Awards from a Globally Renowned Sports Brand
Recognized as the Preferred Supplier for a Global Sports Brand
 Consecutively awarded Best Adhesive Supplier by a Global Sports Brand for two years.

Sportswear

- Bio-Based
- Recyclable
- Low/Zero VOC

Opportunities in Bio-based and Recyclable Products

PU Foam Insoles

First bio-based PU Foam Insoles

NanPao has developed biomass materials with lignin extract from liquid waste produced during paper manufacturing. The biomass materials provide high support and low elasticity, which can also achieve negative carbon emissions.

Footwear Additives

We are developing eco-friendly, carbon-negative footwear additives, replacing fossil-based materials with nature-based materials.

Textile Adhesives

NanPao has recycled derivatives of carbon dioxide as raw materials. The materials provide great softness and breathability.

Footwear Adhesives

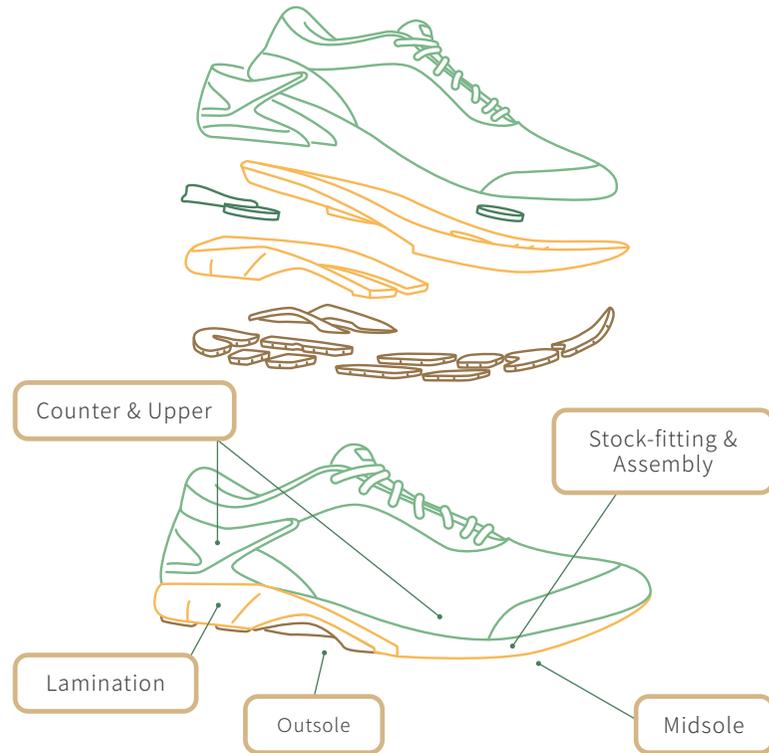
Currently, 75% to 80% of NanPao footwear adhesive products are low-VOC or zero-VOC.

As one of the top three footwear adhesive suppliers, the main customers of the Company are mostly top sportswear brands. The footwear adhesive products of NANPAO are not only eco-friendly, but also more applicable for various traditional and high-tech materials. Furthermore, the Company is able to perform customization according to customer requirements, e.g. automation technology of applying footwear adhesive onto the outsole. Apart from footwear adhesive with

stable composites and constituents, the Company also provides products with low viscosity and without organic solvent. NANPAO has a powerful R&D team that is able to work together with a highly responsive technical service provision team. As such, NANPAO is able to stand out from many competitors in the industry.

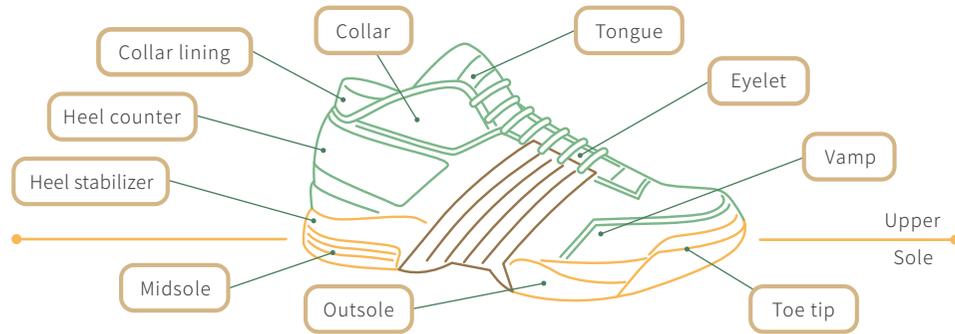
In response to the rapidly changing market demands and the continuous rise in labor costs, the footwear industry is shifting towards process innovation and optimization trends, such as process streamlining, rapid production, and automation. Our company is dedicated to innovative research and development of adhesive solutions for the new process lines in the sports footwear industry.

Through long-standing understanding with our brand and footwear manufacturing customers, whenever they require the use of new materials, process optimization, overcoming bottlenecks, or finding stronger adhesive solutions for new shoe designs, they turn to NANPAO during the design stage for joint discussions and development. This is why we continue to receive more orders and enhance our overall market share in the sports footwear adhesive industry.



The key parts of an athletic shoe that require footwear adhesive are as follows :

Most athletic shoes have at least 20 spots that require footwear adhesive. The materials for each pair of shoes have their own unique properties and requirements for malleability, air permeability, waterproof property, exterior, shock resistance and elasticity. Before applying footwear adhesive, the shoes also require the treatment of cleaner and primer, and sometimes, hardener. We are able to provide exclusive and comprehensive footwear adhesive solution for each shoe model.



Adhesive R&D and Business Unit

Consumer Goods

- Bio-Based
- Low/Zero VOC
- High Performance

High Performance and Bio-based for Sustainable Life

Non-Woven Adhesives

Leading Supplier of local Tier-1 Diaper Brands in Mainland China

We have developed high wet-strength adhesives to extend diaper durability even after wetting. NanPao ultra-soft adhesives for the elastic band and diaper outer surface provide greater comfort, remaining soft to the touch in both cold and warm weather.



Paper Coating
Plastic free paper coating can make paper cups and paper containers completely recyclable and reusable.

Paper Labels Lamination
Bio-based hot melt adhesives used for paper labels lamination of metal cans.

Woodpow®-Woodworking Adhesives
Our woodworking PUR adhesives are solvent-free, with great heat and moisture resistance and high bonding strength, which enables safer and more sustainable furniture.

Industrial & Tech  Eco-Friendly  Low/Zero VOC  High Performance

Efficient and Eco-Friendly Solutions in High Demand

  **PSA for LCD Polarizer Plate and Touch Panel**

High temperature and high humidity resistance. Acid free design which enables low corrosion and low pollution design for ITO film.



 **UV Tape for Semiconductor**

Breaking into semiconductor supply chain



UV Tape is for semiconductor process to protect surface of wafer during backgrinding process and to hold wafer with ring frame during dicing process.

With UV irradiation, the tape can be easily peeled from the wafers, which help improve production efficiency.

 **Automotive Adhesives**



NanPao has developed water-based adhesives products (low/zero-VOC) for car interior such as carpets, leather seats etc.

Sportswear adhesive has always been NANPAO's strength. Apart from adhesive applying to athletic shoes, 30% of the basketballs in the world are made using our adhesive. In Japan, 50% of the baseballs are also made with NANPAO's adhesive.

Looking forward, one of the products that we shall focus on is adhesive for functional fabric of sportswear. Meanwhile, the global adhesive market for non-woven, flexible packaging materials, tapes and labels is comparable to the footwear adhesive market. To accelerate growth and increase profitability via economy of scale, we adopt the Golden Sample in relation to these products to search for star products that meet the three following requirements and accelerate growth :



1. Market demand for application is strong
2. R&D team is able to develop product with top grade functionality
3. The product can be manufactured in a more cost effective way

Main applications of adhesive products :



Flexible packaging materials



non-woven



tapes



woodwork



textile

Coatings and construction materials R&D and Business Unit

Coatings & Construction  Low/Zero VOC  High Performance

Pursuing Home Efficiency and Living Comfort



 **Powder Coatings for Tap Water Pipes**

The First Solution Provider in Taiwan

Preventing the pipes from leaching chemical substances into tap water. Making drinking tap water safer and provide better quality and more sustainable water in Taiwan.

 **Insulating Glass Sealant**

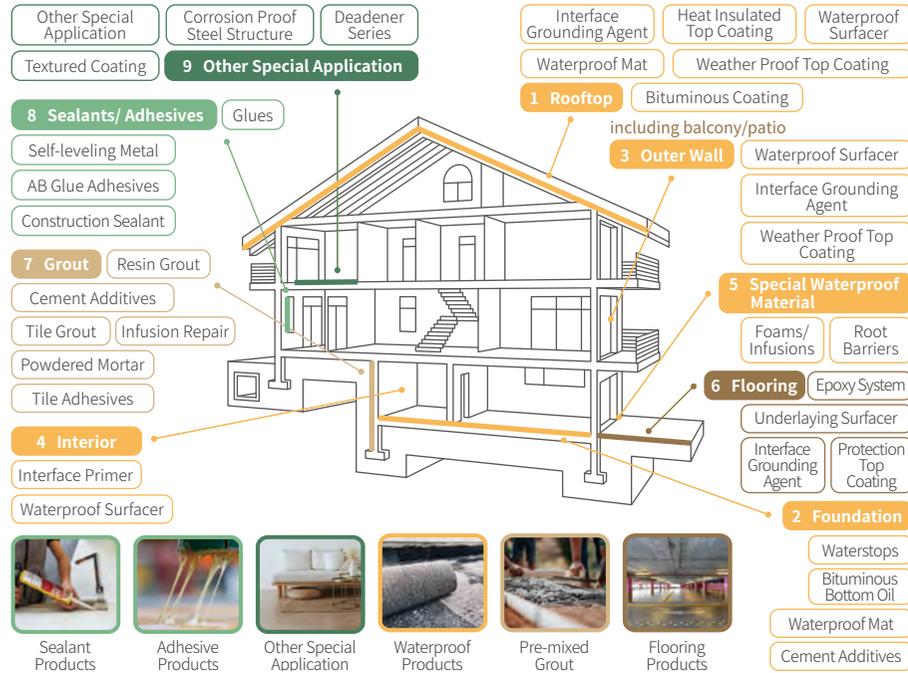
Resistant to sunlight, extreme weather and moisture, improving energy efficiency for buildings.

Our initial and only goal for development is to assist customers and the vast market to gain an understanding of construction chemicals further, to apprehend how to utilize highly efficient and latest innovative products to optimize their own business value and create limitless business opportunity.

The product domain includes liquid and powder coating, sealant, adhesive, and flooring and waterproof materials for professional providers. The business office also provides customers usage recommendation and consultation services on construction chemical materials. Apart from providing chemical professional services and technical support, the business office has also fostered long-term strategic partnership with key strategic team from Europe, Australia, and the US.

The demand for environmental protection is a major driving force behind the development of powder coatings. In the mainstream market, there is a search for methods to reduce the volatile organic compound (VOC) content of products, leading to the substitution of solvent-based coatings with powder coatings in industrial production. Powder coatings have low VOC

content, are easy to clean, and overspray can be recycled. New water-based wood coatings have become a trend in the industry, replacing old wood coatings that used formaldehyde and solvent-based paints with unpleasant odors that are not environmentally friendly. The development of formaldehyde-free and non-hazardous environmentally friendly coatings will become a mainstream trend in the industry.



Innovative Development Section

The Innovation and Development Department aims to provide technological solutions for replacing new materials and solving process problems to help our customers achieve their environmental and carbon reduction goals, benefiting the environment and society together.



Climate Change/Circular Economy Series :

With the core principles of Replace (replacing petroleum-based materials), Recycle (recycling and regeneration), and Reduce (reducing resource consumption), we develop products that mitigate climate change.

By substituting existing petrochemical raw materials with bio-based materials in the production of water-based acrylic resins, we not only maintain their basic properties but also achieve ecological friendliness and sustainable development. We also design formulations according to the specific requirements of our customers to efficiently meet market demands.



Environmental Protection and Low Environmental Impact Series :

We develop various Eco-friendly products, such as water-based, solvent-free, and non-phenol products, or products that minimize process pollutants' emissions, reducing negative impacts on the environment.

Polyester Polyol R&D Technology Section

Introducing the industry's polyester material recycling supply chain and utilizing water-based co-polyester resins in polyester fiber substrates can enhance functional industries. This is a future trend in the circular economy.

By adopting recycled PET bottles, which are cleaned and sliced, to produce recycled PET-based polyols, they can serve as raw materials for water-based polyurethane (PU) products. This not only reduces the dependency on petroleum for polyester but also minimizes resource consumption and promotes resource recycling.

Transforming recycled PET bottles into high-performance polyester polyols can be applied as raw materials in water-based PU. When applied in textile products, it can provide stiffness to garments. If used in foam materials, such as chair cushions, it can offer comfort and softness.



Products that comply with ZDHC's zero discharge of hazardous chemicals and bluesign® international environmental requirements.

Ø ZDHC
CONTRIBUTOR

bluesign
SYSTEM PARTNER

By utilizing synthetic resin polymer synthesis technology and structural design, harmful substances and hazardous materials are eliminated and managed. In addition to providing functional performance that meets product applications, the core technology also reduces the harm of human exposure and environmental impact, ensuring consumer safety.

Currently, NANPAO has obtained bluesign® non-toxic certification for 20 textile products, including textile foam coatings, lightweight windproof coatings, abrasion-resistant high-strength bag materials, water-based PU for lamination, formaldehyde-free water-based acrylics, PUR adhesives for fabrics/films, fluorine-free water repellents for dyeing and finishing, and moisture-wicking and quick-drying agents for enhanced breathability.

To accelerate the management of chemical substances in footwear products, factories in Foshan, Dongguan, Vietnam, Indonesia, and other locations have obtained the highest level 3 certification from ZDHC (Zero Discharge of Hazardous Chemicals) globally. The shoe chemicals supplied to renowned sports brands, accounting for 80% of the shipments, have also obtained level 3 certification, solidifying the leading role in the shoe chemical industry.

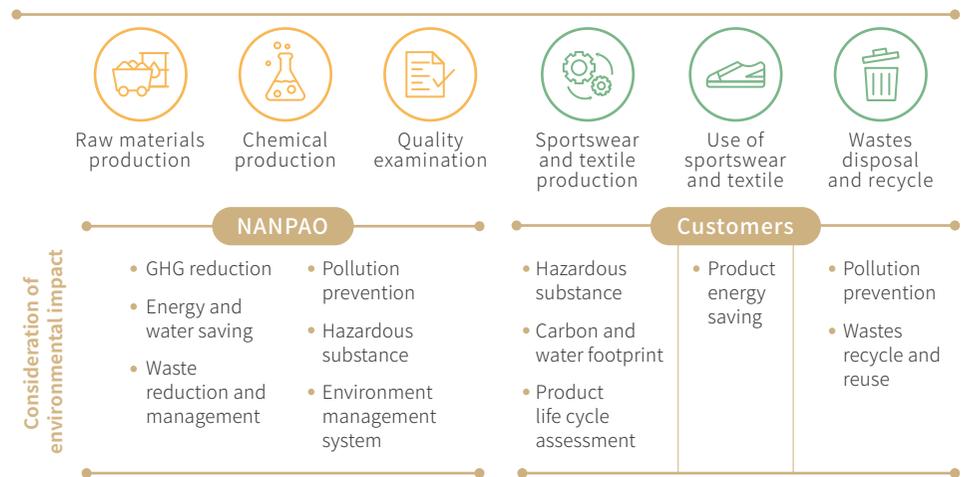
Production Process Optimization and Product Innovation

NANPAO is the leading adhesive maker in Asia. Apart from consistently optimizing and expanding the existing business, the Company also strives to increase its long-term competitiveness by putting in concerted effort in innovation and R&D, fostering green business opportunities with a circular economic mindset. The well-being of people is closely intertwined with ours, and the happiness of animals is equally important. NANPAO's products undergo rigorous research and development, and they are continuously applied in various industries. We are committed to ensuring that chemicals produced by NANPAO does not undergo animal testing. We utilize recognized alternative testing methods or existing data to demonstrate the effectiveness of adhesion.

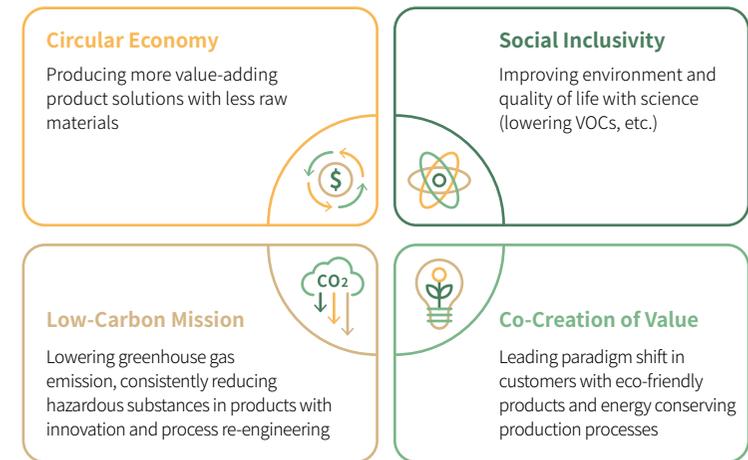
Product Life Cycle Assessment

The chemicals used in NANPAO's various manufacturing plants, except for solvents, are not directly associated with significant health or environmental impacts in products such as adhesives, coatings, building materials, carbon fiber, and others. For these regulated chemicals, we conduct comprehensive risk assessments and management throughout different stages of the chemical life cycle, including product development, manufacturing, transportation, storage, sales, use, and disposal. NANPAO considers the environmental impact of the product life cycle, including collaborating with customers on product development, raw material manufacturing and transportation, and product manufacturing and testing stages. In addition to focusing on managing hazardous substances, pollution prevention, and reducing resource consumption in the manufacturing process, we also require suppliers to prioritize environmental protection and continuously reduce the environmental footprint of chemicals.

Life Cycle Assessment (LCA) refers to the evaluation of the potential environmental impacts of a product or service throughout its life cycle, including raw material acquisition, manufacturing, distribution, sales, use, and disposal or recycling. Through LCA, companies can assess the environmental impacts of their products from "cradle to grave," considering various aspects such as global warming and ozone depletion. The assessment results can be applied to improve products, manufacturing processes, or services with the goal of providing environmentally friendly products or reducing resource consumption in the product manufacturing process.



NANPAO has completed the environmental footprint analysis of water-based adhesives in accordance with ISO 14067 life cycle assessment standard. The declaration unit is per kilogram, and an ISO 14067 verification statement has been obtained. The calculation results indicate that the majority of the environmental footprint comes from the raw material acquisition stage. In the future, there will be continuous efforts to expand the coverage of product life cycle assessment (LCA), establish operational procedures for conducting product life cycle assessments, provide training to employees through internal courses, and design low-carbon products by analyzing carbon hotspots and implementing improvements.



Low-carbon Chemicals

The company is committed to the trends of circular economy and ESG sustainable development, aiming to achieve sustainable business goals through the use of bio-based materials and recycled materials, contributing to circular economy, environmental protection, energy conservation, and carbon reduction. The bio-based materials we have developed can reduce carbon emissions by 5-80% depending on the bio-based content. Our product range includes bio-based PU foam cushions certified by the US USDA bio-based label, bio-based polyols applicable for PU foam and adhesive synthesis, bio-based shock-absorbing materials for insoles and midsoles, bio-based spray resin and adhesive for footwear, bio-based functional coatings for textiles, bio-based PUR for wood floor adhesion, and bio-based hot melt adhesive for food container labels.

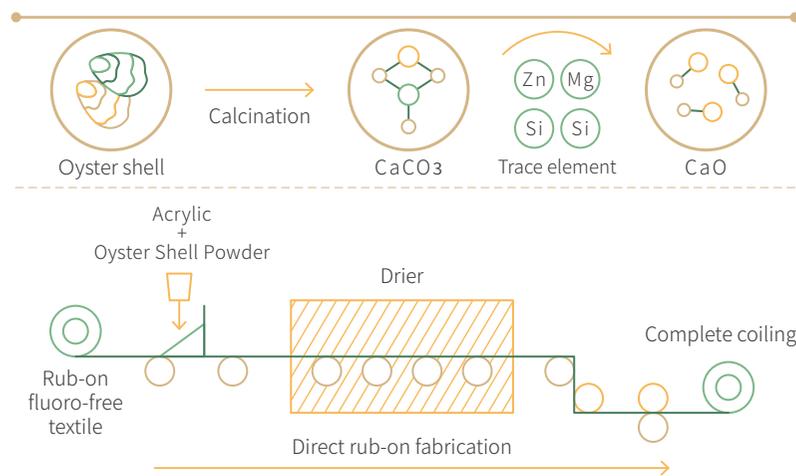
Furthermore, by incorporating recycled materials into our products, we have developed textile coating resins and heat transfer resins containing r-PET, floor coatings containing recycled wafer waste, and textile coating resins containing oyster shell powder, which can reduce carbon emissions by up to 26%. In response to

government initiatives to reduce plastic usage and to overcome traditional food container coating processes, we are dedicated to developing water-based non-plastic paper coating resins that provide water and oil resistance and can be fully recycled as paper after disposal, aiming to achieve multiple goals of plastic reduction, carbon reduction, and waste reduction.

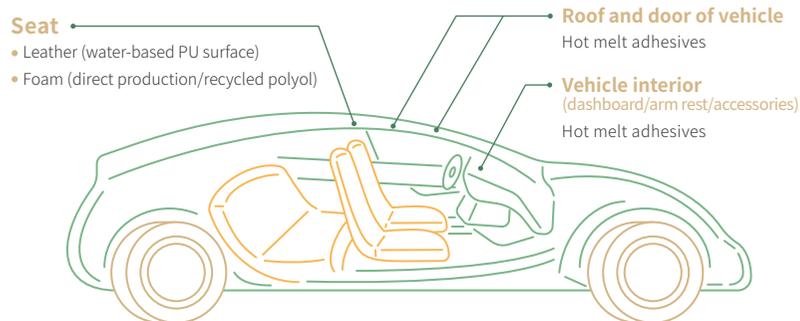
Existing Biomass Product Items :

Polyurethane dispersions (PUD), polyurethane resin (PUR), polyaluminium chloride (PAC), hot melt adhesives, polyurethane foam materials, ethylene vinyl acetate(EVA) foam and polyester polyol

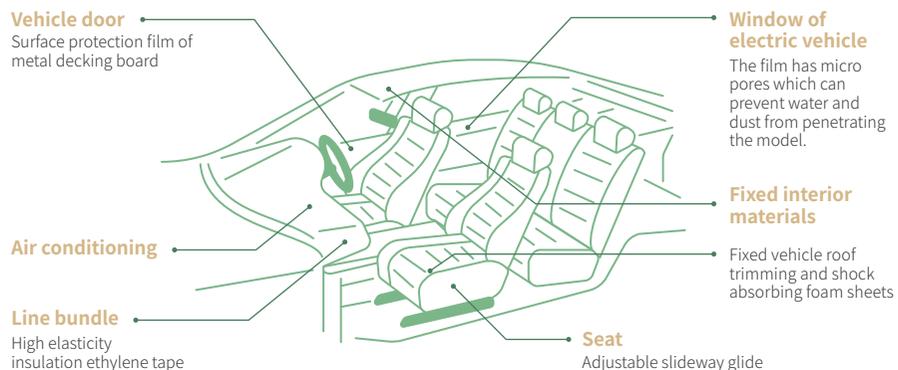
Acrylic Used in Textile Made with Oyster Shell Powder



Biomass and Eco-friendly Adhesive Application for Vehicles



Low Volatile Organic Compounds (VOCs) Double-sided Tape and Pressure Sensitive Adhesive

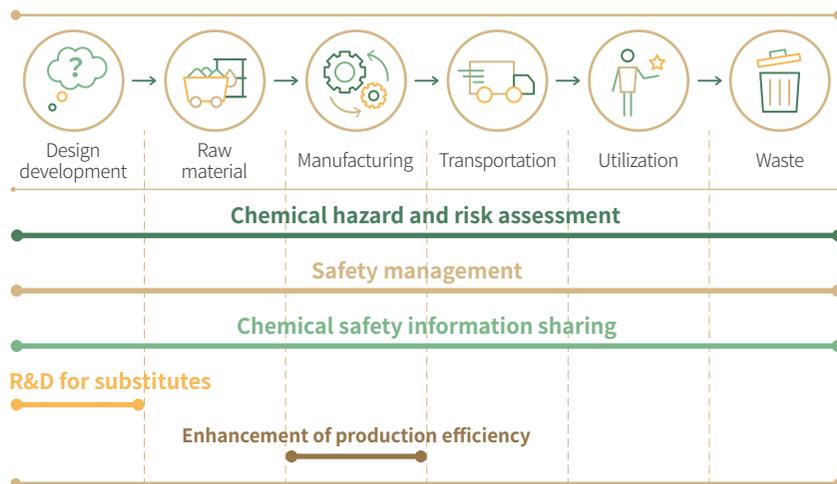


Application	Green product	Sustainability				Sustainability
		Biomass	Recycle	Water-based	Solvent-free	
Leather	Water-based PU resin for surface			○		Carbon reduction : >50% No greenhouse gas emission
Adhesives	Hot melt adhesives				○	VOC-free green products No greenhouse gas emissio
PU foam	Biomass polyol	○				Biomass content : 70% Carbon reduction : >50%
	Recycled polyol		○			Content of recycled material : 20-40% Carbon reduction : 20-40%
PU foam	Biomass PU foam (cushion)	○				Biomass content : 25-35%

3-3 Accountable Chemical Management

As part of the effort of the chemical industry in practicing principles that encourage eco-friendliness, and labor safety and health, as well as exhibiting the commitment to consistent performance improvement, chemical management has always been one of the core foundation of our development. We have adopted a product lifecycle mindset since the design and R&D stages, assisting customers in developing substitution products. In the product design stage, we avoid using chemical substances that have potential hazardous risk that may endanger human lives and health. We also strive to reduce the risk of employee exposure to chemicals.

Accountable Chemical Management Strategy



For factory management, the environment and occupational safety offices of the headquarters and various factories are important units for chemical management. "Chemical Management Procedures" has been established, whereby based on various stages of chemical lifecycle management, source control and management at adoption phase are undertaken. Furthermore, the utilization stage is the focal point of management within factories. Regulatory updates pertaining to chemical control promulgated by the competent authority are carefully monitored so as to catalogue the impacts on factories and discuss the response measures. This is to ensure the operation of various factories and relevant units meeting local regulatory requirements and protecting employee safety and health in utilizing chemicals. When products are delivered to customers, we also have the corresponding transportation and customer service departments. Apart from providing customers with the best technical service, we also seek to undertake chemical management and fulfil our sustainable beliefs.

GHS Classification of Chemicals

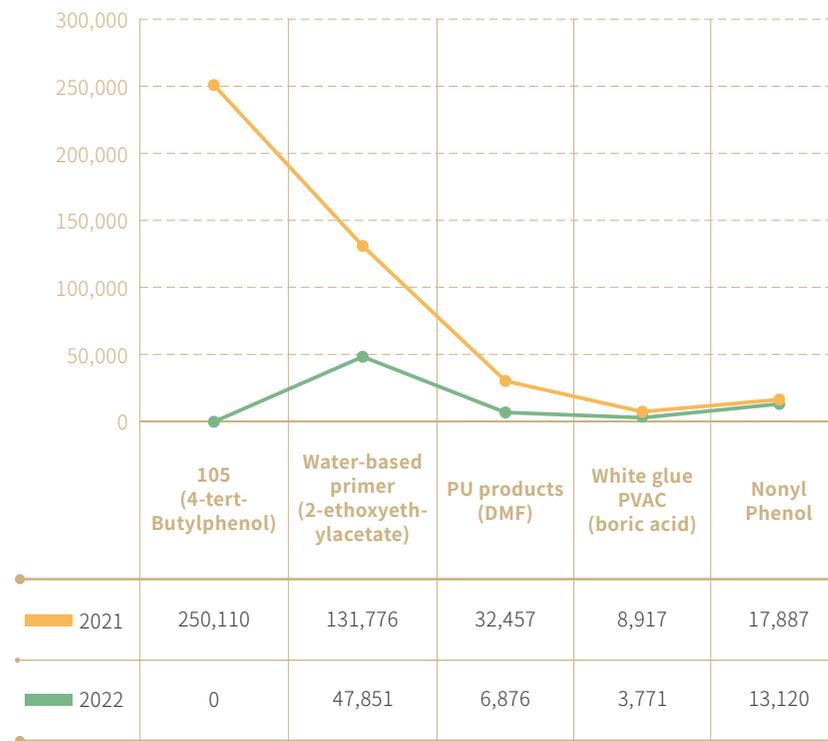
According to the United Nations' GHS system, the "Globally Harmonized System of Classification and Labelling of Chemicals" adopts an internationally recognized hazard communication framework to promote the safe use of chemicals and enhance protection of human health and the environment. It covers physical, health, and environmental hazards and provides workers with a more comprehensive understanding of chemical hazards in the workplace. It reduces the need for chemical testing and evaluation, facilitates appropriate assessment and identification of chemical hazards, avoids trade barriers related to chemicals, and promotes safe international trade.

The headquarters in Taiwan has conducted hazard risk assessments for 100% of its products, and all subsidiary companies within the group continue to assess product hazards based on this standard. In 2022, the revenue from products classified as GHS hazard levels 1 and 2 accounted

for 55% of NANPAO's total revenue in Taiwan, it has a 3% reduction compared to the year 2021. We actively and cautiously approach the handling, use, and even the final disposal of such chemicals. The handling of these chemicals is also included in the annual factory emergency response scenarios. Through proactive scenario planning and implementation of appropriate response measures, we ensure that our employees are familiar with timely and proper control measures in different situations, keeping the consequences of accidents within acceptable risks.

In 2021, NANPAO Taiwan set a goal to reduce the usage of chemicals listed in the Restricted Substances List (RSL) based on EU regulations by 50% in all their sales products by 2030. The research and development team actively sought alternative products and adjusted formulations, successfully reducing the usage of high concern chemicals listed in the RSL by 62% in 2022, surpassing the 50% reduction goal set for 2030. This achievement demonstrates NANPAO's strong commitment to green chemistry. The table below compares the usage of high concern chemicals in NANPAO Taiwan's main products between 2021 and 2022.

Substances of Very High Concern in bulk products-Taiwan(kg)



Product Quality Guarantee

NANPAO aims to provide customers with stable, safe and legally compliant products and services. Product quality is seen as the bedrock of branding growth and sustainable development. For internal management, our resolution in pursuing good quality and meeting standards shall not be compromised. For training wise, the quality policy is imparted in all employees to ensure complete compliance and implementation, and serves as the principle for work assignments and routine processes, as well as performance indicators.

The product life cycle pertaining to the health and safety aspects of products, and evaluation and management procedures of green products are as follows :



3.4 Good Customer Relationship

Technical Service

The customer satisfaction level is not merely built on product quality. In fact, the after-sale services are the key to customer satisfaction. The technical service department has gathered many experienced professionals who have accumulated solutions for technical problems over time. Furthermore, we have established a comprehensive big data database which is sent to various locations of operation to provide professional technical service for customers in the vicinity. Meanwhile, for the properties of each product, the Company also provides customer production teams with complete guidance and support on the product usage. When customers are in the product development stage, the technical service teams of NANPAO are able to promptly provide viable solutions to collaborate in resolving product problems. In the event that customers encounter difficulties in product usage and report back to the sales department, the technical service units shall immediately take over to provide support.

After customer products are in the manufacturing stage, the technical service units shall collect all problems encountered by customers in the production lines and perform troubleshooting exercise at the customer ends. Each quarter, the technical service units shall convene a technical seminar to take proactive actions in resolving problems encountered by customers.

Protection of Customer Privacy, Rights and Interests

For the protection of customer privacy, the documentation of business information, trading transactions or any information related to customer privacy is undertaken by designated personnel so as to implement personal data management which is required by the provisions of Personal Data Protection Act. Internally, any access to customer records must be approved and authorized beforehand to ensure that no leaks pertaining to customer confidential information shall occur. In 2022, the Company had not received any complaint regarding sabotage of customer privacy or loss of customer information. Meanwhile, the development, product registration, marketing and advertisements, sales, etc. shall be completed in an orderly manner. The product marketing and advertisement activities shall be undertaken in accordance with the law and regulations. In 2022, no incident counterfeit or infringement of rights had occurred.

Customer Satisfaction

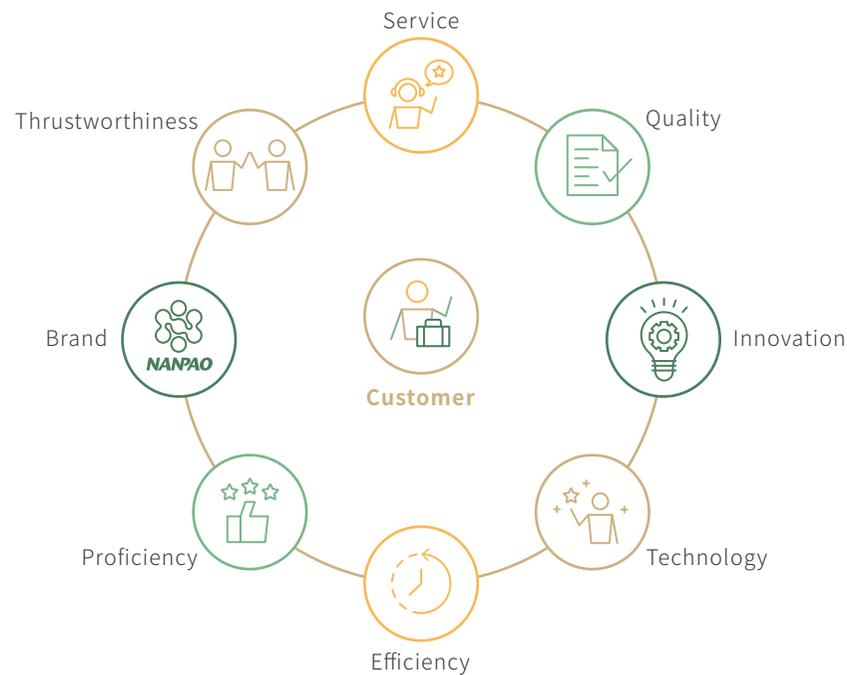
Strategy

Customized service. Regularly understand and respond to customer needs and feedback through meetings or questionnaires, providing the best customer service.



To understand customer satisfaction with the services provided by NANPAO, the General Manager, along with the business department's sales team, conducts annual on-site visits to assess customers' perception and evaluation of our products and services. Through regular annual communication opportunities, we can steadily improve and make continuous progress.

Each year, we conduct customer satisfaction surveys at least once for key customer groups in our business areas. In 2022, the Taiwan headquarters conducted on-site visits to 30 customers, focusing on eight key indicators to solidify our brand image and improve quality stability, professional service capability, expertise, customer handling, and feedback speed. Feedback from customers is consolidated into a SWOT analysis for NANPAO's business promotion, and quarterly reviews of customer satisfaction feedback are conducted during quality management review meetings. We identify and address any shortcomings in our products and services and propose improvement plans to provide services that better meet customer expectations.



4. GREEN MANUFACTURING AND LOW CARBON TRANSFORMATION

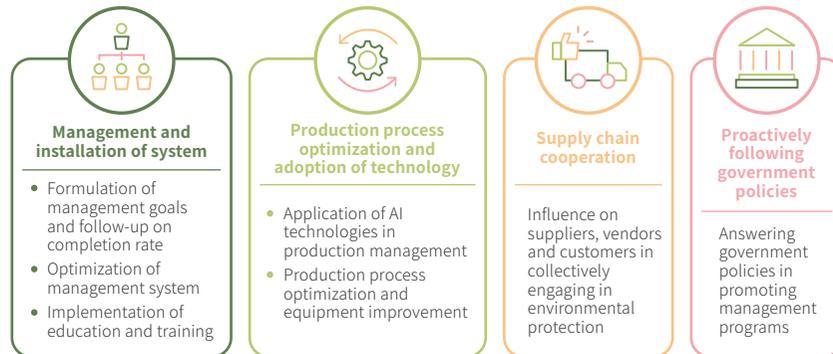
4.1	Risk and Opportunity of Climate Change	52
4.2	Greenhouse Gas Emission and Management	53
4.3	Energy management	55
4.4	Water resources	58
4.5	Air Pollution Prevention	62
4.6	Waste management	64
4.7	Ecosystem Preservation	66



04 Green Manufacturing and Low Carbon Transformation

NANPAO values and responds to climate-related financial disclosure, net-zero emissions, renewable energy, green chemistry, and circular economy initiatives. The company has implemented the ISO14001 environmental management system to integrate sustainability into daily operations, and promotes various sustainable actions from the perspectives of climate change, energy, water resources, waste, and air pollution prevention to protect the earth's environment and enhance corporate value.

Environmental Sustainability Policy and Management Approach



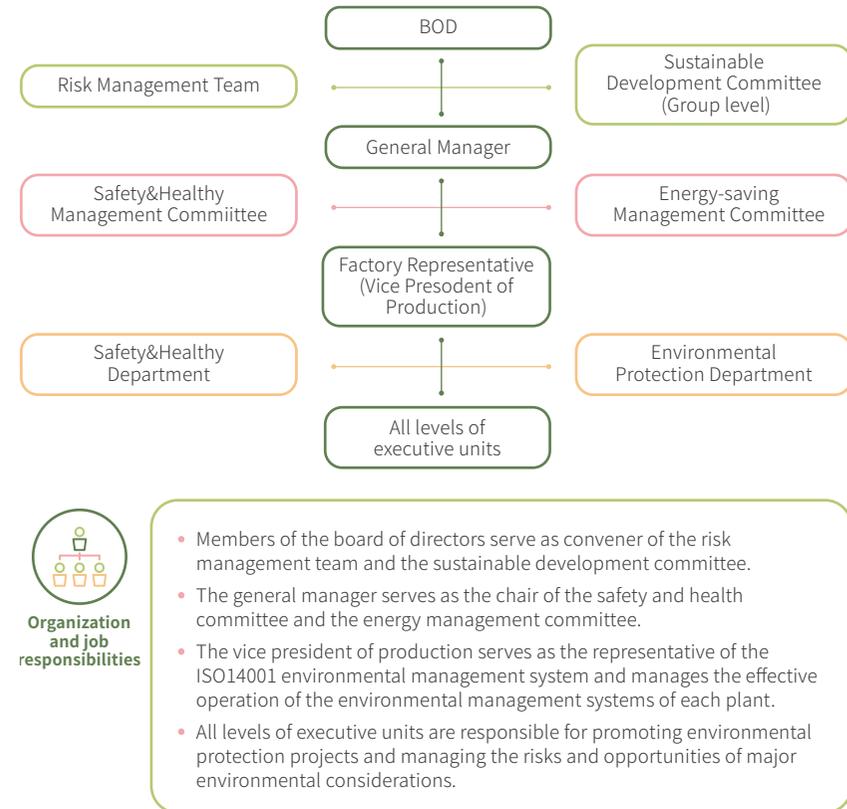
Environment Policy

NANPAO's environmental policy is to produce environmentally friendly products, comply with regulations, prevent pollution, save energy and reduce waste, involve all employees, and continuously improve. NANPAO also commits to :

1. Implementing ISO14001 environmental management system and practicing continuous improvement.
2. Disclosing relevant information regularly in accordance with local and international laws and regulations.
3. Continuously improving the ability to research and develop green products, and strictly adhering to international standards for environmentally friendly products.
4. Clearly communicating the policy and requiring all employees to fully implement it, working together to protect the environment.

Environment Management Organization

To strengthen its sustainable environmental performance, NANPAO has established a comprehensive environmental management organizational framework, with responsibilities delegated according to the organizational structure, and is committed to achieving various environmental management-related performance targets.



In the era of climate change, with the advent of low-carbon and circular economy, only businesses that pursue environmental sustainability and green production are able to stand out in a competitive market. The capital market has gradually incorporated environmental protection performance into the investment policies. Customers are also looking forward to low-carbon products or services. Government policies are also following the trend and shepherding companies to embark on low carbon transformation.

Low Carbon Progress of NANPAO

Items	Actions
 <p>Governance</p>	<ul style="list-style-type: none"> The Board of Directors is the highest governing body for climate management. The Board regularly supervises the overall sustainable development strategy and the results of the company, including the performance of the climate change action plan, and provides appropriate recommendations. The Board sets up a Sustainable Committee, which is responsible for formulating sustainable issues and climate-related governance strategies. The CEO is a member of the Sustainable Committee and the Risk Management Team under the Board. In addition to regularly reviewing the company's internal sustainability promotion strategies and policies, it also grasps external environmental changes, synchronizes the company's sustainable risks and opportunities into the overall risk management of the company. The CEO regularly reports on strategy and execution progress to the Board and the Risk Team to effectively integrate the risk management achievements of the Group and its subsidiaries. Under the Sustainable Committee, the ESG Sustainable Execution Working Group is set up, and the CEO serves as the Chief Sustainability Strategist, with the Operating Management Department serving as the leader of each subsidiary. Based on the "NANPAO Zero Emission Plan," the executive teams holds monthly meetings to review the carbon reduction plans and performance of each unit, and the Planning Department integrates the daily management activities of each plant in the company on climate change and energy issues, and checks their execution quality and effectiveness, and reports regularly to the Chairman of the Board.
 <p>Strategy</p>	<ul style="list-style-type: none"> NANPAO has established a list of climate-related key risk and opportunity issues based on the TCFD framework. Department managers from various plant sites participated in evaluating the operational impacts that climate change may have in the short, medium, and long-term across functions such as the supply chain, research and development, and operations. Following the TCFD framework, physical risks are assessed using the AR6 SSP5-8.5 scenario discussed by the Intergovernmental Panel on Climate Change (IPCC), while transition risks are evaluated using the 2050 Net Zero Emissions (NZE) scenario proposed by the International Energy Agency (IEA). The company evaluates risks and opportunities under different climate scenarios, including the most severe ones.
 <p>Risk Management</p>	<ul style="list-style-type: none"> Adopting the TCFD framework to analyze policy and regulations, technology, market, corporate reputation, acute and chronic climate risks, and through questionnaires and communication with senior executives to determine major climate-related risks facing the company. NANPAO has established a "Risk Management Policy and Procedures" and regularly evaluates risks each year. The company has also listed climate-related risks on its main risk list and planned corresponding monitoring measures and mechanisms to control the risks. Transformational risk management: <ul style="list-style-type: none"> In response to market changes, the company develops high-performance and low-carbon chemical products with "Replace" (substitute petroleum raw materials), "Recycle" (recycle and regenerate), and "Reduce" (reduce energy resource consumption) as the core to develop products that mitigate climate change and are eco-friendly. The company has an Energy Management Committee that regularly holds energy-saving meetings and learns from best practices in the industry to develop suitable energy-saving measures for each factory. Physical risk management: <ul style="list-style-type: none"> The company adopts the Water Risk Assessment Tool (Water Aqueduct) developed by the World Resources Institute (WRI) and combines it with the actual management status of the factory to develop water resource risk response plans for Taiwan's major factories, controlling for two main hazards: heavy rainfall and water shortages. The company analyzes supply chain disruptions, evaluates the increase in raw material input costs, the scope of transportation impacts, and develops plans such as self-made raw materials, off-site production, and flexible transportation scheduling to increase operational resilience.

Items

Actions



Targets & Goal

- NANPAO has formulated climate-related indicators and short, medium, and long-term goals to track management effectiveness in response to major climate-related risks and opportunities. Relevant departments have developed corresponding measures such as greenhouse gas reduction and renewable energy installation:
- Greenhouse gas reduction
 - Annually conduct a greenhouse gas inventory following ISO 14064-1
 - The company aims to complete carbon inventories of scope 1, 2, and 3 for the entire plant area by 2027.
 - Reduce carbon emission intensity by 10% by 2025.
 - Achieve carbon neutrality by 2050.
- Renewable energy installation
 - Complete the installation of renewable energy equipment with a capacity of 1,200 kW in the factory by 2023.
 - Complete the installation of renewable energy equipment with a capacity of 4,800 kW in the factory by 2025.

List of NANPAO ISO Certifications

	"ISO9001 Quality Control System"	"ISO50001 Energy Management System"	"ISO14001 Environmental Management System"	"ISO45001 Health and Safety Management System"	"ISO 27001 Information Security Management System"	"ISO 46001 Water efficiency management systems"	"ISO 14064-1 Greenhouse Gas Inventory"
Taiwan	●	●	●	●	●	●	●
Foshan(CN)	●	●	●	●			●
Foshan Advance(CN)	●	●	●	●			●
Dongguan(CN)	●		●	●			●
Dongguan Jiaqin Elec.(CN)	●		●	●			●
Kunshan(CN)	●		●				●
Fuqing(CN)	●						●
VNP(VN)	●		●	●			●
NP Materials(VN)	●		●	●			●
NP advanced materials(VN)	●		●	●			●
NNV(VN)	●		●	●			●
Indonesia	●		●	●			●
Thailand	●		●				

4.1 Climate Change Management

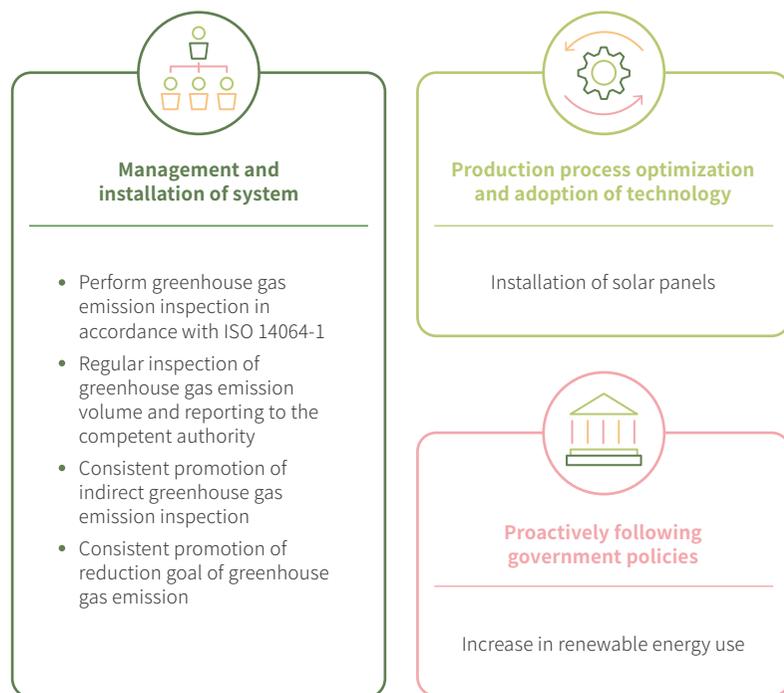
According to the Intergovernmental Panel on Climate Change (IPCC), the global average temperature has risen by nearly 1.1 degrees, and in recent years, natural disasters caused by extreme weather have become more frequent worldwide. Controlling climate change has become one of the most important global actions, and NANPAO is also doing its best to mitigate the impacts of climate change. NANPAO combines its existing governance framework and follows the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to disclose the company's four core governance, strategy, risk management, and indicators and targets related to climate change, and effectively carry out responsive management.

Analysis of Significant Climate Change Risks and Opportunities Impact for NANPAO

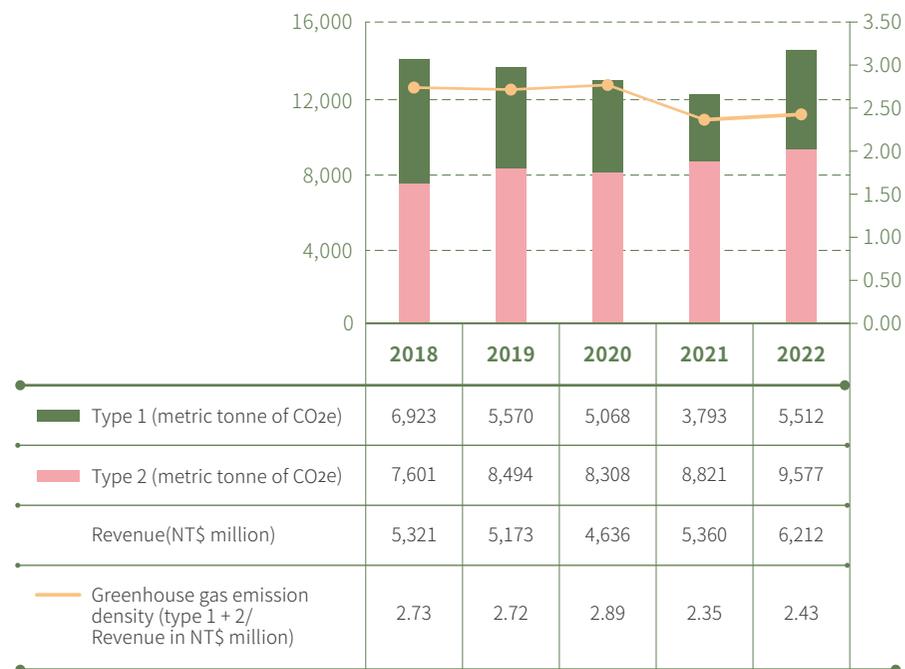
Risk type	Key factor/risk issue	Impact level	Period of impact	Risk to NANPAO	Opportunity derived	Financial influence	Strategic response
Transformational risk	Policy and regulations : <ul style="list-style-type: none"> Greenhouse gas emission control 	High	Short-term	<ul style="list-style-type: none"> Investment in low-carbon technology, equipment and management cost Total carbon emission volume and carbon trading, carbon fee and carbon tax systems 	<ul style="list-style-type: none"> Smart low-carbon production Participation in carbon trading Differentiating enhancement of competitiveness 	<ul style="list-style-type: none"> Capital expenditure Operational costs 	<ul style="list-style-type: none"> Establishment of carbon reduction roadmap and achieving carbon neutrality in long term Promotion of energy conservation and carbon reduction measures Change to low energy consumption equipment Promotion of recycling and reusing of waste Management of greenhouse gas scope 3 emission intensity
	Market: Low-carbon technology <ul style="list-style-type: none"> Renewable energy Carbon capture, utilization and storage (CCUS) 	High	Mid-term	<ul style="list-style-type: none"> Regulations and procurement of renewable energy 	<ul style="list-style-type: none"> Expansion of new energy business Development and application of carbon capture technology 	<ul style="list-style-type: none"> Capital expenditure Operational costs 	<ul style="list-style-type: none"> Investment in energy efficiency enhancing equipment Investment in solar power generation Proactive search of new energy such as wind, biofuel, geothermal, organic solvent cracking power generation
	Market : <ul style="list-style-type: none"> Environmental protection and sustainable products Green supplier certifications (Bluesign, ZDHC, Higg Index) 	High	Short-term	<ul style="list-style-type: none"> Investment in technology and management cost 	<ul style="list-style-type: none"> Enhancement of product competitiveness 	<ul style="list-style-type: none"> Capital expenditure Operational costs 	<ul style="list-style-type: none"> Increase of sales percentage of eco-friendly products Consistent investment in R&D expenditure to increase R&D capacity Proactive improvement on the passing rate of product testing
Physical risk	Typhoons and floods	High	Short-term	<ul style="list-style-type: none"> Surge of transportation and equipment maintenance costs due to heavy rainfall/ typhoons and floods 	<ul style="list-style-type: none"> Strengthening of operational resilience 	<ul style="list-style-type: none"> Operational costs 	<ul style="list-style-type: none"> Use of WRI scientific model to evaluate physical risks of various production bases Real-time monitoring of precipitation, water level and changes in water regime to establish sales emergency response coordination mechanism Utilization of real-time water resource statistics from Water Resources Agency to formulate strategies for tackling water shortage Situation management : Adoption of optimal storage management and flexible adjustment of transportation Adoption of water conservation production processes and programs

4.2 Greenhouse Gas Emission and Management

Greenhouse Gas Emission Management Policy and Implementation Program



Greenhouse gas emission volume(type 1&2) for NANPAO Taiwan



NANPAO is committed to achieving carbon neutrality by 2050. The company has undertaken a phased approach to establish and procure renewable energy, gradually working towards this goal. In 2023, greenhouse gas inventories in type 1 and type 2 were conducted and verified across all the group's facilities, obtaining certification. Starting from 2025, the verification process for type 3 to 6 emissions will be carried out in all group facilities, aiming to achieve 100% coverage by 2027.

Using an organizational carbon inventory approach, NANPAO Taiwan emitted approximately 190,768 metric tons of CO2e3 in greenhouse gases from type 1 to type 6 in the year 2022. The total emissions from type 1 and type 2 increased by 19.62% compared to the previous year. The increase can be attributed to the implementation of ISO 14064-1 verification in various facilities in 2022, as well as the completion of the operational headquarters and research building in the fourth quarter of the same year, which expanded the inventory scope compared to 2021.

Regarding the inventory work for type 3 to 6, significant emission sources were first identified, followed by inventorying these sources. In NANPAO's 2022 inventory, the major emissions in type 3 to 6 primarily stemmed from upstream raw material usage and distribution. To further control these two major emission sources, NANPAO's research and development department is dedicated to reducing solvent substances in their products and adjusting formulations using recycling and bio-based materials to lower the carbon footprint. The procurement center has also implemented "local procurement" practices to reduce carbon emissions from the transportation of raw materials.

Greenhouse Gas Emission Density of Manufacturing Factories in NANPAO Group in 2022

	Taiwan	Foshan (CN)	Foshan Advanced (CN)	Dongguan (CN)	Dongguan Jiaqin(CN)	Kunshan (CN)	Fuqing (CN)	VNNP (VN)	NP Materials (VN)	NP advanced materials (VN)	NNV (VN)	Indonesia	Thailand	Total emission of NANPAO manufacturing factories
Type 1 (metric tonne of CO₂e)	5,512	486	1,893	435	11	47	88	483	1,141	1,152	192	45	55	11,540
Type 2 (metric tonne of CO₂e)	9,577	1,867	2,364	671	452	494	223	1,643	1,772	185	463	40	70	19,821
Total emission of type 1 & 2 (metric tonne of CO₂e)	15,089	2,353	4,257	1,106	463	541	311	2,126	2,913	1,337	655	85	125	31,361
Revenue (NT\$ million)	6,212	2,120	2,352	513	179	725	381	3,323	1,592	936	562	1,499	65	20,459
"Greenhouse gas emission density (type 1 + 2 / Revenue in NT\$ million)"	2.43	1.11	1.81	2.16	2.59	0.75	0.82	0.64	1.83	1.43	1.17	0.06	1.92	1.53
ISO14064-1 verification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Verify in 2024	
Type 3 (metric tonne of CO₂e)	1,370	3,766	8,618	1,160	169	412		606	2,392					
Type 4 (metric tonne of CO₂e)	174,309	51,696	90,245	21,523	6,625			39,455	39,463					
Total emission of Type 1~Type 4 (metric tonne of CO₂e)	190,768	57,815	103,120	23,789	7,257			42,187	44,768					

Note 1: The reference for greenhouse gas emission coefficients required for the greenhouse gas emission inventory is primarily based on the announcement of the "Greenhouse Gas Emission Factor Management Table Version 6.0.4" by the Environmental Protection Administration of the Executive Yuan.

Note 2: The data on global warming potential provided by the Fifth Assessment Report (2013) of the United Nations Intergovernmental Panel on Climate Change (IPCC) is used as the basis for calculations.

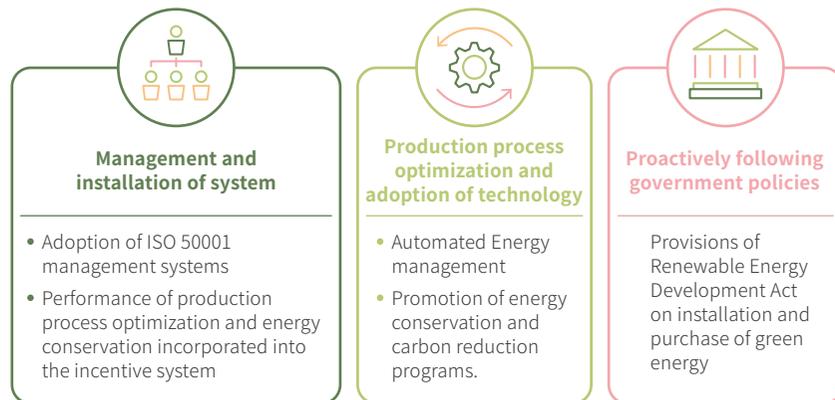
Note 3: Our company adopts an operational control approach, aggregating the greenhouse gas emissions of Type 1 and Type 2 from various production regions. The accounted greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride.

Note 4: Due to Type 3 to Type 6 (Categories 3 to 6) not being categorized as "owned or controlled emissions sources," it is difficult to aggregate and obtain relevant emission information. Therefore, they are temporarily exempted from the inventory scope.

Note 5: Foshan NANPAO's Category 4 raw materials accounted for approximately 70% of the 2022 inventory.

4.3 Energy Management

Energy Management Policy and Implementation Program



The General Manager serves as the convener and establishes cross-departmental energy management review task force. The task force convenes meetings on a regular basis to review energy consumption, implement energy conservation measures and follow up on the results of energy conservation program consistently. In line with the relevant procedures and regulations formulated by the energy task force, the task force takes charge of executing assignments and providing the energy task force with all the necessary details pertaining to the programs. Furthermore, the task force coordinates with the smart platform of management system at the factory ends, whereby factory personnel can monitor the energy consumption level of various equipment at any time. Via analyzing data from the platform, the Company consistently reviews the optimization of production processes, enhances energy consolidation and reduces unnecessary consumption, thus increasing the energy efficiency rate. In the future, we shall continue to promote the inspection and consultation on factory area provided by professional team, whereby the professional team proposes improvement hotspots of the factory area and recommendation of solution, and assists in improvement execution. With the large factory-leading-small-factory model, the benefit enjoyed by the overall ecosystem may be enhanced. Current energy management strategies include:

Automated Energy Management : (1) We implement automated systems to manage energy consumption efficiently, (2) Energy Conservation and Carbon Reduction Projects : We actively promote projects aimed at reducing energy usage and carbon emissions, (3) Optimization of Management Systems and Energy Efficiency : We continuously improve our management systems to optimize energy consumption while incorporating energy-saving practices. Performance in this area is rewarded through our incentive program.

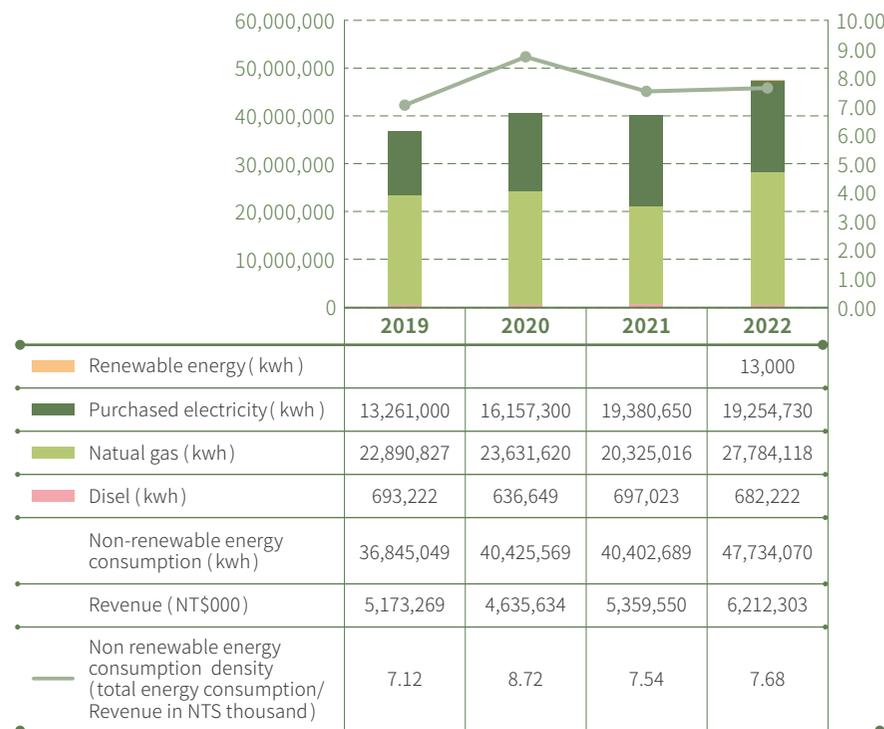
The 3 factories in Taiwan and 2 factories in Foshan City, Guangdong Province has certificated with ISO50001 energy management certification.

Energy Consumption Statistics of NANPAO Taiwan

Energy consumption	Diesel (L)	Diesel (kwh)	Natural gas (m3)	Natural gas (kwh)	Purchased electricity1 (kwh)	Renewable energy power generation (kwh)	Non renewable
2019	70,960	693,222	2,460,321	22,890,827	13,261,000		36,845,049
2020	65,169	636,649	2,539,942	23,631,620	16,157,300		40,425,569
2021	71,349	697,023	2,184,546	20,325,016	19,380,650		40,402,689
2022	69,834	682,222	2,654,449	27,784,118	19,254,730	13,000	47,734,070

Note 1 : For 2019 to 2020, the scope of computation for purchased electricity covered the 1st factory, Pao-Li factory and the 5th factory.
 Note 2 : 2021 onward, the scope covered the 1st factory, Pao-Li factory, the 5th factory, headquarters factor, carbon fiber and various liaison offices.
 Note 3 : Renewable energy in the form of self-installed and self-utilized solar power is used to offset on-site electricity consumption.

NANPAO Taiwan Energy Consumption



NANPAO Taiwan's total energy consumption from non-renewable sources in 2022 was 47,734,070 kwh, an increase of 18.15% (7,331,382 kwh) from 2021. The main reason for this was the robust performance that year, which led to an increase in natural gas consumption to meet the higher production volume. The energy intensity has also increased by 1.93%.

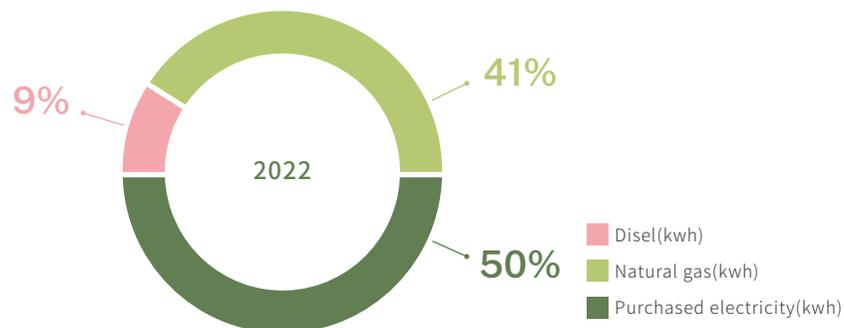
In recent years, NANPAO Taiwan has actively promoted energy-saving measures. Despite the increase in total energy consumption and production volume in 2022, the total electricity usage decreased by 0.65% against the trend.

Innovative Energy Saving Projects Across All Factories

NANPAO's two main directions for carbon reduction strategy are low-carbon energy and process energy-saving. In 2022, the company will promote energy-saving projects in various factories of the group, while continuously improving energy efficiency through the use of energy management systems.

Type	Area	Project
Process energy saving	Taiwan 2022/03 → 2023/6	Secondary Steam Recycling for Reuse - Recycle to Boiler In the PU and PUD processes, the condensate water pump uses steam as power to push the secondary steam condensate to the recovery tank for recycling to the boiler. This effectively recovers the condensed steam water.
	Taiwan 2022/4 → 2023/3	THF Waste Liquid Distillation and Recovery Equipment Approximately 1,200 tons of wastewater and waste solvent are recovered and treated.
factory energy conservation	Taiwan 2023/1 → 2023/12	Replacing Smart Electricity Meters: Smart Meters Save Energy it is expected that annual electricity usage will decrease by 10%.
	Vietnam 2022/11	Reduce the Night-time Operation of Motors by About 3 Hours
	Indonesia, Foshan 2022 → 2023	Replacing Electric Forklifts Each diesel forklift consumes approximately 3,240 liters of diesel per year. Replace diesel forklifts with electric ones.
	Foshan 2023/01 → 2023/06	Chiller Replacement Retire older equipment with higher energy consumption. It is expected to complete the replacement of new equipment in the first half of the year, and save 50,000 kWh of electricity in the second half of the year.
	Foshan 2023/01 → 2023/12	Replacing Fixed Frequency Air Conditioners with Variable Frequency Air Conditioners The fixed frequency air conditioners in the factory, office, and dormitory areas will be replaced with variable frequency air conditioners, which is expected to save about 20-30% of electricity per unit.

NANPAO Group Energy Consumption in 2022



	Disel(kwh)	Natural gas(kwh)	Purchased electricity(kwh)	Renewable energy(kwh)
Taiwan	682,222	27,784,118	19,254,730	13,000
Foshan(CN)	453,254	1,129,757	6,799,350	224,200
Dongguan(CN)	667,178	715,394	1,970,000	
Kunshan(CN)	0	0	1,112,454	
Fuqing(CN)	72,487	140,035	391,800	
VNP(VN)	1,392,013	0	2,250,100	
NP Materials(VN)	2,790,435	0	2,454,600	
NP advanced materials(VN)	101,600	3,294	314,512	
NNV(VN)	92,026	4,773	1,068,360	
Indonesia	156,307	0	51,760	
Thailand	11,723	0	163,000	
Total	6,419,245	29,777,371	35,830,666	237,200

Renewable Energy

NANPAO sees energy and greenhouse gas emission management as important issues in its routine operation. As such, it consistently promotes energy conservation and carbon reduction measures to improve the efficiency of energy use. Meanwhile, the Company also proactively answers the call of local governments' energy policy and installs solar panels in most of the manufacturing factories. During the inventory of greenhouse gas emissions, it was found that the emissions of categories one and two were mainly from purchased electricity. Therefore, our company actively manages energy and promotes carbon emissions reduction by installing solar power generation equipment on the roofs of our factories. In 2022, our company generated a total of 1,378,239 kWh of renewable energy, resulting in a reduction of approximately 702 metric tons of atmospheric carbon dioxide emissions.

NANPAO's renewable energy installation goals are to complete the installation of renewable energy generation equipment in 40% of its factories (with a capacity of 1,200KW) by 2023, and in 70% of its factories (with a capacity of 4,800KW) by 2025.

	In 2019	In 2020	In 2021	In 2022
Renewable energy power generation capacity (kwh)	813,256	900,257	855,411	865,563
Roof space for rent (Taiwan)	127,826	136,070	140,317	136,160
Self-built for sale (Taiwan)				152,316
Self-built for company use(Taiwan)				224,200
Self-built for company use(Foshan)	941,082	1,036,327	995,728	1,378,239
Total renewable energy generation(kwh)		527	500	702

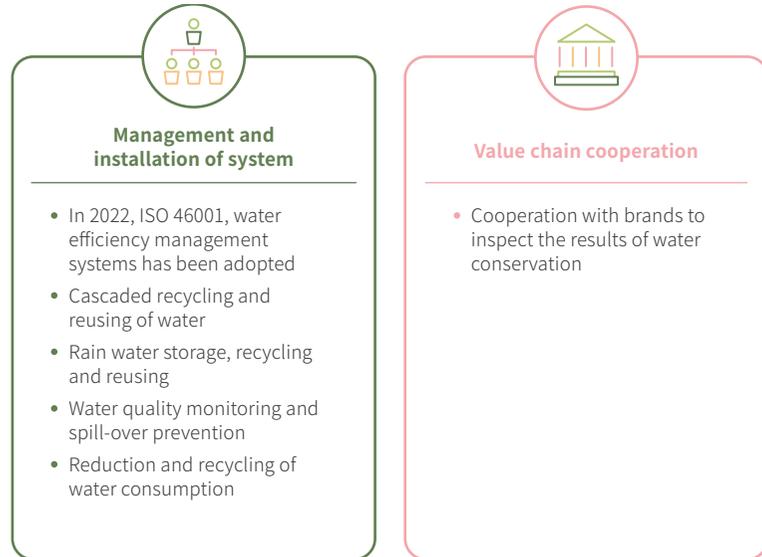


4.4 Water Resources

Water Resource Risk Assessment

To monitor the water resource risk facing various factories group-wide, the Company has adopted water resource risk assessment tool, Water Aqueduct developed by World Resources Institute (WRI), along with the actual management in the factories, to devise the response measures and programs to mitigate water resource risks of main factories in Taiwan. Two major risks, namely heavy rainfall and water shortage, have been incorporated for control performed. For water resource risk assessment, the WRI tool serves as the basis for reference for subsequent adjustments and risk rating to monitor the water supply and water demand risks of different factories.

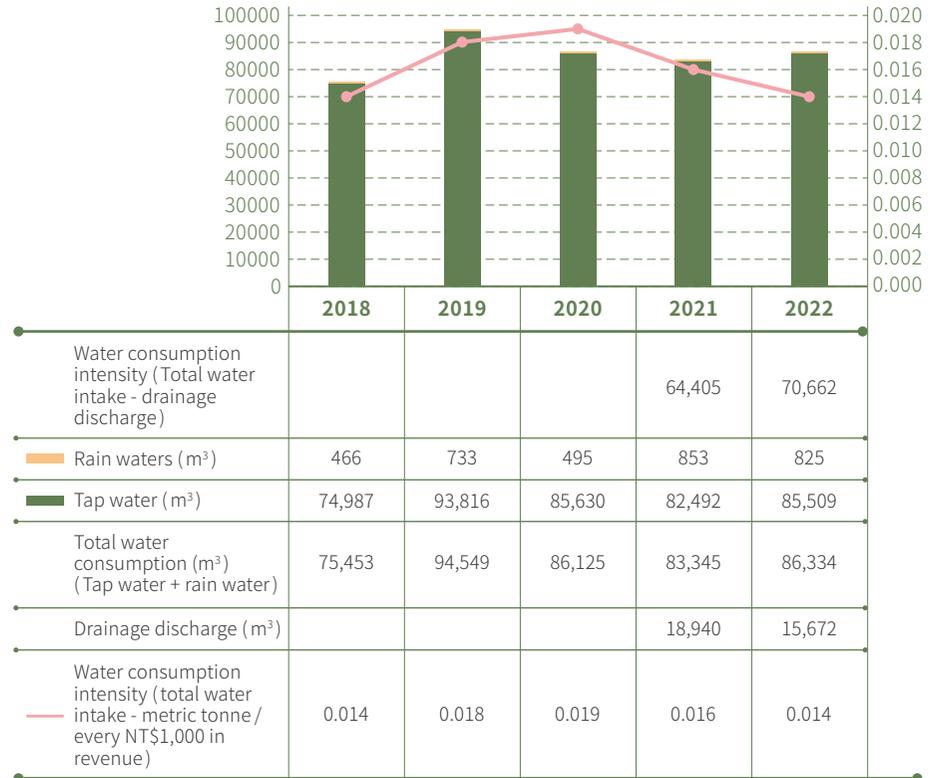
Water Management Policy and Implementation Program



Water Intake and Reuse

NANPAO utilizes three major strategies for water resource management : reduction, reuse, and recycling. The primary water source is tap water, and in 2022, NANPAO had a total water intake of 86,334 m³, the total water consumption increased by 3.59% (2,989 m³) compared to the previous year due to significant sales performance growth during the year. However, the water consumption intensity per unit of revenue decreased by 12.5% compared to the previous year, indicating that NANPAO's water resource management measures have yielded favorable results.

Water Consumption of NANPAO Taiwan in 2022



In recent years, extreme weather conditions have caused unstable water supply in Taiwan, leading to conflicts between industrial and domestic water usage. To alleviate the impact of these conflicts, NANPAO has implemented various measures for water resource management, such as open-source conservation, aiming to improve the water consumption in their processing system and processes. NANPAO also focuses on recycling wastewater, such as through the discharge of wastewater recovery, rainwater harvesting, steam condensate recovery, and cooling water recovery through heat exchangers, to increase the recycling rate within the factory. Therefore, the company continues to maintain the concept of recycling and reusing water and is gradually moving towards the goal of multiple water sources, aiming to reduce the risk of production loss or damage caused by water restrictions and to minimize the impact on water resources.

All water sources used by NANPAO are supplied by the Taiwan Water Corporation, and the company does not draw water from ecologically protected areas or use groundwater sources. NANPAO is not included in any ecological conservation areas or water quality protection zones, and no species in the surrounding area have been listed in the IUCN Red List or the National Protection List.

Water Sources

The water sources for each plant are primarily categorized into groundwater, tap water, and industrial water. When planning for water usage, we take into consideration government policies, company development, industry trends, and the water resource needs of the surrounding communities. For instance, we collaborate with regulatory authorities to establish groundwater extraction points for the plant, ensuring access to water for the public during dry periods while effectively managing the allocation and distribution of water resources. Furthermore, both the quantity of water extraction and the methods employed are designed to minimize any significant adverse impacts on the ecological environment and nearby residents in the water source area.

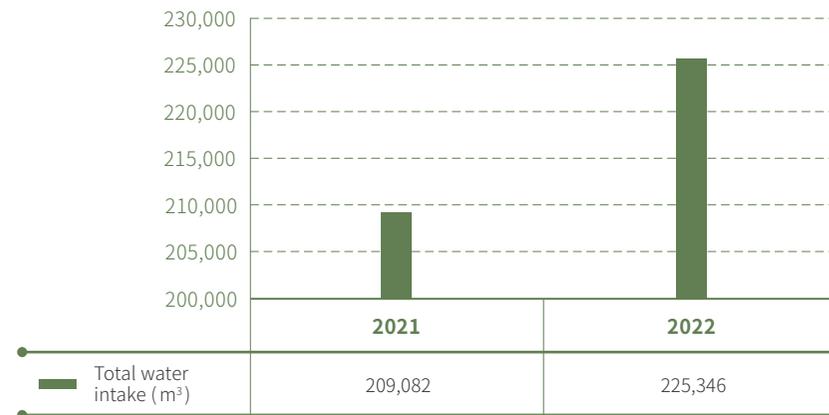
Response Measure for Areas with Tight Water Resources

Climate change has changed water resources, causing water flow and quality to be important issues awaiting critical resolution. NANPAO has catalogued locations of operation that face tight water supply according to open and reliable information on areas with tight water supply-Aqueduct Water Risk Atlas. The factories in Kunshan and Thailand are situated in area with tight water supply. From 2022 onward, NANPAO strengthens management in areas facing tight water resources and sets water resource management goal to reduce water intake, as the Company proactively seeks to understand and respond to local communities and environmental impact, and protect precious water resources.

For areas facing tight water resources, NANPAO has undertaken the following improvement measures and program to tackle water shortage and flood :

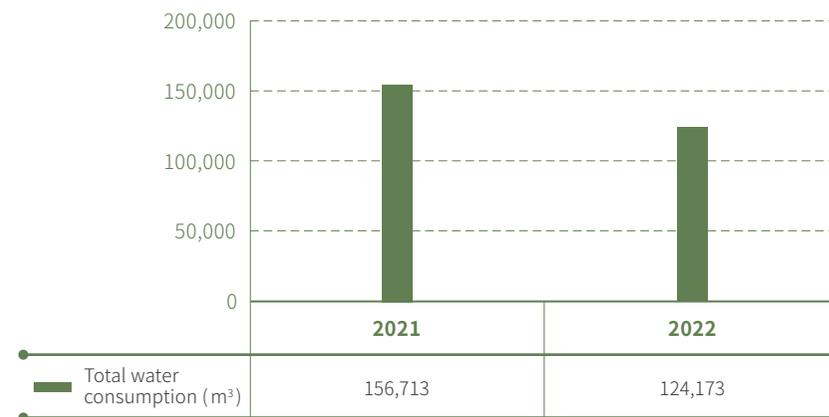
Project	Reasons	Improvement solutions
Water shortage	Low rainfall leading to insufficient water supply	<ul style="list-style-type: none"> • Increase capacity of the tap water reservoir. • Implement on-site water recycling. • Purchase water from external sources (e.g., groundwater from suppliers or other sources). • Establish a water (wastewater or seawater) recycling system.
Flooding	Climate change causing sudden heavy rainfall	<ul style="list-style-type: none"> • Install floodgates for water resistance. • Add additional water pumps. • Elevate equipment to prevent flooding or consider relocation.

Comparing the total water intake of the group for the years 2021 and 2022



In 2022, the total water intake from tap water (225,346 liters) increased by 7.78% compared to 2021 (209,082 liters). The primary reason for this growth was a higher demand for the group’s products, leading to an increase in water consumption for various manufacturing processes.

Comparing the total water consumption of the group for the years 2021 and 2022



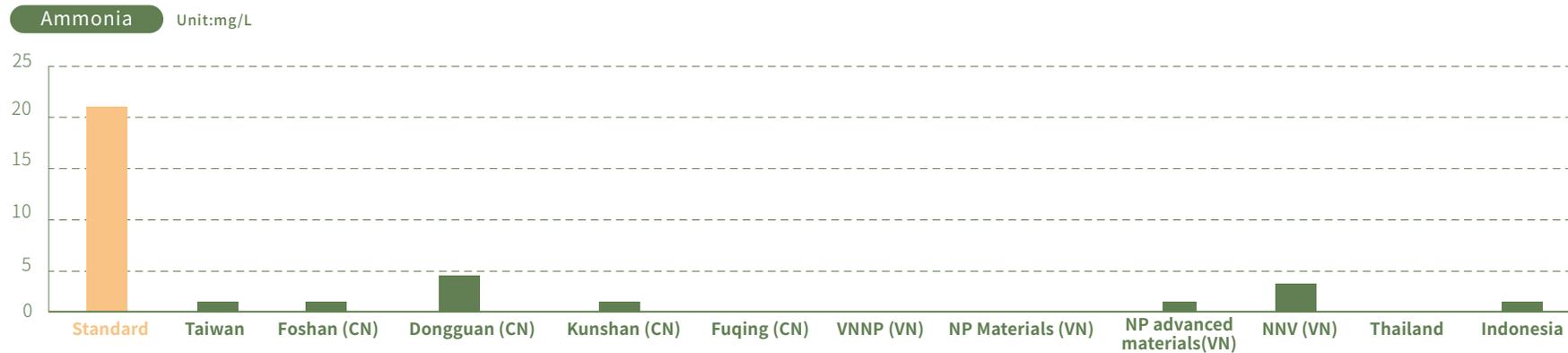
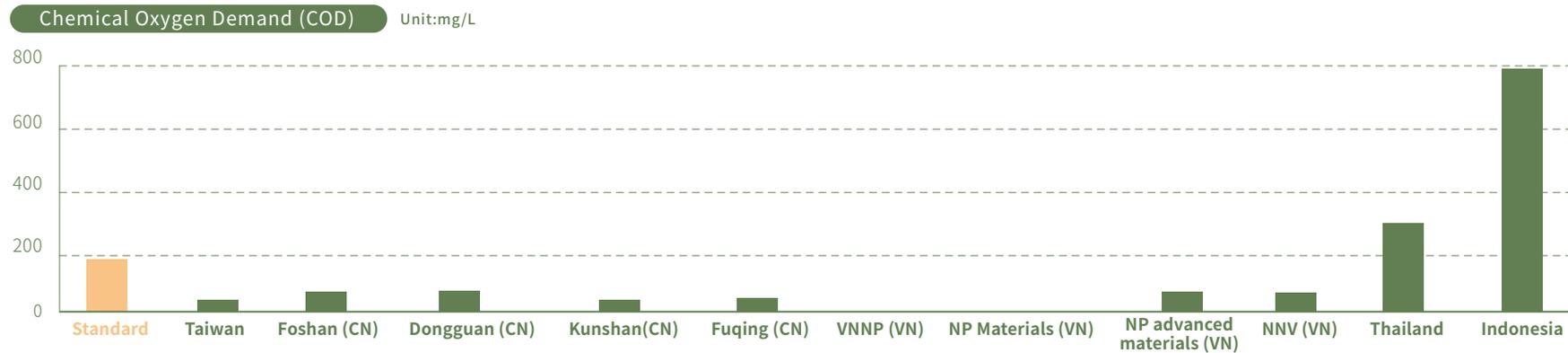
In 2022, the total water consumption was 124,173 liters, showing a significant decrease of 20.76% compared to the total water consumption in 2021, which was 156,713 liters. This substantial reduction indicates that each operational facility has made conscientious efforts and achieved remarkable success in optimizing water resources utilization.

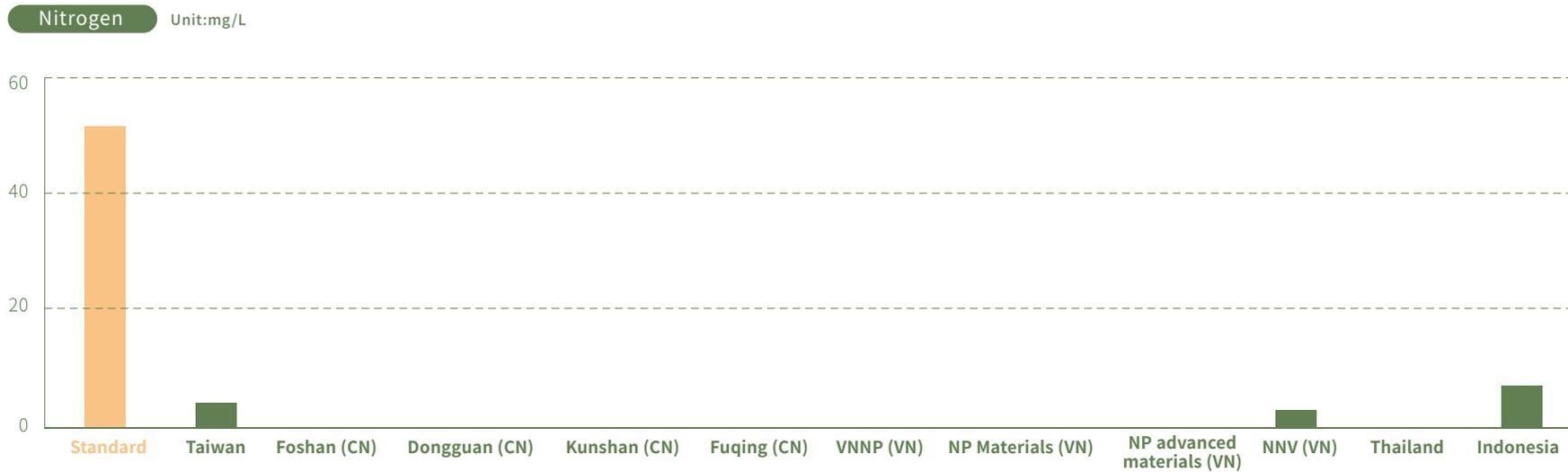
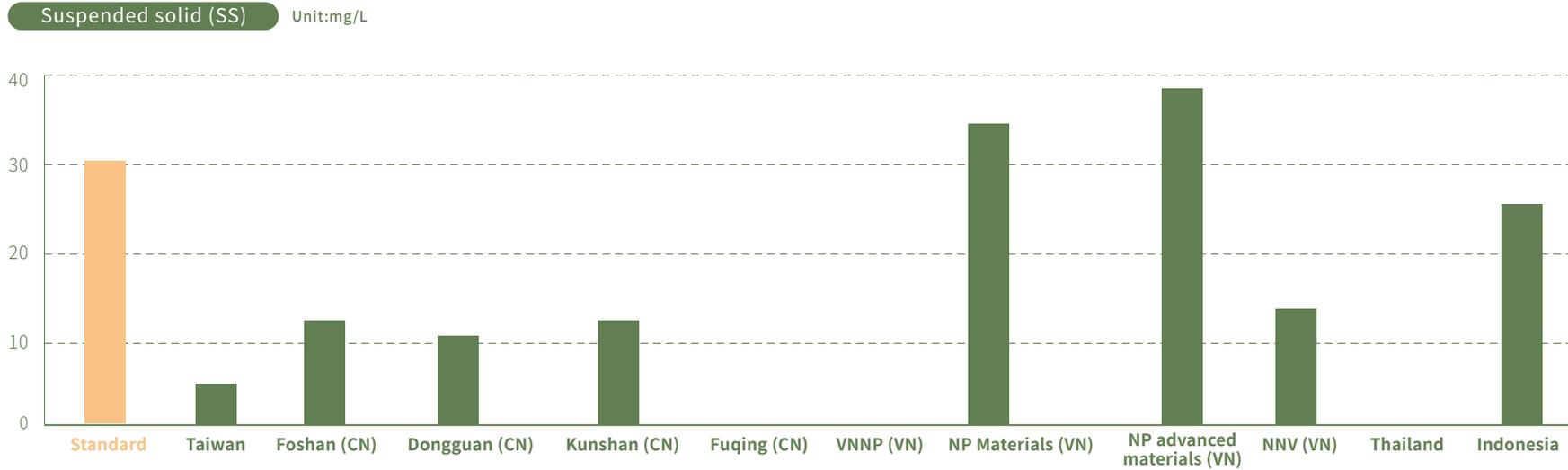
Wastewater Management

Rivers play an important role in providing water resources and serve as important habitats for diverse fauna. The wastewater generated by NANPAO undergoes chemical treatment, biological treatment (activated sludge), and MBR membrane treatment, and is discharged into water bodies approved by environmental protection agencies after meeting the regulatory discharge water standards. Daily inspections and periodic inspections as required by law are carried out to comply with the requirements of relevant stakeholders (bluesign® inspection), and efforts are made to maintain the environment as an important part of the overall NANPAO environmental plan to achieve sustainability goals. NANPAO's wastewater management includes daily regular wastewater quality (COD) testing by the internal environmental laboratory to strengthen the monitoring and management of discharge water quality to ensure compliance with standards, which are more stringent than regulatory requirements (COD<100mg/L). Sampling and testing of the discharge water quality are outsourced every six months to comply with regulatory requirements and the requirements of relevant stakeholders (bluesign®), including heavy metal testing and fish egg toxicity (zebrafish eggs). All testing items (as shown in the table below) are below the regulatory limit to ensure that the discharge water has no impact on the environmental ecology of nearby water bodies.

Wastewater Monitoring Data

NANPAO has selected COD, SS, ammonia, and nitrate-nitrogen as the key parameters for monitoring in wastewater discharge. These priority substances are closely monitored and compared against the regulations set by the competent authorities to demonstrate the achievements in wastewater treatment.





Note 1 : Each plant's process characteristics and applicable discharge standards may vary, resulting in different treatment and standard comparisons for water quality parameters at each site.

Note 2 : The standard values are based on the headquarters' (Taiwan) water quality discharge standards.

Note 3 : The average values of emission concentrations are presented based on the reported test data.

Note 4 : Nitrate-nitrogen is not regulated by the competent authority at the China plant, hence no specific testing data is available.

Note 5 : The wastewater produced at the Fuqing plant is domestic wastewater, and there is no industrial wastewater to be treated. The wastewater at the Vietnam plant is managed and treated by qualified contractors, and there is no information on industrial wastewater treatment.

Note 6 : Foshan region includes Foshan NANPAO and Foshan Advanced Materials, Dongguan region includes Dongguan NANPAO and Donggung Jiaqin.

4.5 Air Pollution Prevention

Air Pollution Management Policy and Implementation Program

Management and installation of system

- Regular inspection of air pollutant emission and reporting to the competent authority
- Air pollution prevention campaign
- Management personnel are required to attend training and obtain the relevant licenses

Production process optimization and adoption of technology

Change to natural gas boiler

Supply chain cooperation

- Launching low VOC chemicals as per customer requirements
- Ensure that air pollutant emission meeting the requirements of certification bodies such as Reach, Bluesign and ZDHC

Proactively following government policies

Announcing air quality and undertaking response measures in line with regulatory requirements

Air Pollution Prevention

NANPAO has established "Procedures for Air Pollutant Emission Prevention Management", where it consistently adopts air pollutant emission prevention technology, regularly reviews existing facilities and production procedures, and regularly inspects boiler equipment and exhaust piping so as to ensure that emissions are meeting regulatory requirements.

In 2022, NANPAO Taiwan emitted 66.06 metric tons of volatile organic compounds (VOCs) during its production process, which represents an 8.58% reduction (6.2 metric tons) compared to 2021. The VOCs emissions equivalent was reduced by 15.38% compared to 2021.

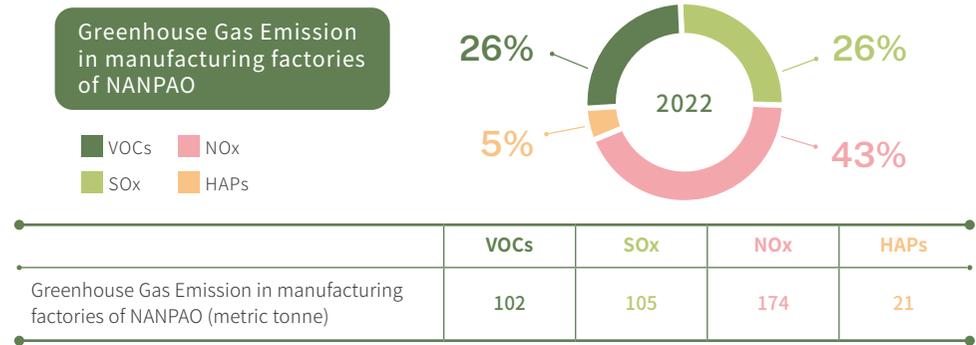
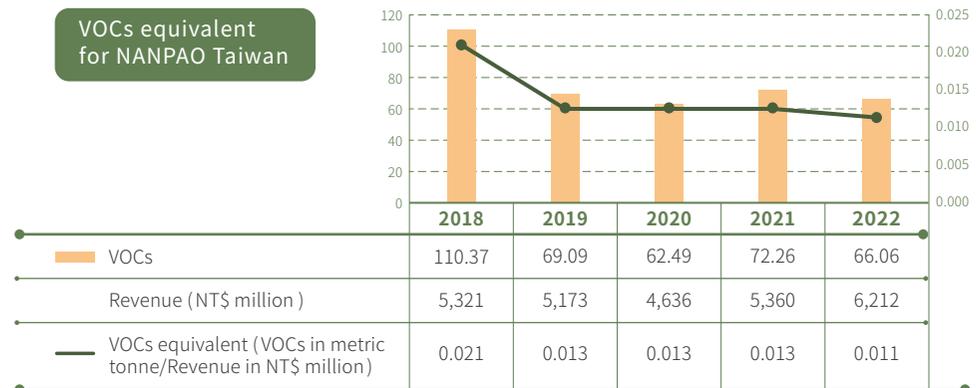
To effectively reduce air pollution and control emissions of harmful pollutants such as VOCs, NANPAO has actively researched process improvements and added preventive equipment to find the best feasible technology. In 2022, NANPAO invested in a gravity bed waste gas treatment facility and a regenerative catalyst thermal oxidizer (RCO) to handle harmful pollutants generated during production with the best feasible technology, reducing their impact and contributing to the overall NANPAO environmental plan, which is committed to maintaining the environment and achieving sustainable goals.

Greenhouse Gas Emission of NANPAO Taiwan

Item (metric tonne)	VOCs	SOx	NOx	HAPs (Data collected since 2021)
2018	110.37	15.38	13.65	
2019	69.09	0.44	2.60	
2020	62.49	0.01	3.24	
2021	72.26	0.00	3.59	21.11
2022	66.06	0.00	3.97	21.49

Note 1: From 2021 onward, the Environmental Protection Administration (EPA) has promulgated "Standards for Hazardous Air Pollutant Emission from Stationary Pollution Sources" to control the emission of hazardous air pollutants (HAPs). NANPAO Shall Adopt the EPA Standards and Start to Collect HAP Emission Data from 2021 Onward.

Note 2: All NANPAO facilities do not produce, import, export, or emit any ozone-depleting substances (ODS).



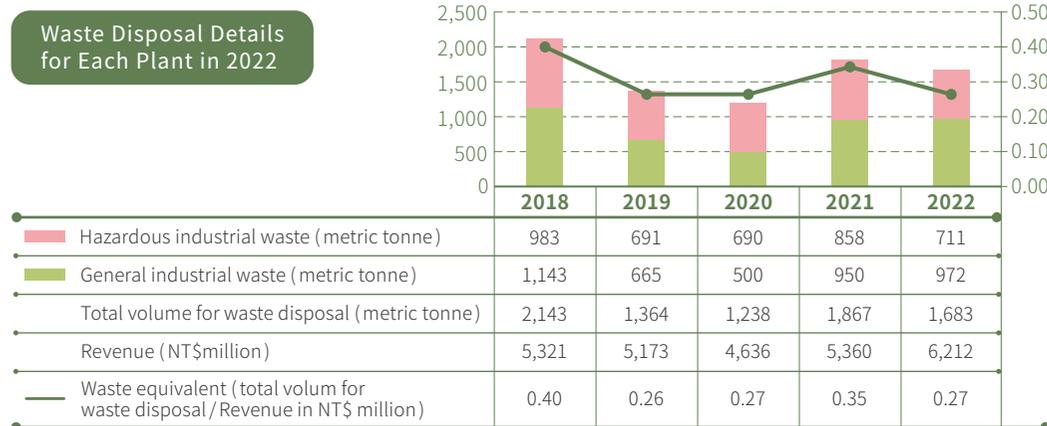
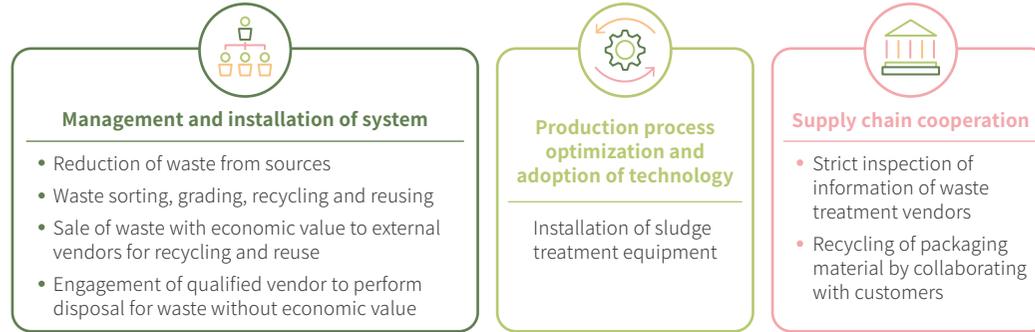
2022 NANPAO Taiwan Environmental Related Penalties and Improvements Completed

NANPAO Taiwan was fined a total of NT\$450,000 in February and April 2022 for violating Article 20, Paragraph 1 of the Air Pollution Control Act and Article 29, Paragraph 1, Subparagraph 2 of the Regulations Governing the Control and Emission of Volatile Organic Compounds from Stationary Pollution Sources. The violations occurred in the Baoli and 1st plants due to exceeding the inspection values of equipment components for process tank reactors. NANPAO is handling the aftermath of the penalty case with caution, immediately repairing the leaking components and implementing countermeasures to prevent similar incidents from happening again.

Incident	Action
<ul style="list-style-type: none"> Date of disposal : February 16, 2022 Disposal reference number : No. 1110015639 Violated regulations : Article 20, Paragraph 1 of the Air Pollution Control Act and Article 29, Paragraph 1, Subparagraph 2 of the Regulations Governing the Control and Restriction of the Emission of Volatile Organic Compounds Description of violation : Pou-Li Plant is engaged in the manufacturing of plastic raw materials and holds an operating permit for the manufacture of other synthetic resins or plastic processes (M01). During an inspection conducted by the competent authorities and Kai Teng Environmental Technology Co., Ltd., a testing company approved by the Environmental Protection Administration on December 27, 2021, while the M01 process at Pou-Li Plant was operating normally, the initial test result of equipment component (No. 1101227F207L) flange (F) of the M01 process reactor tank (E021) was found to be 18,698 ppm (net test value > 10,000 ppm), which exceeded the standard for one point in this test. 	<ul style="list-style-type: none"> Monthly environmental self-inspection Each unit should regularly implement self-inspection Manhole covers should be kept clean and locked Deformed gaskets should be replaced immediately Component leaks require emergency repairs
<p>Penalty NT\$150,000 Cost NT\$100,000</p>	
<p>Incident</p> <ul style="list-style-type: none"> Date of disposal : April 1st, 2022 Disposal reference number : No.1110034597 Violation of regulations : Article 20, paragraph 1 of the Air Pollution Control Act, and Article 29, paragraph 1, subparagraph 2 of the Regulations Governing the Control and Emission Standards of Volatile Organic Compounds. Violation of Regulations: Factory 1 holds an operating permit (M01) for other synthetic resin or plastic manufacturing processes. On January 5, 111, during an inspection conducted in collaboration with the Environmental Protection Agency and a certified testing company, Kaixing Environmental Technology Co., Ltd., it was found that the M01 process at Factory 1 was operating normally. The test results revealed that the net detected values for three points in the M01 process exceeded the standard limits: <ol style="list-style-type: none"> (1) Equipment component flange (F) (No.: 1110105F220L) had an initial detected value of 24,504 ppm (net detected value > 10,000 ppm). (2) Equipment component flange (F) (No.: 1110105F014L) had an initial detected value of 21,087 ppm (net detected value > 10,000 ppm). (3) Equipment component flange (F) (No.: 1110105F155L) had an initial detected value of 20,396 ppm (net detected value > 10,000 ppm). 	<p>Action</p> <ul style="list-style-type: none"> Monthly environmental self-inspection Each unit should regularly implement self-inspection Manholes should be kept clean and locked securely Gaskets that have deformed must be replaced immediately Leaks in equipment components should be repaired urgently Purchase FID equipment for self-testing.
<p>Penalty NT\$300,000 Cost NT\$600,000</p>	

4.6 Waste Management

Waste Management Policy and Implementation Program



Recycled and Reused Waste Disposal in NANPAO Taiwan

	2018	2019	2020	2021	2022
General industrial waste (metric tonne)	1,143	665	500	950	972
Hazardous industrial waste (metric tonne)	983	691	690	858	711
Reused and recycled waste (metric tonne)	8	8	48	74	53
Reused and recycled hazardous waste (metric tonne)	562	514	543	649	615
Reused and recycled waste %	0.70%	1.20%	9.60%	7.80%	5.46%
Reused and recycled hazardous waste %	57.17%	74.38%	78.70%	75.66%	86.47%

NANPAO has established a "Waste Management Operating Procedure" to manage its waste, and complies with environmental regulations to properly classify and label the waste generated. The waste is stored in designated locations according to regulations, and an internal waste inspection and auditing system has been established.

The waste of NANPAO is mainly waste solvent and resin generated from the manufacturing processes. In order to achieve sustainable resource utilization, the company's waste management principle prioritizes reuse within the manufacturing process to reduce raw material usage. Recycling is the next priority, and incineration or landfill disposal is only used as a last resort. The company has significantly reduced its waste solvent production by promoting solvent reuse. Additionally, for waste that can be recycled, the company sorts the waste and outsources the recycling of materials such as paper, plastic, and scrap metal to recycling companies. Some empty steel and plastic drums are reused or recycled within the factory, and the company is continually striving to reduce waste.

In 2022, the total amount of waste generated during production was 1,683 metric tons, a 6.91% reduction (125 metric tons less) compared to 2021 (1,808 metric tons). The company will continue to focus on reducing waste at the source and actively seeking waste treatment facilities or reuse organizations (treatment plants) to effectively dispose of waste within the factory or utilize it within a circular economy. The company is committed to environmental sustainability and achieving its sustainability goals. In 2022, the recycling and reuse rate of hazardous waste reached 86.47%, marking a significant increase of 14.29% compared to the previous year.

Hazardous Waste

Hazardous waste within the factories mainly comprise waste solvent and containers used for hazardous chemical storage. The Company has engaged waste disposal vendors certified by the competent authority of environmental protection to perform the disposal service.

Apart from engaging certified waste disposal or treatment vendors and requiring proof of completion of disposal or treatment as per regulatory requirements, the Company also uses GPS to track the route and final destination of the waste. Employees in charging of environmental protection also monitor the process in person or follow the disposal vehicle on an ad-hoc basis. On-site visits to the vendors are made to ensure that different types of waste are handled properly to prevent additional burden on the environment and risk of pollution. When engaging waste treatment service, the Company shall hand over the waste and report the handover as per regulatory requirements. In line with the law, within 48 hours, the Company shall confirm that the vendors have indeed received the waste.

Waste Disposal Details for Each Plant in 2022

	General industrial waste	Hazardous industrial waste
Incineration	1,329	914
Burial	221	0
Physical treatment	30	0
Thermal treatment	145	0
Washing up	4	1,073
Biological treatment	56	0
Recycling and reuse	466	39
Total	2,251	2,026
Recycled %	20.88%	54.89%

Solvent Recycling

NANPAO has completed an environmental footprint analysis of water-based PU dispersion (including packaging) using LCA technology and obtained an ISO14067 verification statement. In the water-based PU process, waste solvents are distilled and recycled back into the process (acetone), which not only significantly reduces the production of waste solvents but also reduces the cost of waste disposal. Other chemicals (butanone) produced after the distillation of waste solvents are sold back to customers. This not only improves resource efficiency but also enhances our operational performance, realizing the circular economy of waste turning into gold.

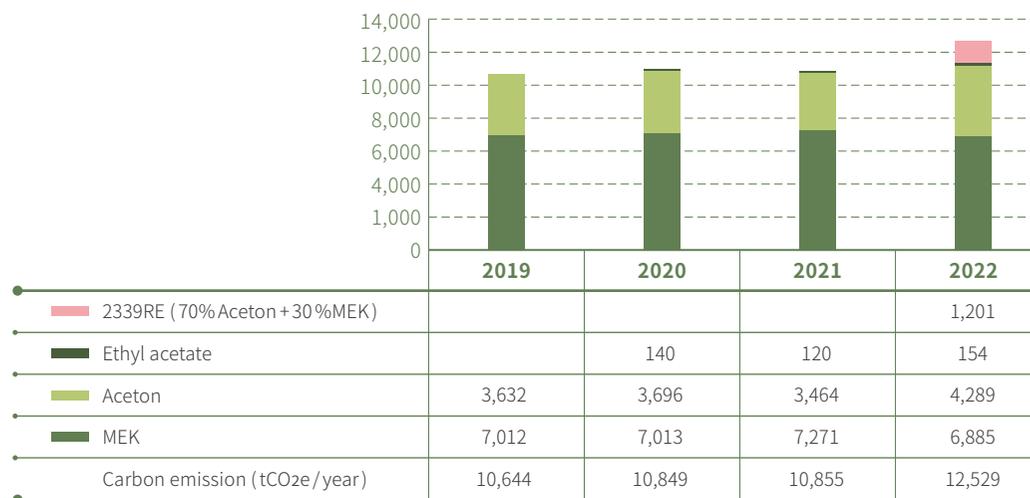
NANPAO Taiwan continues to expand its equipment and processes for solvent recovery and reuse. In 2022, a total of 5,620 tons of solvents were recovered, representing a 9.66% increase from the previous year.

Solvent Recycle Statistics of NANPAO Taiwan



Apart from reducing the waste volume, recycling solvent is able to significantly reduce the emission of carbon dioxide. In 2022, solvent recycle reduced a total of 12,529 metrics tonnes in carbon dioxide emission.

Carbon emission reduction from recycling solvent (tCO₂e/year)



4.7 Ecosystem Preservation

All production bases of NANPAO have undergone evaluations pertaining to the environmental protection law in the planning phase. Moreover, the Company has selected locations in industrial areas permitted by location government as its production bases. These areas are neither nature reserve or habitat of flora and fauna nor areas on IUCN Red List of Threatened Species. For all production activities, we are committed to pose as little influence and impact as possible on the local biodiverse environment. To reduce the environmental impact posed by our production processes, NANPAO has implemented the relevant pollution prevention equipment to enhance treatment efficiency and reduce the influence on the environment.

NANPAO has also established a "Biodiversity Policy", committed to introducing prevention, mitigation, and monitoring practices within the scope of corporate efforts, and calling on supply chain partners to support and collaborate together.

NANPAO Group Biodiversity Policy

NANPAO is committed to addressing climate change-related issues and recognizing the importance of biodiversity conservation and forest preservation in recent years. We have developed the "NANPAO Group Biodiversity Commitment" to incorporate preventive, mitigative, and monitoring practices within the realm of corporate capabilities. We also call upon our supply chain partners to support and collaborate with us to achieve the following commitments and guidelines :

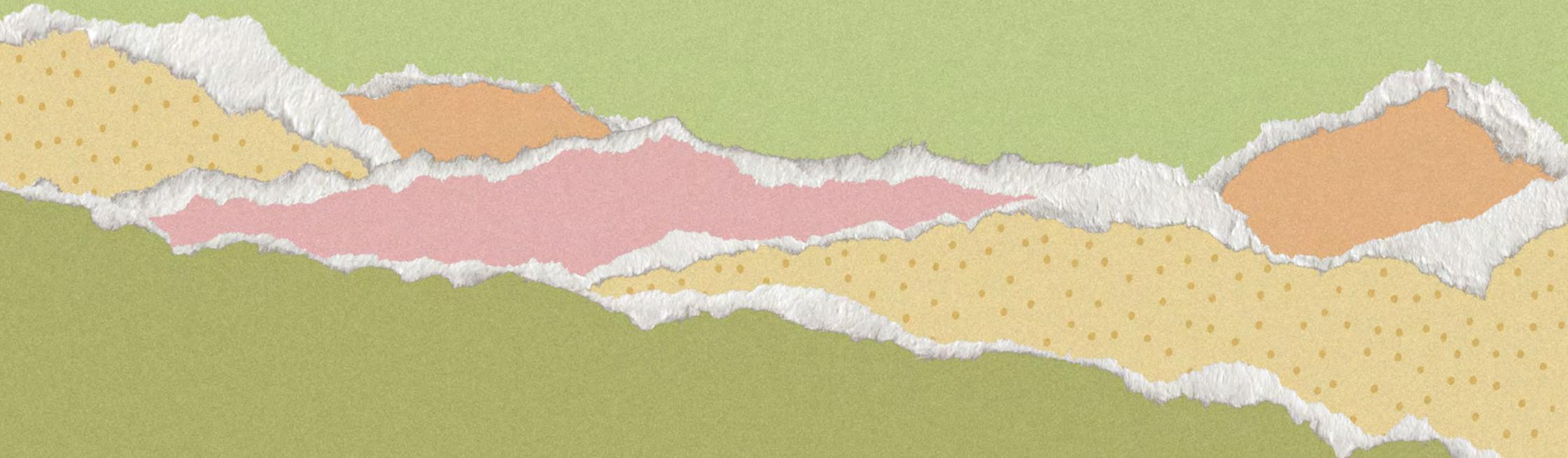
1. Avoid establishing new operational locations in areas internationally or nationally defined as important habitats, biodiversity-sensitive regions, or designated as natural protected areas. We also avoid locating in neighboring areas that are ecologically connected or mutually influenced by hydrological and vegetation conditions.
2. Avoid activities that harm or impact protected forests and species during our operations.
3. When operating in proximity to critical biodiversity areas becomes necessary, we will strive to implement preventive, mitigative, offsetting, monitoring, and restoration measures within our corporate capabilities.
4. Promote the concept of biodiversity conservation and forest preservation to internal and external stakeholders, raising awareness of environmental protection among stakeholders.
5. Ensure that NANPAO and our supply chain partners comply with relevant international laws and regulations in our operations' locations. Our operations will not engage in deforestation, and we will refrain from development activities in forested areas, highly conservation-worthy regions, peatlands, and similar areas.
6. Informed by the situation, we will refrain from procuring from suppliers that contribute to biodiversity loss, engage in illegal logging, or violate regulations.
7. Collaborate with supply chain partners and stakeholders to support biodiversity conservation, forest preservation, and ecological protection efforts.

As a responsible corporate entity, NANPAO is dedicated to implementing these commitments and guidelines to contribute to the preservation of biodiversity and the protection of our natural environment.



5. CO-CREATION OF VALUE

5.1	Human Rights Policy	69
5.2	Employee and Welfare	70
5.3	Employee Communication and Development	77
5.4	Safe Occupational Environment	78
5.5	Good Supplier Management and Relationship	83



05 Co-creation of value

5.1 Human Rights Policy

NANPAO values human rights issues and continuously adjusts work regulations to comply with domestic and international laws and regulations. The company has adjusted working hours, wages, and vacation rules according to the latest revised labor laws to ensure that every employee can work with peace of mind and enjoy protection and security in the workplace. NANPAO is committed to creating a high-quality and friendly workplace.

To uphold the basic human rights of NANPAO's employees and value chain partners (including customers, suppliers/contractors, agents, joint ventures, and local communities) and promote sustainable development in the environment, society, and economy, NANPAO has formulated a "Human Rights Policy." The policy supports and respects the protection, respect, and remedy principles of the United Nations Universal Declaration of Human Rights, the first and second principles of the United Nations Global Compact, the United Nations Guiding Principles on Business and Human Rights, and the international human rights norms of the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. NANPAO complies with local laws and regulations to ensure the implementation of human rights protection work.

Note: Please refer to the company website for NANPAO's "Human Rights Policy."

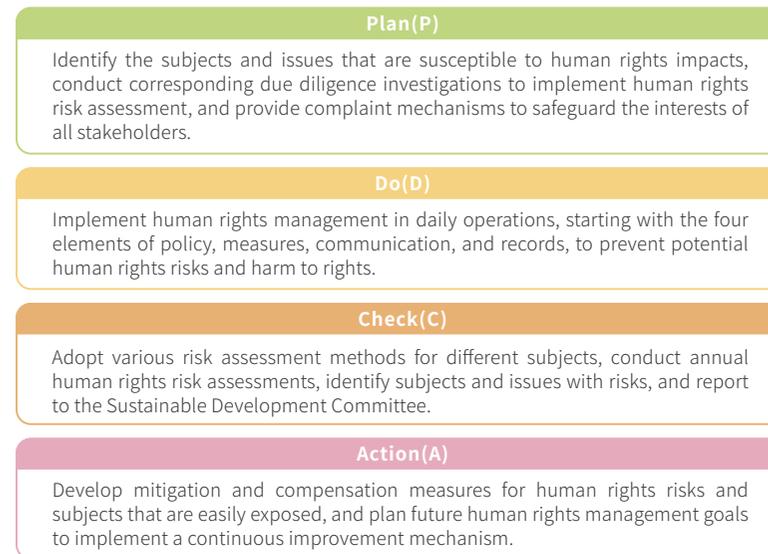
Human Rights Protection Measures of NANPAO

- No forced labor:** Comply with government labor laws and international norms, and do not force or coerce anyone who is unwilling to perform labor.
- Prohibition of child labor:** No child labor is allowed in any of Nan Pao Resins' operating locations.
- Basic wage compliance:** Ensure that employees' wages are not lower than the local minimum wage and safeguard employee benefits.
- Employee rest time:** Reasonable work hours are limited and employees are entitled to paid leave.
- Freedom of association:** Respect employee choices and allow employees to join unions freely.
- Equal respect:** Implement diversity and equality and oppose any form of discrimination.
- Anti-discrimination and harassment:** Establish "Measures and Penalties for the Prevention and Control of Sexual Harassment," ensure privacy and personal information protection in the workplace, and hold educational training courses and relevant event reporting channels.

NANPAO pays close attention to protection of privacy and personal data. We have established privacy and personal data protection policy. We also require members of NANPAO and other collaborative vendors to comply with Personal Data Protection Act promulgated by ROC, General Data Protection Regulation promulgated by EU and personal data protection law in any location of operation when collecting, handling, utilizing, retaining and disclosing personal data so as to ensure legal compliance, and that concerted effort is put in to protect personal data, and the rights and interests of every individual.

To consistently strengthen the awareness of members of NANPAO on personal data protection so as to implement management and operation that meet regulatory requirements, we educate them on regulations and operating procedures on personal data protection, and review the maintenance on personal data protection via internal training and important announcements on a regular basis. Based on the evaluation results, relevant management programs and measures shall be formulated.

Human Rights Risks Management Procedures



Plan(P)

Identify the subjects and issues that are susceptible to human rights impacts, conduct corresponding due diligence investigations to implement human rights risk assessment, and provide complaint mechanisms to safeguard the interests of all stakeholders.

Do(D)

Implement human rights management in daily operations, starting with the four elements of policy, measures, communication, and records, to prevent potential human rights risks and harm to rights.

Check(C)

Adopt various risk assessment methods for different subjects, conduct annual human rights risk assessments, identify subjects and issues with risks, and report to the Sustainable Development Committee.

Action(A)

Develop mitigation and compensation measures for human rights risks and subjects that are easily exposed, and plan future human rights management goals to implement a continuous improvement mechanism.

Role of NANPAO	Target	Human Rights Issues	Main Policy	Responsible Unit	Due Diligence	Complaint Mechanism
Employers Value chain partners (including joint ventures)	<ul style="list-style-type: none"> All employees Foreign employees Female employees 	Freedom of choice of employment, working hours, wages and benefits, non-discrimination, prevention of sexual harassment, occupational safety, emergency preparedness, workplace injuries and occupational diseases, data privacy and security.	Human rights policy	Human resource center, Human resource department in other subsidiaries	Internal compliance audit	Internal reporting channels: internal reporting channels of each subsidiary (audit department) External reporting channels: customer service mailbox (info@nanpao.com)
	<ul style="list-style-type: none"> Child labors 	Teen employees				
Purchasers	<ul style="list-style-type: none"> Suppliers / Contractors 	Freedom of choice of employment, youth employment, working hours, wages and benefits, occupational safety, emergency preparedness, responsible mineral sourcing, data privacy and security.	Supplier code of conduct	Procurement center, purchasing units of subsidiaries	Supplier code of conduct statement, supplier audit, internal compliance audit	
Assisting community development	<ul style="list-style-type: none"> The community nearby and environment 	Water resources, noises, air pollutions	Sustainability practice guidelines	Operational site plants	Plant monitoring of noise, water and gas emissions	
Service providers	<ul style="list-style-type: none"> Customers 	Data privacy and security	Privacy and personal data protection policy	Operational site plants	Annual risk assessment, internal compliance audit unit	

5.2 Employee and Welfare

Diversity Recruitment

Good quality human resources are one of the keys to the success of NANPAO. The Company has established reasonable and fair human resource system and healthy internal organization so that employees are able to make full use of their talents. The Company treats applicants and employees in a fair manner regardless of ethnicity, gender, age, religion, nationality or political inclination. By upholding the principle of "valuing talents, enshrining people" the Company provides equal employment opportunity to its employees. Furthermore, the Company proactively utilizes diverse avenues, such as social media, campus internship, internal recruitment and industry-academia cooperation to recruit world-class talents. The Company also proactively engages in industry-academia cooperation with various universities and provides short-term internship opportunities to students, so that students are able to experience work life and make use of their knowledge. Student are therefore, able to quickly adapt to the industry.

Care for Employees with Disabilities

NANPAO pays special attention to the special needs of employees with disabilities and values their training and development. We employ more disadvantaged groups than required by law, and collaborate with the Tainan City Department of Labor to develop vocational training for people with disabilities. Through the guidance and teaching of senior employees and supervisors, employees with disabilities can smoothly integrate into the workplace and complete their work tasks, and we create an environment suitable for their work through ergonomics.

NANPAO values employee diversity and employs a total of 11 employees with disabilities, in compliance with the requirements of the "Persons with Disabilities Rights Protection Act." We also respect our employees' religious beliefs, culture, and customs, and have never been involved in any incidents that violate their work rights and human rights.

In 2022, all employment contracts between employees and the company in each operating location comply with relevant local laws, and there were no incidents of discrimination, sexual harassment, child labor, infringement of indigenous rights, or forced labor.



International student internship



University student internship



Disability occupational therapy integration



Home visit for students with disabilities

Employee Composition and Retention

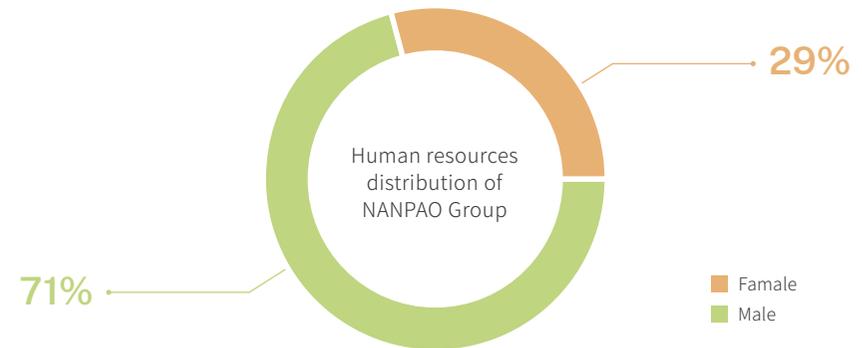
As of 2022, NANPAO had a total of 3,083 employees. The total number of employees in the Taiwan headquarters was 691, with 172 female employees and 519 male employees. In recent years, NANPAO has actively promoted a gender-equal working environment, which has helped attract female employees. In 2022, the proportion of female employees increased by 11.69% compared to the previous year (from 23.1% to 24.7%). Due to the labor-intensive nature of the chemical industry to which the company belongs, over 70% of the employees are male. In terms of age composition, over 70% of NANPAO's employees in 2022 were concentrated in the 30-50 age group.

However, NANPAO recognizes that a "diverse" employee composition can increase corporate resilience and help improve overall business performance. Therefore, the company continues to create a diverse and friendly workplace environment, and hopes to continue to increase the proportion of female employees and female managers, working towards a gender-friendly workplace. In 2022, the proportion of female managers in NANPAO Taiwan increased by 1% compared to the previous year (with an additional 1 female grassroots manager). NANPAO also emphasizes the diversity of employee nationalities and composition, with each operating location having employees primarily from the respective countries.

Distribution of Employee Numbers of NANPAO Taiwan

Age	2020				2021				2022			
	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
<30 years old	72	14%	20	13%	62	12%	16	10%	59	11%	16	9%
30-50 years old	354	68%	86	54%	363	71%	93	61%	373	72%	110	64%
>50 years old	95	18%	54	33%	87	17%	45	29%	87	17%	46	27%
total	521	100%	160	100%	512	100%	154	100%	519	100%	172	100%

Employee Overview by Region for the Group in 2022



Numbers of Female Supervisors in NANPAO Group

2022	Numbers of female employees	%
Junior supervisors	45	34%
Executives	3	2%
Staff in STEM department	86	64%
Total	134	100%

Note 1: Junior supervisors: section manager to manager level (inclusive)

Note 2: Executives: managers above assistant vice president (inclusive)

Note 3: STEM department: staff in areas of science, technology and engineering

Nationality Distribution of Employees in NANPAO Group in 2022.

Nationality	Male	Female	Total
China	604	226	830
Taiwan	698	307	1005
Indonesia	166	40	206
India	11	1	12
Bangladesh	20	1	21
Hong Kong	3	3	6
Thailand	47	13	60
Malaysia	28	14	42
the Philippines	12	10	22
Vietnam	435	230	665
Australia	152	58	210
Korea	4	-	4
Total	2180	903	3083

Talent Recruitment and Retention

Employees are the most important asset of NANPAO. As such, the Company has provided a comprehensive promotion management course and employee welfare system to facilitate continuous self-development of employees. In addition to general recruitment channels, NANPAO actively participates in campus recruitment events in order to attract more young talent to the stable and solid chemical industry. To retain competitive talents, the company strives to create a friendly working environment, emphasizes work-life balance, provides employee training and development opportunities, and promotes continuous self-improvement for employees to achieve their personal career development.

As a player in the chemical industry, the majority of new employees in the NANPAO Group are operational staff, R&D personnel, and management personnel aged between 30 and 50. In response to the rapid growth in the group's performance in 2022, the proportion of new hires in Taiwan is 22%, and the proportion of new hires in the entire group is 23%.

The Newcomers in Taiwan

Year	Age\Gender	<30 years old	30-50 years old	>50 years old	Total	Male & Female	Average turnover (%)
2020	Male newcomers	17	22	0	47	681	7%
	%	3%	4%	0%			
	Female newcomers	6	1	1			
	%	4%	1%	1%			
2021	Male newcomers	22	51	1	100	666	15%
	%	4%	10%	0%			
	Female newcomers	6	18	2			
	%	4%	12%	1%			
2022	Male newcomers	45	68	1	154	691	22%
	%	9%	13%	0%			
	Female newcomers	14	24	2			
	%	8%	14%	1%			

The Newcomers in NANPAO Group

Year	Age\Gender	<30 years old	30-50 years old	>50 years old	Total	Male & Female	Average turnover (%)
2020	Male newcomers	159	195	9	524	2,954	18%
	%	8%	9%	0%			
	Female newcomers	81	76	4			
	%	10%	9%	0%			
2021	Male newcomers	168	214	21	595	2,953	20%
	%	8%	10%	1%			
	Female newcomers	94	91	7			
	%	11%	11%	1%			
2022	Male newcomers	225	269	16	711	3,083	23%
	%	10%	12%	1%			
	Female newcomers	80	111	10			
	%	9%	12%	1%			

Note 1 : New hire rate (%) = Number of new hires in the category in the current year / Total number of employees in the category at the end of the current year.

Note 2 : The number of new hires does not exclude employees who resigned midway.

Due to the industry structure, the workforce composition of NANPAO is mainly made up of people aged 30 to 50. Therefore, the resignation rate also tends to be higher in this age group, which is not significantly different from 2021.

Turnover

In terms of managing resignations, once an employee expresses the intention to resign, the human resources department will arrange an exit interview and seek suggestions from the employee about the company. The department will also try to understand the reasons for the employee's resignation, provide care and retention efforts, and offer suggestions for improvement or adjustments to various management levels. The human resources department regularly analyzes data on the job type and seniority of departing employees to gain a comprehensive view of talent flow. The department also periodically arranges internal job transfers or open recruitment to ensure that all talents are in suitable positions for sustainable development.

When an employee applies for resignation, both the supervisor and the human resources department will conduct an exit interview to understand the real reason for the employee's resignation. Through understanding the employee's personal strengths, job content, and adjustment of work location, or by providing internal transfer opportunities, the aim is to retain the employee.

Turnover Rate in Taiwan

Year	Age\Gender	<30 years old	30-50 years old	>50 years old	Total	Male & Female	Average turnover (%)
2020	Male newcomers	25	54	9	106	681	16%
	%	5%	10%	2%			
	Female newcomers	3	11	4			
	%	2%	7%	3%			
2021	Male newcomers	23	14	48	116	666	17%
	%	4%	3%	9%			
	Female newcomers	7	13	11			
	%	5%	8%	7%			
2022	Male newcomers	39	62	10	133	691	19%
	%	8%	12%	2%			
	Female newcomers	10	9	3			
	%	6%	5%	2%			

Turnover Rate in NANPAO Group

Year	Age\Gender	<30 years old	30-50 years old	>50 years old	Total	Male & Female	Average turnover (%)
2020	Male newcomers	169	236	40	581	2,945	20%
	%	8%	11%	2%			
	Female newcomers	52	71	13			
	%	6%	8%	2%			
2021	Male newcomers	169	248	38	637	2,953	22%
	%	8%	12%	2%			
	Female newcomers	77	91	14			
	%	9%	11%	2%			
2022	Male newcomers	159	258	37	625	3,083	20%
	%	7%	12%	2%			
	Female newcomers	60	99	12			
	%	7%	11%	1%			

Note 1 : Turnover rate (%) = number of employees who left during the year / total number of employees in the category at the end of the year.

Note 2 : The number of employees who left includes voluntary or involuntary terminations and retirements.

Employee-management Communication

NANPAO holds labor-management meetings every quarter in compliance with the law, where representatives from both the employer and employee sides communicate and exchange ideas with sincerity to manage labor relations, value and respond correctly to employee opinions, and effectively coordinate labor-management relations to promote cooperation. For decades, the company has upheld the belief of "harmonious labor-management relations, mutual benefit" to promote and advance labor-management relations. The company follows all labor laws and regulations, including the Labor Standards Act, Occupational Safety and Health Act, and Labor Insurance Act. In addition to these laws, NANPAO maintains an obstacle-free labor-management communication channel, with 56.68% of employees participating in the union, and the union leaders regularly holding meetings with company representatives. The company also invites the union chairman to participate in business meetings to provide employees with a comprehensive understanding of the company's operations and direction.

Reasons for NANPAO Taiwan not signing a collective agreement are explained as follows :

1. **Respect for employee freedom of choice** : Currently, 57% of NANPAO Taiwan's employees are members of a union. Respecting the employees' freedom of will and rights, the company believes that each employee has the right to decide whether to join a union, and there should be no unfair treatment due to signing a collective agreement. The company respects the individual decisions of employees and supports them in making balanced choices between personal and collective interests.
2. **Flexibility and diversity** : The company aims to maintain flexibility and diversity to better adapt to market changes and business needs. Without signing a collective agreement, the company can make decisions more quickly and adjust organizational structure and employee allocation flexibly to enhance competitiveness and business efficiency.
3. **Direct communication and negotiation** : The company adopts direct communication and negotiation with employees and has established open communication channels for employees to express their opinions, raise questions, and seek solutions. The company encourages employee participation in the decision-making process and ensures that employee opinions are fully heard and considered.
4. **Flexible employee benefits and compensation** : The company is committed to providing flexible employee benefits and compensation packages to meet individual employee needs and expectations. The company values performance-based rewards based on employee performance and market competitiveness, and offers a competitive salary system and benefits program.
5. **Continuous improvement of labor conditions** : The company is committed to continuously improving employees' working conditions, including the work environment, safety measures, and training opportunities. The company will ensure the respect and protection of employee rights through internal policies and processes, not solely relying on the provisions of a collective agreement.

Employee Welfare

NANPAO has an employee welfare committee, and all company welfare expenses in Taiwan are allocated according to statutory contribution rates, which include 0.5% of salaries, 0.11% of revenue, and 30% of the sale of scrap materials, used to organize various welfare activities for Taiwanese and foreign employees. Welfare expenses for overseas business locations are based on local regulations. The allocation of expenses for each branch of the employee welfare committee in Taiwan is decided by its members and employees and includes organizing regular travel activities, Labor Day lottery draws, club activities, health checkups, scholarships, various bonuses and gifts, and employee group insurance.

Exposing Gender Pay Ratio

In 2022, NANPAO Taiwan classified male and female salary ratios by managerial and non-managerial positions, and found no difference in the annual salary ratio between male and female employees, regardless of their positions. For employees in the same position, such as grassroots officers, their treatment is the same. For those with relevant professional and work experience, their treatment is based on their education, expertise, and qualifications, and is not affected by gender or ethnicity. Using female salaries as a baseline of 1, the average salary for male managers was 1.06 and for non-managerial male employees was 0.94.

NANPAO provides a competitive and multi-faceted compensation system that does not discriminate based on age, gender, or race. The average salary level is also higher than that of the industry. We adhere to the concept of sharing profits with employees to attract excellent talents, motivate and retain existing employees. NANPAO Group (including the Taiwan headquarters and overseas subsidiaries) complies with the requirements of employee salary and benefits in each operating location, and there were no violations in employee salary and benefits in 2022.

Compensation Policy

1. **Salary** : Adjustments are made based on individual performance according to the company's overall operating conditions.
2. Allocate a certain proportion of profit as the basis for employee bonuses and share profits with colleagues.
3. Encouraging employees to hold company stock, and assisting them with long-term investment and retirement planning.
4. Annual performance evaluations for grassroots employees are recognized, rewarded, and stimulated by a variety of incentive schemes. These include bonuses for festivals, production performance, project proposals, outstanding contributions, team cooperation, outstanding employees, and senior employees, among others.

Salary ratio between male and female in various job categories at NANPAO Taiwan is shown in the following table

Nationality	Gender	Numbers of employees	In 2020	Numbers of employees	In 2021	Numbers of employees	In 2022
Executives	Male	65	1.01	72	1.02	70	1.06
	Female	9	1	10	1	10	1
Staff	Male	449	0.93	426	0.95	427	0.94
	Female	152	1	150	1	150	1

Note 1 : Executives of section manager to manager level (inclusive)

Note 2 : Non-executives below section manager level

Note 3 : The number of employees is planned to be reported in accordance with the "Full-Time Employee Salary Information Disclosure Form for Non-Supervisory Positions."

Pay Equality Indicators of NANPAO Taiwan

Pay Equality Indicator	Gap (%)
Gender pay gap in average salary	2.14
Gender pay gap in median salary	1.92
Gender gap in average variable bonus	6.31
Gender gap in median variable bonus	1.06



Parent-child crafting class



Chemical & science class



Employees birthday celebration



Employee Reading award



Retirement Planning and Protection

NANPAO has established an employee stock trust to encourage employees to engage in long-term investment planning. The trust provides employees with the option to participate, and they can allocate a portion of their monthly salary to a personal trust account. The company also provides a corresponding incentive contribution to encourage employees to save and accumulate wealth for retirement and care. As of 2022, the employee participation rate has reached 70%.

NANPAO adheres to relevant Taiwanese laws by providing employees with labor insurance, national health insurance, and group insurance. We have also established a 'Labor Retirement Fund Supervisory Committee' to review and oversee the utilization of retirement funds. In accordance with the law, full retirement fund contributions are made on a monthly basis to the Taiwan Bank Retirement Fund Account to ensure the rights and benefits of retired employees. For employees who joined the company on or after July 1, 2005, the new labor retirement system, as stipulated in the 'Labor Retirement Act,' is applied uniformly, with retirement fund contributions meeting or exceeding legal requirements. For employees who joined the company on or before June 30, 2005, they have the option to choose between the new or old retirement system, starting from July 1, 2005, based on their individual preferences. The participation rate for regular employees in the retirement plan is 100%.

Retirement System and Implementation Method of NANPAO Taiwan

1. The company has established a "Labor Retirement Plan".
2. A Labor Retirement Reserve Fund Supervisory Committee is established in accordance with legal regulations. Each month, retirement funds are allocated and fully deposited into the Taiwan Bank Trust Department.
3. Since July 2005, the new Labor Retirement Pension system has been implemented in accordance with the monthly salary grading table for the Labor Retirement Pension. Each employee is required to contribute 6% of their monthly salary to the Labor Retirement Pension, which is then deposited into the special purpose account of Taiwan Bank.
4. In accordance with the provisions of International Accounting Standard No. 19, an actuary is commissioned to evaluate and calculate the Labor Retirement Reserve Fund and provide an actuarial valuation report.

Retirement pension system	Old system	New system
Applicable law	Labor Standards Act	Labor Pension Act
How to allocate	Monthly allocation of retirement reserve funds (15% allocation rate) to the special purpose account of Taiwan Bank.	Following the monthly salary-based contribution table for labor retirement funds, we allocate 6% of each employee's monthly salary to their individual account at the Bureau of Labor Insurance.
Amount of allocation	As of December 31, 2022, the balance in the Labor Retirement Fund Account is New Taiwan Dollars 351,685 million.	The allocation for 2022 is NT\$22.222 billion

Maternity and Family Friendly Measures

The company and the Employee Welfare Committee have signed contracts with nearby reputable childcare institutions to provide childcare services and benefits to employees. In response to the government's policy on parental leave without pay, employees can apply to the company for parental leave in accordance with the "Gender Equality in Employment Act" and the "Implementation Measures for Parental Leave without Pay," and can extend their leave based on personal needs. Early resumption of work can also be arranged, and during the leave period, employees can still enroll in the company's labor and health insurance.

NANPAO is committed to safeguarding maternal rights and building a friendly working environment and system for both male and female employees. The nurses take the initiative to care for pregnant colleagues, examine whether the working environment needs to be adjusted, and provide suggestions. In Taiwan, we comply with the "Gender Equality in Employment Act" and have established lactation rooms, offering maternity leave and paternity leave in accordance with the law, as well as granting parental leave.

We also encourage colleagues with infants and young children at home to make good use of parental leave to provide family support and accompany their children. In 2022, a total of 7 people applied for parental leave without pay, and 4 people have already returned to work, with a return rate of 57%. Three of them are still on parental leave.

Statistical data on the number of employees who applied for parental leave from 2020 to 2022 in NANPAO Taiwan

Year	Male	Female	Total	Employee return rate
In 2020	2	4	6	100%
↓				
In 2021	2	5	7	86%
↓				
In 2022	3	4	7	57%

Employee Clubs and Societies

We encourage employees to establish clubs and take part in club activities. To date, employees have taken the initiative to establish the golf club and badminton club in NANPAO.

For sports clubs such as basketball and jogging clubs, employees are able to foster rapport and friendship via working out after office hours or during weekends. This is able to deepen interaction and understanding between executives and employees outside the office. Apart from improving health, these activities are helpful in increasing workplace collaboration efficiency.



Practice session of Jogging Club



Practice session of Basketball Club



Practice session of Basketball Club



Golf competition



Golf competition

5.3 Employee Communication and Development

To ensure good labor-management communication, on a regular basis, we convene labor-management meetings, bi-weekly meetings, interactive meetings with departmental executives, seminars, toolbox meetings, feedback and Chairperson mailboxes, and other complaint avenues made available to employees. For any violation or infraction noted within the unit, employees are able to file a complaint or blow the whistle to the Company via the relevant avenues. Regular labor-management meetings allow the management echelon and labor representatives to gain understanding and undertake discussion on matters concerning employees, so that effective and viable response and solutions may be offered.

Name	Participant	Content	Frequency
Direct line to CEO	Employees and investors	Operating issues of the Company	Whenever necessary
Website and customer service e-mail	All employees and external personnel	Any issues	Whenever necessary
Weekly meeting	All employees	Reporting by senior management, section manager level and above to enable employees to apprehend operating policies and directions, and business performance.	Once every two weeks
Seminar for union workers.	Employees in union	Employee welfare, labor-management issues and employees in union engage in communication and discussion.	Once per year
Toolbox meetings	Production units	Employee may voice any issue encountered in the meeting, e.g. queries pertaining to job assignments or problems at workplace. Executives or competent personnel shall offer a solution to employees.	Once per week
Staff Welfare Committee Convention	Staff Welfare Committee	Reporting of employee welfare activities and use of funding to Staff Welfare Committee members selected by various factories.	Once per quarter

Training and Communication of Code of Ethics

To guide employee behavior to meet ethical standards, the "NANPAO Code of Ethics" was established, and stakeholders were informed of the ethical behavior standards that employees should adhere to while performing their duties.

Every new employee is given an orientation on the Code of Ethics, and the company regularly announces the guidelines and methods of the Code of Ethics, the Trade Secrets Act, and others on the internal platform, so that employees can understand ethical behavior, prevent conflicts of interest, avoid personal gain, protect confidentiality, engage in fair transactions, protect and use company assets appropriately, and comply with laws and regulations.

NANPAO has established a "Code of Ethics" for all directors, managers, and colleagues to follow, with the expectation that all colleagues should comply with the relevant rules of the company during their daily work and business operations, in order to gain public trust and ensure the sustainable growth and development of the company.

The Company has set up an "Employee Opinion Box" and an "Employee Complaint Handling System." If there are any doubts about ethical and legal behavior or any instances of unequal treatment in the workplace, employees can seek advice from the Human Resources Department or through the mailbox to obtain appropriate suggestions and submit reports to detect, prevent, and avoid significant improper behavior and violation of government laws and regulations.

Education and Training

The development and cultivation of human resources are the bedrock of sustainability management and consistent improvement of businesses. The training policy of NANPAO is "to develop the organizational competence in line with vision and strategies of the Company", so as to allow corporate culture and values taking root in the behavior of employees. By continuous enhancement of core competences, the Company develops unique competitive advantage, cultivating all-rounded/worldly management talents and fostering an organizational culture that thrives on training."

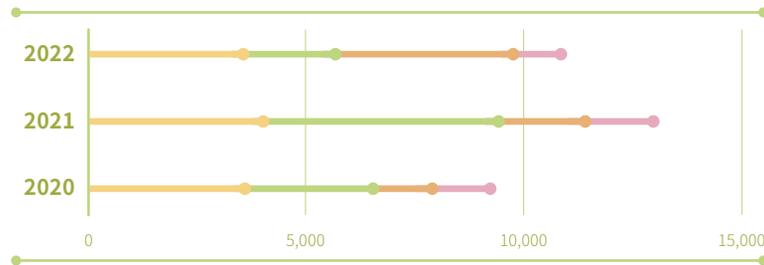
To assist in quick enhancement in employees so that they can adapt to fast-changing needs of the environment, in recent years, the Company proactively promotes digital learning, launching online learning platform, "NANPAO E-Learning", online English learning platform and other digital systems to foster an innovative and diverse learning environment. The effort is made so that the learning activities of employees are not limited by time or space. The employees are then able to apply what they have learned in their job assignments, and continuously improve the job effectiveness.

Performance Appraisal

According to Procedures for Employee Performance Appraisal Management, employees conduct performance appraisal once every half a year. There are, therefore, two appraisals each year. Except for consultants, probationary and trainee personnel, all other employees should undergo performance evaluations. Non-KPI personnel are subject to an annual performance assessment. KPI assessment goals are divided into common objectives for all staff and common objectives for

specific functions (such as sales, research and development). These goals' achievement rates are reviewed semi-annually. For senior executives, promotion candidates, and employees with development potential, a 360-degree performance appraisal is conducted annually to gain a comprehensive understanding of their characteristics and potential.

Training Hours of NANPAO Taiwan



	2020	→ 2021	→ 2022
R&D / Quality Control	3,310	3,824	3,339
Production departments	2,930	5,412	2,123
Management departments	1,322	1,973	4,104
Sales departments	1,334	1,499	1,042

5.4 Safe Occupational Environment

To establish a safe, healthy and comfortable working environment for employees and consistently reduce occupational hazard rate, the Company has established the "Occupational Safety and Health Policy" to serve as the highest guiding principle for safety and health management. Safety in operation has been our top priority. With management standards that focus on continuous improvement, the Company proactively enhances the workplace environment, production equipment and operating procedures to protect the safety and health of workers and stakeholders.

From 2000 onward, NANPAO embarked on the Occupational Health and Safety Assessment Series 18001 (OHSAS18001). In 2020, the Company passed the revised certification, i.e. ISO45001:2018, ISO standard for management systems of occupational health and safety, to establish procedures for hazard identification, risk assessment and control planning, as well as management, supervision and improvement measures so as to prevent safety and health disasters arising within factories.

To implement occupational safety and health management in a comprehensive manner, NANPAO established "Safety and Health Committee", which serves as the highest level body in review and deliberation for safety and health management. The chairperson position of the committee is rotated between management representatives of different factories. The Safety and Health Committee convenes a meeting once each quarter to take charge of research, coordination and supervision of environmental, safety, hygienic and health matters of various factories. Every two weeks, factory safety meeting is convened to discuss improvement measures for tackling various audit weaknesses and prevent occupational disasters.

The Manufacturing Plant that has Obtained ISO 45001 Certification

Location	Taiwan	Fohsan, Gaungdong	Dongguan, Gaungdong	Kunshan, Jiangsu	Fuqing, Fujian	NANPAO, Vietnam	Nan Pao Materials Vietnam	Nan Pao Advanced Materials Vietnam	NNV, Vietnam	Thailand	Indonesia
Status	✓	✓	✓	Due to relocation planning, the implementation is temporarily postponed.		✓	✓	✓	✓	Expected to obtain certification in 2024.	✓

Safety and Health Policy

Compliance with regulations, workplace safety, environmental hygiene, full participation, consultation and communication, continuous improvement.

1. Implement ISO45001 occupational health and safety management system.
2. Provide safe and healthy working conditions.
3. Comply with safety and health laws and regulations and other requirements.
4. Ensure that all employees and contractors understand, comply with, and implement various occupational safety and health regulations, and provide continuous education and training.
5. Eliminate hazards and reduce occupational safety and health risks.

Management policies and objectives

Following the safety and health policy and strategies, reduce personnel health and safety accidents, promote process safety protection, and continuously improve occupational safety and health performance.

Emergency Response Measures

NANPAO owns many chemical plants, and in response to the characteristics of the industry, we attach great importance to emergency response and handling during the operation process. Various factories have established procedures for emergency response operation. Each year, emergency response team conducts on-site exercise to implement environmental or safety and health system, and prevention of accidents and disasters, as well as getting prepared via first-aid and response exercise. This is to ensure that when accident occurs, timely response measures can be initiated to promptly prevent or alleviate the injuries of casualties, property loss and production disruption caused by emergency accidents, and control influence of disaster and reconstruction after disaster.

To undertake correct and effective response strategies and procedures to reduce casualties, property loss and environmental impact to the minimum when emergency incident occurs, Nan Pao has made plans for conducting exercises to train the relevant personnel with hopes of continuously enhance the response mindset of all employees, thus strengthening the disaster relief and response capacity of factories. The content of exercises includes :

- 

1. Response information: Including plan metric map of factory, distribution map of machinery, response process chart, etc.

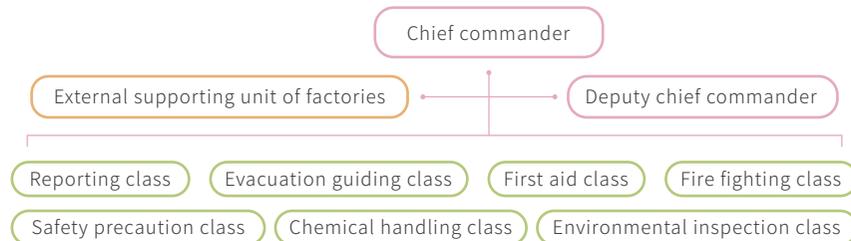
 - Fire extinguishing equipment: Including fire fighting system, public address system, etc.
 - Response equipment: Including various types of protective clothing, individual protective gear, portable air-breathing apparatuses, portable detectors, leak processing equipment, warning indicators, etc.
- 

2. Standardize response procedures and strengthen personnel training.
- 

3. Conduct routine training for personnel to familiarize with reporting, disaster relief, on-site control, first aid for casualties, support for disaster relief and other response skills. The types of training are as follows :

 - Exercise of emergency response team : Including basic, advanced and emergency response courses.
 - Fire drill : Fire drills are conducted each year as per regulatory requirements.

The Organization of Emergency Response Team is as Follows :



Emergency response exercise



Occupational Safety and Health Training

We place great emphasis on the safety of our employees and continuously implement mobile patrols and operational safety observations to reduce hazards arising from unsafe behaviors and environments. Additionally, we utilize safety climate indicators to implement an early warning mechanism and dynamically adjust the intensity of our safety management. Special attention is given to safety and emergency response training to enhance preparedness.

Furthermore, in our commitment to reducing commuting accidents, we consistently conduct safety culture training with a focus on traffic safety. Our goal is to ensure a safe workplace and promote a culture of safety among our workforce.

2022 NANPAO Taiwan Occupational Health and Safety Training Statistics

	Pre-Employment Training	Legal Certification Training		On-the-Job Training
	New Hires and Transfers	Initial Certification	Recertification	Specific or General Training
Number of Participants	51	49	191	354
Training Hours	234	1528	748	254.5

Safety Management of Working Partners

Suppliers and contractors :

NANPAO has established Procedures for Vendor Safety and Health Management to ensure the work safety of contractor personnel within factories. Focal management is undertaken whenever vendors work in factories. Overhead and confined space, induction, hot work, leaks of hazardous gases/chemical and other work that may cause casualties and major property loss are listed as major items for promotion, training and inspection. Meanwhile, the Company has also undertaken regular communication with suppliers and vendors on environmental protection, safety and health issues, encouraging them to enhance performance in environmental protection, safety and health aspects.

To ensure the safety of suppliers and contractors on site, NANPAO cultivates seeds of engineering safety supervisors, providing training on general operations, hot work, elevated work, roof work, confined spaces, and hoisting operations. Qualified colleagues who pass the test are awarded the supervisor badge. When a project is underway, the seed personnel will conduct a preliminary safety and health check to reduce and prevent potential hazards.

Each year, the Company conducts a contractor convention to illustrate the safety and health regulations and measures of NANPAO to contractors, as well as requiring contractors to collaborate with the Company in undertaking safety management measure to ensure their work safety. The Company had requested vendors to sign on Safety Partner Declaration since 2022.

contractor safety convention



NANPAO places great importance on working environment and employee safety, and has established a mechanism for reporting and investigating accidents. Occupational health nurses provide immediate treatment and assistance to injured colleagues, and follow-up care and tracking are provided during their recovery period. Occupational health physicians are also invited to assess and determine whether adjustments or changes to their work content are necessary. Occupational accidents are investigated and analyzed for causes, and improvement plans are formulated and executed. In 2019, the accident investigation form and corrective preventive measures were changed from paper to an electronic signature system, greatly reducing the operation process time and more effectively tracking the progress of improvements. Starting in 2020, group accidents were unified and summarized into group reports, which were published on the company's cloud website and sent via email on a regular basis each month. After being reviewed by each subsidiary, relevant improvement measures were implemented to reduce the frequency of occupational accidents. In 2022, NANPAO Taiwan recorded a total of 23 cases of false alarms and accidents within the factory. There were 4 incidents involving chemical exposures. To mitigate such incidents, the company has established standards for wearing personal protective equipment (PPE) and conducted educational training on the proper use of PPE. These measures are aimed at increasing awareness among employees about the importance of wearing personal protective equipment and reducing accidents related to chemical exposures.

NANPAO Taiwan's Occupational Injury for 2022 (excluding traffic accidents that occur during the commute)

Category	Item	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
Total working hours		1,390,528	1,389,352	1,380,040	1,348,016	1,498,752
Total number of workdays in a year		17,2811	173,669	172,505	167,764	163,836
Number of fatal occupational injuries in a year		0	0	0	0	0
Total number of non-fatal occupational injuries		2	4	4	6	6
Total number of occupational diseases		0	0	0	0	0
Total number of lost workdays		57	46	134	236	207

Note 1 : There were two commuting accidents occurred in the year 2022.

Note 2 : Starting from 2022, the working hours of informal employees will be included in the statistics.

2022 Process Safety Indicators in NANPAO Taiwan (%)

Total process safety incidents count (PSIC)	Total Recordable Incident Rate (TRIR)	Process Safety Total Incident Rate (PSTIR)	Process Safety Incident Severity Rate (PSISR)	Disabling Injury Severity Rate (SR)	Disabling Injury Frequency Rate (FR)
0	0.80	0	0	138.11	4.00

Note 1 : Corrected NANPAO's Total Recordable Incident Rate (TRIR) for 2021, including both direct and indirect employees, to 0.89 instead of 8.9.

Process Safety Performance Indicators Calculation Formulas :

TRIR (Total Recordable Incident Rate) : $TRIR = (\text{Number of Recordable Accidents} * 200,000) / \text{Total Work Hours}$

SR (Severity Rate) : $SR = (\text{Total Lost Disability Days} * 1,000,000) / \text{Total Man-Hours Worked} = (\text{Total Lost Workdays due to Occupational Injuries} * 1,000,000) / \text{Total Work Hours}$

FR (Frequency Rate) : $FR = (\text{The total number of incapacitating injuries} * 1,000,000) / \text{Total working hours}$

2022 NANPAO Group Occupational Injury Performance Statistics

	Taiwan	Foshan (CN)	Foshan Advanced (CN)	Dongguan (CN)	Dongguan Jiaqin (CN)	Kunshan (CN)	Fuqing (CN)	VNNP (VN)	NP Materials (VN)	NP advanced materials (VN)	NNV (VN)	Indonesia	Thailand
1 Frequency Rate (F.R.)	4.00	0	0	0	0	43.89	0	0	0	0	0	0	0
2 Severity Rate (S.R.)	138.11	0	0	0	0	307.10	0	0	0	0	0	0	0

2022 NANPAO Group Incident Statistics

Type	False Alarm Incidents		Safety Incidents	
	Process-related	Non-process-related	Process-related	Non-process-related
Taiwan	0	5	0	9
Foshan (CN)	0	3	0	0
Foshan Advanced (CN)	0	0	0	0
Dongguan (CN)	0	0	0	0
Dongguan Jiaqin (CN)	0	0	0	0
Kunshan (CN)	0	0	0	1
Fuqing (CN)	0	0	0	1
VNNP (VN)	0	0	0	1
NP Materials (VN)	0	0	0	0
NP advanced materials (VN)	0	0	0	0
NNV (VN)	0	0	0	0
Indonesia	0	0	0	0
Thailand	0	0	0	0

Numbers of incidents



Health management certification

Ministry of Labor
Middle-aged and Elderly Exemplary Company

Tainan Public Health Bureau
Certification for Dementia Friendly Organization



Ministry of Health and Welfare

- National Excellent Performance Workplace Certification
- Health Management Award
- On-site certification on CPR and AED equipment.



Health Center and Health Check-up

NANPAO has engaged one professional occupational nurse and established health center to undertake first aid and emergency measures, one-to-one health consultation and employee health management, making more medical resources and professional consultation available to employees with hopes that medical professional instilling the correct health mindset among employees. Meanwhile, the Company has also engaged occupational medical specialists to provide consultation services in factories each month, undertake identification and improvement of work hazard, provide consultation and follow up on employee health issues, make referral for medical services, etc. For disease prevention and employee health protection, the Company specially engages occupational medical specialists from hospital to provide service on-site each month, undertake identification and improvement of work hazard, provide consultation and follow up on employee health issues, make referral for medical services, etc., as well as assisting in implementing health management program.

Each year, NANPAO provides health checkup and special operation health checkup according to different age group. The health checkup items surpass regulatory requirements. Each employee is given electrocardiogram (ECG) examination, abdominal ultrasound, cancer screening (carcinoembryonic antigen (CEA), alpha fetoprotein (AFP) and prostate-specific antigen (PSA)), and thyroid and glycated hemoglobin tests, with hopes of early detection and treatment, along with four major cancer screening tests subsidized by the government. For subsequent stages, health level management is performed according to the results of the checkup. On-site doctors shall provide health education and make referral for further medical services. Occupational

nurse is responsible for inputting the results of the checkup into the "Health Management System".

Occupational safety and health personnel arrange for special hazardous health checkup according to environmental inspection results of different special operations. Occupational medical specialists are responsible for assessing and rating the results so as to implement a comprehensive management by levels. For employees' subject to management at level two and above, individual health guidance is provided. Consultation service and occupational disease prevention training by occupational medical specialists are also provided on a timely basis.

Maternity Protection Measures

To protect the health of female employees, who are seeking pregnancy, expecting, within one year after giving birth or breastfeeding, and health of babies, for work that may endanger maternity health, occupational safety personnel, nurse and unit supervisor shall assist in arranging environmental inspection, and hazard assessment and control. Occupational medical specialists and nurse perform case-by-case management, initiating interviews and guidance, health risk assessment and risk level management, and providing recommendation on appropriate work arrangements. On an adhoc basis, occupational medical specialists provide care for different stages, e.g. after occupational medical specialists confirms that the checkup results are clear, they shall inform the female employee of the relevant information, whilst respecting her will to work so as to realize employment equality and maternity protection.

To strengthen the protection mechanism for the initial stage of pregnancy, after receiving report of pregnancy, pink uniform is distributed to prevent accident (e.g. collision, shoulder-tapping). Special parking space is also provided for expecting female employees.

5.5 Good Supplier Management and Relationship

Supplier Sustainability Management Policy

NANPAO regards suppliers as long-term partners, and competitive quality, technology, delivery time, and cost are essential requirements for suppliers. In the future, NANPAO will place greater emphasis on supplier governance, environmental considerations, and social aspects, making suppliers important partners in driving sustainable development across the value chain. To achieve targets of supply chain sustainable development, the Company seeks to ensure that when suppliers provide products and services, the processes are compliant with social and ethical standards. Furthermore, the Company also ensures that they understand and adhere to regulatory requirements, and are proactive in responding to environmental protection and social related issues, and taking on ESG such that they consistently undertake improvement and enhancement measures. To respond to sustainable development requirements on a timely manner, the Company had incorporated a "Supplier Code of Ethical Conduct" and "Letter of Commitment for Environmental

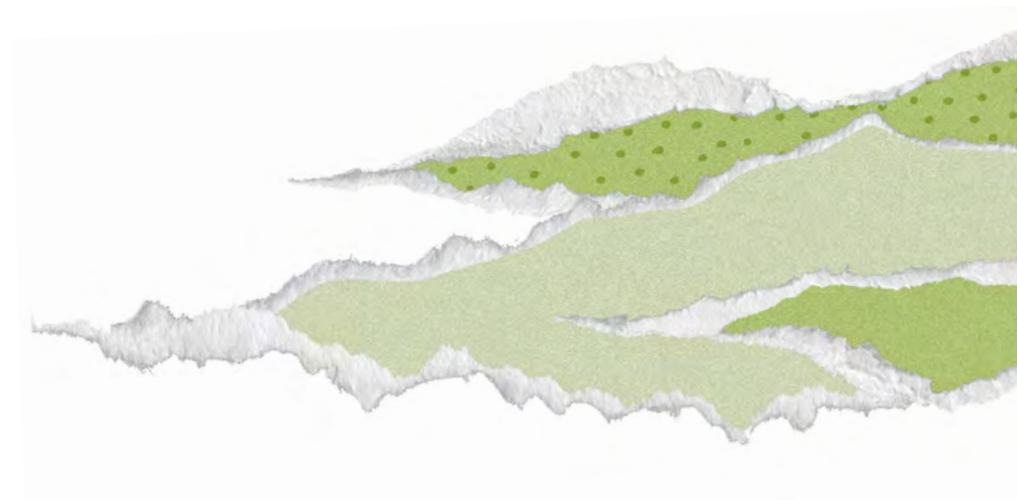
Protection" in the "NANPAO Supplier Code of Conduct". The list of suppliers required to sign on relevant documents had expanded to suppliers of the entire NANPAO Group. In 2022, the group achieved a supplier re-signing rate exceeding 90% across various locations.

NANPAO seeks to maintain a long-term collaborative relationship with suppliers, collectively fostering a stable, developing and sustainable supply chain. Apart from regular assessment on the supplier product and service quality, timeliness of delivery, trading circumstances and service collaboration with suppliers to ensure product quality and stability, the Company also requires suppliers in implementing environmental protection, and safety and health enhancement measures, and paying attention to human rights and other issues so as to fulfil sustainable collectively. In 2022, none of NANPAO's key operational sites had suppliers that employed or utilized child labor, and there were no suppliers with significant or potential environmental impacts.

In 2022, our suppliers' manufacturing facilities were located in various Asian regions such as Japan, South Korea, Mainland China, and Vietnam. In Europe and the Americas, they were situated in countries such as Germany, Belgium, the United States, Spain, and Italy. No procurement was conducted through high-risk regions.

Supplier Management Procedures

NANPAO is committed to maintaining long-term partnerships with suppliers and establishing a sustainable supply chain for stable development. In addition to conducting regular evaluations of quality, delivery time, transaction conditions, and service coordination to ensure product quality and stability, NANPAO also urges suppliers to implement measures to protect the environment, improve safety and health, and prioritize human rights. This is done in order to fulfill corporate social responsibility collectively.





Selection of new suppliers

For new suppliers, NANPAO has established "Questionnaire for New Suppliers" for the investigation of supplier factories providing direct or indirect supplies. Apart from basic information of suppliers, the content of the questionnaire also covers detailed inspection and examination on quality management system, quality control, materials purchased, production supply system, production rate, machinery utilization rate, transportation equipment, R&D system, pollution prevention system and handling system of abnormal products, etc.

Only suppliers who satisfy the requirements shall be selected.



Education and training for suppliers

Conduct education and training for suppliers on an ad-hoc basis.

Promote and communicate the supply chain management of NANPAO.

Supplier evaluation management

Potential suppliers must pass the "Supplier Assessment," which covers the assessment on quality control system, production supply capabilities, technological development capabilities, environmental protection and pollution prevention management, capabilities in handling abnormal products to be included in the "Supplier List."

The Company conducts supplier review once per year, covering three units on quality control, storage management and procurement. The review shall rate the quality, timeliness of delivery and services and cost. The qualification as a supplier shall be terminated in the event that the scoring is lower than the passing grade.

Local Procurement

In NANPAO's products, raw material cost represents the largest component of production costs, and the quality of raw materials is a critical factor affecting product yield. Therefore, stable raw material supply and excellent raw material quality are our primary objectives in raw material procurement.

NANPAO Group has production facilities in many countries and continuously supports local suppliers in each location. In 2022, the proportion of locally sourced raw materials used in production at each facility was 62%. If intra-group transactions are excluded, the proportion of locally sourced raw materials reached 79%, consistently surpassing the target of exceeding 70%. (In 2021, the proportion of locally sourced raw materials for the Group was 61%, and excluding intra-group transactions, it reached 76%).

Furthermore, in 2022, NANPAO Taiwan achieved a high proportion of 99% for local procurement in labor and engineering categories (mainly related to investments in new building construction and plant expansions at the headquarters).

Note: The scope of local procurement statistics includes subsidiaries of NANPAO Group, including 13 group companies in mainland China, Vietnam, Indonesia, and other locations.

Supply Chain Environmental Performance

NANPAO is committed to environmental sustainability and works continuously with suppliers on various energy-saving and carbon reduction initiatives. These efforts not only reduce operational costs for both NANPAO and its suppliers but also enhance the overall competitiveness of the supply chain. For example, the use of recycled pallets instead of new ones: In 2022, NANPAO Taiwan achieved a recycling rate of 68.4% for pallet procurement, which continues to increase annually. Additionally, damaged pallets are repaired using wooden components, significantly reducing wood consumption.

	Key Highlights	Quantitative / Qualitative Results	Implementation Region
Pallet Recycling and Reuse	Use of recycled pallets instead of new ones	Procurement achieved a 68.4% rate of recycled pallets	Taiwan
Reusable Carriers	Replacing cardboard boxes with eco-friendly containers	Reduced 1000 metric tons of cardboard usage, resulting in a 20% reduction in cardboard waste	Foshan
Pallet Recycling and Repair		Reduced pallet procurement quantity by 6.4%	Taiwan



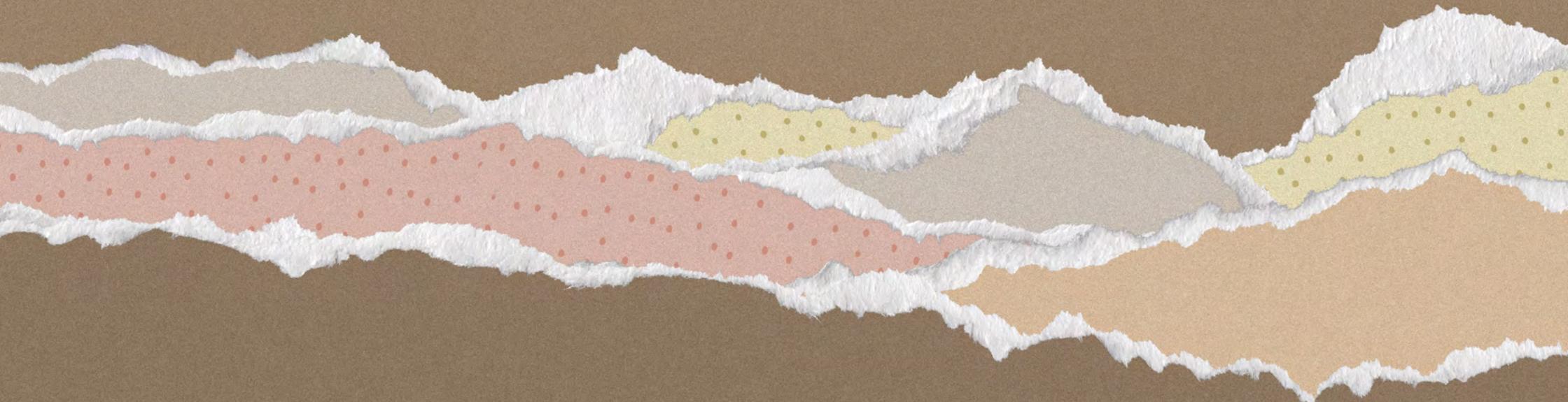
Purchasing used pallets and pallet repair and reuse



Shipping cartons can be reused for 15 or more times

6. COMMUNITY ENGAGEMENT

6.1	Community Safety and Health	86
6.2	Child Education	87
6.3	Elderly Care	88
6.4	Care for the Underprivileged	89
6.5	Charity Service	90



06 Community Engagement

6.1 Community Safety and Health

As a chemical manufacturing company, to avoid the local communities from getting affected by gas leak or emission from the production process, or toxic substances, NANPAO proactively undertakes various protective measures within its factories. As the factories contain many types of chemicals, there is a risk of an unusual odor from volatile chemicals in the vicinity area. To tackle the odor of production EA, the Company has changed from injecting chemical into the aforementioned reactors via holes to via diaphragm pump. This is able to prevent the chemicals from contacting with the air, thus reducing the odor and the concentration of chemical exposure of personnel. Next, the Company has made improvements on components of old equipment within factories (motor with no shaft seal, blind flange and self-inspection, etc.), so that the odor issue is improved. Meanwhile, NANPAO is devising a plan to recycle all effluents of the factories in the coming years. Such measure can prevent effluents from emitting into the sewage of Liucuo community, so that going forward, there will be no water pollution caused by the effluents. We also strive to reduce the VOCs content and emission since early phases of product development and production processes so as to prevent VOCs from polluting the air of the community.

NANPAO has undertaken protective measures for the usual and natural disasters, and chemical leaks properly. Furthermore, each year, the Company conducts various safety exercises on a regular basis. In the event of a disaster, the environmental impact of the local communities can be reduced to the minimum. The Company also invites the residents of the communities to participate in environmental protection interactive activities. As a member of the community, NANPAO cherishes good neighbors whom it works together with. The Company shares with community partners the principle of reducing pollutants from the source and the results of past environmental protection effort so that community residents are able to appreciate that a chemical factory can be friendly to the environment and communities. No complaints or petitions that caused significant negative impacts on the local community in 2022.

NANPAO's headquarter is in Xigang District, Tainan City. When there are job vacancies in the company, priority is given to local qualified candidates from nearby villages and neighborhoods to increase local employment opportunities.

Community Tour at NANPAO



NANPAO provides general safety and health education and training for new employees, job transfers, and foreign workers. The company conducts two self-defense and fire brigade exercises and two toxic substance disaster drills annually to ensure emergency response actions for employee evacuation and sheltering in place during emergency situations. The company also provides necessary safety and health education and training for occupational safety and health business supervisors, high-pressure gas operation supervisors, personnel operating dangerous machinery or equipment, special operations personnel, and emergency response personnel.

All hazardous chemicals in each plant area are labeled, and a list and safety data sheet are established and disclosed, with necessary general training for proper chemical management. The company sets up operation environment monitoring plans for workplaces with organic solvents, dust, and noise, and reports the monitoring plans and test results to the central competent authority.

NANPAO implements protective measures for various general disasters, natural disasters, and chemical leakage disasters, and conducts various safety drills regularly each year to minimize the impact of any disasters on the environment and nearby communities. The company continues to pay attention to community dynamics and responds to changes in community culture or values to fulfill social responsibility.

Care for Communities

1. Blood Donation Drives

NANPAO is a caring entity. Each year, it organizes blood donation drives. In 2022, it collaborated with Tainan Blood Donation Center and provided incentives for donating blood, encouraging residents of Xigang District to donate blood. The effort garnered 517 bags of blood, effectively alleviating blood shortage, motivating local residents to give back to the society.



2. Community Infrastructure

NANPAO has been concerned with community infrastructure consistently. In Xigang District, Tainan, it has been investing in infrastructure related to police and fire departments, and community safety, e.g. police vehicles, ambulances, service vehicles for elders and other resources, making up to the shortage of community resources in a timely manner. And arrange professional technical personnel to provide on-site construction guidance to achieve the goal of providing good infrastructure.



Ambulance donation



Paints donation to an education center



A flower festival in the community



New year celebration with the community

NANPAO firmly believes the importance of giving back to the society. Apart from pursuing technological innovation and service quality, the Company also proactively seeks to protect social culture, diligently assisting in cultivating the next generation, and fulfilling the responsibility in caring for the elderly. In 2007, the Company established the "NANPAO Social Welfare Foundation" to fulfil its social responsibility via engaging in three main aspects, namely "Talent Cultivation," "Care for Elderly" and "Care for the Underprivileged."

6.2 Child Education

After-school Tuition Programs, Talent Classes, and Summer and Winter Camps

Due to the openness of government policies and change in social formation, the economic disparity of the society is deteriorating fast, further causing problems such as single-parent, skipped generation and foreigner families. Xigang District is a remote area in Tainan City, whereby the income level is much lower than the national average. The children with such family background will live in the community, facing the choice of their fate. Only education can provide them with a ticket to pursue and realize their dreams in the future. Each child is like a seed. Some are seeds of gentle roses, while others are towering camphor trees. We must provide a diverse range of courses and opportunities for a variety of cultural studies. We must respect the uniqueness of each child, and even go one step further to inspire students in realizing their diverse cultural potential and creativity. As such, NANPAO Foundation collaborates with Sigang Elementary School, Gangdong Elementary School, Houying Elementary School, Songlin Elementary School and Cheng Kung Elementary School in Sigang District, and Wunnei Elementary School from remote area of Jiali District in organizing after-school tuition programs, societies and summer and winter camps. The courses are designed and tailored to the children's needs by teachers of various elementary schools. Apart from studies, the courses devised also develop and cultivate children's interests in art, sports and other club activities.

2022 Child Education Activities (only main activities are listed)

Participant	Content
Sigang Elementary School, Cheng Kung Elementary School, Houying Elementary School, Songlin Elementary School and Wunnei Elementary School	After-school tuition programs, and summer and winter camps.
Gangdong Elementary School	Donations for after-school tuition programs, summer and winter camps, and library books.

After-school programs



6.3 Elderly Care

Huashan Social Welfare Foundation

As the demographic structure of Taiwan is turning into an aging society, the society at large is very much concerned with elderly issues and needs. More investments are required than before. After coming into contact with Huashan Social Welfare Foundation, who has been consistently offering care for elderly welfare, NANPAO Social Welfare Foundation has come to realize that the current care available to the elderly is inadequate. As such, it started collaboration with Sigang Angel Station of Huashan Social Welfare Foundation. Each year, NANPAO calls on its employees to raise fund for gift boxes for Dragon Boat and Mid-Autumn, and Chinese New Year. The gift boxes are delivered in-person to the elderly by Huashan Foundation for the convenience of mobility-impaired or solitary elderly. To better looking after the daily lives of the elderly, NANPAO donated home service car specially for Xigang District, as well as the service expenses for solitary elderly

care. Professional social workers from Huashan Social Welfare Foundation take charge of the home service in NANPAO's stead. Each day, social workers visit the elderly for accompanying them receiving medical attention, performing bed bathing, sending nutritional supplement and food, etc. Apart from providing services to cater to physical needs, for mental needs, the social workers also provide company to the elderly, helping them regaining confidence and life goals.

Senior Citizen's Welfare Association and Community Activities

The percentage of elderly population of Xigang District of Tainan City on household registration record is not particularly high. However, the young population is migrating outward. Not all elderly lack material resources. But living alone is taking a toll on them emotionally. To encourage the elderly in Sigang District to take part in interactive activities and maintain their physical and mental health, each year, during Double Ninth Festival, Nan Pao Foundation collaborates with Sigang Senior Citizen's Welfare Association to organize recreational activities and buffet. During Dragon Boat Festival, Nan Pao Foundation also makes donation to cover expenses for dumpling preparation in Sigang District, Qing'an community, providing scrumptious dumplings to disabled, solitary and underprivileged elderly, and making Sigang District an empathetic place filled with a savory dumpling aroma. NANPAO Foundation also collaborates with Qigu District Shulin Community Development Association in organizing Shulin Community geriatric day care center, Spoonbill Academy. The measure arranges for solitary elderly in the community to attend courses. They are able to regain confidence by learning new talents and taking part in competitions, thus leading a fulfilling life.

2022 Elderly Welfare Activities (only main activities are listed)

Participants	Content
Huashan Social Welfare Foundation	Home services, festival gift sets, social worker visits
Xigang District Qing'an Community Development Association	Dragon Boat Festival caring activity
Qigu District Shulin Community Development Association	Shulin Community geriatric day care center, Spoonbill Academy
Xigang District Senior Citizen's Welfare Association	Double Ninth Festival activity

NANPAO taking part in community activity on care for elderly



6.4 Care for the Underprivileged

In the past ten years, the economic disparity in Taiwan has been deteriorating. Wealth and resources are in the hands of the few. NANPAO is able to understand the hardship of livelihood of the common folks, especially in remote area. As such, NANPAO Foundation provides emergency funding for resolving difficulties encountered by underprivileged families. Since its established in 2007, NANPAO Social Welfare Foundation has provided emergency subsidies for covering medical and funeral expenses, and privation, as well as school fees of students from low income families. Meanwhile, we have also subsidized many foundations in Tainan area with funding issues, so that we can spread our care further, e.g. Genesis Social Welfare Foundation, Tobias Social Welfare Foundation, Chao Hsin Social Welfare Foundation, Love Child Care Foundation, Genesis Social Welfare Foundation and Tainan Welfare Association for the Deaf.

In 2022, the NANPAO Headquarters and Research and Development Building will be completed and put into use. Immediately, the company invited students from the Edens Foundation Dandelion and Grapevine Workshop in the community to write down their long-awaited Christmas wish lists. The company's staff prepared gifts for the students to fulfill their dreams. The activity not only gave the students the opportunity to visit the new building and bring back their dream gifts, but also allowed the NANPAO staff to show their love and care for those in need while working. It warmed the hearts of the employees.

2022 Care for the Underprivileged (only main activities are listed)

Participants	Content
Tobias Social Welfare Foundation	Subsidies for scholarships
St. Raphael Opportunity Center	Donations for appliances and other consumables
Chao Hsin Social Welfare Foundation	Subsidies for meals of the intellectually disabled
Tzu Kuang Mental Care Welfare Foundation	Donations for equipment and activity funding
Eden Social Welfare Foundation	Jiali Dandelion Workshop
Subsidies for activities of Tainan Welfare Association for the Deaf	Rice donation for the deaf
Genesis Social Welfare Foundation	Donation of basic amenities to vegetative service of Genesis Social Welfare Foundation
Workshop of Children Are Us Foundation	Donation to cover expenses incurred for cultivating intellectually disabled children
Individual emergency and funeral subsidies	Applicants and referred individuals



NANPAO donated the Prototype shoes to Tzu Kuang Mental Care Welfare Foundation



Eden Social Welfare Foundation service vehicle



The Secret Santa Christmas party with Eden social welfare foundation

6.5 Charity Service

NANPAO Social Welfare Foundation has been deeply involved in community environmental cleanup, assistance to vulnerable groups, and disaster relief for many years. The company encourages employees to participate in community service by arranging volunteer opportunities and providing volunteer hours. Activities such as creative chemistry courses, beach cleanups, tree planting, blood donation drives, visits to elderly people living alone, and spreading love to rural areas have all seen the presence of NANPAO's volunteers. For employees, participating in volunteer actions can increase communication and interaction among colleagues and enhance their psychological satisfaction in exploring social values. For NANPAO, when corporate citizens can take action and understand the responsibility and value of giving back to the community, the company is more likely to achieve "sustainable engagement".



Tree planting



Road repairing



A day with an orphanage



Covid prevention volunteering



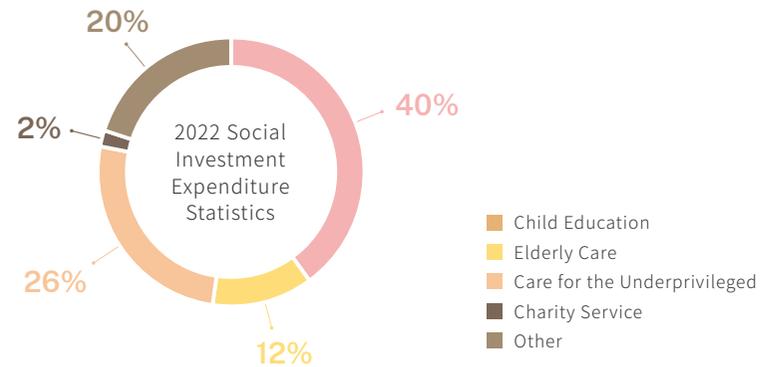
Beach cleanup day

NANPAO continues to invest funds, resources, and manpower to participate in charity activities, long-term community events, and work participation in corporate operational activities, in order to create more positive social impact.

The donation categories and amounts of the NANPAO Social Welfare and Charity Foundation from 2019 to 2022 are summarized as follows:

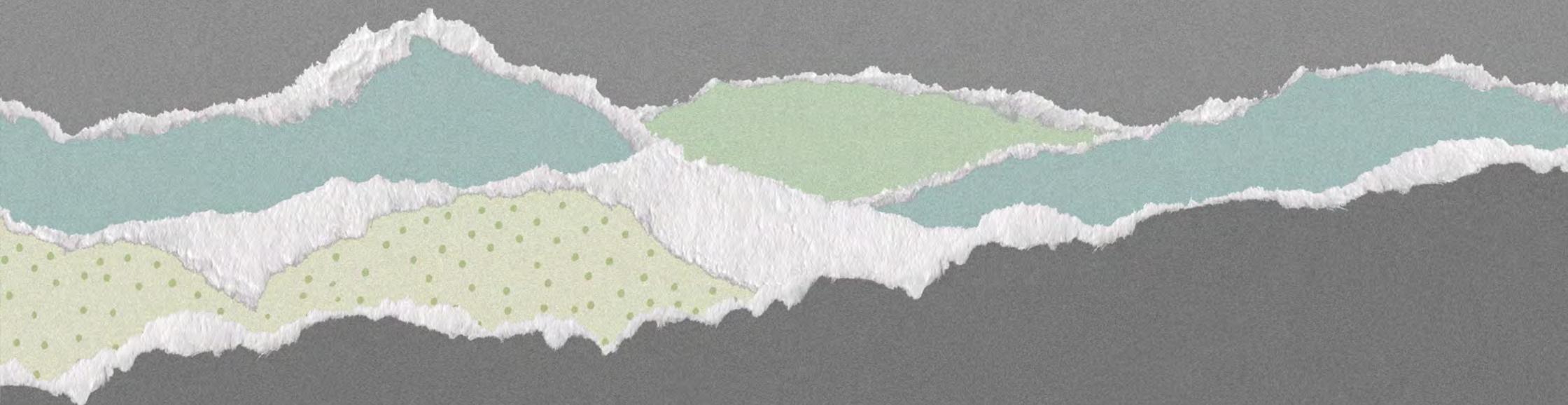
Types of Social Participation Investment (in NT\$)

	Child Education	Elderly Care	Care for the Underprivileged	Charity Service	Other	Total
2019	2,133,233	600,000	1,186,040	-	1,685,459	5,604,732
↓						
2020	2,257,181	730,000	800,340	-	1,202,390	4,989,911
↓						
2021	2,268,652	670,000	938,713	144,800	1,803,500	5,825,665
↓						
2022	2,429,600	730,000	1,583,113	109,400	1,245,030	6,097,143



7. APPENDIX

7.1	SASB Index	92
7.2	GRI Standard Index	93
7.3	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies	95
7.4	Climate-related information by TWSE Listed Companies	96
7.5	Assurance Report	96
7.6	Report issued information	100



7.1 SASB Index

Topic	Index	Chapter	Page	Type	SASB No.	
Greenhouse Gas Emission	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	4. Sustainable Environment	53-54	Quantitative	RT-CH-110a.1	
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets		53	Discussion and Analysis	RT-CH-110a.2	
Air Quality	Air emissions of the following pollutants : (1) NOx (excluding N ₂ O) (2) volatile organic compounds (VOCs) (3) Sox (4) hazardous air pollutants (HAPs)		62	Quantitative	RT-CH-120a.1	
Energy Management	(1) Total energy consumed (GJ) (2) percentage renewable (%) (3) percentage grid electricity (%) (4) total self-generated energy (GJ)		55	Quantitative	RT-CH-130a.1	
Water Management	(1) Total water withdrawn (2) percentage of each in regions with (3) total water consumed High or Extremely High Baseline Water Stress		58	Quantitative	RT-CH-140a.1	
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations		N/A	Quantitative	RT-CH-140a.2	
	Description of water management risks and discussion of strategies and practices to mitigate those risks		59	Discussion and Analysis	RT-CH-140a.3	
Hazardous Waste Management	Amount of hazardous waste generated, percentage recycled		64	Quantitative	RT-CH-150a.1	
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests		6. Community Engagement	86		RT-CH-210a.1
Workforce Health & Safety	(1) Total recordable incident rate (TRIR) (2) fatality rate for direct employees and contract employees		5. Co-Creation of Value	81	Quantitative	RT-CH-320a.1
	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	82		Discussion and Analysis	RT-CH-320a.2	
Product Design for Use-phase Efficiency	Revenue from products designed for use-phase resource efficiency	3. Innovation and Serve	39	Quantitative	RT-CH-410a.1	
Safety & Environmental Stewardship of Chemicals	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment		45	Quantitative	RT-CH-410b.1	
	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact		45	Discussion and Analysis	RT-CH-410b.2	

Genetically Modified Organisms	Percentage of products by revenue that contain genetically modified organisms (GMOs)	No GMOs materials	N/A	Quantitative	RT-CH-410c.1
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	1. Corporate Governance	22	Discussion and Analysis	RT-CH-530a.1
Operational Safety, Emergency Preparedness & Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	5. Co-Creation of Value	81	Quantitative	RT-CH-540a.1
	Number of transport incidents		N/A	Quantitative	RT-CH-540a.2
Product Output	Product output by product category.		6	Quantitative	RT-CH-000.A

7.2 GRI Index

Statement of Use	The reporting organization, NANPAO, has reported the content from January 1, 2022 to December 31, 2022 in accordance with the GRI Standards.
GRI 1 standard	GRI 1: Basic 2021

GRI Standard	Disclosure Items	Page	Note
GRI 2 General Disclosures 2021			
THE ORGANIZATION AND ITS REPORTING PRACTICES			
2-1	Organizational details	5	
2-2	Entities included in the organization's sustainability reporting	6	
2-3	Reporting period, frequency and contact point	10	
2-4	Restatements of information	10	
2-5	External assurance	10	
ACTIVITIES AND WORKERS			
2-6	Activities, value chain and other business relationships	5	
2-7	Employees	71	
2-8	Workers who are not employees	71	

GOVERNANCE			
2-9	Governance structure and composition	22	
2-10	Nomination and selection of the highest governance body	22	
2-11	Chair of the highest governance body	22	
2-12	Role of the highest governance body in overseeing the management of impacts	22	
2-13	Delegation of responsibility for managing impacts	34	
2-14	Role of the highest governance body in sustainability reporting	22	
2-15	Conflicts of interest	34	
2-16	Communication of critical concerns	11	
2-17	Collective knowledge of the highest governance body	24	
2-18	Evaluation of the performance of the highest governance body	24	
2-19	Remuneration policies	26	
2-20	Process to determine remuneration	26	
2-21	Annual total compensation ratio	26	

GRI Standard	Disclosure Items	Page	Note
STRATEGY, POLICIES AND PRACTICES			
2-22	Statement on sustainable development strategy	18	
2-23	Policy commitments	20	
2-24	Embedding policy commitments	20	
2-25	Processes to remediate negative impacts	30	
2-26	Mechanisms for seeking advice and raising concerns	30	
2-27	Compliance with laws and regulations	29	
2-28	Membership associations	8	
2-29	Approach to stakeholder engagement	16	
2-30	Collective bargaining agreements	74	
GRI 3 : MATERIAL TOPICS 2021			
3-1	Process to determine material topics	11	
3-2	List of material topics	12	
3-3	Management of material topics	13	
GRI 201 : ECONOMIC PERFORMANCE 2016			
201-1	Direct economic value generated and distributed	6	
201-2	Financial implications and other risks and opportunities due to climate change	52	
GRI 202 : MARKET PRESENCE 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	75	
202-2	Proportion of senior management hired from the local community	71	
GRI 204 : PROCUREMENT PRACTICES 2016			
204-1	Proportion of spending on local suppliers	84	
GRI 205 : ANTI-CORRUPTION 2016			
205-1	Operations assessed for risks related to corruption	29	
205-2	Communication and training about anti-corruption policies and procedures	29	
205-3	Confirmed incidents of corruption and actions taken	30	
GRI 302 : ENERGY 2016			
302-1	Energy consumption within the organization	55	

GRI Standard	Disclosure Items	Page	Note
GRI 302 : ENERGY 2016			
302-2	Energy consumption outside of the organization	55	
302-3	Energy intensity	55	
302-4	Reduction of energy consumption	56	
GRI 303 : WATER AND EFFLUENTS 2018			
303-1	Interactions with water as a shared resource	58	
303-2	Management of water discharge-related impacts	58	
303-3	Water withdrawal	58	
303-4	Water discharge	58	
303-5	Water consumption	58	
GRI 305 : EMISSIONS 2016			
305-1	Direct (Scope 1) GHG emissions	53	
305-2	Energy indirect (Scope 2) GHG emissions	53	
305-3	Other indirect (Scope 3) GHG emissions	54	
305-4	GHG emissions intensity	54	
305-5	Reduction of GHG emissions	53	
305-6	Emissions of ozone-depleting substances (ODS)	62	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	62	
GRI 306 : WASTE 2020			
306-1	Waste generation and significant waste-related impacts	64	
306-2	Management of significant waste-related impacts	64	
306-3	Waste generated	64	
306-4	Waste diverted from disposal	65	
306-5	Waste directed to disposal	65	
GRI 307 : ENVIRONMENTAL COMPLIANCE 2016			
307-1	Non-compliance with environmental laws and regulations	63	
GRI 308 : SUPPLIER ENVIRONMENTAL ASSESSMENT 2016			
308-1	New suppliers that were screened using environmental criteria	84	
308-2	Negative environmental impacts in the supply chain and actions taken	84	

GRI Standard	Disclosure Items	Page	Note
GRI 401 : EMPLOYMENT 2016			
401-1	New employee hires and employee turnover	73	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	74	
401-3	Parental leave	76	
GRI 403 : OCCUPATIONAL HEALTH AND SAFETY 2018			
403-1	Occupational health and safety management system	78	
403-2	Hazard identification, risk assessment, and incident investigation	78	
403-3	Occupational health services	82	
403-5	Worker training on occupational health and safety	80	
403-6	Promotion of worker health	82	
403-9	Work-related injuries	81	
GRI 404 : TRAINING AND EDUCATION 2016			
404-1	Average hours of training per year per employee	78	
GRI 405 : DIVERSITY AND EQUAL OPPORTUNITY 2016			
405-1	Diversity of governance bodies and employees	72	
405-2	Ratio of basic salary and remuneration of women to men	75	
GRI 412 : HUMAN RIGHTS ASSESSMENT 2016			
412-1	Operations that have been subject to human rights reviews or impact assessments	69	
412-2	Employee training on human rights policies or procedures	70	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	70	
GRI 414 : SUPPLIER SOCIAL ASSESSMENT 2016			
414-1	New suppliers that were screened using social criteria	84	

7.3 Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies

The disclosure of sustainability metrics by chemical industry

No.	Metrics	Indicator type	Annual disclosure status	Units
1	Total energy consumption, percentage of purchased electricity, renewable energy utilization rate, and total self-generated energy (Note 1)	Quantitative	In 2022, NANPAO Taiwan had a total energy consumption of 47,734,070 kWh(171,843 GJ), with the percentage of purchased electricity being 40%. The self-generated energy accounted for 0.8% of the total purchased electricity.	(kwh), (%)
2	Total water intake, total water consumption, and legally required or voluntarily disclosed amount of wastewater (pollution) discharge.	Quantitative	The total water intake for NANPAO Taiwan in 2022 was 86,334 m ³ , with a total water consumption of 70,662 m ³ and a wastewater discharge of 15,672 m ³ .	(m ³), (%)
3	Total amount of hazardous waste generated and percentage of recycling in the product manufacturing process, as required by law or voluntarily disclosed.	Quantitative	In 2022, NANPAO Taiwan generated a total of 711 metric tons of hazardous waste during its production processes, with a recycling rate of 86.47%.	Metric tonne(t), (%)
4	Number and ratio of occupational accidents	Quantitative	In 2022, there were 6 occupational accidents (excluding commuting accidents) in NANPAO Taiwan, with a Total Recordable Incident Rate (TRIR) of 0.80 for direct and indirect employees.	(%), amount
5	Operational activities that have significant actual or potential negative impacts on the local community.	Discussion and Analysis	To reduce the negative impacts on the community, NANPAO takes the following measures : 1. Conducting regular fire drills and emergency response drills at each plant site. 2. Inviting community residents to visit the plant site and understand its operations and safety management.	Not applicable
6	Specific and effective mechanisms and measures adopted by the company itself and its suppliers to reduce negative impacts on the environment or society.	Discussion and Analysis	NANPAO has assessed and established management mechanisms to address the following issues in order to reduce negative impacts on the environment and society for both the company itself and its suppliers : 1. For the Company Itself : Responsible Chemical Management, human Rights and Employee Management, community Issue Management 2. For Suppliers : Through the adoption of a Supplier Code of Conduct, suppliers commit to their social and environmental responsibilities.	Not applicable
7	Product output by product category.	Quantitative	Please see NANPAO 2022 annual report	Varies by product type

Note 1 : The total self-generated energy refers to the definition provided in the "Renewable Energy Development Act," "Implementation Regulations for Renewable Energy Certificates," or relevant subsidiary laws.

7.4 Climate-related information by TWSE Listed Companies

No.	Item	Execution (Pages)
1	Statement on the supervision and governance of climate-related risks and opportunities by the board of directors and management.	52
2	Explanation of how identified climate risks and opportunities affect the company's business, strategy, and finances (short-term, medium-term, long-term).	52
3	Description of the financial impacts of extreme weather events and transition actions.	52
4	Integration of the process for identifying, assessing, and managing climate risks into the overall risk management system.	52
5	If scenario analysis is used to assess resilience to climate change risks, provide information on the scenarios, parameters, assumptions, analysis factors, and major financial impacts used.	52
6	If there are transformation plans to manage climate-related risks, explain the content of the plans, indicators, and targets used to identify and manage physical risks and transition risks.	52
7	If internal carbon pricing is used, explain the basis for price determination.	Not yet executed
8	If climate-related targets are set, provide information on the activities covered, greenhouse gas emission scopes, planning timelines, annual progress, etc. If carbon offsets or Renewable Energy Certificates (RECs) are used to achieve the targets, explain the sources and quantities of carbon offsets or the number of RECs used.	Not yet executed
9	Inventory and assurance of greenhouse gas emissions.	54

7.5 Assurance Report

 <p>安永聯合會計師事務所 70051 台南市永福路一段189號11樓 11F, No.189, Sec. 1, Yongfu Road Tainan City, Taiwan, R.O.C</p> <p>Tel: 886 6 292 5888 Fax: 886 6 200 6888 www.ey.com/taiwan</p>
<p>Assurance Report of Independent Auditors</p> <p>To: Nan Pao Resins Co., Ltd.</p> <p>1. Scope</p> <p>We have been engaged by Nan Pao Resins Co., Ltd (the "Company") to perform a limited assurance engagement in relation to and report on selected sustainability performance indicators included in Nan Pao Resins Co., Ltd.'s 2022 Sustainability Report ("the Sustainability Report").</p> <p>Regarding the sustainability performance indicators selected by the Company and their applicable criteria, please refer to Appendix A.</p> <p>Management Responsibility</p> <p>The Company is responsible for the preparation of the Sustainability Report in accordance with adequate criteria, including referencing to Global Reporting Initiatives Standards ("GRI Standards") issued by Global Reporting Initiative (GRI), and compiling in accordance with the disclosure standards issued by the Sustainability Accounting Standards Board (SASB) for chemical industry, and for the design, execution and maintenance of internal controls relevant to report preparation to support the collection and presentation of the Sustainability Report.</p> <p>Independent Auditor's Responsibility</p> <p>Our responsibility is to plan and perform limited assurance engagement in accordance with Assurance Engagements No.3000 – "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the Taiwan Accounting Research and Development Foundation.</p> <p>2. Assurance</p> <p>The procedures performed in limited assurance engagement vary in nature and timing are less in extent than for a reasonable assurance engagement so that the level of assurance is substantially lower than reasonable assurance engagement. While we considered the effectiveness of the Company's internal controls when determining the nature and extent of procedures, our procedures were not designed to provide assurance on internal controls.</p> <p>To conclude for limited assurance, our procedures performed included:</p> <ul style="list-style-type: none"> Interviewing with the Company's management and personnel to understand the Company's implementation of overall social responsibility and reporting process. <p style="text-align: center;">1</p> <p style="text-align: center; font-size: small;">A member firm of Ernst & Young Global Limited</p>

7.5 Assurance Report



EY 安永
Building a better working world

- Performing analytical procedures on the selected sustainability performance indicators; gathering and checking other supporting documentation and management information obtained; testing on sample basis if necessary.
- Reading the Sustainability Report to ensure the implementation of overall social responsibility and reporting process is consistent with our understanding.

3. Limitations

Non-financial information contained within the Sustainability Report are subject to measurement uncertainties. The selection of different measurement techniques can result in materially different measurement. Also, assurance engagements are based on selective testing of information being examined, and it is not possible to detect all of the existing material misstatements whether resulting from fraud or error.

4. Quality and Independence

We are in conformity with *Standards on Quality Control No. 1 "Quality Control for Public Accounting Firms"* to establish and maintain a sound system of quality control, including code of professional ethics, professional standards and those written policies and procedures in applicable regulations. We are also in conformity with related independence and other ethics requirements in *The Norm of Professional Ethics*, whose basic principles are integrity, objectivity, professional competence and due care and professional behavior.

5. Conclusion

Based on our procedures and evidence obtained, nothing has come to our attention that caused us to believe that any material modifications or adjustments should be made to the selected sustainability indicators in accordance with applicable criteria.

Hung, Kuo-Sen *Hung, Kuo-Sen*
Ernst & Young
August 15, 2023

Notice to Readers
The reader is advised that the assurance report has been prepared originally in Chinese. In the event of a conflict between the assurance report and the original Chinese version or difference in interpretation between the two versions, the Chinese language assurance report shall prevail.

2

A member firm of Ernst & Young Global Limited

Appendix A: No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria
1	55	4-3 Energy Management	The consumption of purchased electricity, the total energy consumed and the percentage grid electricity in 2022.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - (1) total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy(Note) 1. Refers to the accounting metric of SASB RT-CH-130a.1.
2	58	4-4 Water Resources	The total tap water intake and total water consumption of Taiwan's water resources data in 2022.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - total water withdrawal, total water consumption and volume of effluent required to be disclosed under the law or to be disclosed voluntarily. Refers to the accounting metric of SASB RT-CH-140a.1.

Note: The total amount of self-generated and self-consumed energy is defined in the "Renewable Energy Development Act"; Implementation Regulations Governing Renewable Energy Certificates" in related law.

3

7.5 Assurance Report

No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria
3	64	4-6 Waste Management	Total amount of hazardous industrial waste and the recycling percentage in Taiwan facilities.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - total quantity of hazardous wastes generated and recycling percentage during the production process of products required to be disclosed under the law or to be disclosed voluntarily. Refers to the accounting metric of SASB RT-CH-150a.1.
4	81	5-4 Safe Occupational Environment	Total recordable incidents (cases) and fatality rate in 2022.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - illustrating the number and rate of occupational accidents. Refers to the accounting metric of SASB RT-CH-132ba.1.

1

No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria
5	81-82	5-4 Safe Occupational Environment	Process Safety Incident Count (PSIC), Process Safety Total Incident Rate (PSTIR) and Process Safety Incident Severity Rate (PSISR) in 2022.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - illustrating the number and rate of occupational accidents. Refers to the accounting metric of SASB RT-CH-540a.1.
6	31/ 78- 82	2-3 Strengthening Risk Culture Awareness 5-4 Safe Occupational Environment	Methods for evaluating operations that have material actual or potential negative impacts on the local communities. The Company has identified actual and potential negative impacts on the economy, environment and people (including their human rights) in accordance with GRI 3.	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - operations that have material actual or potential negative impacts on local communities. The Company has identified actual and potential negative impacts on the economy, environment and people (including their human rights) in accordance with GRI 3.

3

7.5 Assurance Report

No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria
7	45	3-3 Accountable Chemical Management	Accountable Strategy	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - specific and effective actions taken by the enterprise and suppliers to reduce negative impacts on the environment and society.
	66	4-7 Ecosystem Preservation	Nan Pao Group Biodiversity Policy	
7	69	5-1 Human Rights Policy	Human Rights Protection Measures of Nan Pao	According to GRI 3, the Company has identified actual and potential negative impacts on the economy, environment and people (including human rights), related policies or commitments, and the actions taken regarding to aforementioned impacts.
	77	5-3 Employee Communication and Development	Employee Grievance Mechanisms	
7	78	5-4 Safe Occupational Environment	In order to impose the protective measures against general disasters, natural disasters and chemical leakage disasters, various safety drills are regularly carried out every year, and if a disaster occurs, that can minimize the environmental impact on the communities.	According to GRI 3, the Company has identified actual and potential negative impacts on the economy, environment and people (including human rights), related policies or commitments, and the actions taken regarding to aforementioned impacts.
	86	6-1 Community Safety and Health		
7	29	2-2 Anti-Corruption and Ethical Corporate Management	Suppliers are committed to social and environmental responsibility by signing the Supplier Code of Conduct	According to GRI 3, the Company has identified actual and potential negative impacts on the economy, environment and people (including human rights), related policies or commitments, and the actions taken regarding to aforementioned impacts.
	69	5-1 Human Rights Policy		
7	83	5-5 Good Supplier Management and Relationship		According to GRI 3, the Company has identified actual and potential negative impacts on the economy, environment and people (including human rights), related policies or commitments, and the actions taken regarding to aforementioned impacts.

No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria
8	91	Annual report	Production Volume (Metric Tons)	According to Article 4 and the Attachment 1.2 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" -production by reportable segments.
	Annual report	Adhesives	228,432	
8	Annual report	Annual report	Coating	15,322
	Annual report	Annual report	Others	-
8	Annual report	Annual report	Total	243,754
	Annual report	Annual report		Refers to the activity metric of SASB RT-CH-000.A.

7.6 Report issued information

Report Issued Information

2022 Sustainability Report : Issued in September, 2023.

Feedback

We would appreciate any feedback you have on the contents or activities of this report. Please do not hesitate to contact us if you have any questions or suggestions.

Contact

NANPAO Resins Chemical Co., Ltd./ Planning Dept.

Add. : No.519 Chungshan Rd. Xikang Dist. Tainan City Taiwan 723

Tel. : +886-6-7965888

Fax : +886-6-7950079

E-mail : info@nanpao.com

Contact : Fengwen Hung Extention:1181

Contact email : fengwen@nanpao.com

Website : www.nanpao.com



TEL +886-6-7965888 | FAX +886-6-7950079 | WEBSITE www.nanpao.com
MAIL info@nanpao.com | ADD No.519 Chungshan Rd. Xikang Dist. Tainan City Taiwan 723

Design by  手心設計

NANPAO