2024
SAN FU CHEMICAL CO., LTD.

2024
ESG REPORT

CONTENTS

Message from the Chairperson

Thank you to our customers for their support, and to our employees for their efforts. In 2024, the Company's revenue reached NT$5,324 million, an annual increase of 6.7%. Thanks to the hard work of our colleagues in various product production and sales activities, we've seen positive outcomes. Of course, results across departments vary — some are significant, some are progressing more slowly. By reviewing these achievements, we stay motivated to push forward and accelerate progress.

In terms of energy conservation and carbon reduction, performance by each unit has improved. However, due to increased production volume and new investment projects, total carbon emissions have risen. This requires further improvement so that we can reduce overall emissions and move step by step toward net-zero carbon.

For circular economy efforts, 160,234 metric tons of TMAH-R waste liquid have been collected and transported for recycling and reuse. The cumulative volume of recycled solvents used has reached 52,238 metric tons — both figures show continued growth. To process TMAX, we invested NT$1.5 billion to build the International Nitto Electrolytic Purification Plant, which has been operational since April 2023. After two years, production has stabilized and output meets the requirements for semiconductor applications, with the product already in use at several factories. It is currently undergoing trial use at Company T and Company U. Due to the cautious nature of the trial process, each step is carefully executed. If these trials are completed successfully, it will complete the TMAH recycling puzzle for our circular economy initiative. San Fu Chemical produces low-carbon-footprint TMAH, which qualifies as an ESG-compliant product.

Unfortunately, in 2024, we did not manage wastewater discharge properly. Equipment failure caused untreated wastewater to overflow, resulting in a fine. To address this, we are not only strengthening preventive maintenance of equipment but also advancing process-level waste reduction. We estimate an additional investment of NT$50 million for a wastewater recovery project.

Our joint venture, Hong Cheng, recovered 4,759 metric tons of CO_2 in 2024 — a 24.9% increase from 3,808 metric tons in 2023. A new plant with a planned CO_2 recovery capacity of 30,000 metric tons per year is still in the planning phase.

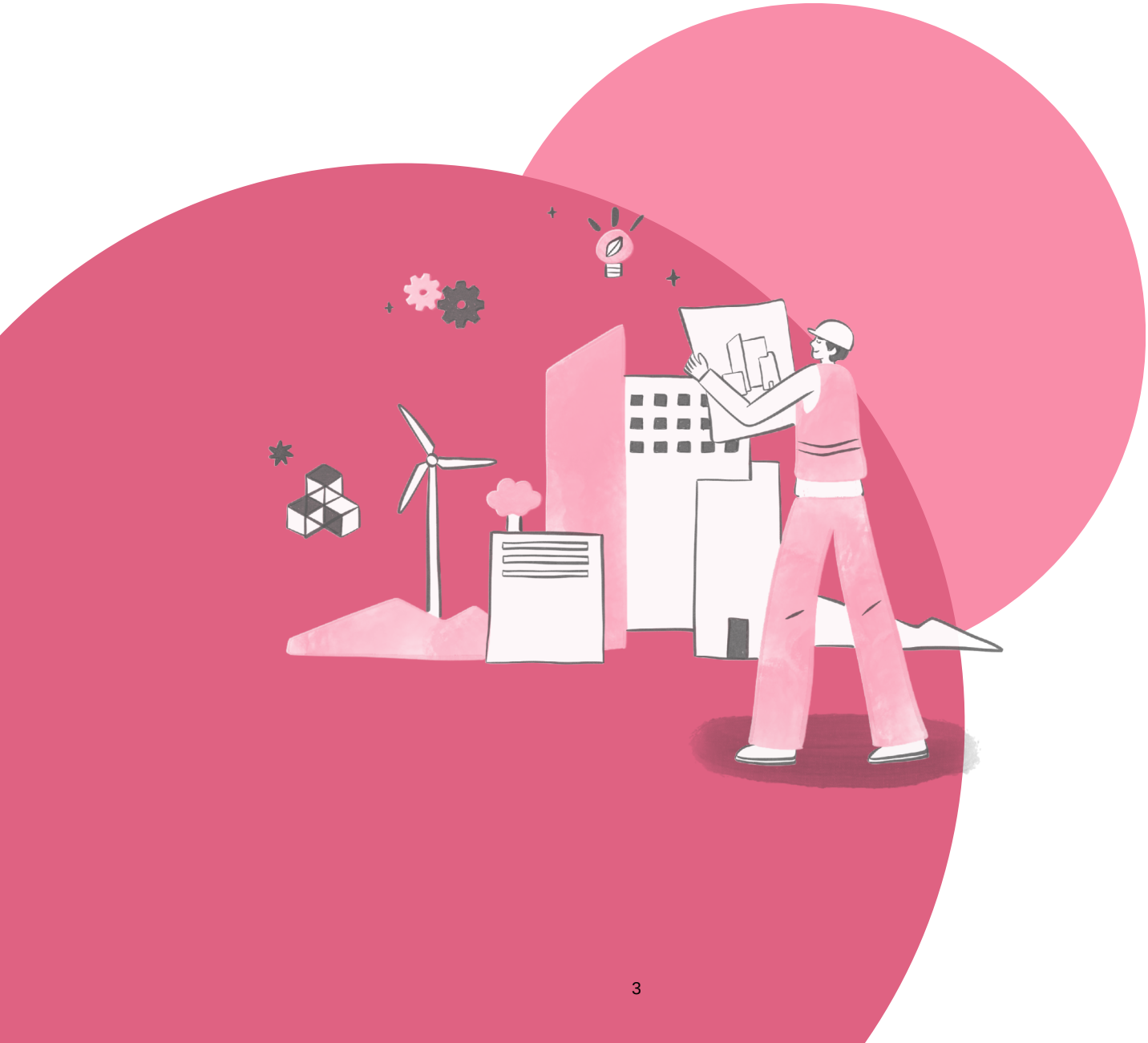
The Company follows the philanthropic spirit of our founder Mr. Chang Fu-Lu and Honorary Chairperson Mr. Chang Chun-Ming. With gratitude, humility, and generosity, we continue to engage with our community: supporting the Shanhua Junior High School baseball team, providing scholarships to students at National Taiwan University, National Cheng Kung University, and Tunghai University, and contributing to the Wang Kuang-Tsan Bio-Organic Chemistry Education Foundation and the Fu-Lu Cultural and Educational Foundation. We strive to fulfill our responsibility and make meaningful contributions to society, humanity, and the planet.

San Fu Chemical Co., Ltd.

CHAIRPERSON, SIMON WU

114.4.28

About the Report



About the Report

This report is the "2024 Sustainability Report" issued by San Fu Chemical Co., Ltd. (hereinafter referred to as "San Fu Chemical" or "we"). Its purpose is to help all stakeholders who care about San Fu Chemical better understand our efforts and achievements in the areas of Environmental Protection (E), Social Responsibility (S), and Corporate Governance (G) through the sustainability information disclosed.

The report is published in both Chinese and English and is available for download from the official website: https://www.sfchem.com.tw

Reporting Period

This report was published in June 2025. It covers the period from January 1, 2024, to December 31, 2024, consistent with our financial reporting cycle.
The previous report was issued in June 2024. The report is published annually. We will continue this annual disclosure to regularly communicate non-financial performance and to demonstrate our ongoing commitment to sustainable business operations.

Compilation Guidelines

This report follows the Global Reporting Initiative (GRI) Standards (2021 Universal Standards), AccountAbility's AA1000 Accountability Principles (2018), and the Sustainability Accounting Standards Board (SASB) Chemical Industry Standards. It also complies with the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" issued by the Taiwan Stock Exchange.

Report Management and Review

1. The report complies with the Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies mentioned above. The Sustainability Task Force compiled and reviewed the data, which was verified by the Chief Sustainability Officer, and reviewed by the General Manager and Chairperson. The report was approved by the Sustainability Committee on April 17, 2025, and the Board of Directors on April 29, 2025.
2. In response to the revision of the "Regulations Governing Establishment of Internal Control Systems by Public Companies" by the competent authority, our Board of Directors resolved in 2024 to include the "Sustainability Report Compilation and Verification Procedures" as part of the internal control system and include it in the annual audit plan.

Restatement of Information

In the chapter "Raw Material Management" under "Environmental Stewardship", the 2023 consumption of space bags at the Shanhua Plant was revised from 9,999 kg to 11,790 kg. The restatement was necessary due to the errors in the formula calculations. The restated data is 11,790 kg, and this adjustment does not affect the report's content.

Contact Information

If you have any suggestions or questions regarding the "2024 Sustainability Report" or ESG topics, you are welcome to contact us through the following means to share your valuable feedback.

San Fu Chemical Co., Ltd.
Address: 7F., No. 21, Sec. 2, Zhongshan N. Rd., Taipei City
Contact: Chang Ching-Tang, Chief Sustainability Officer / Senior Manager
Tel: +886-6-5837-608 #616
E-mail：JTCHANG@sfchem.com.tw

Third-Party Confirmation Information

Financial Data

The financial data disclosed in this report is based on the consolidated financial statements audited and certified by Deloitte Taiwan in accordance with the International Financial Reporting Standards (IFRS).

Product and Service Quality

- **The Company's ISO 9001 Quality Management System is certified by the Taiwan branch of the British Standards Institution (BSI).**
- **The ISO 22000 / HACCP Food Safety Management System is certified by Intertek Testing Services (hereinafter referred to as Intertek).**
- **The Quality Control Laboratory has passed the ISO 17025 Laboratory Quality Management System certification by the Taiwan Accreditation Foundation (TAF).**

Environmental Protection and Occupational Health and Safety Management

- **The ISO 14001 Environmental Management System and ISO 45001 Occupational Health and Safety Management System at San Fu Chemical's plants have been certified by BSI Taiwan; the International International Nitto is certified by Intertek.**
- **The locations disclosed in this report: the Taipei Headquarters, Zhubei Office, Tainan Shanhua Plant (hereinafter referred to as the Shanhua Plant), Tainan Liuying Plant (hereinafter referred to as the Liuying Plant), Kaohsiung Plant (hereinafter referred to as the Kaohsiung Plant), and Tainan International Nitto Technology Plant (hereinafter referred to as International Nitto) — have all obtained ISO 14064-1 greenhouse gas inventory declarations verified by Intertek.**

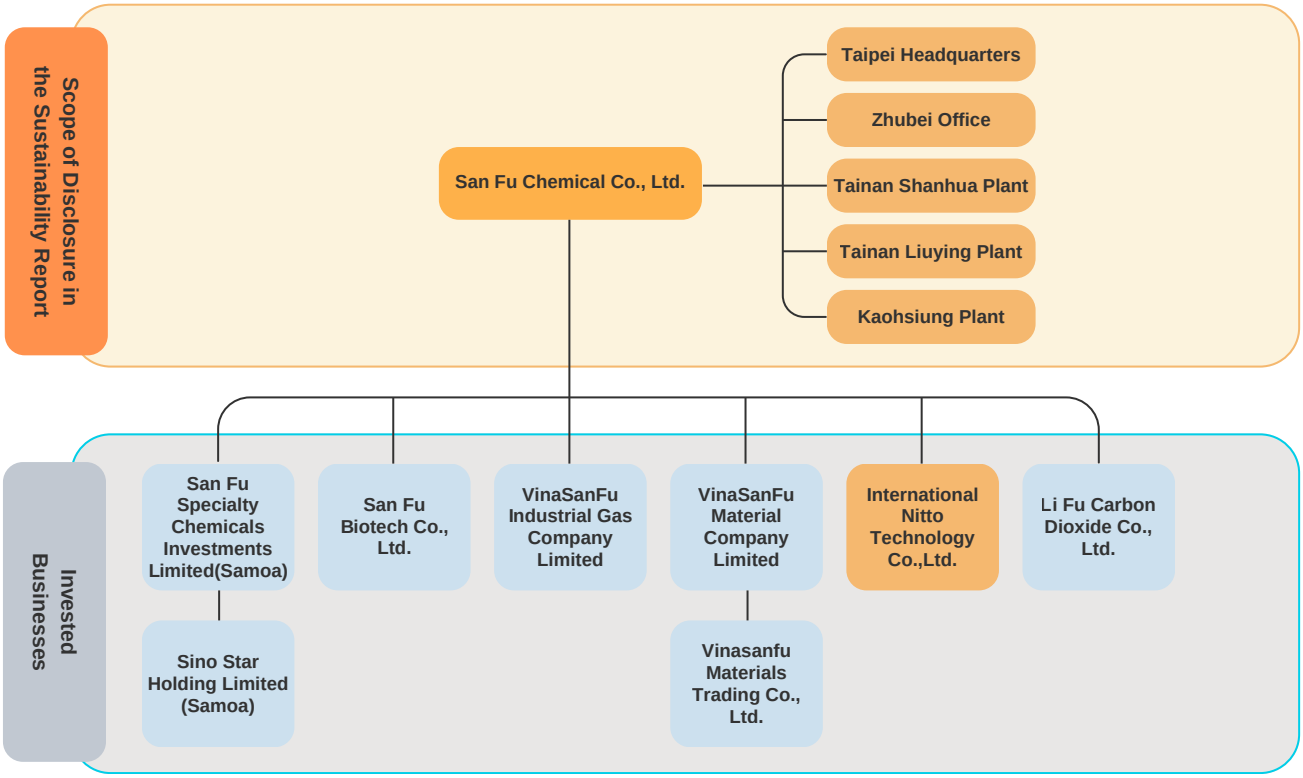
Energy Management

The Shanhua Plant and Liuying Plant have received ISO 50001 Energy Management System certification through BSI Taiwan.

Sustainability Report

In accordance with Article 4, Paragraph 2 of the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" published by the Taiwan Stock Exchange, this report discloses chemical industry sustainability indicators and has obtained a limited-assurance report issued by PwC Taiwan.

Scope of Disclosure for the Report

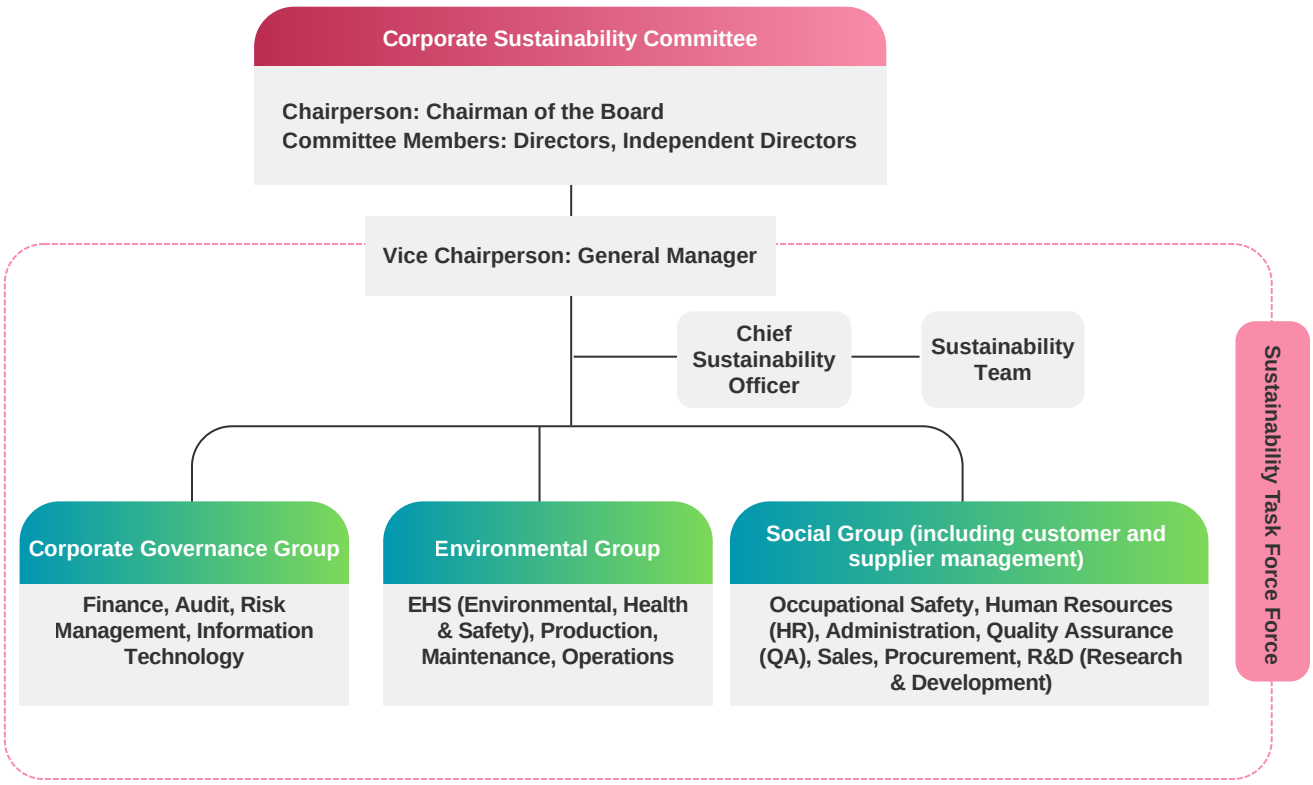


The economic and social data in this report is based on the consolidated financial statements disclosed in the 2024 San Fu Chemical Annual Report, covering six operating locations: Taipei Headquarters, Zhubei Office, Shanhua Plant, Liuying Plant, Kaohsiung Plant, and the subsidiary International Nitto. Other invested companies are not included. For the environmental category, the primary disclosure boundary includes manufacturing plants: Shanhua Plant, Liuying Plant, Kaohsiung Plant, and International Nitto. The Taipei Headquarters and Zhubei Office primarily disclose non-industrial water conservation measures and the adoption of LED lighting systems to reduce greenhouse gas emissions. Based on materiality assessment of production facilities, starting in 2024, the Company has included International Nitto in the scope of sustainability information disclosure.

Boundaries of Disclosure for Operational Locations and Report Information

Name	Address	Number of Employees	Take Charge	Scope of Disclosure		
				Economic	Environmental	Social
Taipei Headquarters	7F., No. 21, Section 2, Zhongshan N. Road, Zhongshan Dist., Taipei City	34	Decision-making Center	●	●	●
Zhubei Office	6F-2, No. 251, Fuxing 1st Street, Zhubei City, Hsinchu County	31	Sales Unit	●	●	●
Shanhua Plant	No. 340, Xiaoxinying, Shanhua Dist., Tainan City	205	Product Manufacturing	●	●	●
Liuying Plant	No. 1, Sec. 1, Huanyuan E. Rd., Liuying Dist., Tainan City	68	Product Manufacturing	●	●	●
Kaohsiung Plant	No. 45-1, Zhongheng St., Xiaogang Dist., Kaohsiung City	17	Product Manufacturing	●	●	●
International Nitto	No. 26, Sec. 2, Huandong Rd., Shanhua Dist., Tainan City	29	Product Manufacturing	●	●	●

Corporate Sustainability Committee



Establishment of the Corporate Sustainability Committee

In response to global sustainability trends, we have established the Corporate Sustainability Committee and the Sustainability Task Force to implement sustainable development initiatives and strengthen the Company's sustainability governance. The Committee provides oversight for corporate strategy formulation and planning. It consists of three directors appointed through a Board resolution, and approves the formulation of sustainability policies, strategies, annual plans, and special projects, while overseeing implementation and reviewing the sustainability report. The Committee meets at least annually with additional meetings convened as needed.

General Manager and Vice Chairperson Mr. Su Tian-Pao serves as the ultimate supervisor of the Sustainability Task Force. Together with the Chief Sustainability Officer and task force leaders, he oversees decisions on sustainability matters. Annually, the Chief Sustainability Officer reports ESG performance and future plans to the Committee.

Operation of the Sustainability Task Force

Ultimate Supervisor	Functional Group Leaders	Meeting Frequency	Duties
General Manager and Vice Chairperson Mr. Su Tian-Pao	Appointed by the General Manager from representatives in corporate governance, environmental, and social functions.	Quarterly	• Identify stakeholder categories and material topics, formulate strategic initiatives. • Facilitate cross-departmental communication and information integration. • Track and review performance on sustainability-related executions. • Annually, the Chief Sustainability Officer reports sustainability performance outcomes and future plans to the Corporate Sustainability Committee. • Most recent reporting date: April 29, 2025 (Previous: February 26, 2025).

San Fu Chemical Corporate Sustainability Policy

To continuously refine our sustainability framework, we established the "San Fu Chemical Corporate Sustainability Policy" integrating sustainability principles across all business operations. The policy emphasizes three pillars: integrity-driven governance, environmental sustainability, and inclusive social prosperity. These pillars encompass governance, environmental, and social dimensions, serving as the Company's paramount guidance on the path toward sustainability.

Official website of San Fu Chemical – Important Statement

Stakeholder Communication and Material Topic Identification

Stakeholder Communication

In accordance with the five principles of the AA1000 Stakeholder Engagement Standard (AA1000 SES) — dependence, responsibility, attention, influence, and diverse perspectives — and based on peer benchmarking, we have identified six major stakeholder groups: Customers, Financial Supervisory Authorities, Shareholders, Suppliers, Contractors, and Business Partners, Employees, and Local Communities. Through materiality analysis, we have identified key issues of concern for these stakeholder groups. We disclose the performance highlights and improvement outcomes of these issues in the report, and maintain ongoing communication with stakeholders. The communication status is reported regularly to the Board of Directors.

We hold annual general shareholders' meetings to fully protect shareholder rights. We strictly comply with regulatory disclosure requirements and publish relevant information regularly on the Market Observation Post System (MOPS). We actively participate in the government's corporate governance evaluation mechanism by voluntarily submitting a "Corporate Governance Evaluation Report" annually to enhance governance performance.

In terms of customer relations, our sales personnel maintain a strong customer-oriented approach, promptly providing product specifications and quotations according to client needs. Our Quality Department issues required quality test reports before product delivery to ensure that product standards meet customer expectations.

For media inquiries on our business performance, our designated spokesperson formally responds to interviews. Press releases are published via MOPS or the Company's website to ensure information transparency and accuracy.

In terms of internal stakeholder communication, we maintain close interaction. The Board of Directors meets at least once per quarter to ensure efficient and transparent decision-making. Quarterly labor-management and occupational safety & health/environmental protection committee meetings are held to safeguard employee rights and workplace safety.

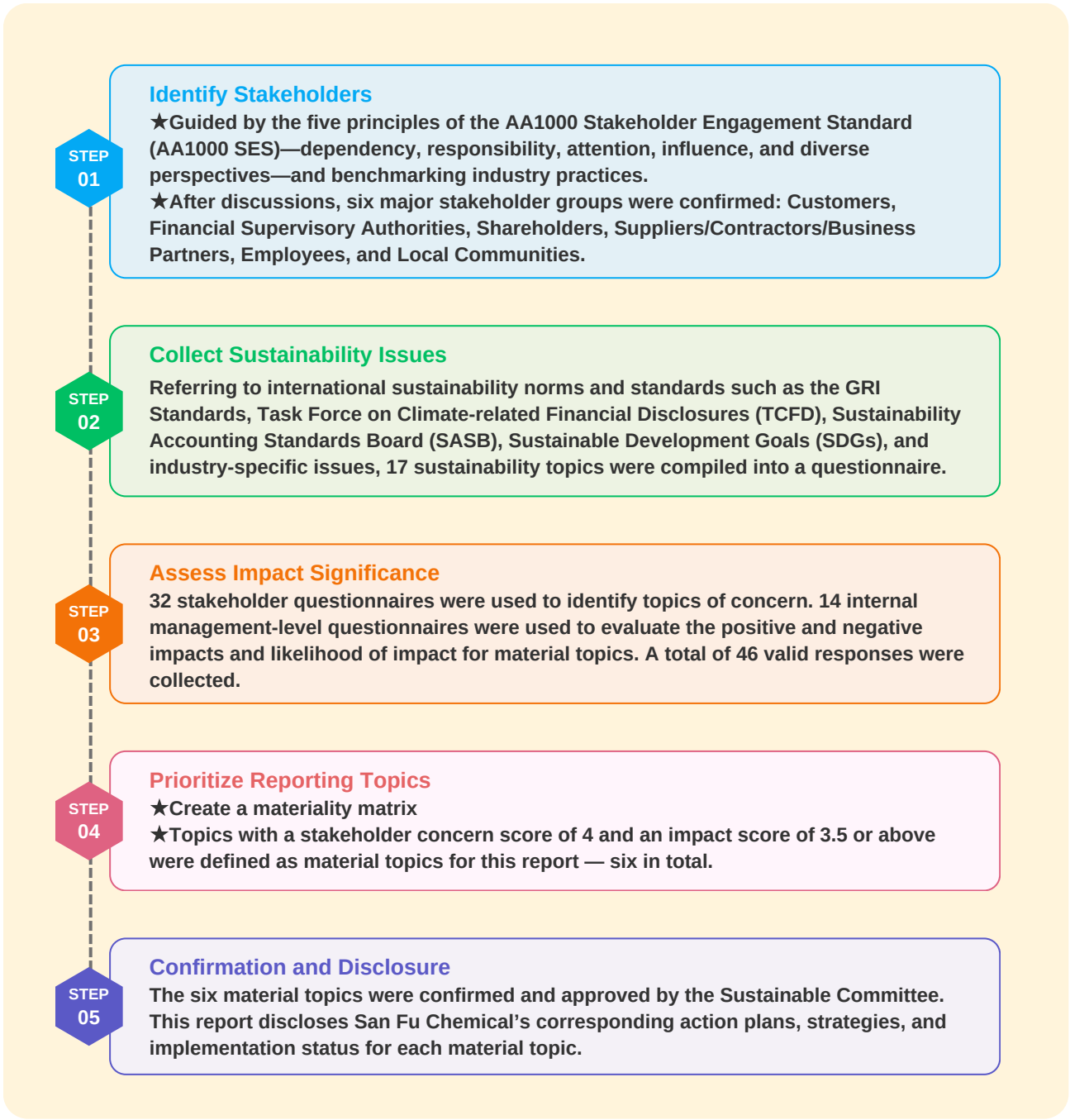
Daily communication is conducted through the Company's internal website to ensure timely information sharing.

Stakeholder Communication Outcomes

Stakeholders	Importance	Communication Method	Frequency	Issues of Concern	Response Measures (Please see the following chapters)
Customers	San Fu Chemical recognizes customer satisfaction as a key performance indicator and growth benchmark. All feedback is addressed through our structured feedback management protocol.	Telephone E-mail In-person Visits Company Website	Irregularly	• Compliance with laws and regulations • Customer Relationship Management	About Us (1) Environmental Stewardship (4) Customer Commitment and Supply Chain Management (5)
		Customer Satisfaction Survey	yearly		
Employees	We provide equitable employment opportunities and prioritize capability enhancement through comprehensive training programs. Employee development is strategically aligned with corporate objectives.	Announcement platform Employee feedback platform MOPS	Irregularly	• Integrity and Accountability • Occupational Health and Safety	About Us (1) Occupational Safety and Health Management (7)
		Labor-management meetings Welfare Committee meetings Environmental Safety Committee	Quaternary		
Regulatory Authorities	All operational activities of San Fu Chemical comply with domestic and international regulations and serve as the foundation for the company's business continuity.	Inspections by competent authorities E-mail Official letter NETWORK Policy briefings by competent authorities MOPS	Irregularly	• Integrity and Accountability • Compliance with laws and regulations • Waste • Occupational Health and Safety	About Us (1) Environmental Stewardship (4) Occupational Safety and Health Management (7)
Suppliers/ Contractors/ Business Partners	San Fu Chemical regards each supplier and contractor as an important partner and has implemented a supplier self-assessment mechanism to evaluate compliance in five aspects: quality, labor, environment, human rights, and economics.	Telephone E-mail Plant audit Written correspondence	Irregularly	• Integrity and Accountability • Compliance with laws and regulations • Occupational Health and Safety	About Us (1) Environmental Stewardship (4) Occupational Safety and Health Management (7)
		Supplier audit	yearly		
Shareholders	San Fu Chemical promotes a corporate culture and management system based on integrity, upholding principles of honesty, transparency, and responsibility. A dedicated unit is responsible for formulating and supervising the implementation of prevention programs.	Company Website MOPS Press Releases	Irregularly	• Compliance with laws and regulations • Waste • Occupational Health and Safety • Customer Relationship Management	About Us (1) Environmental Stewardship (4) Customer Commitment and Supply Chain Management (5) Occupational Safety and Health Management (7)
		Financial reports	Quaternary		
		Annual reports Investor Conferences Shareholders' meetings	yearly		
Local Communities	San Fu Chemical attaches great importance to local community engagement and environmental management. Dedicated community contact windows have been established to allow residents to conveniently provide suggestions or feedback, strengthening mutual interaction and understanding.	Telephone E-mail In-person Visits Company Website	Irregularly	• Compliance with laws and regulations • Emissions • Waste • Occupational Health and Safety	About Us (1) Environmental Stewardship (4) Occupational Safety and Health Management (7)

Materiality Assessment Process

Each year, San Fu Chemical's Sustainability Task Force and senior executives identify stakeholders and material topics through structured questionnaires distributed to internal and external stakeholders. This process ensures our sustainability strategy and disclosures align with stakeholder expectations.
Guided by the principles of identification, analysis, and validation, we collected 46 stakeholder and executive inputs during the 2024 reporting period. The finalized material topics were reviewed and formally approved by senior management.



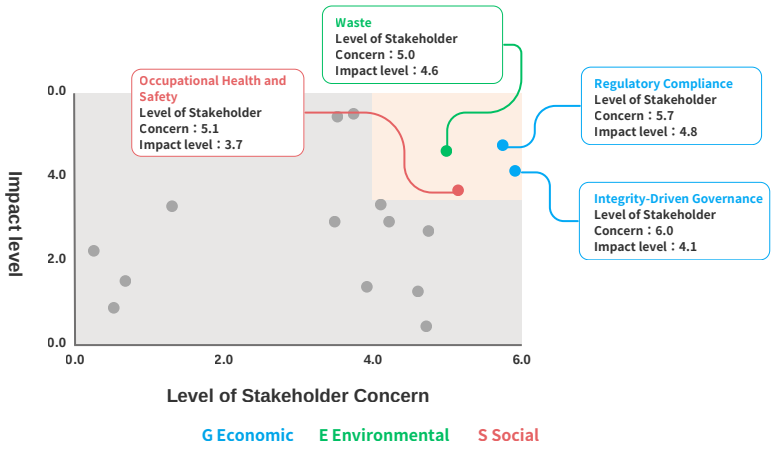
Materiality Determination Outcomes

To ensure our materiality assessment accurately captures contemporary priorities, we comprehensively updated the sustainability questionnaire in 2024. Six material topics were identified based on a rigorous analysis of stakeholder concerns and the significance of each topic's positive and negative impacts.
The assessment of each topic considered its impact (positive/negative) on the economy, environment, and people, as well as internal and external influences.

Positive Impact

Aspect	Material Topics	Actual and potential positive impacts on the economy, environment, and people (including human rights)
G	Integrity-Driven Governance	Implementation of ethical management policies enhances corporate reputation and market competitiveness
G	Regulatory Compliance	Maintain zero penalties and no litigation to avoid financial or reputational damage
E	Waste	Convert waste into reusable resources to reduce the demand for raw materials, thereby lowering production costs and environmental impact
S	Occupational Health and Safety	Robust OHS systems foster safety culture, improve regulatory compliance, and reduce incident frequency

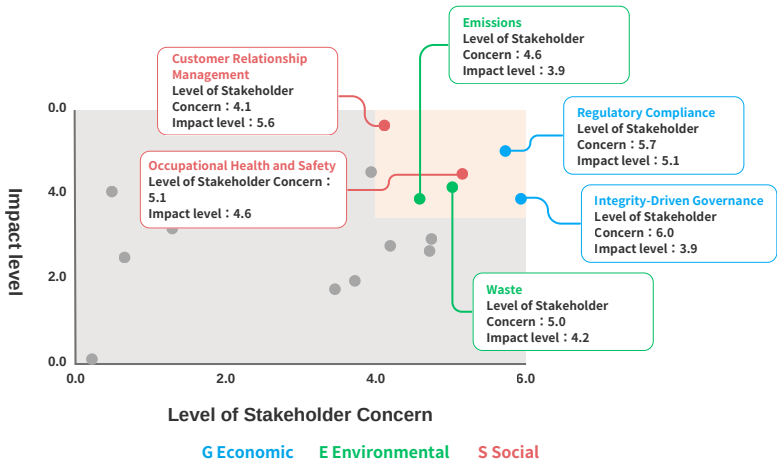
Materiality Matrix



Negative Impact

Aspect	Material Topics	Actual and potential negative impacts on the economy, environment, and people (including human rights)
G	Integrity-Driven Governance	If ethical management is not implemented, legal proceedings and fines may follow, damaging brand image, reducing market trust, and causing major financial losses
G	Regulatory Compliance	Significant fines imposing reputational damage and legal sanctions
E	Emissions	High GHG emissions may incur carbon fees and could prevent product exports
E	Waste	Improper waste disposal may cause environmental pollution and further damage the Company's reputation
S	Occupational Health and Safety	Failure to effectively prevent hazards may lead to workplace injuries and damage the Company's reputation
S	Customer Relationship Management	Failure to protect customer privacy or data-leak incidents may result in customer loss and damage to brand image

Materiality Matrix



Descriptions of differences in the materiality matrix

Compared to the previous year, the materiality of three sustainability issues decreased—"economic performance", "labor/management relations", and "training and education, employee diversity and equal opportunity"— while the materiality of two topics, "Integrity-Driven Governance" and "waste", increased. The differences are as follows.

Material Topic	2023 Material Topics	2024 Material Topics	Materiality difference
Economic Performance	✓	✗	⬇
Emissions	✓	✓	-
Labor/Management Relations	✓	✗	⬇
Occupational Health and Safety	✓	✓	-
Training and Education, Employee Diversity and Equal Opportunity	✓	✗	⬇
Product and Service Quality	✓	✗	Integrated into Customer Relationship Management
Customer Privacy	✓	✗	Integrated into Customer Relationship Management
Environmental Protection, Socio-economic Compliance	✓	✗	Integrated into Regulatory Compliance
Integrity-Driven Governance	✗	✓	⬆
Waste	✗	✓	⬆
Customer Relationship Management	✗	✓	Newly added topic
Regulatory Compliance	✗	✓	Newly added topic

Impact boundaries of material topics along the value chain and their importance to San Fu

ESG Dimension	Corresponding SDGs	Material Topic	Importance to the Company	Corresponding GRI Indicators	Value Chain Impact Assessment		
					Suppliers	The Company	Customer
Economic	8, 16, 12	Integrity-Driven Governance	We implement an ethical management policy, establish a good image, enhance market competitiveness, and avoid legal action and fines that could damage brand image, reduce market trust, and cause major financial losses	205-2 205-3	✓	✓	
Economic	16, 12	Regulatory Compliance	With the growing global emphasis on ESG standards, compliance is an important foundation for steady growth and sustainable operations, helping the organization avoid violations of laws, regulations, or contracts and fulfill its corporate responsibilities	206-1 416-2 417-2 417-3	✓	✓	✓
Environmental	13	Emissions	Amid the global push for net-zero emissions and the EU/US carbon border adjustment mechanisms, net-zero transition is not only an environmental issue but also a key economic issue affecting corporate competitiveness. We strive to effectively reduce greenhouse gas emissions.	305-1 305-2 305-3 305-4 305-5 305-6 305-7	✓	✓	✓
Environmental	12	Waste	Transforming waste into reusable resources reduces the demand for raw materials. We implement classification and control and commission qualified contractors approved by competent authorities to remove and treat waste, thereby lessening environmental impact.	306-3 306-4 306-5	✓	✓	
Environmental	3	Occupational Health and Safety	An effective occupational safety management system can foster an internal safety culture, enhance employees' compliance with safety regulations, reduce accidents, and enable employees to work safely and happily, thereby maximizing human efficiency.	403	✓	✓	
Social	12, 17	Customer Relationship Management	Customers are our most valued partners. We attach great importance to customer privacy and transaction security, and regularly conduct customer health and safety assessments. Meeting customer needs and earning their recognition is the cornerstone of long-term partnerships.	416-2 418-1		✓	✓

List of Material Topics and Chapters of Response

Material Topic	Policies and Commitments	Tracking Mechanism	Target	2024 Performance Outcomes	Response Chapter
Integrity-Driven Governance	The Company engages in business activities based on the principles of fairness, honesty, trustworthiness, and transparency. To implement the ethical management policy and actively prevent unethical behavior, we have established the "Ethical Corporate Management Procedure and Code of Conduct" and the "Fraud Reporting Procedures".	• Whistleblowing hotline: 02-25426789#211 • Report to the Board of Directors annually	• Ethical corporate management • Periodically analyze and audit the effectiveness of unethical behavior prevention measures within the scope of business operations to reduce the occurrence of unethical behavior	• No incidents of unethical conduct occurred	About Us (1) - 1.3 Corporate Governance
Regulatory Compliance	Facing pressure and challenges in complying with relevant laws and regulations, each responsible unit fulfills its duties by continuously monitoring legal developments and adjusting behaviors to reduce the risk of violations. We have formulated the "Environmental Safety and Health Policy", "Corporate Governance Best Practice Principles", "Ethical Corporate Management Procedure and Code of Conduct", and quality targets.	• Responsible units: Environmental Protection / Occupational Safety 06-5837608#210 / Quality 06-5837608#225 / HR 02-25426789#211 • Report at quarterly management system communication meetings	• Business operations comply with domestic and international laws and regulations	• 5 environmental violations (For follow-up corrective actions, see “Environmental Stewardship (4) - 4.5 Proper Waste Management”) • No violations regarding health and safety of products and services • No violations of product labeling regulations • No violations of labor regulations • 1 case of occupational safety regulation violation	About Us (1) - 1.3 Corporate Governance Environmental Stewardship (4) - 4.1 Implementing Environmental Protection Management
Emissions	If not managed rigorously, the chemical industry may pose actual or potential environmental impacts on the local community. We have established the "Environmental Safety and Health Policy" to monitor environmental data and ensure proper implementation.	• Responsible units: Environmental Protection 06-5837608#210 / Sustainability Section 06-5837608#616 • Annual external certifications obtained: ISO 14064-1, ISO 14001, ISO 50001 • Sustainability Task Force holds quarterly work meetings • Quarterly air pollutant testing	• Air pollutant emissions comply with standards • 20% reduction in greenhouse gas emissions by 2030	• 100% compliance in air pollutant emissions • Quarterly reporting of greenhouse gas emission statistics	Response to Climate Change (3)
Waste	We have established the "Waste Classification and Management Standards" to ensure proper disposal of the Company’s waste and compliance with environmental regulations.	• Contact number: Management Section 06-5837608#300 • Quarterly waste reporting • Sustainability Task Force holds quarterly work meetings	• 3% reduction in hazardous waste per unit product	• 8.7% reduction in total waste per unit product	Environmental Stewardship (4) - 4.5 Waste Management Protocol
Occupational Health and Safety	We have established the "Environmental Safety and Health Policy" and "Safety and Health Work Guidelines" to ensure effective implementation of the occupational health and safety management system.	• Contact number: Industrial Safety 06-5837608#210 • Maintain effectiveness of ISO 45001 Occupational Health and Safety Management System • Hazard and risk identification • On-site health and safety inspections and management	• Zero occupational accidents	• 1 incident of chemical splash involving international contractor (International Nitto)	Occupational Health and Safety Management (7) - 7.1 Implementing Occupational Health and Safety Management
Customer Relationship Management	To ensure that our services and products meet customer requirements in quality, cost, environmental protection, and human rights, we have established the "Ethical Corporate Management Procedure and Code of Conduct" and the "Quality Policy".	• Contact number: Sales 06-5837608#250 / Quality 06-5837608#225 • Regular customer visits • Annual customer satisfaction survey	• Products do not contain restricted hazardous substances • Annual customer satisfaction score above 90 • No breaches of customer privacy or data loss	• Products free from restricted substances • Customer satisfaction score of 95 • No incidents of customer privacy breaches or data loss	Customer Commitment and Supply Chain Management (5) - 5.1 Customer Commitment

Other Sustainability Management Indicators

Short-, Medium-, and Long-Term Targets

Since the systematic implementation of corporate sustainability in 2015, we have been striving toward our sustainability performance indicators across economic, social, and environmental dimensions. In 2024, we incorporated stakeholder concerns into our corporate sustainability management and established short-, medium-, and long-term sustainability goals. We also communicated these strategies and results to employees, ensuring they clearly understand the Company's future sustainability direction. All staff are expected to continuously promote and deepen the implementation of the Company's sustainability strategy to achieve medium- and long-term goals.
In addition, the Company received the Gold Award in the Traditional Manufacturing Category of the 2024 Taiwan Corporate Sustainability Report Awards, marking eight consecutive years of recognition since 2017.

Short-, Mid-, and Long-Term Sustainability Performance Indicators

	Short-term goals (2024)	Mid-term goals (2027)	Long-term goals (2032)
Social **Sustainability Issues: Employee Development**	Encourage employees to continue learning Annual training plan achievement rate of 88%	Continue to promote transformation into a learning organization Average annual training hours per employee: 30 hours	Employee innovation and learning capabilities co-create corporate sustainability
	Emphasize employee feedback; employee satisfaction average score ≥ 3.6	Emphasize employee feedback; employee satisfaction average score ≥ 3.7	Diversified and inclusive labor-management relations and sustainable operations
Environmental **Sustainability Issues: Energy Resource Use Energy Conservation and Carbon Reduction**	Procurement ratio of recycled feedstock ≥ 20%	Recycled Feedstock Procurement Ratio: ≥21.5%	Environmental protection
	Annual electricity saving rate ≥ 1% at factories	Reduce GHG emissions by 20% by 2030	Energy conservation and carbon reduction

Social Performance

San Fu Sustainability Goals and Actions

We hope employees develop a sense of shared ownership of sustainability and are encouraged to continue learning and growing to foster a positive and proactive corporate culture. The company provides an open environment and systems to support employee learning and growth. Employees are the foundation of the company — when employees grow, they achieve self-realization and contribute to the company's sustainable growth. San Fu Chemical continues to provide resources and space for employee development, supporting both professional skill enhancement and self-improvement. This helps maintain competitiveness amid environmental and economic challenges and jointly creates a sustainably competitive enterprise.

Short-term strategic goals	Mid-term strategic goals	Long-term strategic goals
Annual training plan achievement rate of 88%	Continue to promote transformation into a learning organization Average annual training hours per employee: 30 hours	Employee innovation and learning capabilities co-create corporate sustainability

Target achieved

n In 2024, the company's overall training completion rate was 94.50%, with 174 planned training sessions completed. Total training hours reached 3,879.5, with 370 participants. Historical completion rates have exceeded 88%, meeting the target.

San Fu's Actions

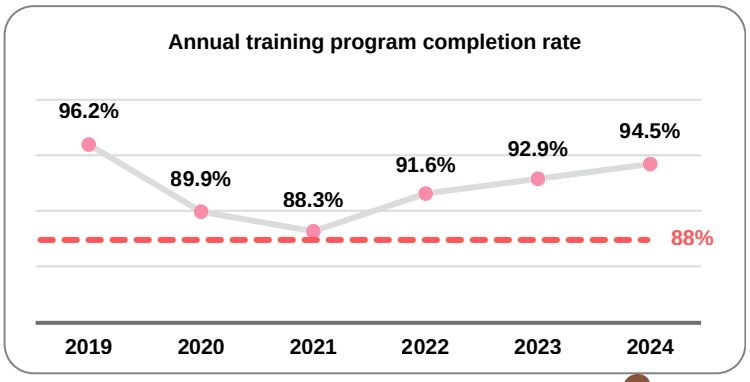
Continue to provide an open learning environment. Employees not only enhance their professional skills but also improve managerial and general knowledge through various learning platforms. This increases learning opportunities and motivation, providing the foundation for becoming a learning organization.

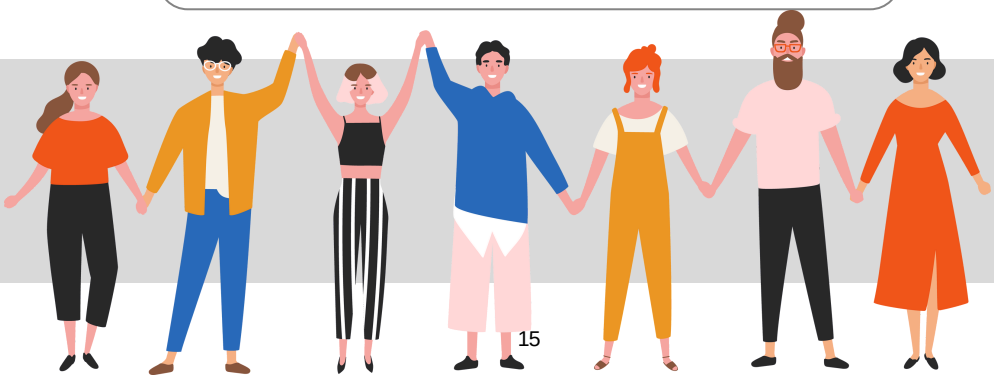
Long-term Policy

In response to rapid global environmental and industrial changes, San Fu Chemical encourages self-directed learning through external courses, an internal self-learning platform, and external platforms. Combined with internal instructor support, this fosters employee learning and enhances innovation — talent is the foundation of sustainability. Only through passionate and engaged talent can we achieve sustainable operations.

Goals and achievement

Annual training plan achievement rate of 88%





Social Performance

San Fu Sustainability Goals and Actions

San Fu Chemical strives to foster a workplace where employees feel cared for and respected. We strictly comply with labor laws in all operating locations worldwide to protect employees' legal rights. To San Fu's management, labor relations are like family bonds — once hired, employers must care for, supervisors must nurture, and employees must fulfill their roles. This collective effort strengthens operations and sustainability — the enterprise's greatest contribution to social responsibility.

Short-term strategic goals	Mid-term strategic goals	Long-term strategic goals
Emphasize employee feedback; average satisfaction score ≥ 3.6	Emphasize employee feedback; average satisfaction score ≥ 3.7	Diverse labor-management relations Inclusive and sustainable management

Target achieved

According to Article 2 of the "Implementation Regulations for Labor-Management Meetings" issued by the Ministry of Labor, Executive Yuan of the Republic of China, business entities with more than 30 employees are required to hold 12 labor-management meetings annually. San Fu Chemical has duly conducted and implemented all required sessions.

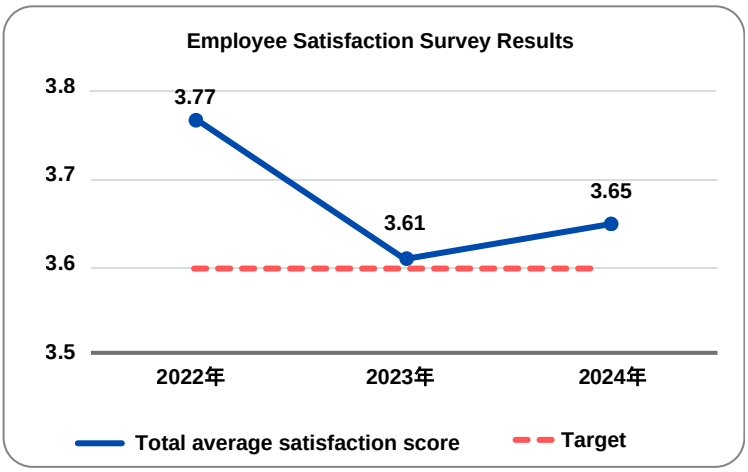
San Fu's Actions

Employee importance at San Fu goes beyond communication. Management actively tracks employee satisfaction and conducts annual surveys across five key dimensions. We believe satisfaction stems from leadership and sound systems. When employees can achieve self-realization, San Fu becomes a workplace of engagement and fulfillment.

Long-term Policy

In the face of the declining birthrate trend, San Fu Chemical regards talent recruitment and retention as one of its most important human resource policies. In the next phase, in addition to actively building an employer brand, San Fu strives to create a happy enterprise and a diverse and inclusive workplace environment. This ensures employees can develop their careers, realize and enhance their self-worth, and establish a solid foundation for sustainable operations.

Goals and achievement



Environmental Performance

San Fu Sustainability Goals and Actions

With the goal of increasing the procurement of recycled raw materials for electronic chemicals, San Fu continues to pursue environmental protection, energy conservation, and carbon reduction

Short-term strategic goals	Mid-term strategic goals	Long-term strategic goals
Procurement ratio of recycled raw materials ≥ 20%	Procurement ratio of recycled raw materials ≥ 21.5%	Environmental protection Energy conservation and carbon reduction

Target achieved

In 2024, the recycled raw material procurement ratio for electronic chemicals reached 25.3%, achieving 20% of the set target. San Fu Chemical continues to collaborate with solvent recycling vendors to recover and purify solvent waste from customer processes for reintegration into the market.

San Fu's Actions

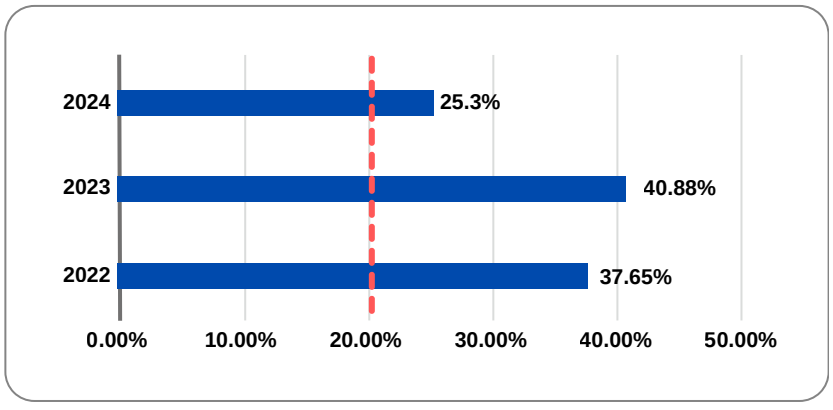
San Fu prioritizes the procurement of recycled raw materials and continues to promote sustainability through environmental protection, energy conservation, and carbon reduction.

Long-term Policy

In addition to actively supporting government green material policies, San Fu reduces environmental impact and contributes to environmental protection. By cooperating with suppliers, the company reduces pollution from waste, and through recycling and purification, achieves raw material reuse—further supporting energy conservation, carbon reduction, and environmental protection.

Goals and achievement

Recycled raw materials procurement ratio ≥ 20%



Environmental Performance

San Fu Sustainability Goals and Actions

With an annual electricity saving goal of 1%, San Fu continually reduces factory electricity consumption to conserve energy and reduce emissions

Short-term strategic goals	Mid-term strategic goals	Long-term strategic goals
Annual electricity saving rate ≥ 1% at factories	Reduce greenhouse gas emissions by 20% by 2030	Energy conservation and carbon reduction

Saving 1% of energy Electricity saving target not fully achieved

In 2024, the Shanhua Plant reduced electricity consumption by 1.1%, and the Liuying Plant by 15.1%. However, the Kaohsiung Plant saw a 32.8% increase in electricity use due to production increases across all sites, with Kaohsiung's output rising by over 40%. Despite the higher overall usage, unit energy consumption at the Kaohsiung Plant decreased by more than 5%.

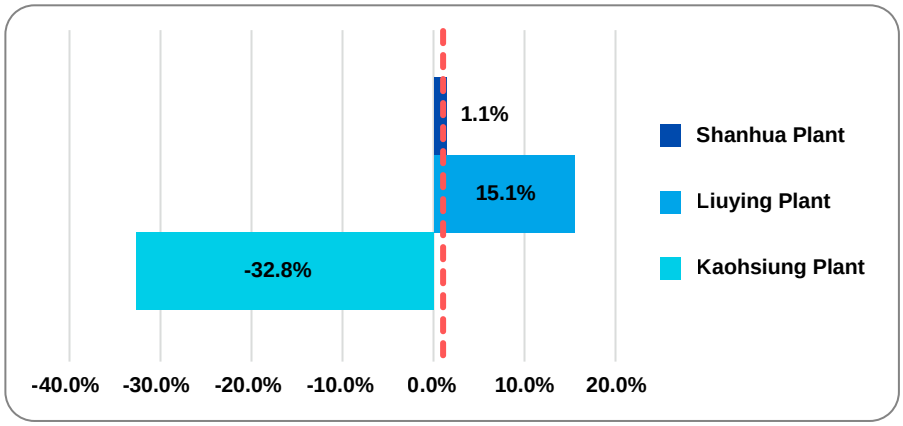
San Fu's Actions

Through energy-saving strategies, San Fu reduces greenhouse gas emissions across the board. Measures include replacing outdated equipment, optimizing operating parameters, and utilizing solar power for on-site use, all aimed at achieving the company's GHG reduction targets.

Long-term Policy

In addition to actively supporting government carbon reduction policies, San Fu continues to upgrade equipment, implement equipment replacement projects, improve energy efficiency, and evaluate the adoption of renewable and biomass energy sources.

Goals and achievement



2024 Sustainability Performance Highlights

External Recognition

Received the Taiwan Corporate Sustainability Awards (TCSA)
17th Taiwan Corporate Sustainability Awards – Gold Award in Traditional Manufacturing (Category II)

Ranked in Business Weekly's Top 100 Carbon Competitiveness
#1 in the chemical industry

Recognized in Lien Hwa Electronics Supply Chain Carbon Inventory Guidance Program
Special Carbon Reduction Award

Awarded the EcoVadis Bronze Medal
2024 sustainability rating placed us in the top 35% of all assessed companies.

CDP Climate Disclosure Rating of B
2024 CDP climate disclosure assessment for small and medium-sized enterprises (SMEs), we achieved the highest rating of B.

articipated in the Big Leads Small Program for low-carbon and smart upgrades in manufacturing
Participated in carbon reduction initiatives with PTI's supply chain suppliers – commended by Miaoli County Government

Environmental Aspect

The total volume of TMAH (Tetramethylammonium Hydroxide) waste liquid transported for disposal was 160,234 metric tons
TMAH waste liquid recycled and reused by San Fu plants totaled 160,234 metric tons

25.3% of purchased raw materials are recycled materials
Recycled materials comprise 25.3% of total electronic-grade chemical purchases

72.27% of raw materials used are recyclable materials
The ratio of recyclable raw materials (including recyclable fresh solutions) used is 72.27%

Greenhouse gas emissions, water use, and total hazardous waste weights have third-party verification
ISO 14064-1:2018 verified by Intertek; water usage and waste weight assured by PwC

Water recycling and reuse rate: 3.15%
Reuse at Shanhua Plant accounts for 3.15% of total water withdrawal

Organic sludge reduced by 82.94%
The sludge-reduction program initiated in 2018 achieved an 82.94% reduction by 2024, meeting the target

100% compliance with air pollution emission regulations
The plant regularly monitors air emissions per environmental regulations and 100% complies

0 transportation leakage incidents
No incidents of spills during transport of oil, fuel, waste, chemicals, or products

Environmental investment totaled NT$131.33 million
Through ongoing process improvements and equipment upgrades, energy savings, water conservation, waste reduction, and carbon reduction goals were achieved

98 hours of community service
Adopted a road-cleaning initiative to foster a clean environment

Corporate Governance

100% of employees completed training on ethical management and the Code of Conduct
Promoted training on Procedures for Ethical Management and Code of Conduct; supervisors and sales staff achieved a 100% completion rate

100% compliance with regulations related to customer service and product quality
0 Substantiated complaints concerning breaches of customer privacy and losses of customer data; 0 penalties for product labeling violations

0 incidents of anti-corruption
No corruption incidents involving employees or the Company

No monopolistic behavior
The Company adheres to the principle of ethical management and has not engaged in monopolistic practices.

Social Aspect

100% of licenses obtained
Achieved 100% legal certification compliance

Welfare expenses NT$515,945 thousand
In 2024, the employee salary and benefit expenses totaled at NT$515,945 thousand.

5 health courses were conducted
Organized five health-awareness courses

Respect for human rights
0 incidents of discrimination, child labor, or forced labor

44 participants in industry–academia collaborative training
44 staff attended “Emergency Response Precautions” training at National Kaohsiung University of Science and Technology

NT$1,089 thousand in social investment
In 2024, scholarships and sponsorships were provided to local junior/senior high schools, community groups, public/private universities, and the Chemical Industry Association

All suppliers underwent a CSR assessment
In 2024, six new suppliers were added and all existing suppliers completed CSR practice assessments — 100% completion

Customer satisfaction score reached 95
Overall customer satisfaction rating was 95 points

100% non-use of restricted substances
No restricted substances used in products

01

About Us

100.00%
Remuneration Committee attendance rate:

100.00%
Audit Committee attendance rate:

97.78%
Board of Directors attendance rate:

0
0 reports or complaints of ethics violations or illegal conduct related to operations or employees

Company Profile

From Local to International, From Self-Reliance to Benefiting Others

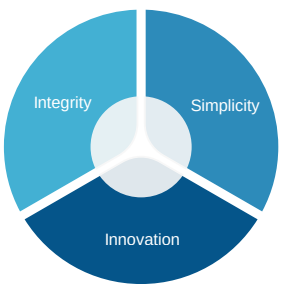
In 1952, San Fu Group established San Fu Chemical Plant in Banqiao, marking the beginning of the company's development. In the early days, we focused on producing chemical raw materials such as food additives with in-house R&D and production technology, laying the foundation of our business. Over the past half-century, we have established a strong presence in Taiwan and actively expanded to global markets. The business has grown in scale and diversified from chemicals into high-tech specialty chemicals, beverages, and food products.
As of 2024, the Company's paid-in capital reached NT$1.007 billion, and the number of full-time employees stood at 384.

Locations

Taipei Headquarters	Decision-making center
Zhubei Office	Sales division
Tainan Liuying Plant	Produces precision and Commodity Chemicals
Tainan Shanhua Plant	Produces precision and Commodity Chemicals
Tainan International Nitto	Production of precision chemicals
Kaohsiung Xiaogang Plant	Produces Commodity Chemicals

Business Philosophy

San Fu Chemical adheres to the philosophy of "innovation, integrity, and simplicity," striving to inspire employee creativity and foster an open, inclusive environment for innovation. We leverage advanced technologies to create higher value for customers, aiming to become their most trusted business partner. We uphold principles of integrity management and provide high-quality, reasonably priced products and services to all industries. We actively integrate resources, match supply and demand precisely, and explore new business fields to create more possibilities for customers and deliver greater value to society.



To move toward more professional operations, San Fu Chemical and San Fu Gas formally separated into two independently operating companies in October 2003. Today, San Fu Chemical's products and services fall into two main business groups: precision chemicals and Commodity Chemicals.

The Precision Chemicals Business Group focuses on providing wet chemicals, equipment, and operations services to high-tech industries such as IC semiconductors, LCD, touch panels, LED, and solar panels, and on OEM production of polishing slurries. The Commodity Chemicals Business Group includes food additives, food ingredients, and products such as para-hydroxybenzoic acid, cyclohexylamine, and dicyclohexylamine, serving both food and chemical sectors.

We continue improving in quality, capacity, and service, aiming to be the most trusted partner of our customers. In addition, none of the Company's current products have been banned in their designated sales markets.

Product Types and Production Volume Distribution

Product Category	Product Item	Instruction	Serviced Customers	Sales Markets	2024 Production Volume (tons)
Specialty Chemicals	Wet Chemicals	Developers – TMAH, KOH, NaOH Etchants – aluminum/copper/ITO/mixed acid/hydrofluoric acid etchants; phosphoric/nitric/hydrochloric/acetic/hydrofluoric/oxalic/aqua regia Strippers – BM-73, MD-73, DMSO, BDG, MEA, NMP, copper strippers, packaging/testing strippers Diluents and cleaners – CPN, RGB rework, ITO rework, benzyl alcohol, EBR, etc.	Wafer foundries Panel manufacturers Solar panel makers LED epitaxy plants	Taiwan China Singapore 49,506	49,506
	TMAH Recycling	Developer waste liquid recycling			
	VMT	OEM for polishing slurries			
	$POCl_3$	$POCl_3$Phosphoryl trichloride	Semiconductor plants, Solar cell plants, Pharmaceutical companies, Chemical plants	Taiwan	
	Nitrous Oxide	Electronic-grade nitrous oxide	Semiconductor plants, Solar cell plants, Panel manufacturers	Taiwan Vietnam	
Commodity Chemicals	Chemical Raw Materials	Benzoic acid (sodium), sulfamic acid, cyclohexylamine, dicyclohexylamine, aniline, para-hydroxybenzoic acid, parabens, oxalic acid, sodium gluconate, sodium hexametaphosphate, isophthalic acid	Cosmetic factories Chemical plants Pharmaceutical companies	Taiwan U.S. Japan India China South Korea	5,054
	Food Additives	Flavoring agents: Citric acid (monohydrate/anhydrous), sodium/potassium citrate, lactic acid, sodium/calcium lactate Sweeteners: Sorbitol solution, mannitol, sucralose, acesulfame potassium, neotame, sodium saccharin, sodium cyclamate Preservatives: Benzoic acid (sodium), potassium sorbate Others: Anhydrous calcium chloride, sodium bicarbonate, phosphoric acid, sodium carbonate (anhydrous)	Food manufacturers Pharmaceutical companies	Taiwan	
	Food Ingredients	Glucose (monohydrate/anhydrous), maltodextrin, trehalose, corn starch		Taiwan	
Total Production Volume					54,560

Note

1. As most basic chemical products are processed through repackaging, they are not included in the production statistics.

Industry Overview

Precision Chemicals

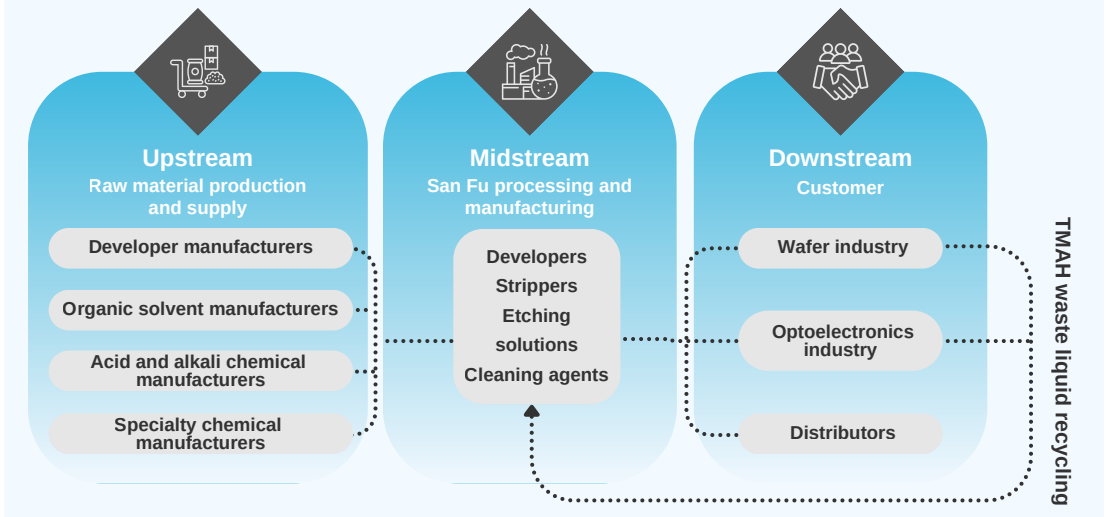
Precision chemicals, also known as specialty chemicals, are primarily used in manufacturing processes or final products to enhance product characteristics and are typically high value-added products. The Company's products are mainly applied in the electronics industry and include acids, alkalis, solvents, and other chemical compounds such as developers, etching solutions, strippers, diluents, cleaning agents, and polishing slurries.

The electronics manufacturing industry is a major driver of Taiwan's economic growth, with the IC and optoelectronics industry chains being particularly critical. Within the overall industry supply chain, the Company acts as a midstream manufacturer.

Upstream industries mainly consist of raw material suppliers, providing developers, organic solvents, acids and alkalis, and specialty chemicals. As a midstream enterprise, San Fu Chemical processes these raw materials through blending, purification, and dilution to produce the developers, strippers, etching solutions, and cleaning agents required by the electronics manufacturing industry.

Downstream customers primarily belong to the electronics manufacturing sector, including IC fabrication and the optoelectronics industry. Some products are sold via distributors to further expand market reach and industry applications.

The relationships between the upstream, midstream, and downstream segments of the industry are as follows:



Applications of Precision Chemicals

In the wafer and panel display industries, forming specific patterned thin films is a key process. Regardless of whether the film material is insulating silicon dioxide or polycrystalline silicon, photoresist is first applied to the wafer or glass substrate. After baking, exposure, and development, etching is carried out to create the required pattern, and finally the photoresist is removed to complete the film. Developers can be classified into organic and inorganic alkalis and are used with photoresists to provide excellent development capabilities and high contrast.

Etching solutions are mainly used in processes involving transparent conductive films (ITO) or metal layers in liquid crystal panels, touch panels, and solar cells. The etching process involves removing part of the substrate material through chemical corrosion or physical impact (or a combination of both) to retain the circuit pattern.

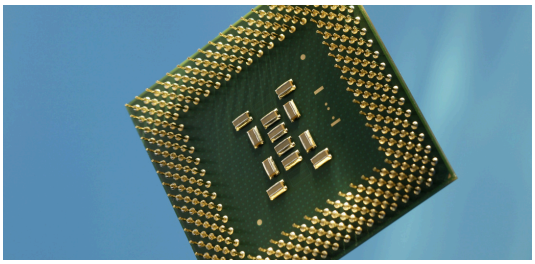
Strippers are key materials in the TFT-LCD process used to remove photoresist after etching. Diluents are primarily used to remove excess photoresist from the substrate edges after photoresist coating in panel manufacturing.

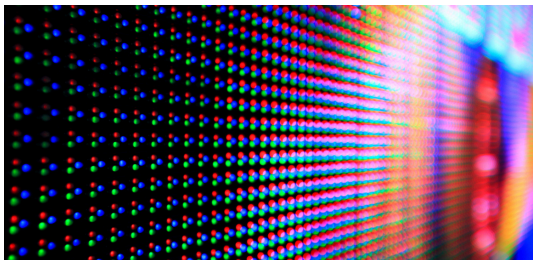
Cleaning agents are used for the following purposes, depending on the need:

- **Cleaning glass after failed color filter processes**
- **Cleaning substrates before entering equipment**
- **Cleaning photoresist coating tools**

With the continued growth of Taiwan's semiconductor and optoelectronics industries, the demand for related electronic chemicals keeps rising, along with increasingly stringent quality requirements. Improving process efficiency and refining product quality have thus become key to industry development.

The emergence of next-generation products—such as electric vehicles, 5G, high-performance computing (HPC), the Internet of Things (IoT), flexible displays—and advancements in new-generation technologies and processes—such as 1x-nanometer nodes, GAA, FinFET, 3D stacking, AMOLED, IGZO, LTPS, and copper processes—are driving the steady growth of the global specialty chemical industry's output and growth rate. Different processes require different types of electronic chemicals. Research and development of new-generation chemicals has become a crucial trend for the future development of the industry.





$POCl_3$(Phosphoryl trichloride)

The relationships between the upstream, midstream, and downstream segments of the industry are as follows:

Upstream Raw material production and supply	Midstream San Fu processing and manufacturing	Downstream Customer
Industrial-grade $POCl_3$ manufacturers	Electronic-grade $POCl_3$	Semiconductor plants Solar cell plants Pharmaceutical factories Chemical synthesis plants

$POCl_3$ (Phosphoryl Trichloride) Application Description

Phosphoryl trichloride ($POCl_3$) is an inorganic compound with the chemical formula $POCl_3$. It is a colorless, transparent liquid commonly used in the production of triaryl phosphate esters (such as triphenyl phosphate and tricresyl phosphate), and also serves as a flame retardant and plasticizer for polyvinyl chloride (PVC). In the semiconductor and solar cell industries, $POCl_3$ is used as a phosphorus source in diffusion processes to dope and produce N-type silicon semiconductors. It is also used in pharmaceutical applications to manufacture precursor drugs.
This chemical is mainly applied in the manufacturing process of P-type solar cells. Silicon wafer substrates composed of P-type chips (doped with boron or gallium) are among the most in-demand in the market. To create a P-N junction for photovoltaic effect and make solar cells, an N-type phosphorus diffusion layer must be formed on these P-type wafers. Typically, $POCl_3$ is used along with nitrogen (as a carrier gas) in a high-temperature diffusion furnace to form a phosphorus silicate glass (PSG) layer on the wafer surface. Then oxygen is introduced to diffuse the phosphorus into the silicon crystal lattice, forming an N-type phosphorus diffusion layer. Finally, hydrofluoric acid is used to remove the PSG layer.

San Fu has a $POCl_3$ purification production line capable of providing high-purity (7N) $POCl_3$ products. With in-house analytical capabilities, we can deliver high-purity products and quality data promptly to provide optimal customer support.

N_2O (Nitrous Oxide)

The relationships between the upstream, midstream, and downstream segments of the industry are as follows:

Upstream Raw material production and supply	Midstream San Fu processing and manufacturing	Downstream Customer
Recovery of tail gas from adipic acid	Electronic-grade nitrous oxide	Semiconductor and panel manufacturers Solar cell plants Distributors

N_2O (Nitrous Oxide) Application Description

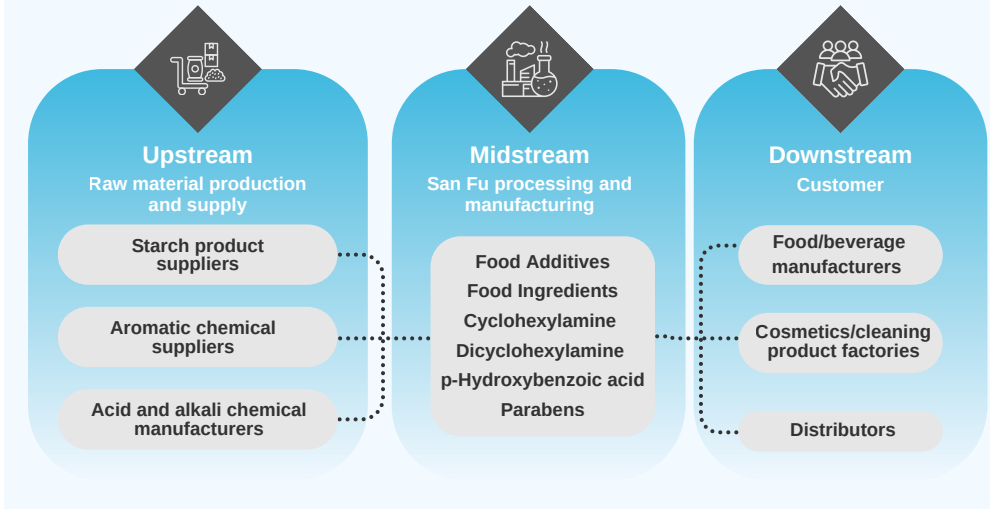
Nitrous oxide, commonly known as laughing gas, is an essential gas in semiconductor and food processing industries. Electronic-grade N_2O is primarily used in semiconductor CVD/thin film processes. It also has medical applications as an anesthetic.

Commodity Chemicals

The Company's Commodity chemical products include three main categories: chemical raw materials, food additives, and food ingredients. For chemical raw materials such as cyclohexylamine, dicyclohexylamine, p-hydroxybenzoic acid and its esters (parabens), they are widely used in the production of various chemicals and cleaning products.

Food additives and food ingredients are introduced only after strict quality control, supervision, and assessment from the raw material supply chain. They are either repackaged or sold directly. These products include flavor enhancers, preservatives, quality improvers, sweeteners, leavening agents, starches, and sugars. Major customers are leading domestic food and beverage manufacturers.

The relationships between the upstream, midstream, and downstream segments of the industry are as follows:



Application of Commodity Chemicals

For example, cyclohexylamine is the main raw material for cyclamate. Cyclamate is an artificial sweetener with a sweetness 30 to 8,000 times that of sucrose but with extremely low calories. It is often used to replace sugar or corn syrup and is widely found in soda, sweetened beverages, chocolate, jam, chewing gum, and ice cream. Cyclohexylamine is also used as a corrosion inhibitor in water treatment agents.

Dicyclohexylamine is a by-product in the production of cyclohexylamine and is primarily used in rust inhibitors for steel. p-Hydroxybenzoic acid is a monomer for liquid crystal polymer (LCP), while its esters (parabens) are commonly used as excipients and preservatives in pharmaceuticals and cosmetics.

Food additives refer to ingredients other than commonly used seasonings (such as garlic, scallions, and ginger) in food production. While definitions and regulations differ across countries, food additives are generally considered safe for consumers when used within permitted levels. The Codex Alimentarius Commission, established by the FAO and WHO, sets international definitions, specifications, and standards for food additives to promote global alignment.

However, country-specific definitions and controls still vary. For instance, the U.S. does not classify colorants as food additives, and the Codex excludes contaminants or substances added for nutritional enhancement or quality improvement.

In Taiwan, the Act Governing Food Safety and Sanitation defines food additives scientifically and in detail as: “Substances added to or in contact with food during manufacturing, processing, blending, packaging, transport, or storage for purposes including coloring, flavoring, preservation, bleaching, emulsifying, enhancing aroma, stabilizing quality, aiding fermentation, increasing viscosity, enhancing nutrition, or preventing oxidation.”

Monohydrate citric acid is widely used in food and beverage industries as a flavoring agent to impart a refreshing sourness. Sodium benzoate is a common preservative effective at inhibiting microbial growth and is approved in many countries (including Taiwan) for use in foods such as carbonated beverages, preserved fruits, and snacks.

In recent years, a series of food safety incidents (e.g., melamine, plasticizers, ractopamine) have heightened public awareness about food hygiene and quality control. These incidents have made consumers more health-conscious and pushed the food industry to prioritize safety and quality as key pillars of future development. In the future, the food market will place even greater emphasis on hygiene and quality to meet consumer expectations for health and safety.

Third-party verification

We actively invite third-party organizations and partners to conduct external audits and reviews. Since our establishment, we have continuously introduced and maintained various management system certifications and verifications. Through external audits, we strive to improve product quality and implement occupational health and safety as well as environmental management in green manufacturing processes. The third-party verifications obtained are as follows:

CATEGORY	Certificate	Verified Sites					
		Shanhua Plant	Liuying Plant	Kaohsiung Plant	Taipei	Zhubei	International Nitto
Quality and Food Safety	ISO 9001 Quality Management System	●	●	●			●
	ISO 22000 Food Safety Management System	●	● (San Fu Biotech)				
	HACCP Hazard Analysis and Critical Control Point System	●	● (San Fu Biotech)				
	Food Business Sanitation and Safety Management System	●	● (San Fu Biotech)				
Environmental Related	ISO 14001 Environmental Management System	●	●				●
	ISO 14064-1 Greenhouse Gas Inventory Standard	●	●	●	●	●	●
Occupational Health and Safety	ISO 45001 Occupational Health and Safety Management System	●	●	●			●
Energy Management	ISO 50001 Energy Management System	●	●				
Laboratories	ISO 17025 Laboratory Management System Certification	●	●				

Note

1. ISO 17025 certification was first obtained by San Fu Chemical, making it the first wet chemical company in Taiwan certified by TAF.
2. Third-party verification certificates/statements can be found on the official San Fu Chemical website.

ISO 9001 Quality Management Certificate

San Fu Chemical ISO 22000 Food Safety Management Certificate

San Fu Chemical HACCP Certificate

ISO 17025 TAF Laboratory Certificate

Participation in Industry Associations

Taiwan Chemical Industry Association

To serve Taiwan's chemical technology industry, we have collaborated with domestic chemical and chemical engineering associations, academic institutions, and industry-academia-research organizations to work together and advocate for the industry. This collective effort aims to enhance the industry's competitiveness and increase its added value.

Taiwan Institute of Chemical Engineers

Dedicated to promoting the development of chemical engineering in Taiwan, the association promotes various events and academic activities and publicizes technological achievements and research results in chemical engineering. It aspires to help the domestic chemical engineering field build on its solid research foundation to open a new chapter.

The Chemical Society Located in Taipei

Through the participation and contributions of chemical professionals, the Society actively facilitates international and domestic exchange, knowledge dissemination, and the inspiration of future generations. It will continue to advance the growth of Taiwan's chemical sector.

Corporate Governance

High-standard governance policies to ensure effective board operation

The Company was officially listed in November 2013. All directors exercise their powers objectively and independently based on the long-term interests of the Company and its shareholders. We recognize that both domestic and foreign institutional investors and key stakeholders increasingly consider corporate governance—including the presence of independent directors—as an important investment criterion.

Therefore, we continue to adhere to corporate governance principles. Our Board of Directors is elected by all shareholders via voting, and various functional committees have been established under the Board to strengthen its effectiveness. Our high standards in governance policies ensure effective board operations and safeguard shareholder rights.

Enhancing Board Functions

As of the reporting year, the Board consists of 9 directors, including 3 independent directors, accounting for 33.3% of the Board. This composition strengthens independence and diversity, and enhances the Board's strategic guidance. Chairperson Simon Wu, who also serves as a director of International Nitto, leads board operations and ensures sound governance. In line with the "Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies," San Fu Chemical considers the overall composition of the Board when appointing directors. This includes competencies such as operational judgment, financial and accounting analysis, crisis management, industry knowledge, international market insight, leadership, and decision-making.

In addition, the Board follows the "Guidelines for Continuing Education of Directors and Supervisors of TWSE/TPEx Listed Companies" and organizes director training annually. The Board fulfills its corporate governance responsibilities by reviewing business performance and addressing key strategic issues related to the economy, environment, society, risks, and opportunities. We also publicly provide our "Articles of Incorporation," "Rules for Shareholders' Meetings," "Procedures for Director Election," "Rules of Procedure for Board Meetings," and "Ethical Corporate Management Procedures and Code of Conduct" for timely access by domestic and international investors.

Chief Corporate Governance Officer

On November 6, 2024, the Board appointed CFO Luo, Chu-Cheng as the Corporate Governance Officer. He brings extensive experience in finance and accounting at public companies. His main responsibilities include organizing Board and shareholder meetings, preparing meeting minutes, assisting directors with onboarding and continued education, providing information needed for their duties, and ensuring compliance with applicable laws.

Collective knowledge of the highest governance body

For details, please refer to the Market Observation Post System (MOPS) regarding director training. Additionally, quarterly sustainability reports and management team briefings help enhance Board members' knowledge of economic, environmental, and social issues.
https://mops.twse.com.tw/mops/#/web/t146sb05?companyId=4755

Evaluation of the performance of the highest governance body

In accordance with the "Board and Functional Committee Performance Evaluation Procedures," the Company conducted a self-evaluation in 2024. Results are available in the annual report on the Company website:
https://www.sfchem.com.tw/zh-hant/page/annual-report

Operation of the Board of Directors

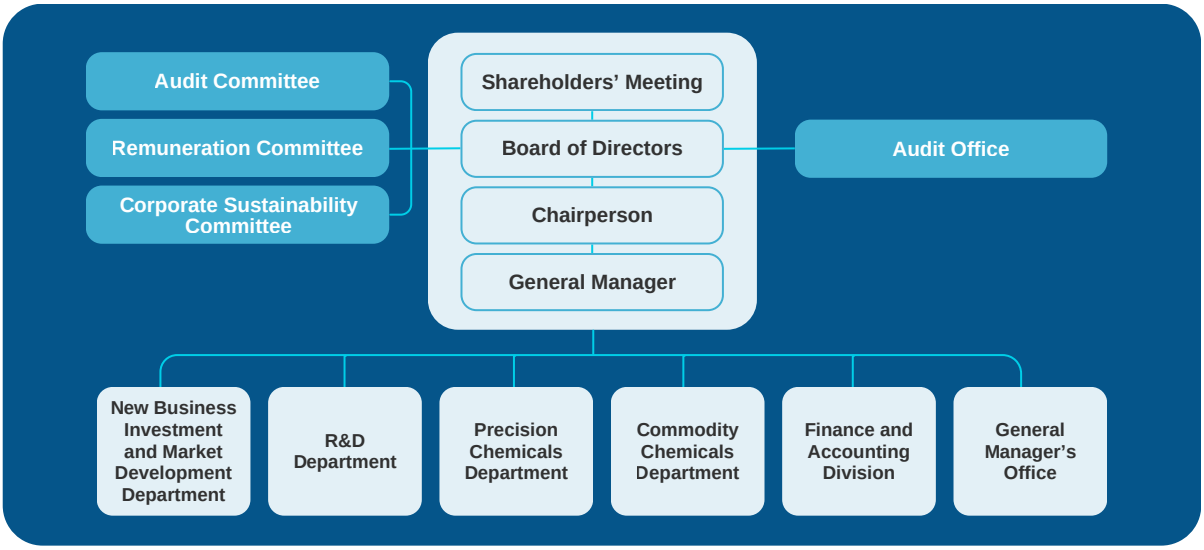
The Company's Board of Directors has 9 members. The 9th term spans from June 12, 2024 to June 11, 2027. The Board members are listed below:

No.	Job title	Name	Gender	Age	Responsibilities
1	Chairperson	Simon Wu	Men	>50 years old	1. Determination of business policy 2. Review of budget 3. Preparation of the final accounts report for the shareholders' meeting 4. Proposal for amending the Articles of Incorporation 5. Execute the resolutions of the shareholders' meeting 6. Review of major contracts 7. Propose a motion for the distribution of earnings or covering losses 8. Propose a motion for capital increase or decrease 9. Appointment and dismissal of key employees 10. Powers and authorities as determined by other laws and regulations or by the shareholders' meeting.
2	Director	San Fu Global Co., Ltd. Representative: Chang, Chung-Ming	Men	>50 years old	
3	Director	Tsai, Chieh-Jung	Men	>50 years old	
4	Director	Su, Tian-Bao	Men	>50 years old	
5	Director	Zhang, Yi-Zong	Men	30-50 years old	
6	Director	Liang, Guo-Yuan	Men	>50 years old	
7	Independent Director	Hsieh, Yung-Fen	Women	>50 years old	
8	Independent Director	Wu, Tung-Ming	Men	>50 years old	
9	Independent Director	Yang, Hong-Zhi	Men	>50 years old	

The Company values board diversity as a key policy. To enhance corporate governance and promote a sound composition and structure of the Board of Directors, we believe that diversity contributes to overall corporate performance. Director elections are conducted in accordance with the "Procedures for Election of Directors" approved by the Board, adopting a candidate nomination system. Directors are elected by the shareholders from the list of nominated candidates. In cases involving conflicts of interest, recusal is handled according to the Company's "Rules of Procedure for Board Meetings." Details regarding Board diversity, independence, concurrent directorships in other companies, or cross-shareholding with other stakeholders can be found in the annual report section of the Company website: https://www.sfchem.com.tw/zh-hant/page/annual-report

Note: If a director or the legal entity represented by a director has an interest in a matter under discussion, the director must disclose the key details of such interest at the Board meeting. If the interest is likely to harm the Company's interests, the director shall not participate in the discussion or vote, must recuse themselves from the process, and may not act as a proxy for other directors. If a director's spouse, blood relative within the second degree, or a company under the director's control has an interest in the matter, the director is considered to have a personal interest. Resolutions of the Board shall be made excluding such directors, in accordance with Article 206, Paragraph 4 of the Company Act, which applies Article 180, Paragraph 2 mutatis mutandis.

Board of Directors Organization Chart



The Remuneration Committee was established to assist in the evaluation of remuneration level

The Company established its Remuneration Committee in 2011 in accordance with Article 14-6 of the Securities and Exchange Act, by resolution of the Board of Directors. The Committee consists of no fewer than three members. The Remuneration Committee is composed of three independent directors. In 2024, the Committee convened two meetings, with a 100% attendance rate from all members. The Remuneration Committee assists the Board in evaluating the linkage between the remuneration levels of the Company's directors, supervisors, and managers and the Company's overall performance. It determines the bonus allocation ratio, provides recommendations on the remuneration of managers and overall remuneration policy, and formulates Company-level strategies based on industry competitiveness, operational performance, and benchmark market conditions. In addition, the Company regularly participates in industry and consultancy salary surveys to review the alignment between its remuneration system and market practices and to design incentive-based remuneration systems. Each year, employee remuneration must be approved by the Board of Directors, reported at the shareholders' meeting, and disclosed in the Company's annual report.

https://www.sfchem.com.tw/zh-hant/page/annual-report

Senior Management Remuneration and Rewards

The Company regularly sets performance evaluation criteria for senior executives each year. The policy for determining executive remuneration is based on the Company's performance evaluation targets and variable bonuses. In addition to considering the Company's overall performance against budget targets, safety, environmental protection, social responsibility, business development, customer satisfaction, and employee training and development, individual performance and contributions are also taken into account to provide reasonable remuneration.

All related evaluations and remuneration plans are reviewed by the Remuneration Committee and submitted to the Board for approval. The remuneration system is subject to ongoing review depending on actual business conditions and ESG-related requirements. Senior management remuneration is tied to the Company's ESG performance.

Note: Since the establishment of the Remuneration Committee, San Fu Chemical has included "corporate development" as one of the key performance indicators for senior management. Within this, "ESG sustainable development" accounts for 5% of the overall performance targets. In 2024, the implementation included establishing the Sustainable Development Committee to enhance sustainability and corporate governance company-wide, conducting a greenhouse gas inventory, and achieving a 11% reduction in emissions compared to the base year.

The Board of Directors has robust oversight and management functions. In response to global sustainability trends, the Company has established the "Corporate Sustainable Development Committee" and the "Sustainability Task Force" to advance sustainable development and strengthen corporate governance. The Corporate Sustainable Development Committee plays a supervisory role in promoting strategic planning and projects. It consists of three directors appointed by the Board, responsible for assisting in sustainability policy development, strategic planning, annual and special project planning, supervision and evaluation of implementation, and review of the sustainability report. The Committee convenes at least once a year and may meet as needed.

Vice Chairperson and General Manager Mr. Su Tian-Pao also serves as the highest-ranking officer of the Sustainability Task Force. Together with the Chief Sustainability Officer and task force leaders, he oversees decisions on sustainability issues, strategies, and targets. Each year, the Chief Sustainability Officer reports ESG implementation results and future plans to the Corporate Sustainability Development Committee. On April 29, 2025, the Board of Directors received a report on the Company's sustainable development performance and future plans. The agenda included: (1) identifying key sustainability issues and formulating corresponding action plans; (2) supervising the implementation of sustainability initiatives and assessing results (e.g., reducing environmental impact in production, promoting waste recycling, and fulfilling ecological responsibilities to help customers reduce absolute carbon emissions); (3) evaluating the risks and opportunities brought by climate change and formulating appropriate response strategies.

The Board reviews management reports, including ESG reports, on a quarterly basis. Management must propose Company strategies to the Board, which evaluates their feasibility, monitors progress, and urges compliance with domestic and international laws and key material issues as needed.

In 2024, a significant environmental penalty incident occurred. The Industrial Safety Department consulted with the responsible unit, submitted a statement to the relevant authority, and reported the final outcome to the highest governance body.

Regarding environmental health and safety policy, the Company, as required by competent authorities, reports quarterly to the Board of Directors on greenhouse gas emissions and improvement measures.

Strong financial performance remains a key focus for management. The Board of Directors receives quarterly operating performance updates.

An Audit Committee was formed to strictly control finance, human resources, and audit-related matters.

The Company formed an Audit Committee in 2021 to replace the duty of supervisors, as required by the competent authority. In 2024, the Audit Committee held four meetings, with 100% attendance by all members. One member of the Audit Committee has accounting or financial expertise. They are responsible for supervising the presentation of the Company's financial statements, the selection, dismissal, independence, and performance of CPAs, the effective implementation of internal control, the Company's compliance with relevant laws and regulations, and the management of existing or potential risks. In addition, the Audit Office continuously implements internal audits and risk management.

Implementing ethical management and anti-corruption to protect shareholders' interests

We follow the Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies and the Corporate Governance Evaluation Self-Evaluation Indicators of the Taiwan Stock Exchange's Corporate Governance Center.

(1) San Fu Chemical Corporate Governance Best Practice Principles
(2) San Fu Chemical Procedures for Ethical Management and Guidelines for Conduct
(3) San Fu Chemical Internal Regulations on Prevention of Insider Trading

The Board of Directors and management actively uphold ethical management policies and implement them in internal management and business activities. To foster a corporate culture of integrity, transparency, and responsibility, a dedicated unit promotes ethical management policies and oversees prevention programs. The General Manager's Office handles reports and complaints to implement the Code of Ethical Conduct Management Measures and Ethical Corporate Management Best Practice Principles, preventing corruption and ensuring legal protection for whistleblowers and respondents.

Implementation effectiveness

The Procedures for Ethical Management and Guidelines for Conduct are publicly disclosed on the Company website.	**No violations of ethics or illegal conduct by the Company or employees were reported or complained about in 2024.**	**All employees signed the Ethical Behavior Commitment Statement.**	**The 2024 online course on ethical management achieved a 100% completion rate.**

Compliance with domestic and international laws, and key material events

Each of our operations complies with domestic and international laws and regulations, forming the foundation for sustainable operations. In response to the Personal Data Protection Act, we established the Personal Data Protection Management Regulations. We also review GRI-required compliance indicators one by one.

- **Environmental compliance: Inspections by the Environmental Protection Administration resulted in five key material incidents of non-compliance with environmental laws in 2024, for which penalties were issued and improvements completed—see the Sustainability – Environment chapter for details.**
- **Social compliance: On issues like financial reporting, workplace discrimination, or corruption, there were no significant fines or other sanctions in 2024.**
- **Product sales compliance: No large fines were imposed during the reporting period for violations in providing or using products and services.**
- **No corruption incidents occurred during the reporting period.**
- **No antitrust/trust violations occurred.**
- **No complaints about infringement of customer privacy or loss of customer data.**
- **No violations of marketing laws or voluntary guidelines (including advertising, promotion, or sponsorship).**
- **No disputes in product sales.**
- **No violations of product or service information and labeling laws or voluntary codes.**
- **No violations of health and safety regulatory or voluntary requirements for products or services throughout their lifecycle.**

Risk Control

Precautionary and effective risk management

To reduce overall operational risk, maintain competitiveness, and ensure sustainable operations, we established the Internal Control System, Internal Audit System, and related operating procedures. Any amendments require Board approval. The Audit Office executes annual audit plans to enforce oversight and risk management. The General Manager and department heads discuss topics in management meetings, analyze risk likelihood and severity, assess results and risk tolerance, then choose responses—updating controls and implementing necessary actions promptly.

Identified daily operational risks include financial and operational categories, and our responses include prevention, mitigation, and impact improvement measures.

Identified financial and operational risks during the reporting period are as follows:

Potential risks	Response strategies and measures
Financial risk	
Changes in interest rate and exchange rate	The Company's interest rate risk mainly arises from long- and short-term bank borrowings and short-term fund operations for working capital. For long-term major investments, long-term borrowing interest rates are used. We maintain close contact with banks to monitor interest rate trends and secure the most favorable borrowing rates. For exchange rates, we collect external market data, assess trends and risks, and maintain close relationships with banks to monitor exchange rate movements and adjust foreign currency positions in a timely manner to hedge exchange rate risks. Internally, the sales team incorporates exchange rate considerations into pricing to maintain profitability.
Inflation	The Company constantly monitors market price fluctuations and maintains good relationships with suppliers and customers. If inflation leads to rising procurement costs, the Company will adjust both sales and purchase prices to reduce inflation's impact on operations.
Operational risk	
Plant expansion	With the rapid growth of Taiwan's IC industry in recent years, total TMAH demand from the IC sector has significantly surpassed that of the panel industry. Since two years ago, over 80% of recycled TMAH raw materials have come from the IC sector. To support resource reuse and sustainable circulation, in 2020 San Fu renovated the Nanke International Nitto facility to handle developer waste from the IC sector and refine it into IC-grade TMAH products. According to last year's data, 25% of TMAH products from the Nitoto plant had over 90% of metal ion levels stably below 10ppt, while over 60% of 2.38% diluted TMAH met <1ppt requirements. Aside from ongoing validation by Company T, we are actively marketing these high-purity, low-carbon-footprint recycled TMAH products. As IC industry demand increases, the development of IC-grade recycled TMAH has become essential. The biggest challenge lies in whether these products can pass Company T's stringent validation process, which affects the profitability timeline of the Group. Currently, IC-grade 25% TMAH products from Nitoto are sold at lower panel-grade prices to the panel industry, resulting in lower-than-expected profits. Besides Company T, many IC customers have expressed interest in Nitoto's products. Accelerating the validation process is key to realizing short-term profit growth.
Concentration of procurement or sales	Procurement: The Company has stable channels for sourcing raw materials. Our partner suppliers demonstrate high standards in both quality and quantity, and in addition to supplying our Company, they also serve various customers in different regions. For specialty raw materials, the Company adopts equity partnership arrangements to secure stable access to these materials. In the event of market shortages, the Company is given priority in obtaining raw materials. For other types of raw materials, the Company engages more than two suppliers to ensure stable delivery. We maintain good relationships with our suppliers and adopt a risk diversification strategy. Sales: At present, the Company's precision chemical products are mainly supplied to the display-related industry. To avoid excessive concentration of clients in the display industry, which could increase the Company's exposure to risks and impacts, we are actively diversifying. Currently, the sales proportion to the solar energy industry has been increasing year by year, and the Company is also actively expanding into the wafer and light-emitting diode (LED) industries. In the future, our product sales will span across industries such as wafers, displays, solar energy, and LEDs. As for exports, our overseas customers currently cover related industries in China, India, Singapore, and other regions. Anticipating significant growth in chemical demand in China and other regions, the proportion of exports in total sales is expected to increase annually. In the future, both the types of customer industries and the number of countries we sell to will increase substantially, in order to effectively diversify sales risks.

02

Economic Performance

52,238 metric tons

Cumulative recovered solvent purchases since 2017:

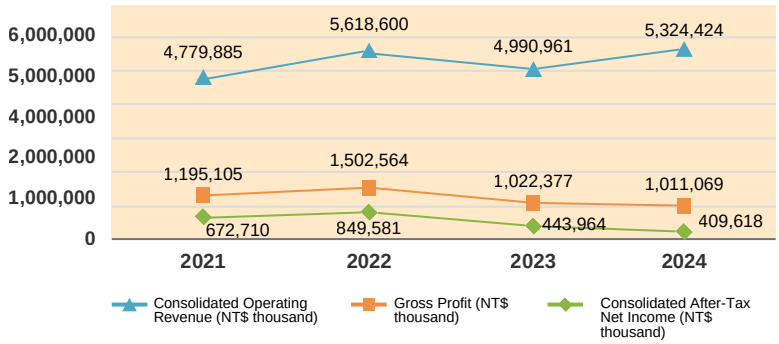
160,234 metric tons

Cumulative recycled and reused TMAH waste liquid since 2011:

2024 consolidated net income: NT$409,618 thousand

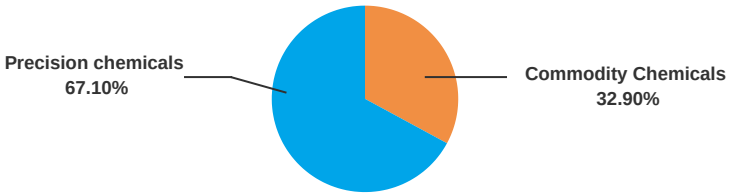
To illustrate the capital flows among different stakeholders and the significant economic impacts the Company brings to society, the Company adopts economic performance indicators to respond to stakeholders' concerns about the generation and distribution of economic value. These indicators also reflect the direct economic value generated and distributed during the reporting period. All financial data are based on audited financial statements or income statements reviewed by a professional accounting firm.

The Company's consolidated operating revenue for the year was NT$5,324,424 thousand, representing a year-over-year increase of 6.7%. Consolidated net income was NT$409,618 thousand, reflecting a year-over-year decrease of 7.7%. Taxes paid to local governments amounted to approximately NT$157,732 thousand. Consolidated after-tax earnings per share were NT$4.1, down 7.0% compared to the previous year.



Further breaking down the revenue ratio, revenue from precision chemicals was NT$3,572,934 thousand, accounting for 67.1% of consolidated revenue. Revenue from Commodity Chemicals was NT$1,751,490 thousand, accounting for 32.9% of consolidated revenue.

Distribution of operating revenue ratio



Following the principle of stable dividend distribution, the Company has distributed cash dividends to shareholders annually since 2013; in the future, the amount of cash dividend per share will be adjusted according to annual profitability. For 2024, after-tax earnings per share were NT$4.1, and the cash dividend distributed per common share was approximately NT$3.5 (NT$2.0 per share from earnings, and NT$1.5 per share from capital reserve, subject to approval at the shareholders' meeting on June 9, 2025).

Consolidated operating revenue and operating performance statistics table

	2022	2023	2024	Annual growth rate
Capital (NT$ thousand)	1,007,060	1,007,060	1,007,060	0.00%
Consolidated Operating Revenue (NT$ thousand)	5,618,600	4,990,961	5,324,424	6.68%
Gross Profit (NT$ thousand)	1,502,564	1,022,377	1,011,069	-1.11%
Income tax (NT$ thousand)	223,292	137,346	157,732	14.84%
Consolidated After-Tax Net Income (NT$ thousand)	849,581	443,964	409,618	-7.74%
After-tax earnings per share (NT$)	8.43	4.41	4.1	-7.03%
Net worth per share (NT$)	45.56	43.83	44.87	2.37%
Employee salary and benefit expenses (NT$ thousand) (Note 2)	569,387	487,970	515,945	5.73%
Amount paid to the capital contributor: Shareholder bonus is distributed in the form of stock (NT$)	0	0	0	-
Funds paid to the capital contributors are paid in cash (NT$)	5.9	3.5	3.5	0.00%
Amount of social investment (NT$)	2,010,000	907,400	1,089,000	

Note

1. Since 2013, the financial reports have been prepared in accordance with the International Financial Reporting Standards (IFRS), replacing the previously used Generally Accepted Accounting Principles (GAAP).
2. The source of the information is IAS 19 Employee Benefits.
3. The increase in revenue of approximately NT$330 million in 2024 was mainly due to the recognition of approximately NT$510 million in revenue from large medical equipment based on the percentage-of-completion method.

Future Revenue Growth Drivers

Development Trends

The Company's current products are mainly used in the TFT-LCD display industry, the semiconductor industry, as well as in green energy industries such as LED and solar power, and the food and beverage industry. Most of the products are key specialty chemicals and Commodity Chemicals used in the production processes of downstream manufacturers. To meet various customer needs, the Company continuously adjusts and improves its products and develops new customized products tailored for clients, in order to adapt to rapidly evolving high-end technologies and changing manufacturing processes. The future development of these products is closely tied to the growth of the downstream application industries. The future trends for each downstream application industry are described below:

TFT-LCD industry

2024 served as a correction year for the panel industry following the demand pull-in caused by the pandemic. As a result, customers focused on optimizing production capacity and upgrading products. Looking ahead to 2025, with the low base effect in play, demand growth is expected from China's new industrialization and infrastructure plans, an AI PC upgrade cycle, and the launch of a new generation of desktop gaming consoles. Terminal panel prices have been rising since early 2025, with large, medium, and small-sized panels all seeing continuous increases. Meanwhile, due to the geopolitical tensions between the U.S. and China, Taiwanese manufacturers have naturally become favored production sites for brand companies. In summary, the first half of 2025 is expected to remain strong despite traditionally being the off-season, and the second half is likely to maintain its peak-season momentum. On another front, the surge in AI computing demand has brought significant momentum to the advanced packaging market. Panel makers are also investing in FOPLP (Fan-Out Panel Level Packaging) technology in hopes of tapping into this trend and developing a high-growth business in addition to traditional panel sales.

Semiconductor industry

In 2024, driven by the strong wave of AI high-performance computing, as anticipated in previous research reports, the output value of Taiwan's semiconductor industry surpassed NT$5 trillion, reaching NT$5.3 trillion. Of this, semiconductor manufacturing revenue accounted for NT$3.42 trillion, a 28% increase, representing a 22% growth from 2023 — significantly higher than the 19% global semiconductor growth rate in 2024. San Fu has closely collaborated with leading Taiwanese semiconductor manufacturers in the advanced packaging field to develop products and applications compatible with InFO and CoWoS technologies, with these efforts beginning to yield results in recent years. Looking forward, the Company will further advance into SoIC (System on Integrated Chips) products and promote San Fu's products in front-end fabs with sub-10nm processes.
Looking ahead to 2025, AI-driven demand will continue across servers, electric vehicles, laptops, mobile phones, and home appliances, with AI applications becoming pervasive. The most anticipated trend is the broad application of "AI robots," whose high-performance and sensing chips will exceed the number used in current devices by several times. Therefore, market research forecasts that Taiwan's semiconductor output value will surpass NT$6 trillion in 2025, reaching NT$6.18 trillion — a 16% year-on-year increase. (The estimated global semiconductor growth rate for 2025 is 11%.)

Food industry

Global consumers' demand across four key areas — "health," "enjoyment," "convenience," and "environmental and ethical responsibility" — has become a major driving force for innovation and R&D in the food industry. To meet growing health-consciousness, food manufacturers are improving technologies, formulas, and processes to balance taste with health and safety. This includes reducing calories, allergens, and packaging size to minimize physical burden on consumers. In recent years, multiple food safety incidents both domestically and internationally — such as melamine-tainted milk powder, plasticizer contamination, and adulterated starch — have heightened public awareness of food safety, prompting the industry to pay greater attention to the sourcing and quality of raw materials.

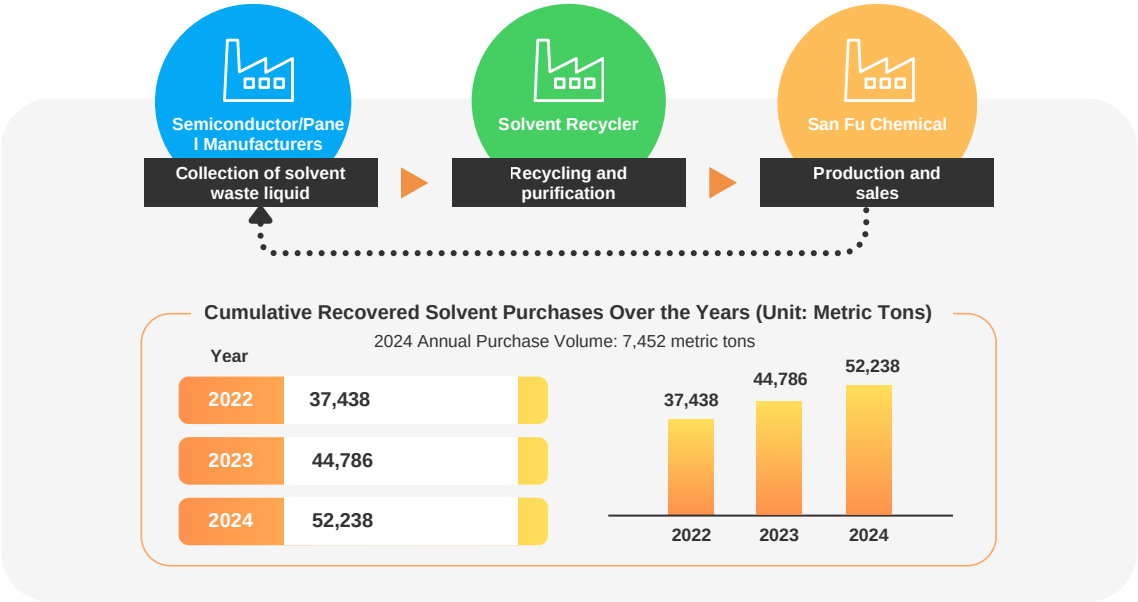
Competition of products

In recent years, competition has intensified due to greater information transparency, easier access to raw materials, and foreign suppliers actively entering the Taiwan market. However, the Company maintains a competitive edge. Compared to foreign suppliers, San Fu offers localization and price advantages. Compared to domestic suppliers, San Fu holds strengths in high quality, customized services, and technical customer support. As a result, despite the increasing competition, the Company continues to achieve stable annual growth.

Sustainable Circular Economy

Solvents Circulation

In response to global-scale environmental degradation and climate change, and to reduce environmental burden, the Company collaborates with suppliers (solvent recovery operators) to recycle waste solvents generated in customers' (semiconductor/panel manufacturers) production processes. By leveraging the solvent recovery operators' high-efficiency regeneration equipment and advanced distillation and separation technology, the waste solvents are refined and reintroduced into the market for reuse. Since 2017, San Fu Chemical has cumulatively purchased a total of 52,238 metric tons of recycled solvents.



TMAH Waste Liquid Recycling

Tetramethylammonium Hydroxide (TMAH) is a critical developer in the photolithography processes of the electronics industry. Classified as a lethal neurotoxin, it can cause fatality within 30 minutes of human exposure. Several occupational incidents in Taiwan have been attributed to TMAH exposure. TMAH wastewater contributes significantly to ammonia nitrogen levels in electronics industry effluent and exhibits acute toxicity to biological systems. Untreated discharge can severely degrade water quality and cause ecological damage.

As a chemical manufacturer, San Fu Chemical implements proactive pollution prevention, waste minimization, and energy/carbon reduction initiatives while optimizing production processes. Beyond supplying high-purity chemicals, we assist customers in managing chemical-related waste streams. Since 2007, we have pioneered TMAH recycling R&D, becoming Taiwan's first domestic enterprise to independently develop this technology. In 2008, our innovation secured an R&D grant from the Industrial Development Bureau, MOEA, with multiple patents granted since 2012.

Our patented process employs electrodialysis technology to convert customer TMAH waste into 25% TMAH developer solution. The regenerated product achieves electronic-grade purity comparable to virgin material, enabling market reintroduction. This circular approach reduces virgin TMAH consumption and aligns with energy conservation and waste reduction goals.


Invention Patent No. 1366076 (June 2012)

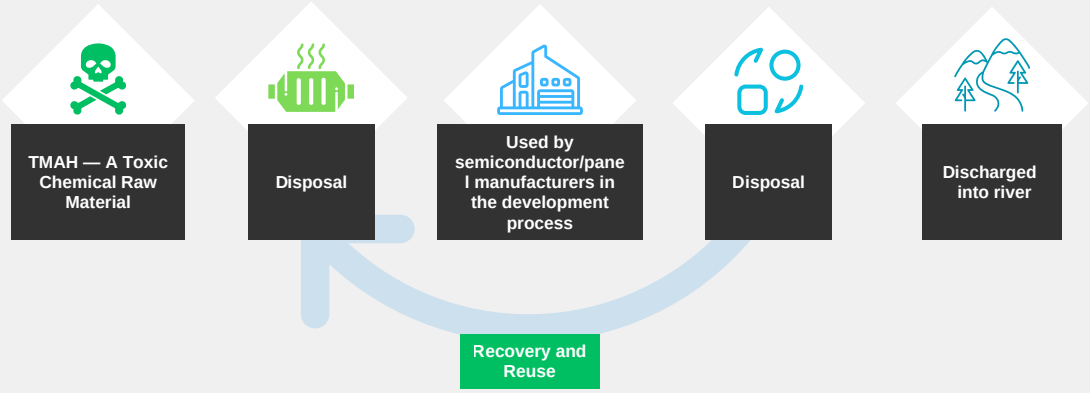

Invention Patent No. 1462770 (December 2014)

Invention Patent No. 1607987 (December 2017)

Waste Recycling and Reuse — Fulfilling Ecological Responsibilities

As a leading enterprise in the chemical industry, San Fu Chemical plays an integral role in people's daily lives. We fully recognize the importance of properly managing waste generated both in our own operations as well as in our customers' manufacturing processes. Through ongoing R&D, we actively promote a circular economy model to reduce reliance on external resources, enhance the reuse of materials, lower manufacturing costs, and achieve a win-win-win outcome for environmental protection, customer value, and corporate growth — all of which accelerate the transition to a sustainable economy.

Taiwan is a densely populated island with limited resources and is surrounded by the sea, making precision in energy management and land use essential to realizing the vision of becoming a green technology island. San Fu Chemical leverages its proprietary recycling technology to convert developer waste liquid (TMAH waste liquid) generated during the display manufacturing process at customer sites into high-quality regenerated TMAH developer solution. Since 2011, we have continuously supplied customers with this regenerated solution. With the expansion of our customers' new plants, the volume of recycled and reused TMAH has reached new heights, demonstrating significant environmental and economic benefits.



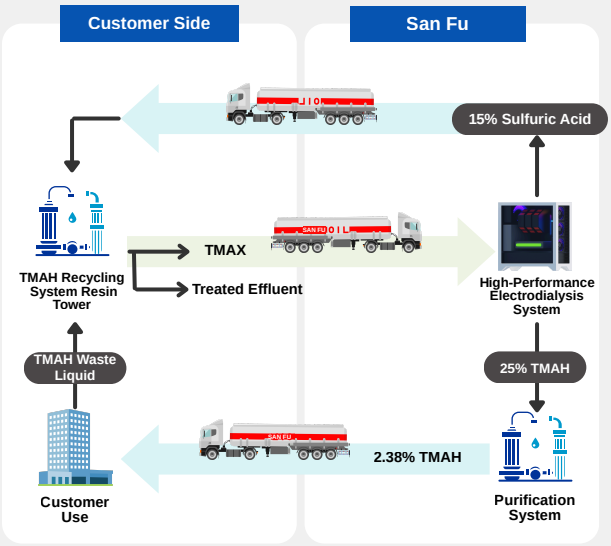
Creating Win-Win Outcomes and Driving Sustainable Economic Transformation

In terms of sustainable development and economic transformation, San Fu Chemical invested NT$330 million in 2011 to establish a TMAH recycling and reuse plant, which officially commenced operations that same year. It also obtained the first recycling permit from Taiwan's TFT-LCD industry customer. Following mass production, San Fu Chemical was commissioned by many internationally renowned semiconductor and optoelectronics manufacturers located in the Hsinchu, Central, Southern Taiwan Science Parks, and other industrial parks. Subsequently, the Company invested an additional NT$120 million to expand capacity and optimize production processes, helping customers reduce the concentration of TMAH in discharged wastewater to comply with the Environmental Protection Administration's ammonia nitrogen discharge standard (less than 20 mg/L), thereby effectively mitigating environmental burden.

In 2020, San Fu Chemical invested over NT$50 million to install evaporative concentration equipment, which integrates water and waste heat recovery to reduce steam and natural gas consumption, improve energy efficiency, and implement sustainable energy-saving practices. In 2021, the Company introduced an energy management system and adopted the PDCA (Plan-Do-Check-Act) cycle to continuously optimize energy management, reduce operating costs, and strengthen its capacity for sustainable business operations.

With the continued expansion of Taiwan's semiconductor industry, demand for TMAH has increased significantly. The existing recycling capacity at San Fu Chemical's Shanhua plant is no longer sufficient to meet demand, particularly with the ongoing expansion of new semiconductor plants in the Southern Taiwan Science Park. To address this growing demand, San Fu Chemical applied to add a semiconductor-grade ultra-high-purity TMAH developer product line at the Southern Taiwan Science Park and fully transferred the relevant technology to its subsidiary, International Nitoto Technology Co., Ltd. The factory completed its construction plan in 2022. In 2023, the Company invested NT$600 million to build a semiconductor nano-grade production line, continuing to adopt circular economy principles and sustainable development as long-term strategies.

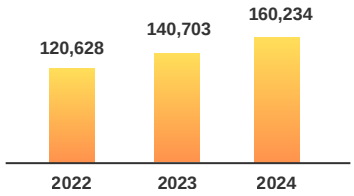
Technology is bringing the world closer together and prompting greater focus on the three fundamental pillars of sustainability: social progress, economic growth, and environmental protection. In response to the challenges posed by climate change, San Fu Chemical continuously advances improvements across all stages of the product life cycle. In addition to collaborating with leading domestic and international technology companies to provide cost-effective and competitive TMAH recycling solutions, the Company actively pursues process improvements to enhance recycling efficiency, reduce energy consumption, broaden applications, mitigate environmental impact, and improve product quality — all aimed at establishing itself as a leader in the green chemical industry.



San Fu Chemical has successfully transformed the highly toxic chemical TMAH into a valuable resource. As of 2024, a cumulative total of approximately 79,000 metric tons of 25% TMAH recycled product has been reused. Since 2011, San Fu Chemical has recycled and reused a total of 160,234 metric tons of TMAH waste liquid, demonstrating the outstanding results of its innovative circular economy model — achieving both environmental protection and industrial sustainability.

Cumulative Inbound Waste Haulage Volume Over the Years (Unit: metric tons)

Year	
2022	120,628
2023	140,703
2024	160,234



Recognition of Circular Economy Achievements

San Fu Chemical has been dedicated to the R&D of recycling and reuse technologies for the semiconductor process pollutant Tetramethylammonium Hydroxide (TMAH) since 2006. TMAH, once heavily imported into Taiwan, is an indispensable yet highly toxic raw material in semiconductor manufacturing. Although the Company initially considered manufacturing TMAH, it ultimately chose to focus on developing recycling and regeneration technologies. The technology was successfully developed in 2010, commercialized in 2012, and reached profitability by 2016.

San Fu Chemical delivers multiple value propositions to its customers:

(1) Resolves the disposal challenges associated with developer waste liquid while reducing treatment costs.

(2) Purchases recycled TMAH solution that meets stringent quality standards, thereby reducing the reliance on virgin TMAH.

(3) Deepens collaborative relationships through tailored services, fostering long-term partnerships.

(4) Provides low-carbon recycled raw materials and reduces carbon emissions associated with waste treatment.

Performance Highlights:

1. Patented TMAH recycling technology has been adopted by 17 electronics technology plants.
2. Annually assists customers in treating approximately 1.83 million metric tons of wastewater — equivalent to the volume of 730 Universiade swimming pools — significantly reducing energy consumption in the semiconductor industry.
3. Helped customers save over NT$2 billion in pollution treatment costs.
4. 2019: Received the inaugural Circular Economy Gold Award.
5. 2023: Received the Silver Award from the Taiwan Sustainable Action Awards.

San Fu Chemical's innovative circular economy model not only effectively addresses environmental pollution but also actively supports the electronics industry's transition toward a green industry. The continued support of customers and recognition through various awards underscore the Company's outstanding achievements and unwavering commitment to sustainability over more than a decade.

03

Climate Change Response

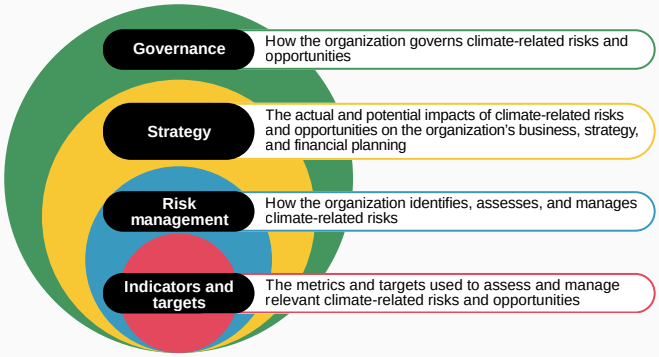
11%

Reduction of GHG emissions in 2024

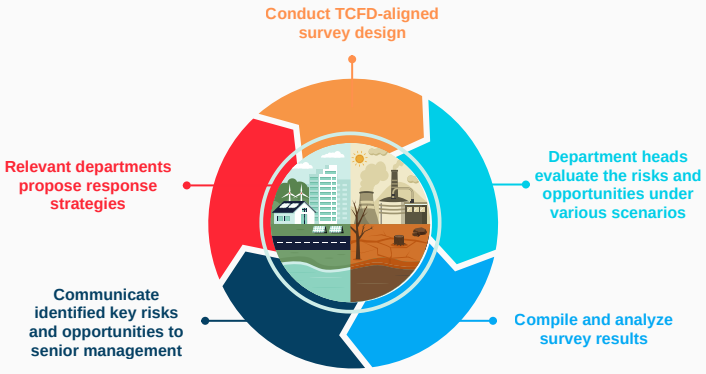
Climate Change Risks and Opportunities

San Fu Chemical places great emphasis on the long-term performance of the business and actively addresses the risks brought by climate change. The Company aligns with the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) issued by the Financial Stability Board (FSB), and follows its four core pillars: Governance / Strategy / Risk Management / Metrics and Targets. Through dynamic scenario-based analysis, the Company evaluates emerging climate risks and opportunities and their potential impact on corporate management. Response strategies are developed for each scenario to mitigate financial risks associated with climate change.
In 2025, the Company has officially launched its TCFD project and plans to issue a standalone TCFD Report in the future. More complete and specific climate-related disclosures will be included in the 2025 Sustainability Report.

Core Elements of Climate-Related Financial Disclosures



Main steps for identifying climate change risks and opportunities

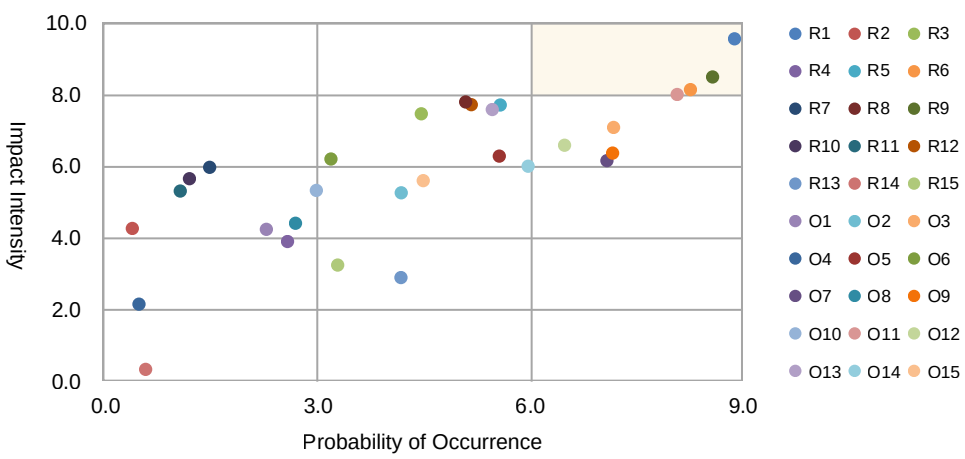


Climate Scenario Assumptions

Given the inherent uncertainty of climate change, San Fu Chemical references scientific reports from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA), and adopts two contrasting scenarios - very high GHG emissions scenario (SSP5-8.5) and Net Zero Emissions (NZE) to assess climate-related risks and opportunities:

1. The very high GHG emissions scenario (SSP5-8.5) — Based on IPCC's most severe emissions pathway under minimal climate policy, this scenario models the worst-case warming outcomes. San Fu uses SSP5-8.5 to simulate potential climate-related disruptions to production facilities and formulate necessary adaptive measures.
2. Net Zero Emissions (NZE) Scenario — Proposed by the IEA, this scenario reflects a pathway to limit global temperature rise to below 1.5°C by 2050 through aggressive emissions reduction. San Fu assesses the potential impacts of this transition scenario on low-carbon operations and the broader economic transformation of the Company.

Climate Change Risk and Opportunity Materiality Matrix



Results of Identification of Climate Change Risks and Opportunities

Risks/Opportunities		Item	Instruction
Transitional risk	Policies and Regulations	R1	Increased greenhouse gas emission costs due to regulations★
		R2	Strengthened emission disclosure requirements
		R3	Regulations and supervision of existing products and services
		R4	Risk of litigation related to climate change
	Technology	R5	Substitution of existing products and services with low-carbon alternatives
		R6	Cost of low-carbon technologies★
		R7	Investment failure in new technologies
	Market	R8	Changes in customer behavior
		R9	Rising raw material costs★
	Goodwill	R10	Increased negative feedback from stakeholders; industry stigmatization
		R11	Shift in customer preferences
Physical Risks	Acute	R12	Typhoons/hurricanes, heavy rainfall/flooding
	Chronic	R13	Rising average temperatures
		R14	Sea level rise
		R15	Changes in precipitation and water availability; more extreme climate patterns
Opportunities	Resource Efficiency	O1	Adoption of more efficient transportation methods
		O2	Use of more efficient production and distribution systems
		O3	Recycling and reuse
		O4	Transition to more energy-efficient buildings
		O5	Reduction in water usage and consumption
	Energy Source	O6	Adoption of low-carbon energy sources
		O7	Participation in carbon trading markets
		O8	Transition to decentralized energy systems
	Products and Services	O9	Development/expansion of low-carbon products or services
		O10	Establishment of climate risk adaptation solutions
		O11	R&D of innovative products or services★
		O12	Changes in customer preferences
	Market	O13	Entry into new markets
	Resilience	O14	Participation in renewable energy projects and adoption of energy-saving measures
		O15	Energy substitution and diversification

In terms of transition risks, the risk associated with replacing existing products and services with low-carbon alternatives is rising. Customers committed to net-zero are increasing demand for low-carbon products, which has led to higher verification-related costs for product carbon footprints. To comply with the Financial Supervisory Commission's roadmap for sustainability in listed companies, the Company has also incurred additional costs for greenhouse gas (GHG) inventory and verification. Moreover, under the Environmental Ministry's "Carbon Fee Collection Regulations," beginning in 2026, entities will be taxed based on their 2025 emissions, with the initial focus on large emitters emitting over 25,000 metric tons annually. Therefore, San Fu Chemicals may face medium- to long-term impacts. In the long term, climate change could affect suppliers, leading to rising raw material costs that may ultimately reduce the Company's profitability.

Regarding physical risks, according to WRI's Aqueduct water risk assessment, the Company's operating locations are not within high water-stress regions. As a result, the likelihood of droughts or flood events caused by extreme climate change is extremely low, and no related physical-water risks have been identified.
As for opportunities, with net-zero emissions becoming a global imperative, San Fu Chemicals is investing in research and development of innovative low-carbon products and services over the medium to long term to meet evolving customer needs, thereby enhancing both revenue and profit.

The results of short-, medium-, and long-term climate change risks and opportunities identified by San Fu Chemical are shown below, listing three climate change risks and one opportunity.

Risks/Opportunities	Risk category and opportunity	Short-term (1-3 years)	Mid-term (3-6 years)	Long-term (over 6 years)
Risk	Transitional risk Risks associated with low-carbon transition and changes in policies, regulations, technologies, markets, society and economic conditions.	R6: Replace existing products and services with low-carbon products	R1: Greenhouse gas regulations increasing emission costs	R9: Rising raw material costs
Opportunities	Opportunities Efforts to mitigate and adapt to climate change will create opportunities for the organization.	-	O11: R&D of innovative products or services	-

Corresponding management approaches for the results of climate change identification

In 2024, climate change-related risks and opportunities were identified. Appropriate response strategies were formulated to address the impacts of climate events. Feasible strategies, management processes, and responsible units are outlined in the table below.

Climate change risks

TYPE		Climate Change Issues	Potential Financial Impact on San Fu	Response Strategy	Management Process	Responsible Unit
Transitional risk	Policies and Regulations	Greenhouse gas regulations increase the cost of emissions	In order to control carbon emissions, many countries are implementing carbon pricing mechanisms, which aim to internalize the cost of greenhouse gas emissions from production by pricing carbon and accounting for environmental costs. Although the Ministry of Environment has announced a carbon fee regulation, San Fu Chemical is not yet among the entities subject to the fee. However, as regulations tighten, the potential impact is expected to materialize in the medium to long term. In response to the government's plan to begin collecting carbon fees in 2025 for companies emitting over 25,000 metric tons CO_2e per year, and considering that the threshold may be lowered to 10,000 metric tons CO_2e in the future, based on San Fu's 2024 GHG emissions of 19,492 metric tons CO_2e and an estimated fee of NT$300/ton, the expected increase in operating costs is approximately NT$2.85 million in the mid-term.	1. Prioritize the replacement of energy-intensive machinery and equipment at operating sites with energy-efficient equipment to achieve energy-saving effects. 2. Evaluate investment in environmental sustainability and renewable energy-related equipment at production sites, such as installing solar panels for self-use.	1. Greenhouse Gas Emission Reduction Policy and Goals 2. Management System, Objectives, and Control Procedures	Industrial Safety Department / Production Units
	Technology	Substitution of existing products and services with low-carbon alternatives	In response to the decline in customer demand for high-carbon-emission products and services, and the increasing demand for low-carbon or green energy products and services, we are adapting accordingly.	R&D projects are focused on adjusting and improving product manufacturing and collaborating with academic institutions and customers to develop low-carbon products.	1. R&D Projects 2. New Product Development Verification Management Procedure	R&D Division
	Market	Rising raw material costs	Due to the rising demand for green products and related certifications, suppliers may be required to adopt more environmentally friendly production practices, leading to increased procurement and transaction costs, thereby increasing operational pressure on the Company.	1. Develop green supplier sources to increase bargaining flexibility. 2. Evaluate and select environmentally friendly raw materials that are more mature in the market, and adopt a procurement strategy to build maximum inventory when prices are low. 3. Establish green supplier management and optimize supply chain management systems to control costs.	Supplier Management Procedure	Procurement Unit
			Climate change has resulted in unstable supply from suppliers and rising energy prices, reflected in increased raw material and freight costs, leading to higher production and operating expenses for the Company.	1. Use raw materials that are more accessible and recyclable. 2. Develop product recycling and reuse technologies, or collaborate with local recycling vendors to advance sustainable circular economy practices. 3. Prioritize sourcing from diversified production base suppliers who are resilient and have robust risk management, and adopt dual-sourcing strategies to mitigate climate change risks.	1. New Product Development Verification Management Procedure 2. Supplier Management Procedure	R&D Division/Procurement Unit

Climate Change Opportunities

TYPE	Climate Change Issues	Potential Financial Impact on San Fu	Response Strategy	Management Process	Responsible Unit
Products and Services	R&D of innovative products or services	Material selection aims to be environmentally friendly and comply with international environmental regulations (RoHS, REACH, etc.) as well as customer requirements. We focus on developing leading-edge technologies/products/services to increase Company revenue and profit.	1. Conduct regular exchanges with customers' R&D teams to understand future technology and process development trends in order to provide corresponding products. 2. Invest in R&D capacity and strengthen the R&D team. 3. Establish product patent protection mechanisms to raise entry barriers for competitors.	1. New Product Development Verification Management Procedure 2. Communication Management Procedure 3. Hazardous Substance Control Procedure	R&D Division / Sales Division / Quality System Management Division

Transition Plan for Managing Climate-Related Risks

Transition Plan	Plan Content	Action Item	Activity Metric	Target
Transitional risk	Energy saving	Follow ISO 50001:2018 management procedures	Energy intensity	Reduce electricity consumption by 1% annually compared to the previous year
	Carbon reduction	Follow ISO 14064:2018 management procedures	Carbon emission intensity	Reduce combined Category 1 and Category 2 GHG emissions by 20% by 2030, and achieve net-zero emissions by 2050
	Circular Production Economy	More than 10% recycled material procurement rate	Recycled material procurement rate	Recycled material procurement to exceed 20%

Greenhouse Gas Emissions Management

Below is the greenhouse gas emissions data of San Fu Chemical for the year 2024:

Direct greenhouse gas emissions (Scope 1): **9,701.0 ton CO_2e**

Energy indirect greenhouse gas emissions (Scope 2): **17,046.7 ton CO_2e**

Other indirect greenhouse gas emissions (Scope 3–6): **5,720.6 ton CO_2e**

Total greenhouse gas emissions: 32,468.3 ton CO_2e

Category of greenhouse gas emissions (Unit: ton CO_2e)

	CO_2	CH_4	N_2O	HFCs	PFCs	SF_6	NF_3	Total emissions
Emissions equivalent (ton CO_2e/year)	27,962.4	33.7	4,256.1	216.1	0	0	0	32,468.3
Gas ratio (%)	86.12%	0.10%	13.11%	0.67%	0%	0%	0%	100.00%

In addition to its five operating sites, San Fu Chemical's subsidiary International Nitto also completed ISO 14064-1:2018 greenhouse gas inventory in 2024. The disclosed GHG emission data was verified by Intertek Testing Services Taiwan Ltd.

The total Category 1 and Category 2 GHG emissions of San Fu Chemical increased by 7,024 tons CO_2e compared to the previous year. The reasons for the increase are as follows: In 2024, due to increased customer demand, production volume increased, leading to higher energy and resource consumption. In addition, the Liuying Plant's nitrous oxide (N_2O) products were included in the inventory for the first time, which also contributed to the rise in Category 1 direct emissions. The overall carbon emissions intensity increased due to both the rise in production volume and the expansion of inventory coverage to include the subsidiary.

Greenhouse Gas Emissions and Emission Intensity Statistics

Emissions Unit: ton CO_2e / Intensity Unit: ton CO_2e per NT$1 million in revenue

Verification Agency	Verification Guidelines	Statement of Compliance	Item	Verification Scope	2021	2022	2023	2024
Intertek	ISO 14064-1:2018	GHG inventory and verification certificates are disclosed on the official website of San Fu Chemical: https://www.sfchem.com.tw/zh-hant/page/certifications	Category 1: Direct emissions	Parent company	7,200.9	5,003.0	2,638.4	9,701.0
				Subsidiary	--	--	--	1,056.1
			Category 2: Indirect emissions from energy.	Parent company	19,888.2	20,344.0	17,085.2	17,046.7
				Subsidiary	--	--	--	7,159.1
			Category 3 - 6: Other indirect emissions. (Energy upstream, resource upstream, waste disposal)	Parent company	4,741.6	4,528.0	3,998.9	5,720.6
				Subsidiary	--	--	--	2,047.4
Carbon emission intensity of the whole plant					5.67	4.51	3.95	6.57

Note

1. The electricity emission factor used is 0.494 kg CO_2e/kWh, as announced by the Bureau of Energy, Ministry of Economic Affairs for 2023, based on the IPCC Sixth Assessment Report (GWP 2021 data).
2. Starting in 2024, the GHG inventory scope was expanded to include the subsidiary International Nitto.
3. Emission intensity is calculated as: (Scope 1 + Scope 2 emissions of San Fu Chemical and International Nitoto in metric tons CO_2e) / consolidated revenue in NT$ million.

Greenhouse Gas Reduction Targets, Strategies, Action Plans, and Results

San Fu Chemical takes its commitment to net-zero emissions seriously. We assess overall carbon reduction performance annually based on GHG inventory results and formulate emission reduction strategies. In response to the "Boiler Air Pollutant Emission Standards" announced by the Environmental Protection Administration in 2018—which set uniform emissions limits for boilers across industries and required operators to meet them within a specified timeframe—San Fu began in 2019 to plan and promote the conversion of its boilers to natural-gas equipment to reduce air pollution; therefore, the Shanhua Plant set 2019 as the reduction baseline year, the scope of the greenhouse-gas inventory was expanded in 2021 to include the Liuying Plant and the Kaohsiung Plant, all San Fu Chemical operating sites completed inventory and verification in 2023, and the subsidiary International Nitto, which has a similar chemical production process, also completed its inventory in 2024. To comply with the Financial Supervisory Commission's sustainability development roadmap for listed companies, the Company plans to complete the greenhouse-gas inventory of all consolidated subsidiaries by 2027. The Company has also set medium- and long-term goals to reduce combined Category 1 and Category 2 greenhouse-gas emissions by 20% by 2030 and to achieve net-zero emissions by 2050.

Greenhouse Gas Reduction Baseline

Plant area	Base year
Shanhua Plant	2019
Liuying Plant	2021
Kaohsiung Plant	2021
Office area (Taipei Office, Zhubei Office)	2023
Subsidiary, International Nitto	2024

Unit: ton CO_2e

Greenhouse Gas Emission Baseline

39,315.8

Greenhouse Gas Reduction Strategy

Through energy-saving strategies, we comprehensively reduce greenhouse gas emissions, including replacement of outdated equipment and optimization of equipment operation parameters, to achieve the Company's greenhouse gas reduction targets.

Concrete Action Plan for Greenhouse Gas Reduction

In 2024, relevant departments proposed equipment and process reviews and improvements, resulting in a total reduction of 631 tons CO_2e. The specific reduction actions are as follows:

Unit: ton CO_2e

		Conservation measures	Achievements of conservation	Carbon reduction
1	Liuying Plant	Reduce operation frequency of scrubbers after work hours and on holidays	65,000 kWh of electricity saved	32.1
2		Install new solar panels for self-use power generation	365,000 kWh of electricity saved	180.3
3	TMAH	1. Replace electrolytic cell membranes 2. Improve heat exchange efficiency by installing electrode rods 3. Improve chiller efficiency by modifying piping configuration	671,000 kWh of electricity saved	331.5
4	Kaohsiung Plant	Adjust cooling water fan motor speeds based on inlet and outlet temperatures	12,592 kWh of electricity saved	6.2
5	International Nitto	Install inverters on cooling tower fans (install inverters on fans of towers B, C, and D)	163,298 kWh of electricity saved	80.7

Note

1. The carbon emission coefficient of electricity is calculated based on the 2023 figure announced by the Bureau of Energy, Ministry of Economic Affairs: 0.494 kg CO_2e/kWh

Greenhouse Gas Emission Reduction Outcomes

Reviewing the results of Category 1 + Category 2 greenhouse gas emission reductions in 2024, the reduction progress compared to the baseline year has reached 11%.

2030 Targets **20% reduction**

2050 Targets **Net Zero**

Categories 1 and 2 Total carbon emissions (Metric tons CO_2e)	Base year	2024
	39,315.8	34,962.7
Achievement rate of reduction targets		11%

Development of internal carbon pricing

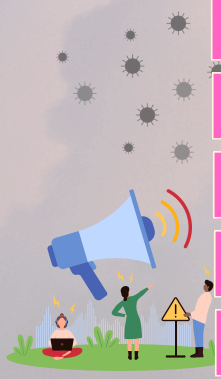
San Fu Chemical continues to analyze and reference international carbon pricing trends to evaluate strategies for establishing an internal carbon pricing system. A carbon price of NT$300 per metric ton has been set as a reference for capital investment and major decision-making. In addition to capital expenditures, carbon reduction benefits are also factored into cost calculations. Through the internal carbon pricing management mechanism, each plant is incentivized to achieve its carbon reduction targets and promote carbon management across the Group.

Rigorous Detection of Air Pollution to Accurately Meet Regulatory Standards

Air pollution has adverse impacts on the climate, ecosystems, air quality, habitats, agriculture, and the health of humans and animals. Issues such as deteriorating air quality, acidification, forest degradation, and public health risks have prompted local and international regulations to control gaseous emissions. Accordingly, we regularly monitor emissions data related to air pollution and are committed to reducing emissions of air pollutants.

We have formulated internal air pollution prevention and control management measures in compliance with national environmental protection regulations, and have incorporated ISO 14001 environmental management systems to monitor compliance with relevant air pollutant discharge standards. All gas emissions are 100% compliant with regulatory standards. Please refer to the 2024 Air Pollutant Emissions Statistics for details.

Since 2012, we have conducted comprehensive testing of all relevant air pollutant discharge points to confirm emission coefficients, which serve as data references for equipment improvement. To ensure that gas emissions meet regulatory requirements and to minimize their environmental impact during operations, the Company implements the following air pollution control measures:



1. Compliance with the Air Pollution Control Act
2. Compliance with the Volatile Organic Compounds Air Pollution Control and Emission Standards
3. Compliance with the Air Pollutant Emission Standards and the Regulations Governing the Establishment and Operation of Stationary Pollution Sources
4. Exhaust gas emissions from relevant production processes are managed in accordance with the Air Emission Control Standard Manual
5. Operation and maintenance of air pollution control equipment follow the Mechanical Equipment Maintenance Management Procedure and Product Process Control Procedure
6. Volatile Organic Compounds (VOCs) generated from painting operations are handled according to the VOCs Operation Control Standard Manual
7. Where emissions from the workplace do not comply with the Air Pollution Control Act, effective exhaust gas treatment facilities must be installed to reduce environmental pollution

2024 Air Pollutant Emissions Statistics (Unit: metric tons)

Air Pollutant	Boundary	Permitted Amount (T)	Emissions (T)
Nitrogen Oxide (NO_x)	Shanhua Plant	14.07	4.16
	International Nitto	Permit application in progress	Permit application in progress
Sulfur Oxides (SO_x)	Shanhua Plant	0.65	0
	International Nitto	None	None
Volatile Organic Compounds (VOC)	Shanhua Plant	6.57	2.23
	Liuying Plant	6.66	1.34
	Kaohsiung Plant	1.35	0.40
	International Nitto	None	None
Particulate Matter (PM)	Shanhua Plant	0.41	0.12
	International Nitto	Permit application in progress	Permit application in progress
Total Air Pollutant Emissions			8.25

04 Environmental Stewardship

72.27%

Proportion of recyclable materials used in specialty products (including recyclable fresh liquids):

82.94%

Reduction of waste organic sludge: (compared with 2019)

13,133 million

Cumulative investment in environmental protection promotion:

Implementing Environmental Management to Let the Earth Thrive Continuously

While the scale of operations continues to grow, we also emphasize the sustainable development of environmental aspects. We pay close attention to the impacts on both biotic and abiotic natural ecosystems, including land, air, water, and ecosystems, so that the Earth can thrive endlessly and leave a clean land for future generations — an unshirkable mission of San Fu.

The environmental aspects cover impacts from various inputs such as energy and water, as well as outputs including emissions, effluents, and waste. In addition, transportation, impacts related to products and services, compliance with environmental laws and regulations, and environmental expenditures are all disclosed in this chapter. In addition, the relevant environmental protection actions will be disclosed in this section one by one, including the impact of transportation, products and services, compliance with environmental protection regulations, and environmental expenditures.

The following is our management policy regarding environmental sustainability issues.

1. All operational activities, products, and services must undergo regular reviews to implement effective environmental management.
2. Continuously improve and carry out pollution prevention efforts.
3. All operational activities, products, and services must comply with applicable government environmental protection laws and regulations, as well as other environmental requirements signed by the Shanhua and Liuying Plants.
4. Provide a framework for setting and reviewing environmental goals and targets in accordance with the “Management System Objectives Control Procedure” and “Management Review Procedure.”
5. Establish and maintain an environmental management system, including manuals, policies, goals, targets, operating procedures, work instructions, and forms.
6. Conduct training for all employees, encourage participation and commitment to environmental management work, and continuously promote the plant’s environmental philosophy.
7. Post the Environment, Safety, and Health (ESH) policy in the security room and publicly disclose it.
8. The Company regularly monitors and measures the key characteristics of operations and activities that may have significant environmental impacts and records the results.
9. Monitoring and measurement equipment shall be regularly calibrated and maintained.
10. Periodically evaluate compliance with environmental protection laws and other requirements, and record and preserve the results.
11. For any non-conformities related to the environment, appropriate measures shall be taken to handle, investigate, analyze root causes, correct, and prevent recurrence.
12. Revise procedures as necessary based on corrective and preventive actions.
13. Records related to the execution of the environmental management system must be easily searchable, identifiable, and traceable, and must be properly preserved and maintained.
14. Conduct regular audits of the environmental management system to determine compliance with environmental management planning and ISO 14001 requirements. These audits may be carried out by external experts or internal personnel. Audit results shall be reviewed at the management review meetings.

Implementing Environmental Protection Management

Management Policy

We continue to implement environmental management standards, establish a responsible team and management system, and formulate rigorous policies, procedures, and management standards to promote internal environmental management, with the goal of creating a clean working environment.

Comprehensive verification of the environmental management system

Through third-party verification, we implement environmental management and align with national and international standards. We have currently obtained the following third-party certifications: ISO 14064-1:2018 Greenhouse Gas Inventory Standard, ISO 14001:2015 Environmental Management System.

Environmental, Occupational Health and Safety Management System (EHS) Standard Third-party Verification and Statistics Table

Plant area	ISO 14064-1:2018	ISO 14001:2015
Taipei Headquarters	✓	
Zhubei Office	✓	
Shanhua Plant	✓	✓
Liuying Plant	✓	✓
Kaohsiung Plant	✓	
International Nitto	✓	✓

ISO 14001:2015 Environmental Management System Certification

Shanhua Plant

Liuying Plant

International Nitto

Environmental Safety Education and Training

2024 Performance of Colleagues in the Plant Obtaining Legal Certificates

License item	International Nitto	San Fu	Number of qualified personnel	Whether it meets the legal standards
Toxic Chemical Substance Specialist	0	10	10	100% Conformity
Dedicated Wastewater Treatment Personnel	2	10	12	100% Conformity
Air Pollution Control Personnel	2	10	12	100% Conformity
Waste-management Specialist	2	11	13	100% Conformity
Energy Management Personnel	2	5	7	100% Conformity

On-site environmental-protection inspection

We have formulated the “Safety and Health Personnel Responsibilities and Authorities Control Procedure,” requiring supervisors at all levels, employees of each plant, and environmental-protection personnel to conduct on-site environmental inspections within their areas. Any violations of environmental regulations can be reported through the “Environmental/Occupational-Safety Non-conformity Handling, Corrective and Preventive Measures Procedure,” and are then tracked, improved, and recorded.

Tracking and verification

Under the environmental-management system, the Company has established the “Internal Audit Management Procedure.” Each year the Industrial Safety Department assigns staff who have passed internal-audit training to perform cross-audits of all departments, checking compliance with internal environmental regulations, procedures, and standards according to the audit plan.

Raw Material Management

Recycling and reuse of raw materials

If waste generated at the end of the production process is not properly handled, it places a heavy burden on the environment. Therefore, San Fu works together with suppliers and customers to broaden raw-material recycling and reduction solutions throughout the production-and-sales supply chain.

Recycling and purification

Together with suppliers, we recover and re-purify post-use chemicals so they can serve as raw materials in other processes, creating new applications and delivering both environmental and economic benefits.

Reusing packaging materials

We actively communicate with customers, assess packaging-material life cycles, and adopt a “dedicated container reuse” model to reduce waste; when the containers reach end of life, they become feedstock for other industries.

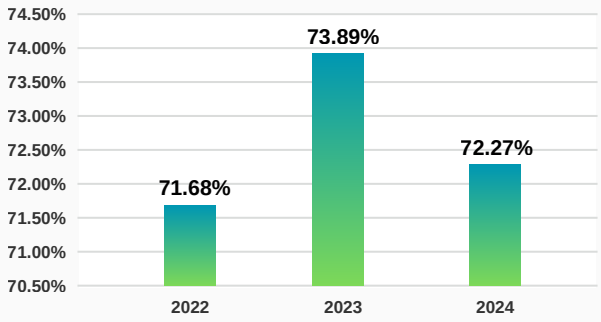
Recycled packaging materials

To protect forests, paper bags and cartons are produced from recycled pulp: paper bags contain > 70 % recycled pulp, and cartons are made from 100 % recycled pulp.

In San Fu’s operations plan, the ultimate goal is green products across the entire life cycle. We eliminate tasks that pose potential environmental threats, continually develop the next generation of products, and keep improving green processes to achieve environmental friendliness.

The share of recyclable raw materials (including fresh recyclable liquids) in specialty raw materials decreased by 1.62 % compared with 2023, but the total quantity increased by 2,445 tons. The share of recyclable packaging materials in specialty products rose by 16.44% versus 2023, returning to previous-year levels. The share of recyclable raw materials in chemical products fell by 7.48% compared with 2023, mainly because of differences in the product mix of orders.

Comparison of recyclable raw materials for Specialty Chemicals products over the years



Percentage of Recyclable Raw Materials (Including Fresh Recyclable Liquids)

Raw materials

Product Category	Unit	Recyclable (Including Fresh Recyclable Liquids) 2022	2023	2024	Non-recyclable 2022	2023	2024	Subtotal 2022	2023	2024
Specialty Chemicals	Metric tons	26,443	26,570	29,015	10,447	9,387	11,132	36,890	35,958	40,147
	%	71.68%	73.89%	72.27%	28.32%	26.11%	27.73%			
Commodity Chemicals	Metric tons	0	0	0	2,460	2,973	3,326	2,460	2,973	3,326
	%	0%	0%	0%	100%	100%	100%			

Statistics on recyclable packaging materials

Packaging materials

Product Category	Unit	Recyclable			Non-recyclable			Subtotal		
		2022	2023	2024	2022	2023	2024	2022	2023	2024
Packaging (Specialty Chemicals)	Kg	53,209	30,733	46,853	210,774	1,088,784	197,258	263,984	1,119,517	244,111
	%	20.16%	2.75%	19.19%	79.84%	97.25%	80.81%			
		2022	2023	2024	2022	2023	2024	2022	2023	2024
Renovation (Commodity Chemicals)	Kg	4,271	3,200	2,240	46,682	23,159	23,159	50,953	26,359	48,117
	%	8.38%	12.14%	4.66%	91.62%	87.86%	95.34%			

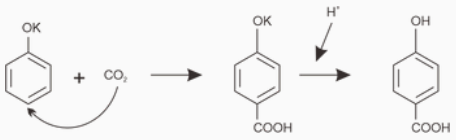
Note: Non-recyclable refers to disposable packaging materials used once by customers

San Fu Chemical prioritizes the use of recyclable or renewable materials in its raw material selection. In addition to actively cooperating with customer and government green material policies, this also reduces environmental impact and contributes to environmental protection.

In terms of production processes, we continuously improve efficiency to reduce raw material consumption per unit, which not only conserves energy and reduces carbon emissions but also prevents environmental pollution and harm to human health.

Regarding by-products, we strive for recycling and reuse, which reduces process waste and generates additional value for the company. For example, dicyclohexylamine, a by-product of cyclohexylamine production at the Kaohsiung Plant, can be used as a rust inhibitor; potassium sulfate, a by-product of para-hydroxybenzoic acid production at the Shanhua Plant, can be dehydrated and used as a potassium fertilizer in agriculture.

Main Product at Shanhua Plant: Para-Hydroxybenzoic Acid (PHBA)



PHBA is the main product of San Fu's Shanhua Plant. Thanks to the efforts of R&D and production teams to improve the process, the raw materials used per metric ton of PHBA in 2024 were reduced compared to 2023, as shown below.

In 2024, due to stabilized customer demand and increased sales orders, production volume increased, and raw material consumption decreased compared to 2023.

Raw Material Consumption Statistics – Shanhua Plant

YoY Change			
	Finished goods	Annual PHBA Production	104.6%
	Raw materials	Phenol	-7%
		Potassium Hydroxide	-34%
		Sulfuric Acid	-5%
		Nitrogen	-200%
		Carbon Dioxide	-84%
	Materials	Bulk Bags	25,038 Kg

Note: Data restated – 2023 bulk bag usage revised from 9,999 kg to 11,790 kg.

Main Products at Liuying Plant: Specialty Chemicals

The Liuying Plant specializes in producing precision chemical products such as developers, photoresist strippers, etching solutions, photoresist thinners, and edge cleaning agents. These are mainly supplied to the semiconductor, solar energy, display panel, and LED markets. Key customers include major manufacturers like Company T, U, I, and A. Raw material and packaging suppliers are prioritized based on RoHS, REACH, SVHC, PFAS compliance, IECQ QC080000 Hazardous Substance Process Management certification, conflict-free minerals, and avoidance of restricted substances. San Fu also boasts a strong R&D team capable of improving existing processes and developing advanced ones that align with customer needs.

Main Products at Kaohsiung Plant: Cyclohexylamine, Dicyclohexylamine

The Kaohsiung Plant's main raw materials are aniline and hydrogen. It operates under a production-sales balanced model. The following table shows year-over-year changes in major raw material consumption:

Raw Material Consumption Statistics – Kaohsiung Plant

YoY Change	Finished goods	Annual Production (CHA, DCHA)	44.14%
	Raw materials	Aniline	1.21%
		Hydrogen	-2.28%
Materials		200L Steel Drums	147,546 Kg

The plant complies with company safety policies: raw materials are stored separately with containment berms and trenches in place to prevent environmental harm from leaks. All operations follow SOPs and workplace safety regulations. Equipment is grounded, and emergency showers, eyewash stations, and fire extinguishers are installed to ensure personnel safety and occupational health.

Energy Management

Energy consumption is a major factor in climate change, as burning non-renewable fuels generates greenhouse gases (GHGs) and has other environmental impacts. Efficient energy use is crucial to climate change mitigation. We comply with the Ministry of Economic Affairs' Energy Administration Act and aim to reduce energy usage through process improvements.

Energy use is a key environmental concern; we regularly collect and review internal energy data to improve energy efficiency. The scope includes the Shanhua, Liuying, International Nitoto, Kaohsiung Plants, and office areas (Taipei HQ, Zhubei Office). Energy types include thermal fuel, purchased electricity, and diesel. In 2019, natural gas equipment was added, replacing fuel oil.

The total energy consumption in 2024 is 276,796 gigajoules (GJ) which includes: (1) purchased electricity 170,737 (2) natural gas 102,762 and (3) diesel 3,297, where the purchased electricity accounts for 61.68 % of the total energy consumption.

Since October 2019, natural gas boilers have replaced conventional units at our Shanhua Plant. By 2020, heavy fuel oil was completely phased out, resulting in reduced emissions of nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM).

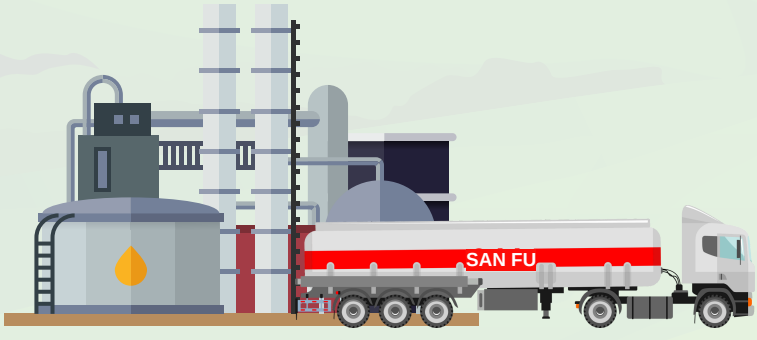
Diesel is mainly used for the company's own transport vehicles, including one gull-wing truck and five tanker trucks, for shipment and transportation.

Energy Consumption Statistics – Shanhua Plant, Liuying Plant, Kaohsiung Plant, International Nitto, and Offices (unit: gigajoules (GJ))

2022	Purchased electricity 134,474	Diesel 2,236	Natural gas 76,076
2023	Purchased electricity 120,413	Diesel 3,184	Natural gas 37,526
2024	Purchased electricity 170,737	Diesel 3,297	Natural gas 102,762

Note

1. Starting from 2024, energy consumption statistics include International Nitto.
2. The Liuying Plant installed on-site solar panels in April 2024 for self-consumption. However, as Taipower's renewable energy certification process remains pending, this generation cannot yet be classified as renewable energy in our reporting.



Water Resource Management

Clean water is one of nature's most precious resources. Due to its scarcity and value, we continuously monitor water usage in the production process and strive to reduce consumption and enhance water recycling. While implementing energy-saving activities at all plants, we also focus on water usage and reducing unnecessary waste. We have formulated concrete measures to reduce water consumption. In 2024, the total water withdrawal across the Taipei headquarters, Zhubei office, and four plant sites was 469.64 million liters, total water consumption was 134.69 million liters, and total wastewater discharge was 334.95 million liters.

Since 2021, the TMAH recycling plant's mechanical vapor recompression (MVR) energy-saving system has been fully installed to recover steam condensate for reuse. In 2024, the total amount of water recovered and reused was 9.45 million liters, accounting for about 3.15% of the Shanhua Plant's total water withdrawal. This represents a 2.15% decrease from 2023, due to MVR malfunction resulting in poor condensate water quality, making it unsuitable for reuse.

Total Water Withdrawal/Consumption by Source (megaliters)

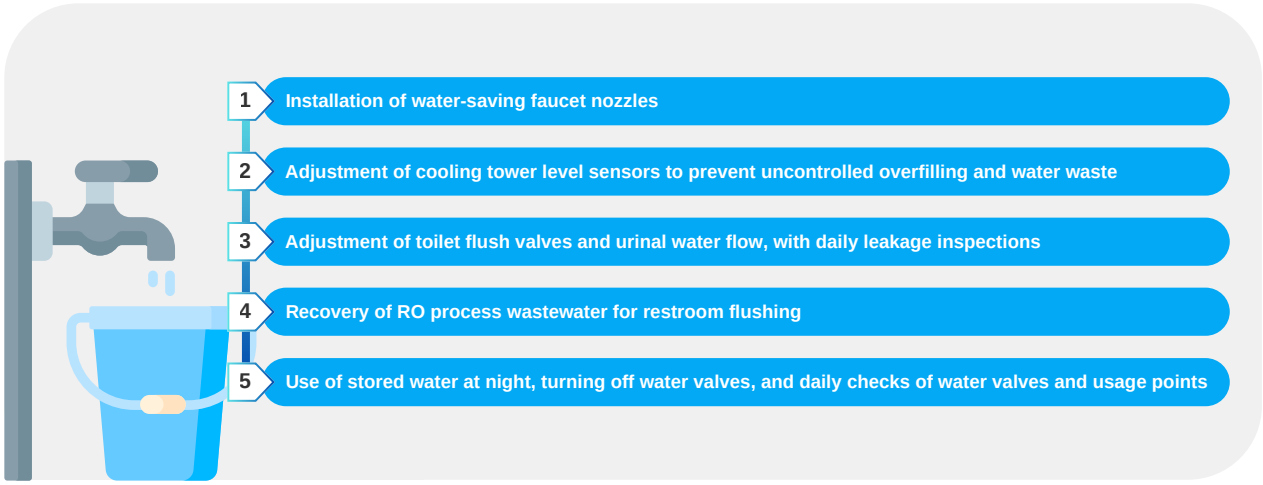
	Taipei Headquarters		Zhubei Office		Shanhua Plant			Liuying Plant			Kaohsiung Plant			International Nitto
	2023	2024	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2024
Tap water company	0.33	0.36	0.07	0.09	25.59	5.68	5.19	17.49	12.78	16.68	0	0	0	80.14
Groundwater	0	0	0	0	286.40	292.47	295.15	0	0	0	0	0	0	0
Industrial water	0	0	0	0	0	0	0	0	0	0	50.44	45.64	72.03	0
Total water withdrawal	0.33	0.36	0.07	0.09	311.99	298.15	300.34	17.49	12.78	16.68	50.44	45.64	72.03	80.14
Water Recycled & Reused	0	0	0	0	16.99	15.81	9.45	0			0			0
Water Recycled as % of Total Withdrawal	0%	0%	0%	0%	5.45%	5.30%	3.15%	0%			0%			0%
Water consumption	0.33	0.36	0.07	0.09	134.99	128.84	51.42	11.49	8.71	11.44	21.44	27.78	41.79	29.59

Note

1. The Shanhua Plant draws groundwater in accordance with the Water Resources Act, under water rights numbers D0119270 and D0117256.
2. The Kaohsiung Plant is located on land leased from Taiwan Chlorine Industries. Its industrial water is treated and supplied by Fengshan Water Plant and is not sourced from a municipal water company, and is thus exempt from water rights issues.
3. Starting in 2024, water statistics of Total Water Withdrawal/Consumption include the subsidiary International Nitto.
4. Water consumption is calculated as total water withdrawal minus wastewater discharge.

Water-saving Measures: Domestic Water Use

Across the six operational sites disclosed in this report, we have not only installed water-saving equipment for domestic water but also strengthened awareness campaigns to foster employees' water conservation habits and improve water efficiency. Key measures include:



Strengthening Effluent Water Quality Control

Rivers play a vital role in supplying water resources and supporting biodiversity. Protecting clean rivers is an important part of our environmental program.
We manage manufacturing wastewater using total effluent data tracking and self-inspection, ensuring compliance with national discharge standards and reducing environmental impact.
Regular testing of water samples for pollutants is part of our program. After treatment, effluent is subject to daily internal monitoring and quarterly testing by a third-party certification agency. Treated wastewater is discharged into the Yanshui River and is not reused by other organizations.

We adopt high standards for testing and managing discharged wastewater. In 2024, the average COD (Chemical Oxygen Demand) concentration of discharged water from the Shanhua Plant was 32 mg/L, significantly below the regulatory limit of 100 mg/L.
In accordance with effluent standards for the chemical industry, we use COD — a rapid and effective water quality indicator — as our key self-monitoring metric. In addition to quarterly third-party testing required by law, we conduct additional COD testing for every 0.8 million liters of discharged water daily to ensure compliance with standards.

Estimated Wastewater Volume and COD Concentration

Shanhua Plant

Note: No inorganic wastewater since 2021.

Item	Unit	2022	2023	2024	National standard value	Result
Average COD concentration	mg/L	57	51	32	100	In compliance with regulations
Volume of wastewater	Megaliters	177	169.31	248.92	0.8 Megaliters/day (organic)	In compliance with regulations

Estimated Wastewater Volume and COD Concentration

Liuying Plant

※ The Liuying Plant is located within the park and discharges comply with limits set by Liuying Science and Environmental Technology Park.

Item	Unit	2022	2023	2024	Park/authority limit	Result
Average COD concentration	mg/L	94	60	8	500	Better than the standard of Liuying Science and Environmental Technology Park
Volume of wastewater	Megaliters	6	4.07	5.24	0.12 Megaliters/day	Better than standards approved by competent authority

Estimated Wastewater Volume and COD Concentration

Kaohsiung Plant

※ The Kaohsiung Plant is located within a science park and complies with discharge standards set by the joint wastewater treatment facility.

Item	Unit	2022	2023	2024	Joint Treatment Plant Limit	Result
Average COD concentration	mg/L	37	45	21	480	Better than joint wastewater treatment plant standard
Volume of wastewater	Megaliters	29	17.86	30.24	0.15 Megaliters/day	Better than joint wastewater treatment plant standard

Estimated Wastewater Volume and COD Concentration

International Nitto

※ International Nitto is located within the park and complies with limits set by Southern Taiwan Science Park and Environmental Technology Park.

Item	Unit	2024	Joint Treatment Plant Limit	Result
Average COD concentration	mg/L	70	450	Better than Southern Taiwan Science Park standard
Volume of wastewater	Megaliters	50.55	0.25 Megaliters/day	Better than standards approved by competent authority

Proper Waste Management

To ensure that the Company's industrial waste disposal complies with the Waste Disposal Act and relevant sub-laws, we implement operational controls in accordance with the Waste Classification and Management Standards and the Safety, Health, and Pollution Prevention Operation Standards of the Quality Control Section. In 2024, the total amount of hazardous waste generated by the Shanhua Plant, Liuying Plant, International Nitto, and Kaohsiung Plant was 1,615.03 metric tons, an increase from the previous year due to the inclusion of the International Nitto in the calculation.

All waste is handled and treated by certified contractors approved by the environmental authority, ensuring full compliance with relevant regulations.

Waste Types and Treatment Methods (Shanhua, Liuying, International Nitto, Kaohsiung Plants)

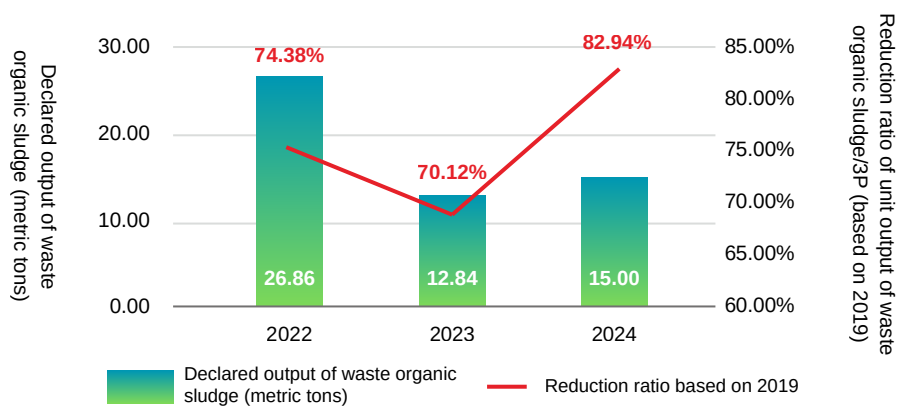
Treatment unit: Outsourced / Unit: metric tons

Name	Type	Disposal method	2022	2023	2024
Mixed waste containing toxic heavy metals exceeding leaching limits	Hazardous waste	Landfill	0	0	0
Waste liquid with pH≦2.0	Hazardous waste	Chemical treatment	842.34	839.21	1,615.03
Mixed flammable industrial waste	Hazardous waste	Incineration	0	52.22	0
General waste	Non-hazardous waste	Incineration (large-scale combustion)	42.50	34.07	52.73
Waste inorganic sludge	Non-hazardous waste	Heat treatment	19.73	1.69	0
Waste organic sludge	Non-hazardous waste	Heat treatment	26.86	12.84	27.40
General industrial waste (e.g., scrap iron, paper, plastic, cables)	Non-hazardous waste	Re-use	147.66	126.16	59.11

Note

1. Waste data from the International Nitto was added in 2024.
2. The Liuying Plant, International Nittoo International, and Kaohsiung Plant are all located within science parks, and the relevant discharge regulations are implemented in accordance with park administration regulations.
3. The Taipei headquarters and Zhubei office are commercial office buildings and only generate domestic waste from employees. As this type of waste is not required to be reported online, it is not included in the statistics.

Statistical analysis of declared waste organic sludge output



Due to increasing environmental awareness and insufficient landfill space, the costs of sludge removal and treatment have both risen year by year. This not only exacerbates environmental pollution but also leads to growing sludge treatment costs for enterprises. Since the reuse rate of sludge resources remains low, incineration can reduce sludge volume, but source reduction is the fundamental solution. It is key to contributing to Environmental Stewardshipal development. The Company launched its organic sludge waste reduction program at the end of 2018. By 2024, the unit output of organic sludge has decreased by 82.94% compared to 2019, achieving the goal of reducing unit sludge output at the Shanhua Plant by more than 60% before 2025.

Toxic Chemical Substance Control

To comply with the Toxic Chemical Substances Control Act of the Environmental Protection Administration, Executive Yuan, operations are controlled according to the Regulations for the Handling of Toxic Chemicals in Small Quantities. Each plant reports monthly usage to ensure that all listed toxic chemical substances meet legal requirements during operations.

Control of Chemicals and Liquid Chemical Substances

To effectively control the Company's chemicals and reduce their environmental impact, operations are managed in accordance with the Standard Operating Procedures for Chemical Handling, Emergency Response SOP for Liquid Chemical Leaks, and Standards for Filling and Unloading of Hazardou1s and Harmful Substances, ensuring effective control over all chemicals and liquid materials.

No Leakage Incidents

To prevent environmental impacts from accidental leaks during raw material and product transport, the Company follows its Accident Handling Procedures, implementing preventive measures, reviews, follow-ups, and supervision. No chemical, oil, or waste leakage incidents occurred during the reporting period.

Environmental Penalties

Five environmental penalties occurred during the reporting period. All corrective actions have been completed.

No.	Breach of laws and regulations	Content of violation	Disposal unit	Penalty amount and items	Improvement measures
1	Article 14(1), Article 45(2), Article 7(1) of the Water Pollution Control Act; Article 2, Article 28(1), Article 40(1) of Effluent Standards	1. On Feb. 2, 2024, the EPB inspected and found that operational wastewater from the soft water process in the boiler area of the Shanhua Plant was discharged into underground ditches and then to off-site surface water through an unpermitted pumping station (Well No. 36, permit not registered). The discharge method did not match permit conditions, and the water quality, volume, and flow direction were not recorded in the permit. A sample at the discharge outlet failed to meet chemical industry effluent standards. 2. A water sample taken at the discharge outlet was tested, and the result did not comply with the effluent standards for the chemical industry.	Environmental Protection Bureau, Tainan City Government	Fine of NT$4,362,000	1. According to the operation and management regulations for collection wells, inspect the current status of collection wells and report to the Occupational Safety Office by the end of February. 2. Reproduce collection well signage and implement daily self-inspections. 3. The Occupational Safety Office will strengthen inspections of the plant's collection wells. If abnormalities are found, an "Environmental Nonconformance Corrective Report" will be issued. 4. Lock the rainwater discharge gate valves for control.
2	Article 14(1) of the Water Pollution Control Act; Article 22(1), Article 45(2) of the Regulations for Review and Approval of Water Pollution Control Measures and Permit Applications; Article 2, Item 3 of the Penalty Standards for Violations of the Water Pollution Control Act (Table 3, 8); Article 3(1)(2)	On May 16, 2024, during an inspection by the Environmental Management Administration, the following deficiencies were found: 1. The steel belt oil skimmer on the oil-water separator (T01-02) of the wastewater treatment facility was malfunctioning. 2. Two pipelines from the waste oil storage tank were connected to the wastewater tank (T01-01). 3. A pipe near the cooling tower runoff ditch was connected to the original wastewater (WM01). 4. Wastewater from the cooling tower could be discharged to the runoff ditch via the wastewater pipe. This operation was not in accordance with the registered permit contents and was therefore non-compliant.	Environmental Protection Bureau, Tainan City Government	Fine of NT$126,000	1. New equipment was installed on June 12 and is currently operating normally. 2. The two pipelines from the waste oil storage tank to the wastewater tank (T01-01) comply with the permit. 3. Cooling tower wastewater has been included in wastewater (WM01) and is clearly separated from runoff wastewater, in accordance with the permit. 4. Cooling tower wastewater is now discharged to the collection well via a dedicated pipe, and the permit change application has been submitted.
3	Article 7(1) of the Water Pollution Control Act; Article 2 and Article 40(1) of the Effluent Standards; Article 2, Item 1 (Table 1), Item 8 (Table 8), Article 3(1)(2) of the Penalty Standards for Violations of the Water Pollution Control Act	As the violation of Water Pollution Control Act on February 2, 2024 was required to be rectified by May 25, 2024, the Environmental Protection Bureau conducted a follow-up inspection on May 24, 2024. A sample taken at the Shanhua Plant's discharge outlet still failed to meet the effluent standards for the chemical industry.	Environmental Protection Bureau, Tainan City Government	Fine of NT$351,000	1. Establish a "Raw and Wastewater Flowchart" clearly indicating the raw water usage, wastewater discharge volume, and water flow direction for each process unit. 2. Install monitoring instruments (e.g. water meters, flow meters) on raw water and wastewater pipelines. 3. Establish an emergency response mechanism for abnormal wastewater; report to higher authorities immediately when overload occurs. 4. Confirm whether the current wastewater treatment SOP is correct or needs adjustment. Arrange education and training for wastewater operators on procedures and emergency response. 5. Arrange weekend shifts to strengthen monitoring of wastewater discharge stability. 6. Blind-seal the pipeline from the R1 reaction tank to the 600-ton reservoir to prevent intentional or accidental misuse.
4	Article 31(1)(2), Article 52 of the Waste Disposal Act	On May 16, 2024, during an inspection by the Southern Region Environmental Management Center of the Environmental Management Administration, the following deficiencies were found: 1. The Shanhua Plant failed to report the generation, storage, and disposal of waste lubricating oil (R-1703) from machinery maintenance. 2. The waste treatment procedure also failed to report the generation, storage, and disposal of waste activated carbon (D-2403). The company stated that both the waste gas treatment process and other basic chemical manufacturing processes generate D-2403, but it was only reported under the latter. 3. Phenol, a raw material in other organic acid chemical manufacturing processes, is used monthly but was reported under other basic chemical material processes. These raw material usage and waste generation, storage, and disposal activities were not reported as required.	Environmental Protection Bureau, Tainan City Government	Fine of NT$6,000	1. The plant has records and contracts for the disposal of R-1703 waste oil; disposal is completed monthly. No storage occurs, and any residual amount is cleared before the end-of-month report. 2. Generation, storage, and disposal of D-2403 are carried out; for R-2408, output was recorded but storage reporting was missed and not submitted online. 3. Monthly usage of phenol in other organic acid chemical manufacturing was misreported under other Commodity Chemicals; this has been corrected immediately.
5	Article 14(1) of the Water Pollution Control Act; Article 22(1) of the Regulations for Review and Approval of Water Pollution Control Measures and Permit Applications; Article 45(2); Article 2, Item 3 (Table 3), Item 8 (Table 8), and Article 3(1)(2) of the Penalty Standards for Violations of the Water Pollution Control Act	On July 12, 2024, the Environmental Protection Bureau conducted a supervisory inspection and found the following issues: 1. The amount of chemical agents used for wastewater discharge from January to June 2024 was lower than the minimum quantity registered in the permit. 2. The backwash cycle of the sand filter (T01-10) in the wastewater treatment system was not operated according to the registered permit content.	Environmental Protection Bureau, Tainan City Government	Fine of NT$162,000	1. All chemicals added in the wastewater treatment plant were applied based on actual operational needs, not intentionally omitted. 2. The sand filter operates according to standard procedures, with manual switches required to start/stop the backwash cycle. Operators recorded it as automatic after manual activation. In summary, all records were based on actual operations, and there was no intent to falsify documentation.

Communication and Response with Nearby Communities

Among the production sites of San Fu Chemical, only the Tainan Shanhua Plant is located near residential communities. We believe the plant environment, employees, and the surrounding neighborhoods are closely interconnected. By improving the plant's environment, we maintain good relations with the community, ensuring smooth production operations. Therefore, we actively engage with nearby residents and listen to their feedback.

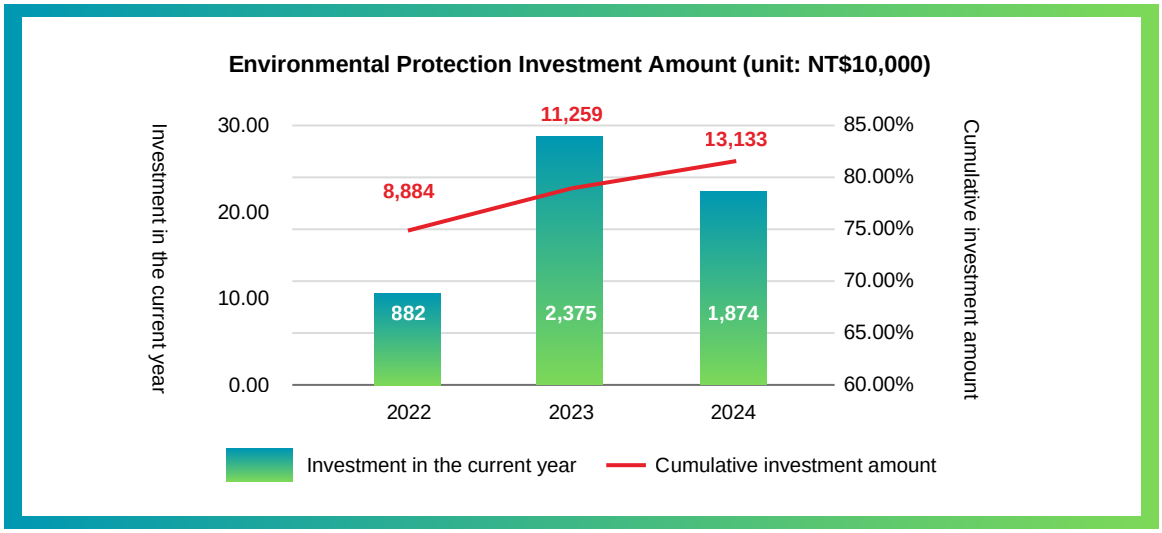
Due to the nature of the industry, San Fu Chemical's business activities may pose actual or potential negative impacts on the community, such as chemical odors or effluent produced during operations or discharge. To avoid affecting employee health and community life, we monitor air and water quality at the plant annually to reduce operational impact on nearby residents and communities. This helps ease public concerns over air and water pollution surrounding the plant. At the same time, we strengthen maintenance for leakage-prone equipment and conduct unscheduled inspections.

To further reduce potential community impact, we completed an odor improvement plan in 2019 and have continued to track the performance of pollution control equipment improvements.

In addition, all production sites have emergency response procedures and conduct regular drills to reduce the impact of unexpected accidents on surrounding communities. The Company has established the "Good Neighbor Operating Procedure," which clearly defines communication, participation, and consultation regarding environmental, health, and safety matters with nearby communities. Complaints can be submitted via telephone, in-person meetings, or with assistance from local village chiefs. This ensures effective communication and protects residents' rights.

Environmental Protection Investment

Sustainable social development requires environmental resources as a foundation. Our company adheres to government environmental regulations, cherishes resources, and upholds the concept of sustainable corporate operations. Through continuous process improvement and equipment upgrades, we aim to achieve energy savings, water conservation, carbon reduction, and waste reduction. Below are the environmental protection investment projects for 2024:



2024 Environmental Protection Promotion Expenses and Performance

Investment Items	Month Equipment Commissioned	Investment Amount (NT$)	Benefits of Environmental Investment
Installation of solar panels for self-use at the Liuying Plant	2024/4	17,200,000	Based on in-plant meter readings (April–December), approximately 1,000 kWh of electricity can be generated daily for in-plant use. Annually, this generates 365,000 kWh of green electricity, reducing greenhouse gas emissions by approximately 180 metric tons CO_2e. (Due to the lack of data from January to March, which are off-peak months, the actual figure may vary slightly.)
Install inverters on cooling tower fans (install inverters on fans of towers B, C, and D)	2024/4	180,000	Saved 163,298 kWh of electricity Reduced greenhouse gas emissions by approximately 80.7 metric tons CO_2e
Condensate recovery from process tail gas for CHA	2024/4	1,026,000	Daily recovery volume during CHA production Summer: 15L/day; Winter: 5L/day
Installation of variable frequency control system for cooling tower fans	2024/6	330,000	Cooling tower fan power savings of 73% Reduced greenhouse gas emissions by approximately 6.2 metric tons CO_2e

Solar panels for self-use

Installation of variable frequency control system for cooling tower fans

Condensate recovery from process tail gas for CHA

05

Customer Commitment and Supply Chain Management

144

responses were received from the customer satisfaction survey

95

Overall customer satisfaction score:

19 Suppliers

A total of 19 supplier audits conducted

6 Suppliers

6 new suppliers, 100% completed Corporate Social Responsibility assessments

Customer Commitment

Customer Privacy Protection

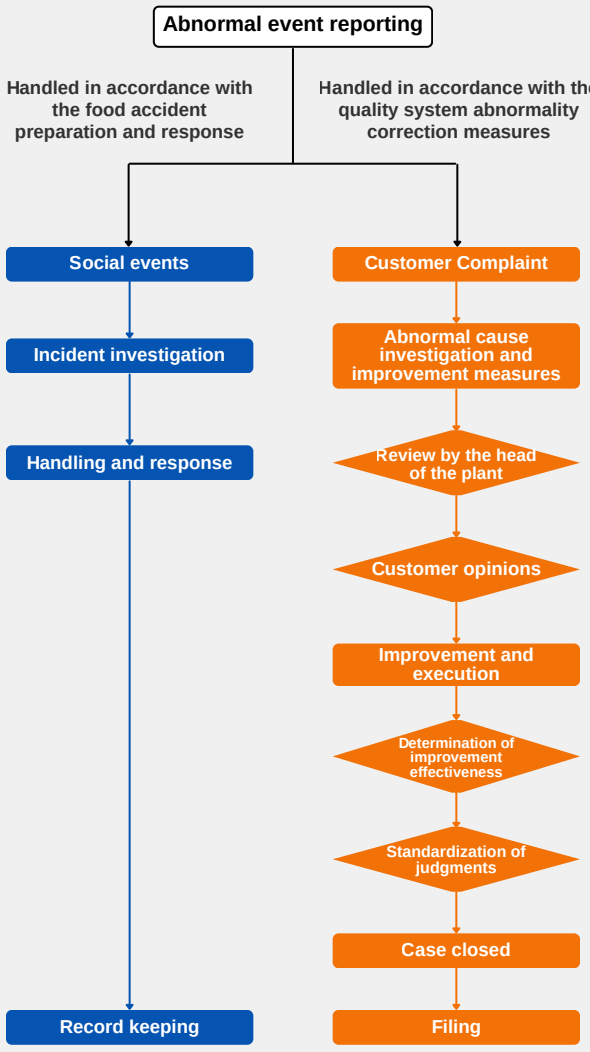
San Fu Chemical values customer needs and is committed to building long-term partnerships. Through ethical operations and mutual benefit with customers, we aim to create win-win outcomes and maximum social value. We comply with customer data management requirements, sign confidentiality agreements, and implement personal data protection to meet relevant regulations. Customer privacy protection, business information, transaction data, or any information involving customer privacy is compiled and filed by dedicated personnel, adhering to fundamental legal compliance. No complaints related to customer privacy violations or loss of customer data occurred during the reporting period. In addition, San Fu Chemical adheres to ethical business principles and regularly educates employees on the "Ethical Business Operations Procedures and Code of Conduct", and has established confidentiality structures and responsibilities to clearly define the conduct expected of employees when performing their duties.

Customer Complaint Mechanism

In accordance with the "Communication Management Procedures", the Company designates responsible sales personnel as customer contact windows to provide information on products, quotations, contracts, or orders, and to receive customer feedback and complaints.
All shipped products must comply with the product's "Packaging Specification" and "Packaging Diagram" requirements. In cases of quality/food safety control incidents — e.g., threats to customer health and safety, misleading marketing or labeling — customers may lodge complaints with the responsible personnel using any communication method. Upon receiving a customer complaint, the matter is immediately reported to relevant units for handling. An investigation is initiated according to the "Quality System Nonconformity Corrective Action Procedure" and the "Food Incident Preparedness and Response Procedure" to determine the cause of the incident, quickly implement response and improvement measures, and report results to the customer — providing optimal service and protecting customer rights. Relevant training or internal announcements are made to prevent recurrence.

If a product is deemed to require recall, the Company will carry out the recall in accordance with the "Nonconforming Product Control Procedure". The responsible salesperson will proactively notify the customer and execute the recall as per customer instructions. (Food and food additives are handled according to the "Product Recall Management Procedure".)
No customer data loss and privacy complaints in 2024.

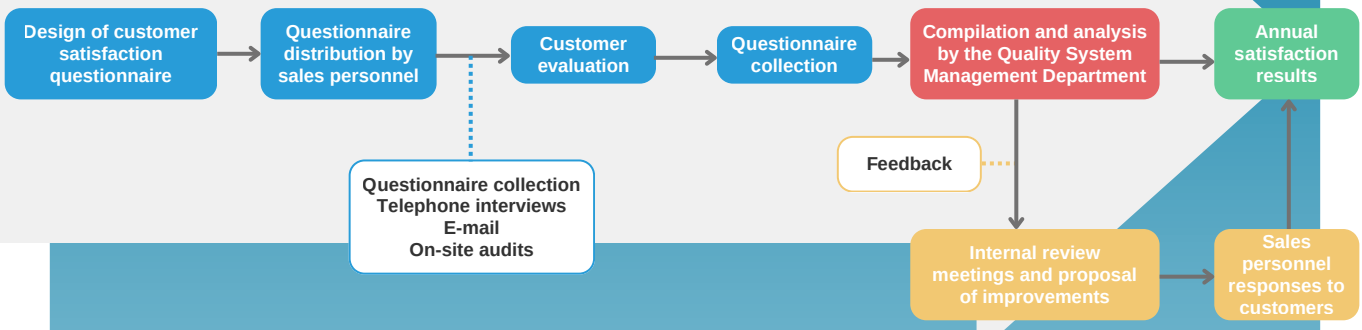
Abnormal event reporting and handling/response process



Customer Satisfaction Feedback

To understand customer satisfaction with our products and services and obtain objective and actionable evaluation data as a basis for continual improvement, San Fu Chemical has established a formal Customer Satisfaction Survey Procedure to maintain customer trust and support.

Customer Satisfaction Survey Process



Customer feedback is the driving force behind improvements to products and services. Therefore, San Fu regards customer satisfaction survey results as key performance indicators and important metrics for evaluating future growth. Each year, sales personnel are responsible for sending out satisfaction questionnaires to customers. The survey covers areas such as product quality, delivery performance, service quality, professional image, and regulatory compliance.

In 2024, a total of 144 questionnaires were returned. The survey is conducted through on-site visits and telephone calls by sales personnel, or by requesting customers to fill out the questionnaire via email, to gather customer opinions and needs. In addition, after customer audits or factory visits, customers are also invited to fill out the satisfaction questionnaire. The collected customer feedback is then compiled and statistically analyzed. More importantly, for the valuable feedback or improvement suggestions provided by customers, the relevant internal departments will immediately review them, formulate improvement measures, and follow up on the improvements. The sales department will then provide corresponding responses to the customers.

We conduct customer satisfaction surveys continuously throughout the year. The survey results show that the overall customer satisfaction score reached 95 points, and has remained above 90 points for three consecutive years. In 2024, compared with the previous year, the scores of each evaluation item — including product quality, professional image, and regulatory compliance — all increased, demonstrating that San Fu Chemical has earned strong customer confidence and trust.

Through professional, accurate, and prompt responses to countermeasures and solutions, as well as continuous improvements in the operation of the quality management system, the results are clearly evident. However, service quality slightly declined, and this will be a focus for improvement in 2025 to win even greater customer recognition.

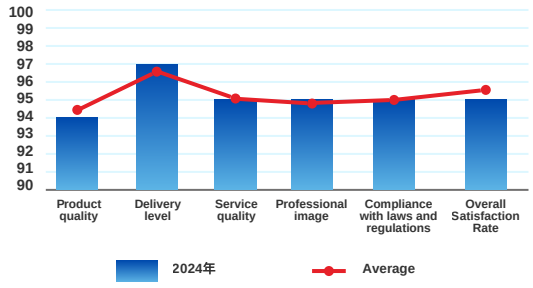
Number of data collection

Satisfaction score	Commodity Chemicals	Precision Chemicals	Total number
Questionnaire	91	53	144
Percentage	63.2%	36.8%	-

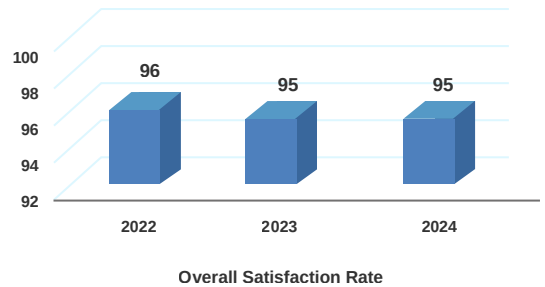
Customer Satisfaction Survey

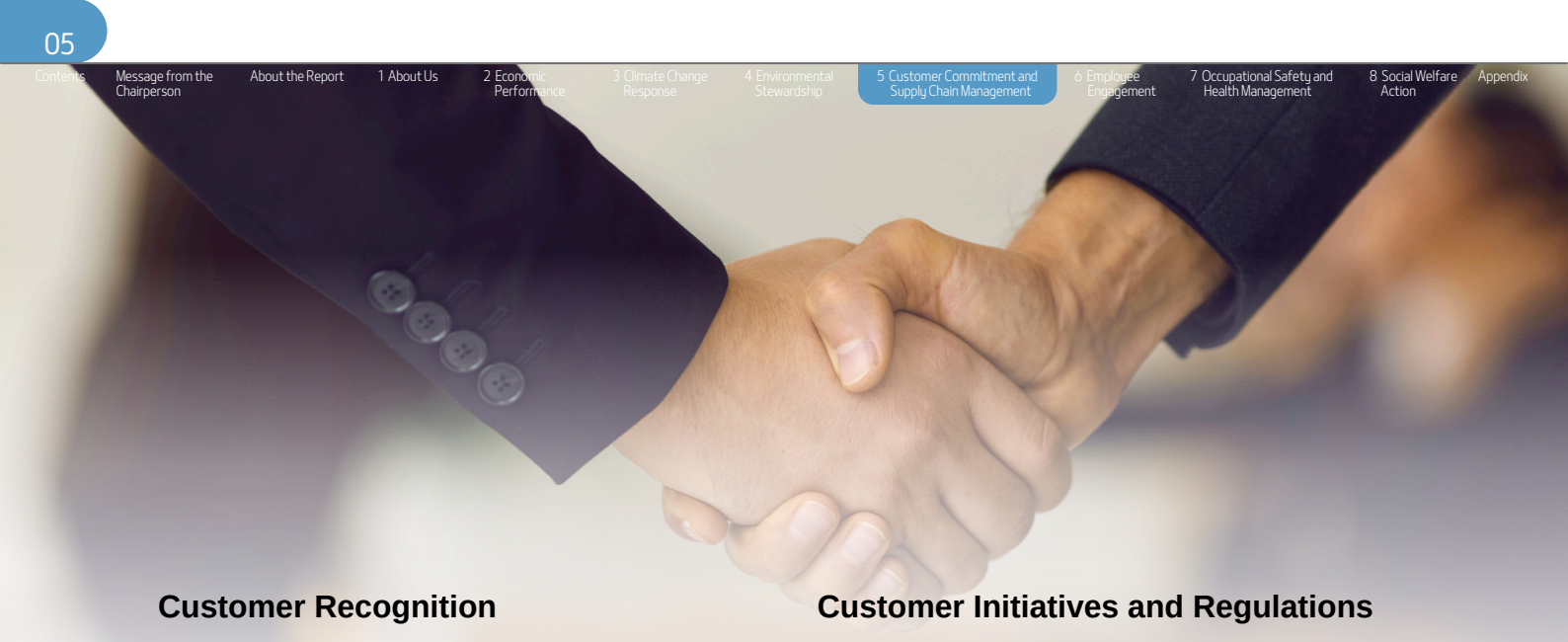
Evaluation item	2022	2023	2024	Average
Product quality	95	94	94	94.3
Delivery level	96	97	97	96.8
Service quality	95	96	95	95.4
Professional image	95	94	95	94.7
Compliance with laws and regulations	96	93	95	94.8
Overall Satisfaction Rate	96	95	95	95.3

2024 Satisfaction Assessment for each Aspect and Comparison with the 3-year Averag



Overall Satisfaction Rate





Customer Recognition

Many of San Fu Chemical's customers require us to implement corporate social responsibility management according to standards that exceed international regulations and industry norms — covering areas such as labor rights, occupational health and safety, environmental protection, ethical standards, and management system requirements. San Fu Chemical's performance in these areas has been widely recognized by customers, who have given us high evaluations through various audits and supplier assessment systems.

Customer Initiatives and Regulations

San Fu upholds the quality policy of "customer satisfaction" to provide products and services, and follows the principles of responsible corporate production. We actively participate in supplier corporate social responsibility data exchange platforms such as SEDEX and EcoVadis, using the evaluation tools of such platforms to disclose the company's CSR-related performance. Based on audit results, we gain a clear understanding of our own capabilities and continuously pursue opportunities for performance improvement, thereby providing customers with non-financial management system-related information. Through information sharing on these platforms, more stakeholders can understand the efforts San Fu Chemical has made in fulfilling corporate social responsibility.

We comply with the international initiatives and regulations jointly advocated by our customers, and take full responsibility within the supply chain. In the process of providing products and services, we treat related regulations as guiding principles in order to meet customer expectations.

Green Products

Sign the initiative and regulations

- **Sign the Hazardous Substance-Free Guarantee (RoHS, REACH, SVHC, PFASs)**
- **Comply with IECQ QC080000 Hazardous Substance Process Management System Standard**
- **Declaration of Conflict-Free Minerals**
- **No use of prohibited or restricted substances**

Labor and Human Rights

Sign the initiative and regulations

- **RBA Responsible Business Alliance**
- **UN Guiding Principles on Business and Human Rights**
- **International Labour Organization Declaration on Fundamental Principles and Rights at Work**
- **UN Universal Declaration of Human Rights**

Supply Chain Management

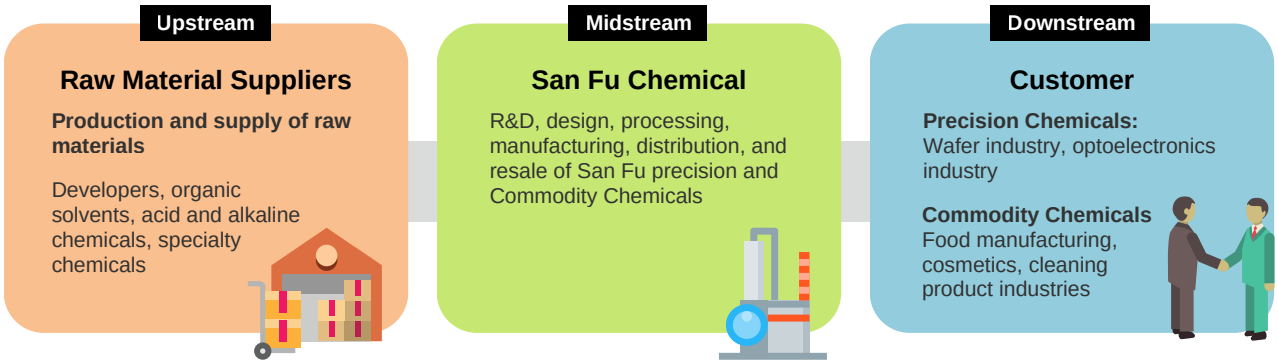
Supplier Management Approach

In the chemical industry chain, San Fu Chemical acts as a manufacturer, sourcing raw materials from suppliers for product development and sales. Each supplier is regarded as an important partner. We conduct rigorous annual assessments of all suppliers and, for bulk raw-material sources, select only well-known domestic and international manufacturers to ensure quality. To promote sustainable supply-chain development and ensure that suppliers comply with social and ethical standards, understand and follow the law, respond actively to environmental and social issues, and commit to continual improvement, we have introduced a supplier self-assessment system. Suppliers evaluate their performance in five areas—quality, labor, environment, human rights, and economic factors—so both they and we can understand their operational risks.

San Fu Supply Chain

Upstream – raw-material suppliers providing developers, organic solvents, acids & alkalis, specialty chemicals, etc. Mid-stream – San Fu Chemical: R&D, formulation, purification, dilution, and manufacture of developers, strippers, etchants, cleaning solutions, etc. Downstream – wafer and optoelectronics industries, which use our products in their processes.

The Commodity Chemicals supply chain is divided into two parts: (1) The food supply chain, in which raw materials are purchased from upstream suppliers, processed and manufactured, and then provided to downstream food manufacturers for use. (2) The chemical products segment, including items such as cyclohexylamine, dicyclohexylamine, and p-hydroxybenzoic acid, which are produced in-house by San Fu and sold to downstream customers for use as corrosion inhibitors, in water treatment, and in polymer applications.



Supplier Categories and Local Procurement

As a midstream company, in addition to complying with environmental and energy-saving standards, San Fu Chemical also considers and increases the proportion of purchases from domestic suppliers to support the growth of domestic industry. However, due to the needs of downstream industry processes in Taiwan, some raw materials not produced domestically must be sourced from overseas. Furthermore, to maintain risk management through secondary suppliers, ensure delivery and service reliability, and reduce costs, a certain proportion is still procured internationally.

Supplier categories in 2024 include:

(1) Raw materials: Locally produced and distributed

(2) Packaging materials

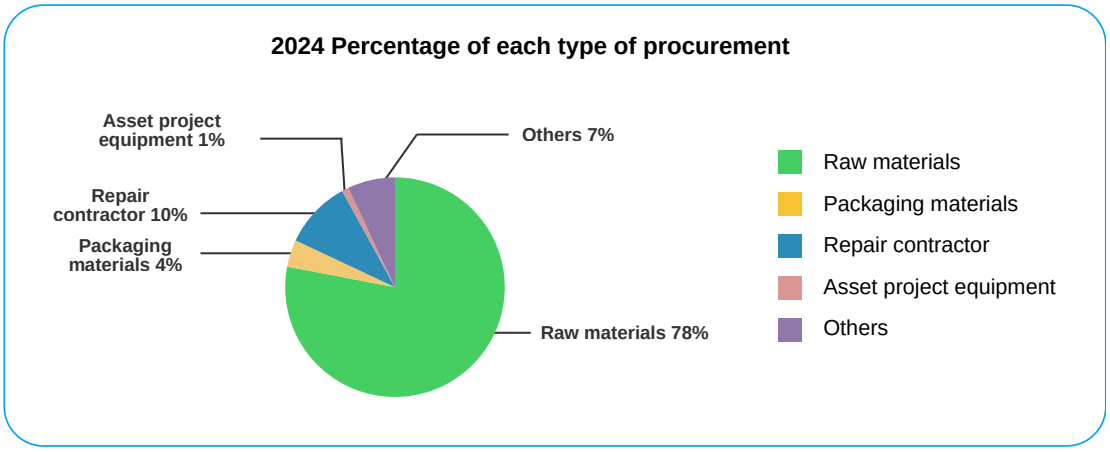
(3) Capital project equipment

(4) Maintenance and renovation contractors

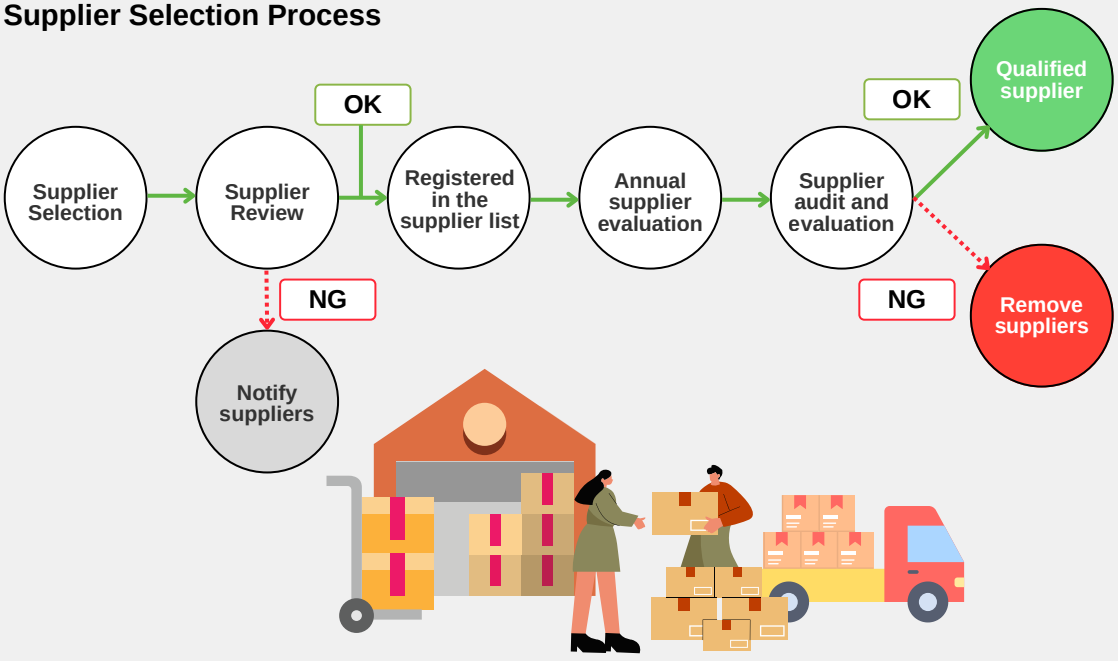
(5) Other five major categories

Percentage of Purchase Amount

	Domestic			Overseas		
	2022	2023	2024	2022	2023	2024
All Categories	59%	52%	65%	41%	48%	35%
Raw materials	49%	44%	58%	51%	56%	42%
Packaging materials	93%	98%	92%	7%	2%	8%
Repair contractor	86%	67%	83%	14%	33%	17%
Asset project equipment	89%	74%	94%	11%	26%	6%
others	98%	97%	99%	2%	3%	1%



Supplier Selection Process



For the selection of new suppliers, San Fu prioritizes those who have obtained ISO 9001 or ISO/TS 16949 certification for quality, and certifications such as ROHS & WEEE compliance, IECQ QC080000, ISO 14001, or green/environmental, energy-saving, or green building material certifications for environmental standards. Suppliers are required to jointly sign the “Hazardous Substance Free Guarantee” to comply with the concentration limits specified in San Fu Chemical’s “Hazardous Substance Control Table.” On the social front, suppliers must also sign the “Supplier Code of Conduct and Supplier Commitment Letter” to promote shared responsibility in areas including labor, health and safety, environmental standards, and business ethics compliance.

In 2024, a total of 6 new suppliers were added. CSR assessment results for new suppliers are as follows:

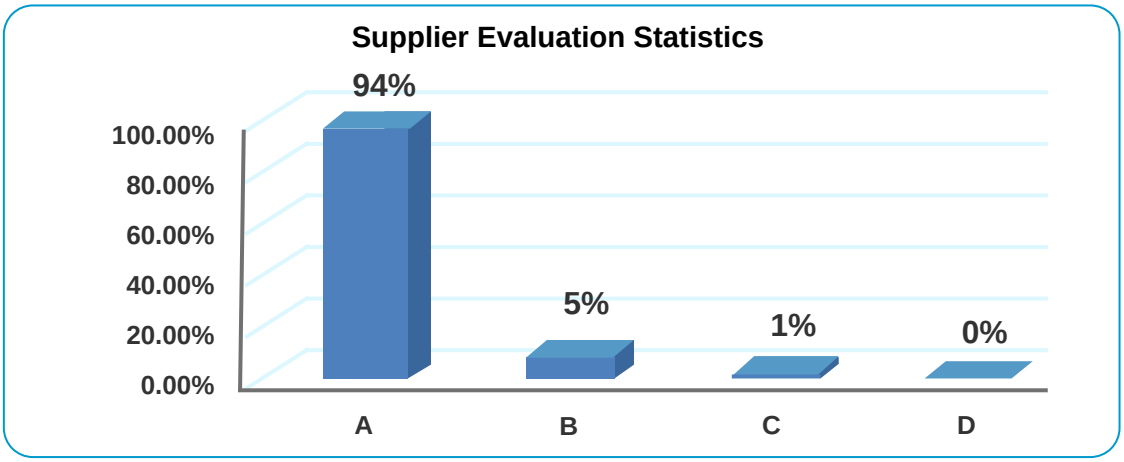
Grade	CSR Assessment Score, X	Result	Percentage
A	90 ≦ X	6	100%
B	80 ≦ X＜90	0	0%
C	70 ≦ X＜80	0	0%
D	X＜70	0	0%

Supplier Evaluation

San Fu Chemical has established the "Supplier Management Procedure", and conducts annual evaluations of suppliers whose procurement amounts reach a certain threshold. Evaluation criteria include Quality (Q), Cost (C), Delivery (D), Service (S), and Hazardous Substance Free (HSF) compliance. In 2024, a total of 117 suppliers were evaluated, including 54 precision chemical suppliers and 63 basic chemical suppliers. Among them, 99% were rated grade B or above, with 1 supplier rated grade C.

Evaluation results are as follows:

Grade	Annual Evaluation Score, X	Result	Percentage	Action Taken
A	90 ≦ X	110	94%	Priority procurement
B	80 ≦ X＜90	6	5%	Orderable
C	70 ≦ X＜80	1	1%	Reduce orders, request lower price, and extend payment terms
D	X＜70	0	0%	Suspend transactions



Supplier audit and evaluation

Based on the supplier evaluation results from the previous year, we conduct routine audits of qualified suppliers and carry out annual audits for new suppliers, as well as suppliers rated C or D in the annual evaluation, suppliers involved in major quality or environmental and safety incidents, or those subject to customer complaints. The audit focuses primarily on product quality, occupational safety and health, environmental protection, and labor rights. Through these annual supplier audits, we gain a deeper understanding of supply chain needs. San Fu adopts a proactive and committed approach to continuously improve the supplier management system and create a win-win outcome.

In 2024, a total of 19 suppliers were audited. Audit results are as follows:

Grade	Annual Audit Score, X	Result	Percentage	Action Taken	Frequency
A	90 ≦ X	17	89%	Continuous improvement	Once every three years
B	80 ≦ X＜90	2	11%	Continuous improvement	Once every two years
C	70 ≦ X＜80	0	0%	Require improvements; re-audit the following year	Once a year
D	X＜70	0	0%	Cancel or suspend transactions; require immediate improvement and re-evaluation	-

Supplier Commitment

Corporate Social Responsibility - Business Ethics Commitment

- **Economic**: Corporate Governance; Ethical corporate management; Transparent Information
- **Environmental**: Environmental protection; Pollution Prevention; Resource Sustainability
- **Social**: Labor Practices; Occupational Safety; Freedom of Human Rights

For the business ethics component of supplier corporate social responsibility, we conduct a questionnaire survey through self-disclosure, covering three major aspects: economic, social, and environmental. This is to jointly uphold the concept of CSR and promote social safety, environmental health, and resource conservation, thereby achieving a stable and interconnected balance.

Economic Aspect

1. Suppliers and their employees shall faithfully conduct all commercial and transactional activities, including but not limited to material procurement, project contracting, subcontracted processing, equipment transfers, disposal of idle or obsolete materials, transportation and customs clearance, labor dispatch, and outsourced agency services.
2. Suppliers shall not offer or provide any employee of San Fu Chemical, their relatives or other interested parties with cash, securities, non-standard group gifts, recreational entertainment, travel accommodations, or any other form of private benefits.
3. No financial lending, leasing, investment, or non-work-related dealings are allowed between suppliers and any employee or their associates.
4. Suppliers shall not offer any nepotistic job arrangements to San Fu Chemical employees or their associates. Any conduct that may harm the Company's interests or business reputation is strictly prohibited.

Social Aspect

1. San Fu works closely with its suppliers to ensure that all workers are treated fairly. Child labor and forced labor are strictly prohibited.
2. Working hours and wages must not fall below statutory standards, and legally mandated benefits must be provided.
3. Discrimination based on gender, race, religion, political affiliation, marital status, disability, social origin, age, or other factors is not tolerated, in order to fully protect human rights.

Environmental Aspect

1. San Fu Chemical has long adhered to principles of safety and high quality, while continuing to innovate and develop with care for environmental protection. Suppliers are therefore required to ensure their raw materials comply with national regulations, with user safety as the top priority.
2. The sale of banned or controversial products is strictly prohibited.

Environmental Initiatives and Regulations Signed and Recognized by Suppliers

CATEGORY	Regulation Signed	Referenced Standards
Environmental Safety and Health	Confirm that suppliers have passed ISO 14001 and ISO 45001 management system certifications	ISO 14001 ISO 45001
	Suppliers continuously provide valid Safety Data Sheets (SDS)	
	Hold valid permits for environmental pollution prevention and treatment	
	Obtain certifications in green environmental protection, energy saving, or green building materials	
Green Products	Comply with IECQ QC080000 standards	IECQ QC 080000 RoHS REACH GADSL
	Follow international hazardous substance regulations such as RoHS and REACH; establish hazardous substance management standards	
	Regularly provide hazardous substance test reports	
	Sign the Hazardous Substance Free Guarantee	
Labor and Human Rights	Suppliers and contractors must undergo corporate social responsibility training	SA 8000 RBA
	Commit to compliance with SA 8000 standard requirements	
	Commit to compliance with the Responsible Business Alliance (RBA) Code of Conduct	
	Complete the Supplier Corporate Social Responsibility Assessment Form	
Quality and Service	Confirm that suppliers have passed ISO 9001 and ISO 22000 management system certifications	ISO 9001 ISO 22000
	Provide quality agreements and confidentiality undertakings	
	Complete the Supplier Quality Evaluation Form	
Procurement Practices	Cooperate with San Fu Chemical's regular supplier audits to ensure quality, service, delivery, labor rights, and environmental health and safety management meet Company requirements	Supplier Audit Procedure

06

Employee Engagement

3.65

Employee satisfaction:

5 Courses

Organized 5 health-awareness courses

Talent Acquisition

Employees are the foundation of the Company's continued excellence. San Fu Chemical provides fair employment opportunities and is committed to promoting an inclusive and diverse environment. No one is treated differently based on gender, religion, race, or political affiliation, and the Company actively implements equal opportunity measures to ensure equal access to employment and advancement for all job applicants. Following the management philosophy of "Innovation, Integrity, Simplicity," we offer a well-structured benefits system and competitive compensation to attract professionals from various fields. Together, our teams work toward improved service quality, from traditional chemical production to industry-leading contributions to environmental protection.

Workforce Overview

We clearly disclose the Company's human resource information, reflecting workforce stability, and present the level of benefits provided to employees. In compliance with the Ministry of Labor's 2019 ban on converting dispatch workers into full-time hires, San Fu Chemical has not employed any non-regular workers (i.e., dispatched employees) since. As of the end of 2024, all 384 employees were full-time, representing 100% regular employment; 82% were male and 18% female. The age distribution shows that the majority—70%—are between 30 and 50 years old. In 2024, the number of non-employee personnel totaled 9. In both 2023 and 2022, the number was 6. Most of these were personnel contracted from a security company to perform on-site plant security services.

Changes in Non-Employee Personnel (Past 3 Years)

Year	Number
2024	9
2023	6
2022	6

Note: Data as of December 31, 2024

San Fu Chemical has been established for over six decades, and 81% of our employees are under the age of 50, with 13% under the age of 30. While we provide a platform for younger generations to thrive, we also place great importance on knowledge transfer and intergenerational integration, continuously transforming experience into critical organizational knowledge and skills. What's especially commendable is that our supervisors generously share their valuable experience. Through the talent development mechanism embedded in personal development plans, they systematically guide and train younger employees, while also encouraging their career growth within the organization.

Workforce Composition by Employment Type

Employment Type	Permanent Employees			Temporary Employees			Full-time Employees			Part-time Employees		
Region/gender	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
Taipei	11	23	34	0	0	0	11	23	34	0	0	0
Zhubei	9	22	31	0	0	0	9	22	31	0	0	0
Shanhua	38	167	205	0	0	0	38	167	205	0	0	0
Liuying	8	60	68	0	0	0	8	60	68	0	0	0
Kaohsiung	0	17	17	0	0	0	0	17	17	0	0	0
International Nitto	3	26	29	0	0	0	3	26	29	0	0	0
Total	69	315	384	0	0	0	69	315	384	0	0	0

Note

1. The compiled data is based on values as of the end of the reporting period (December 31, 2024).

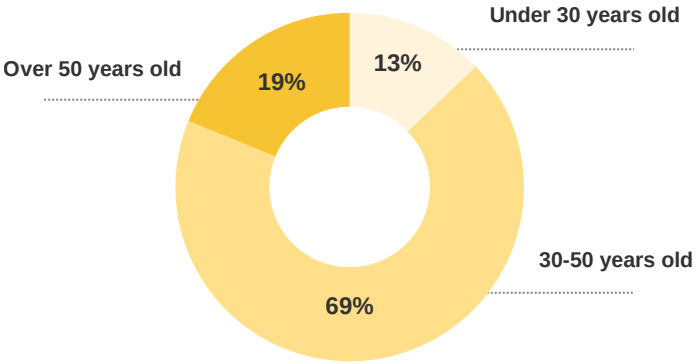
Diversity and Inclusion

San Fu Chemical upholds the core corporate value of being "people-oriented" and its societal commitment to co-create an equitable, diverse, and inclusive workplace. Given industry characteristics and domestic socio-cultural norms, employee gender distribution is heavily influenced by sector type and job nature. The lower participation of women compared to men in chemical manufacturing reflects common industry workforce patterns. Nevertheless, San Fu Chemical proactively develops employee-friendly systems and environments to encourage women's engagement in this field, advancing fair economic resource allocation. By the end of 2024, the male-to-female ratio was 4.6:1, with female representation adjusting to 18% (compared to 2023).

San Fu Chemical actively promotes social inclusion and encourages the participation of socially disadvantaged groups to support the execution of corporate social responsibility. In terms of talent recruitment, the Company welcomes individuals from all backgrounds, including people with disabilities and members of Taiwan's Indigenous communities. In 2024, there were three employees with disabilities, accounting for approximately 0.78% of the total workforce. In 2021, the Chairperson signed the Human Rights Policy, committing to providing fair and reasonable compensation and working conditions, a safe and healthy work environment, ensuring equal employment opportunities for all, and eliminating all forms of discrimination.

Employee ratio - by diversity

CATEGORY		Percentage
Age Group	Under 30 years old	13%
	30-50 years old	69%
	Over 50 years old	19%
Gender	Men	82%
	Women	18%

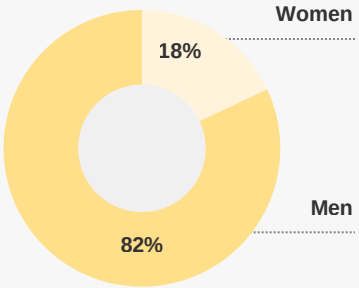


Number of Employees with Disabilities

Year	Total Number of Employees	Number of Employees with Disabilities	Percentage
2022	383	2	0.52%
2023	366	3	0.82%
2024	384	3	0.78%

Percentage of Male and Female Employees

		2022	2023	2024
All full-time employees	Men(%)	80%	80%	82%
	Women(%)	20%	20%	18%
	Number of people	383	366	384



Employee Turnover Overview

In 2024, San Fu Chemical hired 31 new employees, accounting for 8% of the total workforce. During the same period, 35 employees resigned, representing 9% of the total workforce.

New Employee Hires and Employee Turnover by Age Group and Gender

		Men		Female		Subtotal	
		Pcs.	Percentage	Pcs.	Percentage	Pcs.	Percentage
New employees	Under 30 years old	6	17%	2	17%	8	17%
	31-50 years old	16	7%	3	7%	19	7%
	Over 51 years old	4	7%	0	0%	4	6%
	Subtotal	26	8%	5	7%	31	8%
Resigned employees	Under 30 years old	3	8%	3	25%	6	13%
	31-50 years old	22	10%	5	11%	27	10%
	Over 51 years old	2	3%	0	0%	2	3%
	Subtotal	27	9%	8	12%	35	9%

Note:

1. The percentage is calculated as the number of individuals in a given age group and gender divided by the total number of people in that group.

Remuneration and Benefits

Remuneration

Fixed salary

Bonuses：Year-end bonus, performance bonus, EHS (environment, health, and safety) bonus, proposal bonus

San Fu is committed to improving its salary and reward mechanisms to ensure that its compensation levels remain competitive in the market, thereby facilitating the recruitment and retention of top talent. In addition to issuing year-end bonuses to full-time employees based on the Company's operational performance, special operational bonuses are awarded based on individual performance and evaluation results. Since 2019, in order to offer more immediate incentives, San Fu has implemented a monthly EHS bonus system to effectively motivate all employees to uphold high standards in environmental protection, workplace safety, and food hygiene. The Company also regularly participates in salary surveys conducted by the industry or consulting firms to review the competitiveness of its compensation and benefits, ensuring alignment with the market. These reviews serve as a basis for performance-based salary adjustments and talent development or promotion.

In accordance with Taiwan Stock Exchange regulations, the following table discloses the number, average salary, and median salary of full-time employees in non-managerial positions. In 2024, the average annual salary of full-time employees in non-supervisory roles at San Fu was NT$916,000. San Fu's employee incentive plans take into account the Company's financial and operational performance as well as its future development, and are structured around the roles and individual performance of employees to determine corresponding remuneration packages.

	2022	2023	2024	Difference from the previous year
Number of Full-time Non-Managerial Employees	344	338	285	-53
Average salary of full-time non-managerial employees (NT$ thousand)	998	900	916	16
Median salary of full-time non-managerial employees (NT$ thousand)	884	810	832	22

Employee Care

Human Rights Protection

We believe that respect for human rights and creation of a dignified working environment are important to the Company's sustainable operation and corporate social responsibility. To San Fu's management, labor relations are like family bonds — once hired, employers must care for, supervisors must nurture, and employees must fulfill their roles. This collective effort strengthens operations and sustainability — the enterprise's greatest contribution to social responsibility.

San Fu Chemical complies with labor laws and regulations in all of its operating sites around the world to protect the legitimate rights and interests of employees. We also identify with and support the United Nations Universal Declaration of Human Rights, the Global Compact, and the International Labor Organization Conventions, as well as respect the internationally recognized basic human rights. We have also established relevant human rights policies based on the aforementioned guidelines and principles to protect the human rights of all employees, including permanent employees, contract and temporary staff, and interns.

The implementation results in 2024 include:

To protect employees' human rights, we promote human rights and labor-related laws and regulations courses in the training for new recruits. We have also set up an employee suggestion box for employees to express opinions and complaints on human rights and labor practices in a timely and smooth manner, and the senior management will respond to and handle them in a timely manner. No employee complaint was received in 2024.

Sexual Harassment Prevention

In accordance with Article 13 of the Act of Gender Equality in Employment and Article 4 of the Regulations for Complaints and Discipline of Sexual Harassment Prevention in the Workplace established by the Ministry of Labor, we have also issued the "Written Statement of San Fu Chemical Co., Ltd.'s Prevention of Sexual Harassment in the Workplace" to provide a working environment free of sexual harassment for all employees of the Company. We never tolerate any of the Company's management, employees (including job seekers), customers, or third parties engaging in or suffering from sexual harassment as defined in Article 12 of the Act of Gender Equality in Employment, including:

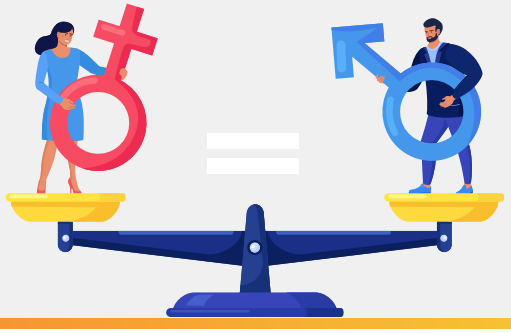
The employer (or senior executive) makes a clear or implicit sexual requirement, verbal or behavioral implications, or otherwise discriminates based on the gender of the employee (or job seeker) as a condition for the establishment, existence, change, or distribution, allocation, remuneration, performance evaluation, promotion, demerit, or reward of the labor service contract.

When an employee is performing duties, any person (including a customer or third party) making verbal or behavioral requests with sexual demands or sexually suggestive language or involving other forms of gender discrimination, which causes a hostile, coerced or offensive working environment, and thus infringes on or interferes with the personal dignity of the employee, or affects the employee's work performance.

At the same time, we have also planned a comprehensive complaint channel, so when any of the Company's employees is harmed by the above-mentioned acts, or hears of such an incident, they may immediately notify the Company's dedicated personnel to assist in handling the matter immediately. In principle, the investigation will be conducted in a confidential manner. The Company prohibits any retaliation against the abovementioned whistleblowers, whistleblowers, and those who help with complaints or investigations of sexual harassment. In addition, to enhance the awareness and understanding of all employees about such incidents, the Company regularly holds internal seminars and training courses to ensure that all employees have a clear understanding of the contents. No complaints of sexual harassment occurred in 2024.

Gender equality

We actively implement the maternity and paternity leaves and other leave rights to help us recruit and retain outstanding employees, thereby enhancing the morale and productivity of our employees. We have also established a nursery room and implemented a parental leave without pay system in accordance with the Act of Gender Equality in Employment, which is applicable to both male and female employees.
To care for the needs of new mothers to feed and collect their breast milk in the workplace, we have set up a standard breastfeeding room for postnatal mothers to use.



The breastfeeding room was officially opened on September 1, 2019. It is equipped with tables and counters, as well as handrails, chairs, and disinfectant boilers. There is also a dedicated refrigerator to store the mother's milk. Emergency phones and the "Key Points for the Use and Management of the Breastfeeding Room" are installed to create a warm, friendly, safe, and fully equipped breastfeeding room for employees. For pregnant and postnatal mothers, the doctor will conduct health hazard assessment and work suitability assessment.

Breastfeeding room in the nursery home

Parental leave without pay

In 2024, female employees will account for 18 % of all employees, a decrease of 2% compared to last year. Employee gender distribution is generally influenced by the type of industry and nature of work. In the chemical manufacturing sector, it is typical that fewer women than men enter the field, which is a common manpower structure across the industry. To encourage parents to accompany their children in their growth, San Fu Chemical has applied for parental leave in accordance with the Employment Insurance Act and the Act of Gender Equality in Employment to allow parents to take care of their children without worries. We will continue to enhance the protection of the rights of working parents to build a friendly working system and working environment for employees. Parental leave without pay is a statutory right. In addition to the application rate, the reinstatement rate and retention rate are also worth noting. The former reflects whether employees choose to leave, and the latter reflects whether they want to return, indicating whether the Company has sufficient cohesion to retain talent. In 2024, the number of employees who applied for parental leave without pay was 3 and the number of employees to be reinstated in the year was 3. The actual number of employees who were reinstated was 1 and the reinstatement rate was 33%. The number of employees who have been retained for one year was 1 and the retention rate was 25%. Although the number of parental leave applicants decreased by 2 compared to the previous year, the Company continues to actively support and promote a family-friendly workplace, respecting the balance between work and personal life.

Parental leave application and reinstatement statistics

		2022	2023	2024
Number of people qualified for parental leave	Men	36	29	32
	Women	10	5	2
	Total number	46	34	34
Number of applicants	Men	0	4	3
	Women	0	1	0
	Total number	0	5	3
Number of people requiring reinstatement	Men	0	4	3
	Women	1	1	0
	Total number	1	5	3
Number of employees who were reinstated	Men	0	3	1
	Women	1	1	0
	Total number	1	4	1
Reinstatement rate	Men	--	75%	33%
	Women	100%	100%	--
	Total number	100%	80%	33%
Number of employees who have worked for one year after reinstatement in the previous year	Men	--	--	0
	Women	1	1	1
	Total number	1	1	1
Retention rate	Men	--	--	0%
	Women	100%	100%	100%
	Total number	100%	100%	25%

Note:

1. The number of employees eligible for parental leave is calculated based on the number of applicants for childbirth subsidies and child-rearing allowances each year
2. Reinstatement rate = Actual number of employees reinstated / Number of employees scheduled to return (if the denominator is zero and the rate cannot be calculated, it is indicated as "--")
3. Retention rate = Number of employees who remained employed for one year after reinstatement in the previous year / Number of employees reinstated in the previous year (if the denominator is zero and the rate cannot be calculated, it is indicated as "--")
4. Number of employees who remained employed for one year after reinstatement in the previous year: if no employees were reinstated in the previous year, this is indicated as "--"

Employee Benefits

Leave System	Pre-granted annual leave that exceeds the requirements of the Labor Standards Act
Wedding gift money	Cash gifts for employees and their children on the occasion of marriage
Festival gift money	Cash gifts for the three major holidays and for employees' birthdays
Bereavement compensation	Condolence payments in the event of death of an employee, their children, spouse, or parents
Hospitalization condolence allowance	Condolence payments for injury, illness, or hospitalization of the employee or their spouse
Childbirth subsidy	Subsidies for childbirth for employees or their spouses
Childhood care allowance	Monthly childcare allowance for children under five years old
Education grants	Education subsidies for employees' children from birth through college graduation, covering up to 22 years
Travel subsidies	Annual travel allowance
Year-end dinner party	Annual company banquet
Group insurance	Coverage includes term life insurance, hospitalization/cancer treatment, accident insurance, work-related accident insurance, and critical illness insurance

We believe that milestones in our employees' lives are milestones for San Fu Chemical as well, so many of our benefit measures extend to employees' family members. By offering a wide range of benefits including group insurance and education subsidies, we look after every aspect of employees' daily lives, enabling them to work with peace of mind.

To encourage childbirth, we actively design family-friendly policies that contribute to Taiwan's society.

Upholding the idea that "talent is treasure," the president of San Fu Chemical placed his personal shares in a trust and earmarked the proceeds for employees' children, beginning in 2016: (1) an employee childbirth subsidy, (2) a monthly childcare allowance, and (3) a school-enrollment grant for employees' children. The first two provide NT $20,000 per birth and a NT $2,500 monthly childcare allowance until the child turns five, for a maximum total benefit of NT $170,000. In the year when an employee's child advances from junior high to senior high or from senior high to university, a NT $10,000 enrollment grant is also paid. To ease the load on dual-income parents, San Fu offers family-style support so employees can focus on work while reducing household burdens.

Employee dormitory

San Fu Chemical operates single-occupancy dormitories in Tainan and Hsinchu, giving employees from other counties a comfortable, safe place to live.

Employee cafeteria

A factory-site cafeteria is provided to thank employees for their hard work. The company covers 65 % of costs, so a balanced buffet meal of two main dishes, three side dishes, and soup costs employees only NT $30; menus change daily for healthy, tasty lunches and dinners. San Fu regularly audits the caterer's equipment and hygiene to safeguard meal safety.

Retirement planning

Pensions earned under the old system follow the Labor Standards Act; those under the new system follow the Labor Pension Act, with the company contributing 6 % of monthly wages to each employee's individual account at the Bureau of Labor Insurance, and employees free to add up to another 6 %. A Labor Pension Reserve Supervisory Committee oversees fund use. In line with IAS 19R, an actuary is commissioned annually to value liabilities and ensure contributions are sufficient. The committee meets as needed—holding extraordinary meetings when required—to review contributions, fund use, and payments. In addition, the Labor Pension Fund Supervisory Committee also holds meetings from time to time to discuss matters. If necessary, extraordinary meetings may be held. The meetings focus on the verification of the amount of the Labor Pension Fund contribution, fund storage and expenditure verification, and the amount of the Labor Pension payment.

In addition, for employees who are at the age of retirement, we will evaluate their personal willingness and post-retirement life arrangement. If the Company still needs to take advantage of the experience and ability of the retired employees, we will consult them to return to work and assist the successors in the transition. At the same time, we will also serve as career counselors to assist the successors in the development of their career. This retirement plan not only allows employees to have a comfortable life after retirement, but also enables them to serve as consultants to increase their sense of accomplishment in life after retirement.

Year-end banquet in 2024




Health Promotion

San Fu Chemical is committed to providing a high-quality, healthy workplace for its employees. In addition to providing on-site services by occupational specialists in accordance with regulations, the company collaborates with full-time in-house nurses to organize various health promotion activities, guiding employees to proactively build healthy lifestyles. Each year, the company conducts employee health checkups that exceed legal requirements. Value-added services such as cancer screenings and cardiovascular examinations are also provided. Through comprehensive health screening, risk factors affecting employees' health can be identified, achieving early detection, early treatment, and prevention. Abnormal health checkup results are analyzed and classified, with personalized health education and guidance provided by nurses and on-site physicians. This enables employees to better understand their health conditions, take charge of their well-being, and increase accurate medical knowledge. In addition to legally required special operations, the company integrates environmental monitoring data to identify potential health hazard risks. Special health checkups are arranged for operations involving noise, manganese, lead, nickel, and its compounds. Employees in hazardous operations are managed in accordance with special health examination guidelines. Results of special health examinations are classified into four levels. Class 2 requires health guidance; Class 3 and above require follow-up services from occupational medicine physicians. If necessary, on-site evaluations for suspected work-related illnesses are conducted to provide job-related advice.

For Class 3 and above, follow-up results are submitted to occupational medicine physicians for health risk assessment. The results are recorded in labor health service implementation records and job assignment evaluation forms. Formal written notifications are issued to employees and departments regarding job suitability, adjustments, or recommended protective measures. Department heads coordinate reassignments or take other appropriate actions. After follow-ups for Level 3 and above, reclassification is conducted based on evaluations, and outcomes are reported to the central competent authority as required. As of the follow-up, one employee was classified as Class 4 due to noise exposure. After consultation and risk assessment by an occupational medicine physician, reassignment was deemed unnecessary. However, the use of protective equipment and a hearing protection program was recommended. In 2024, a total of 18 employees underwent special health examinations, with 3 identified as abnormal. One was classified as Class 4 after re-examination. All follow-up procedures have been completed. The 2024 special health examination participation rate was 100%. The company also organizes regular health seminars on chronic disease prevention, exercise, and nutrition, and disseminates health-related information via internal websites or email announcements.

San Fu Chemical uses a "Health Management System" to oversee employee health. Following annual health checkups, health reports and workload surveys are analyzed to identify moderate and high-risk cases. In 2024, 24 moderate-risk and 8 high-risk employees received personalized health management measures. Administrative controls and health monitoring include restricting overtime, tracking medical consultations, monitoring medication compliance, encouraging daily blood pressure checks, and providing health guidance. The company also plans training on cerebrovascular and cardiovascular diseases, educating employees on the risks and proper prevention methods. Comprehensive care is provided to enhance both corporate and employee competitiveness, ensuring physical and mental health.

To mitigate ergonomic hazards caused by repetitive or improper postures, ergonomic principles are integrated into daily operations. Hazard factors are analyzed and addressed through improvement plans targeting high-risk ergonomic issues, aiming to reduce musculoskeletal discomfort and promote a safe and efficient work environment. In 2024, using the ergonomic assessment checklist, 4 employees were identified as potentially at risk. After consultations with nurses and physicians, these risks were deemed unrelated to their work. Related health education was provided. Regular reviews of work posture and proactive inquiries into musculoskeletal health were conducted to reduce ergonomic risks.

To ensure the welfare and health of female employees, the company considers gender differences and pregnancy-related risks by implementing maternal health protection measures:

In accordance with the "Regulations on the Maternal Health Protection of Female Workers" and related guidelines, San Fu conducted a 2024 survey of female employees of childbearing age using the Maternal Health Protection Workplace and Hazard Assessment Form. Based on workplace risk assessment, physician consultation, risk classification, and work suitability planning, the safety and well-being of female employees are ensured. To support nursing mothers, comfortable resting and lactation rooms have been set up, offering a safe, private, and well-equipped space to foster a friendly work environment for female staff.

According to the "Middle-aged and Elderly Health Protection Program," employees aged 45 and above are required to complete a "Work Suitability Assessment Form." Based on the results, physician consultation and necessary referrals are provided to address physical and mental health concerns. This process promotes the well-being of middle-aged and older workers.

During annual physical exams, the company offers free flu vaccinations at the plant. The cost is fully covered by the company. In 2024, the seasonal flu vaccination rate among employees reached 41%, reducing the need to visit medical facilities and enhancing overall health protection.

Health Concept Courses

San Fu Chemical is committed to providing employees with accurate health knowledge. On-site physicians are invited to deliver health education sessions, and both in-person and online courses are organized for employee learning.

The courses offered in 2024 are as follows

No	Date of (online) Course	Name of Course	Lecturer	Remarks
1	2024/2/19	Autonomic Nervous System Disorder	San Fu Chemical Nurse	Online course
2	2024/3/25	Sciatica	San Fu Chemical Nurse	Online course
3	2024/9/3	Prevention of Heat Hazards and Emergency Measures	San Fu Chemical Nurse	Online course
4	2024/9/10	Gastrointestinal Diseases	San Fu Chemical Nurse	Online course
5	2024/11/26	From the Heart – A Brief Talk on Mental Health	Dr. Kuo Wan-Yin, Chi Mei Hospital	Physical course

Health checkup

Labor-Management Communication

Labor Compliance

We comply with local labor laws and regulations. When major operational changes are anticipated that may affect employee rights or alter labor conditions, we fully adhere to the Labor Standards Act and the Act for Worker Protection of Mass Redundancy in Taiwan by providing advance notice before terminating any labor contracts.

Communication channel

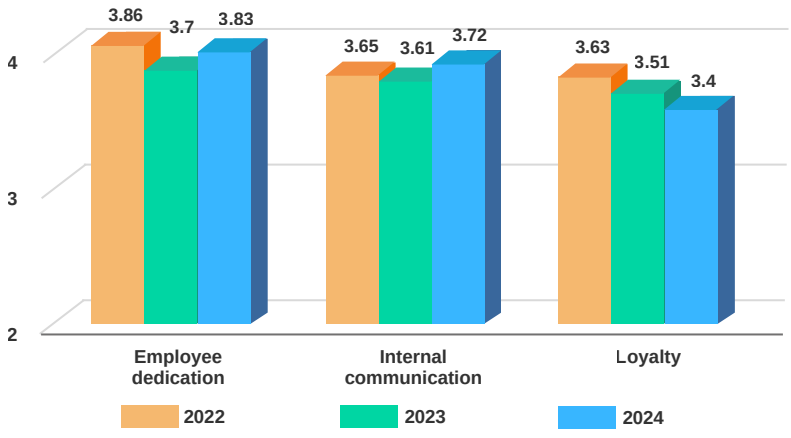
San Fu has established a labor-management communication platform. Each quarter, the Chairperson leads senior executives in engaging with employee-appointed labor representatives for opinion exchange and discussion. Ad hoc meetings may also be convened when necessary. Although we do not have a labor union, we strictly follow labor laws and hold regular labor-management meetings to facilitate two-way communication and collective negotiations. Discussions cover topics such as labor-management cooperation, coordination of labor relations, improvements in working conditions, and planning of employee welfare. Communication channels are kept open to respond to and address employee concerns in a timely manner, aiming to create a workplace where all employees can strive and grow together.

Employee satisfaction

San Fu believes that employee satisfaction comes from effective leadership and robust systems. When employees can fulfill their self-realization at San Fu, the company becomes a place of high engagement and satisfaction—a happy enterprise. The survey covers three main areas: employee engagement, internal communication, and loyalty, aiming to more accurately assess employee satisfaction.
According to the results of the 2024 employee satisfaction survey, the three major aspects showed some improvement compared to the previous year. However, there is still room for enhancement. Upholding the spirit of continuous improvement, San Fu continues to conduct in-depth investigations and interviews on relatively underperforming items and develops corresponding action plans to strengthen employee cohesion. For San Fu, business leaders value a harmonious labor-management atmosphere and a positive overall work environment. The Human Resources department has designed a series of questions based on Maslow's hierarchy of needs theory, addressing self-actualization topics such as "opportunities for employees to demonstrate their abilities" and "continuous learning of new skills." Through follow-up tracking, this is designated as a key focus in HR strategy. Ongoing communication with supervisors regarding employees' job satisfaction and sense of achievement contributes to building a happy and fulfilling workplace.

2024 Employee Satisfaction Survey Results (5-point scale)

Survey Dimension	2022	2023	2024
Employee dedication	3.86	3.70	3.83
Internal communication	3.65	3.61	3.72
Loyalty	3.63	3.51	3.40
Total average	3.67	3.61	3.65



Career Development

Performance evaluation

To fulfill its mission of sustainable operations and social responsibility, San Fu introduced the Balanced Scorecard in 2017 as a strategic framework. It serves as a tool for departments to establish job-specific performance indicators and required competencies, covering both quantitative goals and qualitative behaviors. San Fu regularly reviews its annual performance evaluation system to ensure its integrity and fairness. This includes assessing the rationality of goal-setting, consistency of evaluation criteria, alignment of vertical and horizontal objectives, implementation of performance interviews and feedback mechanisms, performance coaching, and individual development plans. System-wise, overall company profitability is linked to individual performance. Based on evaluation results, special bonuses are awarded semiannually to effectively reward high-performing employees. Evaluation outcomes are also used as a reference for future training and career development, as well as for decisions on salary adjustments and promotions. In 2024, 100% of eligible employees underwent performance evaluations.

Employee training hours

San Fu Chemical spares no effort in employee training and development. In addition to equipping employees with essential skills, the Company nurtures managerial talent required for business growth and enhances employee retention. Aligning employee and corporate development is a core part of San Fu's long-term sustainability and one of its key social responsibilities.

In 2024, the average training time per employee was 8.4 hours, representing a 32% decrease compared to 2023. The decline in training hours was primarily due to the absence of mandatory training courses required by major new clients in the previous year, leading to a significant reduction in the number of participants and total training hours. Nevertheless, the Company remains committed to the principles of DEI (Diversity, Equity, and Inclusion), continuing to provide all employees with opportunities for career development and skill enhancement.

Average hours of education and training per year per employee, by gender and by employee category

		Men	Female	Total
Management	Number of people actually during the reporting period	43	10	53
	Training hours during the reporting period (in-person courses)	266	38	304
	Training hours during the reporting period (online courses)	469	98	567
	Average hours of training during the reporting period	17.09	13.06	16.43
Non-Management Staff	Number of people actually during the reporting period	272	59	331
	Training hours during the reporting period (in-person courses)	496	109	605
	Training hours during the reporting period (online courses)	1295	456	1751
	Average hours of training during the reporting period	6.58	9.58	7.12
Total	Number of people	315	69	384
	Hours of education	2526	701	3227
Total number of employees at the end of the reporting period	Number of people	315	69	384
Average hours of training per employee	Hours of education	8.02	10.16	8.40

Competency Training Courses

San Fu Chemical plans ever-more diversified and plentiful training courses, giving employees a rich selection—including professional-skill programmes—to enhance their job competencies. Since 2018 we have operated an online-learning platform, making courses more accessible so employees can keep learning and growing, unlock their potential, enrich career planning, and foster self-actualization. Training is grouped into six categories: basic training, function-specific professional skills, advanced job skills, general management competencies, and leadership-development programmes for senior executives.

To remain sustainable, San Fu must survive and prosper amid competition and keep pursuing growth. In 2024 we partnered with global leadership consultancy group FranklinCovey to run an in-person “DEI Inclusive Leadership” course at Queena Plaza Hotel in Tainan. The programme aligns with key semiconductor-sector client trends in employee development and fosters diverse thinking to build a win-win workplace culture. The course targeted two main goals: (1) creating a culture of inclusion and trust to raise colleagues’ sense of belonging, engagement, and team integration, and (2) enhancing leadership maturity. A total of 89 employees attended, deepening our DEI culture and strengthening collaboration and innovation.




Finally, in line with the Occupational Safety and Health Act and its Training Rules, San Fu regularly reviews the validity of employees’ EHS licenses and schedules refresher courses before they expire. Since 2020—after reviewing internal resources—we have assigned in-house instructors to deliver “Hazardous-Operation Supervisor Safety & Health” and “First-Aid Personnel Refresher” courses on site, tailoring them to our specific processes and environment; “Fork-lift Operator Refresher” training is conducted in-plant by an external accredited association. This improves training effectiveness and spares employees extensive travel. In 2024 we held three sessions of “Hazardous-Operation Supervisor Safety & Health” training with 69 total participants, one session of “First-Aid Personnel Refresher” with 13 participants, and two sessions of “Fork-lift Operator Refresher” with 28 participants.

Competency Training Courses

Type of duty	Core competencies of the Company	Senior manager	Mid-level managers	Junior staff	Professional personnel	General staff	Suggested courses
Leadership ability	Strategic planning and vision leadership	V					Efficiency Decision-Making
General management competencies	Cultivation and development of employees		V				Leadership Four Major Responsibilities, OKR Management, and DEI Leadership
	Team leadership and collaboration		V				Catfish Effect, Seven Habits of Highly Effective People
Advanced Work Skills	Language ability			V	V		English, Vietnamese, Japanese courses
Professional skills by function	Professional skill training				V		SEAL Lecture and Practical Operation Course Lv.2, Total Productive Maintenance (TPM)
	ISO system training				V	V	ISO9001 Auditor, ISO14001 Auditor, ISO45001 Auditor, ISO50001 Energy Management System Interpretation
	Environmental Safety and Health Certification Training				V	V	Hazard general knowledge, hazardous operation supervisor, forklift, first aid, and other industrial safety certification training
Basic training	Core Values/Organization Culture	V	V	V	V	V	Business Integrity, Communication Funnel, Telephone Etiquette, Financial Planning Concepts, Anti-Bullying in the Workplace, RBA Overview, Sexual Harassment Prevention, Grievance, and Disciplinary Training

E-learning system

In the past, physical learning was the main focus. Nowadays, digital technology is advancing rapidly. To keep up with the times, the Human Resources unit introduced a digital learning platform at the end of 2018, enabling colleagues to learn new knowledge online without time and space constraints. By integrating functions such as career learning maps, knowledge management, license management, e-learning materials, and mobile device learning, the platform helps employees continuously enhance their capabilities and strengthen the Company's overall competence, fulfilling strategic business goals and the responsibility of sustainable management.
The effectiveness of the digital learning platform in 2024 is as follows:

1. Online new employee training: A total of 24 sessions were conducted, saving 192 hours of internal instructor face-to-face teaching time.
2. Online course conversion: A total of 25 courses were converted to online format, including Defensive Driving Training, ISO45001 Hazard Identification and Risk Assessment Training, Seven Quality Control Tools, GHP Good Hygiene Practice, Ethical Business Practices and Code of Conduct, SPC Statistical Process Control, FMEA Failure Mode and Effects Analysis, On-the-Job Safety and Health Training, Hazardous Chemicals and Fire Safety Awareness, 8D Problem Solving Techniques, Internal Staff Training, General Hazard Awareness for New Recruits, RBA Overview, ISO 50001 Energy Management System Overview, and Workplace Sexual Harassment and Infringement Prevention.
3. Health education materials: Topics included prevention of noise hazards, gastrointestinal diseases, CPR first aid training, the importance of health, and dengue fever awareness.
4. 2024 Online Course on Ethical Corporate Management

A total of 8 directors participated in the training, and the completion rate was 100%.
A total of 371 employees participated in the training, achieving a completion rate of 91.57%.

Region/ gender	Women	Men	Total	Completion rate
Taipei	11	23	34	85.29%
Zhubei	10	22	32	90.63%
Shanhua	39	147	186	95.70%
Liuying	7	59	66	95.45%
Kaohsiung	0	17	17	82.35%
International Nitto	4	32	36	100.00%
Total	71	300	371	91.57%

Learning Organization Culture

San Fu regards each employee as an important asset. In addition to offering diverse and comprehensive in-person and online training courses to enhance work-related competencies, the company also values employees' individual learning needs. In 2024, San Fu continued its partnership with the Hahow learning platform to implement the "Hahow for Business" corporate program. The curriculum includes a wide range of topics such as business management, digital marketing, data analysis, workplace skills, programming languages, visual design, business foreign languages, and lifestyle courses. During the program period, each participant could freely select courses of interest without time or location restrictions, expanding their potential, promoting self-actualization, and cultivating a learning-oriented organizational culture to strengthen the company's internal learning atmosphere.

The project was implemented over a six-month period, with a total of 375 courses completed, 722 cumulative training hours, an average of 9.6 learning hours per participant, and an overall satisfaction score of 4.7.

07

Occupational Safety and Health Management

100%

Achieved 100% legal certification compliance

100%

100% pass rate in inspections of hazardous machinery and equipment

Implementing Occupational Safety and Health Management

Management Policy

We continue to implement health and safety management standards (HS), establishing a dedicated team and management system, and developing strict policies, procedures, and standards to promote internal occupational health and safety management. We also actively collaborate with the Southern Regional Occupational Safety Center, Fire Department, Labor Affairs Bureau, and Hsinhua District Public Health Center to build a safe and healthy working environment.

Our safety policy includes the following:

Comply with Occupational Safety and Health Laws and Regulations	To ensure that the organization's products, activities, and services comply with regulatory requirements, we have established a safety and health management system, adhere to corporate responsibilities, and regularly check for regulatory compliance.
Continuous Injury Prevention and Health Management	We implement environmental/safety non-conformance corrections, accident prevention mechanisms, and improvement proposals. Employee health check results are graded for management, and hazard factors are effectively controlled with regular monitoring to prevent work-related injuries, illegal harm, poor health, illnesses, and accidents. The goal is to protect the health and safety of the community, all employees, suppliers, contractors, and visitors all achieve the highest standards of “zero disasters,” “zero accidents,” and “zero tolerance for violations.”
Full participation and continuous improvement	Through manager performance appraisals and safety/environmental bonuses, we foster a culture of environmental health and safety, provide related education and training to employees, contractors, and workers, allocate time and resources, and consult employees and their representatives to support the implementation of the EHS system.
Hazard identification and risk assessment	In accordance with laws and internal systems, San Fu annually conducts risk assessments for all operational activities, machinery operations, and chemical usage involving employees, contractors, and visitors across all sites. We evaluate risks based on the severity and frequency of potential incidents to assign a quantified score, review existing protective measures, and prioritize improvements to reduce overall risk.
Establish a corporate safety and health culture, strengthen safety and health education and communication	Through manager performance appraisals and safety/environmental bonuses, we foster a culture of environmental health and safety, provide related education and training to employees, contractors, and workers, allocate time and resources, and consult employees and their representatives to support the implementation of the EHS system.

Establishment of Occupational Safety and Health Committee

In accordance with Article 23 of the Occupational Safety and Health Act, we have established an official OSH management unit—the Industrial Safety Department—reporting directly to the General Manager's Office, responsible for overseeing and advising on OSH planning and review.

We have also set up an Occupational Safety and Health Committee chaired by the General Manager and composed of department heads, OSH staff, and employee representatives. The Chairperson leads quarterly meetings to review and improve issues related to environment, safety, health, fire safety, and food safety.

Comprehensive Certification of the Occupational health and safety management system

We have passed third-party certifications for occupational safety and health, aligning our systems with national and international standards. Currently, we hold certifications for ISO 45001:2018 and CNS 45001.

HS Health and Safety Management Standard Third Party Verification Statistics Table

	45001:2018	CNS 45001
Shanhua Plant	V	V
Kaohsiung Plant	V	
Liuying Plant	V	
International Nitto	V	

Hazard Identification and Risk Assessment

In accordance with legal and internal management system requirements, the Company conducts annual risk identification for various work activities, machinery operations, and chemical usage involving employees, workers, contractors, and visitors across all sites. A quantitative risk score is calculated based on the severity and frequency of potential incidents. If the score falls between 120 and 159.9, it is classified as "high risk" and requires a review and prioritization of improvement for existing protective measures to reduce the risk. If the risk score exceeds 160 points, it is considered "unacceptable risk." In such cases, operations must be halted immediately, and the adequacy of current protective measures must be reviewed or improved, or the emergency response capacity must be strengthened. In 2024, risk scores exceeding 120, categorized as high risk or above, were recorded in 4 cases: 3 in the Hsinhua Plant, none in the Liu Science Park Plant, none in the Kaohsiung Plant, and 1 in the Rih-Dong Plant. All of these were incorporated into the 2024 annual management plan for audit and follow-up, with 100% completion achieved within the same year.

Zero Occupational Accidents as the Goal

The Industrial Safety Department sets management objectives and action plans based on company policies, monitors progress and evaluates performance accordingly, all with the ultimate aim of achieving “zero occupational accidents.” The company emphasizes each employee’s safety and health, and enhances their risk awareness and safety knowledge through risk assessments, hazard identification, safety education programs, and pre-work meetings.

To comply with legal requirements and achieve the zero-accident goal, the Company established the "Safety and Health Work Rules," which were submitted to the competent authorities. Chapter 8 of the Work Rules, “Accident Notification and Reporting,” outlines the right of workers to withdraw from unsafe work situations without facing termination, demotion, loss of benefits, or other forms of retaliation.

The Company conducts monthly statistical analysis on FR (Frequency Rate), SR (Severity Rate), and FSI (Frequency-Severity Index), reporting the results at the quarterly Occupational Safety and Health Committee meetings and disclosing them to all employees. As shown in the accompanying historical FSI performance chart, there were zero disabling injuries among employees in 2024, resulting in an FSI of 0. Similarly, there were no disabling injuries among contractors, with an FSI of 0. Looking ahead to 2025, all employees of the Company will continue their efforts to maintain the goal of zero accidents.

FSI statistics

Item / Year	Employees			Non-employee(Contractor)		
	2022	2023	2024	2022	2023	2024
Working hours (Hr)	750,065	741,163	771,123	54,098	66,530	91,297
Number of disabling injuries	0	1	0	0	0	0
Frequency rate (F.R)	0	1.35	0	0	0	0
Days lost due to disabling injuries	0	28	0	0	0	0
Disabling severity rate (S.R.)	0	37.78	0	0	0	0
Frequency severity index (FSI)	0	0.23	0	0	0	0

Note:

1. Disabling Frequency Rate (F.R) is the number of disabling incidents per 1 million working hours. Formula: Number of disabling injuries × 1,000,000 working hours / Total working hours
2. Disabling Severity Rate (S.R.) is the number of days lost due to disabling injuries per 1 million working hours. Formula: Days lost due to disabling injuries × 1,000,000 working hours / Total working hours
3. Frequency-Severity Indicator (FSI)

公式：$\sqrt{\frac{FR \times SR}{1000}}$

The statistics of occupational injuries in 2024 are shown in the figure below:

Item / Year	Employees			Non-employee(Contractor)		
	2022	2023	2024	2022	2023	2024
Working hours (Hr)	750,065	741,163	771,123	54,098	66,530	91,297
Number of deaths as a result of work-related injuries	0	0	0	0	0	0
Occupational fatality rate due to work-related injuries	0	0	0	0	0	0
Number of people suffering from severe occupational injuries	0	0	0	0	0	0
Rate of high-consequence work-related injuries	0	0	0	0	0	0
Number of recordable occupational injuries	1	1	0	0	0	0
Percentage of recordable work-related injuries	1.38	1.35	0	0	0	0
Loss of work days rate (LDR)	0.3	7.5	0	0	0	0
Total number of days absent (days)	6.9	28	0	0	0	0
Absence Rate (AR%)	0.01	0.05	0	0	0	0
Main types of occupational injuries	Contact with hazardous substance	Collapse	None	None	None	None

Note:

1. Except for the Loss Days Rate (LDR), all other items are calculated based on 1,000,000 working hours, and all workers are covered.
2. Severe occupational injuries refer to disabling injuries where the individual has not recovered within six months.
3. Loss Days Rate (LDR, rounded down to the first decimal place) = (Total days lost due to disabling injuries / Total working hours) × 200,000.
4. Absence Rate (AR, rounded down to the first decimal place) = (Total number of absent days / Total number of working days) × 100%. (Includes personal leave, sick leave, and absenteeism.)

Traffic Safety Management

We aim to achieve traffic safety management, expand safety management for tank truck transportation and employee traffic, and establish a safety framework centered on product safety and employee care. To further improve San Fu Group's employee traffic safety performance, we invite employees' family members to participate in traffic safety events, thereby fostering positive social impact through traffic safety promotion.

Vehicle Accident Frequency Rate (VAFR) is calculated primarily for long-term contractors and company drivers.

$$VAFR = \frac{\text{number of accidents}}{\text{total number of driven km}} \times K \quad (K = \text{constant} = 1{,}000{,}000)$$

(Employee Traffic Accident Frequency Rate (ETAFR))
Tallies traffic accidents involving employees that cause property damage or injury, whether on public roads, inside facilities, or in customer premises.

$$ETAFR = \frac{\text{Number of employee traffic accidents}}{\text{Total employee working hours (hr)}} \times K \quad (K = \text{constant} = 1{,}000{,}000)$$

Traffic Safety Performance Statistics

Number of traffic accidents	1
Total mileage (km)	1,488,373

VAFR =4.03

Number of employee traffic accidents	5
Total employee working hours (hr)	771,123

ETAFR =7.78

San Fu Chemical has established a comprehensive environmental safety and health system, offering annual defensive driving training for employees. A "Transportation Safety Management Standard" is also in place for internal drivers and long-term contractors. Regular training and accident case reviews help instill correct driving awareness and reduce incident risk.

Since 2019, defensive driving and forklift safety awareness courses have been available via the San Fu online learning platform, allowing employees to train with greater time flexibility.

Statistics and Remediation of Major Occupational Safety Violations

In 2024, the Southern Occupational Safety Center of the Ministry of Labor conducted one inspection and found no deficiencies. The Southern Taiwan Science Park Bureau conducted two inspections, and improvement orders were issued as outlined below. A fine of NT$60,000 was imposed.

Labor Inspection Violation Statistics

Plant	Dates	Reasons for the meeting	Competent Authorities	Improvement status	Penalty amount
International Nitto	2024.08.15	On August 14, 2024 (Wednesday), a contractor performing new pipeline connection work at the International Nitto failed to release residual pressure and drain the contents after cleaning, resulting in three workers being sprayed with chemicals.	Southern Taiwan Science Park Bureau	1. Personnel must wear appropriate personal protective equipment (PPE) when working on hazardous pipelines. 2. Hazardous pipeline dismantling operations require the presence of the owner and must include a pre-work checklist and on-site pressure confirmation. 3. Chemical pipeline work may proceed only after confirming no residual pressure remains, and neutrality is verified using pH strips or other instruments. 4. Specific chemical operations must be supervised and directed on-site by a qualified chemical operations supervisor.	60,000
	2024.09.25	1. The double-jacketed joint piping above the regenerating filler tank was left unprotected. 2. It was recommended to place absorbent pads/acid-absorbing cotton near the emergency shower and eye wash station. 3. When protective equipment was mounted on safety helmets, parts of the side face and chin remained exposed to splash risk.	Southern Taiwan Science Park Bureau	1. Covered the exposed sections with PVC sheeting to prevent spray hazards in case of anomalies. 2. Absorbent pads have been placed beside the emergency shower and eye wash station. 3. Purchased powered air-purifying respirators (PAPR) for employees.	Counseling

Safety and Health Education and Training

The Company has established a comprehensive environmental safety and health management system and organizes various legally mandated certification training programs in accordance with regulations and operational needs to ensure safe production and operations. For statistics on training and certification, please refer to “Occupational Safety Education and Training Statistics” and “Internal Legal Certification Performance Statistics.”

2024 Occupational Safety Education and Training Statistics

Courses	Target of investment	Course format	Training hours	Training Rate
Work Safety Education	Contractor	Physical course	3	100%
Defensive Driving	All employees in the plant	Online course	1	100%
General Training for Hazardous Chemicals and Fire-fighting Practices	All employees in the plant	Online course	3	97%
Respiratory Protection Program Education and Training	Employees using respiratory protection equipment	Online course	3	99%
Commander Emergency Response Training	Concerned persons	Online course	8	100%

2024 Performance of Colleagues in the Plant Obtaining Legal Certificates

License item	Number of people acquired (San Fu Chemical)	Number of people acquired (International Nitto)	Comply with regulatory standards
Occupational Safety and Health Operation Supervisor	24	6	100% compliance
Occupational Safety and Health Management Personnel	5	1	100% compliance
Construction Industry Occupational Safety and Health Supervisor	3	2	100% compliance
Fixed Crane Operators (over 3 metric tons)	53	5	100% compliance
Specific Chemical Substance Operation Supervisors (trained)	117	27	100% compliance
Forklift Operators (over 1 metric ton)	146	22	100% compliance
Hazardous and Harmful Substances Labeling & Communication	150	0	100% compliance
Safety Valve Inspection and Pressure/Gas Tightness Test	23	3	100% compliance
High-Pressure Gas Equipment Operators	26	1	100% compliance
On-site Safety and Health Supervisors	13	0	100% compliance
Class I Pressure Vessel Operators	14	1	100% compliance
First Aid Personnel	56	19	100% compliance
Dust Operation Supervisors	14	1	100% compliance
Oxygen-Deficient Work Supervisors	47	7	100% compliance
Organic Solvent Operation Supervisors	100	2	100% compliance
Boiler Operators	16	2	100% compliance
Process Safety Assessment Personnel	5	1	100% compliance
Road Hazardous Materials Transport Personnel	13	0	100% compliance
Security Supervisors	6	0	100% compliance
Security Inspectors	6	1	100% compliance
Fire Prevention Managers	11	7	100% compliance
Health Services Nurses	1	0	100% compliance

100% of Hazardous Machinery and Equipment Passed Inspection

The installation status and quantity of hazardous machinery and equipment in each department are listed below. All periodic annual inspections during the reporting period were passed, and departments carried out inspections based on their annually revised “Self-Inspection Plans.”

Statistical analysis of the number of hazardous machinery and equipment that have passed inspection

Listed parties	Name	Shanhua Plant	Liuying Plant	Kaohsiung Plant	International Nitto	Pcs.
Hazardous equipment	Class I Pressure Vessel	8	0	12	0	20
Hazardous equipment	High-Pressure Gas Equipment	1	12	9	1	1
Hazardous equipment	High-Pressure Gas Containers	3	4	0	0	7
Hazardous equipment	Boiler	2	0	0	0	2
Hazardous machinery	None	0	0	0	0	0
Total number of qualified products						30

On-site Safety and Health Inspection

We have formulated the "Safety and Health Personnel Responsibility and Authority Control Procedures" requiring all levels of supervisors, plant employees, or safety and health officers to conduct on-site EHS inspections within their jurisdiction. Any violation of safety and health regulations can be reported through the “Environmental/Safety and Health Nonconformity Handling, Correction and Preventive Measures Procedure” for immediate correction, tracking, and documentation.

Tracking and verification

In accordance with the occupational safety management system, we have established the "Internal Audit Management Procedures" to audit the execution of internal safety regulations, procedures, and standards annually. The Industrial Safety Department leads the process, assigning qualified internal auditors to carry out cross-departmental audits according to the plan. In 2024, there were 14 deficiencies at Shanhua Plant, 2 at Liuying Plant, 2 at Kaohsiung Plant, and 1 at International Nitto, totaling 19 cases. All were corrected within the year.

Assisting Business Partners in Improving Occupational Safety and Health

Before contractors begin on-site work, they must complete at least 3 hours of training on internal safety and health regulations in accordance with the “Contractor Management Procedure.” They must also hold pre-construction safety coordination meetings, establish required on-site OSH units and personnel, conduct daily hazard briefings and toolbox meetings, and follow the “Safety Work Permit Procedure” for safety checks before, during, and after operations. Department supervisors and OSH personnel will perform scheduled and unscheduled site inspections. Any violations are reported and tracked for correction per the “Environmental/Safety and Health Nonconformity Handling Procedure.” If not corrected, penalties or work suspension are enforced according to the “Penalty Standards for Contractor Safety Violations.”

Sharing of safety and health information

We regularly share major safety incident information or case studies during meetings or on bulletin boards to raise awareness across all facilities and encourage learning from others' experiences.

Bottom-up management to encourage proposals

We established “Accident Prevention Techniques” reporting mechanism and encourage each employee to report at least one hazard or risk per month. Employees are protected from reprisal. In 2024, the company received 2,113 such reports.

Follow the APT plan established by the supervisor, including the required frequency, observation targets, and topics

▼

Proceed to the work area for on-site observation

▼

Immediately initiate safety contact or improvement upon discovering unsafe behavior, conditions, or near-miss incidents

▼

After safety communication, return to your seat to retrieve and record in the logbook

▼

After recording is complete, submit it to the department supervisor for compilation and statistics, thus completing the APT operation

6S Competition: Over NT$1 million awarded

We established the “6S Evaluation Management Procedure” and “6S Implementation Standards Manual,” and present 6S reports and recognitions quarterly in the Occupational Safety and Health Committee meetings. All plants implement the 6S competition, which has been running for 18 years with extensive experience.

To date, more than NT$1 million in incentive bonuses have been awarded to departments with outstanding performance over the years.

Chemical Disaster Emergency Response Drill

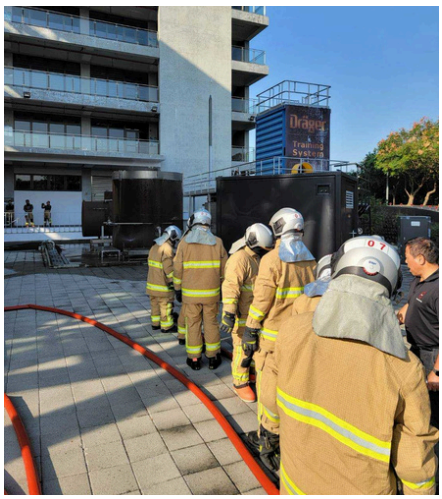
Two drills are held annually to strengthen emergency response

Chemical substances can pose hazards during production, manufacturing, storage, and transportation processes. Therefore, we place great emphasis on routine industrial safety awareness training and conduct two chemical emergency response drills annually to ensure the safety of employees and surrounding communities, aiming to ultimately protect public life and property. The Kaohsiung University of Science and Technology toxic-disaster response team and the local fire department are periodically invited to the plant to provide emergency-response training and identify deficiencies for targeted improvement in the next drill. We also enforce tank-truck transport safety and have established the “Emergency Response and Handling Procedures,” under which all roles, reporting lines, and handling steps are carried out, aiming to minimize personnel injury and property loss when an incident occurs. A plant-wide fire-prevention and emergency-response drill is held every six months, under the supervision and guidance of the fire brigade, to prevent accidents before they happen.

2024 Chemical Disaster Emergency Response Drill Photos







Chemical Disaster Emergency Response Drill

Plant	No.	Date of Drill	Location (In-plant/Off-plant)		Emergency Drill Item	Assumed Scenario / Drill Description
			In-plant	Off-plant		
Shanhua Plant	1	2024/4/25	•		First Half of 2024 "Self-Defense Emergency Response Drill" at Shanhua Plant	Chemical spill and fire at VMT Plant due to earthquake
	2	2024/10/24	•		Second Half of 2024 "Self-Defense Emergency Response Drill" at Shanhua Plant	Chemical leak and fire in the Production Section of the Chemical Engineering Department due to earthquake
	3	2024/11/26	•		Fire Extinguisher Hands-on Training	Fire Extinguisher Hands-on Training
	4	2024/11/29		•	National Kaohsiung University of Science and Technology – Southern Region Toxic Disaster Response Consultation Center – Emergency Response Precautions	Emergency Response Precautions

Plant	No.	Date of Drill	Location (In-plant/Off-plant)		Emergency Drill Item	Assumed Scenario / Drill Description
			In-plant	Off-plant		
Liuying Plant	1	2024/10/25	•		2024 Emergency Response Drill at Liuying Plant	Simulated incident with internal and external notification drill Disaster zone isolation, environmental detection, and hazard zone division drill Emergency team rescue, leak containment, and decontamination drill

Plant	No.	Date of Drill	Location (In-plant/Off-plant)		Emergency Drill Item	Assumed Scenario / Drill Description
			In-plant	Off-plant		
Kaohsiung Plant	1	2024/04/25	•		First Half of 2024 "Self-Defense Firefighting Group Emergency Drill" at Kaohsiung Plant	Fire Extinguisher Hands-on Training
	2	2024/11/8	•		Toxic Chemical Leak	Leak in the aniline raw material pipeline

Plant	No.	Date of Drill	Location (In-plant/Off-plant)		Emergency Drill Item	Assumed Scenario / Drill Description
			In-plant	Off-plant		
International Nitto	1	2024/5/31	•		First Half of 2024 "Self-Defense Emergency Drill" at International Nitto	Response training for electrical fire at Electrolysis Plant and emergency evacuation drill for earthquake
	2	2024/10/8	•		Second Half of 2024 "Self-Defense Emergency Drill" at International Nitto	Emergency response drill for TMAH pipeline leak at Refining Plant and earthquake evacuation drill

Occupational Health Management

General and Special Operation Health Examinations

San Fu Chemical, based on Article 20 of the Occupational Safety and Health Act and the Labor Health Protection Regulations, has established policies for employee health examinations to ensure that all employees have access to comprehensive health checks and are aware of their own health status. General checkup items include adult health screening items such as blood pressure, blood sugar, total cholesterol, liver and kidney function, and chest X-ray to detect potential illnesses early.

Additionally, for employees whose work may pose health hazards—such as operations involving noise, lead, benzene, arsenic, manganese, cadmium, nickel, mercury, and their compounds—a legally mandated special health check is conducted annually. In 2024, 18 employees underwent this check, of whom 15 were classified under Level 1 or 2 health management. These individuals received personal health guidance, related education, and continued follow-up based on the graded health management system. One person was classified as Level 3 under noise operations. After on-site consultation and workplace risk assessment by an occupational physician, it was determined that the employee did not require job reassignment. However, it is still recommended that all employees in noise operation areas wear proper protective equipment and follow a hearing protection program.

Through a comprehensive system of general and special operation health checks and risk-based health management, high-risk groups can be identified early, enabling continued source-level engineering improvements and downstream care to create a healthier, more comfortable work environment. For employees experiencing physical discomfort potentially related to work, the Company continues to develop occupational health care support mechanisms to safeguard their well-being. As a result, there were no reported cases of occupational disease.

Regarding contractor health protection, the plant's security personnel—many of whom are middle-aged or elderly—are included in the Company's employee health examinations under the same care principles. Additional attention is given to prevent overwork and monitor physical health. Beyond security staff, the Company is also launching a health care program for contractor employees in the plant to provide timely support and assistance.

2024 Health Checkup Statistics (Unit: Persons)

Health Examination Categories	Total number of people	Level 1 management	Level 2 management	Level 3 management	Level 4 management
General Health Exams	289	-	-	-	-
Special Operation Health Exam: Noise	5	0	4	1	0
Special Operation Health Exam: Dust	0	0	0	0	0
Special Operation Health Exam: Lead	17	17	0	0	0
Special Operation Health Exam: Arsenic	14	7	5	2	0
Special Operation Health Exam: Manganese	14	13	1	0	0
Special Operation Health Exam: Chromic Acid	1	1	0	0	0
Special Operation Health Exam: Cadmium	14	14	0	0	0
Special Operation Health Exam: Nickel	14	9	5	0	0
Special Operation Health Exam: Mercury	2	2	0	0	0
Special Operation Health Exam: Dimethylformamide	1	1	0	0	0
Special Operation Health Exam: Trichloroethylene	1	1	0	0	0
Special Operation Health Exam: Benzene	1	1	0	0	0
Special Operation Health Exam: Bipyridine	1	1	0	0	0

Four Major Programs

In response to the four major programs proposed by the Occupational Safety and Health Administration—ergonomic hazards, maternal health protection, abnormal workload, and workplace violence—the Company has implemented the following measures:

Ergonomic Hazards

The Company uses ergonomic health risk questionnaires tailored to various job types to assess exposure risk levels. In 2024, four individuals were initially identified as potentially at risk. However, after health consultations by nursing staff and occupational doctors, it was concluded that the risks were not job-related. Regular posture reviews and musculoskeletal assessments are also conducted to reduce the risk of repetitive strain and poor posture injuries.

Maternal Health Protection

When a pregnancy is reported, the employee and their supervisor must complete the "Maternal Health Risk Assessment Form for Female Workers." In 2024, no pregnant employees required protection. Nonetheless, health staff conduct interviews to assess workplace hazards and provide guidance, hazard notification, and if needed, job reassignment to safeguard the physical and mental well-being of pregnant, postpartum, and breastfeeding employees. Information on maternity benefits is also provided.

Abnormal Workload

Each year, employees fill out the “Work Overload Assessment Form.” Employees are classified into risk levels based on personal factors. Those identified as medium or high risk receive consultations and guidance from occupational physicians, while those at low risk are provided health information by nurses and their supervisors are notified for appropriate support.

Workplace Violence and Unlawful Acts

Training on workplace violence prevention is included in onboarding and in-service training. Annually, a company-wide risk identification and assessment session is held. Senior executives sign a declaration of commitment to preventing workplace violence. A safe work environment and adequate staffing are maintained. An investigation team under HR handles workplace abuse complaints to ensure enforcement of the prevention plan and reduce the risk of such incidents.

08

Social Welfare Action

98 hours

98 hours of community service; adopted 0.5 km of roadway for cleaning

NT$150,000

NT$150,000 sponsorship for Shanhua Junior High School baseball team

NT$4.55 million

Total of NT$4.55 million in scholarships for financially disadvantaged students

NT$200,000

NT$200,000 to promote chemistry-related activities

NT$220,000

NT$220,000 in sponsorships for local neighborhoods

3

Three on-site blood-donation drives

Supporting Charitable Causes Through Practical Actions

Our public-welfare initiatives aim to drive positive social change. Through each operating site we give back to surrounding communities, using our resources to fulfill corporate social responsibility. To cultivate talent for the chemical-engineering sector, we have established scholarships in relevant university departments across Taiwan, encouraging excellence, giving back to society, and spreading warmth—so charitable acts are not solitary efforts.

Road-adoption street sweeping to preserve clean air

We maintain roads around the plant entrances and exits, adopting a total of 0.5 km; employees provided 98 hours of community service.

Nurturing young talent with unwavering effort

Sponsored graduation gifts for Siaosin Elementary School and Jiaba Elementary School.
We encourage graduates to embrace new challenges, greater heights, and fresh hopes in the next stage of life.

Tainan Municipal Shanhua District Siaosin Elementary School

Tainan Municipal Shanhua District Jiaba Elementary School

Sponsored Shanhua Junior High School baseball team with NT$150,000, encouraging students to learn and grow in their passion.

Photo with the principal of Shanhua JHS

Since 2015 we have offered NT$150,000 in annual scholarships to Chemical-Engineering-related departments at National Taiwan University, National Cheng Kung University, Tunghai University, and Taipei University of Nursing and Health Sciences; the cumulative amount reached NT$4.55 million by 2024.

Photo taken from the official website of National Taiwan University

Thank-you card from a student of Tunghai University

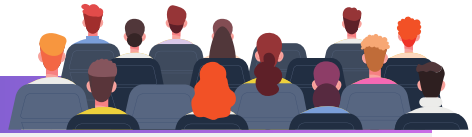
Photo taken from the official website of Taipei University of Nursing and Health Sciences

Photo taken from the official website of National Cheng Kung University

Donated NT$20,000 to the Foundation for Children with Developmental Delay

財團法人中華民國
發展遲緩兒童基金會

Photo taken from the Foundation for Children with Developmental Delay website



Promoting chemistry and broadening education

Education can inspire young minds and deepen students' understanding of science, adding interest to learning. Therefore, San Fu continues to support efforts that promote quality education, such as educational camps and seminars.

- **Sponsored NT$40,000 in advertising for the 2024 Annual Meeting of the Chinese Chemical Society**
- **Sponsored NT$60,000 for the 71st Anniversary Celebration of the Taiwan Institute of Chemical Engineers**
- **Sponsored NT$50,000 to the Chemical Synergy Summit Forum**

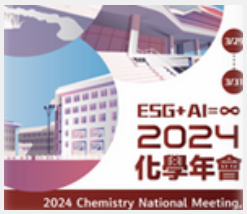


Photo taken from the Chinese Chemical Society Annual Meeting website

Photo taken from the Taiwan Institute of Chemical Engineers website

Photo taken from the Taiwan Chemical Industry Association website

Ongoing community engagement

The Tainan Shanhua Plant began community participation as early as 2001, supporting nearby neighborhoods, in hopes that neighbors can watch over one another and preserve community harmony.

- **Donated NT$10,000 to the Siaosin Community Environmental Protection Volunteer Team**
- **Donated NT$6,000 to the Siaosin Community Development Association**

Donated NT$18,000 to the Liuying District Volunteer Fire Brigade

Image taken from Yahoo News

Donated NT$50,000 to the 2024 Tainan Shopping Festival

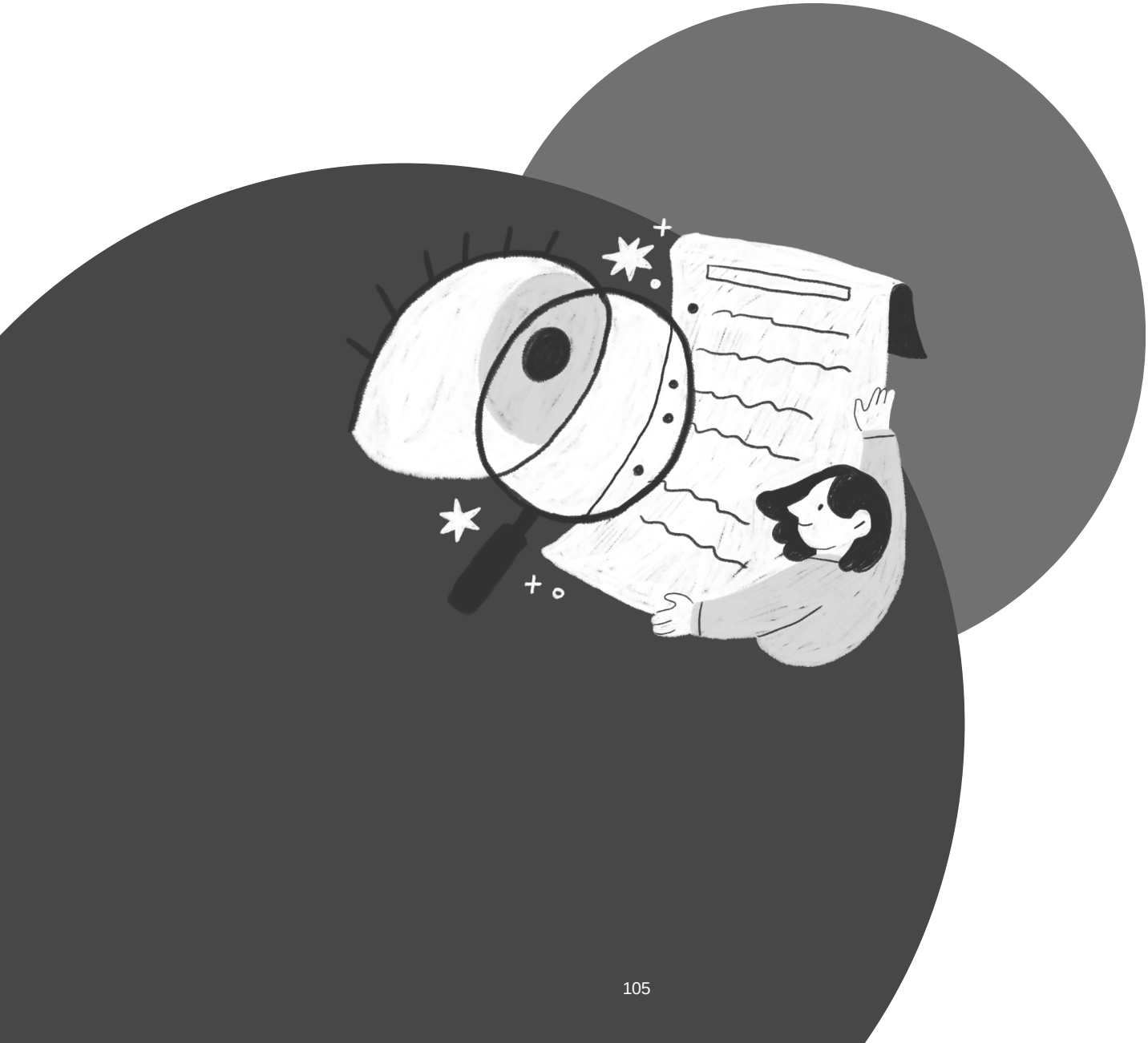
Blood donation with compassion, spreading love together

Employees are encouraged to participate and contribute to charity efforts. Blood drives benefit both ourselves and others, spreading love across Taiwan.

- **Three factory blood donation events held**

09

APPENDIX



GRI Standards Index

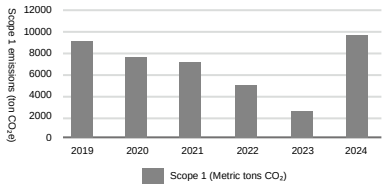
Statement of Use	San Fu Chemical Co., Ltd. reported the content for the period from January 1 to December 31, 2024, in accordance with the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standards	N/A

GRI Standards	Disclosure Item		Page number
GRI 2: General Disclosures 2021	2-1	Organizational details	4-6
	2-2	Entities included in the organization's sustainability reporting	5-6
	2-3	Reporting period, frequency and contact point	4-5
	2-4	Restatements of information	4
	2-5	External assurance	5, 27
	2-6	Activities, value chain and other business relationships	21-26 37-39
	2-7	Employees	78
	2-8	Workers who are not employees	78
	2-9	Governance structure and composition	28-32
	2-10	Nomination and selection of the highest governance body	28
	2-11	Chair of the highest governance body	28
	2-12	Role of the highest governance body in overseeing the management of impacts	7 28-32
	2-13	Delegation of responsibility for managing impacts	7 28-32
	2-14	Role of the highest governance body in sustainability reporting	7, 31
	2-15	Conflicts of interest	29
	2-16	Communication of critical concerns	7 30-31
	2-17	Collective knowledge of the highest governance body	29
	2-18	Evaluation of the performance of the highest governance body	29
	2-19	Remuneration policies	30
	2-20	Process to determine remuneration	30
	2-21	Annual total compensation ratio	30, 78
	2-22	Statement on sustainable development strategy	7
	2-23	Policy commitments	28-32 65-68 79-82
	2-24	Embedding policy commitments	28-32 72-74 86-87
	2-25	Processes to remediate negative impacts	65-66 78-79
	2-26	Mechanisms for seeking advice and raising concerns	65, 79
	2-27	Compliance with laws and regulations	32, 61
	2-28	Membership associations	28
	2-29	Approach to stakeholder engagement	8
	2-30	Collective bargaining agreements	85

GRI Standards	Disclosure Item		Page number	Remarks
GRI 3: Material Topics 2021	3-1	Process to determine material topics	9-10	
	3-2	List of material topics	12-13	
	3-3	Management of material topics	12-13	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	35	
	201-2	Financial implications and other risks and opportunities due to climate change	41-44	
	201-3	Defined benefit plan obligations and other retirement plans	84	
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	70	
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	31, 88	
	205-3	Confirmed incidents of corruption and actions taken	32	
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	32	
GRI 303: Water and Effluents 2018	303-2	Management of water discharge-related impacts	57-58	
	303-3	Water withdrawal	57	
	303-4	Water discharge	58	
	303-5	Water consumption	57	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	44	
	305-2	Energy indirect (Scope 2) GHG emissions	44	
	305-3	Other indirect (Scope 3) GHG emissions	44	
	305-4	GHG emission intensity	45	
	305-5	Reduction of GHG emissions	46-47	
	305-6	Emissions of ozone-depleting substances (ODS)	--	No related discharge substances in any of our plants
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	48	
GRI 306: Waste 2020	306-3	Waste generated	59-60	
	306-4	Waste diverted from disposal	59-60	
	306-5	Waste directed to disposal	59-60	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	78	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	78-82	
	401-3	Parental leave	80	
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	85	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	90	
	403-2	Hazard identification, risk assessment, and incident investigation	90-92	
	403-3	Occupational health services	100	
	403-4	Worker participation, consultation, and communication on occupational health and safety	91-92	
	403-5	Worker training on occupational health and safety	94-95	
	403-6	Promotion of worker health	83-84	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	97	
	403-9	Work-related injuries	92	
	403-10	Work-related ill health	100-101	

GRI Standards	Disclosure Item		Page number	Remarks
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	86	
	404-2	Programs for upgrading employee skills and transition assistance programs	87	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	29 76-77	
GRI 416: Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	32	
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	--	Due to the restrictions on the confidentiality of product formulas, the disclosure of relevant information is omitted.
	417-2	Incidents of non-compliance concerning product and service information and labeling	32	
	417-3	Incidents of non-compliance concerning marketing communications	32	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	32	

SASB Standards: Chemicals
Table 1. Sustainability Disclosure Topics & Metrics

Topic	CODE	METRIC	CATEGORY	Result	UNIT	Page	Remarks
GHG emissions	RT-CH-110a.1	1. Scope 1 GHG emissions	Quantitative	9,701.0	Metric tons CO_2e	45	
		2. Scope 1 GHG emissions subject to emission restrictions	Quantitative	NA	Ratio(%)	--	Not all located in areas subject to emission restrictions set by the EPA
	RT-CH-110a.2	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Qualitative description	1. In late 2019, the Sanfu Shanhua Plant completed the switch from heavy oil to natural gas for boiler combustion, which significantly reduced Scope 1 emissions from 9,090.0 metric tons CO_2e to 7,617.8 metric tons CO_2e in 2020. The MVR system added in 2021 also reduced steam demand, bringing Scope 1 carbon emissions down to 2,638.3 metric tons CO_2e by 2023. 2. Scope 1 emissions increased to 9,700.1 metric tons CO_2e in 2024. In addition to increased production capacity due to product order demand, the primary reason was the inclusion of nitrous oxide product inventory at the Liuke Plant, which added 4,250 metric tons of emissions. The current short-term Scope 1 reduction measures are as follows: a. Diesel forklifts replaced with electric ones b. Company vehicles replaced with hybrid vehicles c. Improvement of nitrous oxide operation SOP to reduce fugitive emissions Long-term plans include the use of emerging technologies such as carbon capture and carbon storage, with rolling adjustments based on government policies. Scope 1 carbon emissions over the years 	N/A	--	
Air quality	RT-CH-120a.1	Air emissions of the following pollutants: NO_x (excluding N_2O)	Quantitative	4.16	Metric tons (t)	48	
		SO_x	Quantitative	0	Metric tons (t)	48	
		Volatile organic compounds (VOCs)	Quantitative	3.97	Metric tons (t)	48	
		Hazardous air pollutants(HAPs)	Quantitative	NA	Metric tons (t)	--	
Energy Management	RT-CH-130a.1	1. Total energy consumed	Quantitative	276,796	Gigajoules (GJ)	56	
		2. Percentage grid electricity	Quantitative	61.68	Ratio(%)	56	
		3. Percentage renewable	Quantitative	0	Ratio(%)	56	
		4. Total self-generated energy	Quantitative	0	Gigajoules (GJ)	56	

Topic	CODE	METRIC	CATEGORY	Result	UNIT	Page	Remarks
Water Resource Management	RT-CH-140a.1	1. Total water withdrawn	Quantitative	469.64	Thousand cubic meters	57	
		2. Total water consumed	Quantitative	134.69	Thousand cubic meters	57	
		Percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	0	Percentage (%)	--	All of them are not located in regions with high or very high baseline water stress.
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	4	Number of cases	61	
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	Qualitative description	1. Add water-saving equipment and enhance communication to raise employees' awareness of water conservation and enhance water conservation efficiency. 2. Effectively manage wastewater from the self-inspection process to ensure that the water quality discharged by the Company meets the national discharge standards and reduces the environmental burden. Please refer to "Sustainable Environment - Water Resource Management" of this report for details.	N/A	57-58	
Hazardous waste management	RT-CH-150a.1	1. Amount of hazardous waste generated	Quantitative	1,615.03	Metric tons (t)	59	
		2. Percentage recycled	Quantitative	0	Percentage (%)	59	
Community relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	Qualitative description	San Fu Chemical's production sites are located near residential communities only in the vicinity of the Tainan Shanhua Plant. Due to the company's operations, there may be actual or potential negative impacts on the community, such as chemical odors or effluent generated during production or discharge. To avoid impacting employee health and local residents' lives, the company conducts continuous monitoring of air and water quality at the plant site every year to reduce the operational impact on nearby residents and communities. These efforts aim to alleviate public concerns regarding air and water pollution around the plant. Equipment leak inspections and irregular patrols are also strengthened. In addition, to promote neighborhood harmony and maintain strong community relationships, the Tainan Plant has been actively engaged in community participation and sponsoring neighborhood activities for the past 24 years. Please refer to the sections "Sustainable Environment – Communication and Response with Nearby Communities" and "Public Welfare Social Action" in this report.	N/A	57-58 103-104	
Labor Safety and Health	RT-CH-320a.1	Directly or indirectly hired employee's 1. Total recordable incident rate (TRIR)	Quantitative	0	Ratio	--	
		2. fatality rate for (a) direct employees and (b) contract employees	Quantitative	0	Ratio	--	
	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	Qualitative description	According to the human factor hazard program, a company-wide ergonomic hazard assessment survey is conducted to evaluate the exposure risk level of operational staff. Employees suspected of being exposed to hazards are referred to the plant physician for consultation and evaluation to determine whether the condition is work-related. No occupational illnesses have occurred. Please refer to the section "Occupational Safety and Health Management – Four Major Programs" in this report.	N/A	100-101	
Product design with efficiency at the use stage	RT-CH-410a.1	Revenue from products designed for usephase resource efficiency	Quantitative	0	NT$	--	The Company has no product with efficiency in the use stage

Topic	CODE	METRIC	CATEGORY	Result	UNIT	Page	Remarks
Chemical Safety and Environmental Management	RT-CH-410b.1	1. Percentage of products that contain Globally Harmonised System of Classification and Labelling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances	Quantitative	97	Percentage (%)	--	
		2. Percentage of such products that have undergone a hazard assessment	Quantitative	100	Percentage (%)	--	
	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human or environmental impact	Qualitative description	1. Meeting the requirements defined in IECQ QC 080000 standard. 2. Formulate hazardous substance management standards in accordance with international hazardous substance regulations such as RoHS and REACH. 3. Periodically provide hazardous substance inspection reports. 4. To achieve the goal of selecting materials that are friendly to the environment, and to comply with international environmental protection regulations (RoHS, REACH, etc.) and customer regulations, we develop cutting-edge technologies/products/services.	N/A	74	
Gene modified organisms	RT-CH-410c.1	Percentage of products by revenue that contain genetically modified organisms (GMOs)	Quantitative	NA	Percentage (%)	--	San Fu Chemical does not produce any genetically modified products
Law and regulatory environment management	RT-CH-530a.1	Discussion of corporate positions related to government regulations or policy proposals that address environmental and social factors affecting the industry	Qualitative description	1. The Company's Shanhua Plant and Liuke Plant have obtained ISO 14001 certification. 2. The Company's operations comply with domestic and international laws and regulations. Key major events can be found in the "About Us" section. 3. The Company is occasionally invited to participate in industry forums. 4. Regular environmental and safety meetings are held to discuss the impacts of environmental regulations. Please refer to the "About Us – Third-party Verification, Compliance with Domestic and International Laws and Regulations, and Key Major Events" and "Sustainable Environment" chapters of this report for details.	N/A	27, 32, 51-52	
Operational Safety, Emergency Preparedness and Response	RT-CH-540a.1	1. Process Safety Incidents Count (PSIC)	Quantitative	0	Occurrence	--	
		2. Process Safety Total Incident Rate (PSTIR)	Quantitative	0	Ratio(%)	--	
		3. Process Safety Incident Severity Rate (PSISR)	Quantitative	0	Ratio(%)	--	
	RT-CH-540a.2	Number of transport incidents	Quantitative	0	Number of cases	--	

Note 1: Process Safety Incidents Count (PSIC): The definition of a process safety incident must meet all the following four criteria:

(a) It must be related to the process; incidents such as accidents in refrigeration systems unrelated to the process or fires in office buildings are not included in the statistics.
(b) The chemical leakage exceeds the minimum threshold for reporting and results in death or injury of employees or contractors, or hospitalization of third parties (non-employees or non-contractors); formal declaration of community evacuation or shelter-in-place; or fire/explosion resulting in direct company losses. Any of the above circumstances must be reported.
(c) The incident occurs in a production or warehouse area.
(d) A major leak occurs, where the leak amount exceeds the threshold within 1 hour.

Note 2: Process Safety Total Incident Rate (PSTIR): Calculated as: (PSIC × 200,000) ÷ total working hours of all workers (employees, contractors, subcontractors).
Note 3: Process Safety Incident Severity Rate (PSISR): Calculated as: (Total severity score of process safety incidents × 200,000) ÷ total working hours of all workers (employees, contractors, subcontractors).
The annual total severity score is derived by grading each process safety incident according to the process safety incident severity classification scale.
Note 4: Number of transportation accidents: Refers to whether a leakage occurred during transportation.

Table 2. Activity Metrics

Topic	CODE	METRIC	CATEGORY	Result	UNIT	Page
RT-CH-000.A	Production by reportable segment	Quantitative	Precision chemicals: 49,506 Commodity Chemicals: 5,054	Metric tons (t)	22	

Table 1-2 Sustainability Disclosure Indicators – Chemical Industry

No.	ACTIVITY METRIC	Type of Indicator	Result	Unit	Page number	Remarks
I	Total energy consumption, percentage of purchased electricity, renewable energy usage rate, and total self-generated energy (Note 1)	Quantitative	1. Total energy consumption: 276,796 GJ 2. Percentage of purchased electricity: 61.68% 3. Renewable energy usage rate: 0% 4. Total self-generated energy: 0 GJ	Gigajoules (GJ), Percentage (%)	56	
II	Total water withdrawal, total water consumption, and wastewater discharge as required by law or disclosed voluntarily.	Quantitative	1. Total water withdrawal: 469.64 thousand cubic meters 2. Total water consumption: 134.69 thousand cubic meters 3. Total wastewater discharge: 334.95 thousand cubic meters	Thousand cubic meters	57	
III	Total hazardous waste generated and percentage recycled in the product manufacturing process, as required by law or disclosed voluntarily.	Quantitative	1. Hazardous waste weight: 1,615.03 metric tons 2. Hazardous waste recycling percentage: 0 %	Metric tons (t), Percentage (%)	59	
IV	Describe the number and rate of occupational accidents	Quantitative	1. Number of occupational accidents: 0 persons 2. Occupational accident rate: 0 %	Percentage (%), Number	92	
V	Operations with significant actual and potential negative impacts on local communities	Qualitative description	See Climate Change Response and Sustainable Environment chapters	N/A	48,58	
VI	Specific and effective mechanisms and measures adopted by the company and its suppliers to reduce negative environmental or social impacts	Qualitative description	See Customer Commitment and Supply Chain Management chapters	N/A	71-74	
VII	Production volume by product category	Quantitative	Precision chemicals: 49,506 Basic chemicals: 5,054	Metric tons (t)	22	

Note 1: The total self-generated energy is defined in accordance with the “Renewable Energy Development Act,” “Implementation Regulations Governing Renewable Energy Certificates,” or relevant sub-laws.

Limited Assurance Report

pwc 資誠

會計師有限確信報告

三福化工股份有限公司　公鑒：

本會計師受三福化工股份有限公司（以下簡稱「貴公司」）之委任，對　貴公司選定民國 113 年度永續報告書所報導之關鍵績效指標（以下簡稱「所選定之關鍵績效指標」）執行確信程序。本會計師業已確信竣事，並依據結果出具有限確信報告。

標的資訊與適用基準

本確信案件之標的資訊係　貴公司上開所選定之關鍵績效指標，有關所選定之關鍵績效指標及其適用基準詳列於　貴公司民國 113 年度永續報告書之「確信項目彙總表」。前述所選定之關鍵績效指標之報導範圍業於永續報告書之「報告書揭露範疇邊界」段落述明。

上開適用基準係為臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」與相關問答集及有關法令之規定、全球永續性報告協會(Global Reporting Initiatives，GRI)發布之最新版 GRI 準則(GRI Standards)與行業補充指南，以及　貴公司依行業特性與其所選定之關鍵績效指標參採或自行設計其他基準。

管理階層之責任

貴公司管理階層之責任係依照適用基準編製永續報告書所選定之關鍵績效指標，且設計、付諸實行及維持與所選定之關鍵績效指標編製有關之內部控制，以確保所選定之關鍵績效指標未存有導因於舞弊或錯誤之重大不實表達。

先天限制

本案諸多確信項目涉及非財務資訊，相較於財務資訊之確信受有更多先天性之限制。對於資料之相關性、重大性及正確性等之質性解釋，則更取決於個別之假設與判斷。

會計師之獨立性及品質管理

本會計師及本事務所已遵循會計師職業道德規範有關獨立性及其他道德規範之規定，該規範之基本原則為正直、公正客觀、專業能力及專業上應有之注意、保密及專業行為。

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pwc 資誠

本事務所適用品質管理準則 1 號「會計師事務所之品質管理」，該品質管理準則規定會計師事務所設計、付諸實行及執行品質管理制度，包含與遵循職業道德規範、專業準則及所適用法令有關之政策或程序。

會計師之責任

本會計師之責任係依照確信準則 3000 號「非屬歷史性財務資訊查核或核閱之確信案件」規劃及執行有限確信案件，基於所執行之程序及所獲取之證據，對第一段所述　貴公司所選定之關鍵績效指標是否未存有重大不實表達取得有限確信，並作成有限確信之結論。

依確信準則 3000 號之規定，本有限確信案件工作包括評估　貴公司採用適用基準編製永續報告書所選定之關鍵績效指標之妥適性、評估所選定之關鍵績效指標導因於舞弊或錯誤之重大不實表達風險、依情況對所評估風險作出必要之因應，以及評估所選定之關鍵績效指標之整體表達。有關風險評估程序（包括對內部控制之瞭解）及因應所評估風險之程序，有限確信案件之範圍明顯小於合理確信案件。

本會計師對第一段所述　貴公司所選定之關鍵績效指標所執行之程序係基於專業判斷，該等程序包括查詢、對流程之觀察、文件之檢查及否適當之評估，以及與相關紀錄之核對或調節。

基於本案件情況，本會計師於執行上述程序時：

- 已對參與編製所選定之關鍵績效指標之相關人員進行訪談，以瞭解編製前述資訊之流程、所應用之資訊系統，以及依關之內部控制，以辨認重大不實表達之領域。
- 基於對上述事項之瞭解及所辨認之領域，已對所選定之關鍵績效指標選取樣本進行查詢、觀察、檢查等測試，以取得有限確信之證據。

相較於合理確信案件，有限確信案件所執行程序之性質及時間不同，其範圍亦較小，故於有限確信案件所取得之確信程度亦明顯低於合理確信案件中取得者。因此，本會計師不對　貴公司所選定之關鍵績效指標在所有重大方面，是否依照適用基準編製，表示合理確信之意見。

此報告不對民國 113 年度永續報告書整體及其相關內部控制設計或執行之有效性提供任何確信。

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有限確信之結論

依據所執行之程序與所獲取之證據，本會計師並未發現第一段所述　貴公司所選定之關鍵績效指標在所有重大方面有未依照適用基準編製之情事。

其它事項

貴公司網站之維護係　貴公司管理階層之責任，對於確信報告於　貴公司網站公告後任何所選定之關鍵績效指標或適用基準之變更，本會計師將不負就該等資訊重新執行確信工作之責任。

資誠聯合會計師事務所

會計師 楊　蕙　慈

中華民國 114 年 7 月 9 日

附錄　確信項目彙總表

編號	確信標的	頁碼	適用基準	其它說明
1	2024 年度暮化廠、柳科廠、國際日東、高雄廠、台北總公司及竹北辦公室內部能源消耗總量為 276,796，單位為 10 億焦耳，各能源分別使用量為： (1) 外購電力 170,737 (2) 天然氣 102,762 (3) 柴油 [1] 3,297 其中外購電力百分比為 61.68%。 [1] 柴油使用量邊界主要使用於本公司發電機用油及自有運輸車輛，包括歐翼車 1 台及槽車 5 台，做為出貨運輸使用。	56	彙整外部供應商繳費單據統計能源使用量總和。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。
2	2024 年度之取水量共計 469.64 百萬公升，分別為： (1)台北總公司：自來水 0.36 百萬公升 (2)竹北辦公室：自來水 0.09 百萬公升 (3)暮化廠：自來水 5.19 百萬公升 地下水 295.15 百萬公升 (4)柳科廠：自來水 16.68 百萬公升 (5)高雄廠：工業用水 72.03 百萬公升 (6)國際日東：自來水 80.14 百萬公升 2024 年度台北總公司、竹北辦公室、暮化廠、柳科廠、高雄廠及國際日東耗水量 [2] 分別為 0.36 百萬公升、0.09 百萬公升、51.42 百萬公升、11.44 百萬公升、41.79 百萬公升及 29.59 百萬公升，共計 134.69 百萬公升。 2024 年度暮化廠、柳科廠、高雄廠及國際日東廢水量分別為 248.92 百萬公升、5.24 百萬公升、30.24 百萬公升及 50.55 百萬公升，共計 334.95 百萬公升。 [2] 耗水量計算為總取水量減廢水量。	57 58	彙整外部供應商繳費單據之自來水及工業用水之取水量總和； 及自行統計並申報經濟部水利署水權資訊網之地下水取水量總和。 自行統計並申報環境保護局之廢(汙)水排放量總和。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。

Limited Assurance Report

編號	確信標的	頁碼	適用基準	其它說明
3	2024 年度暮化廠、柳科廠、國際日東及高雄廠所產生有害廢棄物總量為 1,615.03 公噸，種類如下： (1)其他含有毒重金屬且超過溶出標準之混合廢棄物 0 公噸 (2)廢液 ph 值≦2.0　1,615.03 公噸 (3)其他易燃性事業廢棄物混合物 0 公噸。	59	依據環境保護署「廢棄物清理法」及「事業廢棄物清理計劃書」之規定所清理之有害廢棄物。 委託清運並申報環境保護署事業廢棄物申報及管理資訊系統之有害廢棄物清運量總和。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。
4	2024 年度員工之失能傷害發生次數共 0 次， 2024 年職災綜合傷害指數如下： - 失能傷害頻率(FR) 0 - 失能傷害嚴重率(SR) 0 - 綜合傷害指數(FSI) 0 2024 年職業傷害統計如下： - 職業傷害比率 0 - 損工率(LDR) 0 - 缺勤總天數(天) 0 - 缺勤率(AR%)0	92	依據職業安全衛生法統計之各項數據。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。
5	2024 年度之空氣污染物排放量共計 8.25 噸，分別為： (1)暮化廠： 氮氧化物(NO_x) 4.16 噸 硫氧化物(SO_x) 0 噸 揮發性有機化合物(VOC) 2.23 噸 懸浮微粒(PM) 0.12 噸 (2)柳科廠： 揮發性有機化合物(VOC) 1.34 噸 (3)高雄廠： 揮發性有機化合物(VOC) 0.40 噸 2024 年度暮化廠、柳科廠、高雄廠及國際日東放流水 COD 值平均濃度分別為 32 mg/L、8mg/L、21mg/L 及 70mg/L。	48 58	彙整廠區空氣品質檢測數據及水質檢測數據。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。

編號	確信標的	頁碼	適用基準	其它說明
6	2024 年度供應商年度評比精密化學品 54 家及基礎化學品 63 家，共計 117 家。 2024 年度供應商稽核總計 19 家。	71 72	彙整供應商評比及稽核評鑑數據。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。
7	2024 年度產品產量分別為精密化學品 49,506 噸及基礎化學品 5,054 噸，共計 54,560 噸。	22	彙整各產品類別之入庫產量總和。	「上市公司編製與申報永續報告書作業辦法」第四條第一項規定之應加強揭露永續指標。

2024

SAN FU CHEMICAL CO., LTD.