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# 0.1 About This Report

#### **Editing Principles of the Report**

Nan Pao compiles its Sustainability Report in accordance with the Core Option of the GRI Standards and the "Regulations Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies." The report also references international guidelines, including the OECD Guidelines for Multinational Enterprises, the UN Global Compact (UNGC), the UN Sustainable Development Goals (SDGs), ISO 26000 Social Responsibility, and the Sustainability Accounting Standards Board (SASB) standards for the chemical sector. This report serves as an essential communication channel for non-financial information, helping the company assess and improve its overall sustainability performance.

This report is compiled by the Sustainability Development Office and is published annually in both Chinese and English as an e-book. The full version is available for download on the Nan Pao Group website.

#### External Assurance

The disclosures in this report follow eight sustainability indicators set out in Appendix 1-2 of Article 4 of the "Regulations Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies," as well as SASB disclosure standards. An independent limited assurance was performed by Ernst & Young in accordance with Assurance Standard No. 3000 issued by the Financial Accounting Foundation of the Republic of China for non-historical financial information. An assurance statement is included at the end of this report.

#### **Contact Information**

We welcome your valuable comments or suggestions regarding this report. Please feel free to contact us:

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#### Reporting Period and Scope

This report covers the period from January 1, 2024 to December 31, 2024. The previous edition was published in August 2024, and the current version is scheduled for release in August 2025. The next report is expected to be published in August 2026.

This report discloses the economic, environmental, and social performance of Nan Pao and its subsidiaries.

The disclosure boundary of this report is consistent with that of the consolidated financial statements for economic, social, and governance aspects, covering 100% of consolidated revenues. For environmental indicators, the scope encompasses existing operations in Taiwan, Mainland China, and other regions in Asia. Subsidiaries included, based on their relevance to the core business and the degree of impact on material topics, are Foshan Nan Pao, Foshan Nan Pao Goodwill, Dongguan Nan Pao, Dongguan Jiaqin, Kunshan Nan Pao, Fuqing Nan Pao, Vietnam Nan Pao, Nan Pao Advanced Materials Vietnam, Nan Pao Materials Viet Nam, NNV Vietnam, Nan Pao Indonesia, and Nan Pao Thailand. Any deviations from the above disclosure boundary are specified in the respective sections of this report, accounting for 74.8% of consolidated revenues.



Photo: Nan Pao Operating & R&D Headquarters

## 0.2 About Nan Pao

#### **Core Businesses**

To enhance operational synergy, Nan Pao has diversified its operations into various segments, including adhesives, coatings, building materials, carbon fiber resins and composites, and biotechnology. The core of the value chain is Nan Pao Chemical Industry, encompassing employees and collaborators. Upstream suppliers include raw chemical material vendors, while downstream stakeholders involve customers and local communities.

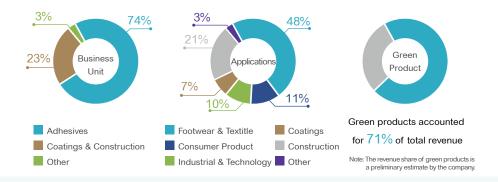
- 2024 Global Sales: NT\$23 billion
- Market Capitalization (as of Dec 2024): NT\$37.9 billion
- Total Employees: Over 3,000
- 27 Plants in 7 Countries
- R&D Expenditure in 2024: 2.4% of consolidated revenue



#### 2024 Revenue by Operating Region

Region	Asia (excluding Taiwan)	Taiwan	Australia	Other Regions
2024 Revenue (NT\$ million)	16,076	3,211	3,172	524
%	70%	14%	14%	2%

#### 2024 Revenue Breakdown by Segment



#### **Development History**

#### Founding Period Rooted in Taiwan Overseas Expansion

- 1953 Founded Nan Pao Dyeing and Finishing Factory (predecessor of Nan Pao)
- 1961 Established Nan Pao Resins Chemical Factory
- 1963 Reorganized as Nan Pao Resins Chemical Co., Ltd
- 1964 Produced 815 cement paint (Nan Pao's first classic product)
- 1965 Produced shoe adhesive (Nan Pao's signature yellow glue)
- 1968 Manufactured grafted chloroprene rubber adhesives

- 1971 Established Nan Pao Research Institute—foundation for R&D and innovation
- 1973 Joint venture with Hoechest (West Germany) to formBao Li Resins Co., Ltd., producing water-based resins1992 Founded Nan Pao Resins Industrial Co.,
- 1979 Co-founded Dalian Chemical Industry Co., Ltd. with Chang Chun to produce vinyl acetate monomer (VAM)
- **1981** Established the fifth plant for oil-based and water-based coatings
- 1983 Licensed by Ripolin (France) to manufacture powder coatings and expanded the fifth plant
- 1984 Collaborated with Hayakawa Rubber (Japan) to produce waterproofing and sealant materials
- **1986** Partnered with Hadfields (UK) to produce electronic insulating varnish

- 1987 Established the first overseas plant, Thai Nan Pao Resins Chemical Co., Ltd., specializing in adhesives
- 1992 Founded Nan Pao Resins Industrial Co., Ltd. (Dongguan Nan Pao Resins Co., Ltd.) and Fuqing Nan Pao Resins Co., Ltd.
- 1993 Established Nan Pao Resins Chemical Co., Ltd. in Indonesia
- 1997 Established Nan Pao Resins (China) Co., Ltd
- 1999 Established Vietnam Nan Pao
- 2004 Established Foshan Nan Pao
- 2009 Founded ITLS International Development Co., Ltd. to produce construction chemical materials

- Diversified Acquisitions
- 2014 Acquired RLA Holdings Pty Ltd, entering the Australian market
- 2015 Established Nan Pao Advanced Materials Co., Ltd., focused on optical-grade adhesives
- 2018 Publicly listed with stock code 4766
- 2020 Founded Nan Pao New Materials (Huaian) Co., Ltd
- **2022** Inaugurated new corporate headquarters
- 2023 Acquired Changshu YuBo Polymer Materials
- **2024** Acquired Yun Der Industrial Co., Ltd., Spark Foamtech Enterprise Co., Ltd.

# 0.3 Operational Capability

#### **Financial Performance**

In 2024, Nan Pao reported consolidated revenue of NT\$23.0 billion, operating profit of NT\$3.6 billion, and net profit after tax of NT\$2.7 billion, with earnings per share (EPS) after tax of NT\$2.26. In response to intense industry competition, Nan Pao has continued to strengthen its footwear adhesive technologies and collaborated with international brands to develop new materials, which have gradually contributed to revenue growth. In addition, the recovery in demand for industrial and consumer adhesives—particularly in sectors such as semiconductors and woodworking—along with the stable growth of the construction materials and coatings businesses, has further demonstrated the company's core business strength. Supported by a market expansion strategy through mergers and acquisitions, Nan Pao achieved record-high revenue and profit despite challenging external economic conditions, thanks to the collective efforts of all employees. Green products now account for more than 60% of revenue, with environmental transformation enhancing product value and driving orders. With 28 production sites worldwide providing localized services, the company will continue to promote innovation, research and development, and the expansion of green product applications in the future.

#### **Consolidated Financial Statements information**

Unit: NT\$ thousand

	2020	2021	2022	2023	2024
Operating Revenue	15,551,344	17,980,007	22,004,313	20,581,188	22,982,598
Operating Profit	1,051,700	1,052,194	1,824,375	2,964,382	3,592,749
Consolidated net profit after tax	1,267,122	929,353	1,862,728	2,566,432	2,786,880

Note: For complete financial performance details, please refer to the annual report, page 109

Unit: Metric tons; NT\$ thousand

		2023		2024		
Major Products	Capacity	Production	Output Value	Capacity	Production	Output Value
Adhesives	232,392	205,868	12,572,796	243,776	240,692	15,052,799
Coatings	17,993	14,609	1,191,130	19,074	15,375	1,264,873
Others (Note)	-	-	3,458,010	-	-	3,393,047
Total	250,385	220,477	17,221,936	262,850	256,067	19,710,719

Note: Due to the inclusion of subsidiaries covering electronic materials and biotech industries, with measurement units in pcs, bottles, cans, boxes, packs, granules, bars, etc., product categories are highly diverse and thus cannot be converted into a uniform calculation.

#### Tax Governance

#### Tax Information for the Past Five Years

Unit: NT\$ thousand

	2020	2021	2022	2023	2024
Profit Before Tax	1,606,092	1,202,541	2,385,414	3,393,761	3,756,850
Income Tax Expense	( 338,970 )	( 273,188 )	( 522,686 )	(827,329)	(969,970)

In 2023 and 2024, Nan Pao's effective tax rates were 24.4% and 25.8%, respectively, both higher than the chemical industry's average effective tax rate of 19.13% as published by the CSA. In terms of cash tax rates, Nan Pao recorded 10.5% in 2023 and 23.2% in 2024. The lower cash tax rate in 2023, compared to the CSA industry average of 20.65%, was primarily due to measures under Taiwan's tax collection regulations in response to the COVID-19 pandemic, which allowed companies to apply for installment payments of income tax or exemption from provisional tax payments.

Nan Pao established the Nan Pao Group Tax Policy in 2023, committing to enhancing financial transparency, disclosing tax information in accordance with relevant standards and guidelines, effectively managing tax risks, and advancing corporate sustainability objectives.

Nan Pao has not yet met the threshold for filing a Country-by-Country Report (CbCR)—defined as consolidated revenue of NT\$27.0 billion in the preceding fiscal year without meeting safe harbor provisions—and has therefore not issued a CbCR to date. In addition, no political donations were made in 2024.

#### Nan Pao 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, Nan Pao Group upholds the following principles and commitments:

- Conduct all operating activities in accordance with local tax laws and regulations in each operating area, fulfilling tax obligations and complying with both the letter and the spirit of the law.
- 2. Consider tax risks and impacts in making important business decisions.
- Do not engage in transactions or establish tax structures that lack commercial substance or are intended for tax evasion.
- 4. Do not use tax havens or engage in tax planning for the purpose of tax evasion.
- 5. Do not transfer profits created by the company to low-tax countries.
- 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.

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).

#### Policy Influence

#### Participation in External Industry and Public Associations

Nan Pao collaborates with cross-industry and interdisciplinary organizations, actively engaging as a member in various associations. Through this participation, we broaden our exchange, stay informed on international trends, and continuously improve and grow.

	Р	osition Held	
Organization	Board of Directors and Supervisors	The Board member	Member
bluesign®SYSTEM PARTNER			V
ZDHC Contributor			V
E.SUN COMMERCIAL BANK Sustainable Advocacy Initiatives			V
SATRA Technology			V
Taiwan Synthetic Resins & Adhesives Industrial Association, R.O.C.	V		V
Taiwan Footwear Manufacturers Association			V
Taiwan Footwear Manufacturers Association -Youth Center			V
Taiwan Circular Economy 100 (TCE 100)			V
Taiwan Chemical Industry Association			V
Association of Bio-based Material Industry			V
Chemical Society Located in Taipei – Kaohsiung Branch	V		V
Cheng-Kung University Green-Energy Materials Research Center			V
Taipei Building Material T.A.			V(Honorary Director)
Importers & Exporters Association of Taipei			V
Taiwan Institute for Sustainable Energy			V
Yi Tsai Club			V
Tainan Cultural Foundation	V		V

	Position Held			
Organization	Board of Directors and Supervisors	The Board member	Member	
Guangdong Adhesives Industry Association	V		V	
China Adhesives and Tape Industry Association			V	
Jiangsu Flooring Material Association			V	
China Association for Quality Inspection			V	
Kunshan Passive Building Alliance			V	
Society of Automotive Engineers of China			V	
Dongguan Security Production Association	V		V	
Dongguan Precursor Chemicals Management Industry Association			V	
China Chemical Industry Environmental Protection Association			V	
China National Building Waterproof Association			V	
China National Household Paper Industry Association			V	
Shouguang City Waterproof Industry Association			V	
Guangdong Chamber of Commerce of Sanitary Products			V	
Taiwanese Chambers of Commerce in Mainland Chin			V	
Floor Covering Institute of Australia			V	
Concrete Institute			V	
Carpet Institute of Australia			V	
Victorian Chamber of Commerce and Industry			V	
The Allied Association for Science Park Industries			V	
Taiwan Health Food Industry Association (THFIA)			V	
Hsinchu County Pharmacists Association			V	
Yunlin County Pharmacists Association			V	

	Р	Position Held			
Organization	Board of Directors and Supervisors	The Board member	Member		
Association for Work Safety and Technology			V		
Malaysian Rubber Board			V		
Suzhou New Building Materials Industry Association			V		
Binh Duong Province Taiwan Chamber of Commerce			V		
Kunshan Economic and Technological Development Zone Work Safety and Environmental Protection Association			V		
Foshan Precursor Chemicals Management Association			V		
Hsinchu County Industrial Park Manufacturers Association			V		
Australian Institute of Waterproofing			V		
Tainan City General Industrial Association			V		
Yunlin County Western Pharmaceutical Commercial Association			V		
New Taipei City Western Pharmaceutical Commercial Association			V		
SUBIC BAY FREEPORT CHAMBER OF COMMERCE			V		

#### Public Policy Engagement – Climate Alignment

#### Nan Pao's Net-Zero Emission Commitment

Nan Pao is committed to achieving carbon neutrality by 2050. A net-zero roadmap has been established to define the company's future mission and responsibility. This roadmap aligns with national policies, supports the low-carbon transition, and is consistent with the objectives of the Paris Agreement.

#### Governance Structure for Public Engagement

Membership in public and industry associations is first reviewed by senior management of each business unit, and then submitted to the General Manager for approval. The Corporate Sustainability Task Force regularly evaluates whether participation aligns with Nan Pao's sustainability goals and policies, reporting results to the General Manager.

### Process for Climate-Related Lobbying and Industry Association Participation

Nan Pao has implemented a management system to monitor all sites' involvement in climate-related lobbying and participation in industry associations. Through rigorous assessment and oversight, we ensure that our public climate actions align with our sustainability goals and the Paris Agreement. We regularly review participating associations—particularly those addressing climate change—to assess alignment. If discrepancies arise, we initiate dialogue and coordination to ensure alignment with Nan Pao's climate objectives. If alignment is not achieved within two years, Nan Pao will withdraw from the associations.

#### **Direct Lobbying**

In 2024, Nan Pao did not engage in any direct lobbying activities related to climate change.

#### **Industry Associations**

Nan Pao is a member of various industry associations, with close attention to those engaged in climate-related initiatives.

Association Name	Evaluation
bluesign® SYSTEM PARTNER	Promotes environmental responsibility within the textile and apparel industry by prioritizing actions such as reducing greenhouse gas emissions, enhancing energy efficiency, and utilizing renewable energy. Strengthens transparency and consumer education, aiming to achieve carbon neutrality by 2050.
ZDHC Signatory	Committed to reducing hazardous chemicals in fashion and textile production processes, aiming to enhance supply chain transparency and ensure environmental safety and labor protection across industries. Dedicated to the sustainable development of overall business operations.
E.SUN ESG Sustainability Initiative	A public advocacy initiative actively integrating ESG principles to mitigate environmental impact, aligning with the goal of achieving carbon neutrality by 2050, and strengthening Taiwan's competitiveness in the sustainable finance sector.
SATRA Technology Centre	Promotes the use of environmentally friendly and low-carbon materials, assisting in ensuring products meet environmental standards. Encourages the reuse and recycling of materials to reduce resource consumption.
Taiwan Synthetic Resins & Adhesives Industrial Association	Facilitates the development and exchange within the synthetic resin and adhesive industry. Provides technical support to members, conducts industry training, and organizes exhibitions to share trends in carbon reduction. Assists enterprises and SMEs in transitioning towards sustainable development.
Taiwan Circular Economy Alliance	Promotes the circular economy in Taiwan, enhancing effective resource utilization and environmental sustainability.
Taiwan Institute for Sustainable Energy	Advances Taiwan's sustainable development and public engagement, aligning with the United Nations Sustainable Development Goals (SDGs), climate sustainability, and biodiversity. Advocates for sustainable resource utilization and contributes to mitigating the environmental impact of climate change in Taiwan.

### Major Contributions and Expenditures in 2024 for Political Activities, Industry Associations, and Tax-Exempt Organizations (Unit: NT\$ thousand)

Organization	Type	Description	Amount
bluesign®SYSTEM PARTNER	Industry Association	As a bluesign® SYSTEM PARTNER, we are committed to sustainable textile production, ensuring our processes and materials meet stringent environmental and safety standards. Through collaboration with bluesign, we strive to minimize our environmental footprint, enhance resource efficiency, and promote transparency throughout the supply chain.	1,650
ZDHC (Zero Discharge of Hazardous Chemicals)	Industry Association	ZDHC is a global initiative aimed at eliminating hazardous chemicals from the textile, leather, and footwear industries. Our active participation in ZDHC demonstrates our commitment to reducing the discharge of harmful substances and supporting sustainable practices. Through engagement with the ZDHC program, we continuously optimize our chemical management processes to align with industry standards, fostering safer products and contributing to a healthier future for consumers and the environment.	675
Association of Taiwan Investment Enterprises on the Mainland (ATIEM)	Industry Association	This association is dedicated to supporting Taiwanese enterprises investing in Mainland China, providing a platform for communication and collaboration, promoting resource sharing, and advocating for policies conducive to business development. By participating in ATIEM, we stay informed about crossstrait economic trends and actively engage in relevant discussions to advance the development and interests of Taiwanese businesses in Mainland China.	520

### The following outlines Nan Pao's contributions and expenditures for political activities, industry associations, and tax-exempt entities in 2024

( Unit: NT\$ thousand)

	2021	2022	2023	2024
Lobbying and Interest groups	0	0	0	0
Political activities and candidates	0	0	0	0
Chamber of commerce, associations and taxexempt organization	191	1,109	7,426	5,293
Other	0	0	0	0
Total	191	1,109	7,426	5,293

Note: The statistical data presented in this report covers Nan Pao Taiwan in 2021. Starting from 2022, the scope of the statistical data expands to encompass the entire Nan Pao Group.

#### **Government Subsidies Received in 2024**

( Unit: NT\$ thousand)

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Country	Item	Granting Authority	Amount
Mainland China	Land Support Fund	Huai'an Economic and Technological Development Zone Investment Promotion Co., Ltd.	13,530
Mainland China	Value-Added Tax Credit	LePing Tax Bureau, Sanshui District, Foshan City	9,494
Mainland China	Industrial Guidance Fund	Management Committee of Jiangsu Huai'an Economic and Technological Development Zone	9,450
Mainland China	Various Human Resources and SME Subsidies	Finance Bureau of Sanshui District, Foshan City	4,604
Taiwan	Phase I Subsidy for "Large Enterprises Leading Small Enterprises" Manufacturing Research Project	Small and Medium Enterprise Counseling Foundation	15,059
Taiwan	Work-Life Balance Subsidy	Ministry of Labor	22
	Total		52,159

#### Changes in Location or Operations

A. In 2024, Nan Pao's Board of Directors approved the acquisition of a 70% equity stake in Yun Der Industrial Co., Ltd. ("Yun Der"), with the transaction completed in the first guarter of 2025. This acquisition aims to strengthen Nan Pao's core business portfolio centered on epoxy resin applications. Yun Der specializes in the production and application development of epoxy resins, offering strong complementarity with Nan Pao's existing coatings and adhesives businesses.

The acquisition is expected to enhance Nan Pao's ability to provide customers with more comprehensive solutions and to further improve market competitiveness and operational synergies through the following strategies:

- Integration of distribution resources to expand market coverage and increase market share:
- · Joint procurement of raw materials to improve procurement efficiency and optimize cost structures;
- Technical exchange and resource sharing to accelerate innovation and new product development.
- B. In 2024, Nan Pao's Board of Directors approved a capital increase in Contact BioSolutions Pty Ltd, an Australia-based company, raising Nan Pao's equity stake from 17.16% to 31.6%. This investment aligns with the Group's long-term business strategy, focusing on green chemistry and biotechnological solutions. It further strengthens Nan Pao's presence in the non-toxic, environmentally friendly bioherbicide market, expands the sustainable product portfolio, and creates longterm strategic synergies.
- C. In 2024, Nan Pao's Board of Directors approved the acquisition of an 18.5% equity stake in PT. Indo Nan Pao Resins Chemical Co., Ltd. ("Nan Pao Indonesia") from its subsidiary, Nan Pao Group Holdings Ltd., increasing Nan Pao's direct shareholding from 49% to 67.5%. Nan Pao Indonesia, a manufacturing subsidiary established in Indonesia, focuses on the production and sale of resin products and serves as a key hub for Nan Pao's market expansion in Southeast Asia.

This equity adjustment was undertaken in response to the Controlled Foreign Corporation (CFC) regime implemented in 2023, as part of an investment structure optimization initiative, with the primary objectives to:

- Simplify the Group's investment structure;
- Enhance management control over overseas subsidiaries;
- Reduce tax compliance requirements and potential risks;
- Improve capital allocation and profit repatriation efficiency.

- D. In 2024, Nan Pao's Board of Directors approved the establishment of a joint venture, Spark Foamtech Enterprise Co., Ltd., with its strategic partner in supercritical foaming technology. The partner specializes in the development of high-performance supercritical foaming materials as well as bio-based and environmentally friendly materials, possessing complete in-house capabilities for material formulation and equipment development. Operated by a team with extensive experience in supercritical applications, the partner offers a fully integrated production model—from equipment to process—providing significant cost and technological advantages. Through this joint venture, the strategic objectives are to:
  - Leverage Nan Pao's R&D expertise and brand reputation in the chemical industry to strengthen collaborations with international brands;
  - Increase technological penetration in the footwear midsole segment and expand market share:
  - Facilitate technology exchange, information sharing, and accelerated development to shorten innovation cycles;
  - · Position the joint venture as a one-stop midsole solution provider integrating material formulation, equipment technology, and process optimization.

E. In the fourth quarter of 2024, Nan Pao's subsidiary, RLA Polymers Pty. Ltd. ("RLA"), invested in the establishment of a new company and completed the acquisition of 100% equity in Australasian Tiling Adhesives Pty Ltd. ("ATA"). Headquartered and operated in Melbourne, Australia, ATA specializes in the production of powdered adhesives and grouting materials for tiling and stone applications, and enjoys stable brand recognition in the local market.

This acquisition represents a key strategic move for RLA to strengthen its market position in the ceramic tile adhesive (CTA) sector. Through the acquisition, RLA will implement a dual-brand market strategy:

- RLA brand Targeting the mid-to-high-end market segment, offering highperformance products and technical support;
- ATA brand Retaining its existing mid-to-low-end positioning to serve pricesensitive customers and broaden market coverage.

In 2024, there were no significant changes in the shareholding structure, with the equity distribution as follows:







# 1.1 Message from the Management

With over six decades of history, Nan Pao has consistently advanced with a firm commitment to developing reliable chemical solutions, refining technology, and providing exceptional service. As an industry leader, Nan Pao has proactively invested in the development of environmentally sustainable products, including waterborne, low-VOC, low-pollution, low-carbon, and energy-efficient formulations. In response to the global emphasis on corporate sustainability and environmental protection, we have strengthened our operational resilience and competitiveness through automated production, digital management systems, enhanced information security frameworks, energy-saving and carbon-reduction projects, and the establishment of continuous improvement task forces. Recognizing our responsibilities as a global corporate citizen, Nan Pao is committed to achieving carbon neutrality by 2050 and has established a clear roadmap to guide our path forward.



In 2024, Nan Pao achieved a record-high net income after tax of NT\$2.7 billion and earnings per share (EPS) of NT\$22.26. The Board of Directors also approved a cash dividend of NT\$19 per share, representing a payout ratio of approximately 85%. Beyond our strong financial performance, Nan Pao made notable progress in environmental performance. Approximately 90% of the Group's greenhouse gas emissions fall under Scope 4, and in 2024, we reduced carbon emissions from PUD (polyurethane dispersion) products by 5%, along with a 30% reduction in emissions from the procurement of low-carbon adipic acid. These achievements underscore our tangible progress in decarbonizing our products and raw materials.

Driven by our sustainability mission, Nan Pao's ESG strategies and transparency efforts have gained growing global recognition. In 2024, we were included in several major global sustainability indices. Notably, Nan Pao ranked among the top 2% of global chemical companies in the 2024 S&P Global Sustainability Yearbook and was selected as a member for the first time. Additionally, we were invited to participate in the CDP Supply Chain Questionnaire, receiving a Management Level (B) rating in both Climate and Water categories. Since 2023, we have implemented the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), with our sustainability report detailing risk management and strategic planning to help stakeholders better understand the financial implications of climate risks.

Looking ahead, Nan Pao will align with the Taskforce on Nature-related Financial Disclosures (TNFD), initiating nature-related disclosures in 2025. While championing sustainable development, Nan Pao will continue to drive its diversified business engine strategy, pushing the boundaries of innovation and capturing opportunities in an everevolving market. Through strengthened corporate resilience, we aim to build a brighter and more sustainable future for the next generation.

NANPAO RESINS Chairman

Wu cheng-Hsien

# 1.2 Sustainable Performance

#### Vision and Mission

#### Vision

To develop high valueadded solutions that promote human health through innovative products and services.

#### Mission

To become an indispensable strategic partner across industries by focusing on innovation and environmentally friendly products.

#### **Core Values**

Leadership · Integrity · Unity · Efficiency



#### **Sustainability Ratings**

S&P Global CSA Score: 75

S&P Global Sustainability Yearbook

FTSE ESG Rating: 3.7

CDP Climate Change: Management Level (B)

CDP Water Security: Management Level (B)

SinoPac+ ESG Rating: B+

Corporate Governance Evaluation in Taiwan: Ranked in the top 5% tier



#### Recognition

Net Zero Achievement Award by Taiwan Chemical Industry Association (TCIA)

> Taiwan Environmental Sustainability Award

AdiFormulator Champion

Top 100 Taiwan Companies Selected by Foreign Investors

Top 500 Import and Export Enterprises in Taiwan in 2023

#### Performance Highlights in 2024



#### Environmental

TCFD	Climate-related financial impact assessment completed
В	CDP Climate Management level (B)
В	CDP Water Management level (B)
-5%	Electricity Consumption Intensity -5% decrease
-3%	Non-renewable energy consumption intensity -3% decrease
-6%	Water Use Intensity -6% decrease
-15%	VOC Emissions Intensity -15% (emissions/revenue)
-5%	PUD Carbon Emissions -5% reduction
-39%	Low-carbon Adipic Acid Procurement -39% reduction in emissions
+20%	On-site renewable energy generation +20% increase
+9%	Total volume of recycled solvents +9% increase
+36%	Hazardous industrial waste reuse rate +36% increase







3% 35% 2% **Eightfold**  Workforce Diversity 199 non-Taiwanese supervisors (+3%) Training Hours +35% for mid-level managers (avg. 1.54 hrs) Women in Leadership +68 female supervisors (16%, +2%) Employee Clubs +Eightfold increase in the number of clubs



#### Governance

85%	Customer Satisfaction 85% positive feedback (Score of 4 or above out of 5)
43%	Independent Directors 43% of board members
14%	Female board representation
<b>78</b> %	Local Procurement 78% (excluding related-party transactions)
Bronze Tower Award	TCIA Improvement Award Bronze Tower Award
-3%	GHS Compliance 3% reduction in Class I/II hazardous products
Higg FEM	Higg FEM Certification Best factory-level environmental management for Vietnam and Foshan sites
Bluesign	Certified SYSTEM PARTNER
ZDHC	All seven production sites certified MRSL v3.1; 100% of products for global sports brands achieved Level 3 certification







#### Governance and Organizational Commitment

Since 2012, Nan Pao has designated corporate social responsibility (CSR) as a strategic focus, establishing a CSR Committee in 2020 (renamed the Sustainability Development Committee in 2024). This committee regularly reports sustainability performance and plans to the Board of Directors, aligning with global trends and key economic, environmental, and social topics. Directors also undergo ESG-related training to enhance governance-level sustainability expertise.

The governance structure supports both vertical integration and horizontal communication to ensure the effective execution of sustainability strategies. Under the leadership of the CEO (also serving as Chief Sustainability Officer), the Sustainability Development Office coordinates with five functional teams across economic, environmental, governance, and social dimensions.

### 1. Board of Directors and Sustainability Development Committee — The Highest Governing Body for Sustainability

The Company places a strong emphasis on sustainable development and has established a Sustainability Development Committee under the Board of Directors as the highest functional body for sustainability governance. Both the Chairperson and the Chief Executive Officer serve as committee members. Through regular oversight and review of sustainability-related policies, targets, and implementation results by the Board, the Company ensures that its sustainability strategies are aligned with core business objectives, while fulfilling the Board's governance responsibilities and commitment to ESG issues.

#### 2. Executive Advocacy and Leadership in Sustainability

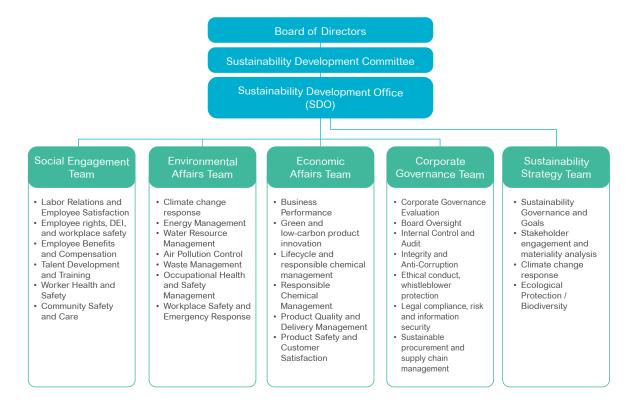
To strengthen the Company's leadership and execution in sustainable development, in 2024 the Chief Executive Officer, Ming-Hsien Hsu, was also appointed as Chief Sustainability Officer (CSO). A Sustainability Development Office was established under the direct leadership of the CSO to serve as the central unit for executing and coordinating the Company's sustainability initiatives.

The CSO leads a professional team comprising five cross-functional working groups, integrating resources from various business divisions and functional units to plan and implement concrete action plans. This structure ensures the achievement of short-, medium-, and long-term sustainability goals, while building long-term momentum for sustainability development within the organization.

# 3. Active Participation of Middle Management and All Departments The driving force behind Nan Pao's practical sustainability efforts comes from the active engagement of its middle management. In addressing diverse and complex sustainability issues, the Sustainability Development Office designs and plans various projects, which are then executed by departmental managers according to their respective responsibilities. These managers also facilitate cross-departmental and cross-organizational communication and collaboration mechanisms to jointly advance the Company's ESG objectives.

Through the leadership and hands-on involvement of middle management, sustainability actions have been deeply embedded into the Company's daily operations, becoming a core force that drives continuous organizational improvement.

#### **Sustainability Organizational Chart**



#### Practicing the United Nations Sustainable Development Goals (SDGs)

In response to the critical challenges faced by humanity, Nan Pao actively advances the United Nations Sustainable Development Goals (SDGs). Guided by the Sustainability Committee, the Company has established a forward-looking sustainability strategy framework with four strategic pillars: Circular Economy, Low-Carbon Mission, Value Co-Creation, and Social Inclusion. Nan Pao has identified nine SDGs highly relevant to its operations and, through the Sustainability Office, integrates internal and external resources to formulate 19 specific, measurable, and time-bound long-term targets, embedding the SDGs into organizational culture and daily operations.

To systematize sustainability management, the Company implements concrete action plans and performance management mechanisms across three dimensions—governance, economy, environment, and society—based on operational characteristics and risk assessments. Through cross-departmental collaboration, stakeholder engagement, and data-driven management, Nan Pao strengthens its connection with society, continuously explores opportunities for sustainable development, and works with stakeholders to co-create a sustainable future with shared value.

#### Sustainability Strategy Pillars



#### Organizational Structure for Sustainability

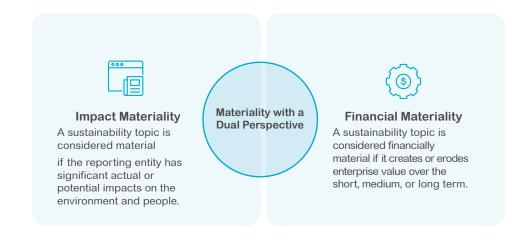
SDGs	Sustainability Strategy Targets
3 GOOD HEALTH AND WELL-SEING	<ul> <li>Increase the share of green chemical sales year-on-year, reaching 80% of total sales by 2030</li> <li>Maintain zero occupational diseases caused by chemical exposure</li> <li>Reduce VOC emission intensity by 10% compared with 2023</li> </ul>
5 ERIORER ERIUALITY	Promote at least one female or diverse-background employee to management each year
6 CLEAN WAITER AND SANITATION	Reduce water withdrawal intensity by 10% compared with 2023 by 2025
7 AFFORDAGE AND CLEAN CHARSE?	Install 2,500 kW renewable energy capacity at plants by 2025
8 DECENT WORK AND ECONOMIC GROWTH	<ul> <li>Organize at least three mental health and stress management courses annually</li> <li>Provide annual general and special occupational health check-ups for employees</li> <li>Reduce occupational accident cases (excluding traffic accidents) by 50% compared with 2024 by 2025</li> </ul>
9 BELISTIK BHAYATAN	<ul> <li>Maintain technology leadership by investing 2.5–3% of revenue in R&amp;D annually</li> <li>Maintain zero incidents of unauthorized disclosure of confidential or sensitive data</li> <li>Maintain zero major cybersecurity incidents impacting operations, reputation, or finance</li> </ul>
11 SASTANABLE CITIES AND COMMUNITIES	<ul> <li>Organize at least one community visit event annually</li> <li>Contribute over NT\$700,000 annually to elderly care services</li> <li>Continue supporting after-school tutoring and summer/winter camps at six elementary schools</li> </ul>
12 RESPONSIBLE ODESLIMPTION AND PRODUCTION	<ul> <li>Increase the recycling and reuse ratio of hazardous waste by 5% compared with 2023</li> </ul>
13 ACHMATE ACTION	<ul> <li>Reduce GHG emission intensity by 10% by 2025 and 35% by 2030 (compared with 2023), and achieve net zero by 2050</li> <li>Reduce non-renewable energy consumption intensity by 5% compared with 2023</li> <li>Reduce product carbon intensity by 5% compared with 2024, with specific targets set by each business unit</li> </ul>

# 1.3 Material Topics and Stakeholder Engagement

Nan Pao conducts its materiality analysis in accordance with the GRI Universal Standards 2021, specifically GRI 3: Material Topics 2021, and the European Sustainability Reporting Standards (ESRS) issued by the European Financial Reporting Advisory Group (EFRAG) under the Corporate Sustainability Reporting Directive (CSRD). The analysis framework is structured based on the principle of double materiality, which integrates Impacts, Risks, and Opportunities (IRO).

#### **Double Materiality Principle**

The double materiality approach considers both financial materiality and impact materiality. It examines how ESG topics present risks and opportunities that may influence the Company's development, performance, and market position from a financial perspective, while also assessing the external impacts of corporate operations on the economy, environment, and people—including human rights. This report is prepared primarily based on sustainability impact materiality, and financial implications are assessed through a structured risk management framework.

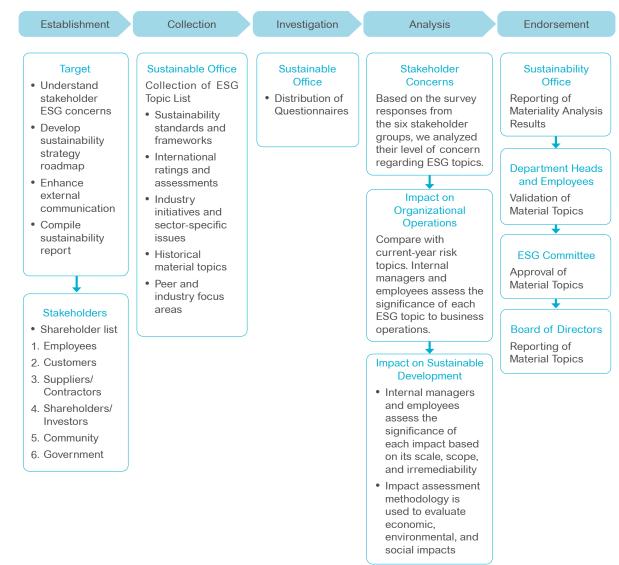


#### **Materiality Analysis Process**



#### Materiality Assessment Methodology

Nan Pao's materiality assessment process draws upon the AA1000 Accountability Principles (2018) and the GRI Sustainability Reporting Standards. The process adheres to four core principles: Inclusivity, Impact, Materiality, and Responsiveness. Guided by these principles, the Company applies a five-step process—Identification, Collection, Investigation, Analysis, and Validation—to review sustainability topics and conduct the materiality analysis. Sustainability issues are reviewed, and a materiality analysis is conducted every year.



#### Stakeholder Concerns

Based on the results of the stakeholder survey, Nan Pao analyzed the level of concern expressed by 546 stakeholders across a range of ESG topics. These results were visualized in the "Stakeholder Concerns Ranking" chart, which highlights the top ten ESG topics of concern. The highest priority topics identified include Occupational Safety and Health and Emergency Response, Air Quality, Climate Change Mitigation, and Water Resource Management, among others. These results have been incorporated into the double materiality assessment process.

#### **Organizational Operational Impact**

Based on the survey analysis of 24 internal managers and employees, four topics were identified as having potentially significant impacts: Chemical Safety Management, Circular Economy, Information Security Management, and Occupational Safety, Health, and Emergency Response. Among these, Circular Economy has the most notable impact on revenue growth and customer satisfaction; Chemical Safety Management and Information Security Management are highly correlated with operational risks; and the safety and health of employees and communities rely heavily on the implementation of Emergency Response measures, which include strengthening employee safety awareness, conducting regular emergency drills for all staff, and carrying out as well as monitoring employee health check results.



#### **Material Topics and Value Chain**

Material Topic		Impact Domain					
Waterial Topio	Economic	Environmental	Social	Human Rights	Nan Pao	Upstream	Downstream
Chemical Safety Management		Hazardous chemicals	Human health	Health	•	0	•
Climate Change Mitigation	Climate risk management	Greenhouse gases	Quality of life	Climate and environment	•	•	•
Air Quality	Regulatory fines	Particulate matter	Working conditions	Health	•		0
Water Resource Management	Climate risk management	Effluent quality			•	0	
Occupational Safety and Health and Emergency Response	Regulatory fines		Human health	Health	•	0	
Waste Management	Resource recycling	Renewable resources	Hazardous industrial waste		•	0	•
Circular Economy	Resource recycling	Renewable resources	Hazardous industrial waste	Climate and environment	•	•	0
Information Security Management	Intangible asset management		Information protection	Information protection	•		•
Human Rights Management	Regulatory fines		Working conditions	Business and human rights	0	•	

#### **Material Topic Risk Management**

Material Topic Risk Factor		Management Approach			
Waterial Topio	Mon Paoloi	Significance to Nan Pao	Objectives or Strategies		
	Exceedance of SVHC in Products	Chemical management is one of the core foundations for Nan Pao's development. From the design and development stage, we apply product lifecycle thinking to help customers develop alternatives and avoid the use of potentially hazardous chemicals in product design. We also strive to minimize employee exposure to chemical risks.	<ul> <li>Chemical reduction and substitution</li> <li>Reduce the number and usage of high-concern chemicals by 50% by</li> </ul>		
Chemical Safety Management	Chemical storage and transport safety	Nan Pao emphasizes the safety of chemical storage and transport both inside and outside the plant. We train and require employees to implement proper protective measures when handling chemicals, and we closely monitor the storage locations and quantities of chemicals on-site to maintain safe storage conditions and prevent fires or flashpoints.	<ul> <li>2030 compared to 2021.</li> <li>Contingency planning and personnel training</li> <li>Safe storage and labeling</li> <li>Compliant transportation and protective measures</li> </ul>		
Occupational Safety and	Fire	We prioritize the safety of workers on-site. Nan Pao is committed to providing a safe and healthy working environment for employees and contractors. Hot work permits must be applied for in advance. We strictly manage the conditions of the chemical storage areas to prevent flash fires and implement a top-down safety culture.	<ul><li>Promoting a Safety Culture</li><li>Committed to achieving zero</li></ul>		
Health and Emergency Response	Employee occupational injury	The chemical production process often involves high-risk materials, making occupational safety and health critical. Comprehensive safety measures can prevent accidents and protect employees' lives. Emergency response plans enable rapid control of incidents to minimize losses. Compliance with regulations also helps avoid fines and protect the company's reputation.	workplace safety incidents  • Preventing occupational diseases		
Waste Management	Improper waste disposal	Waste management helps reduce negative environmental impacts, including pollution and ecological damage.	<ul> <li>Reduction and Resource Recycling</li> <li>Compliant handling and safe storage</li> <li>Supply chain and partnership management</li> </ul>		

Material Topic	Risk Factor	Management Approach		
Material Topic	NISK Factor	Significance to Nan Pao	Objectives or Strategies	
Circular Economy	Lag in new product development	We actively collaborate with external manufacturers and academic institutions to develop innovative products, including the application of recycled and bio-based materials. This not only helps us stay ahead in R&D but also reduces the extraction and synthesis of raw chemicals at the source, minimizing resource consumption, but also meets growing customer demand for green products and enhances product competitiveness.	<ul> <li>Focusing on Innovation-Driven Development</li> <li>Deepening external R&amp;D collaborations</li> <li>Resource recovery and circular utilization</li> </ul>	
Water Resource Management	Water shortage or interruption impacting production	Nan Pao's plants rely on water resources for production, making effective water management essential. It is not only the foundation for smooth production but also a key factor in environmental protection. Proper wastewater treatment and compliance with regulations help prevent pollution and fines. Reuse and recycling can reduce water fees and wastewater treatment costs, enhancing competitiveness. Prioritizing water management also demonstrates our environmental commitment and strengthens our corporate image, which is essential for sustainable development.	<ul> <li>Water Resource Risk Management</li> <li>Developing prevention and control technologies</li> </ul>	
Climate	Power shortage or outage impacting production	Extreme weather events pose significant potential risks to production and operations. Unstable energy supply may lead to power shortages or outages, severely affecting production and causing potential losses.	Strengthening climate resilience     Promoting low-carbon manufacturing	
Change Response	Carbon tax/carbon tariff imposition	The European Carbon Border Adjustment Mechanism (CBAM) and Taiwan's carbon fees will increase Nan Pao's production costs, prompting us to accelerate our transformation and invest in low-carbon technologies to address challenges posed by international trade and domestic environmental regulations.	Using renewable energy     Improving energy efficiency	
Information Security Management	Cybersecurity incidents (e.g., ransomware attacks on company operational data, BEC email scams)	Cybersecurity incidents may lead to production disruptions, equipment damage, data breaches, and even safety accidents, causing casualties and environmental pollution. These incidents can severely impact business operations and reputation.	<ul><li>Data Protection and Access Control</li><li>Cybersecurity Protection</li><li>Employee Training and Response</li></ul>	
	Leakage of critical R&D information	Leakage of important R&D information could result in the loss of technological advantages, reduced market competitiveness, product counterfeiting, and even legal disputes, severely affecting the company's long-term development.	Mechanisms	
	Excessive VOC waste volume	Excessive VOC waste may subject chemical plants to environmental regulations, increased treatment costs, equipment overload, higher safety risks, and even forced production cuts or shutdowns, impacting business operations.	Air Emissions Management	
Air Quality	Odor generation	Chemical odors may cause discomfort to surrounding residents, leading to frequent complaints and negatively affecting the company's image. Environmental authorities may conduct strict inspections, and violations could significantly damage the company's social reputation, consumer trust, and brand value.	Strengthened Monitoring of Air Pollution Control Systems	
Human Rights Management	Pollution from production processes affecting the health and quality of life of surrounding communities	Pollution may trigger resident protests, environmental inspections, and legal actions, leading to plant shutdowns, fines, and reputational damage, severely affecting operations and community relations.	Community Impact Management     Protection of Labor Rights	
	Protection of migrant workers' rights impacting corporate reputation	May lead to international criticism, labor group protests, factory image damage, order losses, and even legal disputes, severely impacting corporate reputation and operations.	Trotection of Labor Nights	

#### Stakeholder Engagement Overview

Stakeholder	Concerned Topics	Communication Channels and Frequency	Response and Communication Performance
Employee	Employee compensation and benefits     Performance evaluation mechanisms     Talent development and growth     Physical and mental health and work environment safety     Labor relations     Operational performance     Employee feedback and communication	Employee performance reviews (semi-annually)     Employee training (irregular)     Occupational Safety and Health Committee (quarterly)     Plant Safety Meetings (twice per quarter)     Labor-management meetings (quarterly)     Internal communication meetings (weekly/monthly)     Employee bi-weekly meetings     Internal electronic bulletin board (irregular)     Employee suggestion mailbox (realtime)     Whistleblower reporting procedures (real-time)	<ul> <li>Conducted semi-annual performance reviews and annual promotion proposals for outstanding employees.</li> <li>21,822 total training participations in 2024, averaging 6.55 times per employee, totaling 24,689 hours of training.</li> <li>Hosted Mother's Day music concert with 164 participants (2024.5.8).</li> <li>First Family Day at the plant with 836 participants (2024.12.14).</li> <li>Four Joint Occupational Safety and Health Committee meetings and eight plant safety meetings held in 2024.</li> <li>Completed external Occupational Safety, Health, and Environmental Management System audit (2024.11).</li> <li>Four labor-management meetings held in 2024.</li> <li>48 management coordination meetings, 12 management meetings, and 70 weekly meetings in 2024.</li> <li>Posted employee welfare and training information on the internal bulletin board irregularly.</li> <li>Completed 17 internal ESG impact assessments.</li> <li>Collected 223 internal stakeholder survey responses.</li> </ul>



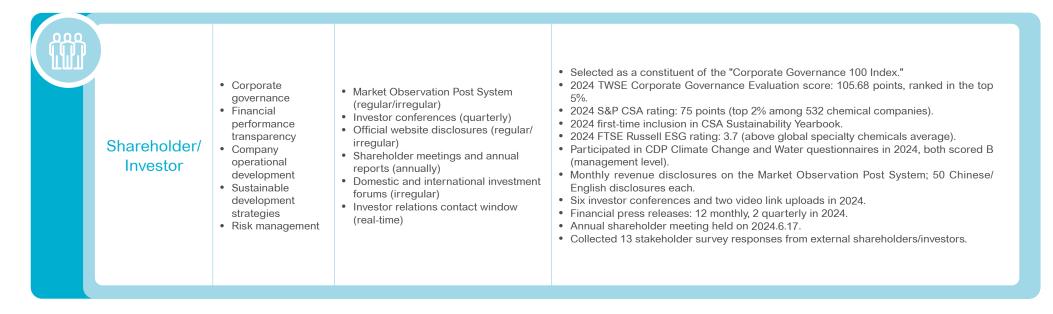
#### Customer

- Customer satisfaction surveys
- Innovation and green products
- Service/product quality
- Marketing communication
- Customer protection and communication

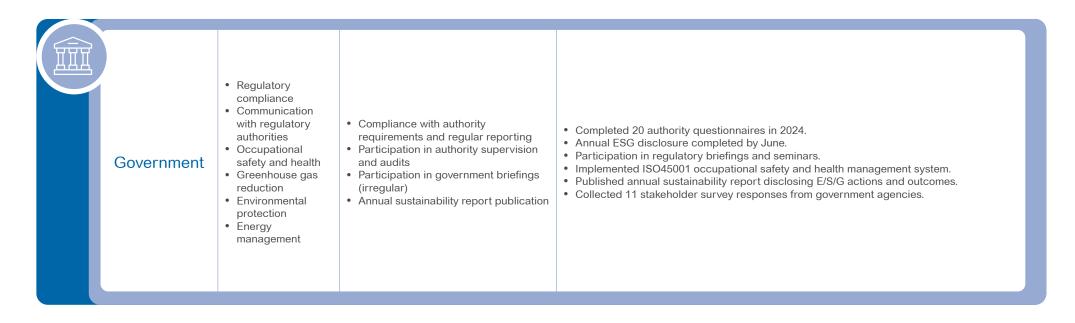
- Customer satisfaction surveys (annually)
- Innovation technology seminars (annually)
- Customer service hotline and email (real-time)
- Official website and social media (irregular)
- Technology innovation exhibitions (annually)
- Business contact window (real-time)

- Annual customer satisfaction survey; 262 questionnaires in 2024.
- Two technology seminars in 2024.
- Won TCIA Net Zero Emission Achievement Award in 2024.
- Regular external audits of quality control systems (Dec 2024) and internal audits.
- Won Adidas adiFormulator ZDHC L3 Annual Champion.
- 2023 Outstanding Importer and Exporter Award.
- Website and Facebook page updated irregularly.
- Taipei Textile Exhibition 2024 showcasing ECO FRESH product line.
- ARAC2024 keynote speaker on eco-friendly adhesives for woodworking.
- · Technical support provided to customers irregularly.
- No information security or privacy breaches in 2024.
- · Collected 157 stakeholder survey responses.

Stakeholder	Concerned Topics	Communication Channels and Frequency	Response and Communication Performance
Supplier/ Contractor	Green supply chain management     Product quality     Business ethics     Regulatory compliance	<ul> <li>Supplier evaluations (annually)</li> <li>On-site supplier audits (annually)</li> <li>Supplier questionnaires and declarations (irregular)</li> <li>Contractor safety meetings (annually)</li> </ul>	<ul> <li>Conducted evaluations of 454 suppliers in Jan and July 2024.</li> <li>Conducted risk assessments and on-site audits for 7 key suppliers in 2024.</li> <li>Local procurement ratio of raw materials was 77% in 2024.</li> <li>55 suppliers completed ESG risk assessment surveys; 2 underwent ESG audits and site inspections in 2024.</li> <li>96.3% of raw material suppliers signed the Supplier Code of Conduct in 2024.</li> <li>Contracts signed with suppliers specifying terms and requirements.</li> <li>Collected 122 stakeholder survey responses from external suppliers/contractors.</li> </ul>



Stakeholder	Concerned Topics	Communication Channels and Frequency			Response and (	Communication	n Performan	ce	
Community	Community engagement and care     Environmental protection     Volunteer service     Occupational safety and health	Nan Pao Social Welfare Foundation (real-time) ESG contact mailbox (real-time) Volunteer activities (irregular) Project donations and sports sponsorships (irregular)	• 20	Child Education  2,615,000  36%  e1: Others include "Factory Toundermistry Career ghting Up Hope	ached NT\$86.96 recial Welfare Found Care for the Disadvantaged 1,610,500 22% de emergency assistes for community recommunity r	Community culture  850,000  12%  tance, volunteer residents. nts for students ty event with E	Elderly Welfare 830,000 12% services, and s. den Founda	ation wish lists.	



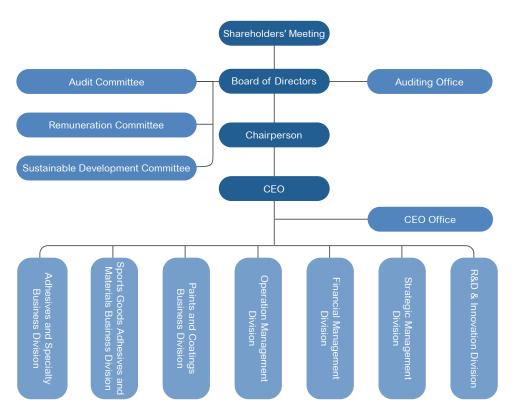


# 2.1 Operational Management and Structure

#### Robust Corporate Governance

Nan Pao firmly believes that a sound and efficient Board of Directors forms the cornerstone of good corporate governance. The Company has also established an Internal Audit Office, which conducts regular audits of the headquarters, subsidiaries, and affiliated enterprises each year to assess operational processes and performance. Audit reports are submitted to the Board of Directors on a regular basis.

Nan Pao's Board of Directors, led by Chairman Mr. Cheng-Hsien Wu, receives quarterly reports from the management team covering business performance, environmental safety, investment outcomes, and more, and provides strategic advice accordingly. A smooth communication channel is maintained between the management team and the Board to ensure alignment on corporate goals and to maximize shareholder value.



#### **Board Composition**

In accordance with the Company's Articles of Incorporation, the Board convenes at least once every quarter to supervise and understand the implementation of operational plans, the presentation of financial statements, the progress of audit reports, and follow-up actions. In 2024, the Board held six meetings with an overall director attendance rate of 97.62%, thereby fulfilling its oversight role over operational plans and other key aspects. Important resolutions of the Board are also regularly published on the Company's investor relations section of the website.

To further enhance its supervisory function and strengthen management capabilities, the Board has established three functional committees:

#### Audit Committee (established in 2017):

Assists the Board in overseeing the appointment and dismissal of certified public accountants, financial reporting processes, internal control systems, and risk management mechanisms.

#### Compensation Committee (established in 2017):

Assists the Board in evaluating and executing overall compensation policies, targets, and performance appraisals for directors and managers.

Sustainability Development Promotion Committee (originally the Corporate Social Responsibility Management Committee, established in 2020):

Coordinates the formulation of sustainability policies, the planning of sustainability goals, and the implementation of sustainability-related initiatives.

#### **Board Professional Qualifications and Experience**

Nan Pao adheres to a fair, just, and open nomination and selection process for directors in accordance with the Company Act and relevant regulations. The composition of the Board takes into account organizational culture, operational patterns, and long-term development, and implements a policy of Board member diversity. Board members must possess the knowledge, skills, and qualities required to perform their duties. Collectively, the Board should demonstrate competencies in business judgment, accounting and financial analysis, business management, crisis management, industry knowledge, international perspective, leadership, and decision-making.

Requirements Name	Professional Qualifications and Experience	Independence Status	No. of Other Listed Companies as Independent Director
Wu Cheng-Hsien S Committee member ( Note 1 )	Chairman Wu graduated from the Department of Chemistry at National Tsing Hua University and later obtained a master's degree from its Institute of Applied Chemistry.  Industry Experience: He joined Nan Pao in 1977, serving in various leadership roles including Plant Manager of Baoli Plant, General Manager of R&D, Executive General Manager of the Adhesives Division, and President. Since 2013, he has served as Chairman of the Board.  Risk Management Experience: He is a member of the Company's Sustainability Development Committee, which oversees the management of sustainability risks, compliance risks, and information security risks.  With more than 20 years of experience in the chemical resins industry, Chairman Wu possesses extensive expertise in corporate management, strategic leadership, and ESG practices.	Chairman Wu also serves as a director, supervisor, or chairman of the Company's affiliated enterprises.  He otherwise meets the independence requirements set forth in Article 3, Paragraph 1 of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies as promulgated by the Financial Supervisory Commission.	0
Lin Wang-Chien (Representative of Baojian Enterprise Co., Ltd.)	Director Lin holds a master's degree from the Graduate Institute of Philosophy at Tunghai University. He currently serves as a director of Her Li Industrial Group Co., Ltd. and San Fang Chemical Industry Co., Ltd., and as Chairman of Yuan Sheng Materials Technology Co., Ltd. From 2021 to 2024, he served as Deputy General Manager of Pou Chen International (Holdings) Ltd. in Hong Kong.  Industry Experience: Since 2016, he has held human resources management positions within Pou Chen Group, and in March 2024 was appointed Executive Associate Vice President of Pou Chen's Global Supply Chain Management Headquarters.  Director Lin possesses expertise in human resources management and corporate management.	Director Lin serves as the representative of Pou Chien Enterprise, a corporate shareholder of the Company. He otherwise meets the independence requirements set forth in Article 3, Paragraph 1 of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies as promulgated by the Financial Supervisory Commission.	0
Hsu Ming- Hsien(Representative of Guangrong Investment Co., Ltd.)  S Committee member  ( Note 1 )	Director Hsu graduated from the Department of Business Administration at National Sun Yat-sen University and later obtained a master's degree from the Institute of Industrial Management at National Cheng Kung University. He currently serves as an Independent Director and a member of the Compensation Committee of Lite-On Photonics Co., Ltd., and as a member of the Compensation Committee of Min Sheng Applied Co., Ltd.  Industry Experience: He joined Nan Pao in 1986, holding key management positions including Manager of the Corporate Management Office and Deputy General Manager of the Planning Division.  Risk Management Experience: He is a member of the Company's Sustainability Development Committee, which reviews sustainability risks, compliance risks, and information security risks.  Information Security Experience: He serves as the convener of the Company's Information Security Committee, overseeing digital transformation and cybersecurity strategies. Under his leadership, the Company obtained ISO 27001 Information Security Management System (ISMS) certification on July 22, 2022, and joined TWCERT/CC.  Since his appointment as CEO in 2017, Director Hsu has led the Company steadily toward sustainability innovation, low-carbon manufacturing, and digital transformation, with the vision of becoming an indispensable strategic partner across industries through innovative and eco-friendly products.  Director Hsu has more than 20 years of experience in the chemical resins industry and is highly skilled in corporate management, strategic leadership, and ESG practices.	Director Hsu serves as the Company's Chief Executive Officer as well as a director or supervisor of its affiliated enterprises. He is also the representative of Kuang Jung Investment, one of the Company's top five corporate shareholders.  He otherwise meets the independence requirements set forth in Article 3, Paragraph 1 of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies as promulgated by the Financial Supervisory Commission.	0
Huang Ying-Lin (Representative of Guangrong Investment Co., Ltd.)	Director Huang graduated from the Department of Chemistry at the University of Southern California and later obtained a master's degree in Applied Chemistry from Waseda University in Japan. He currently serves as a director of Tungsin Optoelectronics Co., Ltd. and Contact BioSolutions Australia Pty. Ltd.  Industry Experience: He joined Nan Pao's New Business Development Center in 2023 and has held positions including Special Assistant to the CEO Office and Executive General Manager of the Footwear Division. Director Huang possesses expertise in corporate management and strategic leadership.	Director Huang serves as Executive General Manager of the Company's Footwear Division, and as a director, supervisor, or chairman of its affiliated enterprises. He is also the representative of Kuang Jung Investment, one of the Company's top five corporate shareholders, and personally (or through nominees) holds more than 1% of the Company's outstanding shares. He otherwise meets the independence requirements set forth in Article 3, Paragraph 1 of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies as promulgated by the Financial Supervisory Commission.	0

Requirements Name	Professional Qualifications and Experience	Independence Status	No. of Other Listed Companies as Independent Director
Chen Yun A Convener C Convener C Convener Note 1)	Independent Director Chen graduated from the Department of Chemical Engineering at Tunghai University, obtained a master's degree from the Institute of Polymer Science at National Tsing Hua University, and a Ph.D. from the Institute of Synthetic Chemistry at the University of Tokyo. He is currently an Honorary Professor at the Department of Chemical Engineering, National Cheng Kung University.  • Industry Experience: He previously served as a polymer engineer at Shinho Fiber Industry Co., Ltd. (1975–1977) and as Deputy Manager of the Joint Research and Development Department at Chien Hsin and Guang Nan Enterprises Co., Ltd. (1977–1984).  • Risk Management Experience: He serves as the convener of the Company's Audit Committee and Sustainability Development Committee, which review financial risks, internal control risks, sustainability risks, compliance risks, and information security risks.  Independent Director Chen has devoted more than 30 years to education and research in polymer chemistry, optoelectronic polymer materials, and fluorescent sensing materials, and possesses expertise in ESG-related matters.	Independent Director Chen has met the qualification requirements stipulated in the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies and Article 14-2 of the Securities and Exchange Act during the two years prior to his election and throughout his tenure. In accordance with Article 14-3 of the Securities and Exchange Act, independent directors are granted sufficient authority to participate in decision-making and to express their opinions, thereby enabling them to exercise their duties independently.	0
Chiang Yung-Cheng A Committee member C Committee member C Committee member Note 1)	Independent Director Chiang graduated from the Department of Law at Soochow University. He currently serves as an Independent Director of Lungta Construction Co., Ltd., Chunghsing Security Technology Co., Ltd., and Typo Precision Imaging Co., Ltd., and as a practicing lawyer at Cheng-Bang/Cheng-Yang Joint Law Firm. He previously served as a judge at the Kaohsiung District Court (1986–1997) and the Kaohsiung Branch of the Taiwan High Court (1997–1999), and as a director of Nan Ho Hsing Industrial Co., Ltd.  Risk Management Experience: He is a member of the Company's Audit Committee and Sustainability Development Committee, which review financial risks, internal control risks, sustainability risks, compliance risks, and information security risks.  Independent Director Chiang has practiced law for more than 25 years and possesses expertise in legal affairs and ESG matters.	Independent Director Chiang has met the qualification requirements stipulated in the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies and Article 14-2 of the Securities and Exchange Act during the two years prior to his election and throughout his tenure. In accordance with Article 14-3 of the Securities and Exchange Act, independent directors are granted sufficient authority to participate in decision-making and to express their opinions, thereby enabling them to exercise their duties independently.	3
Kuo Chin-Rong A Committee member C Committee member C Committee member Note 1)	Independent Director Kuo received a master's degree from the Institute of Industrial Management at National Cheng Kung University and later obtained a master's degree in Accounting from Southern Illinois University, USA. She currently serves as Chairman of the Auditing Committee of the Taiwan Provincial CPA Association, Managing Partner of KPMG Union CPAs, Chairman of the Taipei Certified Tax Agents Association, and Independent Director of Cyuan Yu Hsin Technology Co., Ltd. She previously served as Assistant Professor at the Department of Accounting at Tamkang University (2010–2024), Deputy Chairman of the Auditing Committee of the Taipei CPA Association (2014–2017), Director and Supervisor of the National Federation of Certified Public Accountants Associations of the R.O.C. (2015–2021), and Supervisor of Opus Information Co., Ltd. (2017–2023).  Risk Management Experience: She is a member of the Company's Audit Committee and Sustainability Development Committee, which review financial risks, internal control risks, sustainability risks, compliance risks, and information security risks.  Independent Director Kuo holds CPA licenses in Taiwan, the United States, and Mainland China, and has over 25 years of experience in accounting, taxation, and advisory services. She possesses expertise in accounting, corporate management, strategic leadership, ESG, and tax-related matters.	Independent Director Kuo has met the qualification requirements stipulated in the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies and Article 14-2 of the Securities and Exchange Act during the two years prior to her election and throughout his tenure. In accordance with Article 14-3 of the Securities and Exchange Act, independent directors are granted sufficient authority to participate in decision-making and to express their opinions, thereby enabling them to exercise their duties independently.	1

Note 1: Functional Committees A Audit Committee C Compensation Committee S Corporate Sustainability Development Promotion Committee Note: After verification, none of the Company's directors currently fall under any of the circumstances listed in Article 30 of the Company Act.

# 2.2 Board Composition and Governance

#### **Board Professional Qualifications and Experience**

Nan Pao adheres to a fair, just, and open nomination and selection process for directors in accordance with the Company Act and relevant regulations. The composition of the Board takes into account organizational culture, operational structure, and long-term development, and implements a policy of Board member diversity. Board members must possess the knowledge, skills, and qualities required to perform their duties. Collectively, the Board should demonstrate competencies in business judgment, accounting and financial analysis, business management, crisis management, industry knowledge, international perspective, leadership, and decision-making.

#### Strengthening Board Structure and Operations

2Since 2023, Nan Pao has added one female independent director. All independent directors have not exceeded three consecutive terms. To strengthen corporate governance and enhance Board effectiveness, the Board has appointed Mr. Lin Kun-Chin, Associate General Manager of the Financial Management Department, as the Chief Corporate Governance Officer. The Company has implemented the "Orientation and Continuing Education System for Directors" and continuously revised the "Corporate Governance Best Practice Principles" to align with international corporate governance trends and to address emerging social and international issues.

#### **Board Diversity**

The Company implements a Board diversity policy, as stipulated in its "Corporate Governance Best Practice Principles," which defines Board diversity standards covering but not limited to the following two dimensions:

- (1) Basic Conditions and Values: Gender, age, nationality, race, and culture.
- (2) Professional Knowledge and Skills: Professional background (e.g., law, accounting, industry, finance, marketing, or technology), professional skills, and industry experience.

At the 2023 Annual General Shareholders' Meeting (June 21, 2023), seven directors were elected, including three independent directors. The Board comprises members with diverse and complementary industry experience and professional expertise in finance, accounting, law, and other areas, thereby meeting the management objectives of the Board Diversity Policy (please refer to: Implementation of Board Diversity Policy).

Management Objectives:	Achievement Status:
(1) Female directors account for one-third of the board seats	(1) The proportion of female directors is 14.29%, which has not yet reached one-third Under target
(2) The number of independent directors must exceed one-third of the total number of directors.	(2) Independent directors comprise 42.86% of the Board.  Achieved
(3) The number of directors concurrently serving as managers of the Company must not exceed one-third of directors.	(3) Directors concurrently serving as managers account for 28.57% of the Board.  Achieved
(4) No more than two directors shall have spousal or second-degree relative relationships with each other.	(4) No directors have spousal or second-degree relative relationships.  Achieved

In the past, the selection of Nan Pao's board members primarily considered candidates' professional backgrounds, industry and management experience, as well as their level of engagement and contributions to the Company's future development, without specific restrictions on gender representation. To further promote gender equality on the Board, in 2024 the Company introduced a management target of ensuring that female directors account for one-third of all board seats, and will continue to enhance gender diversity in board composition going forward.

#### Implementation Status of the Board Diversity Policy

Diversity	Basi	c Qualif	ications	Initial	Years of Concurrent Concurrent Professional Knowledge & Skills				Industry Ex	kperience							
Name	Gender	Age	Nationality	Appointment Date	Independent Directorship	Employee Position	Managerial Position	Corporate Management	Leadership & Decision- Making	Accounting	Taxation	Legal	HR	ESG	Chemicals	Sports & Recreation	Textiles & Fibers
Wu Cheng-Hsien	Male	71-80	R.O.C.	20140627				<b>√</b>	<b>√</b>					<b>√</b>	✓		
Hsu Ming-Hsien	Male	61-70	R.O.C.	20140627		<b>√</b>	✓	✓	<b>√</b>					<b>√</b>	<b>√</b>		
Huang Ying-Lin	Male	31-40	R.O.C.	20200616		<b>√</b>	✓	✓	<b>√</b>						<b>√</b>		
Lin Wang-Chien	Male	51-60	R.O.C.	20240318				✓	<b>√</b>				<b>√</b>			<b>√</b>	
Chen Yun (Independent Director)	Male	71-80	R.O.C.	20171212	7-9 years									<b>√</b>		<b>√</b>	<b>√</b>
Chiang Yung- Cheng (Independent Director)	Male	61-70	R.O.C.	20171212	7-9 years							<b>√</b>		<b>√</b>			
Kuo Chin-Rong (Independent Director)	Female	61-70	R.O.C.	20230621	1-3 years			✓	<b>√</b>	<b>√</b>	✓			<b>√</b>			

#### **Board Independence**

The Board of Directors of the Company demonstrates a high level of independence:

- (1) The Board consists of seven members, including three independent directors, representing 42.86% of the Board. All three independent directors meet the independence criteria set forth in the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies."
- (2) None of the independent directors has served for more than three consecutive terms, and none concurrently serves as an independent director in more than three other public companies. Two independent directors have served terms ranging from 7 to 9 years, while one has served a term ranging from 1 to 3 years.
- (3) No directors have spousal or second-degree relative relationships with each other (i.e., none are subject to the circumstances specified in Paragraphs 3 and 4 of Article 26-3 of the Securities and Exchange Act).
- (4) All directors uphold a high level of self-discipline. For any matters on the Board's agenda that present a conflict of interest involving themselves or the entities they represent, directors must disclose the material aspects of such interests during the Board meeting. If the matter may be detrimental to the Company's interests, the director shall neither participate in the discussion nor vote on the proposal, and shall recuse themselves from voting, without acting as a proxy for other directors.

#### **Board Succession Planning and Operation**

The Company's Articles of Incorporation stipulate that the election of directors shall adopt a candidate nomination system. In accordance with the "Corporate Governance Best Practice Principles" and the "Procedures for Election of Directors," the Company implements its Board Diversity Policy. Currently, the Board comprises seven directors (including three independent directors), who possess diverse and complementary industry experience and professional expertise in law, accounting, and finance. Among them, three also serve as senior management of the Company.

Chairman Mr. Wu Cheng-Hsien joined Nan Pao's R&D Department in 1977 and has since held positions such as Plant Manager at Baoli Plant, General Manager of R&D, Executive General Manager of the Adhesive Business Unit, and General Manager. He joined the Board of Directors in 2014 and assumed the position of Chairman, where his primary responsibility is to promote corporate governance. The future composition and backgrounds of the Board of Directors will continue the current structure.

When evaluating executive directors and other key personnel, the Company places particular emphasis on their extensive management experience, integrity, ethical conduct, and strong commitment to the long-term development of the Company. The Company is also gradually building a database of potential director candidates based on the following criteria:

- Compliance with the Company's Board Diversity Policy management objectives.
- Integrity, responsibility, innovation, and decision-making abilities that align with the Company's core values, along with professional knowledge and skills that contribute to corporate management.
- Relevant industry experience related to the Company's business operations.

Candidates for the Board of Directors are jointly recommended by major shareholders or senior management and subsequently nominated by the Board, ensuring that the appointment of leadership carries both credibility and organizational recognition. The Company has also established the "Board Performance Evaluation Procedures," which include performance evaluation criteria such as understanding of the Company and its responsibilities, participation in corporate operations, director professionalism and continuing education, and internal controls. These evaluations are conducted to ensure the effective functioning of the Board and to serve as a reference for future director selection.

Considering the above factors and selection criteria, the Company has identified a successor to the Chairman and plans to complete the succession within the next two to three years.

#### Implementation of Corporate Governance

- 1. The Board of Directors fulfills its fiduciary duty of due care to oversee the implementation of sustainable development by the Company, continually reviewing and improving the effectiveness of its initiatives to ensure that sustainability policies are effectively carried out.
- 2. When promoting sustainable development goals, the Board of Directors fully considers the interests of stakeholders, including the following:
- a. Formulating a sustainability mission or vision, and establishing sustainability policies, systems, or relevant management guidelines.
- b. Integrating sustainability into the Company's operational activities and strategic direction, and approving specific sustainability action plans.
- c. Ensuring the timeliness and accuracy of sustainability-related information disclosure.
- 3. The Company authorizes senior management to handle the economic, environmental, and social issues arising from its operations, with the Sustainability Committee reporting to the Board of Directors on progress and outcomes.
- 4. To enhance sustainability management, the Sustainability Committee serves as the dedicated unit responsible for promoting and overseeing sustainability matters, while the Sustainability Office executes the implementation of sustainability policies and regularly reports to the Board of Directors.

#### The Board's Collective Knowledge

Nan Pao enhances the Board's familiarity with the Company, its industry, and the unique responsibilities of directors through the following measures:

- 1. In addition to regular meetings of the Board and its functional committees, annual reports from the management team and updates from the Sustainability Committee help to strengthen the Board's overall understanding of economic, environmental, and social issues.
- 2. The Company organizes, on an ad hoc basis, professional training courses for Board members that align with annual strategic development priorities and other operational topics. Individual directors may also attend relevant external training courses as needed.
- 3. The Company participates in the Yi Zai Hui, an association of listed companies in Tainan, and leverages its publications and training sessions to keep Board members informed of new developments and to help them enhance their competencies.

#### 2024 Board Training Courses and Hours

	Corporate Governance	Risk Management	Climate Change	Sustainable Finance	Occupational Safety & Health	Total
Executive Directors	11	7	7	-	7	32
Non-Executive Directors	11	15	22	3	4	55

#### **Enhancing Board Functionality**

- 1.To continuously strengthen directors' professional knowledge and legal literacy, thereby supporting the effective functioning of the Board, the Shareholder Services Department assists in arranging training courses for directors. Over the past five years (2020–2024), all board members have completed the required continuing education hours in accordance with the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE/TPEx Listed Companies."
- 2. In 2024, the Company obtained information on the Audit Quality Indicators (AQI) of the appointed certified public accountants, which serves as a reference for evaluating the suitability of auditors and considering their appointment or reappointment. Furthermore, an assessment of the independence and suitability of the 2024 certified public accountants was completed and reported to the Board of Directors on March 14, 2024.
- 3. To promote gender equality among board members, enhance female participation in decision-making, and strengthen the board structure, the Company incorporated a diversity management target in 2024 to ensure that female directors account for one-third of all board seats. Furthermore, the Company plans to add two female directors in the next board election in 2026.
- 4. To enhance information transparency, starting in 2024 Nan Pao voluntarily discloses individual directors' remuneration in the annual shareholders' meeting report. In addition, the Company reports its remuneration policy, as well as the details and amounts of individual remuneration, at the annual general meeting.

#### **Board Performance and Remuneration**

To ensure that board performance is aligned with the Company's vision and strategic objectives, core competencies are evaluated, accountability is reinforced, and remuneration is effectively linked to performance. The Compensation Committee, in accordance with the Regulations for Board Performance Evaluation, incorporates sustainability strategy objectives as flexible indicators in determining directors' remuneration. The results of individual board member performance evaluations are also taken into consideration when setting their respective remuneration, creating a tangible link between performance and pay and achieving a win–win outcome.

Directors' remuneration is determined in accordance with the Remuneration Policy for Directors, Functional Committees, and Managers, subject to review by the Compensation Committee and approval by the Board of Directors. Directors who also serve as managers do not participate in the distribution of directors' compensation. Directors' remuneration is linked to the Company's operating performance and annual decisions on directors' pay,

taking into account remuneration levels, payment methods, and potential future risks. Furthermore, when the Company experiences significant declines in net profit after tax, the growth rate of directors' remuneration must not exceed that of the previous year.

To establish a mechanism that links directors' performance evaluations and remuneration with individual performance and future risks, the Company has also stipulated that, in the event of a moral hazard or other incident that negatively impacts the Company's reputation or goodwill, directors' compensation may be reduced by resolution of the Board.

#### **Board Performance Evaluation Implementation**

To implement sound corporate governance, the company's Board of Directors approved the revision of the "Board Performance Evaluation Measures" on January 25, 2024. The company conducts at least one internal board performance evaluation annually and an external performance evaluation every three years. Through clearly defined performance objectives, the company aims to enhance the functioning of the board and improve its operational efficiency.

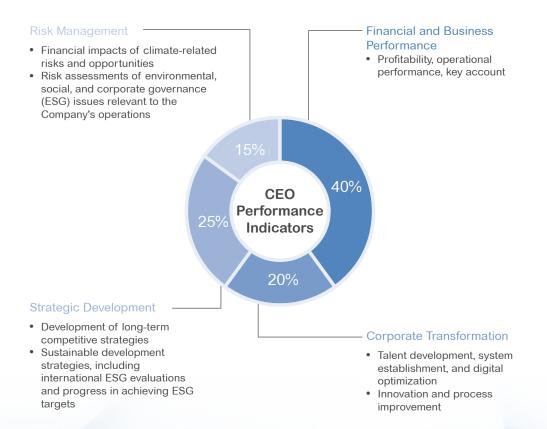
	Evaluation Cycle	Evaluation Period	Evaluation Scope	Evaluation Method	Evaluation Content
	Annual	2024.01.01 ~ 2024.12.31	Entire Board of Directors	Internal Board Self- Evaluation using the "Board Performance Self-Evaluation Questionnaire"	Across five key dimensions—participation in corporate operations, enhancement of board decision-making quality, board composition and structure, director selection and continuing education, and internal control—a total of 50 evaluation indicators are applied.
	Annual	2024.01.01 ~ 2024.12.31	Individual Board Members	Internal Board Self- Evaluation using the "Director Performance Self-Evaluation Questionnaire"	Four main dimensions: understanding of and awareness of responsibilities to the company, participation in company operations, directors' expertise and continuous training, and internal control, comprising a total of 28 evaluation indicators.
	Annual	2024.01.01 ~ 2024.12.31	Functional Committees  Audit Committee  Compensation Committee  Sustainability Development Committee	Each functional committee conducts an internal self-assessment using the "Functional Committee Performance Evaluation Self-Assessment Questionnaire."	Across five key dimensions—participation in corporate operations, awareness of functional committee responsibilities, enhancement of committee decision-making quality, committee composition and member selection, and internal control—a total of 22 evaluation indicators are applied.
С	An ndependent external institution conducts an evaluation every three years	2021.08.01 ~ 2022.07.31	The evaluation covers the operation of the Board of Directors and its functional committees	The Board's performance evaluation is commissioned to the Taiwan Corporate Governance Association.	The evaluation of the Board of Directors covers multiple dimensions, including its composition, the guidance it provides, the delegation of authority, and its oversight function. It also assesses the effectiveness of the Board's communication, internal control and risk management mechanisms, and its commitment to self-discipline. In addition, other aspects such as the conduct of Board meetings and the adequacy of support systems are taken into consideration.

Note: The 2024 Board Performance Self-Evaluation was assessed as satisfactory across all areas, indicating that the board operated effectively overall. The evaluation results were reported to the Board of Directors on March 14, 2025.

#### Performance Evaluation of Senior Executives

In the annual performance review, in addition to assessing individual business objectives and the achievement of ESG targets, risk management indicators are also taken into account, such as whether audit deficiencies are identified. To further strengthen the linkage between ESG performance and executive compensation, if ESG goals set by executives are not achieved, annual bonuses and employee profit-sharing may be adjusted downward as appropriate. Variable compensation for executives is proposed by the Compensation Committee and approved by the Board of Directors before distribution.

#### **CEO Performance Indicators**



#### Managerial Compensation and Performance

Nan Pao has established the "Regulations Governing Remuneration Payments for Directors, Functional Committees, and Managers," which integrate corporate governance and sustainable development principles to ensure reasonable compensation. The Company has also formulated the "Manager Performance Evaluation Procedures" to effectively evaluate managerial performance, enhance operational results, and strengthen accountability. These evaluations serve as a basis for determining managerial compensation, promotion incentives, and development opportunities.

Policy Purpose	To incentivize managers to achieve and exceed company goals, create profits, and improve operational performance, while taking into account the reasonable correlation with future risks, the compensation of managers is periodically evaluated.					
Review Process	The compensation policy, system, standards, and structure for managers shall be reviewed by the Remuneration Committee and then submitted to the Board of Directors for resolution. All members of the Remuneration Committee are independent directors, and no external compensation consultants are engaged.					
Salary Structure	<ul> <li>Fixed salary includes base salary, various allowances, or bonuses, determined based on the individual's professional qualifications and with reference to market compensation levels.</li> <li>Variable salary includes bonuses and remuneration, determined based on the overall operational results of the company, the unit's performance, and the individual's relative performance contribution. It aims to realize the company's core values, demonstrate leadership and management capabilities, and reasonably consider factors such as the correlation with future risks.</li> <li>The retirement system applies the same as for general employees.</li> </ul>					
Risk Linkage	<ul> <li>In the event of a major risk incident that significantly affects the company's reputation, or internal management misconduct, or personnel fraud, the manager's bonuses may be reduced or not granted to achieve risk control effects.</li> <li>If a manager violates the Group's Employee Code of Conduct and is required to return bonuses, surrender any undue benefits received, and pay punitive damages, such penalties may be increased by a resolution of the Board of Directors.</li> <li>If, due to fraud or other intentional serious misconduct by a manager, the company needs to restate its financial results, the manager's variable compensation may be recovered by a resolution of the Board of Directors.</li> </ul>					

Special Bonuses for Employees at Section Chief Level and Above

Special bonuses for employees at the section chief level and above are determined based on individual performance and are linked to the previous year's KPI evaluation results. KPIs are set at both the unit and individual levels. For employees involved in sustainability projects, their KPIs are also linked to relevant sustainability indicators. In the future, the company will continue to increase the proportion of employees whose performance appraisals incorporate sustainability indicators.

#### **Protecting Shareholder Rights**

Nan Pao places great importance on protecting the rights of every shareholder and treats all shareholders equally. The Company has implemented an electronic voting system for shareholders' meetings to encourage shareholder participation in corporate governance. Shareholders can exercise their voting rights at shareholders' meetings to participate in key corporate decisions. Each agenda item—including proposals for approval, discussion, and elections—undergoes individual voting, with results disclosed in real-time during the meeting. By providing shareholders with diverse channels for voting and fully enabling them to exercise their rights, the Company effectively enhances corporate governance.

Nan Pao has established a spokesperson and deputy spokesperson system to ensure the timely and appropriate disclosure of information that may influence shareholder decision-making. The Shareholder Services Department and the Sustainability Office are responsible units for handling shareholder suggestions, inquiries, and disputes through a dedicated email channel. Any shareholder litigation is appropriately managed by the Legal Department.

#### **Equal Treatment of Shareholders**

To protect shareholder rights and ensure equal treatment of all shareholders, Nan Pao has established the "Procedures for the Management of Insider Trading Prevention and the Handling of Material Internal Information," which explicitly prohibit insiders from trading securities using undisclosed information obtained through their positions within the Company. The procedures also stipulate that directors are prohibited from trading Company shares during the closed period prior to financial statement announcements. The Company regularly reviews and updates these procedures to align with current laws and best management practices.

Nan Pao also arranges annual training courses on insider trading prevention for directors and managers. In 2024, the Company further expanded the training to include online educational programs on insider trading prevention for all employees, accompanied by post-training assessments. Before the release of quarterly operating results, the Company reminds directors and insiders of their obligations under Article 157-1 of the Securities and Exchange Act, thereby ensuring the thorough implementation of insider trading prevention measures.





Nan Pao's management philosophy centers on "Leadership, Integrity, Teamwork, and Efficiency." Guided by a spirit of honesty and integrity, Nan Pao promotes sustainable operations and embeds this commitment within its corporate culture. As the company expands its international footprint, we strictly adhere to domestic and international business conduct and ethical standards. We also invest in R&D patents and prioritize information security and data privacy protection to build a solid foundation for sustainable and steady operations.



# 3.1 Internal Control and Internal Audit



Nan Pao's internal control policy is designed in line with the Financial Supervisory Commission's "Regulations Governing Establishment of Internal Control Systems by Public Companies," while considering the company's actual operational needs. This policy is approved by the Board of Directors and executed by the Board, managers, and other employees. The policy includes controls at both the enterprise and operational levels, defining the scope and standards of internal control systems that each business unit must comply with. This ensures the effectiveness of internal control design and implementation, promoting sound corporate governance.



Nan Pao has established a Group Audit Office under the Board of Directors. The office assists the Board and management in examining and evaluating the effectiveness of the internal control system, assessing the efficiency and effectiveness of operations, as well as the reliability, timeliness, and transparency of reporting, and compliance with relevant laws and regulations. It also provides timely recommendations for improvement to reasonably ensure the continued effectiveness of the internal control system, serving as a basis for reviewing and revising the system when necessary.

The Group Audit Office appoints one Chief Internal Auditor and an appropriate number of qualified and competent full-time internal auditors, based on the company's investment scale, business conditions, management needs, and applicable laws and regulations. Internal auditors execute their duties independently, objectively, and impartially. They pursue ongoing training to enhance audit quality and capabilities, continuously improve audit processes and techniques, and actively develop audit tools to boost the efficiency and effectiveness of the auditing function.

The Audit Office has established a risk-based internal audit system. It conducts various audit tasks in accordance with the annual audit plan, covering the internal control systems of the company and its subsidiaries. It also reviews the self-assessment reports on internal control systems submitted by the company and its subsidiaries. The results of these reviews, along with improvements to internal control deficiencies and exceptions identified during audits, serve as a basis for the Board of Directors and the President to assess the overall effectiveness of the internal control system and issue internal control declarations.

The Chief Internal Auditor regularly reports and communicates audit results to the independent directors, and presents internal audit reports to the Board of Directors. In the event of any special circumstances, the Chief Internal Auditor immediately reports to each independent director; no such special circumstances occurred in 2024. Additionally, the Audit Office continuously follows up on requests and recommendations from the independent directors, the Audit Committee, and the Board of Directors regarding internal audits, ensuring that issues are resolved and reported within specified deadlines.

# 3.2 Anti-Corruption and Ethical Business Practices

# **Integrity Management Promotion Organization**

Integrity is the foundation of Nan Pao's operations. To foster a workplace that meets ethical standards, the Company requires all employees to clearly understand and comply with the Code of Conduct. To effectively implement and continuously strengthen related initiatives, Nan Pao has established the "Integrity Management Promotion Task Force" under the Board of Directors. The Chief Executive Officer serves as the convener and chairperson, while the Associate Vice President of Finance & Corporate Governance Officer serves as the executive secretary. The heads of each functional unit act as members, responsible for formulating and supervising the implementation of integrity management policies and preventive measures.

The Company consolidates the operation and implementation of integrity management initiatives and reports to the Board of Directors at least once a year. In 2024, one report was presented, covering the annual promotion plan and the operations of the Task Force. The Board reviews the implementation and outcomes, and when necessary, urges the Task Force to make adjustments to facilitate execution of related plans.

In addition, the Internal Audit Office develops its audit plan based on risk assessments and carries out corresponding inspections. All relevant audit reports are submitted to the independent directors for review and are regularly reported to both the Audit Committee and the Board of Directors.

#### Integrity Management Organization



#### **Promotion Strategy for Ethical Business Conduct**



Nan Pao has established a Code of Ethical Conduct for all directors, managers, and employees to follow, while also enabling stakeholders to clearly understand the Company's ethical standards. All employees are expected to comply with these rules in their daily work and business activities in order to earn public trust and ensure the Company's sustainable growth and development.

The Company also requires domestic and overseas suppliers to sign a Supplier Code of Conduct, which includes provisions related to ethics and integrity. Through the promotion of these ethical guidelines—covering subsidiaries, suppliers, and customers—Nan Pao seeks to jointly fulfill corporate social responsibility and promote economic, social, and environmental sustainability.

Furthermore, the Company has adopted Integrity Management Operating Procedures and Behavioral Guidelines, which explicitly prohibit bribery and corruption, illegal political donations, improper charitable contributions or sponsorships, and define clear rules for the acceptance of gifts, hospitality, or other improper benefits. The guidelines also stipulate procedures for avoiding transactions with counterparties with records of dishonest practices, and require the inclusion of integrity clauses in commercial contracts. Each unit is responsible for annual self-assessments of legal compliance and internal control, while the Audit Office conducts independent audits to ensure effective implementation.

Nan Pao has established an "Employee Feedback Mailbox" and a "Grievance Handling Mechanism." Employees who encounter questions regarding ethical or lawful behavior, or experience unequal treatment in the workplace, may consult the Human Resources Department or use the mailbox to seek advice and file reports. This mechanism helps to identify, prevent, and address misconduct and violations of regulations.

To ensure implementation, Nan Pao requires all employees to sign the Employee Code of Conduct Statement annually and complete the Conflict of Interest Declaration for Third-Degree Relatives. Employees must not conceal or misreport information. In 2024, a total of 2,757 statements and declarations were collected, with a return rate of 94.19%. Nan Pao will continue to strengthen compliance and improve the completion rate year by year. Subsidiaries under Nan Pao's control are also required to sign the Nan Pao Group Code of Conduct for Affiliates, committing to full compliance with applicable laws and adherence to internationally recognized environmental, social, and governance (ESG) standards. In 2024, all 60 subsidiaries completed the declaration, achieving a 100% compliance rate.

To further enhance corporate governance and transparency, Nan Pao has obtained real-name authentication from the Ministry of Economic Affairs to verify dual positions held by directors and senior Taiwanese managers across the Group. In 2024, a total of 122 senior managers signed the consent form for personal data collection, and checks confirmed that none were engaged in businesses competing with Nan Pao.

Nan Pao also prioritizes anti-corruption management. Related policies are communicated through email, company website announcements, and employee training. In accordance with laws and regulations, Nan Pao has established internal control systems, including accounting practices, which are subject to annual evaluation, self-assessment, and audit review. For external stakeholders, Nan Pao evaluates agents, suppliers, customers, and other business partners before engagement, assessing the legality and integrity of their practices as well as potential risks of misconduct.

# **Training and Testing**

#### 1. Training and Education Initiatives

Nan Pao deepens its commitment to ethical business practices through public commitments, information dissemination, and educational training, shaping a top-down culture of integrity within the organization. The employment contracts for new hires explicitly require compliance with the company's integrity policies, and all new employees are required to sign the "Employee Code of Conduct Declaration" upon joining. Each year, the company also conducts comprehensive internal training sessions for new employees, which include briefings on the "Procedures and Guidelines for Ethical Business Conduct" and the "Code of Ethical Conduct." The implementation status of new employee training across the group in 2024 is as follows:

Course	Participants	Hours	Completion Rate
New Employee Orientation (In-person)	295	1,082	100%

Note: The new employee orientation lasts 3 hours, covering the following topics:

- (1) Courses related to human rights (Employee Rights Work Regulations and related management measures, Gender Equality in Employment Act and Sexual Harassment Prevention Act, Sexual Harassment Prevention Measures, Complaint and Disciplinary Procedures, Employee Suggestion Mailbox and Complaint Channels).
- (2) Employee Code of Conduct, Code of Ethical Conduct, Trade Secrets Protection Act, Intellectual Property Rights Promotion, Insider Trading Prevention, Anti-Corruption and Anti-Bribery, Regulations Governing Whistle-blowing from Internal and External Parties.
- (3) Information Security: Personal Data Protection Act, External Hacking Prevention, Internal Data Leakage Prevention, Computer Usage Introduction, and Occupational Safety and Health Act training.

#### 2. Ongoing Annual Training and Testing

The company also organizes annual online courses through the Nan Pao e-Learning Academy to strengthen the concepts of integrity and self-discipline, covering topics such as the Code of Ethical Conduct, the Code of Ethical Business Conduct, trade secrets protection, anti-corruption and anti-bribery guidelines, as well as training on the use of the whistleblowing and reporting channel. Regular online tests are administered, and employees must complete the courses and achieve a certain passing score to pass. The implementation status of group training in 2024 is as follows:

Course Name	Participants	Hours	Test Pass Rate
Code of Ethics and Ethical Conduct	2,073	631	-
Trade Secrets	968	421	100%

#### 2024 Cases of Violations of the Code of Ethics and Ethical Conduct

Category	Number of Violations in 2024
Corruption or Bribery	0
Discrimination or Harassment	0
Customer Privacy and Data	0
Conflict of Interest	0
Money Laundering or Insider Trading	0

The company has established the "Internal and External Whistleblower Handling Procedures" and provides a dedicated stakeholder communication section on its website. Stakeholders can use the communication channels provided to submit suggestions and complaints to the company. Upon receiving feedback, the responsible unit conducts investigations and follows up as appropriate.

# **Diverse Complaint Channels**

Employees can also use the company's "Suggestion Mailbox" to submit recommendations. The company encourages employees and stakeholders to report any suspicious or illegal activities or unethical conduct within the organization or involving business partners. Reports may include, but are not limited to, the following areas:

Violations of the Code of **Ethical Conduct** environmental, safety, and

The company has established the "Internal and External Whistleblower Handling Procedures," which are publicly disclosed on the company's official website and the internal information-sharing platform. The policy clearly specifies that the Audit Office is the designated unit responsible for receiving whistleblowing reports, as well as defining the reporting channels and handling procedures. These procedures clearly define the responsible units, reporting channels, and handling processes. In addition, a dedicated stakeholder communication section is available on the company's website, where stakeholders can submit suggestions and complaints through the provided communication channels. Upon receiving feedback, the responsible unit conducts investigations and follow-up actions as appropriate.

Reports can be submitted through three main channels: in-person reporting, telephone reporting, and letter reporting (either in hard copy or by email). The company has set up an independent whistleblower mailbox and a dedicated reporting hotline. An email address directly managed by the Audit Committee (Independent Directors) is also disclosed for direct receipt and handling of reports.

If a report involves directors or senior managers, it will be forwarded to the Independent Directors for handling. The company has established a whistleblower protection mechanism to ensure confidentiality of both the identity of the whistleblower and the contents of the report. The company is committed to protecting whistleblowers from improper treatment or retaliation as a result of their reports.

In 2024, no whistleblower reports related to unethical conduct were received.

#### **Complaint and Whistleblowing Mechanism**

#### Acceptance and Registration Conclusion and Reporting Channels Report • Face-to-face/Phone/Physical Name and identity of the Report to the appropriate level · Carefully investigate the • Submit an investigation report, mail reported person based on the reported person's matters involved in the including the reason for ♦ Specific facts of the report • Email: reported case the report, the investigation identity: 1..audit@nanpao.com ♦ Date or period of occurrence ♦ Employee: Report to the · Seek assistance from relevant process, handling suggestions, 2. auditcommittee@nanpao. ♦ Evidence available for supervisor and CEO department or external and subsequent improvement investigation ♦ Director or manager: Report experts if necessary measures. Anonymous reports are to the independent director 3.Reporting • Decide whether to report to the Website: Handled by company generally not accepted • An investigation team is board of directors based on the headquarters designated and formed by the severity of the incident and the CEO as necessary. amount of impact.

# 3.3 Avoidance of Conflicts of Interest

# Mechanisms to Prevent Conflicts of Interest

Nan Pao has incorporated conflict-of-interest provisions into its Board of Directors Rules of Procedure and Audit Committee Charter. For matters discussed during board meetings in which a director or the corporate entity they represent has a conflict of interest, the director is required to explain the important aspects of their conflict during the meeting. If the conflict is likely to harm the interests of the company, the director must recuse themselves from both discussion and voting on the matter and may not act as a proxy for another director.

The company has appointed independent directors who, from an objective and impartial perspective, provide professional and experienced advice. When discussing any agenda items, the Board of Directors considers the opinions of independent directors and records their consent, objections, or opinions in the meeting minutes, ensuring adherence to the conflict-of-interest avoidance principle and effectively protecting the company's interests. Additionally, no board member holds any cross-shareholdings with the company's major suppliers.

Nan Pao has also established a spokesperson system and maintains a corporate website to serve as a channel for corporate information and communication. An investor relations mailbox is managed by professional staff to handle shareholder suggestions and inquiries.

With directors upholding high standards of moral self-discipline and the effective operation of these mechanisms, no conflicts of interest have occurred since the establishment of Nan Pao's Board of Directors.

# **Prevention of Insider Trading**

Nan Pao places great importance on shareholders' right to information and strictly complies with information disclosure regulations. The company regularly and promptly provides shareholders with information regarding financial status, business activities, shareholdings of insiders, and corporate governance through the Market Observation Post System or the company's website.

Nan Pao values shareholders' right to information and strictly complies with disclosure requirements. The Company regularly and promptly provides shareholders with updates on its financial performance, business operations, insider shareholding, and corporate governance practices through the Market Observation Post System and the Company's official website.

The company has established the "Procedures for the Prevention of Insider Trading and Handling of Material Internal Information," which explicitly prohibit directors, managers, and employees from engaging in insider trading or profiting from information asymmetry in the market. Directors are also prohibited from trading the company's issued securities during the 30 days prior to the annual financial report announcement and during the 15 days prior to the quarterly financial report announcement.

Financial Reporting Period	Expected Board Meeting & Announcement Date	Blackout Period	Notification	Regulation
2023 Annual Financial Report	2024/03/14	2024/02/13~2024/03/14	The Company's corporate governance personnel have issued advance email	Insiders are prohibited
2024 Q1 Financial Report	2024/05/09	2024/04/24~2024/05/09	notifications to relevant insiders	from violating Article 157- 1 of the Securities and
2024 Q2 Financial Report	2024/08/08	2024/07/24~2024/08/08	(including but not limited to directors) prohibiting any	Exchange Act regarding
2024 Q3 Financial Report	2024/11/08	2024/10/24~2024/11/08	trading of the Company's issued securities during the blackout period as a preventive measure.	the information blackout period.

The implementation status of the prohibition on directors and insiders trading the company's issued securities during blackout periods in 2024 is as follows:

Course Title	Participants	Number of Attendees	Hours	Pass Rate
Internal Equity Reporting and Insider Trading Prevention	Directors, insiders, employees	19	19	-
Insider Trading Prevention	Employees	842	152	100%
2024 Insider Trading Prevention Seminar	Directors	1	3	-

## Regulatory Compliance

Nan Pao strives to ensure that all business activities comply with relevant laws and regulations. To ensure effective regulatory compliance, we continuously monitor domestic and international policies and legal developments that may impact our operations and embed a culture of legal compliance throughout all our business locations.

Nan Pao's Corporate Governance Officer and Legal Department assist the Board of Directors in complying with laws and oversee regulatory compliance across all subsidiaries, ensuring that all operational activities adhere to applicable regulations. Additionally, we incorporate regulatory risk control mechanisms into our risk management assessments to help identify and evaluate potential compliance risks related to business activities.

We require all subsidiaries to promptly report any instances of non-compliance that result in penalties. These cases are then reviewed by the Compliance and Audit Departments, which request improvement plans from the relevant subsidiaries and ensure that corrective actions are implemented to strengthen our corporate governance system.

For domestic regulations, our key compliance focus includes the Securities and Exchange Act, the Securities Investors and Futures Traders Protection Act, the Labor Standards Act, the Occupational Safety and Health Act Enforcement Rules, the Occupational Safety and Health Management Regulations, the Air Pollution Control Act Enforcement Rules, and the Trade Secrets Act. By evaluating, incorporating, and updating internal regulations, as well as through training and announcements, Nan Pao ensures that directors, managers, and employees at all subsidiaries understand and comply with applicable laws and regulations.

In 2024, Nan Pao strictly complied with the Company Act, Fair Trade Act, and other key laws and regulations applicable to corporate governance and listed companies. There were no instances of non-compliance with the aforementioned laws. Nan Pao remains committed to achieving a "zero-penalty" goal in all aspects of operational regulatory compliance.

# 3.4 Enhancing Risk Culture Awareness

In response to the rapid changes in global trends, enterprises must stay current by analyzing both internal and external factors to understand emerging trends and environmental elements, as well as to identify risks and opportunities. Nan Pao continuously monitors significant external environmental factors—including political, economic, legal, social, cultural, technological, natural disasters, and industry-specific developments—to assess their impact on overall operations and to analyze potential opportunities and threats.

For current business operations and future innovative business development areas, Nan Pao identifies potential risks and emerging opportunities, evaluates the organization's current status, and thoroughly understands its strengths, weaknesses, and capabilities. Based on this understanding, the company develops strategic guidelines and response measures.

Risk management aims to ensure uninterrupted operations, improve customer service quality, and enhance shareholder value. Nan Pao strives to control the risks associated with all business activities within acceptable limits, achieving a balance between risk and return while maintaining sufficient capital adequacy. This approach provides strong support for sustainable business development. Therefore, to effectively identify, assess, monitor, and control various risks, Nan Pao upholds the principle that "no business should override risk management," which serves as the foundation of its risk management practices.

# Risk Management Policies and Procedures

The company has formulated its "Risk Management Policy" in accordance with the ISO 31000 framework, which was approved by the Board of Directors in 2023 and serves as the highest guiding principle for risk management at Nan Pao.

- Build and maintain an effective risk management framework to ensure the integrity of risk management operations.
- Foster a risk management culture, enhance risk awareness, and fully implement risk management practices.
- Establish comprehensive risk management procedures to keep risks within tolerable levels and achieve a rational balance between risk and return, thereby enhancing corporate value.

# Scope and Procedures of Risk Management

- The Company's risk management covers four major areas: environmental safety, information security, regulatory compliance, and corporate governance.
- It encompasses strategic risks, operational risks, financial risks, information risks, compliance risks, integrity risks, as well as emerging risks such as climate change, biodiversity, forests, water resources, and pandemics.

The risk management process includes risk identification, analysis, assessment, response, monitoring, and review. Each year, the Risk Management Task Force evaluates and discusses potential and emerging risks across the three ESG dimensions—E (Environmental Protection, including climate and natural resources), S (Social Inclusion), and G (Corporate Governance)—taking into account frequency of occurrence, level of impact, and degree of control. The results are regularly reported to the Audit Committee and the Board of Directors.

#### **Risk Identification**

Regularly collect, identify, and describe potential risks.

#### **Risk Analysis**

Assess the likelihood and severity of identified risks and estimate the degree of risk impact.

#### Risk Evaluation

Compare risk analysis results with risk criteria to determine which risks are acceptable.

#### Risk Response

Assign responsible departments to develop and implement appropriate risk mitigation plans or measures.

#### **Risk Monitoring and Review**

Regularly evaluate the structure, progress, and effectiveness of risk management plans.

# Risk Management System

Nan Pao is committed to establishing a comprehensive risk management system. The Audit Committee and the Sustainability Committee serve as the highest-level bodies overseeing corporate risk management, assisting the Board of Directors in fulfilling its risk management responsibilities. Overall risk analysis is coordinated and consolidated by the Risk Management Task Force, which reports directly to the CEO. In addition, the Audit Office, which reports to the Board, monitors and audits the risk management mechanism to ensure the effectiveness of risk controls and the proper management of potential risks. Senior executives are required to present risk management indicator assessments in the above meetings and are evaluated against sustainability KPIs, which directly affect their variable compensation.

To integrate sustainability risks into the overall risk management system, Nan Pao identifies ESG issues based on international concerns and the United Nations Sustainable Development Goals (UN SDGs). Stakeholder surveys are conducted to incorporate diverse perspectives, and a double materiality analysis is applied to identify operational risks. The Sustainability Office verifies the causes, areas of impact, assessment methods, corresponding risks, and management measures for nine material issues. At the same time, reference is made to the Risk Assessment and Analysis Report prepared by the Risk Management Task Force to identify risk factors and sustainability management priorities related to the material issues. Follow-up monitoring tracks the effectiveness of mitigation measures carried out by responsible units, and the results are disclosed in the sustainability report. The materiality assessment and sustainability target-setting process is conducted annually.



Organizational Unit	Responsibilities
Board of Directors	Serves as the highest responsible body for the company's risk management, approves risk management policies and related regulations, oversees the overall implementation of risk management, and ensures effective risk control.
Audit Committee	The committee is composed of independent directors of the Board and is responsible for managing financial and internal control risks.
Sustainability Committee	The Committee is composed of at least three directors, with more than half being independent directors, and is responsible for overseeing sustainability, compliance, and information security risks.
Audit Task Force	Each year, based on the five elements of COSO internal control, past audit experience, the draft budget for the following year, and the current organizational structure, the Audit Task Force formulates the annual audit plan. The plan is used to review Nan Pao's management in terms of its ability to oversee internal and external environmental risks, the control of operational risks across business divisions, and the effectiveness of the design and implementation of internal control systems. Upon completion of audit work, audit reports are issued and regularly submitted to the Audit Committee and the Board of Directors.
Risk Management Task Force	The Task Force is composed of the heads of functional units, who serve as its members. They are responsible for handling matters assigned by the convener, and for supporting the establishment, implementation, maintenance, and review of the Company's risk management mechanisms. Each unit assigns personnel to act as risk management officers, who, together with relevant staff from operating units, are responsible for carrying out risk management procedures.
Sustainability Office	The Chief Sustainability Officer (CSO) serves as the highest-level executive responsible for sustainability management. A dedicated Sustainability Planning Team is established to carry out full-time implementation, supported by a cross-departmental structure that includes representatives from each business division/plant and staff functions such as R&D and Innovation, Finance, Strategic Procurement, Information Management, Human Resources, and Legal Affairs. This structure enables coordinated company-wide sustainability management. The Sustainability Office reports progress to the CSO on a monthly basis. Climate-related and other sustainability risks and opportunities are consolidated by the Sustainability Office based on inputs from members, and reports and recommendations are submitted to management and the Board of Directors.
Operating Units	<ol> <li>Responsible for identifying, analyzing, assessing, and responding to risks within their respective units.</li> <li>Regularly report risk-related information to the risk management promotion and implementation units.</li> <li>Ensure effective execution of risk management and related control procedures within their respective units.</li> </ol>

# **Emerging Risks and Response Strategies**

To align with sustainability principles, Nan Pao conducts annual reviews of emerging risks by referencing the World Economic Forum's Global Risks Report and MSCI's Annual ESG and Climate Trends to Watch. Core management units discuss and confirm industry context and risk assessments, followed by the implementation of risk responses and monitoring. Through this process, the Company identifies and manages emerging risks, evaluates potential operational impacts and challenges, and develops mitigation measures.

Emerging Risks in 2024	Risk Description	Potential Business Impacts	Adaptation Actions
Geopolitics	In recent years, the escalation of the US-China trade and technology conflict has posed long-term structural challenges to Taiwan's export-oriented chemical industry. Risks include expanded export controls, increased supply chain relocation pressures, and dependencies on key technologies and raw materials from specific countries, creating significant uncertainties for strategic planning and operational execution.	Some of Nan Pao's products (e.g., electronic chemicals and high-performance adhesives) rely on exports to the US and Chinese markets, as well as raw material supplies from China. If the US further expands export restrictions or China restricts imports, it could lead to reduced orders and higher costs. Additionally, international brand customers shifting to Southeast Asian procurement could create order diversion pressures, affecting existing production line utilization and regional layout benefits. Technology licensing and upgrade plans may also be affected by trade policy dynamics.	To address these risks, Nan Pao continues to diversify its markets and supply chains, strengthening sales and production sites in Southeast Asia, India, and the Middle East. The company is also establishing a compliance system for US export regulations to mitigate potential legal and financial risks. Medium- to long-term strategies include introducing digital supply chain risk prediction tools, enhancing in-house R&D capabilities, developing high-value-added green products, and leveraging international strategic alliances to overcome licensing barriers, thereby improving overall risk resilience and global competitiveness.
Frequent Earthquakes	Nan Pao's main production sites are located in southwestern Taiwan, a region with frequent seismic activity. Major earthquake events could not only cause structural damage to facilities and casualties but also lead to large-scale equipment failures, power and water outages, and raw material supply disruptions. Insufficient preventive and response measures would severely challenge operational continuity and corporate resilience.	A major earthquake could halt operations at key factories, including water, power, and natural gas supply interruptions, and damage to production equipment. Raw material supply and logistics could also be disrupted due to infrastructure damage, preventing on-time delivery and impacting customer satisfaction and brand reputation. In the long term, the absence of diversified production planning could result in customer attrition and significant revenue fluctuations.	Nan Pao has conducted earthquake scenario simulations and established various prevention and response measures, including high-capacity water storage systems and emergency power generation equipment, dual-fuel (natural gas and diesel) boilers, and strengthened safety stocks of raw materials and finished products. Additionally, the company is implementing overseas subsidiary production lines and co-production plans to diversify operational risks. An emergency response center has been established, with cross-departmental drills to ensure rapid response to sudden disasters.

# Risk Categories and Identification

Each year, Nan Pao identifies risk categories relevant to its operations. In 2024, responsible departments confirmed a total of 20 potential risk categories as follows:

Risk Factor	Risk Topic(s)		
Operational Risks	Chemical Safety Management		
Financial Risks	Economic Performance1 item		
Information Security Risks	Information Security Management 2 item		
Legal Risks	Human Rights Management		
Integrity Risk	Integrity and Accountability1 item		
Other Emerging Risks (Climate Change)	Climate Change Response2 item		

Extremely High					
High		<ul> <li>Israel- Palestine conflict</li> <li>Improper waste management</li> </ul>			
Medium Possibility	<ul><li>Employee health and safety incidents</li><li>Cybersecurity incidents</li></ul>	<ul> <li>Chinese product dumping</li> <li>Imposition of carbon Fees/ carbon Tariffs</li> </ul>	<ul> <li>Labor shortage</li> <li>Material shortage from suppliers</li> <li>Overreliance on single suppliers</li> </ul>		Product quality issues
Low	<ul><li>Sexual harassment</li><li>Hazardous chemical management</li></ul>	<ul> <li>Power shortage</li> <li>Water shortage</li> <li>Odor</li> <li>Overall Economic Downturn</li> </ul>	<ul> <li>Excess VOC emissions</li> <li>Declining competitiveness of traditional customers</li> <li>Lagging speed of new product development</li> </ul>	<ul> <li>Geopolitics</li> <li>Raw material supply disruptions</li> </ul>	Employee     misconduct     and     whistleblowing
Extremely Low		<ul><li>Community Protests due to Pollution</li><li>Foreign labor rights disputes</li></ul>	<ul> <li>Significant interest rate and exchange rate fluctuations</li> <li>Chemical storage and transportation safety</li> </ul>	<ul> <li>Leakage         of critical         R&amp;D         information</li> </ul>	Fire incidents
	Extremely Minor	Minor	Normal Impact	Serious	Extremely Serious

For the risks identified by each unit in 2024, existing control activities have been implemented. Among them, 14 items were classified as medium-to-high risk, for which the responsible units have developed corresponding response measures and executed risk mitigation plans. Risk management officers continue to track and document the implementation of these measures with the operating units, and the effectiveness of each countermeasure is reviewed and assessed annually based on actual circumstances.

Risk Event	Mitigation Measures	Risk Event	Mitigation Measures
Israel-Palestine conflict	<ul> <li>Strengthen credit management for customers in conflict zones, adopt prepayment before shipment</li> <li>Redirect part of the orders to China to avoid sharp fluctuations in freight costs</li> </ul>	Excessive VOC concentration	<ul> <li>Collect VOCs through condensation</li> <li>Plan for RCO or RTO control equipment</li> </ul>
Improper waste disposal	Actively promote waste recycling and reuse     Select compliant treatment plants, supervise waste disposal results, and conduct on-site inspections annually	Decline in competitiveness of traditional customers	Analyze industry changes and adopt responsive measures with clear KPIs     Expand into emerging brands
Product dumping from China	<ul> <li>Enhance brand differentiation and increase product added value</li> <li>Strengthen technical support and after-sales service</li> </ul>	Delayed new product development	Establish clear R&D roadmaps and allocate key resources     Introduce external technologies to overcome development bottlenecks
Carbon fee / carbon tariff imposition	Transition to low-carbon processes and optimize energy efficiency Select low-carbon suppliers for green procurement Expand renewable energy capacity and replace energy-saving equipment	Geopolitical risks	<ul><li>Diversify production bases</li><li>Establish a quotation system to manage gross margins</li></ul>
Labor shortage	<ul> <li>Promote production line automation to reduce manual operations</li> <li>Strengthen training and knowledge transfer to mitigate talent loss</li> </ul>	Raw material supply disruption	<ul><li>Sign long-term supply agreements with key suppliers</li><li>Conduct annual supply origin surveys</li></ul>
Supply chain fragmentation	<ul><li>Monitor and track developments in the footwear supply chain</li><li>Set up subsidiaries and diversify production bases</li></ul>	Product quality issues	Implement CIT projects to improve production stability     Strengthen technical services to prevent customer misuse of products
Overreliance on single suppliers	<ul><li>Identify alternative suppliers for key raw materials</li><li>Conduct supply chain disruption response drills</li></ul>	Employee violations of ethical standards	Establish and regularly update Codes of Ethics and Conduct     Set up clear reporting mechanisms with whistleblower protection

#### Risk Appetite:

The company has established a framework for determining risk appetite, led by the Risk Management Team and approved by the Board of Directors. For financial risks, quantitative thresholds are applied (e.g., potential losses not exceeding a set percentage of annual revenues). For operational and ESG-related risks, qualitative assessments are used to define acceptable tolerance levels. The determination and review of risk appetite are overseen by senior management, with ultimate supervision by the Board.

#### Integrating Risk Criteria into Product Development:

Risk criteria are integrated into the company's product and service development processes to ensure compliance, safety, and sustainability. For instance, to mitigate the risk of product quality issues, we have introduced the CIT project during product development to strengthen quality stability. In addition, to address the risk of delays in product development, we establish clear R&D roadmaps, allocate key resources accordingly, and leverage external technologies when necessary to overcome potential bottlenecks.

#### Risk Management Training Outcomes

To strengthen the risk management culture, Nan Pao Resins organizes regular and ad-hoc internal and external training courses on risk management each year. These programs aim to integrate risk awareness into daily operations and workplace practices, thereby enhancing the promotion and implementation of risk management.

In 2024, the Group conducted a total of 19,338 training hours with 10,988 participants. The training covered a wide range of topics, including occupational health and safety, chemical safety, climate change management, taxation and finance. ISO-related courses, supply chain management, customer management, and regulatory compliance.

# 3.5 Information Security Management

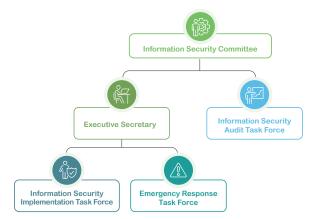
## Information Security Governance Organization

Nan Pao established the Information Security Committee in 2021, responsible for implementing information security management planning, establishing and maintaining the information security management system, and coordinating the formulation, execution, risk management, and compliance audits of information security and protection policies.

The Committee is convened by the CEO, with Associate Vice President of IT, Mr. Kuo Pei-Yi, serving as the Chief Information Security Officer (CISO) and Executive Secretary. The highest-level supervisors of each functional unit serve as committee members.

In addition, the Company has set up an Information Security Audit Task Force and an Information Security Implementation Task Force, dedicated to information and physical security planning, related audit matters, and Task Force leading the operation of the Committee.

#### **Information Security Organization Structure**



Responsibilities of the Information Security Committee

- The Information Security Committee is responsible for formulating information security management policies and regulations, and for conducting regular reviews and revisions.
- The Committee holds regular review meetings to ensure the smooth operation of the management mechanisms, and reports annually to the Board of Directors.
- Under the IT Department, the Chief Information Security Officer (CISO), along with information security managers and staff, coordinates all information security policies, implementation efforts, and the planning and establishment of defense frameworks.

# **Information Security Policy**

Nan Pao's information security policy applies to both the company and its domestic and overseas subsidiaries. It is guided by the following principles:

- Strengthen information security management to ensure the confidentiality, integrity, and availability of the company's information assets.
- Provide a secure information environment that ensures the continued operation of the company's information services.
- Comply with applicable laws and regulations to protect the company from intentional or unintentional internal and external threats.

Nan Pao has implemented a comprehensive Information Security Management System (ISMS) to reduce information security threats from a system, technical, and procedural perspective, thereby creating a secure information environment that meets customer needs. The company continuously improves its information security through the Plan-Do-Check-Act (PDCA) management cycle.

Plan Phase

Focuses on information security risk management. To strengthen information security, Nan Pao has implemented the ISO 27001 Information Security Management System certification at key operational sites (Taiwan and Vietnam), ensuring that information systems operate under standard management guidelines. This reduces human error-related security vulnerabilities and operational disruptions. The company also conducts annual recertification audits to drive continuous improvement.



The Company has established a multi-layered information security defense framework and continues to adopt advanced risk control technologies. Real-time monitoring and reporting mechanisms are in place to ensure the prompt detection and response to potential threats, thereby improving the effectiveness of incident management. In addition, the Company continuously enhances its information and cybersecurity processes to safeguard critical assets.



Regularly monitors the effectiveness of information security management indicators and conducts annual third-party audits of the management system. Additionally, information security vendors are engaged to perform vulnerability scans on critical systems to ensure continuous improvement of information security management and defense capabilities.



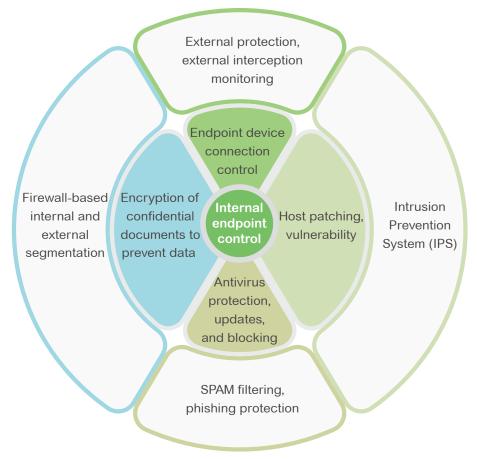
The Company regularly reviews and enhances its information security management measures. All employees are required to comply with information security policies, take responsibility for promptly reporting anomalies and potential risks, and participate in continuous training programs to strengthen awareness. In addition, suppliers, contractors, and partners are required to adhere to the Company's standards to mitigate external risks. Employees and contractors who violate security requirements are subject to disciplinary actions.

# Review and Continuous <u>Improvement</u> Management · Information Security Review and • Cybersecurity Threats and Technology • Information Security Violations and Information Security Training and Action Plan Corporate Cyber Security Check Do Multi-layered Security Monitoring and Evaluation Protection Robust physical and personnel security Rigorous account and access management · Regular security simulation exercises Enhanced information security technologies Comprehensive security across networks, devices, cloud environments Device Security Cloud Security Data Security

# Specific Management Guidelines

To achieve the Company's information security policies and objectives, Nan Pao has established an Information Security Defense Map and adopted proactive measures to strengthen cybersecurity. These include the implementation of next-generation firewalls, intrusion prevention systems, malicious email filtering, operating system updates, antivirus software deployment, encryption of confidential documents, and endpoint connection controls. A layered network segregation mechanism has been established, with independent isolation for different types of network services. Operating systems and applications are regularly updated and patched, and critical data and documents are subject to offsite backups. These measures aim to prevent external cyberattacks from penetrating the Company's internal systems and causing widespread damage. Furthermore, the Company has established a business continuity plan and related management mechanisms to ensure uninterrupted operations

#### Figure:Information Security Protection Map



#### **Multi-layered Information Security Protection**

**Network Security** 

- Establish internal and external firewalls and abnormal traffic detection mechanisms to filter unauthorized access
- Implement secure remote work (WFH) connection architecture in line with information security standards
- Participate in the TWCERT/CC joint defense mechanism to stay informed of the latest cybersecurity intelligence

**Device Security** 

- Install antivirus and endpoint detection & response (EDR) software uniformly on all devices
- Regularly patch system vulnerabilities and restrict unauthorized software installation
- Establish a Storage HA (High Availability) architecture to ensure uninterrupted operation of critical systems

Application Security

- Implement strict access control procedures, adjusting system access rights according to job responsibilities
- Perform daily data backups following the 3/2/1 principle, with regular verification of restoration mechanisms
- Integrate security modules into the email system to block malicious emails and abnormal activities

Data Security Enhancement and Technical Protection

- Maintain ISO 27001 certification with regular internal/external audits and vulnerability scanning
- Establish incident reporting and response procedures for rapid handling and recovery
- Implement sensitive data protection and routine monitoring to strengthen overall cybersecurity resilience

Through the Company's internal risk management mechanisms, information system-related risks are regularly assessed, with reports on risk controls and improvement measures presented at management meetings to manage and reduce potential cyber risks.

Each year, information security training courses are conducted to strengthen employees' cybersecurity awareness. In addition, the Company promotes information security policies and knowledge through regular email communications and occasional keynote sessions during weekly meetings, in order to reduce the risk of employees mistakenly clicking on malicious emails. Operating systems and applications are regularly updated and patched, and critical data and documents are secured through offsite backups.

#### **Review and Continuous Improvement**

Internal Risk Management Mechanism

- Assess information system–related risks and focus on mediumand high-level risk items
- Information security personnel regularly track control implementation and review effectiveness annually
- Report on risk controls and improvement measures regularly at management meetings

Education and Awareness

- Conduct regular training for new employees, specialized information security courses, and provide online self-learning resources
- Distribute monthly information security awareness emails and promote cybersecurity knowledge during weekly meetings
- Carry out annual social engineering drills to strengthen employees' alertness to phishing attacks



# Resources Invested in Information Security Management



• Achieved ISO 27001 certification in June 2022 and continued re-certification in 2024, with no significant findings from the relevant information security audits.



- In 2024, all 19 new employees at the headquarters completed a one-hour pre-employment information security training.
- The Chief Information Security Officer (CISO) and information security staff participated in the "2024 Cybersecurity Video Training Course for TSE/OTC-Listed Companies" organized by the Taiwan Stock Exchange, with a total duration of 6 hours.
- In December, the Group conducted three social engineering phishing email exercises involving a total of 500 participants.



- Bi-monthly email announcements to promote information security policies
- On January 3, 2024, a dedicated "Information Security Awareness" session was held during the weekly meeting to communicate key protection requirements and precautions



**Customer Satisfaction** 

• In 2024, there were no customer complaints related to data loss.

#### **Information Security Incidents**

Incident Description	Loss Amount	Response Measures and Improvements	Expenditure Amount
1. Date: June 2024		Updated OS patches and upgraded OS versions.	
2. Situation: Ransomware detected on environmental safety inspection server	0	Performed server backup and restoration, reinstallation, and updates.	
3. Impact: Due to OS patch vulnerabilities and lack of updates, an initial assessment showed no impact on data integrity or confidential information. Server backup and restoration, as well as reinstallation, were performed.	Ü	Implemented improvement measures and allocated additional budget to enhance IT security.	2,567,000
1. Date: August 2024			
2. Situation: Password-guessing attack leading to account lockout	0	Configured firewall policies to block source IP attacks.     Implemented improvement measures and allocated additional	
3. Impact: Initial assessment indicated no impact on data integrity or confidential information. Firewall blocked the source IP attack.		budget to enhance IT security.	

The Company closely monitors and manages information security incidents to ensure transparency and accountability. In 2024, only two incidents were recorded, with no cases involving customer personal data, no customers affected, and no fines imposed.

Category	2024
Total Number of Information Security Incidents	2
Number of Incidents Involving Customer Personal Data	0
Total Number of Affected Customers	0
Total Fines Related to Information Security Incidents	0



# 4.1 Innovation Capacity

Nan Pao places great emphasis on research and development (R&D) as a cornerstone of its corporate strategy. Since its establishment of the "Nan Pao Research Institute" in 1971, the company has consistently pursued breakthroughs and innovation through dedicated R&D efforts. By integrating the Group's R&D resources and talent, Nan Pao accelerates the development of high value-added products, thereby enhancing its competitive advantages and driving new corporate value. This strong commitment to R&D empowers Nan Pao to become a high-tech, high-value adhesive manufacturer with a clear mission to achieve global leadership.

In line with this focus, the Research Institute was subsequently upgraded to the R&D Center, which now comprises five dedicated R&D divisions and over 300 highly skilled R&D professionals. The "Polyester Polyol R&D Division," for example, focuses on the development of recycled PET-based polyester polyol synthesis and application technologies, opening up opportunities for high-end functional material applications. The R&D Center continues to invest heavily in the development of green, environmentally friendly materials and high-

performance specialty chemicals, ensuring that R&D remains at the core of the company's sustainable growth strategy.

In the near term, Nan Pao's R&D efforts are strategically directed towards high-performance and low-carbon chemicals. Leveraging its accumulated expertise in polymer synthesis and application technologies, the company is committed to continuously expanding high value-added industries, reinforcing its position as an innovation-driven enterprise.

#### Nan Pao R&D Personnel in Taiwan

Year	2020	2021	2022	2023	2024
Number of Personnel	108	97	102	107	109

#### Nan Pao Group R&D Personnel

Year	2020	2021	2022	2023	2024
Number of Personnel	315	320	318	335	344



Innovative development section



Adhesives R&D section



Footwear R&D section



Coatings and construction materials R&D section



Polyester polyol R&D technology section

#### **R&D** Collaboration Performance

To achieve sustainable economic development goals, Nan Pao actively collaborates with external R&D professionals and organizations. By combining its internal expertise with that of external partners, the company jointly develops bio-based products and high-performance solutions. This approach enhances opportunities for academic-industry collaboration, promotes resource sharing, and drives technological innovation and talent development, creating a win-win-win relationship among industry, academia, and research institutions. The R&D collaboration performance in 2024 is summarized below:

R&D Collaboration Projects	Partners	Achievements	Technical Results	2024 Sales Performance
Waterproof mastic, fiberglass adhesive, and white glue	French Technical Consultants	Improved processes to ensure consistent viscosity across batches, integrating patented information from the French technical consultants.	Gained insights into advanced processes for specialty adhesives, adjusted existing formulations, and developed adhesives with different performance characteristics.	DM-256 Color Variation Improvement: 29,620 kg / NT\$1,773,820 T-NP7006 Process Integration: 28,800 kg / NT\$1,209,600
DM-629MDS Process Stability	Department of Chemical Engineering, National Cheng Kung University	Utilized the partner's analytical techniques, testing equipment, and vendor resources to accelerate the acquisition of special raw materials and streamline product testing processes, resolving quality issues.	Developed clear analytical evidence to design improvement plans and conduct experimental validation, thereby enhancing process knowhow and product competitiveness.	DM-629MDS: 1,110.6 tons / NT\$86,278,730
UV Debonding Pressure- Sensitive Adhesives	Japanese Technical Consultants	Integrated patented information from Japanese technical consultants, enabling Nan Pao to understand advanced UV debonding processes, adjust existing formulations, and develop adhesives with diverse performance.	Developed a series of UV debonding products with different performance profiles.	<ul> <li>UV Debonding Products: SD-488: NT\$9.192 million</li> <li>High-Temperature Products AP-280: NT\$188,000 AP-380: NT\$16,000</li> </ul>
Ministry of Economic Affairs "Large Companies Supporting Small Enterprises" Low-Carbon Project	More than 10 upstream and downstream suppliers	Collaborated with the supply chain to promote green products and green processes.	Projected carbon reduction of 8,000–10,000 tons of greenhouse gases upon completion.	- Subsidy Amount: NT\$15.05 million

# Continual Improvement Projects and Teams

To foster a culture of innovation and continual improvement, Nan Pao established the CIT Promotion Office in 2022 to drive Continual Improvement Team (CIT) projects. We developed short-, medium-, and long-term plans to ensure systematic implementation. Training programs—covering 8D, Lean tools, statistical testing, DOE, and Minitab—were designed to build employee skills. Structured guidance and an incentive system create an environment that motivates active participation in improvement initiatives.

Annual CIT project competitions have been held since 2022, with 24 projects completed by 2024. Over 1,300 participants from R&D, Production, Sales, Technical Services, Warehousing, QA, QC, and Procurement have engaged in these activities. We organize mid-term and final presentations to showcase team achievements.

In 2024, top-performing teams represented Nan Pao at the Taiwan Continuous Improvement Activities (TCIA) Golden Tower Award competition, winning the Bronze Tower Award. To further encourage progress, regional presentations were held in Taiwan and Vietnam, along with awards such as Full Attendance, Outstanding Performance, Leader Certification, and Top Three Teams.

These initiatives support SDG 8 (Decent Work and Economic Growth) by empowering employees with skills and opportunities, and SDG 9 (Industry, Innovation, and Infrastructure) by fostering technological innovation and collaboration.



Figure: Nan Pao Bronze Tower Award Team



Figure: Vietnam Major 8D Final Presentation

# 4.2 Business Units and Core **Technologies**

Nan Pao leverages innovative products and exceptional services to expand its presence in the footwear adhesives market, while maintaining stable market share with leading global sports brands. In addition to footwear adhesives, Nan Pao actively develops other growth drivers, including cleaning agents, processing agents, and hardening agents used in the shoe manufacturing process.

#### Footwear Materials R&D and Business Unit

Recognized and awarded by leading global sports brands

Named Formulator of the Year by a major international sports brand

# Sportswear

Opportunities in Bio-based and Recyclable Products



#### **Textile Adhesives**

We are developing ecofriendly, carbon- negative footwear additives, replacing fossil- based materials with naturebased materials.

**Footwear Additives** 



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



Bio-Based

Recyclable



Low/Zero VOC



#### 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.



## Footwear Adhesives

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

Nan Pao is one of the world's top three suppliers of footwear adhesives, serving leading global sports brands. Its footwear adhesive products are not only environmentally friendly but also compatible with both traditional and advanced materials, enabling customization to meet customers' specific process requirements. For example, Nan Pao develops adhesives for automatic outsole coating, focusing on providing stable performance as well as low-viscosity, solvent-free solutions. Backed by a strong R&D team and a responsive technical service team, Nan Pao stands out among its competitors.

As the market evolves rapidly and labor costs continue to rise, the footwear industry is increasingly shifting toward process innovation and optimization, including process simplification, rapid production, and automation. Nan Pao is committed to developing innovative adhesives that support new production lines for sports shoes.

Through long-standing collaboration with brands and footwear manufacturers, customers often turn to Nan Pao in the design phase to discuss and co-develop solutions—whether for new materials, process optimization, bottleneck elimination, or higher-performance adhesives for new shoe models. This close partnership is key to Nan Pao's continued growth and increased market share in the sports footwear adhesive sector.

#### NextGen Growth Strategy Driven by Innovation

Nan Pao's NextGen strategy focuses on collaborating with leading companies in key industries to jointly develop innovative adhesive solutions. By sharing information at an early stage, Nan Pao can respond more quickly with tailored solutions that best meet customer needs.



#### Strategic Actions

- Select Key Partners: Target industry leaders to increase the proportion of highmargin products.
- Develop Innovative Solutions: Share information early and respond rapidly to customer needs.
- Become a Global **Innovation Leader:** Expand product applications, increase market share and ROE, and build a preferred innovation platform.



Footwear Adhesives

- Leading global brands seek todevelop high-performance running shoes using new materials.
- Nan Pao has pioneered innovative adhesive solutions that meet highperformance standards.



Semiconductor Adhesives

- UV-debonding adhesives in semiconductor processes require strong adhesion and fast debonding.
- Nan Pao has developed innovative materials with high adhesion, rapid debonding, and no residual adhesive, thereby improving process efficiency and yield.



Woodworking Adhesives

- New flooring materials are challenging to bond effectively.
- Nan Pao has developed a highefficiency adhesive solution that enhances production capacity by ten times, while offering advantages such as low shrinkage, heat resistance, and noise reduction..

#### Carbon Fiber Composites and Supercritical Foaming Technology Collaboration

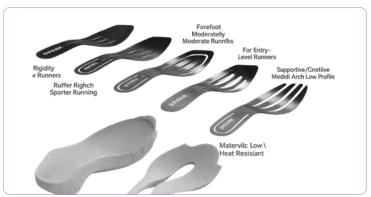


Nan Pao has established a joint venture, SPARK FOAMTECH, with a strategic partner specializing in supercritical foaming technology.

- The team develops proprietary material formulations and equipment, integrating
  the entire value chain from equipment to production technology, resulting in cost
  advantages.
- Expertise in leading high-performance supercritical foamed materials and biobased/environmentally friendly material formulations provides a competitive materials advantage.

#### Strategic Objectives:

- Leverage Nan Pao's expertise and influence in the chemical sector to strengthen partnerships with international brands and enhance penetration in the footwear industry.
- Utilize the joint venture relationship to facilitate technology exchange and information sharing, shorten R&D cycles, and establish Nan Pao as a leading allin-one midsole solution provider.
- Optimize cost efficiency through integrated production of material formulations, equipment, and processes.



## Adhesives R&D and Business Unit

## **Consumer Goods**

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.





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

Efficient and Eco-Friendly Solutions in High Demand



High Performance

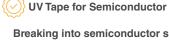




High temperature and high humidity resistance. Acid free design which enables low corrosion and low

pollution design for ITO film.





# 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.





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

Sports adhesives have long been a core strength for Nan Pao. Beyond their application in athletic footwear, Nan Pao adhesives are used in 30% of basketballs worldwide, and 50% of baseballs sold in Japan.

In 2024, in response to environmental sustainability and carbon reduction goals, Nan Pao transitioned the 15-kilogram iron drum packaging for its 3761 white glue product to containers made with 30% recycled plastic. The entire packaging is recyclable and reusable, extending the product's packaging life cycle.



Nan Pao's NANPAOFlex flexible packaging materials, composite packaging materials, and adhesives for soft packaging printing not only meet the needs of lightweight packaging but also incorporate environmentally friendly features. These products comply with various food packaging regulations, including the US FDA 21 CFR175.105, EU 2002/72/EC, and China GB9685-2008. Additionally, Nan Pao has recently obtained Halal certification, ensuring product safety and quality and providing more diverse options for global markets.



#### Main Applications of Adhesive Products:







tapes

Flexible packaging materials

non-woven



woodwork

textile

# Coatings and Construction Materials R&D and Business Unit

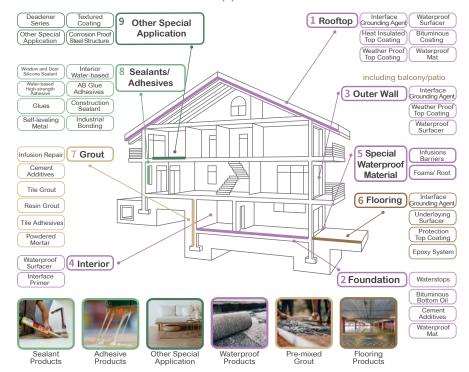


The Coatings and Construction Materials Business Group was established with the sole objective of helping customers and broader markets better understand construction materials chemistry. Through the use of high-performance, innovative products that keep pace with industry trends, Nan Pao aims to maximize the value of its customers' industries and create unlimited business opportunities together.

Nan Pao's product offerings include liquid coatings, powder coatings, construction sealants, adhesives, flooring materials, and waterproofing materials. The company provides customers with application recommendations and consulting services in construction chemicals. In addition to offering professional chemical services and technical support, Nan Pao has built long-term partnerships with key strategic teams in Europe, Australia, and the United States. In recent years, ongoing technical collaboration and R&D with Germany, France, Italy, and Australia have further enriched the product portfolio.

Environmental requirements have become a major driving force in the development of powder coatings. The mainstream market is seeking ways to reduce VOC emissions, leading to powder coatings gradually replacing solvent-based coatings in industrial production. Powder coatings offer low VOC content, easy cleanup, and recyclability of overspray. New water-based wood coatings are becoming the industry trend, replacing older solvent-based coatings that contain formaldehyde and undesirable odors. Developing environmentally friendly coatings that are formaldehyde-free and non-hazardous is emerging as a key industry focus.

#### **Construction Chemical Product Application**



#### Application of Recycled Silicon in Epoxy Floor Coating 926HTG

Recognizing the high potential value of recycled semiconductor waste slurry and the global emphasis on circular economy and renewable energy, Nan Pao utilizes purified silicon dioxide derived from semiconductor process waste slurry—recycled by Kwangyu Advanced Materials and certified by RCS—incorporating it into epoxy floor coatings through specialized dispersion and mixing technology. This innovative use promotes the development of circular economy epoxy floor coatings, which can be reapplied in semiconductor factories, basement flooring, machinery, equipment, and other protective and decorative coatings.





Figure: New Plant Construction Featuring Epoxy Floor Coatings Made from Recycled Silicon

# Innovation Development Division

The Innovation Development Division aims to provide new material alternatives and process problem-solving technologies to help customers achieve their environmental and carbon reduction goals, thereby benefiting both the environment and society. In 2024, adhesives for semiconductor and optical manufacturing processes demonstrated strong performance. The newly developed UV debonding tape offers high adhesion, fast reaction time under UV irradiation, and leaves no residue, significantly enhancing process efficiency and yield. The product has been well received by the market.

#### Innovation and R&D Growth Strategy

#### **Core Technologies**

PUD \ PUR \ Acrlic \ UV \ Epoxy \, Polyester \ O/I hybrid



# Textile Composites

- Textile PUD/PUR/PAc coatings and laminates for windproof, waterresistant, and foam applications
- PUD leather/PVC adhesives
- Water repellents and high-adhesion solutions
- Sports composite resins/adhesives
- Automotive and green energy composite resins
- High-solids printing ink PUD/ acrylics



#### Automotive Metals

- Interior and exterior automotive adhesives
- Structural component resin adhesives for automotive use
- Weather-resistant metal resins/ coatings
- Screw/metal industrial coatings
- Chrome- and fluorine-free anticorrosion weather-resistant coatings



#### Electronics and Green Energy

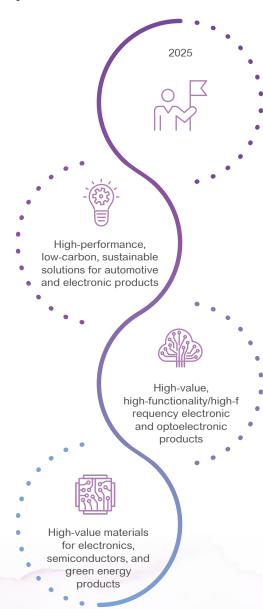
- Epoxy resins for semiconductor packaging
- High-frequency epoxy resins for PCBs
- Resins and PI materials for 5G and electronics
- High-power component resins/ adhesives
- Quantum Dot (QD) and UV adhesives for QD
- Materials for solar energy and lithium batteries



#### Low-Carbon and Net Zero

- Bio-based PU/PAc/HMA/polyester
- Recycled PET/yarn polyol for 2KPU, PUD, and PUR
- Plastic-free/waste resin circular utilization

#### **Chemical Strategy Roadmap for the Electronics** Industry



# Polyester Polyol R&D Division

Nan Pao has integrated a recycled polyester materials supply chain into its operations, applying water-based copolyester resins to polyester fiber substrates to enhance functionality in industrial applications—a future trend aligned with the circular economy.

By recycling PET bottles through washing and pelletizing, Nan Pao produces polyester polyol using these recycled PET materials as a base, which serves as a raw material for water-based PU products. This approach not only reduces the reliance on petroleum-based polyesters but also minimizes resource consumption and promotes resource recycling and regeneration.

Transforming recycled PET bottles into high-performance polyester polyol resins enables the production of water-based PU raw materials. When applied to textile products, these materials can make fabrics more structured; when processed into foam materials such as seat cushions, they provide comfort and softness.





## Process Enhancement and Product Innovation

As a leading adhesive manufacturer in Asia, Nan Pao continually improves and expands its existing businesses while striving to enhance its long-term competitiveness through innovation and R&D. With a world-class R&D team, Nan Pao is dedicated to developing safer and more environmentally friendly products.

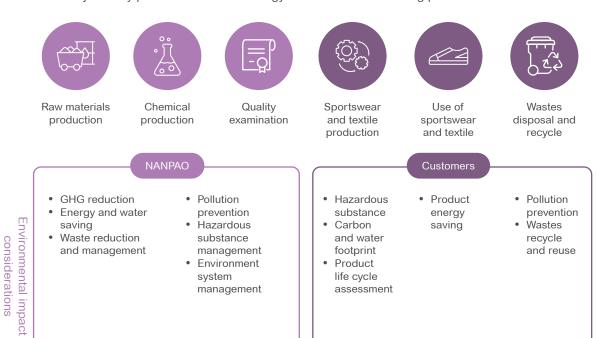
Guided by circular economy principles, Nan Pao creates green business opportunities using rigorous scientific methods to ensure product safety. We are committed to ensuring that all products are free from animal testing and comply with stringent quality standards.

# Product Life Cycle Assessment

At Nan Pao's manufacturing facilities, aside from various solvents, products such as adhesives, coatings, construction materials, and carbon fiber composites do not directly involve chemicals that significantly impact health or the environment. For regulated chemicals, comprehensive risk assessments are conducted throughout the product life cycle—from initial development, manufacturing, transportation, storage, and sales to end-of-life disposal.

Nan Pao considers the environmental impact at each stage of the product life cycle, including collaboration with customers on product development, raw material production and transportation, and product manufacturing and testing. In addition to managing hazardous substances, preventing pollution, and reducing energy and resource consumption during production, Nan Pao also requires suppliers to adopt environmental protection practices and continuously minimize the environmental footprint of chemicals.

A Product Life Cycle Assessment (LCA) evaluates the potential environmental impacts of a product or service throughout its entire life cycle—from raw material extraction and manufacturing to distribution, sales, use, and end-of-life disposal or recycling. By conducting LCAs, companies can assess the impacts of all processes, from "cradle to grave," including global warming, ozone depletion, and other areas. These results can then inform product design, manufacturing, and services to continuously provide environmentally friendly products or reduce energy and resource use during production



Nan Pao conducted environmental footprint analyses of its water-based PU and water-based white glue in accordance with the ISO 14067 life cycle assessment standard, and obtained an ISO 14067 verification statement. These two product categories together accounted for 46% of revenue in 2024. The results revealed that most of the environmental footprint originates from the raw material acquisition stage.

Going forward, Nan Pao will continue to expand the coverage of product LCAs, establish product life cycle assessment workflows, and provide internal training for employees. By analyzing carbon emission hotspots and identifying opportunities to substitute low-carbon raw materials, Nan Pao aims to design low-carbon products and contribute to sustainability goals.

#### **Green Product Policy**



#### Low-Carbon Chemicals

Aligned with the trends of circular economy and ESG sustainable development, Nan Pao utilizes bio-based raw materials and recycled materials to achieve the goals of circular economy, environmental protection, and energy conservation and carbon reduction. The company's currently developed bio-based materials can reduce carbon emissions by 5% to 80% depending on the bio-based content.

In 2024, low-carbon adipic acid procurement led to a carbon reduction of 11,844 tons, representing a 39% decrease compared to the previous year. Meanwhile, the Footwear R&D Division reduced PUD product emissions by 6,651 tons, representing a 5% decrease from the previous year.

Nan Pao uses natural vegetable oils to replace petrochemical raw materials, producing bio-based polyols—one of the key raw materials for adhesives. The company has developed a series of green, low-carbon, high-performance adhesives with bio-based content ranging from 10% to 100%. By producing critical raw materials such as polyols in-house, Nan Pao can flexibly adjust formulations to meet customized needs and fully leverage the structural properties of bio-based materials. This approach not only aligns with sustainability and low-carbon trends but also ensures high-performance physical properties.

In 2024, Nan Pao's green, low-carbon, high-performance adhesives for consumer and industrial applications received the Taiwan Chemical Industry Association (TCIA) Net Zero Emissions Achievement Award.

Additionally, Nan Pao supports academic-industry collaboration and innovative R&D. In 2024, the company participated for the first time in the International Net Zero Technology Competition organized by National Taiwan University, establishing the Nan Pao Resins Zero Carbon Vanguard Award to encourage young teams in netzero innovation, broaden international perspectives, and advance global progress toward a net-zero future.

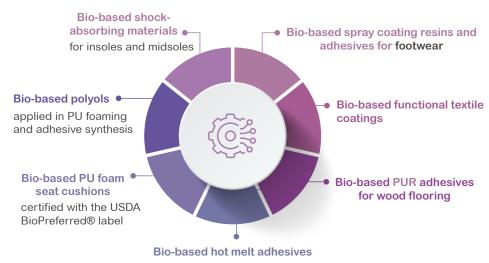


Figure: 2024 Net Zero Emissions Award Winners



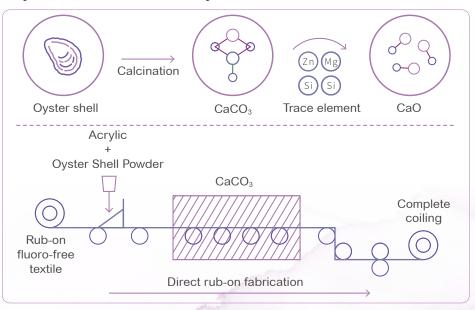
Figure: 2024 Zero Carbon Vanguard Award Winners

#### Nan Pao Bio-Based Products



In addition, by incorporating recycled materials into products to reduce carbon emissions, Nan Pao has developed textile coating resins and hot stamping transfer resins containing r-PET, floor coatings containing recycled waste silicon wafers, and textile coating resins containing oyster shell powder. These innovations can reduce carbon emissions by up to 26%.

#### Acrylic Used in Textile Made with Oyster Shell Powder

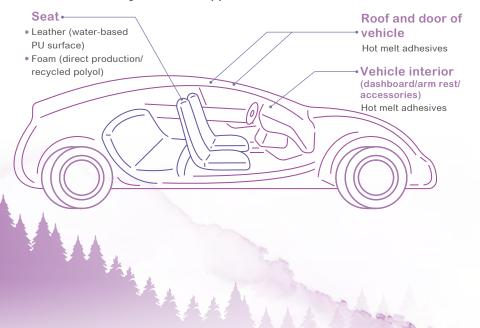


In response to government plastic reduction policies and the need to advance beyond traditional paper container lamination processes, Nan Pao is dedicated to developing water-based plastic-free paper coating resins that provide water and oil resistance. After disposal, these products are fully recyclable with paper waste, helping to achieve multiple goals of plastic reduction, carbon reduction, and waste minimization.

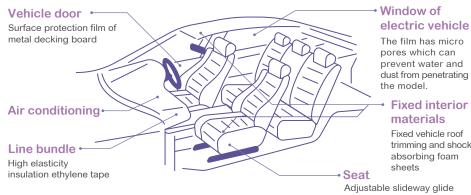
# Automotive Bio-Based and Eco-Friendly Adhesive **Applications**

Nan Pao is committed to developing environmentally friendly and bio-based green products for the automotive industry, covering both exterior and interior materials, with a focus on ensuring the health of drivers and passengers. Depending on the biobased content, these materials can reduce carbon emissions by 5% to 80%. Notably, Nan Pao's bio-based PU foam seat cushions have received the USDA BioPreferred® label, demonstrating our achievements in the field of sustainable materials. Through these efforts, we not only enhance product performance but also reduce environmental impact, fulfilling our commitment to sustainable development.

#### Biomass and Eco-friendly Adhesives Application for Vehicles



#### Low VOCs Double-sided Tape and Pressure Sensitive Adhesives



trimming and shock

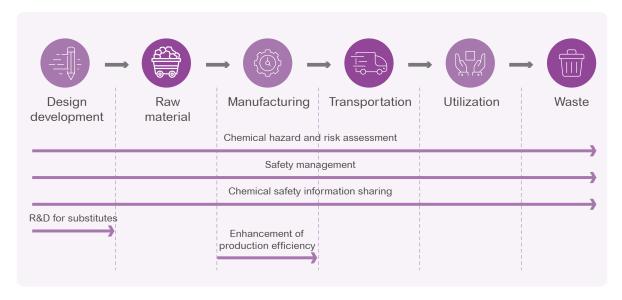
			Sustair			
Application	Green product	Biomass	Recycle	Water based	Solvent- free	Sustainability
Leather	Water- based PU resin for surface			0		Carbon reduction: >50% No greenhouse gas emission
Adhesives	Hot melt adhesives				0	VOC-free green products No greenhouse gas emissio
	Biomass polyol	0				Biomass content: 70% Carbon reduction: >50%
PU foam	Recycled polyol		0			Content of recycled material: 20-40% Carbon reduction: 20-40%
PU foam	Biomass PU foam (cushion)	0				Biomass content: 25-35%

# 4.3 Responsible Chemical Management

# Responsible Chemical Management Strategy

Nan Pao is committed to chemical safety management and has implemented the ISO 14001 Environmental Management System and ISO 45001 Occupational Health and Safety Management System to establish a clear framework for employees to follow, ensuring efficient chemical management. All chemicals stored onsite are tracked through a chemical tracking system that monitors their locations and storage quantities in real time.

To uphold the principles of environmental friendliness and occupational health and safety—and to demonstrate a commitment to continuous improvement—Nan Pao regards chemical management as one of the core foundations of its development. At the product design and development stage, Nan Pao adopts a product life cycle perspective to assist customers in developing alternatives while adhering to international regulations (such as RoHS Directive, REACH Regulation) and restricted substances lists (such as MRSL, RSL). This approach aims to avoid using chemicals that pose potential risks to human health or the environment while minimizing employee exposure to chemical hazards.



At the facility level, the R&D, Quality Control, and Occupational Safety and Health departments at the headquarters and each production site serve as the core units for chemical management. A "Chemical Management Procedure" has been established to guide management across all stages of the chemical life cycle. This procedure starts with source control and extends to management during the introduction phase, with focused monitoring during on-site use.

We continuously monitor updates to chemical-related regulations issued by relevant authorities, assess their impact on our operations, and develop corresponding action plans to ensure that chemical handling at all sites complies with local laws. This ensures employee safety and health in chemical use.

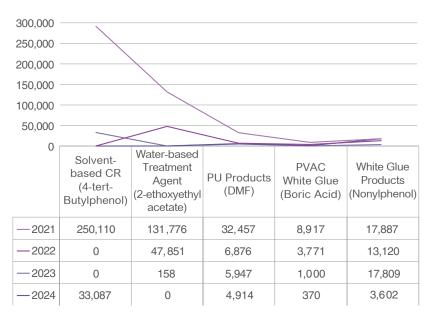
During product distribution to customers, our Logistics and Customer Service departments collaborate on chemical management. Beyond providing high-quality technical services, we also fulfill our corporate social responsibility by ensuring the safety of chemicals during transportation and use. In 2024, no transportation-related incidents occurred.

#### Chemical GHS Classification

In accordance with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS), we adopt internationally recognized and easy-to-understand hazard communication frameworks to promote safe chemical use and enhance protection of human health and the environment. GHS covers physical, health, and environmental hazards, aiming to raise awareness of chemical hazards in the workplace, reduce the need for chemical testing and evaluation, and facilitate safe international trade.

At our Taiwan headquarters, 100% of products undergo hazard risk assessments, and subsidiaries follow the same standard. In 2024, GHS Category 1 products accounted for 16% of revenue and Category 2 for 33%-49% combined, down 4% from 2023 and marking a fourth straight annual decline. In addition, Nan Pao Taiwan set a 2021 goal to cut Restricted Substances List (RSL) chemicals by 50% by 2030; through R&D substitutions and formulation adjustments, we achieved a 50% reduction in SVHC usage by 2024 vs. 2021, surpassing the 2030 target and underscoring our commitment to green chemistry.

We actively and prudently manage the handling, use, and final disposal of such chemicals, incorporating them into annual site emergency response drills. Through scenario planning and response exercises, we ensure that employees are familiar with timely and proper control measures in different situations, thereby keeping the consequences of any incident within acceptable risk levels. These measures demonstrate our commitment to environmental protection and employee safety, and our ongoing efforts to promote best practices in chemical management in pursuit of sustainable development.



Note: Only the top five high-concentration chemical substances are listed, based on their usage in Nan Pao's core products.

# Third-Party Certification of Chemical Management





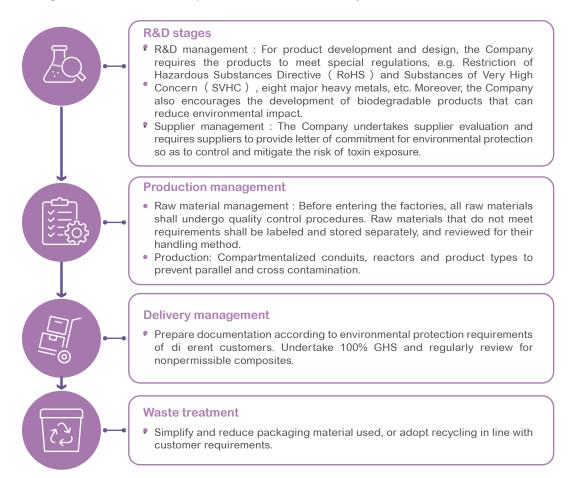
Nan Pao is dedicated to leveraging advanced synthetic resin polymer technologies and structural design to eliminate harmful substances and manage hazardous chemicals. Our core technologies not only ensure product performance but also reduce human exposure risks and environmental impacts, ensuring consumer safety.

Currently, Nan Pao is a bluesign® system partner, with numerous textile-related products certified as bluesign® approved, including foam coatings for textiles, lightweight windproof coatings, abrasion-resistant and high-strength fabric coatings, water-based PU for laminating, formaldehyde-free water-based acrylics, PUR adhesives for textiles/films, fluorine-free water repellents for dyeing and finishing, and moisture-wicking, quick-drying finishing aids.

To accelerate chemical management in footwear products, Nan Pao has become a ZDHC (Zero Discharge of Hazardous Chemicals) Signatory, with multiple products from facilities in Foshan, Dongguan, Vietnam, and Indonesia achieving the highest ZDHC Level 3 certification. In 2024, Nan Pao received the adiFormulator Champion Award from a key customer, with over 86% of the chemicals supplied to major sports brands (including footwear and accessories) achieving Level 3 certification. This achievement solidifies Nan Pao's leadership position in the footwear chemical sector.

## **Product Quality Assurance**

Nan Pao is committed to providing customers with stable, safe, and regulatory-compliant products and services, viewing quality as the cornerstone of brand growth and sustainable development. Internally, we never compromise on our dedication to quality and compliance with standards. Our quality policy is communicated to all employees to ensure thorough adherence and implementation, serving as both a mindset and a performance indicator in daily work.





# **Products for Footwear**

- Each year, all sportswear products shall be submitted to SGS, a third party certification body, to certify that forbidden substances are not used, as per requirements of major brands
- Obtaining ZDHC Signatory Status



# **Products Sold to EU**

- 100% passing quality checks before delivery
- Quality of exported products meeting EU regulations, including RoHS, and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Obtaining bluesign ® SYSTEM PARTNER Certification



# **Passing Rate**

- Adopt the formulation of production batch numbers and undertake 100% sampling inspection
- 100% passing quality checks before delivery

# 4.4 Strong Customer Relationships

#### **Technical Services**

Customer satisfaction is built not only on product quality but also on after-sales support, which is key to ensuring customer satisfaction. Our Technical Service Department comprises highly experienced professionals who have accumulated a wealth of solutions for technical challenges and established a comprehensive big data database. These experts are dispatched to various sales offices to provide customers with professional technical services locally. Depending on the product characteristics, we also provide complete usage guidance and support to customers' production teams.

At the new product development stage, Nan Pao's technical service team can immediately offer feasible solutions to help address product issues. When customers encounter any difficulties with product usage and report them to the Sales Department, the Technical Service Department promptly provides support.

After product launch, the Technical Service Department collects all issues encountered on customers' production lines, conducts troubleshooting training and technical seminars at customer sites, and actively resolves technical challenges.

## **Customer Privacy and Rights Protection**

Regarding customer privacy, all business information, transaction data, or any other customer-related information provided to us is systematically documented and managed by dedicated personnel to ensure compliance with the Personal Data Protection Act. Internal access to customer information requires approval and authorization, ensuring that private information is not easily disclosed. In 2024, there were no complaints regarding breaches of customer privacy or loss of customer data.

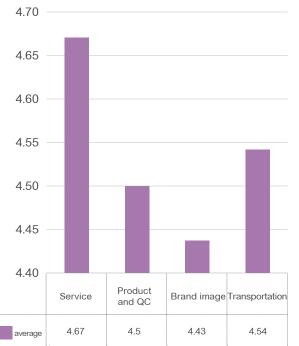
From product development, product registration, marketing, and sales to promotional activities, Nan Pao adheres to all relevant legal requirements. In 2024, there were no incidents of counterfeiting, infringement, or related issues.

#### **Customer Satisfaction**

Strategy:Provide customized services, and regularly engage with customers through meetings and surveys to understand and respond to their needs and feedback, ensuring the best possible customer service.

To better understand customer satisfaction with the services provided by Nan Pao, each business unit conducts annual visits using questionnaires to gather customers' perceptions and evaluations of our products and services. Through these regular annual engagements, we are able to make steady improvements and pursue continuous progress.

In 2024, the Taiwan headquarters conducted a survey among 262 customers whose annual sales exceeded NT\$1 million (representing 91% of the Taiwan region's sales). The survey covered four key areas: services, products, transportation, and staff attitude. Using a 5-point Likert scale, the overall average score was 4.54, exceeding the target of 4.0. Overall, 91% of customers expressed satisfaction with Nan Pao's performance, with staff attitude receiving particularly high praise.



Nan Pao will continue to enhance customer satisfaction, with the goal of maintaining an average score of at least 4.0 and ensuring that over 90% of customers are satisfied in the coming year. Each quarter, feedback from customer satisfaction surveys will be reviewed and discussed in Quality Review Meetings to identify and address deficiencies in products and services. Improvement plans will then be developed and implemented to provide services that better meet customer expectations.



# 4.5 Supplier Management

# Supplier Sustainability Management Policy

Nan Pao regards its suppliers as long-term partners. Competitive quality, technology, delivery, and cost are essential requirements for all suppliers. To achieve sustainable development within the supply chain, Nan Pao ensures that suppliers comply with social and ethical standards, understand and adhere to applicable laws, and proactively address environmental and social issues. Suppliers are expected to assume corporate social responsibility and continually improve and enhance their practices.

Given that Nan Pao operates across Taiwan, Mainland China, and Vietnam, the procurement units take into account regional regulatory differences by establishing additional evaluation standards for different types of cases and incorporating corresponding clauses into contracts. This ensures that suppliers comply with both legal and corporate requirements, and the list of required signatories has been extended to cover the entire Nan Pao Group.

As of 2024, none of the suppliers at Nan Pao's major operating sites employed child labor or engaged in activities that caused significant or potential environmental impacts. The Group's key suppliers' manufacturing facilities were located in Asia (Japan, Korea, Mainland China, Vietnam) and in Europe and the United States (Germany, Belgium, the United States, Spain, and Italy), with no procurement activities involving high-risk regions.

# Supplier Management

To achieve the goal of sustainable supply chain development, Nan Pao specifies environmental requirements in the Nan Pao Supplier Code of Conduct, including compliance with environmental permits, resource conservation and pollution prevention, hazardous substance management, waste and emission control, and material management. Suppliers are required to comply with these requirements and provide signed confirmation. In 2024, the return rate of the signed Supplier Code of Conduct reached 96.3%.

Starting in 2024, the Taiwan headquarters has followed the Supplier Management and Evaluation Procedures under the ISO 9001 Quality Management System to guide supplier selection and management. In addition, Nan Pao has established the Supplier ESG Risk Assessment Criteria to evaluate key suppliers on sustainability risks across environmental, social, human rights, and corporate governance dimensions. Assessments are conducted through the Supplier ESG Risk Self-Assessment Questionnaire, and through ongoing communication and improvement actions, the Company works to advance sustainability throughout the supply chain.

#### Supplier ESG Management Plan

Category	Description
Policy and Commitment	Nan Pao Supplier Code of Conduct
Board Oversight	<ul> <li>The "Nan Pao Supplier Code of Conduct" is approved by the Board representative as the highest guiding principle.</li> <li>The Board regularly reviews the ESG management plan to ensure that supplier partnerships align with the company's sustainability policies and objectives.</li> <li>The Board is responsible for overseeing the implementation of the "Supplier ESG Management Plan."</li> </ul>
Code of Conduct Review	Suppliers must comply with the "Nan Pao Supplier Code of Conduct," which covers: business ethics, labor rights, health and safety, environmental protection, and corporate governance.     To assess supplier compliance with the Code of Conduct, we take the following measures:     Periodic reviews (through signed compliance statements)     Provide necessary guidance and support     Ensure alignment with management expectations and goals
ESG Rating and Contract Termination Clauses	<ul> <li>Evaluation of Key Suppliers' ESG Performance</li> <li>We assess the ESG performance of key suppliers by reviewing their ESG reports or through the Supplier ESG Assessment Questionnaire, covering environmental, social, and corporate governance aspects.</li> <li>Contract Termination Clause</li> <li>ESG-related termination clauses are included in supplier contracts.</li> <li>If a supplier fails to meet required ESG performance standards or is involved in a major ESG incident, Nan Pao reserves the right to terminate the partnership.</li> <li>A six-month improvement period is provided; if the supplier fails to improve within this timeframe, the contract will be terminated.</li> </ul>
Supplier Selection	To ensure that all suppliers partnering with Nan Pao demonstrate strong ESG performance and align with the company's environmental, social, and governance vision and objectives.
Procurement Staff Training	Conduct annual ESG training for procurement staff and relevant internal stakeholders (via internal programs or in collaboration with external organizations) to ensure they understand their responsibilities in the supplier ESG program and how to effectively promote and manage it.

#### **Supplier Screening Mechanism**

Aspect	Description
Business Relevance	<ul> <li>Products or services required by Nan Pao</li> <li>Approved suppliers that have passed Nan Pao's evaluation process</li> </ul>
Environment	Includes but is not limited to air pollution, wastewater, waste, hazardous chemicals management, energy use, and greenhouse gas emissions
Social	Includes but is not limited to human rights and labor rights
Corporate Governance	Includes but is not limited to anti-corruption and anti-bribery

#### **Supplier ESG Assessment**

Assessment Method	Description
Desktop Assessment	<ul> <li>Suppliers representing the top 60% of transaction value are required to complete an ESG self-assessment questionnaire or provide the previous year's ESG report.</li> <li>Nan Pao's internal team or external consultants will review supporting documents provided by suppliers to evaluate their commitments, implementation status, and potential risks related to ESG issues.</li> </ul>
On-Site Supplier Assessment	<ul> <li>Nan Pao's internal team conducts on-site visits and evaluations of suppliers identified as high ESG risk. These assessments include on- site inspections, interviews, and verification of relevant information to evaluate ESG performance and risks.</li> </ul>

#### **Supplier Development**

Category	Description
ESG Programs/ Training	<ul> <li>Provide suppliers with detailed information on ESG programs, including standard documents and ESG-related forms.</li> <li>Regularly organize supplier education and training activities, as well as supplier partner forums, to facilitate information exchange and provide ESG initiative education.</li> </ul>
Provision of ESG Benchmark Information	Regularly provide external ESG training and benchmark information.
Assistance with Improvement Measures	<ul> <li>External consultants provide remote consultation/review of supplier improvement measures.</li> <li>Internal staff provide feedback and relevant information on supplier improvement measures.</li> </ul>
Deep Support Program	Participate in the Ministry of Economic Affairs' "Low-Carbon Intelligent Manufacturing Upgrade Subsidy Program" to help selected suppliers enhance their carbon management and information disclosure capabilities.

# Supplier Evaluation Results

In 2024, Nan Pao launched the first phase of supplier sustainability risk assessments. A sustainability risk questionnaire was conducted with seven key suppliers, representing 80% of raw material procurement value. Among them, two suppliers with relatively lower sustainability scores were selected for on-site audits. The audits were carried out based on their questionnaire responses, and for any nonconformities identified, the suppliers were required to complete improvements within six months. This process aims to continuously enhance the overall sustainability performance of the supply chain.

ESG Risk Level	Description	Number of Suppliers
Tier 1	Top suppliers with extremely low impact on company operations.	24
Tier 2	Excellent suppliers with low impact on company operations.	14
Tier 3	General suppliers with moderate impact on company operations; recommended to enhance sustainability performance.	17
Tier 4	High-risk suppliers with significant impact on company operations; urgent improvements in sustainability performance required.	0
Total	Phase I Statistics: 55 suppliers	

#### **Local Procurement**

Nan Pao Group is committed to promoting a local procurement policy, actively fulfilling the Company's responsibility to support local economies and communities. This initiative not only fosters local business development but also effectively reduces the environmental impact of transportation, thereby strengthening the Company's long-term sustainability.

In Nan Pao's products, raw material costs account for the largest portion of production costs, while raw material quality is a key factor influencing product yield. Therefore, ensuring a stable and high-quality supply of raw materials has always been our top procurement priority.

In 2024, the proportion of locally sourced raw materials at Nan Pao Taiwan reached 76.2%, a 4% increase compared to 2023, and has consistently remained above the 70% target. For procurement related to services, engineering, and equipment, the local sourcing ratio was 87.4% in 2024, slightly lower than 99.5% in 2023. This decline was mainly due to the advance purchase of equipment by Spark Foamtech Enterprise Co., Ltd., a newly established joint venture in Taiwan, which will be resold once its land and facilities are ready. Excluding this internal transaction, the local procurement ratio for services, engineering, and equipment still reached 99.1%, consistent with the previous year.

With production sites across multiple countries, Nan Pao Group will continue to deepen collaboration with local suppliers at each site, promoting local procurement strategies and contributing to the creation of a healthier and more resilient business environment.

# Resource Recycling Initiatives

Nan Pao Group remains committed to the believe of environmental sustainability and actively promotes a range of resource recycling measures. Instead of relying solely on new pallets, we procure recycled pallets and implement pallet repair and reuse programs to reduce dependence on natural resources and minimize waste generation. These actions also help lower energy and water consumption during pallet production, further advancing the development of a circular economy.

In addition, we actively recycle iron and plastic drums and have replaced traditional cardboard boxes with PP eco-friendly boxes to reduce paper usage and lessen environmental impact. These comprehensive environmental initiatives not only bring long-term sustainability benefits to the Company but also contribute to a win–win outcome of environmental protection and business success for society as a whole.

Initiative	Pallet Recycling and Reuse	Drum Recycling	Reusable PP Boxes
Description	Use of recycled pallets to replace new pallets	Reuse and recycling of containers	Replacement of cardboard boxes with PP eco-friendly boxes
Quantitative/ Qualitative Results	<ul> <li>The proportion of recycled pallets purchased reached 76.6%</li> <li>A total of 3,861 pallets were reused</li> </ul>	<ul> <li>9,406 iron drums were recycled and reused</li> <li>14,604 plastic drums were recycled and reused</li> <li>Approximately 756 metric tons of carbon emissions were reduced cumulatively</li> </ul>	<ul> <li>Shipping cartons were reused more than five times on average</li> <li>Paper usage was reduced by 22,524 cartons, decreasing paper carton waste by about 18 metric tons</li> </ul>
Region	Taiwan	Taiwan	Foshan
Photo			This work is the property of the company of the com



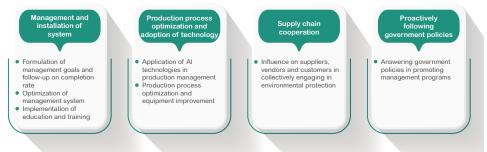
Green Manufacturing and **Low-Carbon Transition** 

- 5.1 Climate Change Risks and Opportunities
- 5.2. Greenhouse Gas Emissions and Management
- 5.3 Energy Management
- 5.4 Water Resources
- 5.5 Air Pollution Prevention
- 5.6 Waste Management
- 5.7 Biodiversity Protection

Nan Pao is committed to addressing climate-related financial disclosures, net-zero emissions, renewable energy, green chemistry, and circular economy initiatives. We have implemented the ISO 14001 Environmental Management System to integrate sustainability into our daily operations. Our sustainability efforts focus on climate change, energy, water resources, waste management, and air pollution prevention to protect the environment and enhance corporate value.

As of 2024, our headquarters (Nan Pao Taiwan) and 11 production sites have successfully established and obtained third-party certification for the ISO 14001 Environmental Management System. These certified companies include: Nan Pao Taiwan, Foshan Nan Pao, Foshan Advanced, Dongguang Nan Pao, Dongguang Jiaqing, Kunshan Nan Pao, Vietnam Nan Pao, Vietnam Materials, Vietnam Advanced Materials, Vietnam NNV, Indo Nan Pao, and Thai Nan Pao. Together, these sites represent 73.2% of the Company's total revenue.

#### **Environmental Sustainability Policy and Management Approach**



# **Environment Policy**

Nan Pao'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. Nan Pao also commits to:

- 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.

# **Employee Environmental Training**

Nan Pao conducts targeted training programs on energy efficiency, waste reduction, and water management to equip employees with both awareness and practical skills. Energy training focuses on optimizing equipment operation, adopting energy-saving technologies, and encouraging behavioral changes to lower consumption. Waste training covers source

reduction, recycling, reuse, and compliance with hazardous waste handling. Water training addresses conservation, recycling and reuse, and monitoring of abnormal usage to improve efficiency. Through these programs, employees are able to apply sustainable practices in daily operations and contribute to reducing the Company's environmental footprint.

# **Environmental Management and Climate Governance Strategy**

To strengthen sustainability performance and climate risk governance, Nan Pao has established a comprehensive environmental management and climate governance structure. Responsibilities are delegated according to organizational levels of authority, ensuring accountability in achieving environmental management performance. The roles and responsibilities at each level are described as follows:

Governance Level	Roles and Responsibilities
Board of Directors	<ul> <li>The highest-level climate governance body of Nan Pao. Responsible for regularly overseeing the planning and implementation of the Company's overall sustainability strategy, evaluating target achievement and risk management results, monitoring the performance of climate-related action plans, and providing appropriate recommendations.</li> </ul>
Sustainability Committee	<ul> <li>The Corporate Sustainability Committee is responsible for managing the company's sustainability-related risks, including climate issues. Its duties include formulating, promoting, and strengthening key sustainability policies and action plans across the Group, reviewing, tracking, and revising sustainability initiatives, and reporting on progress and effectiveness. The Committee reports to the Board of Directors on sustainability and climate-related issues at least annually.</li> </ul>
Sustainability Office	Responsible for implementing environmental management systems, ensuring compliance with environmental regulations and international standards, assessing sustainability transition directions, improving resource efficiency, and establishing climate change response mechanisms. Continuously monitors climate risk-related regulations and regularly updates the identification of climate risks and opportunities. The Committee reports to the Board of Directors on sustainability and climate-related issues at least annually.
Execution Units	• Includes energy management and occupational health and safety functions at plants and subsidiaries. The highest accountability rests with the General Manager of Operations and subsidiary General Managers. Plant-level production heads ensure the effective operation of environmental management systems, while subordinate execution units are responsible for promoting environmental projects and managing significant environmental risks and opportunities.

Nan Pao integrates KPIs into performance evaluations and links them directly to monetary incentives at different organizational levels. The CEO is assessed on progress in carbon reduction targets, renewable energy consumption, reductions in key environmental indicators such as energy, water, and waste, and the implementation of green procurement, with results tied to annual bonus schemes. Business Unit Managers are evaluated on improvements in product carbon intensity, with performance tied to variable pay components. All employees are encouraged to participate in environmental and operational improvements, with valuable contributions acknowledged through cash rewards, contributing to Nan Pao's net-zero and sustainability transition.

# Compliance with Environmental Regulations at Nan Pao Group

The Company places great importance on environmental compliance and is committed to meeting all relevant regulatory requirements. In recent years, environmental violation cases at Nan Pao's Taiwan plants have been summarized as follows. In response, the Company has required on-site units to strengthen operational control, procedures, and maintenance management. Additional monitoring has been implemented in areas prone to irregularities, and personnel are assigned to conduct unscheduled inspections of plant equipment. Furthermore, on-site units are encouraged to adopt self-monitoring practices to reduce the number of reported cases.

Item	2021	2022	2023	2024
Region	Taiwan	Taiwan	Taiwan	Taiwan
Violation Type	Air pollution, water pollution, industrial waste	Air pollution	Industrial waste	Water pollution
Reporting Authority	Tainan Environmental Protection Bureau	Tainan Environmental Protection Bureau	Tainan Environmental Protection Bureau	Tainan Environmental Protection Bureau
Number of Cases / Amount (NT\$)	6 cases / 1.09 million	2 cases / 450,000	1 case / 60,000	1 case / 420,000

# **Environmental Capital Expenditure and Performance Analysis**

Nan Pao compiles statistics on the environmental capital expenditures of each facility over the past three years, comparing and analyzing them against the environmental and economic benefits generated during the same year. To continuously reduce energy and resource use and lower carbon emissions, Nan Pao has steadily increased the installation of environmental protection equipment in recent years. However, due to the relatively long payback period of such capital investments, we also review the return on investment of each piece of equipment annually to maximize the effectiveness of these investments.

Item	2022		2023		2024	
	Environmental Benefits	Economic Benefits (NT\$)	Environmental Benefits	Economic Benefits (NT\$)	Environmental Benefits	Economic Benefits (NT\$)
Expenditure	29,343,339		113,736,171		39,613,099	
Benefits	Electricity Savings (kWh): 82,689.2	Savings(NT\$): 335,718	Electricity Savings (kWh): 273,864	Savings(NT\$): 1,111,887	Electricity Savings (kWh): 976,019	Savings(NT\$): 3,806,474
	Gas Savings (m³): 13,560	Savings(NT\$):: 169,690	Gas Savings (m³): 27,120	Savings(NT\$): 337,047	Gas Savings (m³): 1,680,318	Savings(NT\$): 23,524,459
	Water Savings (m³): 1,464	Savings(NT\$):: 17,568	Water Savings (m³): 3,299	Savings(NT\$): 39,588	Water Savings (m³): 28,364	Savings(NT\$): 360,795

## **5.1** Climate Change Risks and Opportunities

According to the Global Risks Report 2024 published by the World Economic Forum, five of the top ten global risks over the next decade are environmental in nature, with environmental risks ranked as the most severe. The report identified the top three risks in 2024 as extreme weather events, major changes in Earth systems, and biodiversity loss.

Nan Pao integrates these insights into its governance framework by following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Through iterative scenario analysis, the Company incorporates climate-related risk responses into its governance, strategy, risk management, and metrics and targets disclosure processes, thereby strengthening the effectiveness of its climate change management.

## Climate-Related Risk and Opportunity Assessment

In alignment with the TCFD framework, Nan Pao has established a list of climate-related risks and opportunities. With input from plant and departmental managers, the Company evaluates the potential short-, medium-, and long-term operational impacts of climate change across functions such as supply chain, R&D, and operations. Identified material climate-related risks are incorporated into the Company's overall risk management framework and are regularly assessed, controlled, and monitored in accordance with the Nan Pao Group Risk Management Policies and Procedures. The relevant operating mechanisms can be referenced in Section 3.4 Risk Management.

Nan Pao continues to monitor climate risks that may affect operations while also identifying opportunities that could provide potential benefits. The Company's assessment process for climate-related risks and opportunities, along with specific measures, is outlined in the following flowchart:

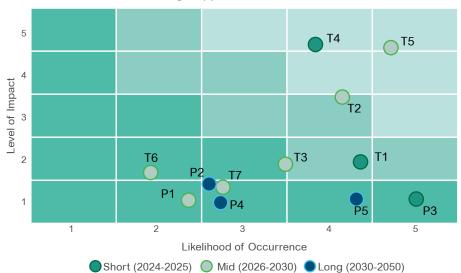
Climate-Related Risk and Opportunity Identification	Climate Risk Assessment	Materiality Determination	Risk Response Measures
Based on TCFD guidelines, international reports, and the company's characteristics, Nan Pao considers product applications, supply chains, mitigation and adaptation actions, new product and technology development, and production operations. The company has identified seven transitional risks, five physical risks, and five potential opportunities.	Risk assessment criteria, including likelihood of occurrence and potential impact, are incorporated into a questionnaire. Department heads score and determine the level of risk and opportunity.	<ul> <li>Thresholds for materiality are established based on the results of risk and opportunity analysis, and are presented in a risk and opportunity matrix.</li> <li>This year, there are three climate risks and three opportunities exceeding the threshold.</li> </ul>	For material climate risks and opportunities, departments and business units develop response measures and monitoring indicators, with regular follow-up conducted in accordance with the risk management process to ensure risk control and oversight.

To evaluate the potential impacts of climate change on the company's strategies and business objectives, Nan Pao has referenced research reports from the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC). Combining these insights with the company's current development direction, Nan Pao has developed two climate scenarios for analysis. The objective is to assess the possible impacts and challenges of climate change over time under different scenarios, thereby enhancing the company's resilience to climate risks and serving as a basis for adjusting future operating strategies and resource allocations.

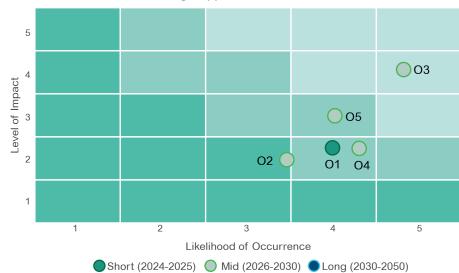
Value Chain	Risk/Opportunity Type	Selected Scenario	Timeframe	Analysis Scope
Raw Material	Transition Risk - Policy and Regulation	IEA-NZE		Taiwan
Suppliers	Physical Risk - Immediate	SSP5-8.5		Global
Government	Transition Risk - Policy and Regulation	IEA-NZE		Taiwan/Vietnam/ China
	Transition Risk - Technology	IEA-NZE		
Nan Pao	Opportunity - Resource Efficiency	IEA-INZE	2024–2050	Taiwan/Vietnam
Nall Pau	Physical Risk - Immediate	SSP5-8.5		raiwaii/vietilaiii
	Physical Risk - Long- Term	3375-0.5		
	Physical Risk - Market			Global
Customers	Opportunity - Products and Services	IEA-NZE		Global

### **Climate Change Opportunities and Risks Matrix**

### **Climate Change Opportunities and Risks Matrix**



## Climate Change Opportunities and Risks Matrix



	Transition Risks					
Code	Risk Type	Risk Issue				
T1	Existing Regulations	Increasing the use of renewable energy in response to customer demands, international initiatives, and reduction targets.				
T2	Emerging Regulations	Paying carbon taxes or purchasing certificates due to greenhouse gas emission regulations.				
Т3	Emerging Regulations	Fluctuations in upstream raw material prices due to carbon border adjustment mechanisms.				
T4	Technology	Product transformation to use low-carbon raw materials or process using electricity.				
T5	Market	Meeting customer requirements for value chain decarbonization targets.				
T6	Reputation	Negative publicity related to environmental issues.				
T7	Reputation	Stagnation in sustainability rating performance.				

		Physical Risks
Code	Risk Type	Risk Issue
P1	Immediate	Extreme weather events impact production facilities.
P2	Long-term	Sea-level rise inundates low-lying plant sites.
P3	Immediate	Extreme weather events disrupt supply chain scheduling.
P4	Long-term	Extreme heat impacts production processes, electricity consumption, and employee attendance.
P5	Immediate	Water scarcity impacts production processes.

	Opportunities					
Code	Opportunity Type	Opportunity Risk Issue				
01	Resource Efficiency	Improve solvent recovery efficiency in the production process.				
02	Energy Sources	Continuously develop or procure low-carbon energy.				
О3	Products and Services	Meet customer demands for low-carbon products.				
O4	Products and Services	Develop products that adapt to extreme weather conditions.				
O5	Market	Expand into the carbon fiber lightweighting market.				

## Financial Impact Analysis of Material Climate-related Risks and Opportunities

		• • • • • • • • • • • • • • • • • • • •			
Climate-related Risks and Opportunities	Scenario	Scenario Analysis Event	Impact on Nan Pao's Operations	Response Strategy	Management Indicators and Targets
T5 Transition Risk: Meeting value chain decarbonization targets required by customers		Customers are required to meet low-carbon targets and comply	Nan Pao currently meets the short- term targets of major customers; however, mid-term decarbonization targets set by major customers will increase significantly	Nan Pao continuously develops water-based green products and expands the use of low-	
O3 Opportunity: Meeting customer demand for low-carbon products		with sustainable product standards	Nan Pao is committed to replacing petroleum-based raw materials. Meeting customer demand for green products will enhance product competitiveness	carbon raw materials in the medium term	
T4 Transition Risk: Product transformation using low-carbon raw materials or electricity-based processes		Prices of bio-based raw materials are affected by land use and energy demand under high economic development scenarios, and prices may continue to rise	In the short to medium term, the impact from customer requirements and increased bio-based raw material costs is limited; however, in the long term, a substantial increase in bio-based raw material prices will impact cost expenditures	When developing new low- carbon products, Nan Pao will simultaneously expand green product sales channels to increase market share	<ul> <li>GHG Reduction:</li> <li>Complete ISO 14064-1 carbon inventory for Scope 1, 2, and 3 across all plants by 2027</li> <li>Reduce carbon emission</li> </ul>
T2 Transition Risk: Paying carbon fees or purchasing certificates due to greenhouse gas emission controls	Temperature rise of 1.5°C (IEA NZE)	Evaluate the impact of carbon fees and certificate prices at the plant locations	If Nan Pao's operational carbon emissions are subject to local carbon fees or certificate fees, production costs will be impacted     Since Nan Pao's upstream supply chain is carbon-intensive, a portion of raw material prices may be affected by carbon cost pass- through, impacting procurement costs	Production units will continue to promote energy-saving and carbon-reduction measures and plan to install renewable energy facilities     Collaborate with the supply chain to reduce carbon emissions, using large enterprises to assist smaller ones and lower value chain carbon fee risks	intensity by 10% by 2025  • Achieve carbon neutrality by 2050  • Renewable Energy Deployment:  • Installed renewable energy capacity of 2,500 kW completed by 2025  • Green Products:  • Use green product sales revenue as a tracking indicator; green product sales account for
O5 Opportunity: Developing the carbon fiber lightweight market		Under a low-emission scenario, the global electric vehicle market is growing year by year, and the automotive industry is moving towards lightweighting to reduce energy consumption. This trend will drive the carbon fiber lightweight market	Nan Pao has recently developed carbon fiber products and entered the automotive-related market, increasing revenue opportunities	Invest in the development and testing of lightweight application products to facilitate entry into emerging markets	72% of total revenue this year
O4 Opportunity: Developing products that adapt to extreme climate		To achieve net-zero, the construction sector promotes zero-carbon-ready buildings, driving the demand for insulation and energy-saving coatings	Revenue from Nan Pao's insulation and energy-saving coating products can seize opportunities from the replacement cycle of the construction market	Maintain stable operations in the insulation and energy- saving coating market, sustaining the advantage of product market share	

## Nan Pao Net Zero Roadmap

Since 2022, Nan Pao has implemented a comprehensive greenhouse gas (GHG) inventory process across all production facilities in accordance with the ISO 14064-1 standard. The company quantifies and analyzes carbon emissions from its operating plants, identifying key emission sources and assessing energy and resource consumption throughout its processes. Concurrently, Nan Pao has expanded the installation of renewable energy generation systems and, where appropriate, purchases renewable energy certificates. The company has launched and is actively implementing GHG reduction initiatives, while also exploring the feasibility of energy recycling and reuse projects.

Nan Pao is committed to achieving net-zero emissions by 2050. We have set a target to reduce Scope 1 and Scope 2 emissions by 90% compared to 2022, while continuously driving decarbonization efforts across our Scope 3 value chain. To fulfill this commitment, the Company is implementing a wide range of decarbonization initiatives.

#### Scope 1 Emission Reductions

The company has actively reduced direct greenhouse gas emissions by transitioning diesel-powered equipment to electric models. Additionally, we have implemented systems to recover waste heat from boilers and reintegrate it into our production processes, thereby reducing the use of natural gas.

#### Scope 2 Emission Reductions

To address indirect emissions from purchased electricity, we have upgraded plant equipment to energy-saving models and installed solar power generation systems on-site.

#### Scope 3 Emission Reductions

Scope 3 emissions account for approximately 90% of Nan Pao's total greenhouse gas emissions. Accordingly, we are committed to reducing emissions from purchased raw materials by prioritizing the use of bio-based or low-carbon materials to replace high-carbon-emission alternatives. We continuously develop and promote environmentally friendly, low-carbon, high-performance products and building solutions that align with sustainability goals.

For residual emissions, Nan Pao will adopt multiple neutralization and compensation measures, including the purchase of carbon credits and investments in permanent carbon removal technologies, to ensure full alignment with our 2050 net-zero commitment.

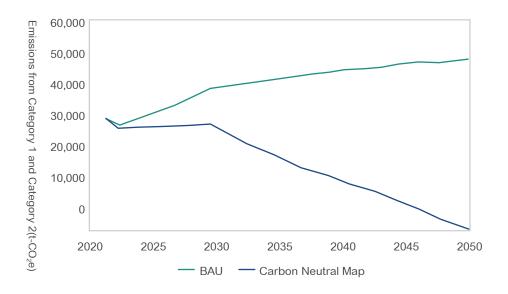
Nan Pao's medium- and long-term goals are to replace traditional fossil fuels with renewable energy and continuously innovate technology. Technological innovation relies on long-term research and development investments with external partners, which is expected to be gradually realized after 2030. Before then, to effectively manage GHG emissions, Nan Pao will continue to conduct comprehensive optimization of product processes.

## Nan Pao Internal Carbon Pricing Strategy

Nan Pao has adopted an internal carbon pricing mechanism. In line with Taiwan's Ministry of Environment's "Carbon Fee Act" and international recommendations, the Company has set an internal carbon shadow price of NT\$300 per metric tonne of CO<sub>2</sub>. This price applies to Scope 1 and Scope 2 emissions, and serves as an important reference for cost-benefit analysis, evaluating capital expenditures related to energy efficiency and emission reduction, and planning long-term net-zero strategies.

Through internal carbon pricing, Nan Pao systematically integrates climate-related risks and opportunities into business operations, covering areas such as energy efficiency improvement, low-carbon investments, risk assessment, decision-making, financial planning, and policy target setting, thereby guiding the Company's transition toward a low-carbon future.

#### Nan Pao Group Carbon Emissions Forecast



## **5.2** Greenhouse Gas Emissions and Management

#### **Management Systems and System Implementation**

- Conduct greenhouse gas (GHG) inventory in accordance with ISO 14064-1.
- · Regularly conduct GHG emissions inventory and report to the competent authority.
- Continue to promote indirect GHG emission inventory.
- Continue to pursue GHG reduction targets.

#### **Process Optimization and Technology Integration**

• Install solar power generation facilities.

#### **Active Cooperation with Government Policies**

· Increase the use of renewable energy.

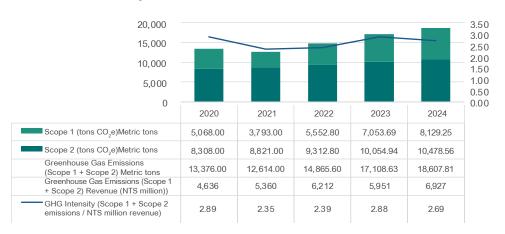
Nan Pao has committed to achieving net zero carbon emissions by 2050. The Company is progressively installing and procuring renewable energy to move toward this long-term goal. In 2023, the Group completed Scope 1 and Scope 2 GHG inventories covering all chemical manufacturing sites and obtained third-party verification certificates. Starting in 2025, the Group will begin Scope 3 GHG inventories across its global sites, with the aim of obtaining verification certificates and achieving 100% site coverage by 2027.

In 2024, Nan Pao formally incorporated environmental performance into the KPIs of senior management, with the following targets established:

Content	Target
GHG Emissions Intensity (Scope 1 + Scope 2)	5% reduction compared with 2023

In 2024, Nan Pao Taiwan reported total Scope 1 and Scope 2 GHG emissions of  $18,607.81~\text{tCO}_2\text{e}$ , an increase of  $1,499.18~\text{tCO}_2\text{e}$  compared with 2023. Although absolute emissions rose, revenue also grew during the same period. As a result, the Scope 1 and Scope 2 GHG emissions intensity decreased to 2.69 in 2024, representing a 5.94% reduction compared with 2023, thereby successfully achieving the annual reduction target.

#### **GHG Emission Intensity of Nan Pao Taiwan**



In conducting the Scope 3 to Scope 6 greenhouse gas inventory, the Company first identifies significant emission sources within the organization and evaluates their impact on overall carbon emissions, followed by systematic data collection and consolidation. In 2024, the primary emissions in this category came from upstream raw material usage, particularly chemical inputs with high carbon emission factors.

To further control emissions from direct raw materials, the R&D division actively promotes the development of low-carbon formulations. This includes reducing the proportion of solvent-based substances in products, prioritizing the use of recycled and bio-based raw materials, and continuously optimizing production processes. These efforts aim to reduce reliance on high-carbon raw materials, lower the carbon footprint across the product life cycle, and enhance emission reduction performance throughout the supply chain.

## Nan Pao Taiwan – 2024 Greenhouse Gas (GHG) Protocol Category 3 to 6 Emissions

	GHG Protocol		En	nissions (tonnes C0	CO <sub>2</sub> e)	
Item	Protocol Category	Description	2022	2023	2024	
		Category 3: Indirect GHG emissions from the value chain				
Upstream transportation and distribution of goods	4	Transportation emissions from purchasing raw materials and consumables	750.15	1,245.80	1,228.55	
Downstream transportation and distribution of goods	9	Excluded due to the lack of a reasonable methodology and information collection platform based on the materiality criteria for indirect emissions	-	-	-	
Employee commuting	7	Emissions associated with employees commuting to and from work, including transportation from home to the workplace	305.26	319.61	353.97	
Customer and visitor transportation	-	Relevant, but data and information are difficult to obtain, so it is not included in the calculation	-	-	-	
Business travel	6	Relevant, but data and information are difficult to obtain, so it is not included in the calculation	-	-	-	
		Category 4: Indirect GHG emissions from the use of purchased products				
Emissions from purchased goods - energy	3	Emissions from raw materials, fuels, and energy production consumed by the plant (not	-	-	-	
Emissions from purchased goods - materials	1	included in scope 1 and 2)	98,946.79	163,253.61	176,351.30	
Emissions from capital goods	2	No large-scale asset expansion activities	-	-	-	
Emissions from the disposal of solid and liquid waste	5	Emissions from the outsourcing of transportation and disposal of waste generated during the production process at the plant	347.04	322.09	618.08	
Emissions from asset use	8	Not applicable. Nan Pao does not have any leasing activities with upstream suppliers.	-	-	-	
Emissions from the use of other services	-	Relevant, but data and information are difficult to obtain, so it is not included in the calculation	-	-	-	
		Category 5: Indirect GHG emissions from the use of sold products				
Emissions from the use stage of products	10 \ 11	Excluded due to the lack of a reasonable methodology and information collection platform	-	-	-	
Emissions from the end-of-life stage of products	12	based on the materiality criteria for indirect emissions	-	-	-	
Emissions from assets leased by downstream	13	Not applicable, products are not leased to downstream users	-	_	-	
Emissions from investments	14 \ 15	Subsidiaries calculate and report their own results	-	-	-	
		Total	100,349.23	165,141.11	178,551.89	

#### Greenhouse Gas Emission Intensity Information of Nan Pao Group in 2024

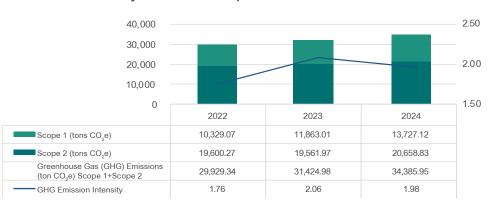
	Taiwan	Foshan(CN)	Foshan Advanced(CN)	Dongguan(CN)	Dongguan Jia-Chin(CN)	Kunshan(CN)	Fuqing(CN)	VNNP(VN)	NP Materials(VN)	NP advanced materials(VN)	NNV(VN)	Indonesia	Thailand	Total emission of Nan Pao manufacturing factories
Scope 1 (metric tonne of CO <sub>2</sub> e)	8,129.25	680.79	1,859.94	394.71	12.90	79.59	74.75	822.84	1,140.08	186.00	138.78	163.87	43.62	13,727.12
Scope 2 (metric tonne of CO₂e)	10,478.56	1,265.50	2,387.93	521.87	501.73	421.48	138.23	1,639.77	1,716.49	215.00	950.84	346.02	75.41	20,658.83
Total emission of Scope1~2 (metric tonne of CO <sub>2</sub> e)	18,670.81	1,946.29	4,247.87	916.58	514.63	501.07	212.98	2,462.61	2,856.57	401.00	1,089.62	509.89	119.03	34,385.95
ISO 14064-1 Assurance	•	•	•	•	•	•	•	•	•	•	•	•	In progress	-
Scope 3 (metric tonne of CO <sub>2</sub> e)	1,582.52	4,603.17	9,746.92	959.09	123.96	1,036.66	548.48	434.56	728.95	596.00	182.21	268.13	7.39	20,818.04
Scope 4 (metric tonne of CO <sub>2</sub> e)	176,969.38	76,682.12	130,893.86	15,518.46	6,753.17	13,521.00	13,108.80	44,877.22	65,002.04	22,532.00	5,802.65		713.40	572,369.10
Total emission of Scope1~4 (metric tonne of CO₂e)	197,159.71	83,231.58	144,888.65	17,394.13	7,391.76	15,058.73	13,865.26	47,774.39	68,587.56	23,529.00	7,074.48	778.02	839.82	627,573.09
Scope 5 Emissions (tCO <sub>2</sub> e)	-	-	20,003.74	-	-	-	-	-	-	-	-	-	-	20,003.74
Total Emissions (Scope 1–5, tCO <sub>2</sub> e)	197,159.71	83,231.58	164,892.39	17,394.13	7,391.76	15,058.73	13,865.26	47,774.39	68,587.56	23,529.00	7,074.48	778.02	839.82	647,576.83

Note 1: The greenhouse gas (GHG) emission factors used for the GHG inventory are primarily based on the "Greenhouse Gas Emission Factor Management Table Version 6.0.4" announced by Taiwan's Environmental Protection Administration (EPA).

Note 2: The global warming potential (GWP) values adopted for calculations are based on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (2013).

Note 3: Nan Pao Taiwan uses the operational control approach to consolidate Scope 1 and Scope 2 GHG emissions across all production sites. The GHGs included in the inventory cover carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride.

#### **GHG Emission Intensity of Nan Pao Group**



In 2024, Nan Pao Group's total Scope 1 and Scope 2 greenhouse gas emissions reached 34,385.95 tons  $CO_2e$ , representing an increase of 2,960.97 tons  $CO_2e$  compared with 2023. The rise in emissions was primarily due to significant business growth during the year, which led to higher energy and resource consumption.

Although revenue also increased compared with the previous year, the Group's Scope 1 and Scope 2 GHG emission intensity decreased to 1.98 in 2024, a 3.88% reduction from 2023. However, this result fell short of the annual reduction target of 5%.

# **5.3** Energy Management

#### **Management System and Frameworks**

- Implement the ISO 50001 Energy Management System.
- · Optimize management systems and energy conservation; incorporate performance into incentive programs

#### **Process Optimization and Technology Integration**

- Automated energy management.
- Promote energy-saving and carbon reduction projects.

#### **Active Cooperation with Government Policies**

 Comply with the Renewable Energy Development Act: regulations on green power installation and procurement.

At each of Nan Pao's operational sites, an interdisciplinary Energy Management Review Committee—convened by the subsidiary general managers—has been established to regularly review energy consumption, formulate energy-saving strategies, and track the performance of energy-saving projects. The committee is supported by a set of policies and guidelines aligned with the energy team's strategic direction, ensuring the effective implementation of energy-saving initiatives. It also provides detailed project information to facilitate the committee's evaluations.

Nan Pao has integrated smart meters and a centralized management platform across its plants, enabling on-site personnel to monitor the energy usage of individual equipment in real time. By leveraging data analytics on the platform, the company continuously reviews and optimizes processes, enhancing energy integration, reducing unnecessary consumption, and ultimately improving energy efficiency.

Looking ahead, Nan Pao will continue to deploy expert teams to conduct on-site assessments and provide guidance to its facilities, identifying key areas for improvement and assisting with recommended actions. This "leading plant mentoring smaller plants" approach aims to enhance the overall ecological benefits throughout the supply chain.

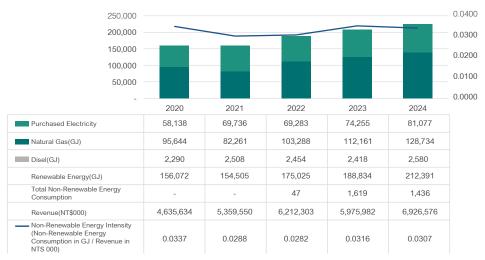
Nan Pao's current energy management strategies focus on:

- 1. Automated energy management;
- 2. Promotion of energy-saving and carbon-reduction projects;
- 3. Optimization of management systems and integration of energy-saving performance into incentive programs.

Since 2025, Nan Pao has also incorporated environmental performance into the KPIs of senior managers. The non-renewable energy consumption target is outlined as follows:

Item	Target
Non-renewable energy consumption intensity	Reduce by 5% compared to 2023

#### Nan Pao Taiwan Energy Consumption



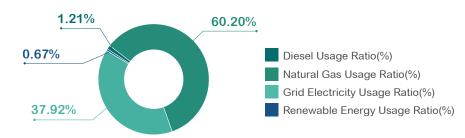
Note 1. The natural gas and diesel consumption data for 2020–2023 were recalculated in the current year based on the calorific values of energy products published by the Energy Administration, Ministry of Economic Affairs for each respective year. This resulted in differences in the calculation of non-renewable energy intensity compared with previous periods.

Note 2. In 2020, the energy usage calculation scope included Plant 1, Baoli Plant, and Plant 5. Starting from 2021, the scope was expanded to include the Main Plant, Headquarters Building, Carbon Fiber Plant, and regional liaison offices.

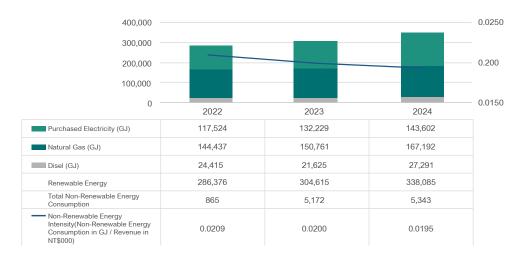
In 2024, Nan Pao recorded a total non-renewable energy consumption of 212,391 GJ, an increase of 23,557 GJ compared with the previous year. Although absolute energy consumption rose, the non-renewable energy intensity decreased by 2.85% from 2023 due to concurrent revenue growth.

Since 2023, the Company has required each department to establish its own carbon reduction projects, with progress tracked on a monthly basis to continuously monitor results. To further strengthen accountability and effectiveness, starting in 2025, the environmental performance of reducing non-renewable energy consumption will be formally incorporated into the KPIs of senior management, thereby driving improvements in energy efficiency and reducing carbon emissions.

#### Nan Pao Taiwan Energy Usage Ratio



#### Nan Pao Group's Energy Consumption Information for 2024



In 2024, Nan Pao Group recorded a total non-renewable energy consumption of 338,085 GJ, an increase of 33,470 GJ compared with the previous year. Although revenue grew during the year, non-renewable energy intensity decreased by 2.50% from 2023.

To address fluctuations in non-renewable energy intensity and meet the ongoing demand for energy conservation and carbon reduction, the Group has, since 2022, actively invested in the installation of on-site renewable energy generation facilities to reduce reliance on non-renewable sources. In 2024, the Group's renewable energy consumption increased by 171 GJ, representing a 3.31% growth compared with the previous year. Looking ahead, the Group will continue to identify suitable sites for renewable energy projects, expand generation capacity, and further increase the proportion of renewable energy in its energy mix to improve energy structure and reduce carbon emissions.

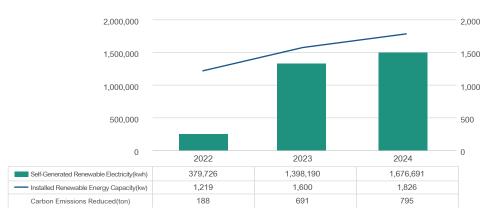
## Renewable Energy

GHG inventory results indicate that Scope 1 and Scope 2 emissions mainly come from purchased electricity. To reduce carbon emissions, the Company has been advancing the installation of rooftop solar power systems at its plants in Taiwan (Nan Pao Taiwan), Foshan (China), Ninh Binh (Vietnam), and Thailand. In addition, since August 2023, the Indonesia plant has begun purchasing renewable energy certificates (RECs), with a cumulative procurement of 570,000 kWh of renewable electricity by the end of 2024.

As of 2024, Nan Pao Group has installed a cumulative renewable energy capacity of 1,826 kW, with a target of reaching 2,500 kW by 2025. In 2024, the Group's self-built and self-used renewable energy facilities generated a total of 1,676,691 kWh, representing an increase of 278,501 kWh or 19.92% compared with 2023 (1,398,190 kWh). This generation was equivalent to a reduction of approximately 795 tons of  $CO_2$  emissions.

The Group will continue to assess and identify suitable sites across its plants to further expand and optimize renewable energy installations.

#### Nan Pao Group Self-Generated Renewable Energy Consumption









## Power Stabilization and Optimization Project

In 2023, Nan Pao Taiwan implemented a voltage stabilization project as part of its purchased electricity reduction plan. This voltage stabilizing equipment helps to regulate the entire plant's voltage, aligning power usage to the optimal range. As a result, it improves the operational efficiency of equipment while preventing power quality issues and avoiding energy waste caused by excessive voltage fluctuations.

Starting in 2024, Nan Pao Taiwan completed the installation of Advanced Metering Infrastructure (AMI) smart meters, voltage stabilizers, and an energy management system at 1st plant. This initiative has achieved an annual energy savings rate of 5.38%, reducing carbon emissions by 173 metric tons annually. Similar installations are planned at the Baoli Plant and 5th Plant, with anticipated energy savings rates exceeding 12% per year after completion. It is estimated that these installations will reduce monthly electricity consumption by approximately 33,000 kWh and cut annual carbon emissions by 196 metric tons.

The AMI power management platform enables electricity data monitoring, statistical analysis, and historical recording, while supporting remote real-time inquiry and alert functions to prevent equipment damage caused by delays. Through this system, the project achieves three major benefits: energy conservation (reducing electricity consumption), carbon reduction (lowering CO<sub>2</sub> emissions), and power stabilization (improving equipment utilization and operational reliability).



Photo: AMI platform

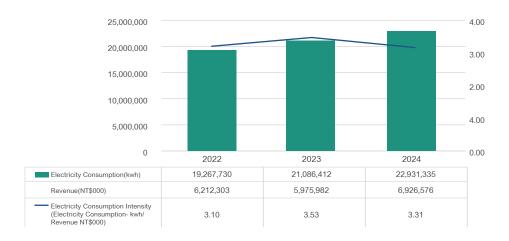


Photo: Energy Management Platform

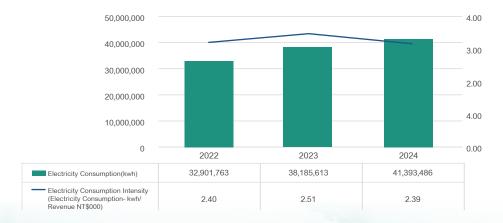


Photo: Energy Saving System

#### **Electricity Consumption Intensity of Nan Pao Taiwan**



#### **Electricity Consumption Intensity of Nan Pao Group**



In 2024, Nan Pao Taiwan recorded a total electricity consumption of 22,931,335 kWh, an increase of 1,844,923 kWh or 8,75% compared with 2023. Despite the rise in absolute consumption, electricity intensity decreased by 6.23% year-on-year due to revenue growth.

At the Group level, Nan Pao 's total electricity consumption in 2024 reached 41,393,486 kWh, an increase of 3,207,873 kWh or 8.40% compared with 2023, while electricity intensity also decreased by 4.78%.

The Company will continue to enhance energy efficiency and work toward a more sustainable operating model.

## **Energy Conservation Initiatives at Each Plant**

Nan Pao's decarbonization strategy focuses on two key areas: transitioning to lowcarbon energy sources and improving energy efficiency in its processes. In 2024, energy-saving projects were implemented across the Group's various plants, alongside the continuous deployment of energy management systems to enhance overall energy performance.

Region	Implementation Measures
Taiwan	Installed voltage stabilizers to protect equipment and reduce power consumption. Implemented smart energy-saving measures, targeting a monthly electricity consumption reduction of 10%.
Vietnam	Replaced industrial fans and air compressors with pneumatic fans. Converted fixed-speed units to variable-frequency drives (VFDs), improving operation by reducing full-load running time to about 10 hours per day, with an estimated monthly energy savings of 5%.
Taiwan, Indonesia	Upgraded chillers with new high-efficiency models. In Taiwan, replaced air-cooled chillers with energy-saving water-cooled chillers, achieving a monthly electricity consumption reduction of 10%. In Indonesia, planned replacement of chillers with new VFD chillers, utilizing variable compressors to achieve approximately 20% electricity savings annually, reducing carbon emissions by around 4.35 metric tons per year.
Indonesia	Installed solar-powered street lights in the plant area to save electricity and reduce energy consumption, achieving an annual electricity savings of approximately 3,600 kWh and a reduction in carbon emissions by approximately 12.55 metric tons per year.



## **5.4** Water Resources

#### Water Resources Risk Assessment

To effectively monitor water-related risks across its global facilities, Nan Pao has adopted the World Resources Institute's (WRI) Water Risk Assessment Tool (Water Aqueduct). This tool, combined with an understanding of each plant's actual management practices, forms the basis for water risk response plans at Nan Pao's major sites in Taiwan. The risk management plans address two primary hazards: heavy rainfall and water scarcity.

#### **Environmental Sustainbility Strategies and Management approaches**

- In 2022, the Taiwan headquarters implemented the ISO 46001 Water Efficiency Management System
- Stepwise water recycling and reuse
- Rainwater storage and reuse
- Water quality monitoring and spill prevention
- Water consumption reduction and recycling

#### **Supply Chain Collaboration**

· Collaboration with brand customers to review water-saving performance

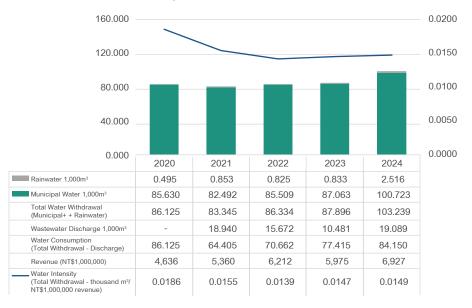
### Water Withdrawal and Reuse

Nan Pao has long focused on energy conservation and environmental protection related to water resources. The company's three main strategies for water resource use are reduction, reuse, and recycling. Nan Pao has implemented a systematic water efficiency management approach in line with ISO 46001, which provides a structured framework for monitoring and improving water use efficiency. Through this system, we conduct regular water use assessments to review consumption patterns, identify activities and processes with significant water use, and evaluate opportunities for conservation and reuse. Data collection, performance indicators, and continuous reviews are used to enhance water efficiency, reduce consumption, and support sustainable water resource management. In water-saving projects, efforts begin with promoting water conservation in daily operations, aiming to maximize the efficiency of available water resources. As of 2024, the headquarters (Nan Pao Taiwan) has completed the implementation of the ISO 46001 Water Efficiency Management System and received third-party certification.

Starting from 2024, Nan Pao has formally included environmental performance in the KPIs of senior managers. The water withdrawal target is set as follows:

Item	Target Value
Water Withdrawal	8% reduction compared to 2023

#### Nan Pao Taiwan Water Consumption



In 2024, Nan Pao Taiwan recorded a total water withdrawal of 103.239 thousand cubic meters, an increase of 15.343 thousand cubic meters or 17.46% compared with 2023. Although annual revenue also grew during the same period, water intensity rose slightly by 1.36%, failing to meet the originally set annual target.

In recent years, extreme climate events have caused instability in water supply, often leading to conflicts between industrial and domestic water demands. To address these challenges, Nan Pao has implemented both water conservation and diversification measures, continuously improving water treatment systems and enhancing process water efficiency. The Company also emphasizes wastewater recycling and reuse. Examples include the recovery of effluent discharge, rainwater harvesting, steam condensate recovery, and cooling water recovery from heat exchangers, which together increase water reuse rates across plants.

## Water Sources

The main water sources at each plant include groundwater, tap water, and industrial water. When planning water withdrawals, the company considers government policies, corporate development, industrial changes, and the water resource needs of neighboring communities. For example, the company collaborates with competent authorities to establish groundwater extraction points at the plant sites, enabling local residents to access water during droughts. This ensures the rational, efficient management, allocation, and utilization of water resources, and the water withdrawal volume and methods do not cause significant negative impacts on local ecosystems or surrounding residents.

## Group Water Withdrawal and Response Measures in Water-Stressed Areas

Climate change has altered water resource conditions, making water quantity and quality critical global issues. Nan Pao has identified facilities located in water-stressed areas; based on the publicly available and reliable tool—the World Resources Institute's Aqueduct Water Risk Atlas—many of the company's facilities in China and Southeast Asia are situated in water-stressed regions. Although water stress has not affected the operation of these facilities, Nan Pao has strengthened its water resource management and set water management targets to reduce withdrawal in these areas. The company is committed to understanding and responding to the social and environmental impacts in these regions, working together to protect precious water resources.

	ltem	Taiwan	Foshan (CN)	Foshan Advanced (CN)	Dongguan (CN)	Dongguan Jia-Chin (CN)	Kunshan (CN)	Fuqing (CN)	VNNP (VN)	NP Materials (VN)	NP advanced materials (VN)	NNV (VN)	Thailand	Indonesia	Total
	vater extraction Ilion liter)	-	-	-	10.357	10.357	-	0.000	-	-	-	-	-	11.000	31.714
	unicipal water (Million liter)	100.723	50.549	8.928	-	-	12.200	-	60.880	18.467	0.750	10.652	2.539	-	265.688
Rain wat	er (Million liter)	2.516	-	-	-	-	-	-	-	-	-	-	-	0.056	2.572
	ater withdraw illion liter)	103.239	50.549	8.928	10.357	10.357	12.200	0.000	60.880	18.467	0.750	10.652	2.539	11.056	299.974
	ater discharge Illion liter)	19.089	0.000	1.511	0.460	1.997	0.000	0.000	21.961	14.467	0.122	8.521	2.031	0.000	70.159
	consumption Illion liter)	84.150	50.549	7.417	9.897	8.360	12.200	0.000	38.919	4.000	0.628	2.131	0.508	11.056	229.815
	Chemical Oxygen Demand (COD)	32.7	75	-	90	-	19	-	77.5	32	12.5	44.5	295.66	55	
Effluent Water Quality	Biochemical Oxygen Demand (BOD)	<1	23.7	-	20	-	1.1	-	27.75	10.05	4.7	17.5	52.57	9.99	
	Suspended Solids (SS)	8.2	5	-	60	-	19	-	33.25	19	18	16.25	-	12.6	
	Ammonia	0.19	0.495	-	10	-	0.8	-	-	6.7	5.88	1.665	-	0.0031	
	Phenols	0.87	-	-	-	-	-	-	-	-	1.44	10.35	-	0.03	

Note 1: Each plant has different process characteristics and emission standards, so the water quality treatment and standard comparison will vary for each plant.

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

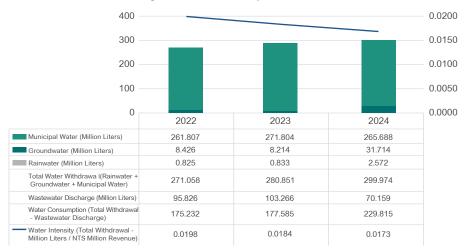
Note 3: The average discharge concentration is based on the reported testing data.

Note 4: The Chemical Oxygen Demand (COD) discharge standard and target are set at 100, following the Taiwan Environmental Protection Administration's regulations for the chemical industry.

Note 5: According to the WRI Aqueduct Water Risk Atlas, Nan Pao's operations located in water-stressed areas include the Kunshan site, all plants in Vietnam, as well as facilities in Thailand and Indonesia. The combined net water consumption of these sites amounts to 69.442 million liters.

Note 6: Over the past four fiscal years, Nan Pao has not experienced any incidents such as water supply interruptions leading to production shutdowns

#### Water Withdrawal Intensity of Nan Pao Group



In 2024, Nan Pao Group recorded a total water withdrawal of 299.974 million liters, an increase of 19.123 million liters (6.81%) compared with 2023 (280.851 million liters). The primary reason was the continued growth in production, which drove higher process water demand.

Although total water withdrawal increased, overall revenue also reached a new high, resulting in a 5.98% decrease in water withdrawal intensity. However, the Group did not achieve the 8% reduction target set for 2024.

## Wastewater Management

Rivers play a critical role in water resource supply and provide essential habitats for diverse flora and fauna. Wastewater generated by Nan Pao undergoes chemical treatment, biological (activated sludge) treatment, and MBR membrane treatment, and complies with regulatory discharge standards before being released into water bodies approved by environmental authorities. Daily monitoring and mandatory periodic inspections are conducted in accordance with stakeholder requirements (e.g. bluesign®), ensuring that environmental protection is an integral part of Nan Pao's overall environmental program and its commitment to sustainability.

Nan Pao's wastewater management involves daily routine wastewater quality (COD) testing by the company's internal environmental laboratory, strengthening the monitoring and management of wastewater quality to ensure compliance with standards that are stricter than regulatory requirements (COD <100 mg/L).

In addition, semi-annual external sampling and testing of wastewater quality is conducted to comply with regulatory requirements and stakeholder expectations, including heavy metals testing and zebrafish egg toxicity testing. All test items are below regulatory limits to ensure that wastewater discharge does not adversely impact the ecological environment of nearby water bodies.

## Water-Related Compliance Records of Nan Pao Resins Group in 2024

In September 2024, Nan Pao Taiwan was fined NT\$420,000 at the Bao-Li Plant for violations of Article 7, Paragraph 1 of the Water Pollution Control Act and Article 2 of the Effluent Standards, as the plant's effluent did not meet the discharge standards for the chemical industry. Nan Pao Resins has taken the case seriously, implemented follow-up corrective actions, and strengthened effluent monitoring and testing measures.

Unit: NT\$ thousand

	Description	Penalty Amount	Corrective Actions	Expenses Incurred
Date of Penalty	2024.09.19			
Case No.	Environmental Water Penalty No. 113090259		Modified water treatment system by connecting existing effluent tanks (T01-	
Violated Regulations	Article 7, Paragraph 1 of the Water Pollution Control Act and Article 2 of the Effluent Standards; penalty imposed in accordance with Article 40, Paragraph 1 of the same Act and relevant penalty guidelines.	NT\$420,000	<ul><li>25 and T01-19) for sequential inspection before discharge.</li><li>2. Changed effluent discharge method from automatic to manual operation.</li></ul>	NT\$400,000
Violation Details	Chemical Oxygen Demand (COD): 508 mg/L (Standard: 100 mg/L); Biochemical Oxygen Demand (BOD): 147 mg/L (Standard: 30 mg/L). Effluent discharge did not comply with chemical industry standards.		·	

## **5.5** Air Pollution Prevention

#### **Environmental Sustainability Strategies and Management approaches**

- Regularly monitor air pollutant emissions and report to the competent authorities
- Air pollution prevention advocacy
- Regular training of management personnel and acquisition of relevant certificates

#### **Process Optimization and Technology Integration**

· Switch to natural gas boilers

#### **Supply Chain Cooperation**

- Develop low-VOC chemicals in response to customer needs
- Ensure air pollutant emissions meet the requirements of REACH, bluesign, and ZDHC certification bodies

#### **Active Cooperation with Government Policies**

• Implement contingency measures in accordance with government-announced air quality measures

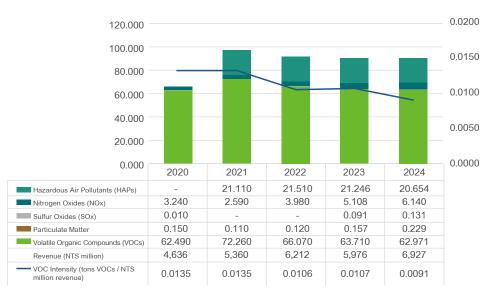
### Air Pollutant Emissions

Nan Pao Group's air pollution control efforts primarily target toluene, xylene, total VOCs, non-methane hydrocarbons, and particulate pollutants. For exhaust gas management, pollutants are classified by their characteristics, collected through enclosed systems or hoods, and then treated using appropriate equipment such as bag filters, condensation recovery systems, etc., to ensure compliance with emissions standards. To further reduce pollutant emissions, the company actively optimizes production processes at the source and continues to introduce high-efficiency pollution control equipment. Since 2020, Nan Pao Foshan has utilized a regenerative thermal oxidizer (RTO) for high-temperature decomposition and energy recovery to treat VOCs. In 2022, Nan Pao Taiwan implemented a regenerative catalytic oxidizer (RCO), along with scrubbers and condensation systems, to enhance the collection and reduction of volatile organic compounds. Through a combination of pollution prevention measures, the company is dedicated to minimizing the environmental impact of air pollutant emissions.

Starting in 2024, Nan Pao Group has formally incorporated environmental performance into the KPIs of senior managers. The air pollutant reduction target is as follows:

Item	Target Value
VOCs	5% reduction compared to 2023

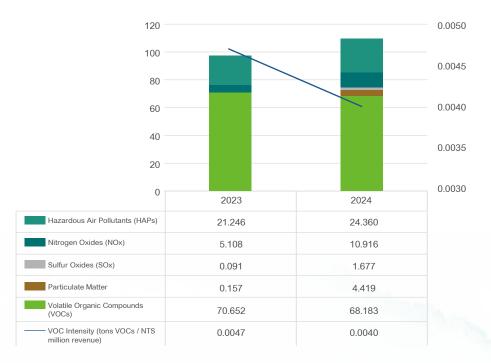
#### Air Pollutant Emissions at Nan Pao Taiwan in 2024



Note: Since 2021, the Environmental Protection Administration (EPA) has promulgated the "Emission Standards of Hazardous Air Pollutants from Stationary Pollution Sources" to control HAPs emissions. Nan Pao Taiwan follows the EPA standards and has been reporting HAPs emissions annually starting from 2021. All Nan Pao Taiwan sites have no production, import, export, or emission of any ozone-depleting substances (ODS).

In 2024, Nan Pao Taiwan recorded volatile organic compounds (VOCs) emissions of 62.971 metric tons, a reduction of 0.739 metric tons (-1.16%) compared with 2023. The VOC intensity was 0.0091, representing a 14.95% decrease year-on-year. This reduction was primarily attributable to the Company's adoption of the regulatory authority's recommendation in 2024 to exclude externally purchased raw materials from the calculation of input quantities, thereby lowering the estimated VOC emissions.

#### **VOC Emission Intensity of Nan Pao Group**



In 2024, Nan Pao Group recorded volatile organic compounds (VOCs) emissions of 68.183 metric tons, a reduction of 2.469 metric tons (-3.49%) compared with 2023. The VOC emission intensity was 0.0040, representing a 14.89% decrease year-on-year, successfully achieving the annual target of a 5% reduction compared with 2023.

The decline in emissions was primarily due to the recalculation of VOC emissions at Nan Pao Resins Taiwan, as well as the installation of new exhaust gas treatment equipment at Vietnam Advanced Materials, which further improved treatment efficiency.

Considering variations in production volume and product pricing, the Group achieved significant improvements in 2024 but will continue to adopt a prudent advancement strategy in 2025. A new target has been set to reduce VOC emission intensity by 10% compared with 2023, with ongoing efforts to strengthen process management and pollution control to minimize environmental impact.



# **5.6** Waste Management

#### **Environmental Sustainability Strategies and Management approache**

- Waste reduction at source
- Waste classification and categorization, recycling and reuse
- Sale of valuable waste to external contractors for recycling and reuse
- Outsourcing of non-valuable waste to qualified vendors for disposal

#### **Process Optimization and Technology Integration**

· Installation of sludge treatment equipment

#### **Supply Chain Cooperation**

- Strict review of waste disposal vendor information
- Collaboration with customers to recycle and reuse packaging material

Nan Pao is committed to avoiding the use of prohibited substances and raw materials, while actively promoting waste reduction and circular utilization. In selecting raw materials and suppliers, the Company adopts a rigorous and cautious management approach, continuously seeking technological improvements or environmentally friendly alternatives. At the same time, Nan Pao complies with all environmental regulations and customer requirements related to its business, products, and services, striving to achieve — and even exceed — established environmental goals.

Nan Pao conducts regular waste audits to evaluate the amount and type of waste generated across operations. The audits identify spent solvents as the Company's primary waste stream. By reviewing waste generation data and segregation practices, the audits help pinpoint opportunities to reduce volumes, increase recycling, and ensure proper treatment and disposal. Findings are integrated into our waste management program to drive continuous improvement and minimize environmental impact.

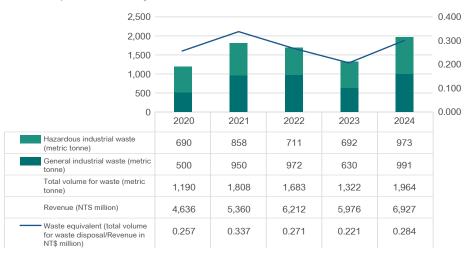
In 2024, environmental performance was formally incorporated into the KPIs of senior management, with specific targets set as follows:

Item	Target Value
Waste Disposal Intensity	5% reduction compared with 2023

In 2024, Nan Pao Taiwan recorded a total waste disposal volume of 1,964 metric tons, an increase of 642 metric tons (48.56%) compared with 2023. The waste disposal intensity was 0.284, representing a 28.51% increase year-on-year, and thus the target of a 5% reduction compared with 2023 was not achieved.

The primary reason was the centralized treatment of accumulated waste from previous years in 2024, which temporarily impacted the intensity indicator.

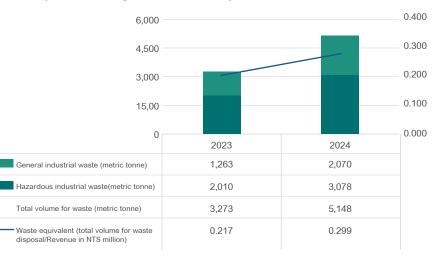
#### Waste Disposal Summary - Nan Pao Taiwan



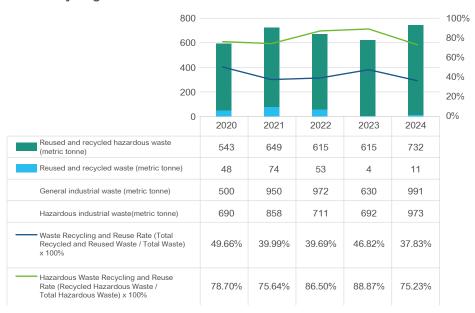
In 2024, Nan Pao Group recorded a total waste disposal volume of 5,148 metric tons, an increase of 1,875 metric tons (57.29%) compared with 2023. The waste disposal intensity was 0.299, representing a 37.79% increase year-on-year, and thus the target of a 5% reduction compared with 2023 was not achieved.

The primary reason was the centralized treatment of accumulated waste from previous years during 2024, which temporarily affected the intensity indicator.

#### Waste Disposal Intensity of Nan Pao Group



#### Waste Recycling and Reuse - Nan Pao Taiwan



#### Waste Recycling and Reuse - Nan Pao Group



The Company adopts "total waste reduction" and "waste resource utilization" as its primary waste management strategies. Through process optimization and raw material reduction measures at the source, Nan Pao is committed to lowering overall waste generation while increasing waste recycling and reuse rates.

In 2024, Nan Pao Taiwan achieved significant progress in waste resource utilization, with a total of 743 metric tons of waste recycled and reused, representing an increase of 124 metric tons (20.03%) compared with 2023. For the Nan Pao Group, the total amount of waste recycled and reused in 2024 reached 2,116 metric tons, an increase of 874 metric tons (142.11%) from 2023. Among this, hazardous waste recycling and reuse totaled 1,554 metric tons, with the recycling rate rising from 37.11% to 50.49%. Meanwhile, non-hazardous waste recycling and reuse reached 562 metric tons, with the recycling rate improving from 10.13% to 27.15%, reflecting a clear shift of waste management toward resource utilization.

In response to the one-time impact of waste disposal intensity in 2024, the Company will adjust its management focus in 2025 to strengthening resource circulation. The new target is to increase the recycling and reuse rate of hazardous waste by 5% compared with 2023, continuing to promote waste reduction and sustainable management.

2025 Target for Hazardous Waste Recycling and Reuse:

Indicator	Target
Ratio of Hazardous Waste Recycling and Reuse to Total Hazardous Waste	5% increase compared with 2023

## Hazardous Waste Management

Hazardous waste generated within the Company primarily consists of waste solvents and containers used for hazardous chemicals. These are entrusted to qualified waste disposal contractors that have been certified by the national environmental protection authority. In addition to outsourcing to licensed contractors in full compliance with relevant regulations and obtaining official disposal certificates, the Company also uses a GPS vehicle tracking system to monitor transportation routes and the final disposal sites of hazardous waste.

Environmental staff members conduct random on-site inspections, either accompanying transport vehicles or visiting contractors directly, to ensure that all hazardous waste is properly handled and does not create additional environmental burdens or pollution risks. All entrusted disposal activities are reported in accordance with regulatory requirements, covering waste receipt, removal, and final treatment.

#### **Group Waste Management Performance Indicators**

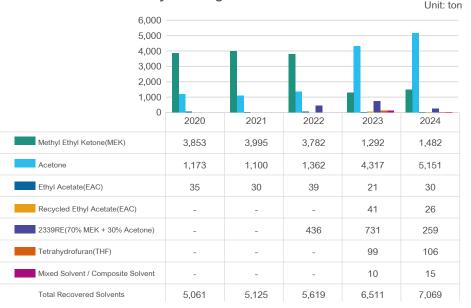
Performance Indicators	Unit	2023	2024
Waste Disposal per Unit of Revenue		0.217	0.299
Non-Hazardous Waste Disposal per Unit of Revenue	Metric tons of waste disposed / NT\$ million revenue	0.084	0.120
Hazardous Waste Disposal per Unit of Revenue		0.133	0.179

## Solvent Recovery

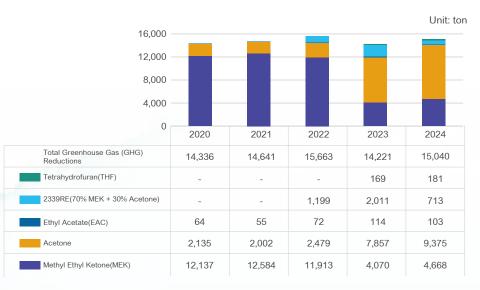
The company recovers waste solvents produced in the water-based PU manufacturing process through distillation and reuses them in the process (acetone). Other chemicals generated from solvent distillation recovery (MEK) can also be sold to customers, thereby improving resource efficiency and operational performance while implementing a circular economy for waste.

In 2024, Nan Pao Taiwan's total volume of recovered solvents was 7,069 metric tons, an increase of 558 metric tons (8.57%) compared to 2023. Through solvent recovery and reuse, the company not only reduced chemical raw material procurement costs but also reduced carbon dioxide emissions by 15,040 metric tons in 2024, a reduction of 819 metric tons (-5.76%) compared to 2023.

#### Nan Pao Taiwan Solvent Recycled Weight



### Carbon Reduction Achievements from Solvent Recycling – Nan Pao Taiwan

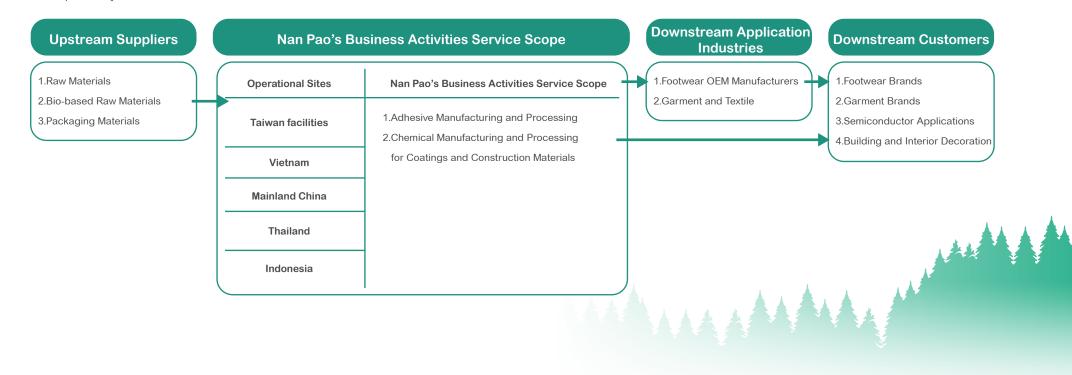


# **5.7** Biodiversity Protection

All of Nan Pao's production sites are located within industrial development zones approved by local governments; none of the sites are situated in biodiversity protection areas or sensitive habitats. Additionally, no International Union for Conservation of Nature (IUCN) endangered species or species listed on national conservation lists have been identified at these sites. During the planning stages, the company proactively evaluates relevant environmental regulations and is committed to avoiding any negative impact on biodiversity from its operations. Pollution control equipment has also been installed to enhance treatment efficiency and reduce environmental impact.

Furthermore, Nan Pao has established a <u>Biodiversity Policy</u>, implementing management measures from the perspectives of prevention, mitigation, and monitoring, while encouraging and engaging supply chain partners to participate and support these efforts.

Nan Pao further refers to the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), integrating the ENCORE assessment tool and local and international species and protected area databases to analyze the company's dependence and impact on natural capital. Using the LEAP methodology, Nan Pao systematically assesses its interactions with natural capital, thereby strengthening its ability to address nature-related risks and seize opportunities, promoting harmonious coexistence with nature, and continuing to contribute positively to a sustainable future.



Nan Pao has conducted a preliminary identification of the natural footprint and potential risk sources associated with its operational sites and various stages of its value chain, following the LEAP (Locate, Evaluate, Assess, Prepare) methodology. This assessment encompasses upstream suppliers (such as chemical raw material and packaging material suppliers) as well as Nan Pao's own operations (including the production, storage, and related facilities for synthetic resins and adhesives).

The evaluation utilized the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) tool, jointly developed by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and the Capitals Coalition, to identify

dependencies and impacts on natural capital and ecosystem services throughout Nan Pao's operations. Further analysis was conducted on items exhibiting high and very high levels of dependency and impact, focusing on their interface with natural resources.

The results indicate that, overall, Nan Pao's operations exhibit a relatively low dependency on most ecosystem services, with key dependencies primarily associated with water resources and disaster risk reduction. In terms of impact drivers, the most direct impact types identified are "Disturbance," "Toxic Soil and Water Pollution Emissions," and "Water Consumption."

			Ecosystem Services											
Business Activity Scope		Provisioning Regulating Flow			Maintaini	Maintaining Physical, Chemical, and Biological Conditions					Mitigating Waste, Toxic Substances, and Other Nuisances			
		Water Supply	Flood Control	Storm Mitigation	Soil and Sediment Retention	Global climate regulation	Local (micro and meso) climate regulation	Water flow regulation	Rainfall pattern regulation	Solid waste management	Pure water	Atmospheric and Ecosystem Dilution	Air Filtration	Noise Attenuation
	Petroleum and coal products manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Manufacturing Materials	Basic chemical materials manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
	Plastic raw materials manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Packaging	Synthetic rubber raw materials manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Materials	Paints, dyes, and pigments manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
	Corrugated paperboard and paper container manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Packaging	Other metal container manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Materials	Other plastic products manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
	Plastic film and bag manufacturing	•	•	•	•	•	•	•	•	•	•	•	•	•
Direct Operations	Nan Pao Group's operating plants	•	•	•	•	•	•	•	•	•	•	•	•	•

■ Very High
■ High
■ Medium
■ Low
■ Very Low
■ Not Involved

					Impact Drivers			
Business Activity Scope		Land/Freshwater/ Marine Use Change Resource Extraction		Climate Change		Pollution		
		Land Use Area	Water Consumption	Greenhouse Gas Emissions	Disturbance	Air Pollutant Emissions	Toxic Soil and Water Pollution Emissions	Solid Waste Generation and Release
	Petroleum and coal products manufacturing	•	•	•	•	•	•	•
	Basic chemical materials manufacturing	•	•	•	•	•	•	•
Manufacturing Materials	Plastic raw materials manufacturing	•	•	•	•	•	•	•
	Synthetic rubber raw materials manufacturing	•	•	•	•	•	•	•
	Paints, dyes, and pigments manufacturing	•	•	•	•	•	•	•
	Corrugated paperboard and paper container manufacturing	•	•	•	•	•	•	•
Packaging Materials	Other metal container manufacturing	•	•	•	•	•	•	•
	Other plastic products manufacturing	•	•	•	•	•	•	•
Packaging Materials	Plastic film and bag manufacturing	•	•	•	•	•	•	•
Direct Operations	Nan Pao Group's operating plants	•	•	•	•	•	•	•

■ Very High
■ High
■ Medium
■ Low
■ Very Low
■ Not Involved

Considering that the ENCORE database conducts analyses at the industry level, it remains necessary to incorporate the spatial relationships between each site and its surrounding natural ecosystems when assessing nature-related topics. Given that Nan Pao's value chain extends across multiple regions in Asia, a 2.5-kilometer radius around each operational site was selected as the potential area of influence. Spatial analysis was conducted by overlaying data on biodiversity hotspots and species distribution designated by conservation agencies.

Further integration of global and regional biodiversity datasets was carried out to assess the spatial connectivity between each site and local ecosystems. Indicators such as Key Biodiversity Areas (KBA), water stress, ecological integrity, and Red List species distribution were also considered to determine whether any operational sites are located in or near areas of high biodiversity sensitivity.

Based on the overlay analysis, approximately 21% of Nan Pao's operational facilities are situated in areas of medium or higher natural sensitivity. Moreover, approximately 28% of facilities within the value chain may be located in ecologically significant areas that warrant close attention. These findings serve as a foundation for identifying and managing nature-related risks.

According to the TNFD (Taskforce on Nature-related Financial Disclosures) guidelines, the identification of priority areas should consider both the dependency and impact analysis of the industry within the value chain, as well as the nature sensitivity assessment. This means that, in addition to evaluating the inherent potential impact of value chain operations on ecosystem services, it is also essential to consider whether the locations of the facilities intersect or overlap with highly sensitive species or ecosystems, which may result in external contact and potential impacts.

Based on this logic, combined with Nan Pao's practical management experience, we defined priority areas as those that are both located in areas of medium or higher natural sensitivity and belong to industries that account for more than 5% of procurement expenditure and demonstrate a high (H) or very high (VH) dependency and impact on nature. Through this screening process, Nan Pao identified a total of 17 priority sites during this reporting year. Moving forward, further analysis will be conducted on the interactions between operational activities and natural capital at these sites to ensure that nature-related risks are effectively managed and addressed.



# **6.1** Human Rights Policy

Nan Pao prioritizes human rights issues and continually updates its work regulations to comply with domestic and international laws. The company aligns its working hours, wages, and leave policies with the latest amendments to the Labor Standards Act, ensuring that every employee can work with peace of mind while enjoying workplace protection and security. Nan Pao remains committed to building a high-quality and friendly workplace.

To protect the fundamental human rights of its employees and value chain partners (including customers, suppliers/contractors, agents, joint ventures, and local communities) and to promote sustainable environmental, social, and economic development, Nan Pao has established a Human Rights Policy. This policy supports and respects the "Universal Declaration of Human Rights," Principles 1 and 2 of the "UN Global Compact," the "UN Guiding Principles on Business and Human Rights" (Protect, Respect, and Remedy Framework), and the International Labour Organization's "Declaration on Fundamental Principles and Rights at Work." Nan Pao strictly complies with national laws where it operates to ensure the implementation of human rights protections.

Note: For details of Nan Pao's Human Rights Policy, please refer to the company website.

Summary of Nan Pao's Human Rights Management Policy and Implementation Measures:

Human Rights Management Policy	Implementation Measures
Prohibition of Forced Labor	<ul> <li>Compliance with labor laws regarding regular and overtime working hours and leave entitlements.</li> <li>Overtime reminders are set in the attendance system, and designated personnel regularly review and monitor working hours to prevent excessive working hours.</li> </ul>
Provision of a Safe and Healthy Work Environment	<ul> <li>Establishment of dedicated occupational safety and health units and committee structures; employment of professional nursing staff.</li> <li>Continuous enhancement of workplace safety equipment and personal protective gear.</li> </ul>
Compensation and Benefits	<ul> <li>Wages comply with relevant laws and are reviewed annually to meet local living wage standards.</li> <li>Overtime pay is calculated by law, paid with monthly salaries, and monitored for accuracy.</li> <li>Quarterly labor-management meetings ensure communication on working conditions and benefits.</li> </ul>
Benefits and Care	<ul> <li>Regular employee recognition events are held, with awards presented to long-serving employees.</li> <li>Flexible working hours are provided.</li> <li>Employee discounts are offered through partner programs, allowing staff to enjoy exclusive benefits.</li> <li>Birthday gifts are provided to employees as a token of care and appreciation.</li> <li>An employee stock ownership trust is available to help employees plan their savings.</li> <li>Tuition subsidies are provided to support employees in learning new skills, obtaining degrees, or earning certifications.</li> </ul>
Support for Employee Well- Being and Work-Life Balance	<ul> <li>Paid annual leave is provided by law, with leave usage tracked to remind employees to take breaks and maintain work-life balance.</li> <li>Regular health checks and special screenings for high-risk groups are offered.</li> <li>Subsidies support diverse employee clubs (e.g., painting, yoga, tai chi, camping, saxophone, badminton, softball, bowling, golf).</li> <li>Health promotion courses are organized periodically, such as massage, aromatherapy, weight management, and wellness seminars.</li> </ul>
Promotion of Workplace Diversity and Equality	<ul> <li>Regular reviews of gender pay gaps across departments and job levels ensure equal pay for equal work. Any unjustified differences trigger review and adjustment.</li> <li>Employment of disadvantaged groups exceeding legal requirements.</li> <li>Provision of a prayer room for Muslim employees.</li> </ul>
Inclusion of Human Rights Clauses in Supplier Code of Conduct and On-Site Audits	In 2024, requested key raw material suppliers to complete 55 ESG risk assessment forms and conducted on-site visits for two suppliers.

Nan Pao prioritizes and is committed to the protection of privacy and personal data. We have established a Privacy and Personal Data Protection Policy, requiring all Nan Pao personnel and contractors to adhere to the Taiwan Personal Data Protection Act, the EU General Data Protection Regulation (GDPR), and other applicable data protection laws in the regions where we operate when collecting, processing, using, storing, and disclosing personal data. This ensures compliance and fosters the joint effort to safeguard data security and protect the rights of data subjects.

To continuously strengthen our personnel's compliance awareness regarding personal data protection and to implement regulatory compliance management, we regularly conduct internal training sessions and issue important announcements on data protection laws and compliance guidelines. We also conduct regular checks on the status of data security and develop management plans and measures based on the assessment results.

At all Nan Pao operational sites, all new employees—whether direct or indirect—receive human rights training from their first day of employment as part of the established onboarding process. The course content is prepared in the local official language, and training is arranged flexibly (in-person or online) to accommodate employees' work environments and schedules.

For contractors (including security personnel), Nan Pao also provides human rights education to ensure the protection of their rights. We offer information to all employees on topics such as workplace sexual harassment prevention, protection against unlawful infringement, civil rights, cultural diversity, and corporate social responsibility. This commitment helps prevent human rights issues and promotes the protection of employee rights. We also emphasize close communication with employees to raise their awareness of human rights.

#### **Human Rights Risks Management Procedures**

Plan(P) Do(D) Check(C) Action(A)

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.

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.

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.

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	Target Group	Human Rights Issues	Key Policies	Responsible Unit	Due Diligence	Mitigation & Remdiation Measures	Grievance Mechanism	
	<ul><li> All employees,</li><li> Foreign workers,</li><li> Female employees</li></ul>	Freedom of choice of profession, working hours, wages and benefits, non-discrimination, sexual harassment				<ol> <li>Conduct investigations and control of physical and chemical hazards according to the "Workplace Maternity Protection Plan."</li> <li>Recruitment and hiring are based on ability, with no discrimination based on age, gender, race, or other criteria, ensuring equal pay for equal work, and no discriminatory provisions.</li> </ol>		
Employer,		Working hours		HR Department, HR units of subsidiaries	Workplace Maternity Protection Plan, Employee Attendance Management Regulations, Internal Compliance Audit	<ol> <li>The Company has established clear policies regarding working hours and overtime in its Employee Attendance Management Regulations.</li> <li>The Company strictly prohibits overtime work once the legal monthly limit has been reached.</li> </ol>		
Value Chain Partners (including joint ventures)	All employees	Collective bargaining	Human Rights Policy			<ol> <li>As part of our commitment to sustainability, we regularly educate employees about their rights and responsibilities. The company supports employees' right to form or join labor unions and engage in collective bargaining and peaceful assembly.</li> <li>We maintain an open and inclusive workplace culture that respects employees' rights to form or join labor unions.</li> </ol>	Internal reporting channels: Internal reporting channels of each subsidiary (Audit Department) (audit@nanpao.com)	
		Forced labor, Human trafficking, Equal pay				<ol> <li>We respect our employees' human rights. We will not withhold any identification documents, and employees are free to leave their employment.</li> <li>We promote our company's code of conduct, strictly prohibiting forced labor, human trafficking, and other human rights violations.</li> </ol>	External reporting channels: Customer service mailbox (info@nanpao.com)	
	Child labor	Adolescent workers				We are committed to protecting children and will not employ anyone under the legal working age.		
Procurement	Suppliers/ contractors	<ul> <li>Respect the freedom of choice of profession of their employees.</li> <li>Protect adolescent workers.</li> <li>Ensure reasonable working hours, fair wages and benefits.</li> <li>Prioritize occupational safety and emergency preparedness.</li> <li>Source minerals responsibly.</li> <li>Protect data privacy and security.</li> </ul>	Supplier Code of Conduct	Strategic Procurement Department, Procurement Units of subsidiaries	Supplier Code of Conduct Statement, Supplier Audits, Internal Compliance Audit	Suppliers sign the "Nan Pao Supplier Code of Conduct" and assess the environmental, social, human rights, and corporate governance sustainability risks of key suppliers, and establish a termination mechanism.		

Role	Target Group	Human Rights Issues	Key Policies	Responsible Unit	Due Diligence	Mitigation & Remdiation Measures	Grievance Mechanism
Community	Neighboring communities and environment	Water resources, noise, air pollution	Corporate Sustainability Practices Guidelines	Operating plant sites	Regular monitoring of noise, wastewater, and gas emissions sources at the plant site.	Regularly invite community administrative units and residents to visit the plant site to introduce environmental and safety management measures.	_
Service Provider	Customers	Data privacy and security	Privacy and Personal Data Protection Policy	Operating plant sites	Annual risk assessment, internal compliance audit	Regularly conduct security vulnerability tests and strengthen backup management.	Business and business administration departments

Our human rights risk mitigation measures are applied consistently across all company sites.

## Identification of Human Rights Risks and Mitigation Measures

Nan Pao conducts human rights risk assessments based on workplace health and environmental conditions. Relevant departments periodically evaluate the impact of risk factors on employees, covering all operational sites (including subsidiaries) and production-related activities. In 2024, no human rights risks were identified. We regularly review internal policies, operating procedures, and related risks while actively improving the work environment. Domestic and international customers also assess Nan Pao's human rights risks and mitigation measures according to international standards; in 2024, there were no human rights violations identified in customer audits.

#### Scope of Human Rights Assessments Conducted by Nan Pao from 2022 to 2024

Category	Assessment Coverage (%)	Incidence of Risk Events (%)	Mitigation Action Rate (%)
Own Operations (% of employees)	100%	0%	0%
Contractors and Tier 1 Suppliers	100%	0%	0%
Joint Ventures	100%	0%	0%

## 6.2 Workforce Composition and Benefits

#### Diverse Recruitment

High-quality human resources are one of the key drivers of Nan Pao's success. We have established fair and reasonable personnel systems and a robust internal organization that enable employees to fully leverage their talents. We treat all job applicants and employees equally—regardless of race, gender, age, religion, nationality, or political affiliation—adhering to our belief of "valuing talent and putting people first," and providing equal employment opportunities.

Nan Pao actively recruits international talent through various channels, including social media platforms, campus internships, in-plant recruitment, and industry-academia collaboration. We also participate in university-industry partnerships and offer students opportunities for short-term internships and collaborative projects, allowing them to gain hands-on workplace experience and apply their knowledge. This helps bridge the gap between academia and industry, accelerating students' career development.



Figure: Internships for International Student



Figure: Internships for University Students

## Care for Employees with Disabilities

Nan Pao pays special attention to the unique needs of employees with disabilities and is committed to their development and growth. We employ a number of disadvantaged individuals that exceeds legal requirements, and we collaborate with the Tainan City Labor Bureau to provide vocational training for employees with disabilities. Through guidance and instruction from experienced employees and supervisors, employees with disabilities are able to integrate smoothly into the workplace and complete their tasks. Nan Pao also utilizes ergonomics to create a work environment suitable for employees with disabilities.

Nan Pao values diversity among its workforce. In Taiwan, Nan Pao employed nine employees with disabilities in 2024 (representing 1.23% of total employees), in compliance with the legal requirements under the "People with Disabilities Rights Protection Act." We also respect employees' religious beliefs, cultures, and customs and have never experienced incidents of workplace discrimination, human rights violations, or infringements on employees' rights to work.

The Nan Pao headquarters is located in Xigang District, Tainan City. When there are vacancies, priority is given to hiring qualified local candidates to increase employment opportunities within the local community.

In 2024, labor contracts for all employees at each operational site were executed in compliance with local laws. There were no incidents of discrimination, sexual harassment, child labor, violations of indigenous rights, or forced labor.



Figure: Functional Skills Integration for Employees with Disabilities



Figure: Worksite Visit for Interns with Disabilities





Figure: Career Assessment and Planning for Employees with Disabilities

## **Employee Composition and Retention**

As of 2024, Nan Pao Group employs a total of 3,333 people. At the Taiwan headquarters, the total number of employees is 734, with 205 female employees and 529 male employees. In recent years, Nan Pao has actively promoted a gender-equal working environment to attract more female employees. In 2024, the proportion of female managers increased by 1.43% compared to the previous year (from 13.92% to 15.35%). Given the labor-intensive nature of the chemical industry in which Nan Pao operates, over 70% of employees are male.

In terms of age distribution, more than 70% of employees at Nan Pao in 2024 were between 30 and 50 years old, representing the prime working-age population.

Nan Pao recognizes that a diverse workforce enhances corporate resilience and contributes to overall business performance. Therefore, the company continues to foster a diverse and inclusive workplace environment and aims to further increase the proportion of female employees, female managers, and foreign managers, maintaining its commitment to a gender-friendly workplace.

Nan Pao values employee diversity in terms of nationality and composition, with each operational site primarily employing local staff.

#### Nan Pao (Taiwan) Employee Distribution

Year		20	)22			20	23			2024       Male     %     Female       82     16%     28       372     70%     132		
Age	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
<30	61	12%	17	10%	55	11%	18	10%	82	16%	28	14%
30-50	373	72%	110	64%	376	73%	117	65%	372	70%	132	64%
>50	85	16%	45	26%	83	16%	46	25%	75	14%	45	22%
Total	519	100%	172	100%	514	100%	181	100%	529	100%	205	100%

#### Nan Pao Group Employee Distribution

Year		20	22			20	)23			20	24	
Age	Male	%	Female	%	Male	%	Female	%	Male	%	Female	%
<30	351	16%	195	22%	319	14%	184	20%	410	18%	209	21%
30-50	1,527	70%	605	67%	1,580	71%	636	69%	1,622	69%	679	69%
>50	302	14%	103	11%	322	15%	101	11%	315	13%	98	10%
Total	2,180	100%	903	100%	2,221	100%	921	100%	2,347	100%	986	100%

The Company is committed to promoting and implementing gender equality, working to narrow gender gaps through institutional measures. In terms of workforce diversity indicators, women accounted for 29.58% of total employees in Nan Pao Group, while women in management positions represented 15.35% of total management roles. Furthermore, women in senior management positions accounted for 8.57%, an increase of 3.31% compared with 2023.

These results demonstrate the Group's continuous efforts to advance diversity within management levels. Looking ahead, Nan Pao will continue setting progressive targets to further enhance gender representation and foster a more gender-inclusive workplace.

#### Number of Female Managers in Nan Pao Taiwan

		2022		2023				2024			
Nan Pao Taiwan	Number of Female Employees	Total Employees	%	Number of Female Employees	Total Employees	%	Number of Female Employees	Total Employees	%		
Total Number of Employees	172	691	24.89%	181	695	26.04%	205	734	27.93%		
Total Managers (including Senior, Middle, and First-Line Managers)	11	98	11.22%	12	96	12.50%	12	99	12.12%		
First-Line Managers	3	32	9.38%	5	34	14.71%	4	37	10.81%		
Middle Managers	7	49	14.29%	7	46	15.22%	8	45	17.78%		
Senior Managers	1	17	5.88%	-	16	0.00%	-	17	0.00%		
Production Department	61	380	16.05%	66	379	17.41%	74	402	18.41%		
R&D and Technical Staff	33	102	32.35%	36	107	33.64%	45	118	38.14%		

#### Number of Female Managers in Nan Pao Group

		2022			2023			2024	
Nan Pao Group	Number of Female Employees	Total Employees	%	Number of Female Employees	Total Employees	%	Number of Female Employees	Total Employees	%
Total Number of Employees	903	3,083	29.29%	921	3,142	29.31%	986	3,333	29.58%
Total Managers (including Senior, Middle, and First-Line Managers)	53	354	14.97%	54	388	13.92%	64	417	15.35%
First-Line Managers	15	104	14.42%	15	97	15.46%	22	125	17.60%
Middle Managers	33	199	16.58%	36	234	15.38%	36	222	16.22%
Senior Managers	5	51	9.80%	3	57	5.26%	6	70	8.57%
Production Department	315	1,384	22.76%	324	1,418	22.85%	367	1,557	23.57%
R&D and Technical Staff	92	318	28.93%	104	335	31.04%	110	346	31.79%

#### Note

- 1. First-Line Managers: Employees at section chief level (inclusive) and above, but below manager level.
- 2. Middle Managers: Employees at manager level (inclusive) and above, but below associate director level.
- 3. Senior Managers: Employees at associate director level (inclusive) and above.

#### Manager vs. Non-Manager Ratio - Taiwan & Group

	Manager vs. Non-Manager Ratio – Taiwan											
Male Female Total												
Non-Manager	442	193	635									
Manager	87	12	99									
Total	529	205	734									

	Manager vs. Non-Manager Ratio – Group										
	Male	Female	Total								
Non-Manager	1,994	922	2,916								
Manager	353	64	417								
Total	2,347	986	3,333								

Note: "Managerial positions" refer to employees at section chief level (inclusive) and above.

### Talent Recruitment and Retention

Nan Pao regards employees as the most valuable asset of the company. Comprehensive promotion programs and employee benefit systems are in place to encourage continuous self-improvement. In addition to using general recruitment platforms, the company actively participates in campus recruitment activities to attract young talent to join the chemical industry with a steady and pragmatic career path.

To retain competitive talent, Nan Pao is committed to fostering a friendly work environment, emphasizing work-life balance, and providing training and development opportunities, thereby supporting employees in their personal growth and career advancement.

As a company in the chemical industry, the majority of new hires within the Group are operators, R&D personnel, and management staff aged between 30 and 50. In response to rapid business growth in 2024, new hires accounted for 19% of total employees in Nan Pao Taiwan and 20% across the Group as a whole.

#### 2024 Nan Pao Group Nationality and Managerial Level Distribution

Nationality	То	tal	First Mana	-Line agers	Middle N	lanagers	Senior N	lanagers
	Count	%	Count	%	Count	%	Count	%
Taiwan	1,018	30.55	59	47.20	115	51.80	52	74.29
China	945	28.35	49	39.20	68	30.63	10	14.29
Vietnam	719	21.57	4	3.20	3	1.35	-	0.00
Australia	266	7.98	-	0.00	13	5.86	4	5.71
Indonesia	215	6.45	12	9.60	6	2.70	1	1.43
Thailand	53	1.59	-	0.00	1	0.45	-	0.00
Malaysia	25	0.75	-	0.00	6	2.70	-	0.00
Philippines	36	1.08	1	0.80	1	0.45	1	1.43
Bangladesh	24	0.72	-	0.00	1	0.45	-	0.00
India	16	0.48	-	0.00	4	1.80	-	0.00
Hong Kong	6	0.18	-	0.00	1	0.45	1	1.43
Korea	3	0.09	-	0.00	2	0.90	1	1.43
Italy	1	0.03	-	0.00	1	0.45	-	0.00
Iran	1	0.03	-	0.00	-	0.00	-	0.00
Colombia	1	0.03	-	0.00	-	0.00	-	0.00
Zimbabwe	1	0.03	-	0.00	-	0.00	-	0.00
New Zealand	3	0.09	-	0.00	-	0.00	-	0.00
Total	3,333	100.00	125	100.00	222	100.00	70	100.00

### New Hires and Proportion of New Employees at Nan Pao Taiwan

Year		20	22			20	23			Male Hire Rate Headcount Hire F		
Age\ Gender	Male Headcount	Male New Hire Rate (%)	Female Headcount	Female New Hire Rate (%)	Male Headcount	Male New Hire Rate (%)	Female Headcount	Female New Hire Rate (%)	Male Headcount	Hire Rate		Female New Hire Rate (%)
<30	45	9%	15	9%	29	6%	10	6%	42	8%	15	7%
30-50	57	11%	20	12%	44	9%	12	7%	48	9%	28	14%
>50	-	0%	3	2%	1	0%	1	1%	1	0%	1	0%
Total New Hires		14	40			9	7			13	35	
Total Employees		69	91			69	95		734			
New Hire Rate (%)		20	)%			14	<b>!</b> %			18	%	

#### New Hires and Proportion of New Employees at Nan Pao Group

Year		20	22			20	23			Hire Rate (%)  Hire Rate (%)  Hire Rate (%)  Hire Rate (%)  67			
Age\ Gender	Male Headcount	Male New Hire Rate (%)	Female Headcount	Female New Hire Rate (%)	Male Headcount	Male New Hire Rate (%)	Female Headcount	Female New Hire Rate (%)	Male Headcount	Hire Rate		Female New Hire Rate (%)	
<30	225	10%	80	9%	138	6%	69	7%	193	8%	67	7%	
30-50	266	12%	108	12%	220	10%	75	8%	256	11%	113	11%	
>50	18	1%	13	1%	22	1%	9	1%	32	1%	9	1%	
Total New Hires		71	10			53	33			67	70		
Total Employees		3,0	983			3,1	42			3,333			
New Hire Rate (%)		23	3%			17	7%			20	%		

Note 1: New hire rate (%) = number of new hires in the category for the year / total number of employees in the category at year-end. Note 2: The number of new hires does not exclude employees who left the company during the year.

## Nan Pao Group Recruitment Costs and Proportion of Positions Filled Internally (%)

	2020	2021	2022	2023	2024
New Hires	77	97	710	533	670
Internal Fill Rate (%)	13%	13%	2%	2%	3%
Average Hiring Cost (NT\$)	1,620	1,186	34,412	11,778	14,101

Note 1: The statistics for 2021 and earlier are based on Nan Pao Taiwan; from 2022 onward, they cover the entire Nan Pao Group.

Note 2: From 2022, overall recruitment costs increased significantly due to particularly high recruitment expenses in Australia RLA.

## **Employee Turnover Statistics**

In turnover management, when an employee expresses the intention to resign, in addition to the department supervisor proactively showing concern and understanding, the Human Resources (HR) Department immediately arranges an exit interview as needed to gather feedback and understand the reasons for leaving. Efforts are made to retain employees through personalized care and support, as well as by providing suggestions for improvement or adjustments across management levels. The HR Department regularly analyzes turnover data, including job categories and seniority, to monitor workforce trends. Internal job rotation or open recruitment is arranged periodically to ensure optimal talent allocation and sustainable development.

When an employee submits a resignation, both the supervisor and the HR Department conduct an exit interview to determine the actual reason for leaving. They also assess the employee's skills and explore the possibility of adjusting job responsibilities, work location, or providing internal transfer opportunities to encourage retention.

In 2024, 82 employees voluntarily resigned from Nan Pao's Taiwan plant. As with all resignations, supervisors and the HR Department conducted exit interviews to understand their reasons for leaving. They also considered potential adjustments in job responsibilities, work location, or internal transfer opportunities to achieve employee retention goals.

#### Nan Pao Taiwan Employee Turnover and Proportion

Turnover	2022		20	23	20	24
Turnover	Male	Female	Male	Female	Male	Female
Voluntary						
Number of Employee Departure	100	18	86	24	64	18
Retirement	9	2	13	2	9	2
Proportion of Total Turnover for the Year (%)	82%	15%	74%	19%	72%	20%
Involuntary						
Number of Employee Departure	2	1	8	1	6	2
Proportion of Total Turnover for the Year (%)	2%	1%	6%	1%	6%	2%

#### Nan Pao Group Employee Turnover and Proportion

Turnover	20	2022		23	20	24
Turnover	Male	Female	Male	Female	Male	Female
Voluntary						
Number of Employee Departure	392	150	302	119	347	124
Retirement	23	7	24	8	22	6
Proportion of Total Turnover for the Year (%)	67%	25%	65%	25%	65%	23%
Involuntary						
Number of Employee Departure	39	14	43	8	54	13
Proportion of Total Turnover for the Year (%)	6%	2%	8%	2%	10%	2%

Note 1: Turnover rate (%) = number of turnovers in the category for the year / total number of employees in the category at year-end. Note 2: Turnover figures include voluntary resignations, dismissals, and retirements.

#### Voluntary Turnover Rate at Nan Pao Group

	2021	2022	2023	2024
Number of Employee Turnover	637	625	504	566
Number of Voluntary Departures	542	542	421	471
Total Employees	2,953	3,083	3,142	3,333
Turnover Rate (%)	21.57%	20.27%	16.04%	16.98%
Voluntary Turnover Rate (%)	18.35%	17.58%	13.40%	14.13%

Note 1: Turnover Rate = Number of Employee Turnover ÷ Total Employees

Note 2: Voluntary Turnover Rate = Number of Voluntary Departures ÷ Total Employees

## Barrier-Free Labor-Management Communication

Nan Pao ensures open and effective communication between labor and management through quarterly labor-management meetings, as required by law. These meetings provide a platform for management and employee representatives to exchange opinions and address labor-management issues with sincerity and a commitment to fostering harmonious relations. The company values and responds appropriately to employee feedback to coordinate labor relations effectively and promote cooperation.

For over sixty years, Nan Pao has upheld the principle of "harmonious labor relations, creating a win-win situation," continuously promoting positive labor-management relations. The company adheres to labor regulations, including the Labor Standards Act, the Occupational Safety and Health Act, the Labor Insurance Act, and others.

Beyond legal requirements, we maintain a barrier-free communication channel with employees. At Nan Pao Taiwan, 51% of employees participate in the union. To ensure smooth communication, union leaders and company representatives hold regular meetings. The company also invites the union president to attend management meetings, enabling employees to fully understand the company's operations and direction.

#### Reasons Why Nan Pao Taiwan Has Not Signed a Collective Agreement

- 1. Respect for Employees' Freedom of Choice: Currently, 51% of Nan Pao Taiwan employees are union members. The company respects employees' freedom of choice and rights, believing that each employee has the right to decide whether to join the union without facing any unfair treatment due to the absence of a collective agreement. The company respects individual decisions and supports employees in balancing personal and collective interests.
- 2. Flexibility and Diversity: The company aims to maintain flexibility and diversity to better adapt to market changes and evolving business needs. Without a collective agreement, the company can make decisions more quickly and adjust organizational structures and personnel arrangements flexibly, thereby enhancing competitiveness and operational efficiency.
- 3. Direct Communication and Negotiation: The company adopts direct communication and negotiation methods to engage with employees and has established open communication channels to allow employees to express their opinions, raise concerns, and seek solutions. The company encourages employee participation in decision-making processes and ensures that their views are fully heard and considered.
- 4. Flexible Employee Benefits and Compensation: The company is committed to providing flexible benefits and compensation packages that meet the individual needs and expectations of employees. The company values performance-based rewards and provides competitive compensation systems and benefits plans in line with employee performance and market competitiveness.
- 5. Continuous Improvement of Working Conditions: The company is committed to continuously improving working conditions, including the work environment, safety measures, and training opportunities. The company uses internal policies and procedures to ensure that employee rights are respected and protected, rather than relying solely on the provisions of a collective agreement.



Figure: Union General Assembly

## **Compensation Management**

The Compensation Committee at Nan Pao is responsible for assisting the Board of Directors in implementing and evaluating the company's overall compensation and benefits policies, as well as the remuneration for directors and managers.

The main duties of the Compensation Committee include:

- 1. Regularly reviewing and proposing amendments to the committee's organizational regulations.
- Establishing and periodically reviewing the annual and long-term performance targets and compensation policies, systems, standards, and structures for the company's directors and managers.
- Regularly evaluating the performance targets achieved by directors and managers and determining their individual compensation packages and amounts.

Directors' compensation at Nan Pao is determined based on their level of participation in company operations and the value of their contributions, while also taking into account industry standards. Recommendations are made by the Compensation Committee and submitted to the Board of Directors for approval. In profitable years, according to Article 25 of the company's Articles of Incorporation, no more than 3% of profits may be allocated as director compensation.

Nan Pao's compensation management regulations specify various work allowances and bonuses. Compensation for the CEO, President, and Vice Presidents is determined by considering their professional experience and referencing market and industry pay levels. Related bonuses are determined based on the company's annual performance, financial status, operating conditions, and individual work performance. In profitable years, 2% to 6% of profits are allocated as employee compensation in accordance with Article 25 of the Articles of Incorporation.

Nan Pao's compensation package includes cash compensation, stock options, profitsharing, retirement benefits or severance pay, various allowances, and other substantive incentives, as defined by the Compensation Committee's organizational regulations. The compensation procedures consider the company's overall operating performance, industry risks, and future development trends, while also referencing individual performance and contribution to company results. Compensation is designed to positively correlate with business performance. All relevant performance appraisals and compensation structures are reviewed by the Compensation Committee and the Board of Directors and are adjusted as needed based on operational conditions and legal requirements to balance sustainable management and risk control.

### **Compensation and Benefits**

Nan Pao adopts a performance-based variable compensation system that is linked to individual and organizational performance. Salaries are correlated with seniority and performance, with no differences based on age, gender, or race. On average, salary levels at Nan Pao are higher than industry peers. Adhering to the principle of profit-sharing with employees, the company allocates a certain proportion of its earnings as the basis for employee bonuses, thereby sharing profits with colleagues. At the same time, Nan Pao assists employees in long-term investment planning and retirement savings to encourage employees to hold company stock.

Nan Pao has established an Employee Welfare Committee. In Taiwan, all welfare expenditures comply with the legally mandated contribution rates: 0.5% of salaries, 0.11% of revenue, and 30% of scrap material sales. These funds are used to organize various welfare activities for both local and foreign employees. At overseas locations, welfare expenditures are adjusted according to local regulations. In Taiwan, the distribution of welfare committee expenditures is determined by committee members and employees, and includes organizing travel activities, employee raffles, club activities, health checks, scholarships, various bonuses, gifts for traditional festivals, and group insurance for employees.

### Disclosure of Gender Pay Ratio

In 2024, the gender pay ratio at Nan Pao Taiwan, categorized by managerial and non-managerial positions, showed no difference in total annual compensation between female and male employees. For entry-level specialists within the same job category, compensation is standardized regardless of gender. For experienced professionals, salaries are determined based on qualifications, expertise, and certifications, without discrimination based on gender or ethnicity.

Nan Pao's compensation system is comprehensive and competitive, with no differences based on age, gender, or race. The company's average pay levels are above the industry average. Nan Pao adheres to a profit-sharing philosophy that attracts top talent and motivates and retains existing employees. All Nan Pao Group companies (including Taiwan headquarters and overseas subsidiaries) comply with local regulations governing employee compensation and benefits. In 2024, there were no violations related to employee compensation and benefits across any operational locations.

## Nan Pao Compensation Policy

- 1. Salary Adjustments: Salaries are adjusted based on the overall operational performance of the company and individual employee performance.
- 2. Profit Sharing: A certain proportion of the company's earnings is allocated as the basis for employee bonuses, sharing profits with colleagues.
- 3. Employee Stock Ownership: Employees are encouraged to hold company stock through trust arrangements to support their long-term investment and retirement planning.
- 4. Performance Incentives: In addition to conducting annual performance evaluations, the company recognizes, rewards, and motivates outstanding performance through a variety of incentive programs. These include: holiday bonuses, production performance bonuses, project bonuses, proposal bonuses, outstanding contribution awards, team collaboration awards, outstanding employee awards, and seniority awards.

#### Nan Pao Taiwan Gender Pay Ratio

Position Category Gend		2022		2023		2024	
	Gender	Number of Employees	Pay Ratio	Number of Employees	Pay Ratio	Number of Employees	Pay Ratio
Managerial Staff	Male	70	1.06	69	0.93	72	0.92
	Female	10	1	12	1	12	1
Non- Managerial Staff	Male	427	0.94	431	0.96	441	0.99
	Female	150	1	164	1	189	1

Note 1: Managerial staff includes employees at the supervisor to manager level (inclusive); non-managerial staff are below supervisor level (exclusive).

Note 2: Employees who have been employed for less than six months due to new hires, resignations, or unpaid leave during the year are excluded from the statistics.

#### 2024 Nan Pao Taiwan Gender Pay Ratio by Position

Position	Manager Level		Entry-Level Management		Non-Managerial Staff	
Category	(Base Salary)	(Total Salary)	(Base Salary)	(Total Salary)	(Base Salary)	(Total Salary)
Male	1	1	1	1	1	1
Female	0.82	0.8	1.08	1.08	1.05	1.03

## 2024 Nan Pao Taiwan Pay Equity Indicators

Pay Equity Indicator	Difference (%)
Gender pay gap (mean)	5.61%
Gender pay gap (median)	2.00%
Gender variable bonus gap (mean)	3.30%
Gender variable bonus gap (median)	0.74%









Figure: 2024 Family Day









Figure: Science Experiment Activity











Figure: International Women's Day Activity



Figure: 2024 Baseball Family Day

## Retirement Planning and Retirement Protection

To encourage employees to engage in long-term financial planning, Nan Pao has established an Employee Stock Ownership Trust (ESOT) to which employees may choose to participate. Employees contribute a portion of their monthly salary to an individual trust account, and the company makes a corresponding contribution as an incentive, thereby promoting long-term savings and wealth accumulation to secure employees' retirement. As of 2024, the participation rate among employees had reached 74.82%.

In accordance with Taiwan's relevant regulations, Nan Pao provides labor insurance, national health insurance, and group insurance for its employees. For employees hired on or after July 1, 2005, the company implements the New Labor Pension System in accordance with the Labor Pension Act, contributing no less than the legally mandated amount. Employees hired before or on June 30, 2005, can choose to adopt either the new system or remain under the old pension system based on their personal preference. The Labor Pension Supervisory Committee reviews and supervises the use of the pension funds. Monthly pension contributions are deposited in a dedicated pension account at the Bank of Taiwan in compliance with legal requirements to safeguard employees' pension rights. The participation rate in the retirement plan for formal employees is 100%.

### Nan Pao Taiwan Retirement System and Implementation Measures

- (1) The company has established a "Labor Pension Regulation."
- (2) In compliance with the law, the company has set up a Labor Pension Supervisory Committee, which ensures that monthly pension contributions are fully funded and deposited in the pension account managed by the Trust Department of the Bank of Taiwan.
- (3) Since July 2005, the company has implemented the New Labor Pension System, contributing 6% of each employee's monthly salary based on the graded contribution schedule to the employee's individual account with the Bureau of Labor Insurance.
- (4) In accordance with International Accounting Standard 19 (IAS 19), the company engages actuarial experts to evaluate and calculate pension provisions, providing actuarial reports accordingly. MANAM

#### **Pension System**

Category	Old System	New System	
Applicable Law	Labor Standards Act	Labor Pension Act	
Contribution	Monthly contribution of 15% of wages to the Labor Pension Fund at the Central Trust of China.	Monthly contribution of 6% of wages based on the graded contribution schedule to the employee's individual account at the Bureau of Labor Insurance.	
Contribution Amount	As of January 1, 2025, the balance in the Labor Pension Reserve Account is NT\$361,064 thousand.	In 2024, NT\$26,082 thousand was contributed.	

## Family-Friendly Childcare Measures

The company and the Employee Welfare Committee have established partnerships with high-quality childcare facilities near the plants to provide childcare services to employees at preferential rates. In line with the government's policy on parental leave without pay, employees may apply for such leave in accordance with the Gender Equality in Employment Act and the relevant implementation regulations. Employees can also apply to extend or shorten their leave based on personal needs, and are allowed to maintain their labor and health insurance coverage during the leave period.

Nan Pao is committed to protecting maternal rights and fostering a gender-friendly work system and environment. Occupational health nurses proactively care for pregnant employees by assessing their work environment and recommending necessary adjustments. In Taiwan, the company complies with the Gender Equality in Employment Act by providing breastfeeding rooms and offering parental leave and paternity leave in accordance with local regulations at each operational site.

Based on the weighted average across all operating regions, the company provides approximately 18 weeks of paid parental leave for primary caregivers and 1.3 weeks (around 9 days) for non-primary caregivers

Region	Maternity Leave (Weeks)	Paternity Leave (Days)	Number of Employees	% of Total Group Workforce
Taiwan	8	7	986	29.58%
China	25	15	981	29.43%
Indonesia	12	2	197	5.91%
Vietnam	24	5	781	23.43%
Thailand	14	_	22	0.66%
Philippines	15	7	17	0.51%
Australia	20	14	275	8.25%
Malaysia	14	7	42	1.26%
Bangladesh	16	_	10	0.30%
India	24	15	22	0.66%
Total			3,333	100.00%

#### A Happy Workplace

In addition to regularly organizing activities, Nan Pao encourages employees to participate in clubs, offering a variety of channels for relaxation and well-being outside of work, thus supporting work-life balance and overall mental and physical health. Participation in these activities also fosters stronger connections with colleagues, families, and the local community. Nan Pao encourages employees to establish and participate in clubs; to date, employees have independently established clubs such as golf, badminton, softball, painting, and music-related groups.







Figure: Saxophone Club Practice



Figure: Softball Friendly Match



Figure: Golf Club Practice





**Employee Health Promotion Programs** 

- Myofascial Release Class: Guided by an instructor and accompanied by relaxing music, this class uses tennis balls to massage meridians, achieving a soothing effect.
- Essential Oil Stress Relief Class: Utilizes natural essential oils to achieve mental and physical relaxation through olfactory stimulation.
- Weight Loss Program: Helps employees achieve weight-loss goals through exercise and dietary control.
- Health Seminar: Based on statistics from the Top Ten Health Examination Abnormalities, educators provide related health education and personalized health check-up consultations.

2024 Nan Pao Taiwan Health Promotion Activities:

Course Name	Number of Participants	Hours
Essential Oil Stress Relief	20	40
InBody Body Composition Check	74	296
Hepatitis Seminar	31	62
Happy Workplace Seminar	23	46
Weight Loss Program	27	432



Figure: Weight Loss Program



Figure: Essential Oil Stress Relief Class



Figure: InBody Body Composition Measurement



Figure: Hepatitis Seminar

# 6.3 Employee Communication and Development

To ensure smooth communication channels between labor and management, Nan Pao regularly holds various communication and grievance mechanisms such as labor-management meetings, biweekly meetings, departmental supervisor exchange meetings, employee forums, toolbox meetings, suggestion boxes, and the Chairman's mailbox. Employees may raise complaints and report any illegal or improper conduct through these channels. Labor-management meetings are held regularly to discuss and address issues of concern to employees, with the management team providing feasible solutions.

Name	Target Audience	Content	Frequency
HR Mailbox	All employees	Reporting misconduct and sexual harassment complaints	Anytime
CEO Hotline	Employees and investors	Company operational issues	Anytime
Website Customer Service Mailbox	All employees and external personnel	Any topic	Anytime
Biweekly Meetings	All employees	High-level management and section chiefs report to all employees on operational policies and performance	Biweekly
Labor Union Employee Forum	Labor union employees	Employee benefits, labor- management issues, and communication with union members	Annually
Toolbox Meetings	Production units	Employees can raise any work-related issues or workplace concerns; supervisors and responsible staff provide solutions	Weekly
Employee Welfare Committee Meetings	Welfare committee members	Explanation of employee welfare activities and fund usage to welfare committee representatives at each plant	Quarterly

#### **Ethics Training and Communication**

To guide employee behavior in line with ethical standards, Nan Pao Group has issued the "Nan Pao Group Code of Conduct" to ensure that stakeholders understand the ethical standards employees must follow when performing their duties. On the first day of onboarding, each new employee receives a briefing on the Code of Conduct. The company also regularly posts the Code of Conduct, the Trade Secret Protection Act, and other related regulations on the internal platform to ensure that employees understand ethical behavior, conflict of interest prevention, avoidance of personal gain, confidentiality obligations, fair trade practices, appropriate use of company assets, and compliance with laws and regulations.

Nan Pao has established the "Code of Conduct" as a guideline for all directors, managers, and employees, emphasizing that all employees must adhere to these standards in their daily work and business operations to earn public trust and ensure sustainable corporate growth.

Nan Pao has also set up an "Employee Feedback Mailbox" and a "Grievance Handling Mechanism," so employees can seek assistance or report concerns regarding ethical behavior and equal treatment in the workplace by consulting the Human Resources Department or using the mailbox. This helps detect, prevent, and avoid major misconduct and violations of government regulations.

#### Training and Performance Management

Human resources development and training are the cornerstone of sustainable corporate operations and continuous improvement. Nan Pao's training policy is: "Align the development of organizational capabilities with the company's vision and strategy, embed corporate culture and values into employee behavior, continuously enhance core competencies, develop unique competitive advantages, cultivate well-rounded and internationally minded management talent, and foster a collaborative and learning-oriented organizational culture."

To help both the company and employees rapidly adapt to a fast-changing environment, Nan Pao has been actively promoting digital learning in recent years, including the implementation of the online learning platform "Nan Pao E-Academy" and an online English learning platform. This creates an innovative and diverse learning environment that allows employees to learn anytime and anywhere, applying their learning outcomes to their work and continuously improving their performance.

According to the company's performance appraisal management policy, KPI employees undergo performance evaluations twice a year. All employees except consultants, probationary, and trainee staff are subject to evaluation. Non-KPI employees receive one evaluation per year. Supervisors objectively evaluate employee performance and goal achievement and conduct interviews to understand employee situations and provide appropriate support. Supervisors also observe and interact with employees on a daily basis to understand their job skills and development aspirations, plan necessary on-the-job training or project assignments, and provide timely promotion or job rotation opportunities.

#### 2024 Nan Pao Taiwan Training Hours

	2022				2023				2024			
	Total Training Hours		Total Training Hours Average Hours		Total Train	Total Training Hours Average Hours		Total Training Hours		Average Hours		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Senior Management	425	5	30.36	5.00	566	6	31.44	6.00	592	-	27.14	-
Middle Management	1,526	363	39.13	60.50	3,351	733	76.16	104.71	3,056	533	74.73	65.54
First-line Management	2,946	238	37.29	26.44	4,742	385	51.54	35.00	4,687	623	48.47	49.04
Engineer	909	170	23.92	21.25	2,766	626	55.32	56.91	3,408	749	57.34	36.82
Professional Staff	627	201	12.29	8.38	1,424	898	21.91	24.27	2,027	1,332	30.68	31.89
General Staff / Operators	2,515	685	7.49	6.92	3,791	1,555	11.74	13.52	5,112	2,557	18.15	17.19

#### Nan Pao 2024 Training Quantitative Benefits

		20	24		
Level	Total Train	ing Hours	Average Hours		
	Male	Female	Male	Female	
Senior Management	1,341	112	213.53	50.66	
Middle Management	3,922	1,286	203.83	225.73	
First-line Management	6,961	965	209.34	134.73	
Engineer	4,910	841	141.34	94.92	
Professional Staff	2,605	1,965	92.94	106.36	
General Staff / Operators	10,244	4,371	1,014.60	479.93	

In 2024, the average training per employee at Nan Pao Taiwan was 10.45 hours, and the average training expense was NT\$1,633.

Nan Pao has established diverse employee development programs that integrate both business and human resource benefits, ensuring sustainable development in both areas. The table below summarizes the quantitative benefits of the 2024 training courses in Taiwan:

Course Name	ISO 9001:2015 Internal Auditor	ISO 14001:2015 & ISO 45001:2018 Internal Auditor
Course Objective	To enhance employees' internal audit competence in ISO 9001 quality management systems, ensuring that the organization can provide stable products and services that meet customer requirements, achieve customer satisfaction, comply with laws and regulations, and ensure system performance and continuous improvement.	To enhance employees' understanding of key control points in ISO 14001:2015 internal audits, combined with handson exercises on environmental management system operation mechanisms, enabling them to apply ISO 14001:2015 audit methods for effective continuous improvement.
Course Benefits (Quantitative Benefits, e.g. certificates obtained, increased retention, patents filed, etc.)	100% Certificate Pass Rate (30 people)	100% Certificate Pass Rate (90 people)
Number of Participants (% of Total Workforce)	30 (4.1%)	90 (12.3%)



Figure: Risk Management Training



Figure: CIT Final Presentation

## **6.4** Safe Workplace Environment

To establish a safe, healthy, and comfortable working environment and continuously reduce occupational injury rates, Nan Pao has formulated the "Occupational Safety and Health Policy" as the highest guiding principle for its safety and health management. Prioritizing safe operations and continuous improvement, the company actively improves workplace environments, manufacturing equipment, and operational methods to ensure the safety and health of employees and stakeholders.

Since 2000, Nan Pao has implemented the OHSAS 18001 Occupational Safety and Health Management System. In 2020, all production plants and subsidiaries upgraded their certifications to ISO 45001:2018, establishing procedures for hazard identification, risk assessment, and control planning. These measures apply to the entire company, employees, and contractors, and include management, supervision, and improvement actions to prevent safety and health hazards at all plants.

To fully implement occupational safety and health management, Nan Pao established a "Safety and Health Committee" as the highest deliberative and advisory body on safety and health management. Committee chairpersons are appointed on a rotating basis among plant management representatives. The committee is responsible for formulating, coordinating, and supervising environmental, safety, health, and related matters at each plant. Meetings are held quarterly and include consultations with employee representatives. In addition, biweekly plant safety meetings are held to discuss improvements for audit findings and establish action goals to prevent occupational injuries.

#### Safety and Health Policy:

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

#### Strategy:

- 1. Implement the ISO 45001 Occupational Health and Safety Management System.
- 2. Provide safe and healthy working conditions.
- 3. Comply with occupational safety and health regulations and other applicable requirements.
- 4. Ensure that all employees and contractors understand, comply with, and implement all safety regulations, supported by ongoing education and training.
- 5. Eliminate hazards and reduce occupational health and safety risks.

#### Management Guidelines and Objectives:

Following the safety and health policy and strategies, Nan Pao aims to reduce occupational health and safety incidents, promote process safety, and continuously improve occupational health and safety performance.

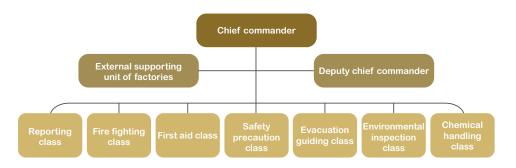
#### **Emergency Response Management**

As a chemical manufacturer, Nan Pao places a strong emphasis on emergency response management throughout its operations, in line with the industry's specific characteristics. Each plant has established emergency response procedures and annually convenes an emergency response team for on-site drills. These drills ensure the implementation of environmental and occupational health and safety systems, prevent accidents, and facilitate effective emergency rescue and response exercises. This ensures that appropriate countermeasures can be activated immediately in the event of an incident, promptly preventing or mitigating injuries, property losses, and production interruptions, while also controlling the extent of damage and aiding in post-incident recovery.

To minimize the potential harm to personnel, property, and the environment from any emergency incident, Nan Pao has developed a comprehensive training program. This ensures that all personnel are prepared with the correct and effective emergency response strategies and procedures. The program aims to continuously enhance employees' emergency preparedness and strengthen on-site disaster response capabilities. Key components include:

- 1. Emergency Information: Includes site layout plans, equipment distribution maps, and response flowcharts.
  - Firefighting Equipment: Includes fire protection systems, public address systems, etc.
  - Response Equipment: Includes various protective clothing, personal protective equipment, self-contained breathing apparatus, portable detectors, spill containment equipment, and warning devices.
- 2. Standardized Response Procedures and Enhanced Personnel Training.
- 3. Regular Employee Training: Ensuring familiarity with notification, disaster response, site management, casualty care, and support for emergency equipment. Training programs include:
  - Emergency Response Team Training: Covers basic, advanced, and response courses.
  - · Fire Safety Training: Conducted annually for all employees in compliance with regulations.

#### **Emergency Response Program Organization chart**



#### Sites Certified with ISO 45001

Facilities	Taiwan	Foshan (CN)	Foshan Advanced (CN)	Dongguan (CN)	Dongguan Jia- Chin(CN)	Kunshan (CN)	Fuqing (CN)	Huai'an (CN)	YuBo (CN)	VNNP (VN)	NP Materials (VN)	NP advanced materials (VN)	NNV (VN)	Indonesia	Thailand
status	•	•	•	•	•	•	•	ed due to n planning	•	•	•	•	•	•	•













## Workplace Safety and Occupational Health Training

Nan Pao places high importance on employee safety by continuously conducting walkaround inspections and workplace safety observations to eliminate unsafe behaviors and mitigate environmental hazards. A safety climate index is also used to implement an early warning mechanism, enabling flexible adjustments to the intensity of safety and health management.

In 2024, Nan Pao Taiwan recorded five commuting accidents, showing a significant reduction compared to the previous year. To further enhance employee commuting safety, the company invited personnel from the Jiali Precinct of the Tainan City Police Department Traffic Division to the plant to conduct traffic safety briefings, raising employee awareness of road safety and reducing commuting incidents.









Figure: 2024 Traffic Safety Awareness Session

#### 2024 Nan Pao Taiwan Occupational Health and Safety Training Statistics

		Pre-Job Training	Legal Certific	ation Training	On-the-Job Training	
		New and Transferred Employees	Initial Certification Training	Renewal Certification Training	Specific or General Personnel	
2022	Attendance	51	49	191	354	
	Hours	234	1,528	748	255	
2023	Attendance	220	50	154	3,200	
2023	Hours	443	781	842	1,983	
2024	Attendance	68	50	106	1,344	
	Hours	523	1,015	576	2,195	

#### 2024 Group Occupational Health and Safety Training Statistics

		Pre-Job Training	Legal Certific	ation Training	On-the-Job Training
	New Transi Emplo		Initial Certification Training	Renewal Certification Training	Specific or General Personnel
2024	Attendance	187	413	146	3,747
2024	Hours	1,398	3,875	939	5,431

#### Safety Management of Work Partners

#### **Suppliers and Contractors**

Nan Pao has established the Contractor Occupational Health and Safety Management Regulations to ensure the safety of both the company's and contractors' personnel working within the plant premises. Contractors are subject to strict management upon entering the facility. High-risk activities—including work at heights, confined space entry, electrical hazards, hot work, and potential leaks of hazardous gases/chemicals—are designated as key areas of focus for training, education, and inspections.

Nan Pao also regularly communicates with suppliers and contractors on environmental protection, safety, and health issues, encouraging continuous improvement in EHS performance. To ensure project safety, the company trains safety supervisors in areas such as general work, hot work, work at heights, roofing, confined spaces, and lifting operations. Qualified personnel receive certification badges after passing the required examinations. When construction or maintenance work takes place, these trained safety supervisors conduct preliminary EHS inspections to reduce and prevent potential hazards.

An annual contractors' conference is held to present Nan Pao's EHS policies and measures, and to require contractors to cooperate fully with the company's safety management requirements. Contractors are also required to sign a Safety Partnership Commitment to uphold a safe working environment.













Nan Pao prioritizes the work environment and employee safety, and has established an incident reporting and investigation mechanism. When an employee is injured, the company's on-site occupational nurse provides immediate care and assistance. Follow-up care and tracking are also provided during the employee's recovery period, and an occupational physician assesses whether job content adjustments are needed. All occupational accident cases undergo thorough investigation and root cause analysis, followed by the development and implementation of corrective actions. Incident investigation reports and corrective/preventive action forms are processed through an electronic signature system, significantly reducing processing time and enabling more efficient progress tracking.

Accident data across the group are consolidated into monthly reports, which are published on the company's cloud platform and emailed to all subsidiaries. This allows subsidiaries to develop parallel improvement measures to reduce the frequency of occupational injuries. In addition, the company has established PPE (Personal Protective Equipment) wearing standards and conducts PPE training programs to raise employees' awareness of chemical safety and reduce the risk of exposure-related accidents.

#### Taiwan Nan Pao 2024 Occupational Injury Statistics

Category	2021	2022	2023	2024						
Full-time Employees										
Total Hours Worked	1,348,016	1,498,752	1,208,712	1,223,472						
Total Workdays	168,502	187,344	151,089	152,934						
Work-related Fatalities	0	0	0	0						
Total Lost-Time Injury Cases	6	6	2	5						
Occupational Diseases	0	0	0	0						
Total Lost Workdays	236	207	22	31						
	Contr	actors								
Total Hours Worked	18,480	35,040	20,272	24,112						
Total Workdays	2,310	4,380	2,534	3,014						
Recordable Injury Cases	0	0	0	0						
Work-related Fatalities	0	0	0	0						

Nan Pao conducts investigations and corrective actions for all occupational injuries at sites certified with ISO 45001. The Company has established a Nonconformity Handling Procedure and, with the participation of employees and other relevant stakeholders, jointly evaluates the need for corrective measures to eliminate the root causes of nonconformities.

In 2024, Nan Pao Group recorded a total of seven occupational injury cases, involving seven employees (representing 0.21% of the total workforce at the end of 2024). Among these, there were seven cases of disabling injuries, with a disabling injury frequency rate of 1.49. Although this showed improvement compared to 2023, the target of achieving zero occupational incidents in 2024 was not met.

#### 2024 Nan Pao Group Occupational Injury Performance Statistics

Category	Group
Number of Employees (as of December 31, 2024)	3,333
Total Working Hours (hours worked $\times$ number of employees)	4,701,483
Number of Disabling Injury Cases (excluding commuting accidents)	7
Number of Traffic Accidents Resulting in Disabling Injuries	6
Lost Workdays	138
Disabling Injury Frequency Rate (FR) (FR = [Number of Disabling Injury Cases $\div$ Total Working Hours] $\times$ 1,000,000)	1.49
Disabling Injury Severity Rate (SR) (SR = [Total Lost Workdays $\div$ Total Working Hours] $\times$ 1,000,000)	29.35
Lost-Time Injury Frequency Rate (LTIFR) (LTIFR = [Number of Lost-Time Injury Cases $\div$ Total Working Hours] $\times$ 1,000,000 = FR)	1.49

Note: The above Group occupational injury performance statistics include only Nan Pao Taiwan, as well as the following subsidiaries: Nan Pao Foshan, Foshan Goodwill, Nan Pao Dongguan, Nan Pao Fuqing, Nan Pao Kunshan, Nan Pao Huai'an, Changshu Yubo, Nan Pao Vietnam, Vietnam Materials, Vietnam Advanced Materials, NNV, Nan Pao Indonesia, and Nan Pao Thailand.

#### Taiwan Nan Pao Resins Process Safety Indicators (%)

Year	Process Safety Incident Count (PSIC)	Total Recordable Incident Rate (TRIR) (Direct and Indirect Employees)	Fatal Incident Rate (TRIR) (Direct and Indirect Employees)	Process Safety Total Incident Rate (PSTIR)	Process Safety Incident Severity Rate (PSISR)	Severity Rate (SR)	Lost-Time Injury Frequency Rate (FR)
2021	0	0.88	0	0	0	172.70	4.39
2022	0	0.78	0	0	0	134.96	3.91
2023	0	0.33	0	0	0	17.90	1.63
2024	0	0.80	0	0	0	24.85	4.01

Process Safety Indicator Calculation Formulas

TRIR: Total Recordable Incident Rate

TRIR = (Number of recordable incidents x 200,000) / Total work hours

SR: Severity Rate (Total Lost Workdays per Million Hours)

SR = (Total lost workdays due to injuries x 1,000,000) / Total work hours

FR: Lost-Time Injury Frequency Rate

FR = (Number of lost-time injuries x 1,000,000) / Total work hours

In 2024, Nan Pao did not incur any fines from authorities for violations of occupational safety and health regulations. The company continues to place strong emphasis on safeguarding employees' health and safety by implementing occupational safety and health measures in compliance with applicable laws and regulations, striving to create a safe, healthy, and legally compliant workplace.

#### Health Center and Health Examinations

Nan Pao (Taiwan) employs a full-time, dedicated occupational health nurse and has established a health center that provides first aid and emergency care, one-on-one health consultations, and employee health management. This ensures that employees have access to additional medical resources and professional advice. The nurse offers guidance to employees on correct health concepts. An occupational medicine specialist also visits monthly to conduct workplace hazard identification and improvements, provide employee health consultations, manage health issues, and arrange referrals or medical service plans.

In disease prevention and employee health protection, the company engages an occupational medicine specialist monthly for on-site services, including hazard identification and mitigation, employee health consultations, resolution of physical and mental health concerns, and referrals or medical service plans. The specialist also assists in implementing health management plans.

Nan Pao offers annual general health examinations and special occupational health examinations to all employees, regardless of age. The examinations exceed regulatory requirements, with all employees receiving ECGs, abdominal ultrasounds, cancer screenings (CEA, AFP, PSA), thyroid tests, glycated hemoglobin tests, and more. The program integrates government-funded screenings for the four major cancers, aiming for early detection and treatment. Based on the results, employees are classified into health management levels, with occupational physicians providing health education consultations and referrals as needed. The occupational health nurse inputs the results into the "Health Management System" for analysis.

According to occupational safety and health personnel recommendations and environmental testing results in various special work environments, the company arranges annual health examinations for operations with specific health hazards. Occupational medicine specialists assess and classify results, implementing comprehensive management. For employees classified as Level 2 or above, personalized health guidance is provided, and occupational medicine specialists conduct additional consultations and occupational disease prevention training as needed.

In 2024, Nan Pao Taiwan completed its annual health check-up, all 565 eligible employees participated. A post-event survey on staff service, venue, and process recorded 560 satisfied responses (99.1%). We will address any findings and continue improving the program.

#### **Maternal Protection Measures**

To safeguard the health of female employees and their unborn children during prepregnancy, pregnancy, within one year after childbirth, and while breastfeeding, Nan Pao (Taiwan) has implemented measures to manage jobs that may pose maternal health risks. Occupational safety personnel, nurses, and supervisors assist in conducting environmental testing, hazard assessment, and control measures. Cases are registered for management by occupational physicians and nurses, including counseling, health risk assessments, risk classification management, recommendations for suitable work arrangements, and periodic follow-up care by occupational health nurses. Once the occupational physician confirms that the employee's health is not at risk, the employee is informed of relevant information, and her work preferences are respected to ensure equal employment opportunities and maternal protection.

To strengthen early pregnancy protection, upon receiving a pregnancy report, a pink uniform is issued to the employee to help prevent accidental incidents (such as collisions or shoulder taps). Designated parking spaces for pregnant employees are also provided, and security staff assist with traffic management during arrival and departure times.

When Nan Pao employees require childcare support, they may apply for parental leave and request reinstatement upon expiration, allowing them to balance personal and family needs.

Item	Female	Male	Total
Actual number of employees who applied for parental leave in 2024	4	1	5
Expected number of employees returning from parental leave in 2024	5	1	6
Actual number of employees returning from parental leave in 2024	5	1	6
Parental leave return-to-work rate	100%	100%	100%
Number of employees returning from parental leave in 2023	3	2	5
Number of employees who continued working for one year after returning from parental leave in 2023	3	2	5
Parental leave return-to-work rate	100%	100%	100%



## 7.1 Community Safety and Health

Nan Pao is a chemical manufacturing company that places great emphasis on minimizing potential impacts on surrounding communities caused by odors and emissions during production. To prevent the release of unpleasant odors and harmful substances into neighboring areas, Nan Pao Taiwan has implemented a series of protective measures within its facilities.

Given the variety of chemicals used onsite, there is a potential risk of odor emissions. To address this, the company has modified the feeding method for the EA process by replacing the open manhole feeding with a diaphragm pump system, thereby reducing exposure to air and minimizing odor dispersion. Additionally, outdated equipment components are being systematically upgraded—such as the adoption of seal-less motors, sealed blind flanges, and autonomous detection systems—to further improve odor control within the plant.

Nan Pao Taiwan is also committed to reducing VOC content and emissions at the source, both in raw materials and production processes, to lessen the environmental impact on the surrounding community.

In terms of safety, Nan Pao has comprehensive protection measures in place against general accidents, natural disasters, and chemical leaks. The company also conducts regular emergency drills to ensure preparedness and reduce any potential impact on the community in the event of an incident. In 2024, there were no complaints or petitions related to significant negative impacts on the local community.

To foster mutual understanding and trust, Nan Pao Taiwan regularly invites community members to participate in environmental engagement events. As an integral part of the local community, Nan Pao values its role as a responsible neighbor. The company shares its philosophy of pollution prevention from the source and reports its environmental protection achievements, demonstrating that chemical manufacturers can also be community- and environmentally friendly.

Moreover, to support local employment, Nan Pao Group gives hiring priority to qualified residents from nearby neighborhoods when staffing needs arise.







Photo: Nan Pao Taiwan Community Visit Activity

General occupational safety and health training is provided to new employees, those reassigned to new positions, and foreign workers. Additionally, Nan Pao conducts two self-defense firefighting drills and two toxic chemical disaster response drills each year to ensure that all employees are well-prepared to respond and evacuate safely in the event of an emergency.

Mandatory safety and health training is also provided for personnel in key roles, including occupational safety and health supervisors, high-pressure gas operation supervisors, operators of hazardous machinery or equipment, personnel engaged in special operations, and first aid responders.

All hazardous chemicals used in the plants are clearly labeled, listed in comprehensive chemical inventories, and accompanied by accessible Safety Data Sheets (SDS). General awareness training is also conducted to ensure proper chemical management. For work environments involving organic solvents, dust, and noise, Nan Pao establishes workplace environment monitoring plans. Monitoring plans and testing results are reported to the central competent authority in accordance with regulations.

Nan Pao has established robust protection measures for general accidents, natural disasters, and chemical spills. Regular safety drills are conducted to minimize environmental impacts on the community in the event of an incident. The company's operations are managed to ensure that production activities do not negatively affect neighboring communities or residents. Nan Pao also maintains active engagement with local communities, staying attuned to cultural dynamics and evolving values in order to fulfill its corporate social responsibilities.

#### **Community Care**

#### **Blood Donation Campaign**

Nan Pao Taiwan demonstrates compassion through action by organizing annual community-based blood donation events. In 2024, Nan Pao collaborated with the Tainan Blood Center to offer incentives for donors, encouraging both local residents in the Xigang District and company employees to participate enthusiastically. The campaign successfully collected 605 units of blood (151,250 c.c.), helping to alleviate the blood shortage and making a meaningful contribution to society. This initiative also inspired greater community participation in public welfare.





Photo: Nan Pao Taiwan Blood Donation Event

#### **Community Infrastructure Support**

Nan Pao Taiwan has long demonstrated its commitment to enhancing community infrastructure. In Tainan's Xigang District, the company has made significant contributions to public safety by supporting the development of essential facilities, including the provision of patrol vehicles, ambulances, and community service vans—helping to bridge resource gaps in local emergency services.

In addition, Nan Pao Group has donated its adhesive, coating, and building material products to under-resourced medical institutions and educational facilities. To ensure proper application and safety, the company also dispatches professional technical staff to provide on-site guidance. These efforts reflect Nan Pao's goal of supporting resilient and accessible infrastructure for underserved communities.



Photo: Donation of Ambulance



Photo: Provision of Coating Products to Educational Institutions



Photo: Community Pink Trumpet Tree Festival



Photo: Community-Based Organization Visit Activity

Nan Pao firmly believes in the principle of "giving back to society." In addition to its pursuit of technological innovation and service excellence, Nan Pao actively promotes social and cultural preservation, supports the development of future generations, and fulfills its responsibility to care for the elderly.

In 2007, Nan Pao Taiwan established the Nan Pao Resin Social Welfare and Charity Foundation in Tainan City. Through three core pillars—Talent Development, Elder Care, and Support for the Underprivileged—the foundation serves as a key platform for Nan Pao to fulfill its corporate social responsibility.

## 7.2 Child Education

#### After-School Tutoring, Enrichment Programs, and Seasonal Camps

With changes in public policy and social structures, the gap between the rich and poor has widened significantly, leading to challenges such as single-parent households, grandparent-led families, and foreign-born parents. Xigang District, located in a rural area of Tainan, has an average income level well below the national average. For children growing up in such environments, education is often the only path to shaping their future and pursuing their dreams.

Each child is like a seed—some may bloom as delicate roses, while others grow tall and strong like camphor trees. It is our responsibility to provide them with diverse learning opportunities and exposure to multicultural experiences. By respecting their individuality and nurturing creativity, we can help children unlock their potential.

Recognizing this need, the Nan Pao Social Welfare and Charity Foundation has partnered with six elementary schools in Xigang and Jiali Districts-Xigang Elementary School, Gangdong Elementary School, Houving Elementary School, Songlin Elementary School, Chenggong Elementary School, and Wunnei Elementary School (a rural school in Jiali)—to implement after-school tutoring, student clubs, and winter/summer camps.









Courses are designed by teachers based on students' needs and include not only academic support but also extracurricular activities in the arts and sports, aimed at fostering well-rounded personal development and nurturing students' interests and talents.

#### 2024 Educational Programs for Children (Selected Key Activities)

School	Program Content
Xigang Elementary, Chenggong Elementary, Houying Elementary, Songlin Elementary, Wunnei Elementary	After-school tutoring classes, winter and summer camps
Gangdong Elementary	After-school tutoring classes, winter and summer camps, library book donations









# 7.3 Elderly Welfare

#### Partnership with the Huashan Social Welfare Foundation

As Taiwan faces the challenges of an aging population, elderly care and related social needs have drawn increasing public attention. Recognizing these urgent needs, the Nan Pao Social Welfare and Charity Foundation partnered with the Huashan Social Welfare Foundation, a nonprofit organization dedicated to elderly welfare across Taiwan.

Through collaboration with Huashan's Xigang Angel Station, Nan Pao Taiwan initiates annual donation drives during the Dragon Boat Festival, Mid-Autumn Festival, and Lunar New Year. Employees are encouraged to donate holiday care packages, which are then personally delivered by Huashan's professional social workers to homebound or solitary elderly individuals, offering warmth and companionship during festive seasons.

To further support elderly care in the Xigang District, Nan Pao provided funding for a dedicated home service vehicle and sponsored long-term caregiving expenses for seniors living alone. With the help of Huashan's trained staff, daily home visits include transportation to medical appointments, in-bed bathing services, and delivery of nutritious meals and supplements. Beyond meeting physical needs, social workers also offer emotional support—spending time with the elderly, engaging them in conversation, and helping restore a sense of self-worth and purpose.

In 2024, Nan Pao hosted a heartfelt appreciation tea event at the company headquarters, inviting elderly beneficiaries from Xigang to visit. The celebration featured live performances and a hands-on floral arrangement workshop, creating warm, lasting memories shared between the seniors and Nan Pao employees.





Photo: Elderly Painting Activity

Photo: Donation of Organic Rice to the Huashan Foundation



Photo: 2024 Huashan Foundation Appreciation Tea Gathering

#### **Elderly Welfare Promotion and Community Engagement**

Although the elderly population in Tainan's Xigang District is not particularly high in terms of household registration, the area has experienced significant outmigration of working-age residents. As a result, many seniors—while not necessarily lacking in material resources—face emotional challenges due to living alone.

To support the physical and mental well-being of elderly residents, the Nan Pao Social Welfare and Charity Foundation collaborates annually with the Xigang District Association for the Advancement of Elderly Welfare to host recreational events and communal meals during the Double Ninth Festival (Senior Citizens Day).

During the Dragon Boat Festival, Nan Pao also sponsors traditional rice dumpling-making events held by the Qing'an Community in Xigang. These handmade rice dumplings are distributed to all seniors in the community who are disabled, living alone, or socially disadvantaged—bringing warmth and festive spirit to their homes.

Additionally, Nan Pao partners with the Shulin Community Development Association in Qigu District to support the Black-faced Spoonbill Daycare Academy, a daytime senior care program. The initiative provides structured classes and social interaction for under-supported elderly residents, empowering them through creative workshops and talent-based competitions that help build confidence and enrich their daily lives.

#### 2024 Elderly Welfare Programs (Selected Key Activities)

Organization	Program Description
Huashan Social Welfare Foundation	In-home care services, holiday gift deliveries, employee volunteer visits
Qing'an Community Development Association, Xigang District	Dragon Boat Festival care activities
Shulin Community Development Association, Qigu District	Black-faced Spoonbill Daycare Academy (daytime elderly care)
Xigang District Association for the Advancement of Elderly Welfare	Double Ninth Festival (Senior Citizens Day) celebration activities





Figure: Nan Pao participating in community care activities for the elderly

# 7.4 Care for the Disadvantaged

Over the past decade, the wealth gap in Taiwan has significantly widened, with resources increasingly concentrated in the hands of a few. As a company rooted in a rural area, Nan Pao Taiwan is deeply aware of the hardships many communities face. In response, the Nan Pao Social Welfare and Charity Foundation has been providing emergency relief to disadvantaged families, offering timely assistance for those in crisis.

Since its establishment in 2007, the Foundation has offered financial aid for urgent needs such as medical expenses, funeral costs, daily living hardships, and tuition support for children from low-income families.

In addition to direct assistance, Nan Pao extends its care by providing financial support to several charitable foundations in the Tainan area, helping them bridge funding gaps. These include the Genesis Social Welfare Foundation, Mei-Shan Foundation, Chaoxing Foundation, Lefu Foundation, Eden Social Welfare Foundation, and the Tainan Deaf and Mute Welfare Association, among others.

In 2024, Nan Pao celebrated Christmas by inviting trainees from nearby Eden Foundation workshops—including the Xinyuan, Dandelion, and Clover Workshops—to share their heartfelt holiday wish lists. Nan Pao employees volunteered to fulfill these wishes by preparing personalized Christmas gifts. The event not only allowed the participants to visit Nan Pao's new building and receive their long-awaited presents, but also gave employees a chance to share love and care with those in need—fostering a sense of warmth and purpose throughout the workplace.

#### 2024 Support Programs for Disadvantaged Groups (Selected Key Activities)

Recipient Organization / Beneficiary	Support Provided
Mei-Shan Social Welfare Foundation	Educational grants for underprivileged students
Catholic Rui-Fu Center for the Intellectually Disabled	Donation of appliances and consumable goods
Chaoxing Social Welfare and Charity Foundation	Nutritional supplement funding for individuals with intellectual disabilities
Ciguang Mental Care Foundation	Donation of equipment and event sponsorship
Eden Social Welfare Foundation – Jiali Dandelion Workshop	Operational support and activity sponsorship
Tainan Deaf and Mute Welfare Association	Donation of rice and event subsidies for hearing-impaired individuals
Genesis Social Welfare Foundation – Tainan Zhi-An Home	Daily supply donations
Chaoxing Social Welfare and Charity Foundation	Operational funding
Children Are Us Foundation – Tainan Sheltered Workshop	Funding for skill training and work support for persons with disabilities
Individual Emergency Relief & Funeral Assistance	Financial aid for referred or applicant families in crisis



Photo: Service Vehicle Supported by the Eden Social Welfare Foundation



Photo: Donation of Sample Shoes by Nan Pao Taiwan to the Mental Health Association





Photo: Eden Foundation's Secret Santa Christmas Celebration

## 7.5 Volunteer Services

The Nan Pao Group has long been committed to community development through its social welfare foundation, with sustained efforts in environmental clean-up, support for the disadvantaged, and emergency relief. The company actively encourages employee participation in community service by organizing volunteer programs and recognizing volunteer hours. Nan Pao volunteers can often be seen taking part in a variety of meaningful activities, including rural science education, beach clean-ups, tree planting, blood donation drives, elder care visits, and rural outreach initiatives.

For employees, engaging in volunteer activities not only strengthens interpersonal bonds but also fosters a deeper sense of social responsibility and personal fulfillment. For Nan Pao, cultivating a culture of volunteerism reinforces the belief that responsible corporate citizenship is essential to achieving long-term sustainability.

Nan Pao continues to dedicate financial, material, and human resources to support charitable causes, ongoing community initiatives, and operational activities aligned with its core business—aiming to create broader, positive social impact.



Photo: Tree Planting Activity

Photo: Road Paving Volunteer Work





Photo: Community Event with Children's Home

Photo: Community Epidemic **Prevention Volunteers** 



Photo: Large-Scale Beach Clean-Up Event

Summary of Donation Categories and Amounts by the Nan Pao Resin Social Welfare and Charity Foundation (2020–2024)

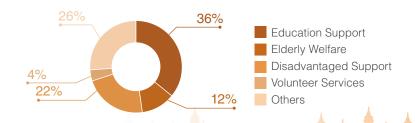
Types of Community Engagement Contributions

(Unit: New Taiwan Dollars, NTD)

Year	2020	2021	2022	2023	2024
Education Support	2,185,681	2,268,652	2,429,600	3,116,866	2,615,000
Elderly Welfare	670,000	670,000	730,000	740,000	830,000
Disadvantaged Support	530,000	938,713	1,538,113	1,687,573	1,610,500
Volunteer Services	0	144,800	109,400	244,047	250,150
Others	1,604,760	1,803,500	1,290,030	1,205,530	1,908,000
Total	4,990,441	5,825,665	6,097,143	6,994,016	7,213,650

Note: Others include emergency assistance, community cultural activities, and sports donations.

#### 2024 Social Contribution Expenditure Breakdown





Appendix 1 SASB Index Table

Appendix 2 GRI Content Index

Appendix 3 Rules Governing the Preparation and Submission of Sustainability Reports by Listed Companies

Appendix 4 Climate-Related Disclosures for Listed and OTC Companies

Appendix 5 Independent Assurance Report

Appendix 6 Report Publication Information



# Appendix — SASB Index Table

Topic	Index	Chapter	Page	Туре	SASB No.
Greenhouse Gas	"Scope 1 GHG emissions (metric tons CO <sub>2</sub> e); percentage of Scope 1 GHG emissions subject to regulatory limits (%)"	Ch. 5 Green Manufacturing and	77~79	Quantitative	RT-CH-110a.1
Emission	"Management strategies or plans for Scope 1 GHG emissions, including reduction targets and performance evaluations"	Low-Carbon Transition	77	Discussion & Analysis	RT-CH-110a.2
Air Quality	"Emissions of the following air pollutants: (1) Nitrogen oxides (NOx), (2) Sulfur oxides (SOx), (3) Volatile organic compounds (VOCs), (4) Hazardous air pollutants (HAPs)"	Ch. 5 Green Manufacturing and Low-Carbon Transition	87~88	Quantitative	RT-CH-120a.1
Energy Management	(1) Total energy consumption (GJ) (2) Share of grid electricity (%) (3) Share of renewable energy (%) (4) Self-generated energy (GJ)	Ch. 5 Green Manufacturing and Low-Carbon Transition	80~81	Quantitative	RT-CH-130a.1
	(1) Total water withdrawal (2) Total water consumption (3) % of operations in high/extremely high water-stress areas		84~86	Quantitative	RT-CH-140a.1
Water Management	(4) Number of water-related violations	Ch. 5 Green Manufacturing and Low-Carbon Transition	86	Quantitative	RT-CH-140a.2
	(5) Water risk management and mitigation strategies		84	Discussion & Analysis	RT-CH-140a.3
Hazardous Waste Management	Amount of hazardous waste generated, percentage recycled	Ch. 5 Green Manufacturing and Low-Carbon Transition	90	Quantitative	RT-CH-150a.1
Community Relations	Discussion of engagement processes to manage risks and opportunities associated with community interests	Ch. 7 Community Engagement	118~119	Discussion & Analysis	RT-CH-210a.1
Workforce Health &	(1) Total recordable incident rate (TRIR) (2) fatality rate for direct employees and contract employees		115	Quantitative	RT-CH-320a.1
Safety	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Ch. 6 Value Co-Creation	116	Discussion & Analysis	RT-CH-320a.2
Product Design for Use-phase Efficiency	Revenue from products designed for use-phase resource efficiency	Ch. 4 Sustainable Supply Chain	54	Quantitative	RT-CH-410a.1
Safety & Environmental Stewardship of	"(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"	Ch. 4 Sustainable Supply Chain	63	Quantitative	RT-CH-410b.1
Chemicals	Development strategies for high-concern substances and alternative products that reduce human and environmental impacts	,	61	Quantitative	RT-CH-410b.2
Genetically Modified Products	Percentage of revenue from genetically modified products	No use of genetically modified (GM) raw materials	-	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	Ch.2 Robust Corporate Governance	18	Discussion & Analysis	RT-CH-530a.1
Operational Safety, Emergency	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Ch. 6 Value Co-Creation	115	Quantitative	RT-CH-540a.1
Preparedness & Response	Number of transport incidents		63	Quantitative	RT-CH-540a.2
	Operations with a significant actual or potential negative impact on the local community.	Ch. 7 Community Engagement	118	Quantitative	
Community Relations	Specific, effective mechanisms and actions taken by the company itself and its suppliers to reduce negative impacts on the environment or society.	Ch.4 Sustainable Supply Chain	69	Quantitative	
Product Output	Product output by product category.	About Nan Pao	9	Quantitative	RT-CH-000.A

# Appendix 2 GRI Index

Statement of Use The reporting organization, Nan Pao, has reported the content from January 1, 2023 to December 31, 2023 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						
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2-3	Reporting period, frequency and contact point	7					
2-4	Restatements of information	Not applicable					
2-5	External assurance	7					
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2-6	Activities, value chain and other business relationships	8					
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	GOVERNANCE						
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2-11	Chair of the highest governance body	28					
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GRI Standard	Disclosure Items	Page	Note
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2-15	Conflicts of interest	42	
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	STRATEGY, POLICIES AND PRACTICES		
2-22	Statement on sustainable development strategy	18~19	
2-23	Policy commitments	18~19	
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2-25	Processes to remediate negative impacts	22~23	
2-26	Mechanisms for seeking advice and raising concerns	24~26	
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2-29	Approach to stakeholder engagement	24~26	
2-30	Collective bargaining agreements	105	

GRI Standard	Disclosure Items	Page	Note			
GRI 3: MATERIAL TOPICS 2021						
3-1	Process to determine material topics	20~21				
3-2	List of material topics	21~23				
3-3	Management of material topics	22~23				
	GRI 201: ECONOMIC PERFORMANCE 2016					
201-1	Direct economic value generated and distributed	8~9				
201-2	Financial implications and other risks and opportunities due to climate change	73~75				
	GRI 202 : MARKET PRESENCE 2016					
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	105~106				
202-2	101~102					
	GRI 204 : PROCUREMENT PRACTICES 2016					
204-1	Proportion of spending on local suppliers	69				
	GRI 205: ANTI-CORRUPTION 2016					
205-1	Operations assessed for risks related to corruption	40				
205-2	Communication and training about anti-corruption policies and procedures	40				
205-3	Confirmed incidents of corruption and actions taken	41				
	GRI 302: ENERGY 2016					
302-1	Energy consumption within the organization	80~81, 83				
302-2	302-2 Energy consumption outside of the organization					
302-3	Energy intensity	80~81, 83				
302-4	Reduction of energy consumption	80, 82~83				
	GRI 303: WATER AND EFFLUENTS 2018					
303-1	Interactions with water as a shared resource	84~86				

GRI Standard	Disclosure Items	Page	Note
303-2	Management of water discharge-related impacts	86	
303-3	Water withdrawal	84~86	
303-4	Water discharge	84~86	
303-5	Water consumption	84~86	
	GRI 305 : EMISSIONS 2016		
305-1	Direct (Scope 1) GHG emissions	77, 79	
305-2	Energy indirect (Scope 2) GHG emissions	77, 79	
305-3	Other indirect (Scope 3) GHG emissions	78~79	
305-4	GHG emissions intensity	77	
305-5	Reduction of GHG emissions	77	
305-6	Emissions of ozone-depleting substances (ODS)	87~88	
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	87~88	
	GRI 306 : WASTE 2020		
306-1	Waste generation and significant waste-related impacts	89	
306-2	Management of significant waste-related impacts	90	
306-3	Waste generated	89	
306-4	Waste diverted from disposal	90~91	
306-5	Waste directed to disposal	91	
	GRI 307: ENVIRONMENTAL COMPLIANCE 20	16	
307-1	Non-compliance with environmental laws and regulations	72, 86	
	GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMEN	NT 2016	
308-1	New suppliers that were screened using environmental criteria	67~68	
308-2	Negative environmental impacts in the supply chain and actions taken	67	

GRI Standard	Disclosure Items	Page	Note			
	GRI 401: EMPLOYMENT 2016					
401-1	New employee hires and employee turnover	103~104				
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees					
401-3	Parental leave	116				
	GRI 403: OCCUPATIONAL HEALTH AND SAFETY	2018				
403-1	Occupational health and safety management system	112~114				
403-2	Hazard identification, risk assessment, and incident investigation	114				
403-3	Occupational health services	116				
403-5	Worker training on occupational health and safety	114				
403-6	403-6 Promotion of worker health					
403-9	Work-related injuries	115				
	GRI 404: TRAINING AND EDUCATION 2016					
404-1	Average hours of training per year per employee	111				
	GRI 405: DIVERSITY AND EQUAL OPPORTUNITY	2016				
405-1	Diversity of governance bodies and employees	100~102				
405-2	Ratio of basic salary and remuneration of women to men	106~107				
	GRI 412: HUMAN RIGHTS ASSESSMENT 2010	ŝ				
412-1	Operations that have been subject to human rights reviews or impact assessments	97~98				
412-2	Employee training on human rights policies or procedures	96				
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	No such event occurred				
	GRI 414: SUPPLIER SOCIAL ASSESSMENT 20:	16				
414-1	New suppliers that were screened using social criteria	67~68				



# Appendix 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 disc	losure status		Units
1	Total energy consumption, percentage of purchased electricity, renewable energy utilization rate, and total self-generated energy (Note 1)	Quantitative	<ul><li>Total Energy Consump</li><li>Purchased Electricity</li></ul>	Nan Pao Taiwan 2024 Energy Consumption: Total Energy Consumption: 212,391 GJ Purchased Electricity (%): 37.92% Self-Generated Energy (% of Purchased Electricity): 0.67%"			
2	Total Water Withdrawal, Total Water Consumption, and Wastewater Discharge (Regulatory or Voluntary Disclosure).	Quantitative		n 2024, Nan Pao Taiwan recorded a total water withdrawal of 103.239 thousand m³, total water onsumption of 84.150 thousand m³, and wastewater discharge of 19.089 thousand m³.			
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 2024, Nan Pao Taiwan with a recycling rate of 7		metric tons of hazardou	s waste during production,	Metric tonne(t), (%)
4	Number and ratio of occupational accidents	Quantitative		recorded 5 cases of occ Incident Rate (TRIR) of 0.8		ding commuting accidents), employees.	(%), amount
5	Operational activities that have significant actual or potential negative impacts on the local community.	"Discussion and Analysis"	"To minimize potential negative impacts on local communities, Nan Pao Taiwan has implemented the following measures:  1. Annual fire drills and emergency response exercises at each plant.  2. Inviting community residents to visit facilities to better understand 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"		97.7% of suppliers have signed the Nan Pao Taiwan Supplier Code of Conduct, which sets forth environmental and ethical requirements for suppliers.			
					Unit:	Metric tons; NT\$ thousand	
			Major Products	2024 Capacity	2024 Production	2024 Output Value	
			Adhesives	243,776	240,692	15,052,799	
7	Product output by product category.	Quantitative	Coatings	19,074	15,375	1,264,873	Varies by
			Others (Note)			3,393,047	product type
			Total	262,850	256,067	19,710,719	
			Note: Due to the inclusion of subsidiaries covering electronic materials and biotech industries, with measurement units in pcs, bottles, cans, boxes, packs, granules, bars, etc, product categories are highly diverse and thus cannot be converted into a uniform calculation.				

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.

# Appendix 4 Climate-related Information by TWSE Listed Companies

No.	ltem	Execution ( Pages )
1	Statement on the supervision and governance of climate-related risks and opportunities by the board of directors and management.	71
2	Explanation of how identified climate risks and opportunities affect the company's business, strategy, and finances (short-term, medium-term, long-term).	74
3	Description of the financial impacts of extreme weather events and transition actions.	75
4	Integration of the process for identifying, assessing, and managing climate risks into the overall risk management system.	73
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.	75
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.	75
7	If internal carbon pricing is used, explain the basis for price determination.	76
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.	75,81
9	Inventory and assurance of greenhouse gas emissions.	79

# Appendix 5 Independent Assurance Report



#### 安永聯合會計師事務所

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#### Independent practitioner's assurance report

To: Nan Pao Resins Co., Ltd.

#### Scope

We have been engaged by Nan Pao Resins Co., Ltd (the "Company") to perform a 'limited assurance engagement,' as defined by the Taiwan Accounting Research and Development Foundation, hereinafter referred to as the engagement, to report on selected sustainability performance indicators (the Subject Matter) contained in the Company's 2024 Sustainability Report (the "Report")

#### The Subject Matter selected by the Company and their applicable criteria

Regarding the Subject Matter selected by the Company and their applicable criteria, please refer to Appendix A.

#### The Company's responsibilities

The Company's management is responsible for the preparation of the Company's 2024 Sustainability Report in accordance with the adequate criteria, including referencing the Global Reporting Initiatives Standards ("GRI Standards") issued by the Global Reporting Initiative (GRI), and compiling in accordance with the Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies issued by the Taiwan Stock Exchange and the disclosure standards issued by the Sustainability Accounting Standards Board (SASB) for chemical industry, and for the design, execution and maintenance of internal controls in regard to report preparation to support the collection and presentation of the Company's 2024 Sustainability Report. The Company's management is responsibility for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records, and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

#### EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the International Statements on Assurance Engagements (ISAE) 3000" Assurance Engagements Other than Audits or Reviews of Historical Financial Information", issued by the Taiwan Accounting Research and Development Foundation, and the terms of reference for this engagement as agreed with the Company. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

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#### Our independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China and have the required competencies and experience to conduct this assurance engagement.

EY also applies Standards on Quality Control No. 1 "Quality Control for Public Accounting Firms", which requires that we design, implement, and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information and applying analytical and other appropriate procedures.

#### Our procedures included:

- Conducted interviews with personnel to understand the business of the Company, the overall
  implementation of sustainability development and the reporting process
- Conducted interviews with personnel and inspections of documents to understand how the Company communicates with and responds to main stakeholders, and to understand stakeholders' expectations and needs
- Conducted interviews with key personnel of the Company to understand the process for collecting, collating and reporting the Subject Matter during the reporting period
- Checked that the calculation criteria have been correctly applied in accordance with the
  methodologies outlined in the Criteria
- Undertook analytical procedures on the Subject Matter; collected and evaluated the supporting documentation, obtained management's assertions of the Subject Matter, and, if necessary, tested on a sample basis
- Identified and tested assumptions supporting calculations
- Tested, on a sample basis, the underlying source information to check the accuracy of the data
- Read the Report to ensure that the overall implementation of sustainability development is consistent with our understanding

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#### Inherent Limitation

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.

#### Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter for the year ended December 31, 2024, in order for it to be in accordance with the applicable Criteria.

Hung, kuo-Sen

Hung, Kuo-Sen

Ernst & Young

August 25, 2025

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Appe	Appendix A:							
No.	Page	Corresponding Report Chapter Contents		Applicable Criteria	Supplementary Explanation			
1	80	5.3 Energy Management	total energy consumed and the grid electricity usage ratio	ichciev consumblion data of cach	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 of "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) <sup>1</sup> .  Refer to the accounting metrics of SASB RT-CH-130a.1.			
2	84	5.4 Water Resources	Toisyan's water resources data	The Company calculates the water intake and discharge data of each plant based on water bills and waste (sewage) discharge surface water declaration tables.	TWSE Listed Companies" - total water withdrawal,			
3	89	5.6 Waste Management	industrial waste and the recycling percentage in	the three-part form of business waste entrusted to joint treatment control delivery declared by the Company.	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 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.  Refer to the accounting metrics of SASB RT-CH-150a.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" or related sub-laws.

No.	Page	Corresponding Chapter	Corresponding Report Contents	Applicable Criteria	Supplementary Explanation
4	114	6.4 Safe Workplace Environment	Total injury statistics and fatality rate in 2024.	Based on the information declared by the Company in the occupational disaster statistical summary table.	
5	114	6.4 Safe Workplace Environment	Count (PSIC), Process Safety Total Incident Rate (PSTIR) and Process Safety Incident Severity Rate (PSISR) in	each incident recorded in the accidents summary report meets the definition of Process Safety incidents (PSI) in accordance with the Process Safety Leading	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - illustrating the number of persons involved in and rate of occupational accidents.  Refer to the accounting metrics of SASB RT-CH-540a.1.
6	43-47 111-115	3.4 Enhancing Risk Culture Awareness 6.4 Safe Workplace Environment	operations that have significant and actual or potentially negative impact	Company has identified actual and potential negative impacts on the economy, environment and people (including human rights).	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - operations that have significant and actual or potentially negative impacts on local communities.
7	63	4.3 Responsible Chemical Management	Responsible Chemical Management Strategy		
		5.7 Biodiversity Protection	Nan Pao Group Biodiversity Policy		

No.	Page	Corresponding Chapter		nding Report	Applicable Criteria	Supplementary Explanation
		6.1 Human Rights Policy 6.3 Employee Communication and Development	Measures of I Employee Mechanisms	Nan Pao Grievance	Company has identified actual and potentially negative impact on the economy, environment and people (including human rights), related policies or	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" – the specific and effective actions taken by the enterprise and suppliers to reduce negative impact on the environment and society.
		6.4 Safe Workplace Environment 7.1 Community Safety and Health	protective m general dis disasters a leakage dis safety drills carried out minimize the	neasures against asters, natural and chemical asters, various are regularly every year to be environmental accommunities if		
	39 67-69 96	3.2 Anti-Corruption and Ethical Business Practices 4.5 Supplier Management 6.1 Human Rights Policy	Suppliers are social and responsibility	e committed to environmental by signing the		
8		0.3 Operational Capability	Adhesives Coating Others Total		the production and sales table as	According to Attachment 1.2 Sustainability Disclosure Indicators, Article 4 of the "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" - production by reportable segments.  Refer to the accounting metrics of SASB RT-CH-000. A.

# Appendix 6 Report Issued Information

#### Report Publication Information:

2024 Sustainability Report: Issued in August, 2025.

#### 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.

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