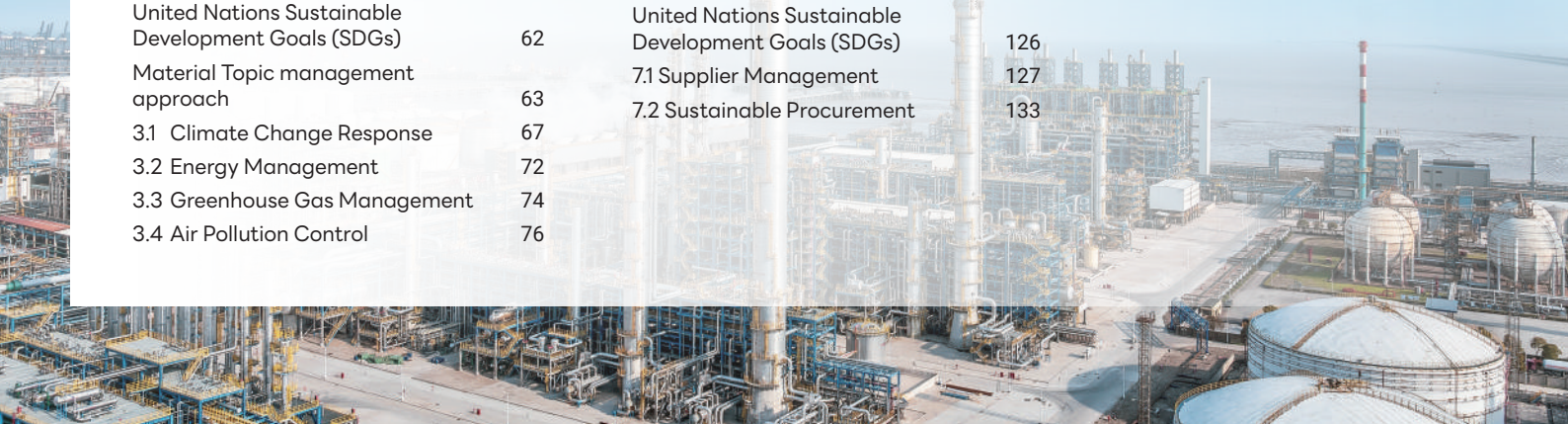
2024 Sustainability Report

國喬石油化學股份有限公司
GRAND PACIFIC PETROCHEMICAL CORPORATION

contents



About This Report

About This Report

GRI 2-1、2-2、2-3、2-5

Editing Principles

Grand Pacific Petrochemical Corporation (hereinafter referred to as "GPPC") has compiled the 2024 Sustainability Report in accordance with the following guidelines and regulations. Adhering to the principles of openness, transparency, and integrity, the Report enables stakeholders to understand GPPC's sustainability strategies, efforts, and performance.

Issuing Unit	Frameworks/Regulations
Global Reporting Initiative, GRI	GRI Sustainability Reporting Standards 2021 Version
Sustainability Accounting Standards Board, SASB	Sustainability Accounting Standards - Chemicals
Financial Stability Board, FSB	Task Force on Climate-related Financial Disclosures, TCFD
Taiwan Stock Exchange	Regulations Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies

The financial performance and related information disclosed in this Report are prepared based on International Financial Reporting Standards (IFRSs), with New Taiwan Dollar as the primary currency.

Reporting Boundary

GPPC operates in the petrochemical industry. The scope of disclosure in this Report covers two operational sites: the Taipei Office and the Kaohsiung Headquarters (Kaohsiung Plant).

The data and information disclosed in this Report are compiled and provided by responsible departments, and the Company's performance on economic, environmental, and social topics is presented in accordance with the requirements of the GRI Standards. The methods used to collect, measure, and calculate the disclosed data and information are primarily based on local or international regulatory requirements.

Reporting Cycle and Coverage Period

The disclosure period covered in this Report is the year 2024 (January 1, 2024 to December 31, 2024). In order to present the full scope of the Company's CSR implementation results and long-term trends, certain topics and information may refer to prior years.

Report Assurance

To ensure the accuracy and transparency of the information disclosed by GPPC, the data and information in this Report have been managed internally by the responsible departments in reference to regulatory standards. Certain information has received external assurance (please refer to the appendix – External Assurance). The relevant data and information have been confirmed by the ESG Report Drafting Team and reviewed and approved by department heads. The Company engaged PwC Taiwan to conduct external independent limited assurance on the selected sustainability performance disclosed in the Report prepared in accordance with the GRI Standards. The assurance was conducted in accordance with the ROC Accounting Research and Development Foundation's Assurance Standard Bulletin No. 3000: "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information." The scope of the assurance covers information for the year 2024 only; information as of December 31, 2023 or earlier is not included in the assurance scope. The assurance statement issued by the certified public accountant, including the assurance scope and conclusion, is detailed in the appendix – Assurance Report.

Publication Date

- Previous publication date: June 2024
- Current publication date: August 2025
- Next publication date: August 2026

Contact Us

If you have any questions about this Report or suggestions for GPPC, please feel free to contact us via the following channels.

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GPPC Company Website

Message from the Chairman

GRI 2-22

Faced with the dual challenges of global industrial shifts and sustainable development, GPPC has adopted "Green Sustainability and High-Value Innovation" as its core strategy. The Company continues to advance in its major products—styrene monomer (SM), acrylonitrile-butadiene-styrene (ABS), hydrogen, and nylon 66—to ensure market competitiveness. At the same time, it is actively developing a low-carbon C3 industry chain in response to the global trend of carbon reduction, driving corporate transformation through innovation and creating new momentum for future growth and sustainability.

In response to the severe and complex internal and external challenges posed by China's overcapacity, tariff trade barriers, and carbon pricing mechanisms, GPPC continues to implement its targets, achieving high standards in workplace safety, voluntary carbon fee reductions, and corporate governance. In recent years, GPPC has allocated several key capital expenditures, such as introducing best available control technologies for energy conservation, carbon reduction, and pollution reduction. The Company continuously holds itself to high standards in hopes of establishing an environmentally friendly image of advanced processes and fulfilling its sacred mission as a model enterprise.

In the face of industry fluctuations, GPPC continues to strengthen its operational resilience through two major transformation strategies: developing new international markets and transitioning toward high-end material applications to maintain operational stability. For instance, the Company is developing bio-based nylon using corn and castor oil as primary raw materials. By replacing petrochemical processes with biotechnology pathways, this can reduce the carbon footprint by approximately 50%. The R&D Center will continue to develop new low-carbon, environmentally friendly, and high-value-added composite products, moving forward on the path of transitioning to a "green petrochemical" industry and sustainable operations.

Sustainability Performance

Economic/Governance Aspect

Creating Diverse Value

Corporate governance is at the core of GPPC's operations. In 2024, the Company enhanced governance policies and procedures, conducted integrity management training, strengthened review mechanisms, and regularly evaluated its "Corporate Mission, Vision, and Values" along with its "Core Competencies" and "Managerial Competencies," requiring all relevant personnel to comply. In addition to disclosing key CSR issues in its publicly issued annual reports, the Company also enhances operational transparency through regular publication of ESG reports.

Environmental/Product Aspect

Protecting a Green Earth

In response to the stringent internal and external environmental and carbon reduction challenges, GPPC uses its cogeneration system to sell surplus electricity to Taiwan Power Company, thereby supplying other electricity users, improving power supply stability, and increasing carbon reduction results. Facing the wave of sustainable transformation, GPPC actively participates in various green power initiatives, including gradually decarbonizing its gas-fired power plant, accelerating the deployment of renewable energy, establishing carbon cycles, and developing a hydrogen energy economy, thereby advancing steadily toward net zero through energy transformation.

Employee/Society Aspect

Promoting a Friendly Society

GPPC places great emphasis on talent development and employee safety and health, setting goals to enhance employees' diverse skills and reduce occupational injuries. The Company continues to promote talent development through competency training. It also integrates ESG into the organization, implements human rights protections, and fulfills its corporate social responsibility.

Response to the United Nations Sustainable Development Goals (SDGs)

Aspect	Implementation of the United Nations Sustainable Development Goals	GPPC's Actions and Annual Achievements
Governance	SDGs 8.7 SDGs 12.4	▪ Completion rate of greenhouse gas inventory implementation by domestic bulk chemical suppliers reached **100%** ▪ **100%** of suppliers signed the Partner Code of Conduct ▪ **100%** of new suppliers in 2024 passed the social and environmental screening criteria ▪ The qualification rate of evaluations for chemical products, contract suppliers, and engineering contractors all reached **100%**
	SDGs 12.7	▪ Proportion of procurement from local suppliers reached **66%**
	SDGs 13.3 SDGs 16.5	▪ Independent directors accounted for **42.8%** of GPPC's Board of Directors, exceeding **one-third** and surpassing legal requirements ▪ Board members actively improved their professional knowledge, with a total of **61 hours** of training ▪ **No** major corruption, violations of ethical business practices, or ethical incidents occurred in 2024 ▪ **No** complaints were received in 2024 regarding violations of customer privacy, information leakage, theft, or loss of customer data ▪ In 2024, **100%** of employees and board members at all operational plants received anti-corruption communication and training ▪ In 2024, procurement from GPPC's suppliers accounted for approximately **40%** of total procurement. **100%** of these suppliers received communication on the Company's anti-corruption policy and procedures and signed the Integrity Commitment Declaration
Environment	SDGs 3.9 SDGs 11.6	▪ Compared to the base year 2020, sulfur oxides (SOx) emissions in 2024 decreased by **60%**, and nitrogen oxides (NOx) emissions decreased by **25%**
	SDGs 6.3~5	▪ Implementation of water resource recycling programs resulted in **204,020 million** liters of recycled water use ▪ In accordance with water resource management policies and commitments, **769 million** liters of water were recycled, achieving a water recycling rate of **85%**
	SDGs 7.1~2	▪ Power saving rate in 2024 was **0.67%**, with an average annual power saving rate of **1.97%** from 2015 to 2024 ▪ Energy conservation and carbon reduction measures in 2024 reduced approximately **436 tons** of CO_2e
	SDGs 12.4~5	▪ Circular reuse was implemented, with a waste recycling rate of **87.22%**
	SDGs 13.1~3	▪ The Company's annual greenhouse gas emissions were 506,600 tons of CO_2e, a reduction of **9.84**% compared to the 2015 base year ▪ This year, the Company actively engaged in discussions and promoted multiple carbon reduction projects, expecting to reduce **1,985.08 tons** of CO_2e, approximately equivalent to the carbon absorption capacity of **5.13** Daan Forest Parks
Society	SDGs1.3	▪ GPPC provides fair and competitive compensation, taking into account job grade, education, and experience. Through performance bonuses and profit-sharing, the Company enhances economic security and organizational cohesion, attracts outstanding talent, and responds to the goal of poverty reduction ▪ **NT$37.23 million** was invested in community support for utility subsidies, scholarships, and nutritional lunches for elderly individuals from low- and middle-income households
	SDGs1.4	▪ Visited the Huashan Social Welfare Foundation and the Down Syndrome Foundation ROC and provided consolation funds of approximately **NT$27,000** ▪ Sponsored approximately **NT$25,000** to train disadvantaged groups in taiko drumming and provided performance opportunities at the Company's year-end party
	SDGs3.4	▪ Provided subsidies for club activities and encouraged employee participation in sports clubs to promote physical and mental health

Aspect	Implementation of the United Nations Sustainable Development Goals	GPPC's Actions and Annual Achievements
Society	SDGs3.8	▪ GPPC provides comprehensive health services, including regular health checkups and on-site physician consultations to ensure employees receive high-quality basic healthcare services ▪ Multiple health promotion activities are held annually, such as myocardial infarction emergency training and heart health seminars, to improve employees' health awareness and self-management capabilities
	SDGs3.9	▪ Strict control over harmful chemicals and noise levels in the work environment, with semi-annual chemical testing for substances such as benzene and butadiene, and special health checkups for specific personnel to reduce health risks caused by hazardous environmental factors
	SDGs4.3	▪ Approximately **NT$3.12 million** in neighborhood scholarships were provided to schools in Kaohsiung's Dashe and Renwu areas
	SDGs4.4	▪ A comprehensive education and training system was established, covering professional skills, management, and environmental safety and health courses, encouraging employees to pursue self-improvement and international learning ▪ A rehire system was implemented to invite retired experts to serve as consultants and retain professional knowledge and experience Training content is continuously adjusted based on course satisfaction surveys to meet employee needs ▪ Through the Dashe Industrial Zone Manufacturers Association, GPPC and Renwu Senior High School jointly established the "Kaohsiung Petrochemical Industry Specialty Program Ren-Da Class"
	SDGs5.1 SDGs5.5	▪ Although the industry characteristics result in most plant positions being held by men, the gender ratio at the Taipei Office and Kaohsiung Headquarters is balanced, highlighting GPPC's commitment to promoting diversity and gender equality and equal workplace opportunities
	SDGs8.8 SDGs8.7	▪ GPPC strictly adheres to labor laws, prohibits the use of child labor and forced labor, and provides legally compliant working hours and leave entitlements. In 2024, **no incidents** of child labor or forced labor occurred ▪ The Company is committed to **non-discrimination** and fair treatment of all employees and job applicants. In 2024, no incidents of discrimination occurred ▪ Certified with **ISO 14001** and **ISO 45001** to ensure employee health and safety, GPPC has established a dedicated occupational safety and health unit. Through regular training and drills, no health- and safety-related disputes or complaints occurred in 2024
Products	SDGs 8.3 SDGs 9.5	▪ Obtained **ABS BIS** certification to expand into the Indian market ▪ Refined the physical properties of heat-resistant ABS and reduced costs to enhance competitiveness ▪ Produced long-chain carbon nylon using batch polymerization kettles, and developed bio-based, renewable nylon with low water absorption, excellent flexibility, chemical resistance, and low-temperature performance ▪ Implemented a long-term diversified layout strategy by investing in a vertically integrated propylene and polypropylene project with a new propane dehydrogenation (PDH) plant in Quanzhou, China, which has successfully commenced commercial operations ▪ Developed high value-added ABS products, such as high-flow ABS for motorcycle shells, ABS for battery casings, and plating-grade ABS
	SDGs 12.4	▪ Conducted regular product testing to comply with **EU RoHS** Directive and **REACH** regulation
	SDGs 12.5	▪ Resource utilization of waste: **172.77 metric tons** of organic sludge and **541.42 metric tons** of inorganic sludge were thermally treated and used as concrete admixture ▪ Waste reduction: waste reuse rate reached **87.22%** ▪ Circular reuse: by monetizing by-products generated in the process—such as hydrogen, sludge microorganisms, and fly ash from cogeneration plants—GPPC practices resource circularity and creates operating income

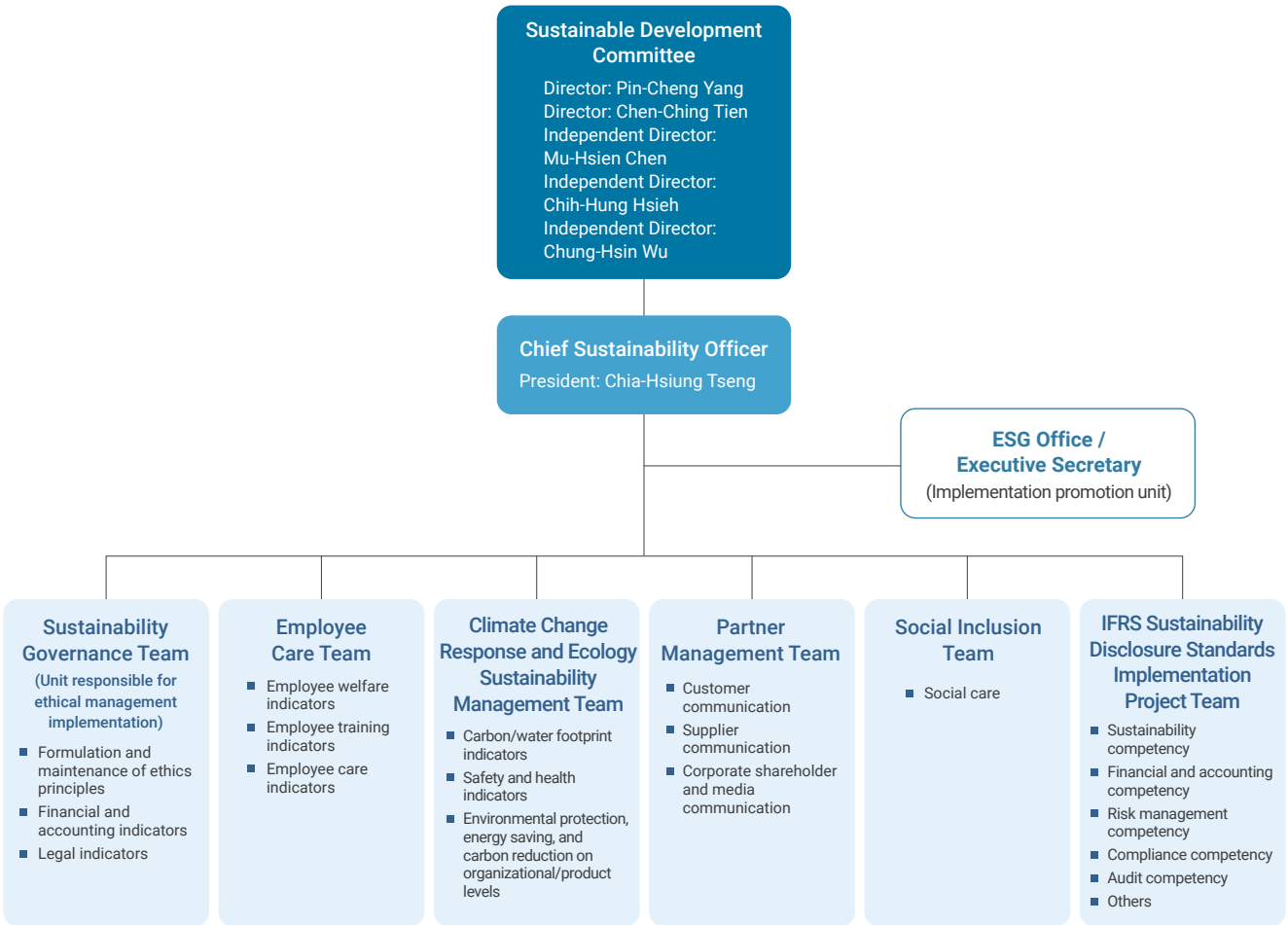
Sustainability Blueprint

GRI 2-12、2-13、2-14

Sustainable Governance

The Board of Directors appointed Mr. Chia-Hsiung Tseng, President of GPPC, as Chief Sustainability Officer to serve as the highest responsible person for the Company's ESG affairs. He leads the Sustainable Development Committee composed of several directors and independent directors to oversee internal sustainability matters, demonstrating the Company's formal integration of sustainable development into its business strategy and strengthening the implementation of ESG-related policies. The Sustainable Development Committee has established various full-time (or part-time) sustainability-related units, encompassing the following six functional teams to carry out project implementation.

Sustainable Development Committee Organizational Chart



The main responsibilities of the Sustainable Development Committee are to formulate sustainable development plans and strategies to guide the Company toward sustainable development. The Committee regularly reviews, tracks, and revises the execution and effectiveness of sustainability efforts to ensure the achievement of expected targets. It is also responsible for overseeing the disclosure of sustainability-related information. Each year, the Committee reports the execution results of sustainability efforts to the Board of Directors and submits the sustainability report, while also offering appropriate recommendations on future directions. The Committee is also responsible for handling other matters as instructed by the Board to promote steady progress on the Company's path toward sustainability.

In 2024, the Sustainable Development Committee reported the status of ESG at the Company to the Board of Directors and provided detailed progress updates and milestone results for each team. The Board reviewed and approved the compilation process of the sustainability report to ensure that the report fully reflects the Company's efforts and achievements in sustainability during the year and communicates information to stakeholders with transparency while fulfilling corporate social responsibility.

Sustainable Development Milestones

The key sustainable development milestones of GPPC over the years are as follows:

2011

- Established the Corporate Social Responsibility Committee

2015

- First published the Corporate Social Responsibility (CSR) report

2022

- First disclosed Task Force on Climate-related Financial Disclosures (TCFD), and in accordance with the framework, identified and managed climate-related transition and physical risks, assessed the financial impacts of high-risk factors, and incorporated climate risk into the Company's risk management system to track and ensure the effectiveness of climate governance
- First prepared report content in accordance with Sustainability Accounting Standards Board (SASB) – Chemical Industry standards and the disclosure indicators specified by the Financial Supervisory Commission for the chemical industry
- Renamed the Corporate Social Responsibility Committee as the ESG Sustainable Development Committee

2023

- The Board of Directors approved the establishment of a functional Sustainable Development Committee to replace the ESG Sustainable Development Committee, with more than half of its members being independent directors

2024

- The Board approved the establishment of full-time (or part-time) sustainability units (the "ESG Office") under the Committee to serve as implementation and execution units, and appointed President Chia-Hsiung Tseng as Chief Sustainability Officer. Six major teams were established to facilitate the execution of sustainability-related affairs
- Introduced the IFRS Sustainability Disclosure Standards

Stakeholder Engagement and Material Topic Analysis GRI 2-29、3-1、3-2

GPPC identifies stakeholders and discloses specific topics in accordance with the AA1000 Stakeholder Engagement Standard, considering external parties that are frequent and significant to the Company's daily operations. The key stakeholders have been determined to include shareholders/investors, customers, employees, suppliers, government agencies, communities/local residents, and media—a total of seven main communication targets.

GPPC discloses company information through open, transparent, and diversified methods to facilitate effective communication with stakeholders and to obtain necessary information and real-time feedback, enabling both sides to achieve efficient and positive interaction. To ensure the effectiveness of communication and facilitate continuous improvement, the Company has designed a comprehensive communication evaluation mechanism to rigorously assess and document feedback from various stakeholders, thereby achieving the expected communication results and enabling deeper and broader interaction between both parties.

Material Topic Identification and Analysis

In 2024, GPPC conducted a material topic analysis in accordance with the GRI 2021 Standards' materiality identification process. After analyzing global sustainability trends and benchmarking leading domestic and international companies, 12 material topics were finalized through the processes of identification, analysis, and confirmation, selected from 17 sustainability issues of concern. These 12 topics were determined as priority disclosure topics for the management approach and related performance for the year. The Company reviews material topics annually and regularly assesses their impact as a basis for planning its sustainability strategy. At the same time, it clearly discloses the positive and negative impacts of each sustainability topic to allow stakeholders to understand the issues they care about.

Material Topic Identification Process

Step 1 Identify Stakeholders and Collect Relevant Topics

- Stakeholder list: Shareholders/ investors, customers, employees, suppliers, government agencies, communities/local residents, and media.
- **17** sustainability issues of concern were selected

- Confirmed the degree of relevance between stakeholders and the Company, and identified seven key stakeholder groups: shareholders/ investors, customers, employees, suppliers, government agencies, communities/local residents, and media
- Based on industry characteristics, social conditions, sustainability trends, and benchmarking against domestic and international peers, 17 sustainability issues of concern relevant to GPPC were selected

Step 2 Analyze and Determine Material Topics

- Issued a questionnaire on stakeholder concerns: A total of **180** questionnaires were collected
- Issued a "Sustainability Issue Impact Assessment Questionnaire" to GPPC's senior management and ESG team members: A total of **65** questionnaires were collected

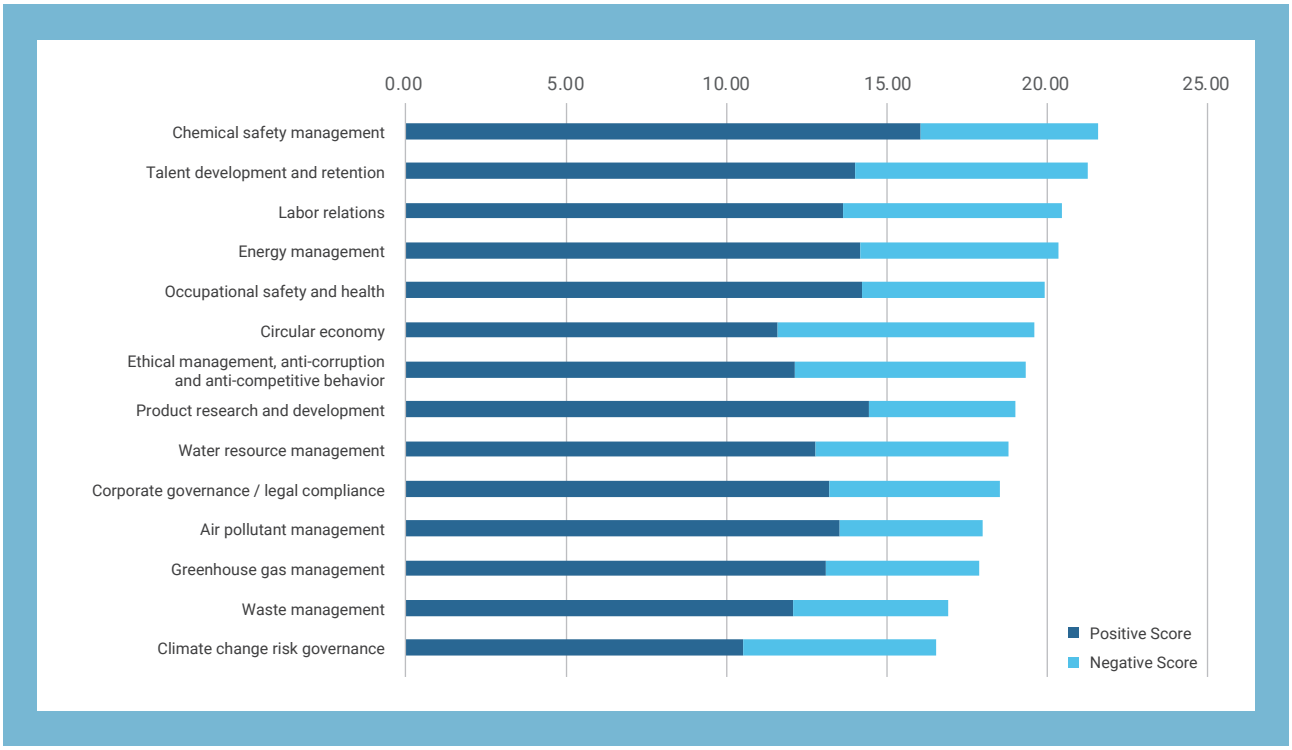
- Based on the questionnaire results, the overall impact of each sustainability topic on "external economy, environment, and people (including human rights)" was analyzed and ranked, and a 2024 material topics bar chart was created for GPPC. After discussion and confirmation, the following topics were newly added to the 2024 material topics compared to 2023: "Talent Development and Retention," "Corporate Governance/Legal Compliance," "Air Pollutant Management," and "Climate Change Risk Governance."
- A total of 12 material topics were identified, which are prioritized and responded to in this report to meet stakeholder expectations.

Step 3 Confirmation and Disclosure

- A material topic ranking chart was created for the identified **12** material topics. Sustainability information was collected and disclosed according to GRI, including management approach and related reporting

- A material topic ranking chart was created for the identified 12 material topics. Sustainability information was collected and disclosed according to GRI, including management approach and related reporting. Other non-material topics deemed worthy of attention by the Sustainability Development Committee are also disclosed in this report to show GPPC's actions. In addition, the Company reports its sustainability development progress to the Board of Directors through the sustainability report, reviews shortcomings, and incorporates them into future management goals, thereby formulating corresponding management strategies.

GPPC 2024 Material Topics Results



Note: The evaluation score is the result of multiplying the probability of occurrence by the degree of positive and negative impact. The top 12 ranked items are the material topics for 2024.

Aspect	GPPC Material Topics	
Corporate Governance (G)	• Ethical management, anti-corruption and anti-competitive behavior	• Corporate governance / legal compliance
Environment (E)	• Chemical safety management • Energy management • Water resource management • Air pollutant management	• Greenhouse gas management • Waste management • Climate change risk governance
Employees (S)	• Talent development and retention	• Occupational safety and health
Products (P)	• Circular economy (materials)	

Stakeholders	Importance of Stakeholder to GPPC	Topics of Concern	2024 Communication Methods and Frequency	2024 Actual Implementation of Engagement Channels and Communication Outcomes
Shareholders and investors	Shareholders and investors are of extremely high importance to the Company. They not only provide funding but also influence corporate governance, strategic direction, and market reputation.	▪ Ethical management ▪ Anti-corruption and anti-competitive behavior ▪ Air pollutant management ▪ Corporate governance / legal compliance	▪ Investor service email (occasional) ▪ Market Observation Post System (published as required) ▪ Spokesperson direct phone line (occasional) ▪ ESG report (annually) ▪ Website ESG section (occasional)	▪ Shareholders' meeting held on June 7 ▪ Online investors' conferences held on June 18 and November 27 ▪ Implemented sound corporate governance and risk management mechanisms to ensure no corruption incidents occur
Customers	Customers are critically important to GPPC, as they are not only the primary users of the Company's products and main source of revenue but also a key driver for product improvement and corporate growth.	▪ Waste management ▪ Chemical safety management ▪ Occupational safety and health	▪ Annual customer satisfaction survey (annually) ▪ Customer ESG audits (as needed) ▪ Exhibitions (as needed) ▪ Material Safety Data Sheets (as needed) ▪ ESG Report (annually)	▪ Number of complaints regarding infringement of customer privacy or loss of customer data: 0 ▪ In 2024, no lawsuits occurred due to violations of product specifications, voluntary standards, or product labeling that resulted in penalties.
Employees	Employees are GPPC's most valuable asset. Therefore, providing comprehensive benefits and care, as well as an environment and opportunities that support self-fulfillment, is a key to the Company's continued growth.	▪ Chemical safety management ▪ Air pollutant management ▪ Greenhouse gas management	▪ Employee Welfare Committee (quarterly) ▪ Labor-Management Meetings (quarterly) ▪ Education and training (occasional) ▪ Employee suggestion mailbox (real-time) ▪ Employee complaint hotline (real-time)	▪ A total of 4 quarterly meetings of the Employee Welfare Committee and Labor-Management Meetings were held. ▪ Education and training hours reached 36 hours, with 909 total participants. ▪ Number of employee feedback letters: Number of employee complaints: 0
Suppliers	Suppliers or contractors have a critical impact on GPPC's operations and competitiveness, as they provide the materials, parts, equipment, or services needed to support the Company's normal operations.	▪ Occupational safety and health ▪ Chemical safety management ▪ Ethical management, anti-corruption and anti-competitive behavior ▪ Greenhouse gas management	▪ Supplier ESG advocacy (annually) ▪ Supplier ESG evaluation (annually) ▪ Supplier carbon emissions survey and reduction – TCFD (annually) ▪ Safety Data Sheets (SDS) (annually)	▪ New supplier ESG advocacy (including ISO 14064-1 and GHG Protocol) ▪ New suppliers are audited using the "New Supplier Evaluation Form" as an audit criterion
Government Agencies	Government agencies are highly important to GPPC, as they act as regulators and promoters in terms of laws, policies, resources, and the market environment.	▪ Chemical safety and management ▪ Greenhouse gas management ▪ Waste management	▪ ESG Report (annually) ▪ Waste/wastewater/air pollution declaration and inspection (occasional) ▪ Government policy advocacy (as needed) ▪ ESG email box set up on the Company website (as needed) ▪ Labor condition inspections (occasional)	▪ Completed greenhouse gas inventory ▪ Average annual electricity saving rate exceeds 1% ▪ Reduced waste and water use intensity ▪ No major penalties for violations of environmental protection laws ▪ On-site services provided by full-time occupational health nurses and physicians
Community/ Local Residents	The importance of communities and public welfare organizations to GPPC continues to grow, especially as corporate social responsibility and sustainable operations receive increasing attention.	▪ Air pollutant management ▪ Waste management ▪ Occupational safety and health	▪ Conversations / proactive visits (occasional) ▪ Industrial zone service center (occasional) ▪ Industrial zone manufacturers' association (annually)	▪ Established "Charity Club" to care for economically disadvantaged groups ▪ Assisted social organizations in providing after-school tutoring for underprivileged children ▪ Organized blood donation events ▪ Provided local resident subsidies for water and electricity fees through the manufacturers' association ▪ Provided scholarships for elementary and junior high school students ▪ Subsidized children's books, insurance, and tuition and miscellaneous fees
Media	Proactively issued press releases and shared company updates through media coverage to inform the investing public.	▪ Air pollutant management ▪ Product research and development ▪ Labor relations ▪ Occupational safety and health ▪ Corporate governance / legal compliance	▪ Clarified incorrect reports (occasional) ▪ Proactively issued 6 press releases	▪ Issued a total of 7 press releases

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Corporate Governance

2024 Highlight Performance

Independent directors accounted for **42.8%** of GPPC's Board of Directors, exceeding one-third and surpassing legal requirements

Board members actively improved their professional knowledge, with a total of **61** hours of training

No major corruption, violations of ethical business practices, or ethical incidents occurred in 2024

No complaints were received in 2024 regarding violations of customer privacy, information leakage, theft, or loss of customer data

In 2024, **100%** of employees and board members at all operational plants received anti-corruption communication and training

In 2024, procurement from GPPC's suppliers accounted for approximately **40%** of total procurement. **100%** of these suppliers received communication on the Company's anti-corruption policy and procedures and signed the Integrity Commitment Declaration

United Nations Sustainable Development Goals (SDGs)

- 1.3 Ethical Management SDGs 16.5
- 1.5 Risk Management SDGs 13.3

Management Approach

Material Topic: Ethical management, anti-corruption and anti-competitive behavior

Impact Description

Positive Impact Description

Establishing corporate trust and a reliable business reputation, as well as communication and training on relevant integrity and ethical policies and procedures, ensures compliance with corporate governance and ethical business conduct, providing reassurance to investors, customers, and partners.

Negative Impact Description

If a sound ethical management system and procedures are not established, and incidents such as corruption occur, it may damage the Company's image and affect customer and investor decision-making.

Policies and Commitments

The Company, in accordance with the Company Act, Securities and Exchange Act, and relevant governance codes, has established the "Ethical Corporate Management Best Practice Principles" and "Corporate Compliance Operations," committing to investigating violations and protecting whistleblowers. To prevent the abuse of power for undue benefit or the leakage of customer privacy, the Company has also established clear codes of conduct. Through the "Code of Conduct for the Execution of Official Duties," fair trade and anti-corruption clauses have been incorporated into operational procedures, accompanied by promotion and training to ensure implementation.

Goal Setting and Progress

	Mid-to-Long-Term Targets (2027 - 2030)	Short-Term Targets (2025 - 2026)	2024 Performance
New employees signed the Code of Ethical Conduct and Ethics Commitment Letter upon onboarding.	100%	100%	100%
Percentage of employees who participated in courses related to ethical management	100%	100%	Total training hours: 478 hours, with a total of 383 course participants.
Major ethical management risk incidents	0 cases	0 cases	0 cases

Responsible Unit

General Management Division

Resources

- Appointed dedicated personnel to coordinate the implementation and review of ethical management–related systems.
- Arranged for employees to complete training on ethics and integrity topics each year.
- Established a whistleblower handling system and protection mechanism to strengthen the internal risk defense line of the organization.
- Incorporated ethical standards into daily operational processes, with supervisors assisting in implementation.

Grievance Mechanism

- An independent whistleblower email and reporting hotline operating 24 hours a day are set up and published on the Company's official website (Stakeholder Section).
- Complaint Hotline: 02-2175-4567
- Complaint Mailbox: audit@gppc.com.tw

Action Plan

Negative Impact Management

If a sound ethical management system and procedures are not established, and incidents such as corruption occur, it may damage the Company's image and affect customer and investor decision-making.

Positive Impact Management

Established procedural documents such as "Corporate Compliance Operations" to effectively reduce corruption risks caused by differences in individual conduct.

Effectiveness Evaluation

Regularly review relevant procedural documents and revise the "Ethical Management Operating Procedures and Code of Conduct."

Material Topic: Corporate governance / legal compliance

Impact Description

Positive Impact Description

The Company's operations follow corporate governance and the requirements of relevant local laws and regulations in all aspects, thereby strengthening the trust of investors and stakeholders, enhancing the Company's overall performance and market value, and establishing a sound business reputation.

Negative Impact Description

If the Company's operations do not comply with corporate governance and local legal and regulatory requirements, it may not only be subject to penalties and liabilities imposed by local competent authorities but also affect the perception of key stakeholders, thereby increasing external social and internal management costs.

Policies and Commitments

The management of Grand Pacific Petrochemical Corporation has long been committed to the transparency of operational and financial information. With ethical corporate standards and commitments, the Company aims to achieve sound corporate governance. Upholding the management philosophy of "Modesty leads to harmony; openness and sincerity build trust," the Company demonstrates humility in appearance and integrity at its core to seize business opportunities and give back to society. Its products must continually evolve in manufacturing technology, uphold rigorous quality standards, and provide timely and comprehensive after-sales service. The Company strictly adheres to laws and regulations and values information disclosure and transparency to gain recognition from relevant stakeholders and the general public. All Company operations must comply with corporate governance and relevant local legal and regulatory requirements. The "Ethical Management Operating Procedures and Code of Conduct" and "Corporate Compliance Operations," among others, have been established and incorporated into operational procedures, accompanied by promotion and training to ensure implementation.

Goal Setting and Progress

	Mid-to-Long-Term Targets (2027 - 2030)	Short-Term Targets (2025 - 2026)	2024 Performance
Regulatory Compliance Completion Rate	100%	100%	100%
Track and amend internal systems or related contract content to comply with regulatory changes	-	-	▪ The "Company Workplace Unlawful Infringement Prevention Procedures" have been updated in accordance with the 4th edition of the Guidelines for the Prevention of Unlawful Infringement during Duty Execution (February 2025) ▪ Amended the "Ethical Management Operating Procedures and Code of Conduct"
Provided the latest relevant legal information to each plant for compliance identification	100%	100%	100%
Number of Serious Violations in the Area of Business Ethics	0 cases	0 cases	0 cases

Responsible Unit

Audit Department

Resources

- The legal department is responsible for daily compliance reviews and internal consultation support.
- External professional consultants are engaged to assist in the analysis and response to major regulations.
- Occasional legal briefings and guidance sessions are held for business practices.
- Interdepartmental collaboration is used to conduct rolling reviews of systems to maintain operational compliance.

Grievance Mechanism

Whistleblowers may report under their real name or anonymously and are required to provide specific information and documents. For named reports, the whistleblower must provide their name and contact information.

- Complaint Mailbox: audit@gppc.com.tw
- Written Reports: Audit Office, Grand Pacific Petrochemical Corporation, 8F, No. 135, Dunhua North Road, Songshan District, Taipei City
- On-site Report Receiving Unit: The Company's Audit Department

Action Plan

Negative Impact Management

Regularly hold legal briefings to report the results of special audits on violations and revise relevant management systems accordingly.

Positive Impact Management

- Annually conduct training on the prevention of insider trading, procedures for handling internal material information, and related laws and regulations to strengthen awareness and dissemination.
- Annually hold training on labor laws and rights protection.

Customer Effectiveness Evaluation

- A dedicated person and corporate governance task force have been established to implement corporate governance in areas such as ethical management, legal compliance, meeting proceedings, and information disclosure.
- Various Board regulations have been established, with self-evaluation conducted annually and external professional agencies commissioned to conduct Board performance evaluations every three years.
- The effectiveness of operational procedures is evaluated through external corporate governance assessments and the internal control system.
- A Board-level Sustainability Development Committee has been established, which holds at least one meeting annually, and the convener reports meeting agenda items to the Board of Directors.

1.1 About Grand Pacific Petrochemical Corporation (GPPC)

GRI 2-1、2-6、2-28

Since the establishment, GPPC has upheld the philosophy of continuous growth and optimization of the business environment, focusing on the production and vertical integration of styrene monomer (SM) and its downstream product acrylonitrile-butadiene-styrene copolymer (ABS). The Company continues to promote efficient manufacturing, strict cost control, and diversified business development, actively expanding into cogeneration, thermal energy supply, and nylon-related businesses to enhance overall operational resilience and sustainable competitiveness.

The Company implements the core values of "continuous innovation in process technology, absolute rigor in quality control, and prompt and thorough after-sales service," and follows the quality commitment of "united as one, consistent in word and deed—if you are not satisfied, I am not successful," striving to provide customers with the best product and service experience. In the face of external challenges and stakeholder expectations, GPPC will continue to move forward steadily and act proactively to gain investor trust, implement corporate governance and social responsibility, and move toward the goal of sustainable operation.

GPPC's headquarters is located in Kaohsiung City. As the key operational site, the Kaohsiung Plant has obtained ISO 9001, ISO 14001, and ISO 45001 certifications and implements target management through the computerized German SAP information system. Inspired by the above quality philosophy, the Company expects both its core business and non-core investments to generate optimal operational synergy, deliver outstanding performance, and remain firmly established and thriving in the industry.

Grand Pacific Petrochemical Corporation

Headquarters address: No. 4, Xinggong Road, Dashe District, Kaohsiung City

Taipei Office: 8F, No. 135, Dunhua North Road, Songshan District, Taipei City

Industry: Manufacture of Chemical Materials

Ownership and Legal Form (Stock Code): 1312

Capital Amount: NT$11,266,203,280

Number of Employees: Total Group: 1,303; Scope covered in this report: 425

Contact Number: (02)2175-4567

Date of Establishment: September 25, 1973

Listing Date: December 21, 1988

Company Milestones

1973
Grand Pacific Petrochemical Corporation (GPPC) was founded under the name of Delta Petrochemical Corporation.

1974
Delta Petrochemical's styrene monomer plant No. 1, being the first in Taiwan, was completed and started production.

1981
Delta Petrochemical's styrene monomer plant No. 2 was completed.

1984
- Following a corporate reorganization, Delta Petrochemical became Grand Pacific Petrochemical Corp.
- The company's first ABS/SAN plant was completed. The plant marked the first step in Grand Pacific's product diversification and vertical integration strategy.

1987
Expanded the ABS/SAN plant to increase annual production capacity.

1988
GPPC shares were officially listed on the stock exchange.

1990
Acquired GPPC Chemical, which produces HIPS.

1991
- Acquired BC Chemical, which produces HIPS/GPPS.
- Invested in the establishment of Grand Pacific Chemical (Thailand) Co., Ltd. and acquired a local ABS production plant.

1992
- Expanded ABS/SAN production capacity.
- Invested in the establishment of CITC Enterprise in Malaysia, engaged in plastic color compounding.

1994
- Expanded ABS/SAN production capacity.
- Upgraded the production process of SM Plant 2.

1995
Acquired the hydrogen business of Delta Gas Products.

1996
- Established Zhenjiang GPPC Chemical Co., Ltd. in Jiangsu Province.
- Expanded ABS annual production capacity at Grand Pacific Chemical (Thailand) Co., Ltd.

1997
- Obtained ISO 9002 and ISO 14001 registration from the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs.
- Actively engaged in non-core diversified investments.

1999
Completed construction of the SM-3 Plant.

2000
- Expanded BC Chemical's annual HIPS production capacity.
- Expanded annual SAN/ABS production capacity at Zhenjiang GPPC Chemical Co., Ltd.

2001
Obtained ISO 9001:2000 registration from the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs.

2002
Expanded annual SAN/ABS production capacity at Zhenjiang GPPC Chemical Co., Ltd.

2003
Obtained Sony "Green Partner" certification and SGS OHSAS 18001 registration.

2004
Styrene Monomer Plant 1 was officially dismantled; the Company held a grand ceremony to mark the conclusion of Taiwan's first styrene plant.

2005
Obtained ASUS "Green Environmental Management System" certification.

2008

- Completed the implementation of the German SAP information system.
- Signed a merger agreement for the Zhenjiang subsidiary with CHIMEI Corporation in April; the Company holds a 30.4% equity stake in the surviving company after the merger.
- The Specialty Chemicals Business Division was established in August.

2007

- Promoted the integration of three ISO systems, and transferred ISO 9001:2000 and ISO 14001:2004 certification to SGS Taiwan.
- Expanded annual SAN/ABS production capacity at Zhenjiang GPPC Chemical Co., Ltd.
- Commenced construction of the cogeneration plant.

2006

BC Chemical converted the original GPS production line into SAN. GPPC expanded its annual ABS production capacity and introduced a new ABS R&D grade to meet customer needs.

2009

- Grand Pacific Chemical (Thailand) Co., Ltd. was approved for dissolution by the Ministry of Commerce of Thailand in August.
- The cogeneration plant steam production facility successfully completed trial operation in October.

2010

- Completed construction of the cogeneration plant, which officially commenced operation in May.
- Zhenjiang GPPC Chemical Co., Ltd. and Zhenjiang CHIMEI Co. officially merged on July 1.
- Debottlenecking and capacity expansion of the SM-3 plant was completed in December, increasing annual SM production.

2011

- Strengthened corporate governance by adding more than two independent directors.
- Established a Remuneration Committee.

2016

The second Nylon 66 production line commenced operation, marking the Company's entry into the engineering plastics and industrial yarn industries.

2014

Nylon 66 products passed UL high-temperature RTI certification.

2013

To strengthen corporate governance, an Audit Committee was established to replace the function of Supervisors.

2012

- The Nylon Business Division was established in January and began official production in July.
- Completed ABS capacity expansion, increasing annual production.
- Subsidiary GPPC Chemical Corp. merged with BC Chemical Corp., with GPPC Chemical Corp. as the surviving company.

2018

Joint venture Zhangzhou CHIMEI Chemical was established with CHIMEI Corporation, mainly producing ABS products; the Company holds a 30.4% stake.

2020

Wholly owned Quanzhou Grand Pacific Chemical Co., Ltd. was established in Fujian Province, mainly engaging in the production of propylene via propane dehydrogenation, polypropylene, and hydrogen products.

2023

Conducted a capital increase by issuing 200,000 thousand new shares; paid-in capital reached NT$11,266,203,280.

2024

ABS products obtained India BIS certification.

Association Memberships

GPPC actively participates in public (industry) associations and public hearings and consultation meetings related to environmental regulations in the petrochemical and cogeneration industries. By sharing management knowledge and practical experience, the Company joins peers in jointly responding to sustainability responsibilities. The associations in which GPPC participated in 2024 are as follows:

Name of Association / Organization	Membership Qualification	Position Held
Petrochemical Industry Association of Taiwan	Petrochemical-related industry operators	Director
Dashe Petrochemical Industrial Zone Manufacturers' Association	Manufacturers in Dashe Petrochemical Industrial Zone	Member
Chinese Society for Quality	Those intending to become a member of the Chinese Society for Quality	Member
Industrial Safety and Health Association of the Republic of China	Enterprises related to industrial safety and health	Member
Renwu and Dashe Industrial Zones Labor Safety and Health Promotion Association	Operators in Renwu and Dashe Industrial Zones	Member
Taiwan Responsible Care Association	Chemical manufacturing-related enterprises that agree with the association's objectives	Executive Director
Taiwan Plastics Industry Association	Enterprises engaged in manufacturing, importing, selling, or related businesses of plastic raw materials	Member
Taiwan Safety Education Research Association	Enterprises or individuals who support the association's objectives	Member
Taiwan Institute of Chemical Engineers	Enterprises or individuals who support the institute's objectives	Member
Chinese International Economic Cooperation Association	Enterprises or individuals who support the association's objectives	Member
Taiwan Chemical Industry Association	Relevant enterprises or individuals who support the association's objectives	Member
Institute of Internal Auditors - Chinese Taiwan	Relevant enterprises or individuals who support the association's objectives	Member
Chinese Industrial Machinery Association	Relevant enterprises or individuals who support the association's objectives	Member
Taiwan Cogeneration Association	Relevant enterprises or individuals who support the association's objectives	Member

Brand Value

In pursuit of sustainable corporate operations, GPPC is internally striving toward goals such as increasing production output, reducing production costs, enhancing sales competitiveness, and expanding market share. Externally, the Company proactively seeks business alliances, improves industrial structure, and develops new products with high added value. In the field of ABS plastics, the Company aligns with the pace of domestic industrial development and will continue to develop new products, expand new customer bases, and adjust its production and sales portfolio to meet the needs of customers across the Taiwan Strait and in the Greater China region, thereby enhancing product added value (for detailed key work items, please refer to the table below). In the future, the Company will use styrene as its core strategic niche, extending its business reach and enhancing operational resilience.

In addition to enhancing brand value, meeting customer needs, and responding to international market competition, GPPC's technical service team selects experienced and outstanding engineers to constantly improve services related to customer technology and product applications. Going forward, the Company will continue to seek other better development opportunities to ensure GPPC's competitiveness remains long-lasting and as solid as a rock.

Optimize latex and large/small particle rubber technologies

Continue optimizing PBL large and small particle latex to improve the coloring quality of ABS and actively develop high-temperature nylon engineering plastics. This initiative also aims at energy conservation, carbon reduction, and reduction of exhaust emissions to implement sustainable processes.

Improve grafted latex quality

Improve the PBL rubber grafting system to enhance the coloring quality, plating-grade appearance, and flame retardancy of ABS products, meeting the material requirements of electrical applications and high-impact performance.

Develop recycled plastic solutions

Invest in product development of post-consumer recycled plastics (PCR ABS), which not only reduces plastic raw material waste and energy consumption, but also contributes to carbon reduction and the realization of a circular economy.

Expand the high-performance nylon product line

Expand the market applications and production technologies for high-temperature nylons such as Nylon 66; develop engineering plastics with characteristics such as ultra-toughness, thermal stability, flexibility, and water vapor permeability—such as PPO materials—to increase product added value and market competitiveness.

Deepen raw material supply deployment

In response to the long-term diversification strategy, the Company has invested in raw material facilities in China, including the construction of a new propane dehydrogenation (PDH) unit and an integrated polypropylene (PP) chemical plant, while actively expanding upstream integration into styrene monomer (SM) and polypropylene copolymers.

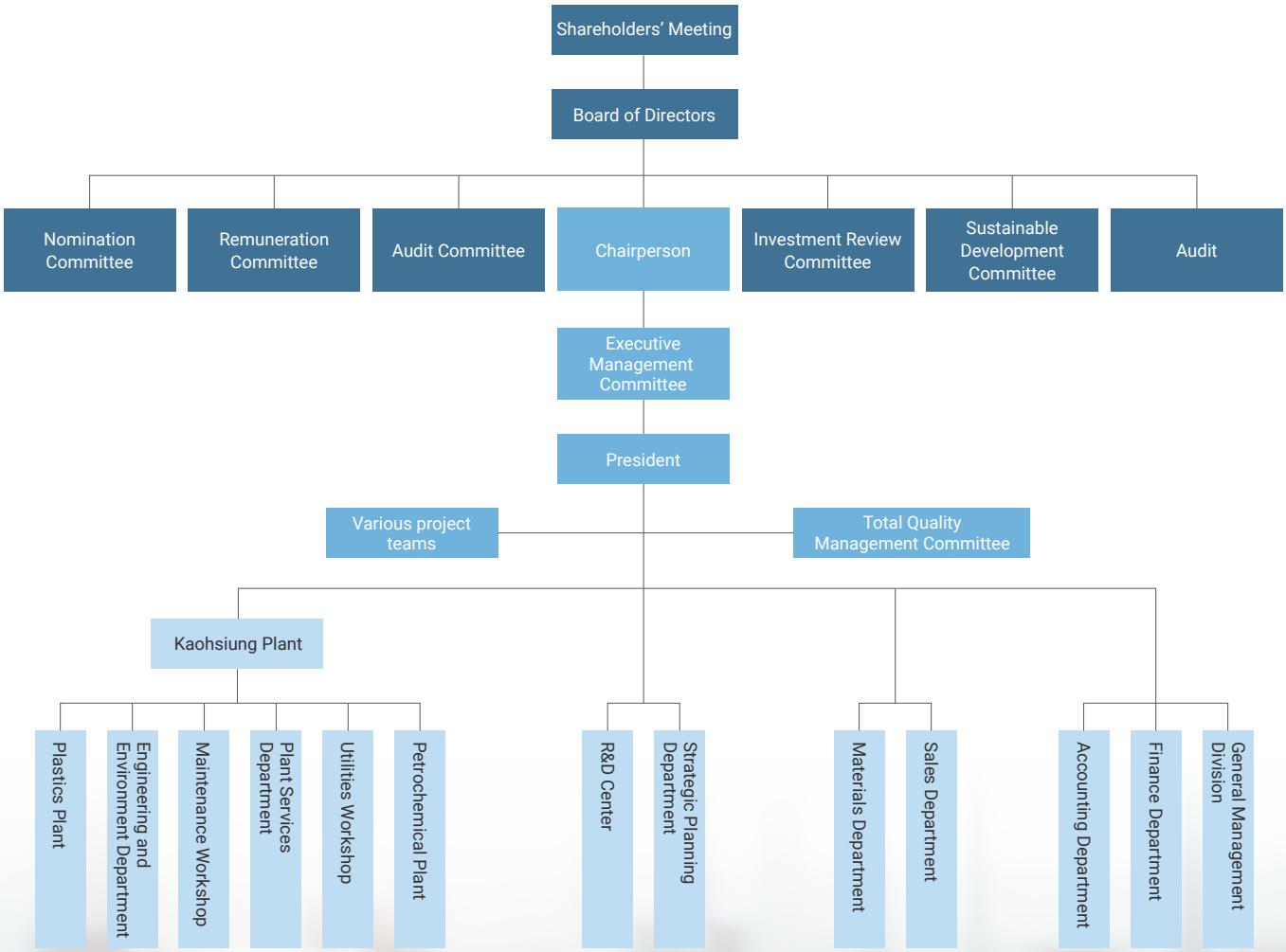
1.2 Governance Structure

GRI 2-9、2-16

The governance structure of Grand Pacific Petrochemical Corporation (GPPC) is based on the shareholders' meeting as the highest decision-making body, composed of all shareholders. The shareholders' meeting elects directors to form the Board of Directors, which is responsible for decision-making and execution of the Company's operations. Under the Board, there are the Sustainable Development Committee, Nomination Committee, Remuneration Committee, and Audit Committee, all composed of independent directors and authorized by the Board with supervisory functions. The Sustainable Development Committee is committed to promoting the Company's ESG strategy, supervising the formulation and implementation of sustainability policies, and is concurrently led by President Mr. Chia-Hsiung Tseng as Chief Sustainability Officer, the highest person in charge of internal ESG affairs, ensuring the Company continues to improve across environmental, social, and governance dimensions while staying aligned with international sustainability trends.

The Chairperson of the Board serves as the Chair of the Board of Directors, represents the Company externally, and is the highest-ranking officer of the Company, but does not concurrently hold any executive position in order to maintain separation of powers and governance independence. In addition, the Company's directors also participate irregularly in corporate governance and ESG education and training organized by the Securities and Futures Institute (SFI) and the Taiwan Corporate Governance Association (CGA), to deepen governance knowledge and strengthen sustainable management capabilities.

Organizational Chart of Grand Pacific Petrochemical Corporation



1.2.1 Board of Directors

GRI 2-10、2-11、2-12、2-15、2-17、2-18、2-19、2-20、405-1

Board Composition and Implementation of Board Diversity Policy

GPPC has established its Board of Directors in accordance with the Articles of Incorporation. In 2024, the Board consisted of seven directors, including three independent directors. The proportion of independent directors exceeds the legal requirement, demonstrating the Company's emphasis on a sound governance structure. The composition of the Board complies with Article 23, Chapter 3 of the Company's "Corporate Governance Best Practice Principles." In addition to considering the Company's business model and development strategy, diversity and professionalism are core principles to enhance decision-making quality and the sustainable value of the Company.

The Company follows the selection principles below to establish a Board structure that is inclusive and forward-looking:

Basic Qualifications and Values

Considering various dimensions such as gender, age, nationality, and cultural background to enrich the Board's perspectives.

Professional Knowledge and Skills

Including diverse areas such as law, accounting, industry experience, finance, risk management, marketing, and technology to effectively support the Board in its decisions regarding corporate strategy, risk, and capital allocation.

In 2024, the age distribution of Board members was as follows: three directors aged 51–60 (42.9%) and four directors aged 61–70 (57.1%). In addition, two independent directors have served terms of 4 to 6 years, and one independent director has served a term of 1 to 3 years.

GPPC has long paid attention to gender equality and board diversity, actively implementing the principle of gender balance. As of 2024, female representation on the Board reached 14%. Ms. Te-Hsin Chiu serves as Chairperson, demonstrating the key influence of female leadership in the Company's governance and echoing the global sustainable development initiative of "enhancing women's roles in senior decision-making positions."

Board Member Profiles

Name	Gender	Age (years)	Position	Major Academic and Career Experience	Professional Expertise
Chiu, Te-Hsin	Female	51~60	Chairperson	Master's in Accounting, Case Western Reserve University, USA	Leadership and decision-making, business management, operational judgment, and experience in commerce and business
Yang, Pin-Cheng	Male	61~70	Director	Master's in Chemical Engineering, National Cheng Kung University	Leadership and decision-making, business management, operational judgment, and experience in commerce and business
Tian, Chen-Ching	Male	61-70	Director	Master's in Law, Fu Jen Catholic University	Legal affairs, technology industry management, ESG, and corporate governance
Chou, Cheng-Kai	Male	51~60	Director	Master's in Finance, Golden Gate University, San Francisco, USA	Business, finance, and business management
Chen, Mu-Hsien	Male	61-70	Independent Director	Master's in Accounting, California State University, USA	Accounting and auditing, corporate governance, and business
Hsieh, Chih-Hung	Male	61~70	Independent Director	Ph.D. in Law, National Chengchi University	Legal affairs, ESG, and corporate governance
Wu, Chung-Hsin	Male	51~60	Independent Director	Ph.D. in Environmental Engineering, National Taiwan University	Environmental engineering and corporate sustainable development

Board Operations

GPPC's Board of Directors is committed to implementing the spirit of corporate governance, strengthening board functions, ensuring transparency and professionalism in decision-making, protecting shareholder rights, and creating sustainable value. In 2024, the Company convened 8 board meetings, with a director attendance rate of 98%, meeting the requirement stipulated in the board meeting rules that "a meeting shall be held at least once per quarter," demonstrating the Board's strong participation and commitment to fulfilling its responsibilities. The following is the disclosure of board meeting topics related to sustainable development in 2024:

Date of Board Meeting	Report or Discussion Items
2024/1/8	▪ 2023 Sustainability report compilation schedule ▪ 2023 Greenhouse gas inventory planning schedule report ▪ Subsidiary greenhouse gas inventory report
2024/4/25	▪ Sustainable development implementation status ▪ Amendment to the "Organizational Guidelines of the Sustainable Development Committee" ▪ Appointment of Chief Sustainability Officer
2024/8/12	▪ Intellectual property management plan report ▪ 2023 greenhouse gas inventory progress ▪ 2023 stakeholder communication report ▪ Approval of the Company's 2023 sustainability report
2024/9/5	▪ Information security management status report
2024/11/11	▪ 2023 greenhouse gas inventory completion and carbon fee explanation ▪ Operation and annual implementation status of ethical management
2024/12/17	▪ Establishment of the IFRS Sustainability Disclosure Standards Implementation Project Team

The Company's Board of Directors deliberates and resolves on major business decisions, financial budgets, capital expenditures, profit distributions, risk management, and corporate social responsibility. It strengthens meeting governance processes and transparency through the provision of complete meeting materials before meetings, detailed recording of statements and decisions during meetings, and uploading of meeting minutes to the internal platform after meetings. Major resolutions are also disclosed on the Market Observation Post System in accordance with the law after board meetings to ensure shareholders' right to know. During meetings, members listen to reports from the management team and independent directors and provide guidance and suggestions on relevant topics, thereby fulfilling their supervisory and supportive functions. The board remuneration system is determined based on the directors' contribution to the Company's operations, the economic environment, and market standards, and is reviewed by the Remuneration Committee (for details, see p.26).

The above board operations are carried out in accordance with the "Board Meeting Rules of Procedure" and related corporate governance guidelines and are continuously optimized in line with the relevant regulations issued by the Financial Supervisory Commission and the Taiwan Stock Exchange regarding board composition and responsibility division.

Board Remuneration

According to Article 29 of GPPC's Articles of Incorporation, board remuneration shall be linked to the Company's pre-tax earnings for the year. After deducting employee and director remuneration, a portion may be allocated, and the proportion of board remuneration shall not exceed 2% of the annual pre-tax earnings. The board remuneration proposal is drafted by the Board of Directors and submitted to the shareholders' meeting for resolution, ensuring procedural transparency and compliance with corporate governance principles. In addition, according to Article 27, board remuneration shall be paid regardless of whether the Company is profitable or not, and the Board of Directors is authorized to determine it by referring to industry standards, fairness principles, and the Company's operational status, to ensure the reasonableness and competitiveness between contribution and compensation. For relevant proportions and actual amounts disclosed, please refer to the "Dividend Policy" section in the Company's annual report under the board remuneration description.

As of 2024, no members of the Board or the executive management team have received severance payments, nor have there been any cases of remuneration clawback or adjustment, reflecting the Company's effective implementation of a sound remuneration system and the principle of integrity. In addition, the ratio of total board remuneration to the median annual salary of all employees, as well as the comparison of annual salary growth rates for both, has been disclosed in the annual report and on the Market Observation Post System in accordance with relevant regulations.

To further uphold the Company's integrity governance and stakeholder rights, the Company has also established the "Code of Ethical Conduct" and the "Procedures for Handling Reports of Illegal, Unethical, or Dishonest Behavior," which provide a clear complaint and handling procedure, offering a fair and confidential communication channel for employees, communities, suppliers, and investors.

Conflict of Interest Avoidance

The Board's powers include the formulation of business plans, profit distribution, capital increase or reduction, approval of important articles and contracts, appointment and dismissal of the president, establishment and dissolution of branches, budget and final account review, real estate transactions, external investments, and handling of other major matters as required by law or the Articles of Incorporation to be resolved by the Board of Directors. Board operations strictly follow the "Board Meeting Rules of Procedure" and relevant legal regulations. To enhance governance transparency and prevent conflicts of interest, board members must proactively disclose and explain the relevant content if the matters under review involve their own or their represented legal entity's interests. If the relationship may harm the Company's interests, the director shall recuse themselves from voting and shall not act as a proxy for other directors in voting. The Company enforces this principle in accordance with Article 16 of the "Board Meeting Rules of Procedure" to ensure fairness and objectivity in board decision-making.

For more of GPPC's corporate governance practices, please refer to the following link:

GPPC Corporate Governance Website

Board Meeting Rules of Procedure

Rules for Election of Directors

Board Continuing Education

GPPC places great importance on the continuous enhancement of directors' professional competencies, recognizing it as a key factor in enabling the Board to effectively fulfill its duties and strengthen the Company's sustainable governance. To this end, the Company continues to provide directors with diverse and forward-looking continuing education resources. It not only regularly relays information on corporate governance and sustainability-related courses held by external professional institutions but also actively plans internal training sessions to assist directors in understanding current major trends.

In 2024, the Company specifically invited external professional lecturers to conduct on-site courses, including "Labor Conditions and Employment Equality: Regulations and Practices," "Special Lecture on Carbon Management Trends and Practices," and "Preventing Employment Discrimination and Promoting Gender Equality in the Workplace." These courses deeply explored employee-related issues and sustainable management. Through these arrangements, the Company aims for its directors to possess not only a solid foundation in corporate governance, but also insight into emerging issues such as climate change and human rights responsibilities, thereby fulfilling their supervisory duties and guiding the Company to move forward steadily amid change.

Title	Name	Training Date	Organizer	Course Title	Training Hours	Sustainability Dimension
Chairperson	Chiu, Te-Hsin	2024/11/12	Securities and Futures Institute	Series on Directors, Supervisors, and Corporate Governance Officers — Discussion on Employee and Director Compensation Topics: Starting from the Amendments to Article 14 of the Securities and Exchange Act	3	Economic
		2024/9/10		Enterprise Risk Management and Crisis Handling — From the Perspective of Directors and Supervisors	3	
Independent Director	Hsieh, Chih-Hung	2024/7/8	Taiwan Corporate Governance Association	The Inevitable ESG and Sustainable Governance	3	Environment
		2024/5/14		Insider Trading Regulations and Case Studies	3	Economic
Independent Director	Chen, Mu-Hsien	2024/6/21	National Federation of CPA Associations of the R.O.C.	Corporate Mergers and Acquisitions and Due Diligence	3	Economic
		2024/4/9		Trends and Case Studies in Anti-Money Laundering	3	
		2024/3/28		Case Introduction and Legal Analysis of Corporate Control Disputes	3	
Independent Director	Wu, Chung-Hsin	2024/8/13	Taiwan Corporate Governance Association	How Enterprises Can Balance Intelligent Security Risks in Digital Transformation to Create a Win-Win-Win Outcome	3	Environment
		2024/8/9		Green Electricity, Certificates, and Sustainable Development — The Corporate Path to Net Zero	3	Environment
		2024/8/6		Latest Norms and Trends in Corporate Governance	3	Economic
		2024/7/23		Development Trends of Technology Risks in the Cloud Era	3	Environment
Director	Yang, Pin-Cheng	2024/2/26	Accounting Research and Development Foundation	Common Deficiencies in "Financial Statement Review" and Practical Analysis of Important Internal Control Regulations	6	Economic
Director	Tian, Chen-Ching	2024/4/26	Taiwan Corporate Governance Association	How to Understand Financial Statements — A Course for Directors and Supervisors without a Financial Background	3	Economic
		2024/3/5		Initiating Succession Planning — Employee Incentive Plans and Equity Succession	3	Society
Director	Chou, Cheng-Kai	2024/11/20	Taiwan Academy of Banking and Finance	Corporate Governance Lecture Series — Practical Analysis on Trade Secrets Protection	3	Economic
		2024/8/27		Impact of the Internal Ratings-Based (IRB) Approach to Credit Risk	3	

GPPC will continue to strengthen the collective knowledge of its directors on ESG topics, deepening their leadership role in the Company's sustainable transformation, and ensuring that the Board possesses the capabilities to face future challenges and lead the Company's long-term development.

Board Performance Evaluation

To implement corporate governance and enhance the function of the Board of Directors, GPPC conducts an annual performance evaluation of the Board in accordance with the "Board Performance Evaluation Measures." The scope of the evaluation covers the overall operational performance of the Board as well as the individual participation of each director. The evaluation content includes indicators such as the directors' contributions to company strategy, supervision, risk management, and sustainability issues. In addition to the legally required and institutionally mandated internal self-assessment conducted annually, the Company also commissions an external professional institution to conduct an independent evaluation every three years according to plan Note, to ensure the objectivity and reference value of the evaluation process. All internal and external evaluation results are completed in the first quarter of the following year and are used as references for enhancing the function of the Board and planning future training for directors. The results of the 2022 external and 2024 internal board performance evaluations are shown in the table below (relevant information can also be found at the website link below).

GPPC Corporate Governance Website

Note: On November 8, 2022, an external independent professional institution conducted an evaluation of the Company's board operations and performance for the year 2022 (January 1, 2022 – December 31, 2022) and issued a report on December 31, 2022, which was presented at the 19th meeting of the 13th Board on January 12, 2023.

Connection Between Board Members and Managers' Performance and Sustainability Indicators

GPPC, in accordance with the "Regulations for Board Performance Evaluation," periodically evaluates directors' remuneration. Relevant performance assessments and remuneration reasonableness are reviewed by the Remuneration Committee and the Board of Directors. The major evaluation items and respective proportions for directors' remuneration are as follows: operating performance (25%), sustainability performance (25%), sustainability commitment targets (25%), and external evaluations (25%). In 2023 and 2024, due to operating losses, no director remuneration was distributed.

Managers' performance bonuses are issued in accordance with the "Manager Bonus Distribution Measures," calculated as a fixed percentage of the Company's annual operating profit. If there is no operating profit for the year, no bonus is issued. The issuance of managers' performance bonuses follows the following indicators: Company performance indicators (profit margin) account for 60%, annual strategic priorities (such as departmental goals) account for 20%, and sustainability performance indicators account for 20%. The sustainability performance indicators include two major parts: "implementation of the Company's core values and operational management capabilities" and "participation in sustainable operations." For example, the evaluation items for senior managers such as President and Vice Presidents include completion of 100% greenhouse gas inventory and verification for subsidiaries, a 1% carbon reduction compared to the previous year, promotion of zero occupational safety incidents in the workplace, and continuous review of the remuneration system based on actual operating conditions and relevant regulations. In 2023 and 2024, due to operating losses, no employee year-end bonuses or managers' performance bonuses were issued.

Board of Directors Performance Evaluation Measurement Items

Self-Evaluation Dimensions	Number of Detailed Measurement Items	Average Score Note
A. Participation in company operations	12	4.83
B. Enhancement of board decision-making quality	12	5.00
C. Composition and structure of the Board	7	5.00
D. Director appointment and continuing education	7	4.86
E. Internal control	7	5.00
Total / Average Score	45	4.93

Note: Each evaluation indicator under the dimensions is scored on a maximum of 5 points.

Board Member (Self) Performance Evaluation Measurement Items

Self-Evaluation Dimensions	Number of Detailed Measurement Items	Average Score Note
A. Understanding of company goals and mission	3	4.71
B. Awareness of directors' duties	3	4.71
C. Participation in company operations	8	4.55
D. Internal relationship management and communication	3	4.67
E. Professionalism and continuing education of directors	3	4.71
F. Internal control	3	4.76
Average Score	23	4.66

Note: Each evaluation indicator under the dimensions is scored on a maximum of 5 points.

Audit Committee Performance Evaluation Measurement Items [Note 1]

Self-Evaluation Dimensions	Number of Detailed Measurement Items	Average Score [Note 2]
A. Participation in company operations	4	4.92
B. Awareness of functional committee duties	5	5.00
C. Enhancement of functional committee decision-making quality	7	5.00
D. Composition and member selection of the functional committee	3	5.00
E. Internal control	3	5.00
Total / Average Score	22	4.98

Note 1: The Audit Committee performance evaluation is executed by the General Management Division. According to the Company's "Board Performance Evaluation Measures," a questionnaire is used to conduct regular evaluations by the committee members on the committee's operations. The results of the performance evaluation will serve as the basis for the Company's review and improvement to effectively supervise existing or potential risks of the Company.

Note 2: Each evaluation indicator under the dimensions is scored on a maximum of 5 points.

Remuneration Committee Performance Evaluation Measurement Items [Note 1]

Self-Evaluation Dimensions	Number of Detailed Measurement Items	Average Score [Note 2]
A. Participation in company operations	4	5.00
B. Awareness of functional committee duties	5	5.00
C. Enhancement of functional committee decision-making quality	7	5.00
D. Composition and member selection of the functional committee	3	5.00
Total / Average Score	19	5.00

Note 1: The Remuneration Committee performance evaluation is executed by the General Management Division. According to the Company's "Board Performance Evaluation Measures," a questionnaire is used to conduct regular evaluations by the committee members on the committee's operations. The performance evaluation results will serve as the basis for the Company's review and improvement.

Note 2: Each evaluation indicator under the dimensions is scored on a maximum of 5 points.

Sustainable Development Committee Performance Evaluation Measurement Items

Self-Evaluation Dimensions	Number of Detailed Measurement Items	Average Score [Note]
A. Participation in company operations	4	4.70
B. Awareness of functional committee duties	5	4.68
C. Enhancement of functional committee decision-making quality	7	4.51
D. Composition and member selection of the functional committee	3	4.60
Total / Average Score	22	4.61

Note: Each evaluation indicator under the dimensions is scored on a maximum of 5 points.

1.2.2 Functional committees

Sustainable Development Committee

- The Company's Sustainable Development Committee externally audits the sustainability report, identifies the core issues of concern to stakeholders, and internally formulates the Company's overall sustainability policy, cross-departmental key performance indicators (KPIs), annual targets and action plans. It also regularly reviews the effectiveness of implementation to ensure that the Company's sustainability strategy is concretely implemented, and appoints the president to concurrently serve as the Chief Sustainability Officer as the highest responsible person for internal ESG affairs.
- In principle, the Committee convenes a meeting every six months, which may be adjusted flexibly according to business needs, but it shall be held at least twice a year. In 2024, a total of three meetings were convened, with an overall attendance rate of 100%.

Remuneration Committee

- The Company's Remuneration Committee is responsible for reviewing the overall business operations and proposing timely and reasonable adjustments to the remuneration system for directors and managers. Its responsibilities include regularly reviewing the performance target setting and achievement status of directors and managers to ensure that the remuneration structure effectively incentivizes the management team and links to the Company's performance. In addition, the Committee is also responsible for reviewing remuneration-related policies, systems, standards, structures, and the remuneration content and amount of individual directors and managers.
- In 2024, the Remuneration Committee convened five meetings in total, with an overall attendance rate of 100%, demonstrating a high level of engagement and commitment by the members.

Audit Committee

- The Company's Audit Committee is composed entirely of independent directors and is intended to strengthen the internal supervision mechanism and corporate governance effectiveness. Its primary responsibilities include supervising the Company's financial operations and regulatory compliance, reviewing and supervising the internal control system, the appropriateness of significant financial and business procedures, and safeguarding the independence of board decision-making. The Committee is also responsible for reviewing major transactions, appointing or dismissing the signing CPA, supervising the accuracy and compliance of financial reports, and handling other significant matters assigned by competent authorities.
- In 2024, the Audit Committee convened a total of eight meetings, with an attendance rate of 100%, and all meetings complied with the required frequency and procedures.

1.2.3 Internal Audit and Internal Control Mechanism

Composition of Internal Audit Unit Members

GPPC has established an internal audit unit that directly reports to the Board of Directors, assisting the Board and management in inspecting and reviewing internal systems and processes, providing timely improvement recommendations to ensure the Company's internal control mechanism is continuously and effectively implemented. In addition, the Board executes due diligence on discovered violations in accordance with the Company's "Compliance Management Code," to ensure compliance.

All internal audit personnel are full-time, consisting of one audit supervisor and two audit staff, two of whom hold international internal auditor qualifications. The appointment and dismissal of internal audit personnel are subject to the consent of the Audit Committee in accordance with relevant laws and regulations and are submitted to the Board of Directors for resolution.

Main Responsibilities of the Internal Audit Unit

GPPC establishes and implements the Company's internal control system based on the "Regulations Governing Establishment of Internal Control Systems by Public Companies" issued by the Financial Supervisory Commission and relevant laws and regulations. After approval by the Board of Directors, the system is implemented across operational guidelines to ensure that the Company's policies and procedures are effectively executed. This system covers daily operational activities, including transaction processes, information management, and various management controls, and incorporates international standards such as ISO 9001, ISO 14001, and ISO 45001 to achieve the three governance goals of operational efficiency, financial transparency, and regulatory compliance.

Independent directors and the Audit Committee meet with CPAs at least once annually. CPAs report to the independent directors and Audit Committee based on the Company's financial condition, integrating key audit matters, overall audit results, financial and operational status of domestic and overseas subsidiaries, and internal control audit results. If major abnormalities occur, meetings may be convened at any time.

Communication Between Independent Directors, Audit Committee, and CPAs

Date	Communication Focus	Communication Results
2024/3/12	CPA explained the audit conclusions of the 2023 financial report and discussed and communicated on the questions raised by attendees.	No objections

In addition, the internal audit supervisor, independent directors, and Audit Committee members hold regular meetings at least once per quarter, during which reports on internal audit execution and internal control operations are presented.

Communication Between Independent Directors, Audit Committee, and Internal Audit Supervisor

Date	Communication Focus	Communication Results
January to December 2024	▪ Audit Reports ▪ Audit Plans	▪ Submitted at least once every 1–2 months ▪ The implementation status of quarterly special audit plans is submitted to the Audit Committee ▪ Annual audit plans are planned, and opinions from independent directors are solicited ▪ Communication between independent directors and audit supervisor is good
2024/01/18	Q4 2023 Audit Business Execution and Follow-up Report	Approved by the Audit Committee and submitted to the Board of Directors
2024/03/12	▪ Recent Audit Business Execution Report ▪ 2023 Internal Control System Self-Evaluation Report / Internal Control System Statement	▪ Approved by the Audit Committee and submitted to the Board of Directors ▪ Approved by the Audit Committee and submitted to the Board of Directors for approval

Date	Communication Focus	Communication Results
2024/05/10	2Q1 2024 Audit Business Execution and Follow-up Report	Approved by the Audit Committee and submitted to the Board of Directors
2024/08/12	Q2 2024 Audit Business Execution and Follow-up Report	Approved by the Audit Committee and submitted to the Board of Directors
2024/11/11	▪ Q3 2024 Audit Business Execution and Follow-up Report ▪ Review of the 2025 Internal Audit Plan	▪ Approved by the Audit Committee and submitted to the Board of Directors ▪ Approved by the Audit Committee and submitted to the Board of Directors for approval
2024/12/17	"Management Procedures for Sustainability Information" Written Internal Control System / Internal Audit Implementation Rules	Approved by the Audit Committee and submitted to the Board of Directors

1.2.4 Investor Communication

Information disclosure is one of the most important aspects of Grand Pacific Petrochemical Corporation's (GPPC) services to investors. For many years, the Company has invested significant resources to ensure compliance with the principles of completeness, accuracy, timeliness, and reliability in information disclosure. In addition to promptly uploading all announcements and material information to the Market Observation Post System (MOPS), investors may also access financial reports, annual reports, dividends, material information, and other data through GPPC's official website.

To further improve investor relations services, the Company actively participates in institutional investor conferences to maintain good communication with investors. For example, on June 18 and November 27, 2024, the Company held online investor conferences to brief investors on the Company's operational status and future outlook.

Shareholders' meeting information on the Company's website

Shareholders' Meeting Rules of Procedure

1.3 Ethical Management GRI 2-23、2-24

1.3.1 Ethical Management Policy

GPPC is committed to implementing a quality corporate culture and business ethics to uphold a good corporate image and earn stakeholders' trust. In accordance with the Company Act, the Securities and Exchange Act, and the Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies, the Company has established and implemented the Ethical Corporate Management Best Practice Principles, the Procedures for Ethical Management and Guidelines for Conduct, and the Code of Ethical Conduct. These explicitly prohibit using one's position to seek improper benefits for oneself or relatives, disclosing customer privacy, and other such behaviors, and commit to conducting due diligence investigations on violations while protecting the safety and rights of whistleblowers.

The Company has also established the Management Procedures for Preventing Insider Trading, the Procedures for Handling Reports of Illegal, Unethical, or Dishonest Conduct, and relevant procedure documents such as the Operating Procedures for the Code of Ethical Conduct and the Procedures for Ethical Management and Guidelines for Conduct, striving to fully implement principles of fair trade and anti-corruption, integrating the relevant clauses into daily operations as a disciplinary and grievance mechanism for violations, and reviewing and amending the above-mentioned procedures as necessary.

To improve the management of ethical business practices, the Company has established a Sustainable Development Committee, with the Sustainability Governance Task Force under its purview as the dedicated (or concurrent) unit for promoting ethical management. This task force is responsible for formulating and supervising the implementation of ethical management policies and prevention programs, with the following primary responsibilities and reports to the Board of Directors regularly (at least once per year):

1. Assist in integrating integrity and ethical values into the Company's business strategies and formulate related anti-corruption measures in compliance with legal systems to ensure ethical business practices

2. Regularly review the risks of dishonest behavior within the scope of business and accordingly formulate prevention programs, including relevant standard operating procedures and conduct guidelines related to business operations

3. Plan internal organization, staffing, and duties, and establish mutual checks and balances for business activities with relatively high risks of dishonest behavior within the business scope

4. Promote and coordinate ethical policy advocacy and training

5. Plan the whistleblower system and ensure its effectiveness

6. Assist the Board of Directors and management in reviewing and assessing whether the preventive measures established for ethical management are effectively functioning, and regularly evaluate compliance within relevant business processes and compile reports.

Implementation Status of Ethical Management in 2024

The Company occasionally promotes to colleagues during various meetings and internal announcements the firm commitment to complying with ethical management standards to ensure implementation

All employees of the Company have signed confidentiality agreements, and the importance of the Company's ethical management is continuously emphasized

The Company conducts annual legal compliance education, ethical management, and insider trading awareness training and advocacy programs

1.3.2 Policy Communication and Training GRI 205-2

To promote advocacy of the ethical policy and training courses, GPPC incorporates it into the internal control system to strengthen awareness and compliance among employees, managers, and directors. A whistleblowing system with confidentiality and effectiveness is also established to assist the Board of Directors and management in continuously inspecting and evaluating the effectiveness of the preventive measures for ethical management. The Company also monitors the development of ethical business practices both domestically and internationally, revises the content of the guidelines in a timely manner based on actual operations and regulatory changes, and encourages internal personnel at all levels to provide suggestions to improve related systems and continuously enhance the overall effectiveness of ethical business practices.

Ethical Management Lectures	Course Hours	Total Participants	Total Training Hours
Latest Norms and Trends in Corporate Governance	3	1	3
Insider Trading Prevention Advocacy Course	1	58	58
Total	4	59	61

Number and percentage of people aware of the Company's anti-corruption policies and procedures

Number of people aware of the Company's anti-corruption policies and procedures

7

Percentage

100%

1.3.3 Assessment of Anti-Corruption Risks and Results GRI 205-1、205-3、206-1

GPPC complies with the "Ethical Corporate Management Best Practice Principles" and the "Procedures for Ethical Management and Guidelines for Conduct," regularly analyzing and assessing business activities with relatively high risk within the scope of operations. To ensure the transparency and authenticity of financial information, the Company has established an effective accounting system and internal control system, strictly prohibits off-the-books accounts or secret accounts, and regularly reviews the design and implementation effectiveness of the system to maintain its continued effectiveness.

Based on the risk assessment results, the internal audit unit formulates an annual audit plan, covering audit targets, scope, items, and frequency, and inspects the implementation of the ethical management prevention mechanisms accordingly. The focus of the audit will be adjusted based on the size of each business unit, major projects (such as plant construction, expansion, major overhauls, etc.), or emergency events, and external professional institutions (such as accountants) may be commissioned to assist in execution when necessary.

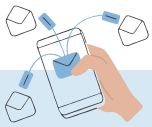
The audit results will be reported to senior management and compiled into reports submitted to the Board of Directors, with a reporting frequency of at least once per year. In addition to annual audit operations, the audit unit also conducts key inspections and risk analyses of red flags that may indicate potential corruption events (such as incomplete procurement processes, unauthorized approvals, unreasonable vendor assignments, etc.).

According to the results of the 2024 risk assessment and internal audit inspections, **no** major corruption, fraud, or violations of ethical business conduct and code of ethics were found within the Group, and there were **no** lawsuits involving anti-competitive behavior or violations of fair trade laws and regulations.

Confirmed Corruption Case Data	2023	2024
Total Number of Reported Cases	0	0
Number of Reports Related to Anti-Corruption Policies	0	0
Number of Cases Confirmed to Violate Anti-Corruption Policies After Verification	0	0

1.3.4 Whistleblowing System and Channels GRI 2-26

GPPC has established the "Procedures for Handling Reports of Illegal, Unethical, or Dishonest Conduct," setting up clear internal and external reporting channels and procedures, encouraging stakeholders to report any behavior that violates laws or ethical standards, and strives to protect the legal rights and interests of whistleblowers and related personnel to foster a transparent, fair, and just corporate culture.



Whistleblowing Channels

- Complaint Mailbox: audit@gppc.com.tw
- Mailing address: Audit Supervisor, Grand Pacific Petrochemical Corporation, 8F, No. 135, Dunhua North Road, Songshan District, Taipei City

Principles for Handling Whistleblower Reports

- Whistleblowers must provide their real name and complete information to facilitate verification (such as the name of the person involved, department, event details, and time of occurrence, etc.). Anonymous reports will generally not be handled unless the situation is significant or requires investigation, in which case it may still be accepted.
- If the subject of the report involves a director or senior executive, the case will be directly submitted to the independent directors for supervision and handling.
- If verified as true, the case will be handled in accordance with relevant laws and the Company's internal disciplinary regulations; for major violations, disclosure will be made on the Market Observation Post System, and the party concerned will be given an opportunity to provide explanations or file appeals to ensure procedural justice.
- Supervisors who fail to properly handle reports or are aware but take no action will be held accountable in accordance with the Company's disciplinary system.
- The Company commits to full confidentiality and protection for whistleblowers and personnel participating in investigations to prevent any form of retaliation or unfair treatment.
- The entire whistleblowing case process will be recorded in writing or electronically and properly retained to meet legal requirements.
- If a case is verified as significant and the whistleblower has made a substantive contribution, a suitable reward may be granted upon the approval of the Chairperson.

In 2024, the Company did **not** receive any reports of violations of ethical management through the whistleblowing system, **nor** were any employees dismissed or disciplined for corruption. At the same time, the Company did **not** experience any changes in cooperation with business partners due to termination or non-renewal resulting from corruption violations, and **no** legal cases related to corrupt practices occurred throughout the year.

1.4 Regulatory Compliance

SASB RT-CH-530a.1

1.4.1 Regulation Identification and Collection

"Integrity and honesty" are the core values consistently upheld by GPPC. The Company places great importance on regulatory compliance and has always conducted various business operations in accordance with relevant government laws and regulations, aiming to fulfill its responsibilities to employees, shareholders, and supply chain partners while pursuing sustainable development. The Company operates with integrity, fairness, and transparency as its principles, setting "zero violations" as its management goal. Each internal unit, based on its responsibilities, regularly monitors regulatory changes and proactively proposes and implements improvement measures through compliance identification, issue consolidation, and risk assessment to ensure the Company's systems and practices comply with legal requirements and to reduce potential operational risks.

General Management Division

Responsible for the overall execution of the Company's legal affairs, including handling various litigation cases, providing legal consultation, reviewing contracts and documents, managing intellectual property rights, and identifying and managing risks at the corporate level.

Human Resources Section

Plans and promotes employee education and training. Through ongoing internal training courses, enhances all colleagues' understanding and practice of regulatory compliance and ethical management.

Audit

Responsible for planning and executing the Company's internal audit operations, conducting audits according to the annual audit plan, issuing audit reports, and proposing improvement recommendations.

All departments

Comply with relevant laws and company regulations according to their scope of responsibilities.

Regulation Identification Results

In response to increasingly stringent sustainability regulations, the Company will continue to monitor and analyze the latest developments in governance, environmental, product responsibility, and labor and human rights-related laws and regulations, making early preparations and deployments to ensure that Company operations continuously comply with regulatory requirements and demonstrate the Company's commitment to sustainable operation.

Governance

- Enhancing the functions of the Board of Directors and functional committees
- Internal control and internal audit system
- Operational risk control and response
- Transparent information disclosure
- Corporate Social Responsibility Best Practice Principles
- Corporate Governance 3.0 – Blueprint for Sustainable Development
- Green Finance 2.0
- Board diversity policy and implementation outcomes
- Ethical management and anti-corruption measures

Environment

- Sustainable Development Roadmap for Listed Companies
- Taiwan 2050 Net Zero Roadmap and strategies
- Wastewater and waste management
- ISO 14001, ISO 14064-1, ISO 14067, ISO 50001, and ISO 45001 system certifications
- Hazardous chemicals management
- Emergency incident management
- Fire safety training
- Occupational safety and health training for employees and contractors
- Climate risk identification and financial disclosure
- Water resource management and energy-saving project effectiveness

Products

- IATF 16949 and ISO 9001 system certifications
- Product quality control
- Product safety labeling
- R&D innovation and sustainable materials application
- Recycling and reuse policies (such as circular economy implementation)

Labor and human rights

- Formulation of human rights policies with reference to international human rights initiatives
- Laws and regulations related to compensation and working conditions
- Maintenance of labor-management relations
- Occupational safety and health-related laws and regulations
- Human rights due diligence and grievance mechanisms
- Diversity and inclusion policies (gender, ethnicity, disability, etc.)
- Employee training and development mechanisms and performance

1.4.3 Regulatory Compliance Status and Improvements

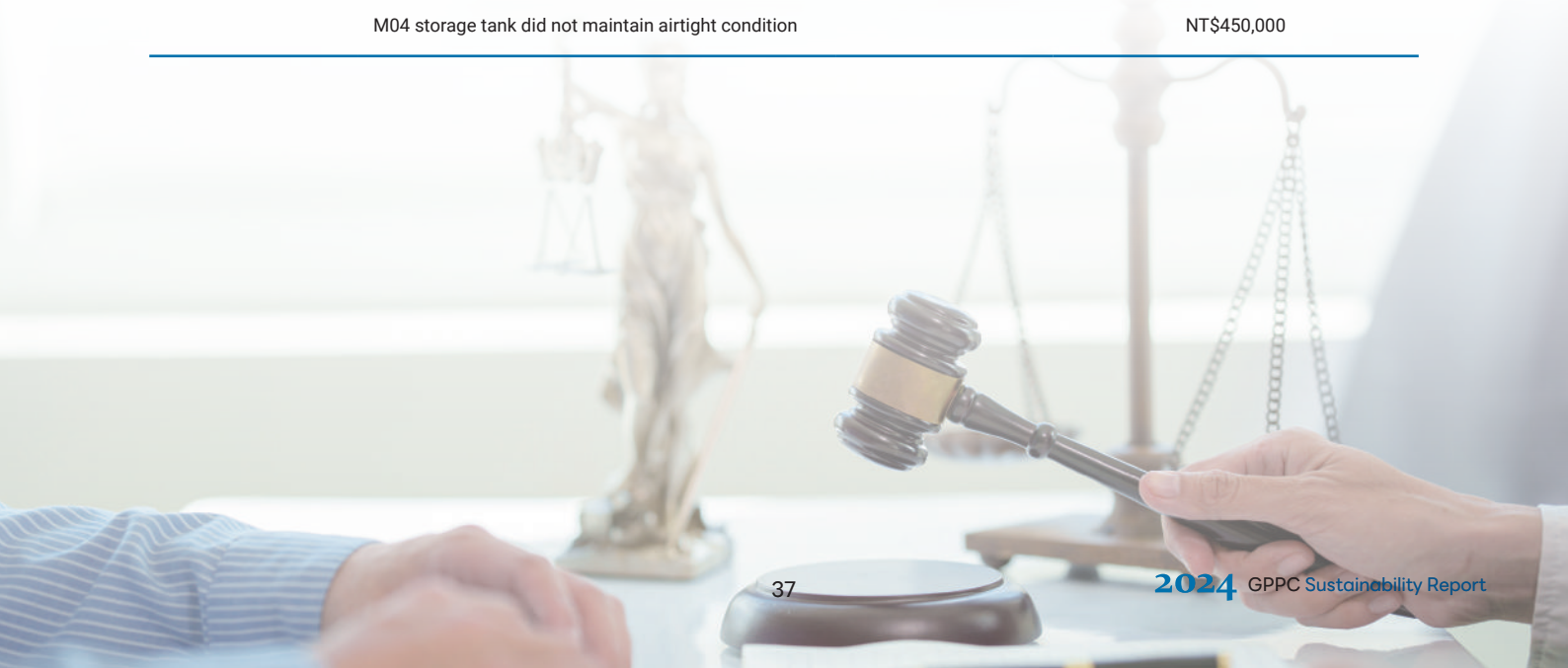
GRI 2-27；SASB RT-CH-140a.2

Grand Pacific Petrochemical Corporation (GPPC) had no incidents of major violations related to environmental, labor and human rights, and occupational health and safety regulations in 2024. However, there were a total of 6 "non-major" regulatory violations in 2024, with a total fine amounting to NT$1,425,000. There were no major regulatory violations involving non-monetary sanctions.

*Definition of major: fines exceeding NT$500,000

"Non-major" fine incidents in 2024

Fined business unit	Violated law and / or regulation incident	Competent authority	Fine amount (unit: NT$)
GPPC	M10 flare tower AA01 pilot flame extinguished	Environmental Protection Bureau Kaohsiung City Government	NT$150,000
	M10 flare tower AA01 emitted black smoke		NT$150,000
	M04 equipment component leakage exceeded regulatory standards		NT$225,000
	M10 equipment component leakage exceeded regulatory standards		NT$225,000
	M11 equipment component leakage exceeded regulatory standards		NT$225,000
	M04 storage tank did not maintain airtight condition		NT$450,000



1.5 Risk management

1.5.1 Risk management policy

Each department of GPPC regularly evaluates risk factors that may arise in the course of operations and formulates corresponding control measures for these risk factors. Operational items with relatively higher risks will be included in the annual audit plan by the audit team. Audits will be conducted, audit reports will be produced, and the results will be regularly submitted to the Audit Committee for review, and reported to the Board of Directors.

In addition, each department will also conduct annual self-assessments of internal controls to verify whether the system design is reasonable and implementation is effective, thereby measuring the operational effectiveness of the system. GPPC plans to establish a Risk Management Committee in the third quarter of 2025 to strengthen the identification, evaluation, and response to overall operational risks of the Company through a dedicated organization, and to continuously report key risks and corresponding management strategies to the Board of Directors.

1.5.2 Risk Management Procedures

Risk management is one of the core elements of sound business operations. GPPC, through a systematic risk management process, including risk identification, evaluation, measurement, and monitoring, comprehensively manages the risks that may arise from various operations. By clarifying the scope of risks and adopting appropriate control measures, the Company can grasp the potential impact of risks on its short-, medium-, and long-term operations, and implement effective allocation of limited resources. On one hand, this enhances the efficiency of risk response; on the other, it improves decision-making efficiency and overall corporate value.

The Company executes risk control through the following processes:

1. Risk identification	Each department regularly reviews the operational risks it faces, proactively identifying potential scenarios and factors that may have significant impacts on the Company, as a basis for subsequent management.
2. Risk evaluation	▪ Based on practical needs, the Company formulates risk tolerance levels and establishes both qualitative and quantitative analytical standards to systematically assess the level and scope of risks. ▪ Identified risks are regularly reviewed, and the evaluation results and response strategies are adjusted according to changes in the operating environment.
3. Risk control	Each unit formulates response strategies and necessary crisis handling mechanisms for key risks and incorporates risk control into daily operations and internal control systems to strengthen prevention and response capabilities.
4. Risk monitoring	▪ Audits monitor the operation of internal controls and risk management through annual audit plans and daily operations, and propose specific recommendations to assist in the continuous optimization of management processes. ▪ Currently, major risk items are tracked and consolidated jointly by the audit team and relevant units, and the overall risk management framework will continue to be strengthened as needed according to business development.

GPPC integrates various business information through the establishment of risk indicators and event reporting mechanisms to conduct independent analysis and trend observations of potential risks. Main identified risk types are as follows:

Risk management item	Risk description and response measures
Operational risk	The Company constantly monitors domestic and international political and economic environments, regulatory changes, technological developments, and industry changes to assess their potential impact on market dynamics, supply chain stability, intellectual property, and information security. The assessment results are incorporated into operational decisions.
Financial risk	A comprehensive assessment is conducted regarding how interest rates, exchange rates, stock prices, inflation, and other factors affect the Company's financial condition, including asset liquidity, customer credit, accounting policies, and investment management risks. The Company has also established a capital safety buffer mechanism to address emergency funding needs and adopts appropriate hedging strategies to mitigate potential impacts.
Operational risk	The Company establishes corresponding management systems and contingency measures to ensure operational stability and workplace safety, in response to potential operational disruptions caused by internal processes, personnel operations, information systems, or external emergencies.
Environmental risk	In the face of increasingly stringent climate policies, the Company conducts risk identification and assessment on issues such as greenhouse gas emissions, energy usage, and environmental regulations, and adopts a dual strategy of "adaptation" and "mitigation" to gradually implement environmental management and improvement actions.
Significant policy and law changes risk	The Company continuously monitors and evaluates the potential impacts of major governmental policy and regulatory changes on operations and proactively plans response measures to reduce legal and compliance risks.

1.6 Information Security and Customer Privacy

1.6.1 Information Security Goals

GPPC values information security and customer privacy, continuously optimizing its internal information environment to establish a secure, stable, and trustworthy operating system and to enhance the protection of the Company's data, equipment, and networks.

The Company's established information security goals are to ensure the confidentiality, integrity, availability, and compliance of core systems in daily operations. At the same time, the Company sets concrete information security performance indicators based on different functions and levels and regularly tracks the effectiveness of information security management. Main goals include:

Confidentiality

Prevent leakage of any sensitive internal Company data, especially avoiding unauthorized access via networks.

Integrity

Ensure that critical data (e.g., insurance information, personal data) remains accurate and is not tampered with without authorization.

Availability

Important systems and data must be regularly backed up to ensure uninterrupted operation and maintain business stability.

Compliance

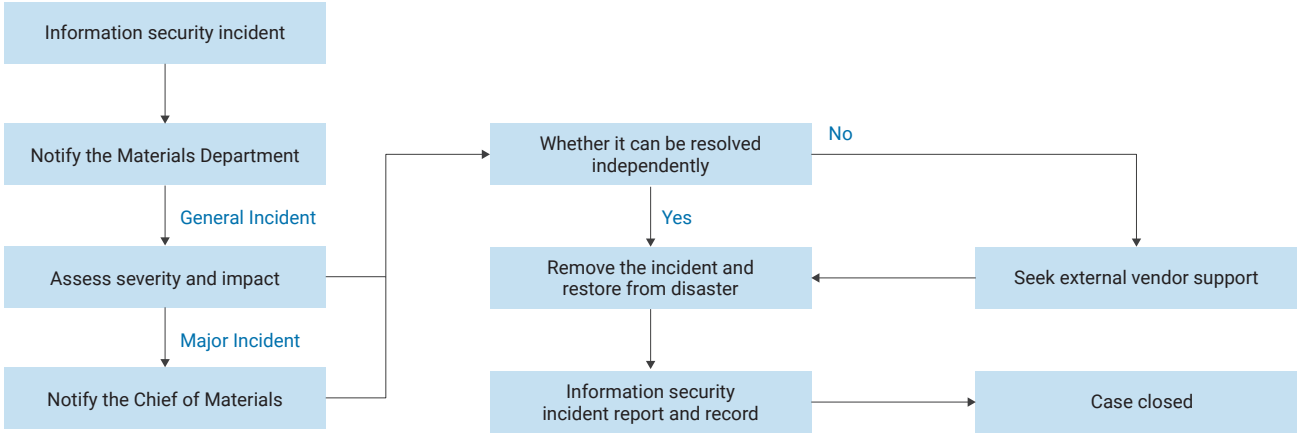
Comply with the Personal Data Protection Act, Trade Secrets Act, intellectual property rights laws, and other relevant regulations to avoid violations and protect the rights of the Company and stakeholders.

1.6.2 Information Security Management Measures

Information security management is the responsibility of the Procurement and Materials Department. A Chief Information Security Officer (CISO) is appointed to oversee implementation, supported by an Information Security Supervisor and two dedicated personnel responsible for planning, executing, and managing information security tasks, as well as enhancing information security awareness among all employees. The CISO periodically reports the status of information security operations to the Board of Directors. Report contents cover aspects such as the information security management framework, resource allocation, access control, disaster response, and physical security.

The Company references the international standard ISO/IEC 27001:2013 in establishing its information security management system and has implemented a PDCA (Plan-Do-Check-Act) operational cycle to continuously improve information security mechanisms. Meetings are held every two months to address information security-related topics and ensure timely updates on the information security status.

Information Security Incident Response Flowchart



Information Security Control and Protection Mechanisms

Item	Item Description
Regulatory Compliance	The Company's information security management regulations strictly comply with relevant government laws, such as the Cyber Security Management Act, the Criminal Code, and the Personal Data Protection Act.
Education, Training, and Awareness	Conducts regular information security education and training to promote awareness of information security policies and related implementation regulations.
Resource Usage Management	Establishes management mechanisms for servers and network resources to centrally allocate and utilize them.
Risk Assessment Before Equipment Installation	New equipment must undergo information security risk assessments prior to deployment to prevent system security vulnerabilities.
Physical and Environmental Security	Establishes physical and environmental security mechanisms for information server rooms and performs regular maintenance.
Access Control	Clearly defines network system access rights to prevent unauthorized access.
Audit and Improvement	Develops internal audit plans for information security, regularly reviews usage conditions, and implements corrective and preventive measures.
Business Continuity Management	Establishes business continuity management regulations and ensures uninterrupted operations through practical drills.
Employee Information Security Responsibility	All employees must comply with and maintain information security standards.
Document Management Standards	Information security documentation must have clearly defined management regulations.
Outsourced Information Security Risk Management	If an outsourced vendor requires subcontracting, information security risks must be assessed and information security management implementation must be monitored.
Project Information Security Control	Internal and external projects must define information security requirements. Control measures should be implemented based on risk assessment results to ensure data confidentiality, integrity, and availability.
Portable Device Management	Establishes management procedures for portable IT devices and storage media, with regular evaluations and audits to reduce the risk of data leakage.

Education and Training on the Protection of Personal Data, Prevention of Personal Data Leakage, and Maintenance of Company Information Security

Title of Education and Training	Description of Content	Total Number of Participants	Participants	Course Hours
Basic Information Security Awareness and Social Engineering Cases	Watch videos online	52	Personnel who failed the social engineering drill	1 hour

1.6.3 Effectiveness of Information Security Implementation GRI 418-1

In 2024, GPPC did **not** receive any complaints related to the infringement of customer privacy, information leakage, theft, or loss of customer data.

Number of Information Security Reports/Complaints at Grand Pacific Petrochemical Corporation Over the Past 3 Years

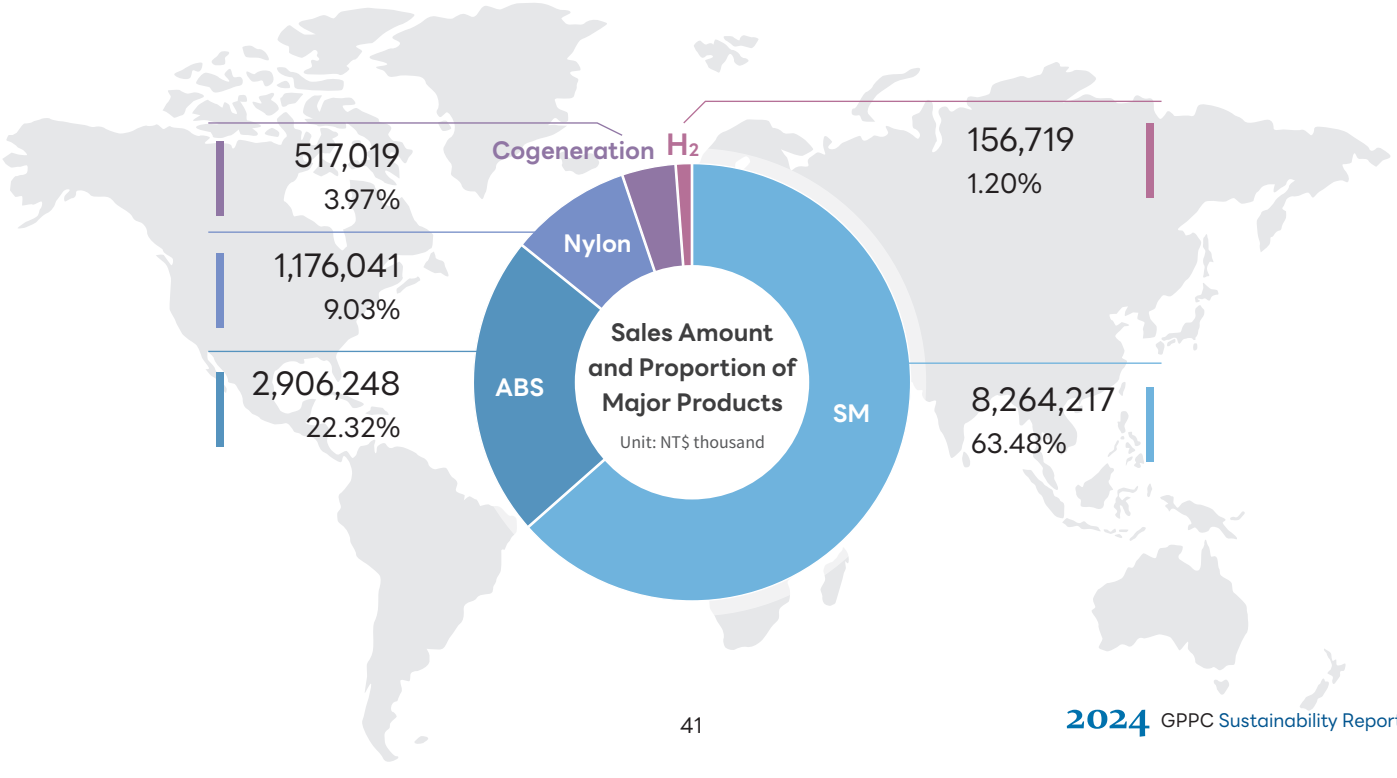
2022	2023	2024
0	0	0

1.7 Business Performance GRI 2-6

1.7.1 Operating Results GRI 201-1

GPPC adheres to the business principles of corporate governance and continuously provides real-time and transparent financial and operational information through platforms such as shareholders' meetings, institutional investor conferences, the Market Observation Post System, and the Company's website to assist shareholders and investors in understanding Company developments.

In 2024, the Company's main products remained petrochemical basic materials, including styrene monomer (SM), ABS raw materials, etc., with overall sales primarily for industrial and consumer end-use purposes. Although this year's performance was relatively conservative due to the impacts of global high interest rates, inflationary pressures, geopolitical tensions, and adjustments to inventory strategies by some customers, the Company has continued to focus on product optimization and the development of new applications. It has actively strengthened cooperation with downstream customers and enhanced product added value to inject growth momentum into future operations and continuously create long-term value for stakeholders.



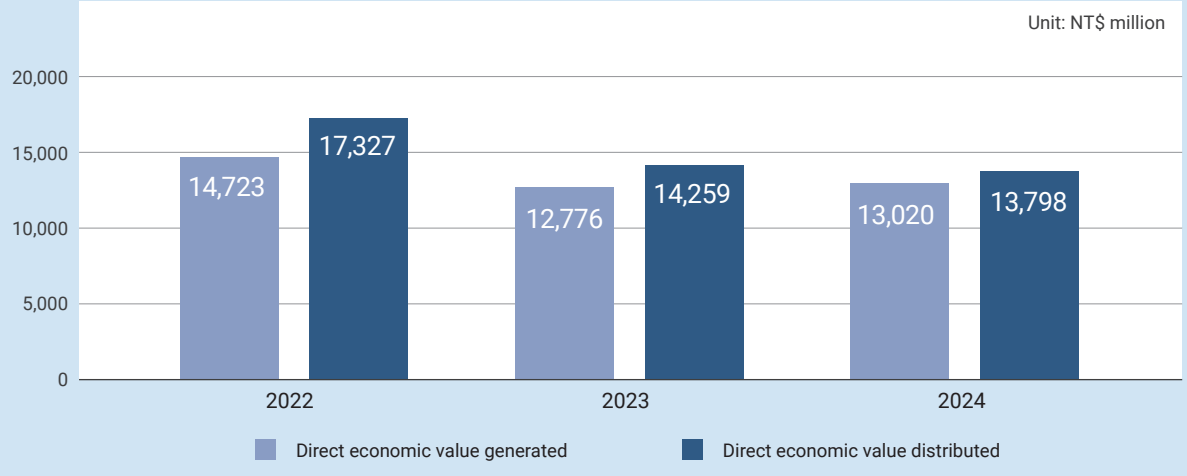
Direct economic value generated and distributed by CPPC

Unit: NT$ million

Item	2022	2023	2024
Generation of direct economic value	14,723	12,776	13,020
Revenue	14,723	12,776	13,020
Operating revenue	14,723	12,776	13,020
Distribution of direct economic value	17,327	14,259	13,798
Operating costs	15,019	13,308	13,322
Operating costs	15,019	13,308	13,322
Employee wages and benefits	419	454	455
Employee welfare expenses	419	454	455
Payments to providers of capital	1,865	475	0
Cash dividends distributed	1,865	475	0
Financial costs	0	0	0
Payments to the government	9	10	10
Community investments	15	12	11
Retained economic value	-2,604	-1,483	-778

* Payments to the government include all taxes and fines required to be paid under international and domestic regulations.
* Taxes may include business tax, income tax, and property tax, but do not include deferred taxes.

Bar chart of generated and distributed direct economic value over the past three years



1.7.2 Government Financial Assistance GRI 201-4

The types and amounts of financial assistance received from the government by GPPC over the past three years are as follows:

		2022	2023	2024
Taiwan	Type of Assistance	Industry Innovation PA612 Project	Industry Innovation PA612 Project	Air compressor energy subsidy
	Amount of Subsidy Unit: NT$ thousand	7,800	7,800	7,800

1.7.3 Tax Policy GRI 207-1、207-2、207-3

The Company actively responds to domestic and international tax governance trends by establishing a sound tax policy and internal management mechanisms. Major Company transactions incorporate tax considerations at the planning stage, and are assessed and prudently managed by professional units. When necessary, external tax advisors are commissioned to provide opinions to ensure that relevant operations are legal and compliant. In addition, Grand Pacific Petrochemical Corporation regularly reviews the overall operational structure and trends in international tax regulations, proactively maintains good communication with tax authorities, ensures information transparency and filing in accordance with the law, and builds trust with stakeholders.

Five Major Principles of Tax Management at Grand Pacific Petrochemical Corporation

Honest Filing

File honestly and pay taxes in accordance with local tax laws; do not engage in transactions aimed at tax avoidance, fulfilling the tax obligations of a corporate citizen.

Proactive Communication

Establish professional and trust-based cooperative relationships with tax authorities, clarify tax application issues, and jointly uphold the spirit of compliance.

Prudent Decision-Making

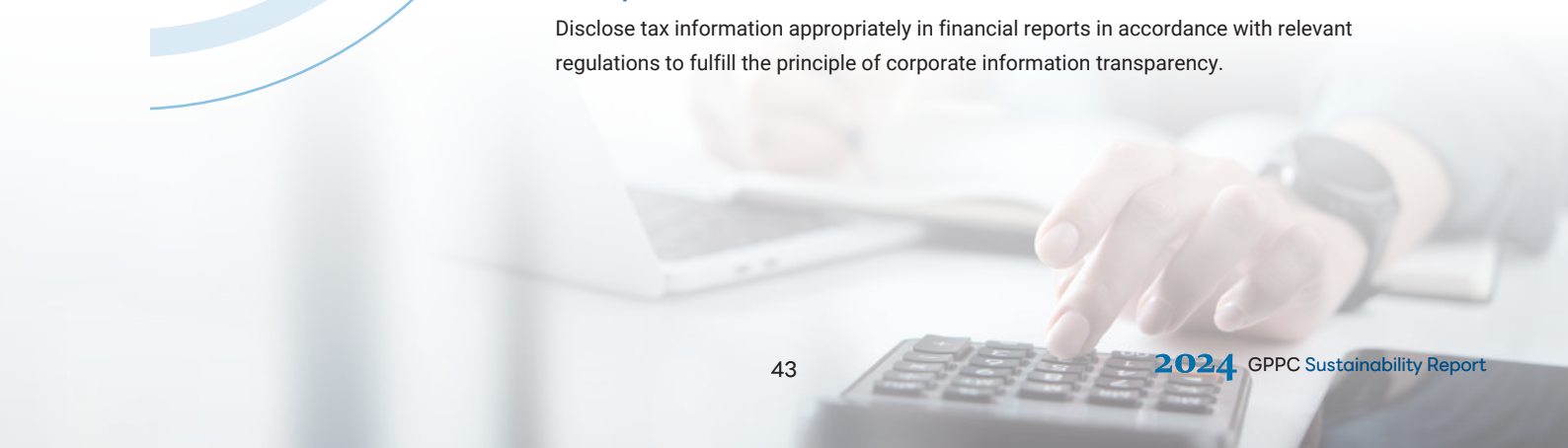
Include assessment of tax impacts and risk control when conducting major investments, operational arrangements, or cross-border transactions.

Expertise Enhancement

Conduct regular internal training and regulatory tracking to improve the tax management team's ability to respond to policy changes.

Transparent Disclosure

Disclose tax information appropriately in financial reports in accordance with relevant regulations to fulfill the principle of corporate information transparency.



Tax Status of GPPC

Unit: NT$ thousand

Operating revenue	Profit (loss) before tax	Income tax payable for the year	Income tax paid amount
13,020,244	-1,697,225	0	-2,234

Income tax

Unit: NT$ thousand

Financial disclosure	2022	2023	2024
Net profit (loss) before tax	-295,765	-1,618,547	-1,697,225
Income tax expense (benefit)	198,047	-180,520	-137,328
Income tax paid (refund)	644,598	221,651	-2,234

Effective tax rate

Year	2022	2023	2024
Book effective tax rate (%) Note 1	-66.96%	11.15%	8.09%
Cash effective tax rate (%) Note 2	-217.94%	-13.69%	0.13%

Note 1: Book Effective Tax Rate (%) = Income Tax Expense / Net Profit Before Tax
Note 2: Cash Effective Tax Rate (%) = Income Tax Paid / Net Profit Before Tax

2

Product R&D, Innovation, and Circular Economy

2024 Highlight Performance

Obtained **ABS** BIS certification to expand into the Indian market

Refined the physical properties of heat-resistant ABS and reduced costs to enhance competitiveness

Implemented a long-term diversified layout strategy by investing in a vertically integrated propylene and polypropylene project with a new propane dehydrogenation (PDH) plant in Quanzhou, China, which has successfully commenced commercial operations

Developed high value-added **ABS** products, such as high-flow ABS for motorcycle shells, ABS for battery casings, and plating-grade ABS

Conducted regular product testing to comply with **EU RoHS** Directive and **REACH** regulation

Resource utilization of waste: **172.77 metric tons** of organic sludge and **541.42 metric tons** of inorganic sludge were thermally treated and used as concrete admixture

Waste reduction: waste reuse rate reached **87.22%**

Circular reuse: by monetizing by-products generated in the process—such as hydrogen, sludge microorganisms, and fly ash from cogeneration plants—GPPC practices resource circularity and creates operating income

Produced long-chain carbon nylon using batch polymerization kettles, and developed bio-based, renewable nylon with low water absorption, excellent flexibility, chemical resistance, and low-temperature performance

United Nations Sustainable Development Goals (SDGs)

- 2.1 Innovation and R&D SDGs 8.3 SDGs 9.5
- 2.2 Quality Management and Safety SDGs 12.4 SDGs 9.5
- 2.3 Circular Economy SDGs 12.4 SDGs 12.5
- 2.4 Customer Relationship Management SDGs 12.4

Management Approach

Material Topic: Circular economy

Impact Description

Positive Impact Description

Reducing dependence on virgin petroleum resources; bio-based nylon uses renewable biomass as feedstock, avoiding consumption of limited fossil resources. The reusing, remanufacturing, and recycling of resources maximizes resource efficiency, thereby lowering material costs and reducing environmental impact. This helps create new business opportunities and revenue sources. It can also attract environmentally responsible consumers and investors, thereby enhancing market competitiveness and promoting long-term sustainable development.

Negative Impact Description

The cost of bio-based feedstocks is higher than that of conventional petrochemical feedstocks, leading to high R&D costs and affecting market promotion. If an effective recycling and reuse system is not established, international trends or customer requirements for circular use of feedstock will not be met, resulting in lost orders and impacts on the Company's operations and financial condition.

Policies and Commitments

In response to the international trend toward a circular economy and to meet customers' carbon-reduction demands for products, GPPC continues to develop high-value green products with environmental benefits that meet market needs. ABS plastic waste is given new value by being developed into post-consumer recycled plastic (PCR ABS). The nylon production process has also been expanded to develop bio-based renewable nylons, addressing the growing demand of end-brand owners for sustainable materials and contributing to carbon reduction along the industry chain.

TargetSetting and Progress

Item	Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025-2026)	2024 Performance
Develop PCR ABS from post-consumer recycled plastics	Develop different grades of PCR ABS and maintain 100 % audit pass rate for products.	Continuously maintain existing grades, targeting iconic electronics and appliance brand customers with urgent needs for green materials, and successfully introduce PCR ABS into their product supply chains.	TÜV plant audit of D-A85 (85 % PCR ABS) — 100 % pass rate.
Develop bio-based long-chain nylons 610 & 612 products	Develop different grades of bio-based long-chain nylon products and maintain a 100 % TÜV audit pass rate for products.	Advance the development of GPPC's first bio-based nylon; TÜV audit pass rate reaches 100 %.	Complete construction of the polymerization plant and start mass production of PA 612

Responsible Unit

R&D Center

Resources

- Arrange continuous circular-economy-related education and training for employees.
- Assign the responsible unit to regularly supervise progress toward targets.

Grievance Mechanism

- Contact: Engineer Chen
- Phone: 02-21754567
- E-mail: audit@gppc.com.tw

Action Plan

Negative Impact Management

- Continuously monitor international circular-economy regulations and policies and keep improving product R&D technology to develop other grades of green products.
- Strengthen cooperation with academia (such as universities and research institutes), technology suppliers, and even competitors to share R&D costs and risks.

Positive Impact Management

- Develop post-consumer recycled plastics.
- Develop bio-based long-chain nylon.
- Circularly reuse by-products generated in processes, such as hydrogen, sludge microbes, and fly ash from the cogeneration plant.
- Continue to develop low-carbon products to meet market demand.
- Continue to implement waste-to-resource measures.

Effectiveness Evaluation

- Review target achievement annually at the management review meeting and carry out planning and target setting for the next year.
- Engage a third party each year to audit products, continually examine product pass rates, and set corresponding strategies or future targets based on the results.
- Conduct regular annual product testing to comply with the RoHS Directive and REACH Regulation.

2.1 Innovation and R&D

GPPC continuously pursues growth and the improvement of its business philosophy. Since its establishment, the Company has been engaged in the production of petrochemical products, including Styrene Monomer (SM) and Acrylonitrile Butadiene Styrene (ABS). The Company has also carried out vertical integration of SM products and diversified into cogeneration and nylon businesses to enhance its competitiveness. The Company continuously upholds the principles of "rigorous quality management" and a "customer-oriented" approach in product manufacturing. Products must undergo quality control and meet specifications, and employees are required to provide prompt and attentive after-sales service to earn customers' trust.

Styrene is the Company's core niche. Our operations extend upstream into crystalline engineering plastics such as nylon 66 and downstream into fundamental development, with a focus on optimizing ABS quality as the annual objective. This year, the following work continued:

- From PBL rubber-grafted large and small latex particles, further refine the color quality of ABS and improve ABS products for electroplating grade, pipe extrusion grade, flame-retardant grade, automotive battery materials, high-impact grade, and high-rigidity grade.
- Develop PCR ABS from post-consumer recycled plastics to prevent plastic waste, reduce energy consumption, lower carbon emissions, and implement a circular economy.
- Expand the market for nylon industrial yarn and develop derivative high-temperature nylons, as well as engineering plastics such as ultra-tough nylon, heat-resistant ultra-tough nylon, soft, water-clear grades, and compounds blended with PPO, to create high-performance, high-quality, high-priced nylon 66 plastic products.
- Implement a long-term diversified deployment strategy by investing in the integrated PP layout project in Quanzhou, China, to establish a new propane dehydrogenation to propylene and polypropylene project; extending operations from the styrene (SM) product line into the propylene product line.

2.1.1 GPPC's Core Products and Sales Regions

GPPC is engaged in the manufacturing and sales of styrene and its downstream plastics. The main product lines include styrene monomer (SM), ABS/SAN plastics, hydrogen gas (H_2), electricity, steam, and nylon. These products are sold to Taiwan, China, the United States, South Africa, and countries in Southeast Asia. Among them, SAN plastic products and electricity are mainly for internal use, while secondary materials produced during shutdowns are sold on the market. To achieve sustainable corporate operations, the Company's R&D team actively works to increase product output, expand market share, and enhance competitiveness. To align with global trends and domestic industrial development, the Company continues to develop new products and adjust its production and sales portfolio to increase product value and meet customer demands.

Product Sales Volume from 2022 to 2024

Sales Products	Unit	2022	2023	2024
Styrene Monomer (SM)	KG	242,493,130	261,934,110	229,748,120
ABS/SAN Plastics	KG	74,461,460	54,863,178	58,099,485
H_2	M^3	10,707,626	11,390,569	10,146,147
Electricity	KWH	41,304,400	114,110,400	159,628,800
Steam	KG	92,216,145	45,263,694	45,997,938
Nylon	KG	12,709,275	14,512,472	17,106,302

2.1.2 Introduction of GPPC's Core Products

GPPC's core products include styrene monomer (SM), ABS/SAN plastics, H_2, electricity, steam, and nylon 6.6 (Nylon 6.6). Downstream applications include the petrochemical industries of plastics, rubber, and fibers, as well as electronics, automotive, textile, and packaging industries. GPPC's ABS plastic products outperform competitors in physical properties such as strength, impact resistance, tensile strength, gloss, and hardness. In recent years, in line with the principles of energy transition and the circular economy, GPPC has further enhanced product performance in terms of heat resistance, chemical resistance, and impact resistance. Furthermore, to meet industrial demand and ease pressure from imports, GPPC has invested in the development of nylon 6.6 plastics and has become the leading domestic producer. These products feature high tensile strength, excellent abrasion resistance, chemical resistance, oil resistance, solvent resistance, impact resistance, and self-lubricating properties. In addition to traditional textile applications, they are also widely used in automotive and electronic components, as well as in communications, precision engineering products, consumer goods, and medical devices.

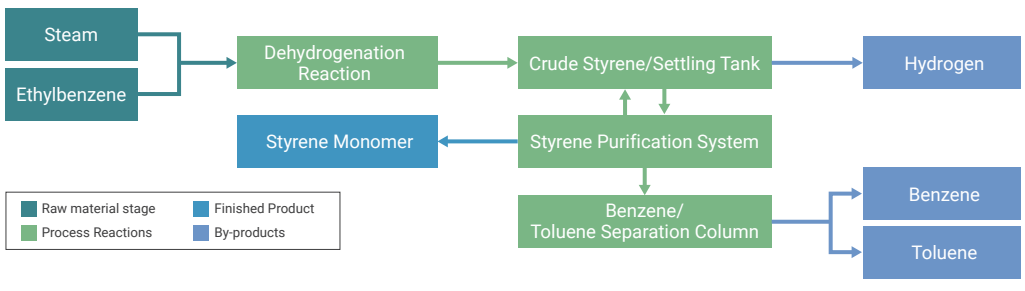
H_2 is a byproduct generated through the dehydrogenation process during styrene production. GPPC operates its own cogeneration plant, which generates electricity to meet the demands of its production process and provides a stable supply of electricity and steam. Surplus electricity sales also contribute to profit. In addition to meeting internal processing needs, part of the steam generated from the cogeneration system is supplied to neighboring plants within the industrial zone. This effectively integrates regional energy resources and improves energy use efficiency.

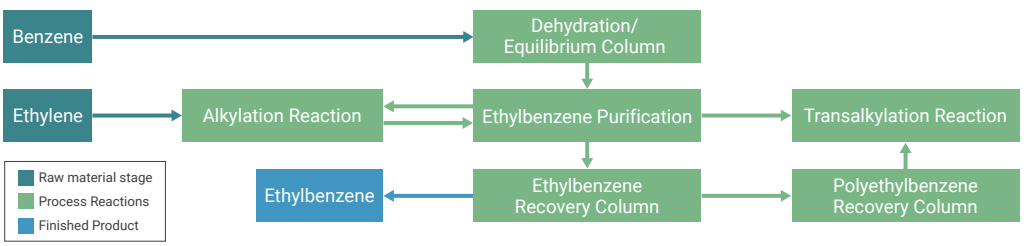
GPPC's products are shown in the table below:

Styrene Monomer (Styrene Monomer, SM), Hydrogen

Product Features

- An important intermediate raw material in the petrochemical industry.
- Can be used to produce ABS plastics, PS plastics, Styrene-Butadiene Rubber (SBR), Unsaturated Polyester (UPR), etc.
- Crude hydrogen is further purified to produce hydrogen gas.

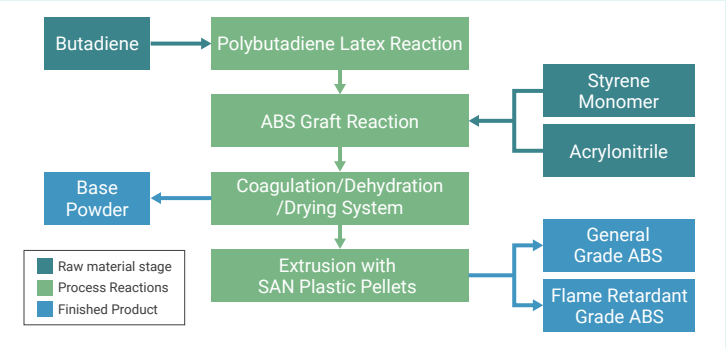




Acrylonitrile Butadiene Styrene (ABS) Plastic

Product Features

- Full name: Acrylonitrile-Butadiene-Styrene Copolymer
- Features: Impact resistance, tensile strength, gloss, and hardness
- Applications: Automotive and motorcycle industry, luggage, pipe valves, toys, and information products
- GPPC has independently developed flame-retardant-grade ABS primarily for the information industry

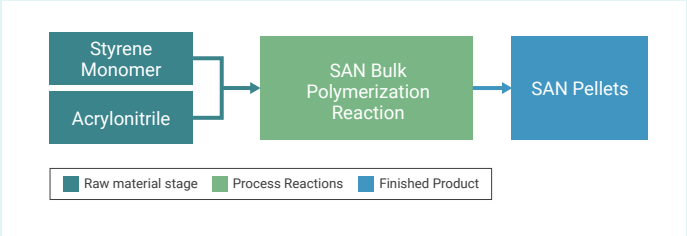


Specifications		Properties	Main Applications
-	60 POWDER	ABS Rubber	Impact modifier
High impact grade	D-100	Possesses extremely high impact resistance and maintains good physical properties even at low temperatures.	For blending use.
	D-100N		
Extrusion grade	D-120S	Especially suitable for extrusion/thermoforming. Finished products have excellent surface appearance, and due to good stress-crack resistance, are more suitable for printing processes and manufacturing food packaging containers. Due to excellent strength and dimensional stability, it is especially suitable for manufacturing large items.	Luggage cases, water pipe valves, motorcycle components, etc.
	D-120N		
	D-120F		
General purpose grade	D-120A	Possesses extremely high impact resistance and maintains good physical properties even at low temperatures.	For blending use.
Weather-resistant grade	D-120V	Due to excellent weatherability and UV resistance, as well as dimensional stability, it is especially suitable for manufacturing motorcycle components.	Motorcycle components, etc.
General purpose grade	D-150	Features a wide processing window, balanced physical properties, and good injection molding characteristics. Widely applicable to various types of molded products.	Home appliance parts, information product components, electronic components, office equipment components, electric product casings, leisure goods, toys, telephone housings, shoe heels, etc.
	D-150HF		
	D-150K		
	D-180		
High flow grade	D-650	Features good flowability, allowing molding at lower temperatures and pressure, shortening molding time and increasing productivity. Easy to mold, increasing flexibility in mold design.	Large home appliances (TVs, VCRs, tape recorders, vacuum cleaners, etc. casings), office equipment components, toys, leisure product components, automotive and motorcycle parts, etc.
	D-670		
Heat-resistant grade	D-450	Features heat-resistant properties and a higher heat deflection temperature, suitable for products requiring high temperature resistance.	Heated appliance casings, heaters, and automotive parts such as dashboards.
	D-470		
Flame-retardant grade	D-1000	Features good flowability and thermal stability. Has considerable heat resistance, impact resistance, and mechanical strength.	TVs, computers, copiers, VCRs, cash registers, fax machines, monitors, computers, surveillance monitors, modems, and other electric product casings and components.
	D-1000A		
	D-1000S		

SAN Plastic (Styrene - Acrylonitrile Resin)

Product Features

- Also known as AS resin
- Features tensile strength, impact resistance, abrasion resistance, and chemical resistance
- Used in audio tapes, batteries, and lighter materials
- Can be further blended with glass fiber to enhance impact and tensile strength, and applied in various fan materials

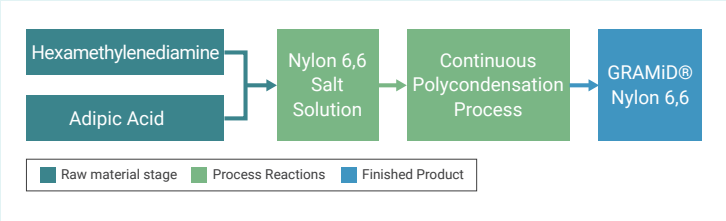


Specifications		Properties	Main Applications
High flowability	D-12	A copolymer of SM and AN, with excellent rigidity and chemical resistance, along with excellent physical and processing properties.	Trash bins, toothbrush handles, lighter shells, cosmetic cases, fan blades, battery housings.
Heat-resistant grade	D-20		

Nylon 6,6

Product Features

- Originally named Polyamide 6,6
- Features high tensile strength, excellent abrasion resistance, chemical resistance, oil resistance, solvent resistance, and impact resistance
- After blending and modification, impact resistance, flame retardancy, and abrasion resistance can be further enhanced
- Applied in the automotive and electronics industries



Specifications		Properties	Main Applications
Blending grade	N200GP	General base material for blending.	Base material for blending and modification.
	N200HF	High flowability, blending base material.	Base material for blending and modification.
Injection grade	N200GL	General injection use with added lubricants.	Products such as kitchenware, nylon rings, eyeglass frames, switches, electronic components, etc.
	N200SL	Features good flowability, fast molding speed, shortens required molding time, and increases productivity.	Products such as cable ties, terminals, connectors, casings, hardware, components, and cable joints, etc.
	N200FC	Features good flowability, fast molding speed, shortens required molding time, and increases productivity.	Products such as cable ties, terminals, connectors, casings, hardware, components, and cable joints, etc.
Glossy grade	F270BR	Glossy-grade nylon 66.	Used for spinning fine-denier short fibers, mainly for producing high-grade cashmere-like products, wool-like decorative fabrics, and other short fiber products.

Steam and electricity

Product Features

The cogeneration system uses coal and natural gas as fuel to simultaneously generate steam and electricity during the power generation process. This system improves energy utilization efficiency by recovering and utilizing waste heat from power generation. The generated steam and electricity can be sold to companies in need, thereby increasing the Company's revenue sources. This not only reduces operational costs but also enhances the Company's market competitiveness and sustainable development image.

2.1.3 Product R&D Highlights

With the continuous emergence of various petrochemical products, the R&D team of GPPC promotes product research and technological innovation by regularly discussing future market demand with customers and incorporating their suggestions to further launch next-generation product designs. To enhance the market competitiveness of products, the R&D team regularly reviews the current status of products and technologies, considers current regulations and market trends, and further incorporates customer feedback for improvement, continuously refining product and technical quality with the aim of improving customer loyalty and increasing business efficiency. As of the end of 2024, the innovation and R&D projects of GPPC are as follows:

Nylon 66 Industrial Yarn Plastic Pellets

Possesses high strength, high wear resistance, and excellent heat resistance and mechanical properties. In addition, melt spinning shows good spinnability and flowability, which can improve fiber strength and modulus.

Client trial certification of nylon 66 glass fiber composite material

By adding glass fiber, the mechanical properties, heat resistance, and dimensional stability of PA66 can be improved, and it is widely used in industries with high-performance requirements such as automotive and electronics.

Develop bio-based long-chain nylons 610 & 612 products

Produced long-chain carbon nylon using batch polymerization kettles, and developed bio-based, renewable nylon with low water absorption, excellent flexibility, chemical resistance, and low-temperature performance.

Development of small-particle PBL latex: trial production and sample completion

Small-particle PBL latex has been successfully used in the production of electroplating-grade ABS, and the product has passed thermal cycling and customer trials.

Development and mass production of ABS products for uninterruptible power supply (UPS) battery cases

In response to customer needs, product rigidity and impact resistance were enhanced.

Optimization and cost reduction of heat-resistant grade ABS products

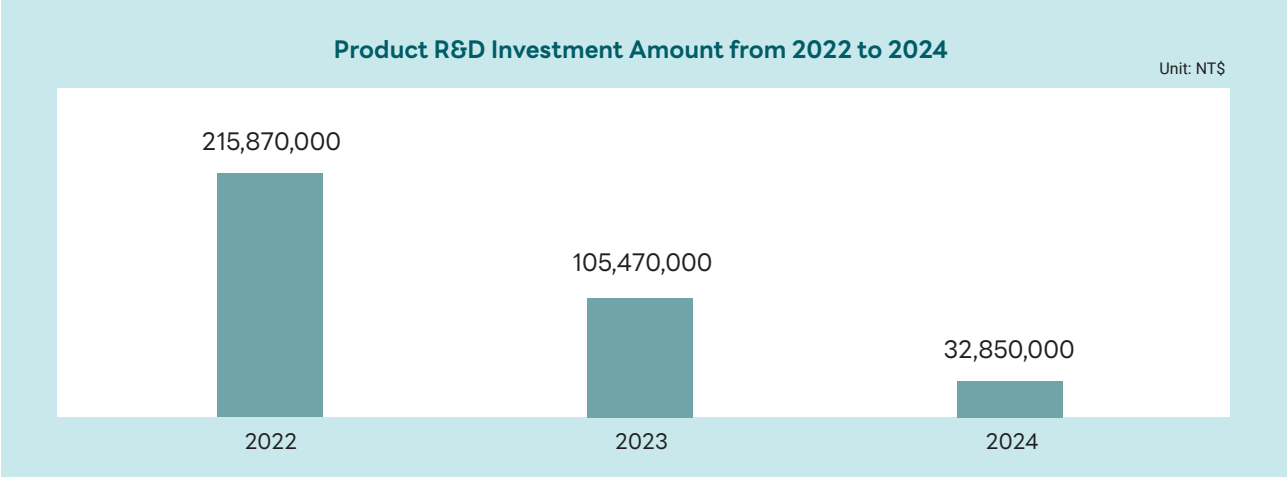
Through optimization of the ratio between heat-resistant agents and ABS base powder, the resulting product has better physical properties and lower cost.

Optimization of pipe extrusion, electroplating, and ABS customer samples

Introduction of small-particle PBL latex during processing improves product processability.

2.1.4 Patents and R&D Investment

To respond to global trends and jointly discuss market demands with customers, the product R&D team of GPPC continues to promote new generations of innovative products and introduce advanced technologies to strengthen competitive advantage. As of the end of 2024, the Company has invested NT$32,850,000 in product R&D.



To prevent the risk of leakage of the Company's operational secrets, GPPC has established a "Trade Secret Protection Policy" that meets operational needs. The policy defines the responsibilities of employees, R&D, procurement, and other departments for identifying and managing confidential information and is listed as one of the four main goals of the intellectual property policy. To enhance employees' correct understanding and practical ability in information protection, the Company will regularly conduct training courses on intellectual property and trade secret protection in 2025. The concept of information confidentiality is also incorporated into the training program for new employees. To effectively manage the linkage between intellectual property and operational objectives and to strengthen competitive advantage within the industry, the Company plans to introduce the Taiwan Intellectual Property Management System (TIPS). Through systematic integration of existing workflows, the Company will establish documentation, records, and implementation mechanisms related to trade secret management. Subsequently, suggestions raised during the verification process will be gradually adopted to revise or supplement internal management practices, strengthening documentation, standardization, and regular review execution within the Company. This will serve as an important foundation for the continued operation of the system. The Company expects to obtain TIPS Grade A certification in 2025.

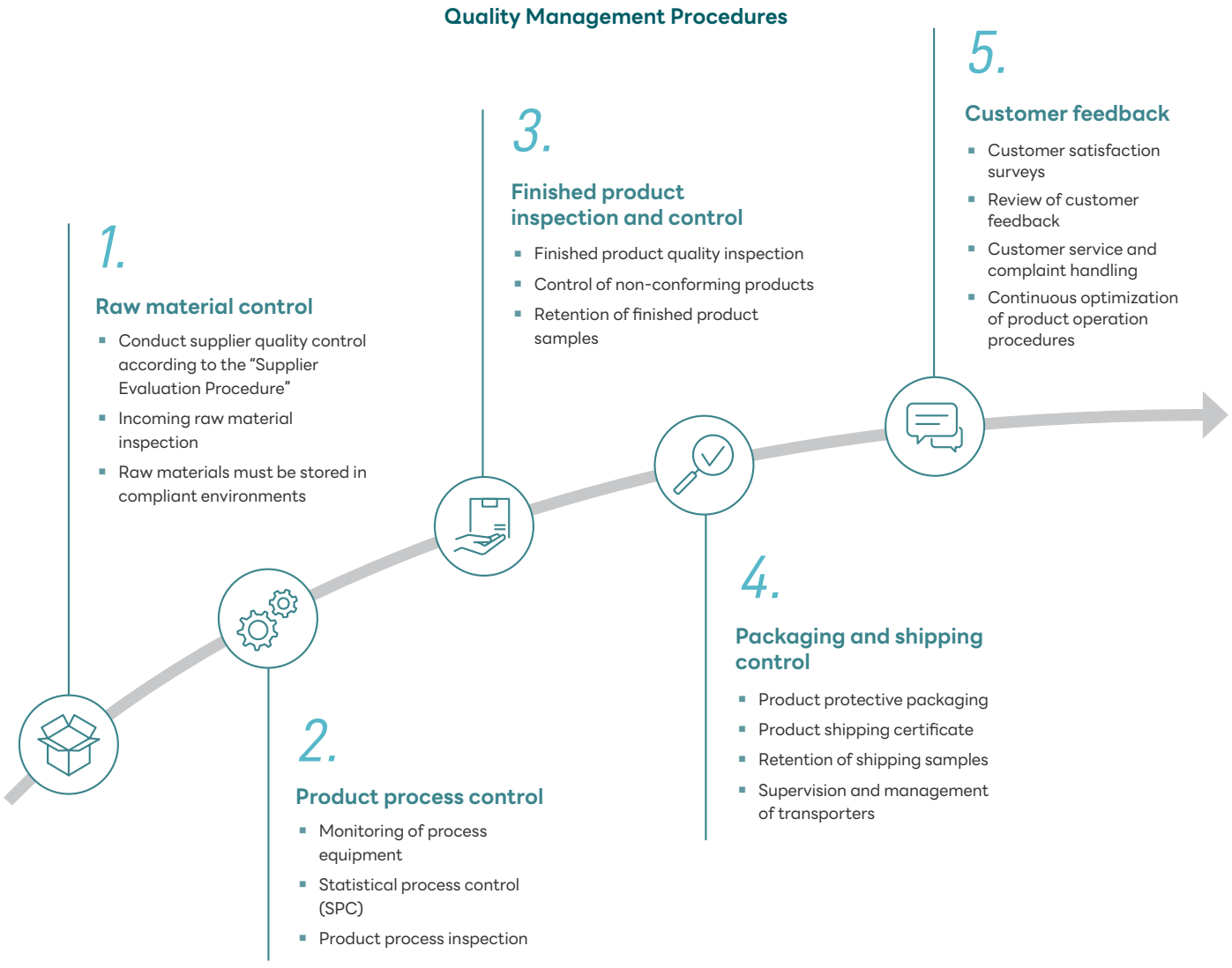
2.2 Quality Management and Safety

2.2.1 Quality Management

GPPC continues to develop product manufacturing technologies and, based on the Company's core philosophy of "All are united as one. Match our words with deeds. Your satisfaction is the only measure of my success," strictly implements quality control with a customer-oriented approach. The Company has established quality management procedures, requiring products to comply with these management processes. In addition, the Company has also set up a "Supplier Evaluation Procedure" to strictly control supplier quality. For details, please refer to 7.1.1 Supplier Selection.

2.2.2 Quality Certifications

To ensure the stability and consistency of product quality and meet customer needs, GPPC has established quality management procedures that require all departments to strictly follow these procedures in executing each stage of operation. This ensures that products pass all inspections and meet standards before shipment. Furthermore, customer satisfaction surveys are conducted to continuously optimize product quality and enhance customer satisfaction and trust. The Company's production sites have obtained external third-party verifications, such as ISO 9001:2015 Quality Management System certification, and the ABS products have also received BIS certification.



All products produced by Grand Pacific Petrochemical Corporation have obtained ISO 9001:2015 Quality Management System certification and ISO 14001:2015 Environmental Management System certification, both issued by the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs. In addition, to comply with EU regulations, the Company uses raw materials that meet the requirements of the Restriction of Hazardous Substances (RoHS) Directive and the Registration, Evaluation and Authorization of Chemicals (REACH) regulation. Each year, products undergo RoHS testing, and REACH declarations are provided to ensure no hazardous substances are detected in the products.

Plan

- Identify and classify which materials are restricted or prohibited substances
- Establish a management plan and objectives for restricted/prohibited substances
- Each unit confirms targets and procedures and formulates annual plans to achieve the objectives

Do

- Obtain restricted substance declarations from suppliers
- Conduct education and training for internal and external personnel
- Regularly review implementation plans; the responsible unit collects data and conducts analysis

Act

- Regularly review additions and deletions of restricted/prohibited substances and regulatory changes
- Improve and prevent non-conformities found in audits
- Take actions based on audit results; regularly provide process improvements and update plans

Check

- Verify sources and uses of substances
- Conduct periodic sampling inspection of raw materials and products and audit suppliers
- Regularly compare actual results with expected results; the Company's dedicated unit evaluates whether further improvement is needed

Product has obtained ISO 9001 certification

Product has obtained ISO 14001 certification

ABS Plastic REACH Declaration


國亨化學股份有限公司
GPPC Chemical Corporation
Certificate of SVHC for Reach

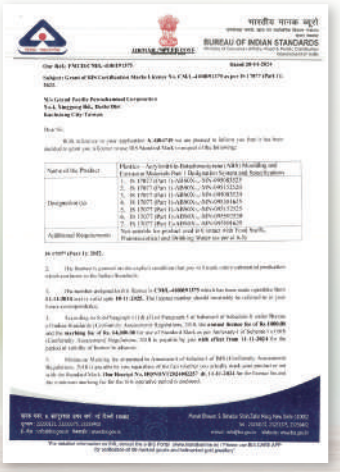
PS Plastic REACH Declaration


SGS
測試報告
Test Report

ABS Plastic RoHS Test Report


SGS
測試報告
Test Report

PS Plastic RoHS Test Report


BUREAU OF INDIAN STANDARDS

ABS Plastic BIS Certification Report

2.3 Circular Economy

GRI2-6、GRI 301-2

GPPC is committed to the circular economy, aiming to reduce the generation of waste and reintroduce it into the production chain, thereby achieving a closed-loop of resource utilization. This not only requires improving efficiency during the production process but also demands that every stage—from design, use, to recycling—takes into consideration the sustainable use of resources. This approach not only enhances product effectiveness but also significantly mitigates the environmental impact of industrial activities and promotes the sustainable development of the entire industry.

GPPC leverages its corporate influence to join forces with local industrial zone manufacturers to enhance environmental performance through investments in emission-reduction equipment and improvement of related outcomes. At the same time, the Company seizes the opportunity brought by the circular economy trend and focuses on resource utilization of waste. It applies high-value utilization to by-products generated during processes—such as hydrogen, sludge bacteria, and fly ash from cogeneration plants—to realize resource circulation, implement carbon reduction goals, promote the petrochemical industry's transition toward low carbon, and jointly create sustainable business opportunities.

GPPC's 3R Concept

GPPC promotes circular economy operations to address resource scarcity issues, including the reduction of energy and resource consumption, reuse, and the materialization of end-of-life resources to maximize resource reuse. GPPC has established a circular value chain based on the 3R principles: Reuse, Reduce, and Recycle. These strategies cover all stages from raw material usage, manufacturing processes, to end-use. GPPC aspires to be a pioneer in the field of corporate sustainable development, moving toward a more environmentally friendly and efficient future.

Circular Economy Management Principles

3R Concept	Description	Implementation Stage	Related Sustainability Actions
Reuse	Waste recycling and reproduction	End stage	Organic and inorganic sludge can be processed by professional firms into recycled materials
Reduce	Reduce hazards and energy/resource consumption in the production process	Raw material stage Manufacturing stage End stage	▪ Reduce waste generation ▪ Reduce greenhouse gas emissions ▪ Improve energy efficiency ▪ Reduce raw material usage ▪ Reduce production water consumption ▪ Reduce VOC emissions, a type of air pollutant ▪ Reduce SOx, NOx, and PM emissions during the production process
Recycle	Economic utilization of by-products generated in the process	Manufacturing stage	Recycling and reuse of by-products generated in the process

2.3.1 Reuse: Waste Recycling and Reproduction into Economically Valuable Compost and Concrete Admixture

The organic and inorganic sludge generated by GPPC, after being processed by professional firms, can be regenerated into recycled materials. For example, organic sludge can be processed and recycled into compost, while inorganic sludge can undergo thermal treatment to be used as a concrete admixture. The circulation of recycled materials not only reduces the volume of waste from GPPC that needs to be landfilled or disposed of, but also more effectively lowers environmental impact and consumption of energy and resources. In 2024, the amounts of organic and inorganic sludge thermally treated and used as a concrete admixture were 172.77 metric tons and 541.42 metric tons, respectively.

2.3.2 Reduce: Waste Reduction and Recycling

In addition to processing waste generated internally (refer to Section 5.2 Waste Management), GPPC reduces the demand for outsourced waste processing through effective waste circulation management. This significantly lowers the cost of outsourced treatment, promotes resource circulation, and actively encourages recycling and reuse, with a focus on optimizing waste resource utilization. The waste reuse ratio reached 87.22%.

Direct Waste Disposal Status

Waste classification	Waste name	Treatment method	Unit	Total	Percentage (%)
Non-hazardous industrial waste	Waste materials [Note 1], organic/inorganic sludge, incinerator fly ash, bottom ash, non-hazardous waste catalysts or their mixtures, non-hazardous organic waste liquid or waste solvents, and general waste	Landfilling, incineration, and other treatments	Metric tons	3,173.67	12.78
	Coal fly ash, bottom ash, and other waste [Note 2]	Reuse	Metric tons	21,715.41	87.22

Note 1: Waste materials refer to mixed plastic waste, discarded insulation materials, and other mixtures such as waste glass, ceramics, bricks, tiles, and clay.
Note 2: Other waste refers to waste plastic, waste lubricating oil, and spent activated carbon.

2.3.3 Recycle: Economic Utilization of By-products Generated from Production Processes

Taking hydrogen, a key by-product in the production process, as an example, it can be used as fuel for internal heating furnaces or sold to gas suppliers. After purification, it can be supplied as high-purity hydrogen to high-tech electronics manufacturers, directly participating in the semiconductor S Corridor supply chain. Hydrogen is also currently a major clean and green energy source globally. It can be supplied as a raw material to hydrogen fuel cell manufacturers. In addition, the steam generated from the cogeneration plant can be supplied to other nearby factories within the zone, realizing thermal integration and reducing pollutants from multiple combustion sources, serving as a typical model of GPPC's active participation in the circular economy.

2.4 Customer Relationship Management

GRI 416-1、GRI 417-1

GPPC not only places importance on product quality but also endeavors to safeguard the health, privacy, and rights of its customers, as well as to understand customer feedback regarding product quality, technical services, and other service-related matters. In fulfilling its obligation to protect customer rights and interests, the Company has established four major management aspects for customer relations:

Customer Health and Safety

All products have established Safety Data Sheets (SDS) provided to customers as storage and transportation guidelines to ensure health and safety.

Customer Privacy

Customer data in the SAP system is managed through permission settings to prevent the risk of data breaches.

Product Labeling

All product marketing and labeling comply with relevant regulations and international standards. In accordance with trademark laws, prohibited ingredients for food-grade use are disclosed on product packaging.

Establishment of Customer Rights and Complaint Procedures

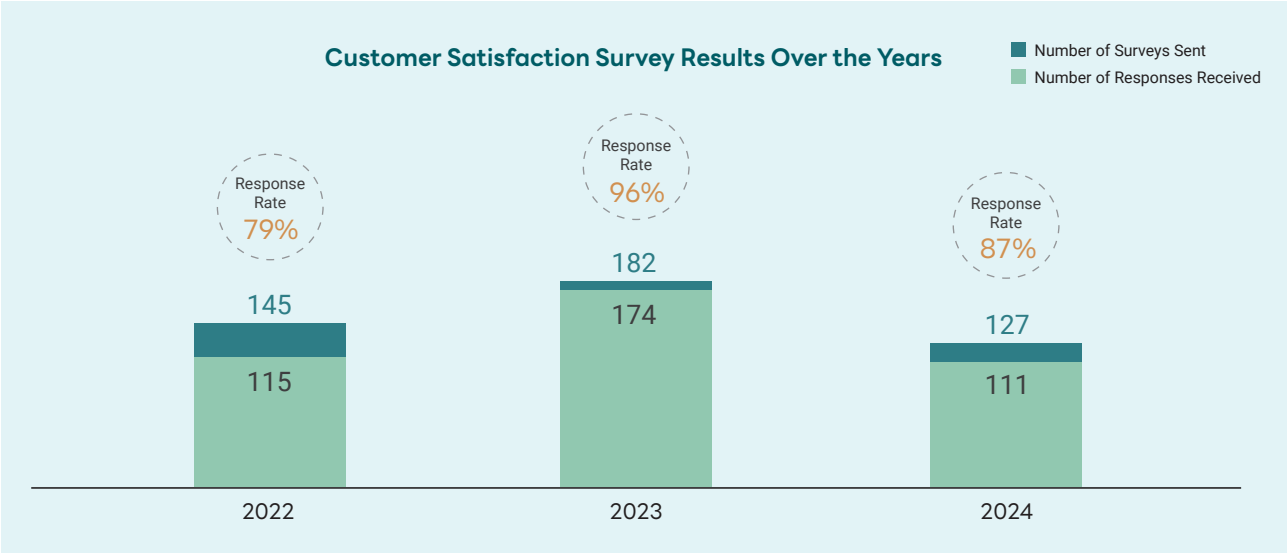
In accordance with the "Customer Satisfaction Survey Management Measures" and "Customer Complaint Handling Procedures," complaint channels are provided to protect customer rights.

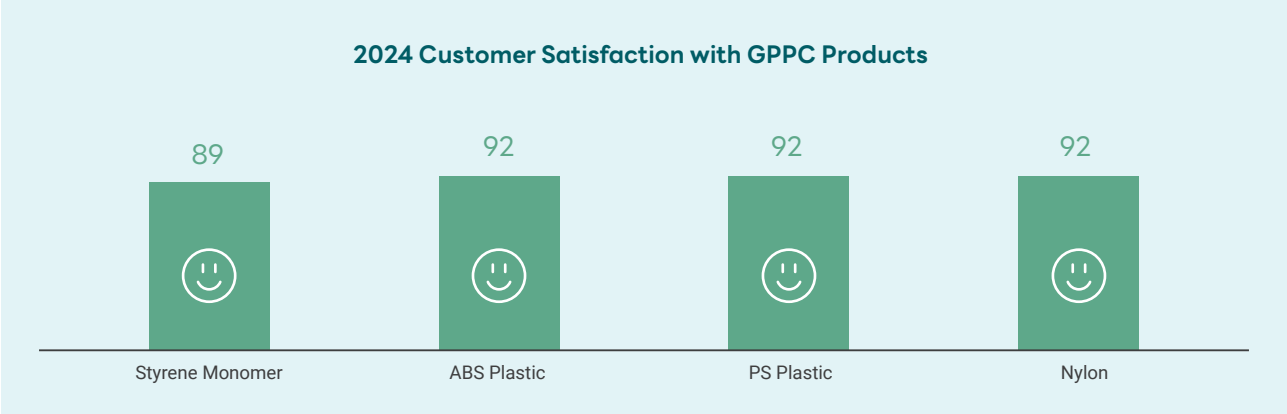
GPPC has established a customer relationship management process to understand customer feedback. Through feedback and suggestions submitted via customer rights and complaint procedures, the Company identifies the sources of issues, develops corresponding improvement plans for each issue raised, and conducts follow-up measures to prevent the recurrence of the same problems. Customer feedback is continuously tracked to optimize and improve response measures.

Customer Relationship Management Process

Understand and identify causes	Propose corresponding strategies and improvement suggestions	Respond to customers and discuss follow-up matters	Continuous tracking
▪ Collect and review customer feedback via service hotlines and the website. ▪ Examine the sources of various issues.	▪ Develop appropriate responses to feedback. ▪ The R&D team formulates improvement strategies and follow-up actions based on the feedback received.	▪ Reply to customers with related improvement plans ▪ Engage with customers regarding subsequent tracking matters.	▪ Continuously track customer feedback to optimize improvement measures.

In the highly competitive chemical industry, refining "customer relationship management" has become one of the core elements driving business success. GPPC builds competitive advantage and achieves long-term value through effective customer relationship strategies. Not only does the Company actively listen to customer feedback and suggestions regarding products, but it also focuses on resolving various issues. In addition, to continuously drive product innovation, the Company regularly discusses future market demands with customers to guide the design and innovation of the next generation of products. At the same time, the Company regularly conducts in-depth analysis of product defect rates and collaborates with customers and internal teams to find solutions, thereby ensuring improvements in product quality and customer satisfaction. GPPC implements customer relationship strategies by integrating customer relationship management into its strategic framework, aiming to enhance customer satisfaction, increase customer loyalty, boost cross-selling and repeat purchase opportunities, and improve overall business efficiency. To enhance customer satisfaction, the Company conducts annual customer satisfaction surveys focusing on product quality, delivery capability, service quality, technical services, and industry comparisons. Customers provide overall scores and feedback based on their actual experiences. The Company reviews service processes based on survey results and continuously improves them to enhance customer satisfaction and maintain strong collaborative relationships. However, due to a decrease in downstream customer orders and a lower willingness to respond to surveys, the customer satisfaction survey response rate in 2024 decreased by approximately 9% compared to 2023. Additionally, due to varying scoring standards among customers regarding delivery capability, the satisfaction score for styrene products in 2024 was lower than that for other products. To address customer concerns and improve satisfaction scores, the Company will continue to strengthen its product delivery process to meet customer delivery requirements.


Customer Satisfaction Survey Results Over the Years
Number of Surveys Sent
Number of Responses Received
Response Rate 79%
145
115
Response Rate 96%
182
174
Response Rate 87%
127
111
2022
2023
2024


2024 Customer Satisfaction with GPPC Products
89
92
92
92
Styrene Monomer
ABS Plastic
PS Plastic
Nylon

3

Climate Change Risk Governance

2024 Highlight Performance

The Company's annual greenhouse gas emissions were **506,600** tons of CO_2e, a reduction of **9.84%** compared to the 2015 base year

Power saving rate in 2024 was **0.67%**, with an average annual power saving rate of **1.97%** from 2015 to 2024

Energy conservation and carbon reduction measures in 2024 reduced approximately **436** tons of CO_2e

Compared to the base year 2020, sulfur oxides (SOx) emissions in 2024 decreased by **60%**, and nitrogen oxides (NOx) emissions decreased by **25%**

This year, the Company actively engaged in discussions and promoted multiple carbon reduction projects, expecting to reduce **1,985.08** tons of CO_2e, approximately equivalent to the carbon absorption capacity of **5.13** Daan Forest Parks

United Nations Sustainable Development Goals (SDGs)

- 3.1 Climate Change Response SDGs 13.1~3
- 3.2 Energy Management SDGs 7.1~2
- 3.3 Greenhouse Gas Management SDGs 13.1~3
- 3.4 Air Pollution Control SDGs 3.9 SDGs 11.6

Management Approach

Material Topic: Climate change risk governance

Impact Description

Positive Impact Description
In the process of responding to climate challenges, the Company has discovered new market opportunities for low-carbon raw materials such as circular economy products, while simultaneously enhancing brand image and operational efficiency, and receiving government support and incentives. Through proactive management and adaptation to climate change risks, the Company can strengthen risk management and compliance capabilities.

Negative Impact Description
Failure to effectively manage and reduce the physical risks of climate change to operating sites and the transition risks related to compliance with local regulations may result in insufficient climate resilience and expose the Company to operational interruption risks.

Policies and Commitments

Major climate change issues are discussed by the Sustainable Development Committee, with committee members identifying associated risks and opportunities and proposing management plans and policy commitments.

Goal Setting and Progress

Mid- to Long-Term Targets (2030–2050)	Short-Term Targets (2025–2030)	2024 Performance
40% reduction by 2030 compared to the base year 2020, carbon neutrality by 2050	20% reduction compared to the base year 2020	In 2024, greenhouse gas emissions were 506,600 ton CO_2e, a 9.84% reduction compared to the base year 2020

Responsible Unit

Sustainable Development Committee

Resources

Annual capital expenditure budget

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management
- Assess increasing cogeneration capacity or installing green power equipment.
- Implement emergency response and strengthen disaster prevention facilities and property insurance coverage.

Positive Impact Management
Conduct ISO 14064-1 greenhouse gas inventory and verification operations.

Effectiveness Evaluation

Conduct monthly compilation and analysis of climate-related indicators and targets such as carbon emissions to assist in adjusting and formulating climate governance strategies.

Material Topic: Energy management

Impact Description

Positive Impact Description
The Company effectively manages energy to reduce energy consumption and improve energy efficiency, which can significantly lower production costs and enhance competitiveness; furthermore, the use of renewable energy and implementation of energy-saving measures helps reduce the carbon footprint, which not only aligns with global environmental trends but also meets the growing demand from customers for low-carbon products.

Negative Impact Description
The Company faces new energy policies and regulations from local competent authorities. Failure to meet relevant requirements may result in negative reputational impact, inability to meet investors' and customers' expectations regarding energy conservation and carbon reduction, leading to increased difficulty in obtaining financing and decreased customer orders.

Policies and Commitments

GPPC endeavors to reduce the environmental impact of energy use, comply with national legal requirements, and meet the set annual energy-saving targets. Using 2015 as the base year, the Company sets short-, medium-, and long-term reduction targets to achieve reductions.

Goal Setting and Progress

Mid- to Long-Term Targets (2030–2050)	Short-Term Targets (2025–2030)	2024 Performance
Continue to increase the installation of renewable energy generation equipment and the proportion of renewable electricity use, participate in carbon capture, utilization, and storage (CCUS), and develop forward-looking energy (hydrogen, geothermal, biomass, ocean energy) and energy storage equipment to achieve the goal of net zero carbon emissions by 2050.	Continue to reduce electricity consumption by 1% annually, replace outdated equipment to improve energy efficiency, and install solar photovoltaic generation equipment to account for 0.5% of total plant electricity usage.	Power saving rate in 2024 was 0.67%, with an average annual power saving rate of 1.97% from 2015 to 2024.

Responsible Unit

Sustainable Development Committee

Resources

Annual capital expenditure budget

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Positive Impact Management
Introduce ISO 50001 Energy Management System.

Negative Impact Management
- Add heated dryer K-803J in the SAN unit to replace the non-heated adsorption dryer K-803F.
- Modify the heat medium system of the nylon line 1 flash evaporator and shut down the secondary heat medium pumps PP-6226A/S.
- Replace the casing of oil-water separator pump PP-203S in SM-3 plant.
- Change the fixed frequency box-type air conditioner on the north side of the cogeneration control room to variable frequency.

Effectiveness Evaluation

Conduct annual statistical analysis on energy usage, capital expenditures for energy-saving facilities, and subsequent operation status.

Material Topic: Greenhouse gas management

Impact Description

Positive Impact Description
Actively managing greenhouse gas emissions can reduce additional operating costs such as carbon fees and enhance market competitiveness, demonstrating the Company's commitment to environmental responsibility. In addition, it enables the Company to better adapt to future environmental regulations and market changes.

Negative Impact Description
The Company faces and adapts to new energy policies and regulations issued by local competent authorities. Failure to meet relevant requirements would result in negative reputation, inability to meet investors' and customers' expectations for energy conservation and carbon reduction, increased difficulty in obtaining funding, and a decrease in customer orders.

Policies and Commitments

GPPC regards environmental protection as a priority and major policy goal. In addition to continuously implementing energy-saving measures, the Company strictly complies with domestic and international regulations related to environmental protection, energy, and greenhouse gas management. In response to government regulations, the Company has established cogeneration facilities and replaced outdated facilities to reduce greenhouse gas emissions from operations.

Goal Setting and Progress

Mid- to Long-Term Targets (2030–2025)	Short-Term Targets (2025–2030)	2024 Performance
Using 2020 as the base year, the Company aims to reduce greenhouse gas emissions by 20% by 2030 compared to the base year and achieve net zero carbon emissions by 2050.	▪ The Company conducts ISO 14064-1 greenhouse gas inventory and verification operations annually. ▪ Use of green electricity: From 2027 to 2029, solar panel installation projects will be carried out, with a target total installed capacity of more than 1,400 kW. ▪ The Company implements equipment replacement projects to improve energy efficiency.	▪ In 2024, energy-saving measures resulted in approximately 436 tons CO_2e. ▪ In the future, multiple carbon reduction projects will be promoted, which are expected to reduce emissions by 1,985.08 tons CO_2e.

Responsible Unit

Sustainable Development Committee

Resources

Annual capital expenditure budget

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management
The Company actively reduces greenhouse gas emissions by replacing outdated equipment and using renewable energy to lower overall greenhouse gas emissions.
- Use of dehydrogenation vent gas in plant heating furnaces to replace natural gas combustion
- Energy-saving and eco-labeled appliances are prioritized in the procurement of office/factory household equipment

Positive Impact Management
The Company conducts ISO 14064-1 greenhouse gas inventory and verification operations annually.

Effectiveness Evaluation

The Company conducts ISO 14064-1 greenhouse gas inventory and verification operations annually and performs statistical analysis of greenhouse gas emissions

Material Topic: Air pollutant management

Impact Description

Positive Impact Description
Effective management of air pollutants not only ensures compliance with regulatory requirements and avoids legal liabilities but also enhances corporate image and reputation, reduces environmental risks, and may improve operational efficiency and reduce long-term costs.

Negative Impact Description
If a large amount of capital and technical resources is not invested in air pollution control, and if related air pollution treatment equipment is not increased, management and technical challenges may lead to regulatory risks and production interruptions, thereby impacting company operations.

Policies and Commitments

GPPC complies with domestic air pollution regulations, monitors and manages emissions, and updates outdated equipment to improve air pollutant emissions.

Goal Setting and Progress

Mid- to Long-Term Targets (2030–2025)	Short-Term Targets (2025–2030)	2024 Performance
Using 2020 as the base year, by 2030, SOx emissions will be reduced by 30% and NOx emissions by 15% compared to the base year.	All process regular inspections comply with air pollutant emission standards.	Compared to the base year 2020, SOx emissions have been reduced by 60%, and NOx emissions by 25%.

Responsible Unit

Engineering and Environment Department

Resources

Annual capital expenditure budget

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management

- Outdated equipment is replaced to reduce air pollutant emissions.
- Autonomous management of equipment components is strengthened, and cross-departmental inspections are conducted to reduce fugitive emissions of volatile organic compounds.
- Automatic monitoring systems are installed to monitor air quality in process areas

Effectiveness Evaluation

Annual air pollutant emissions statistics

3.1 Climate Change Response

3.1.1 Climate-related Financial Disclosures (TCFD) and Governance GRI 201-2

Following the Paris Agreement, climate change response has become an issue that governments and enterprises worldwide must actively address. After the 26th session of the Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2021, countries successively announced actions toward "net zero carbon emissions by 2050." At COP27 in 2022, the importance of limiting temperature rise to within 1.5°C was reaffirmed. Furthermore, in 2023, COP28 launched the first Global Stocktake under the Paris Agreement, which showed that global efforts to control warming have been ineffective, once again emphasizing and urging governments and enterprises to accelerate transitions toward zero/low emissions and low-emission technology development to reduce carbon emissions.

Taiwan also officially announced the "Taiwan 2050 Net Zero Emissions Pathway and Strategy" in 2022. Given the increasingly stringent domestic and international greenhouse gas emission regulations and the direct impact that extreme weather-related natural disasters could have on operating sites, these transition and physical climate-related risks may have financial impacts on the Company. GPPC pays attention to climate risks. Referring to the Financial Stability Board (FSB)'s June 2017 publication of the "Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)," the Company established a "Climate Risk Management Procedure." Under the TCFD framework, the Company identifies and manages transition and physical climate risks, conducts financial impact assessments for high-risk factors, and incorporates climate risk considerations into its existing risk management framework to facilitate long-term tracking and ensure effective governance of climate-related issues.

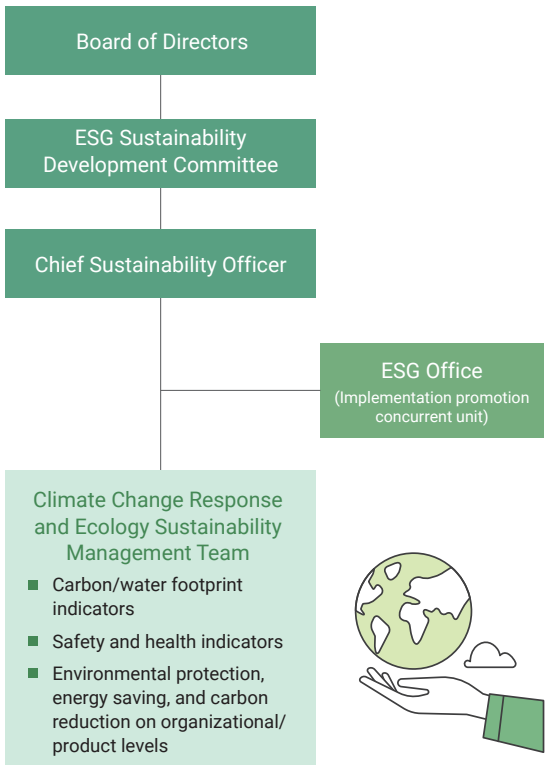
GPPC uses its ESG sustainability organizational structure as the climate governance body. Based on the "Climate Risk Management Procedure" framework, the Company discloses information on climate change impacts and enhances the management of climate-related risks and opportunities through mechanisms such as the identification of risks and opportunities and the setting of carbon reduction targets, continuously responding to the concerns and expectations of the government and other stakeholders regarding the Company's climate governance.

Governance

The Board of Directors is the Company's highest decision-making body for climate governance and is also responsible for supervising GPPC's performance in climate-related governance and the achievement of relevant targets. Each year, it conducts a regular review of the Company's performance in sustainable governance, including the governance status and achievement of targets for climate-related issues.

The Sustainability Development Committee established under the Board is the highest guiding unit for promoting and implementing sustainability practices. Directors serve as members of the committee, which reports annually to the Board on the performance of managing climate-related risks and opportunities. The group members are composed of various committee members, with the Risk Governance Group responsible for collecting and consolidating climate issue trends domestically and internationally. It periodically implements and formulates the Company's overall climate risk and opportunity management policies and response strategies to ensure the appropriateness of the Company's climate governance direction and practices. The Promotion Office under the Committee acts as the ESG part-time promotion unit, responsible for convening and executing the identification and assessment of climate-related risks and opportunities. It compiles and analyzes climate-related indicators and targets, such as energy resource usage and carbon emissions, on a monthly basis to assist in adjusting and formulating climate governance strategies.

Climate Governance Roles and Responsibilities at GPPC



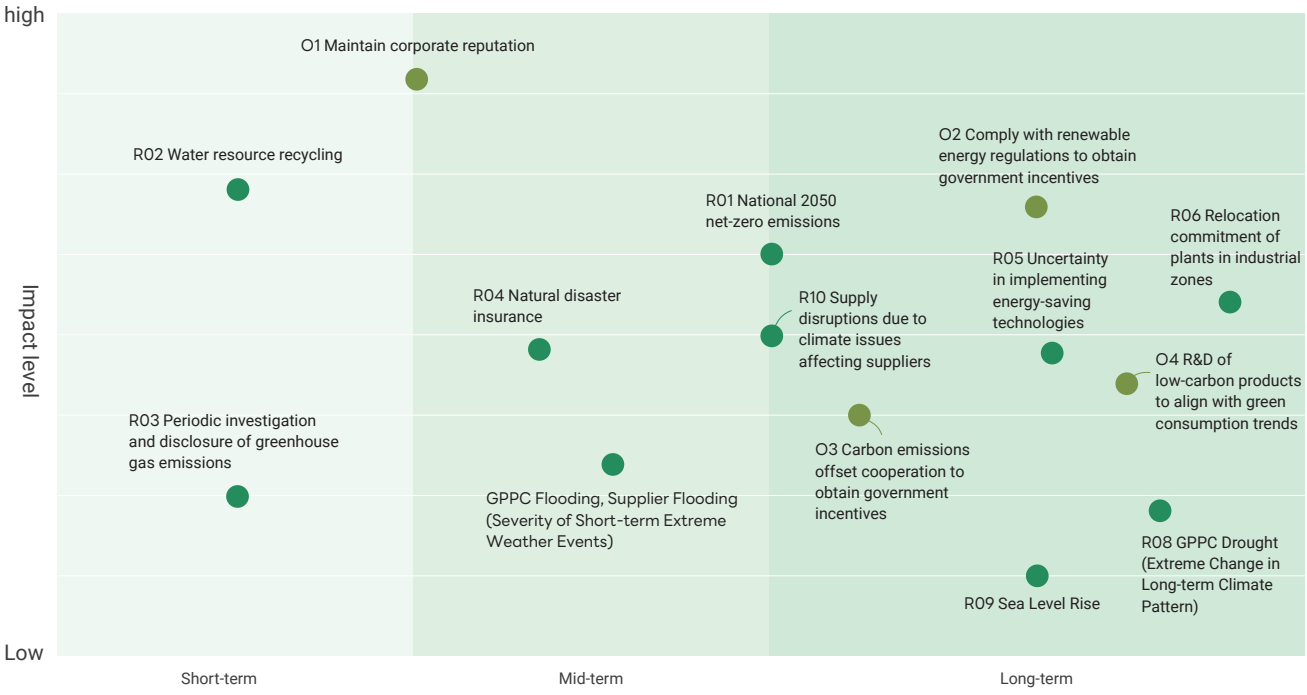
Strategy

GPPC's process for identifying climate risks and opportunities includes three major steps: "review of risk factors," "review of materiality," and "adjustment and confirmation." Through the introduction of a mechanism for identifying climate-related risks and opportunities, the Company fully inventories and assesses the impact of various risk and opportunity issues on its operations and implements appropriate management.

The climate risk and opportunity factors identified by the Sustainability Development Committee are further refined into 14 risk and opportunity factors based on their risk characteristics and their relevance to the Company's industry, supply chain, and R&D-related functions. These factors are then compared, reviewed, and confirmed with the results of internal materiality assessments and benchmarking companies to assess the impact on the supply chain and to facilitate adjustments to materiality. According to the identification results, the Company has a total of four high-priority climate factors: one distributed in the short term (2024 to 2027), one in the mid-term (2028 to 2031), and two in the long term (2032 to 2050). Their distribution is detailed in the following Climate Risk Matrix Diagram.

In response to climate change issues, the Company, after comprehensively considering the risks it faces, its risk tolerance, and the related functions of its supply chain and R&D, has formulated the following list of 14 climate risk and opportunity factors. Subsequently, risk management plans will be developed for the more vulnerable high-risk issues:

Climate Topic Prioritization



Risk Ranking

Risk Ranking	Risk Code	GPPC Risk Factor	Type	Timeframe	Priority Level
1	R01	National 2050 net-zero emissions	Transition Risk – Policy/Regulatory/Low-carbon Trend	Long-term	P
2	R02	Water resource recycling	Transition Risk – Based on Policy	Short-term	P
3	R03	Periodic investigation and disclosure of greenhouse gas emissions	Transition Risk – Policy/Regulatory/Low-carbon Trend	Short-term	
4	R04	Natural disaster insurance	Transition Risk – Based on Customer Expectations	Mid-term	
5	R05	Uncertainty in implementing energy-saving technologies	Transition Risk – Policy/Regulatory/Low-carbon Trend	Long-term	

Risk Ranking	Risk Code	GPPC Risk Factor	Type	Timeframe	Priority Level
6	R06	Relocation commitment of plants in industrial zones	Transition Risk – Policy/Regulatory/Low-carbon Trend	Long-term	
7	R07	GPPC Flooding (Severity of Short-term Extreme Weather Events) Supplier Flooding (Severity of Short-term Extreme Weather Events)	Physical Risk – Extreme Climate Impact (Acute)	Mid-term	
8	R08	GPPC Drought (Extreme Change in Long-term Climate Pattern) Supplier Drought (Severity of Short-term Extreme Weather Events)	Physical Risk – Extreme Climate Impact (Acute)	Long-term	
9	R09	Sea Level Rise	Physical Risk – Extreme Climate Impact (Acute)	Long-term	
10	R10	Supply disruptions due to climate issues affecting suppliers	Physical Risk – Extreme Climate Impact (Chronic)	Long-term	

Opportunity Ranking

Opportunity Ranking	Opportunity Code	GPPC Opportunity Factor	Type	Timeframe	Priority Level
1	O1	Maintain corporate reputation	Opportunity	Mid-term	P
2	O2	Comply with renewable energy regulations to obtain government incentives	Opportunity – Based on Technology	Long-term	P
3	O3	Carbon emissions offset cooperation to obtain government incentives	Opportunity – Based on Technology	Long-term	
4	O4	R&D of low-carbon products to align with green consumption trends	Opportunity – Based on Technology	Mid-term	

Note: Assessment of occurrence time – short term: 0–3 years; medium term: 3–7 years; long term: more than 7 years.

Risk management

To understand the impact of climate change on GPPC's operations, we progressively focused on and managed major risk and opportunity issues through the following identification mechanism. First, we selected 10 risk issues and 4 opportunity issues relevant to the industry based on industry characteristics. These were reviewed by the plant managers of each operating site and the heads of various departments through literature analysis, case studies, collection of domestic and international regulations, and market/technology trends to gain a comprehensive understanding of the impact of each climate risk and opportunity. Then, we evaluated the time frame (short term, medium term, long term), the likelihood of the issues occurring, and the degree of impact on operations. This allowed us to summarize the major potential climate risks and opportunities. Using a climate change risk and opportunity matrix, we identified and ranked the related risks, and identified two major risk issues and two major opportunity issues. These were ultimately confirmed by the Board of Directors, which then adopted corresponding response measures.

To further understand the impact of climate change on the Company, the two major risk issues and two major opportunity issues identified were each qualitatively and quantitatively analyzed through scenario analysis to assess the Company's resilience in facing climate change risks under different external conditions.

Risk Code	Climate Factor	Type	Impact on CPPC	Financial Impact (NT$ _)	Timeframe of Occurrence	Response Measures	Target Indicator/ TCFD Category
R01	Compliance with policy and regulations and the 2050 net-zero emissions goal	Transition Risk – Based on Policy	Compliance with the energy laws and regulations requirement for major energy users to save 1% on average annually by 2024	NT$200 million in direct cost reduction in 2023	Short	Cooperate with regulations to conduct energy audit reporting and achieve the required annual 1% power-saving rate	According to four energy-saving projects in 2024 (detailed in Section 4.2), a total reduction of 437,437 metric tons of CO_2
		Transition Risk – Low-Carbon Trend	Assessment of replacing cogeneration coal-fired boilers with natural gas boilers		Long	Cogeneration plant coal reduction (natural gas substitution) project	All coal-fired boilers to be converted to natural gas by 2040, reducing 280,000 tons of CO_2 GHG emissions
R02	Water resource recycling	Transition Risk – Based on Policy	Avoidance of drought impact from extreme climate	▪ Total investment: NT$14.66 million (direct cost) ▪ Operation and maintenance cost: NT$840,000/year (indirect cost) Expected service life: 20 years	Short	Water recycling project	Recycled water volume increased from 100 CM^3/day to 270 CM^3/day

Opportunity Code	Climate Factor	Type	Impact on CPPC	Financial Impact (NT$ _)	Timeframe of Occurrence	Response Measures	Target Indicator/ TCFD Category
O1	Maintain corporate reputation	Opportunity	Development of green energy initiatives such as the hydrogen energy economy	▪ Investment cost accounts for less than 1% of total operating revenue ▪ Compliant with regulatory requirements, saving NT$6 million per year in natural gas expenses	Short	Use of dehydrogenation vent gas in plant heating furnaces to replace natural gas combustion	Reduce natural gas consumption by 12,000 cubic meters and reduce greenhouse gas emissions by 24,700 tons CO_2/year by 2025
		Opportunity	Compliant with the Ministry of Environment's "Emission Standards for Volatile Air Pollutants"	-	Medium	Emission reduction plan through installation of pilot flame energy-saving burners on flares	Reduce natural gas consumption by approximately 70,000 cubic meters and reduce greenhouse gas emissions by 1,750 tons CO_2/year
O2	Comply with renewable energy regulations to obtain government incentives	Opportunity	Maintain cogeneration equipment operation to avoid constructing renewable energy equipment under the "Regulations for the Management of Setting up Renewable Energy Power Generation Equipment of Power Users above a Certain Contract Capacity"	By operating cogeneration equipment, save a total of NT$65 million in solar renewable equipment costs	Long	Cogeneration operation monitoring and continuous improvement plan	Continue exemption from installing renewable energy generation equipment through cogeneration operation

Indicators and Targets

GPPC aims to reduce carbon emissions by 40% by 2040 compared to the base year of 2013. In the future, GPPC plans to link ESG performance with incentive mechanisms; the ESG Sustainable Development Committee will report climate governance performance to the Board of Directors, which will be responsible for supervision, decision-making, and management of climate-related issues.

Climate commitments shape a low-carbon value system, gradually moving toward the net-zero target

Short-term

- Use of dehydrogenation vent gas in plant heating furnaces to replace natural gas combustion
- Energy-saving and eco-labeled appliances are prioritized in the procurement of office/factory household equipment

Mid-term

- Application for major capital expenditures on facilities/equipment must include energy consumption in technical evaluations.
- Through supplier tier management, key suppliers (such as benzene/ethylene) with high relevance and high emissions are required to implement carbon neutrality and other carbon reduction targets.

Long-term

Using 2020 as the base year, green electricity purchases and the introduction of negative carbon technologies are adopted in alignment with the national 2050 net-zero emissions policy.

3.2 Energy Management

3.2.1 Improving Energy Use Efficiency

GRI 302-1、302-3、302-4、305-5；SASB RT-CH-130a.1

Energy Usage Status

GPPC conducts greenhouse gas reduction management using ISO 14064-1 Scope 1 and 2 reduction targets, and references relevant GRI and SASB indicators to improve climate issue management performance. These include the use of energy resources, and such indicators are also used as management metrics to assess the impact level of climate risks.

To effectively manage climate indicators and targets, the Company has incorporated the management performance of the aforementioned climate-related indicators as one of the evaluation metrics in its compensation and incentive policy. In the future, the Company plans to extend risk management concepts to supply chain management. The Corporate Sustainable Development Office will be responsible for assessing the supply chain's current capabilities in handling carbon issues, greenhouse gas emissions, and carbon footprint inventory, as well as collecting energy-saving and carbon-reduction data and ESG implementation performance. This will serve to optimize supply chain management measures and establish corporate sustainable procurement standards.

The energy used by GPPC includes liquefied natural gas, coal, heavy oil, and purchased electricity, with coal being the most used, primarily for burning petrochemical fuel. The cogeneration system in the plant generated approximately 574,794.58 gigajoules (GJ) of electricity and approximately 129.21 gigajoules (GJ) of steam. In 2024, the Company's total energy consumption was 4,740,253.64gigajoules (GJ), representing an increase of approximately 0.04% compared to the 2023 total energy consumption of 4,742,213.04 gigajoules, due to the Company's adjustment of its energy usage strategy, where liquefied natural gas (LNG) usage was reduced while coal usage increased. Due to the sharp rise in coal prices caused by the Russia–Ukraine war in 2023, liquefied natural gas boilers were chosen to replace coal-fired boilers to supply steam for the production process. In addition, the usage of heavy oil and purchased electricity both decreased this year. The increase in heavy oil usage and the need to purchase electricity in 2023 were due to two equipment shutdowns, which required additional electricity purchases to maintain operations.

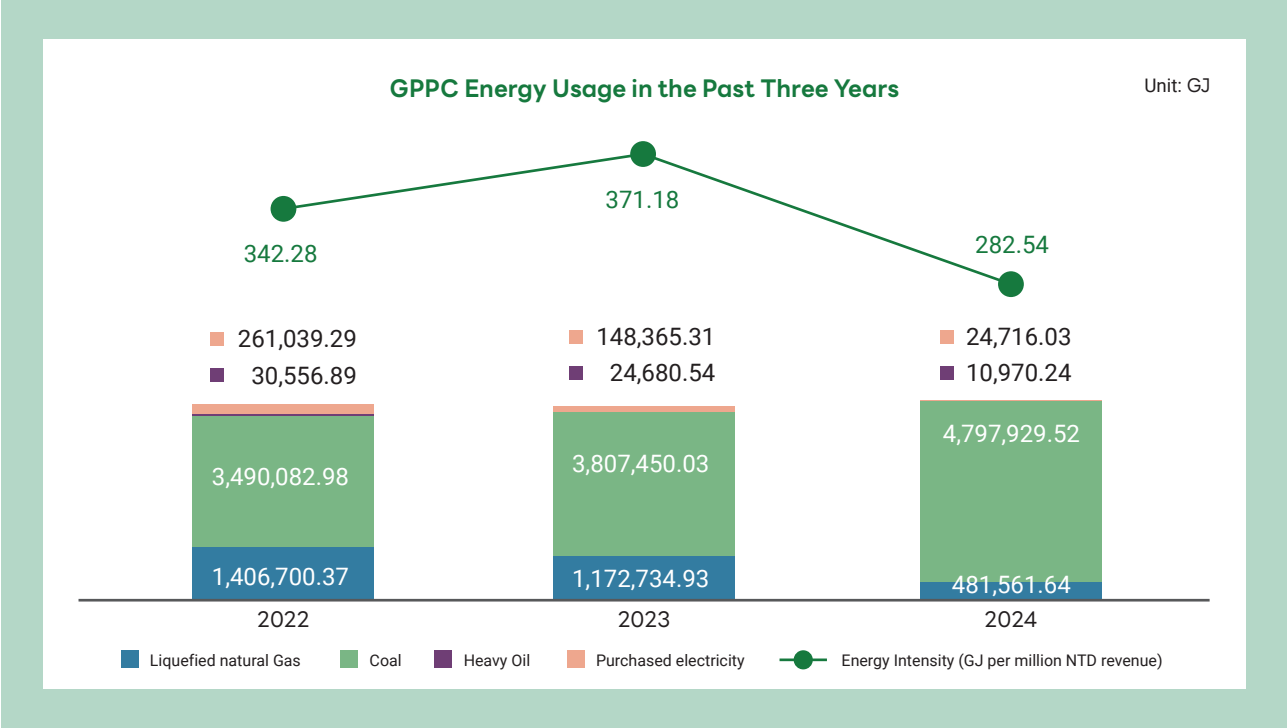
In recent years, GPPC has been transitioning from a traditional petrochemical industry toward a low-carbon circular economy, with the key emission reduction strategy of gradually reducing reliance on coal in line with government policy. To align with the government's overall planning for green energy transformation in society, the Company has launched 62 projects since 2017, achieving a total energy saving of 13 million kWh over five years, with an average energy-saving rate of 1.5%. It has also established a smart grid to ensure stable power supply for manufacturing, improving energy management effectiveness through digitalization. In the future, the Company will partner with major green energy companies at home and abroad to install rooftop solar panels to enhance self-generated green electricity capabilities within the plant area, improve land use efficiency, and move toward self-sufficient green electricity.

GPPC's energy use over the past three years

Unit: GJ

Category		2022	2023	2024
Input	Liquefied natural gas	1,406,700.37	1,172,734.93	481,561.64
	Coal	3,490,082.98	3,807,450.03	4,797,929.52
	Heavy oil	30,556.89	24,680.54	10,970.24
	Purchased electricity	261,039.29	148,365.31	24,716.03
	Purchased renewable electricity	0	0	0
Output	Self-generated electricity	148,728.27	410,891.01	574,794.58
	Self-generated steam	258.53	126.75	129.21
Energy Usage		5,039,392.73	4,742,213.04	4,740,253.64
Energy Intensity (GJ / million NTD revenue)		342.28	371.18	282.54

Note 1: Unit calorific value source: Bureau of Energy, Ministry of Economic Affairs – Energy Product Unit Calorific Value Table
Note 2: GJ stands for gigajoules



Note: The calculation of energy intensity includes the use of liquefied natural gas, coal, heavy oil, and purchased electricity by GPPC.

Energy management

To reduce the negative environmental impact of operational activities, GPPC actively promotes energy management actions at its operational plants. In 2024, energy-saving and carbon-reduction measures reduced consumption by approximately 545,735.01 kWh, totaling 436 tons CO_2e. We aim to start by improving the energy management system and gradually increase energy efficiency at our operational plants.

Energy Management System Interface

2024 Energy-Saving and Carbon-Reduction Implementation Projects

Energy-Saving Measures	Description	2024 Implementation Results
Add heated dryer K-803J in the SAN unit to replace the non-heated adsorption dryer K-803F.	The non-heated dryer with a regeneration air volume of up to 30% was replaced with a heated adsorption dryer (regeneration air volume only 3%) to reduce energy consumption	Annual power savings: **466,809** kWh Approximately **373** tons CO_2e
Modify the heat medium system of the nylon line 1 flash evaporator and shut down the secondary heat medium pumps PP-6226A/S.	The current primary line flash evaporator thermal medium system is equipped with a secondary thermal medium pump. A pipeline was added behind the control valve to the outlet of the flash evaporator thermal medium circulation pump, so the main manifold circulation pump directly provides the required flow for the flash evaporator thermal medium system. This allows for shutting down the secondary thermal medium pump, saving energy consumption.	Annual power savings: **44,000** kWh Approximately **35** tons CO_2e
Replace the casing of oil-water separator pump PP-203S in SM-3 plant.	Replaced the pump casing of oil-water separator pump PP-203S	Annual power savings: **16,731.61** kWh Approximately **13** tons CO_2e
Change the fixed frequency box-type air conditioner on the north side of the cogeneration control room to variable frequency.	Old air conditioning unit with poor evaporator condition and outdated system resulting in poor heat dissipation/low efficiency; replaced with a new unit	Annual power savings: **18,194.4** kWh Approximately **15** tons CO_2e

3.3 Greenhouse Gas Management

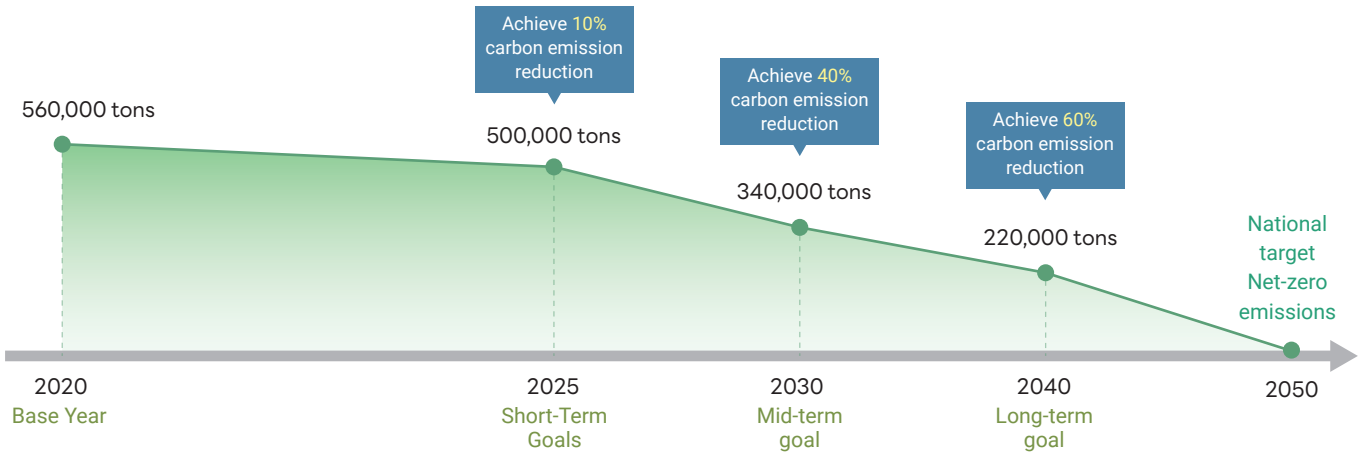
3.3.1 Reduction of Greenhouse Gas Emissions

GRI 305-1、305-2、305-4、305-5；SASB RT-CH-110a.1、RT-CH-110a.2

GPPC Carbon Neutrality Target and Reduction Pathway

To contribute the power of the local petrochemical industry toward Kaohsiung's 2050 net-zero target, GPPC joined the "Industry Net-Zero Alliance" in 2022 and plans to develop green petrochemical symbiosis with upstream and downstream supply chains. It has also initiated carbon footprint inventory operations and relevant industry experience sharing.

GPPC Carbon Neutrality Goal and Reduction Pathway
(In Line with National Long-Term Net-Zero Emission Goal)



2020~2025

- Modification of cooling fan and water turbine in the power plant
- Steam integration application for SM-2 and SM-3 plants
- Replacement of chiller at the Plastics Plant
- SM2 energy-saving combustion tower mother fire system
- Replace part of the coal with natural gas 60,000 metric tons of carbon reduction

Achieve 10% carbon emission reduction by 2025

Estimated cost: NT$172 million

2025~2030

Coal-fired boiler does not generate electricity 160,000 metric tons of carbon reduction

2030~2040

Cogeneration boilers no longer generate electricity and switch to natural gas 120,000 metric tons of carbon reduction

Greenhouse Gas Inventory

GPPC performs greenhouse gas emissions calculations in accordance with 14064-1:2006 using the operational control approach and adopts the GWP from IPCC AR5. In 2024, the greenhouse gas emissions amounted to 506,600 metric tons of CO_2e, and the greenhouse gas emission intensity was 30.196 metric tons CO_2e/metric ton. Of this, Scope 1 emissions were 503,346 metric tons CO_2e, making it the primary source of greenhouse gas emissions. Scope 2 emissions were 3,254 metric tons CO_2e, stemming solely from the indirect emissions of purchased electricity. The decline in purchased electricity this year was mainly due to last year's two equipment shutdowns, which necessitated maintaining operations through purchased electricity, leading to a significant increase in electricity consumption that year. In addition, the cogeneration plant undergoes a major overhaul every two years. During the overhaul period, it is necessary to purchase electricity from Taipower. Therefore, in years with overhauls, the demand for purchased electricity increases accordingly, whereas in non-overhaul years, the demand significantly decreases. The emissions from each scope are shown in the table below.

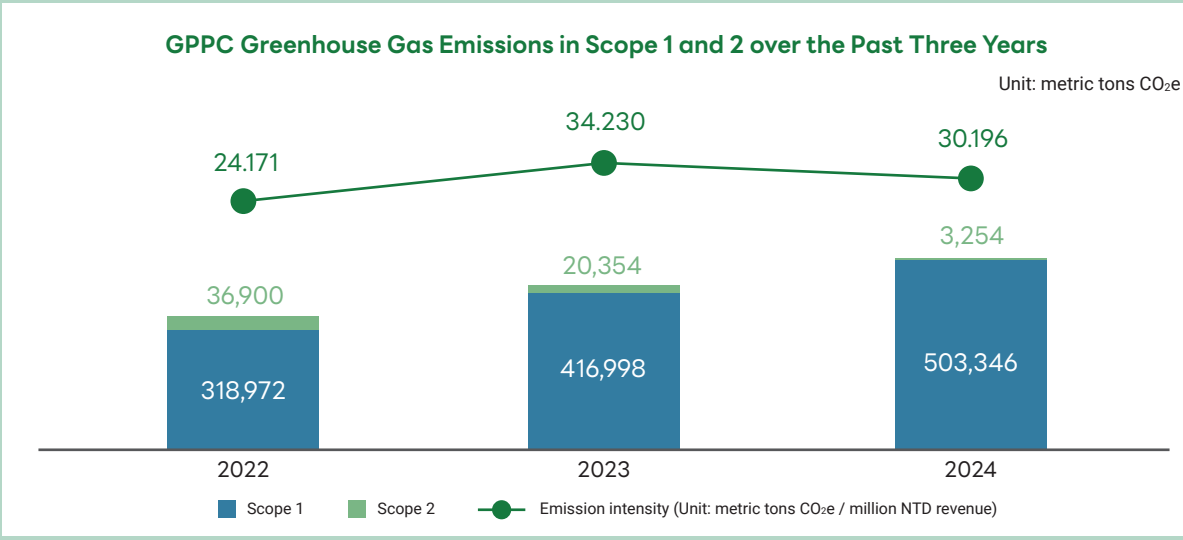
GPPC Greenhouse Gas Emissions Over the Past Three Years

Greenhouse Gas Emissions	2022	2023	2024
Scope 1 (Note 1) (Unit: metric tons CO_2e)	318,972	416,998	503,346
Scope 2 (Note 2) (Unit: metric tons CO_2e)	36,900	20,354	3,254
Scope 3 (Unit: metric tons CO_2e)	471,520	831,357	760,630
Total Emissions of Scope 1 and 2 (Unit: metric tons CO_2e)	355,872	437,353	506,600
Emission intensity (Note 3) (Unit: metric tons CO_2e / million NTD revenue)	24.171	34.230	30.196

Note 1: Greenhouse gas emissions were inventoried using the operational control approach. The calculation method is: activity data × emission factor × GWP value (emission factors referenced from the 2019 version 6.0.4 of the Greenhouse Gas Emission Factor Management Table published by the Ministry of Environment; GWP values referenced from IPCC Fourth Assessment Report (2007)). Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride.

Note 2: The carbon emission factor for purchased electricity in Scope 2 for 2024 was calculated using the 2023 power carbon emission factor of 0.494 kg CO_2e/kWh announced by the Bureau of Energy.

Note 3: Emission intensity = Scope 1 and 2 carbon emissions / GPPC revenue in million NTD.



Greenhouse gas management

In the face of global climate change challenges, GPPC continuously strengthens the Group's climate adaptation resilience and remains committed to mitigating greenhouse gas emissions. The Company conducts annual greenhouse gas inventories and has in recent years prioritized various measures focusing on energy management. In addition, this year the Company has actively engaged in discussions and is committed to launching a series of carbon reduction projects in the future, including the installation of solar panels and the replacement of outdated equipment, with an expected reduction of 1,985.08 tons CO_2e.

Planned Carbon Reduction Implementation Projects

Solar panel expansion project

Target total installed capacity exceeding 1600kW

Expected Implementation Result **1,478** tonCO_2e

Replacement of chiller GC-351N

Replaced with equipment of lower power consumption (from 0.906 kW/RT reduced to 0.528 kW/RT)

Expected Implementation Result **483** tonCO_2e

Replacement of cogeneration plant air compressor

Replaced with lower energy consumption model (from 6.49 kW/CMM reduced to 5.76 kW/CMM)

Expected Implementation Result **24.08** tonCO_2e

3.4 Air Pollution Control

GRI 305-7；SASB RT-CH-120a.1

Air pollutant emissions management

To accelerate the realization of a sustainable vision, GPPC places great emphasis on improving air quality. Since 2012, the Company has successively removed two fuel oil heaters and switched all thermal oil boiler fuel at the plant from fuel oil to natural gas. In addition, the Company invested NT$100 million to install a regenerative thermal oxidizer (RTO), and in 2016 spent another over NT$40 million to install a second RTO, each capable of processing 1,600 cubic meters of exhaust gas per minute. Volatile organic compounds (VOCs) generated from process facilities, storage tanks, oil-water separation facilities, and wastewater treatment plants in the factory are now collected via closed systems and sent to RTOs for treatment, significantly reducing pollutant emissions and odor diffusion.

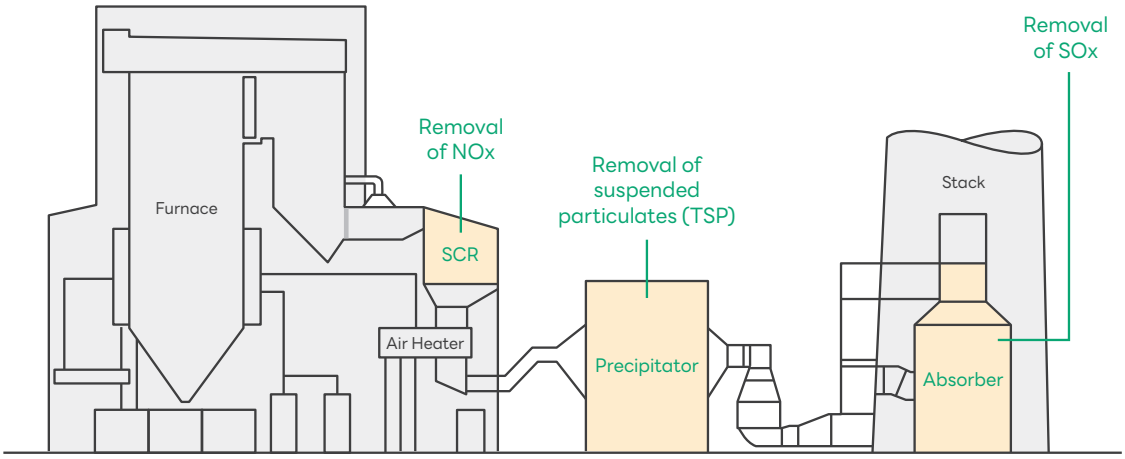
Over the past decade, a total of 29 emission reduction projects have been carried out, with a cumulative investment of nearly NT$200 million. GPPC is well aware of the risks posed by VOCs from petrochemical processes to nearby residents. Currently, all pollution prevention measures at the plant adopt the officially announced Best Available Control Technology (BACT) and equipment. To safeguard the safety and health of residents surrounding the plant, the Company has installed a gas monitoring system within the plant area, connected to the monitoring center, to keep real-time track of fugitive emissions and improve residents' quality of life.

To protect the safety and health of employees and nearby residents, GPPC has installed a gas monitoring system within the plant, connected to the monitoring center for real-time tracking of fugitive emissions. In addition, continuous automatic monitoring equipment is installed on the cogeneration boiler chimney and linked to the Environmental Protection Bureau to maintain ambient air quality in the surrounding area. Other chimneys are subject to regular inspections to monitor emission sources. The status and inspection frequency of all emission ducts at the Company's Kaohsiung Plant are listed in the table below:

Status and Inspection Frequency of Each Emission Duct

T Jurisdiction	Equipment Name	Emission Port Number	Outsourced Analysis Items and Frequency	Approximate Inspection Month
SM2 Plant Area 300	BA-301 Heater	P402	Particulates, NOx, SOx / Once every six months	April, October
Cogeneration Unit	HB-301A/B and HB-302A/B	P701	RATA / Once every quarter	January, April, July, October
SM3 Plant	HS-201/219 Heater	PB01	Particulates, NOx, SOx, THC / Once every six months	April, October
Occupational Environment Department	Incinerator	PG01	Dioxin / Once every two years; Particulates, NOx, SOx, Heavy Metals / Once every year	October
Cogeneration Plant	Coal-Fired Boiler	PF01	RATA / Once every quarter; Particulates / Once every six months Dioxin / Once every two years	January, April, July, October

To reduce the NOx content in flue gas, a Selective Catalytic Reduction (SCR) reactor is used to lower the NOx content to below 30 ppm. Most impurities (suspended particulates) in the flue gas are removed through a precipitator. Finally, a desulfurization absorber tower is used to reduce the SOx content to below 20 ppm before discharging through a 70-meter-high chimney into the atmosphere. The wastewater containing inorganic sludge generated after desulfurization is first processed in an oxidation tank, where a blower forces aeration to remove COD from the water. The sludge is then separated using a dewatering machine. The treated wastewater meets discharge standards (both COD and SS are less than 30 ppm) and is discharged together with the plant's effluent into the industrial zone's wastewater treatment plant.



Air Pollution Control Items	Equipment	Treatment Process
SOx (Sulfur Oxides)	Wet flue gas desulfurization tower	The Induced Draft Fan (IDF) draws the gas through the desulfurization absorber tower, where a magnesium hydroxide aqueous solution is sprayed to reduce SOx content to below 20 ppm, and finally the gas is discharged into the atmosphere through a 70-meter-high chimney.
Nox (Nitrogen Oxides)	Selective catalytic reduction (SCR) system	The denitrification system uses 25% NH_2 aqueous solution, which is atomized and mixed with the flue gas before entering the Selective Catalytic Reduction (SCR) reactor to reduce NOx content to below 30 ppm. The SCR system is designed to enhance removal efficiency and reduce nitrogen oxide emissions.
TSP (Total Suspended Particulates)	Electrostatic precipitator	Uses electrostatic force to remove particulate matter from the flue gas and eliminate most impurities (suspended particulates) within the gas.

Air Pollutant Emission Status

In 2024, Grand Pacific Petrochemical Corporation's air pollutant emissions—including nitrogen oxides (NOx), sulfur oxides (SOx), and total suspended particulates (TSP)—increased slightly compared to 2023, but all remained below regulatory standards. The air pollutant emissions are shown in the table below.

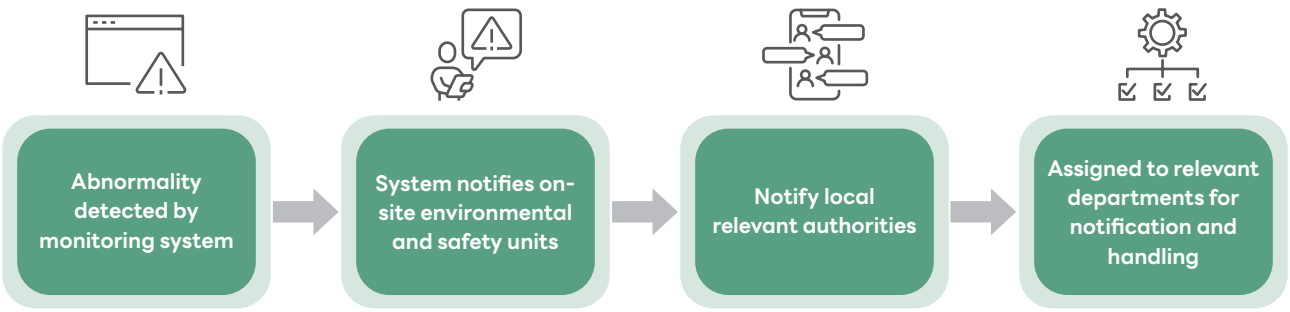
Grand Pacific Petrochemical Corporation Air Pollutant Emissions in the Past Three Years

Air Pollutant Emission Status	Unit	2022	2023	2024
Sulfur Oxides (SOx)	Metric tons	34.3	43.4	43.1
Nitrogen Oxides (NOx)	Metric tons	129	120.4	121.5
Volatile Organic Compounds (VOCs)	Metric tons	22.9	22	22.7
Total Suspended Particulates (TSP)	Metric tons	7.4	10.7	10
Persistent Organic Pollutants (POP)	Metric tons	0	0	0
Hazardous Air Pollutants (HAP)	Metric tons	12.177	10.058	9.398

Air Pollutant Emission Abnormality Notification Handling Process

To ensure proper disposal and monitoring of air pollutants, GPPC has established a comprehensive air pollutant notification and handling process. If the air pollution monitoring system detects any abnormal emission events (such as pollutant concentrations exceeding the limit), the issue is handled in accordance with the notification procedures of the respective plant area and processed according to local regulations. In 2024, two abnormal emissions were detected by the monitoring system. The causes and handling results are shown in the table below.

GPPC Air Pollutant Emission Abnormality Notification Handling Process



2024 Detected Emission Abnormalities – Causes and Handling

1130427 Ethylene Adsorption Bed Maintenance Startup and Shutdown

This event was caused by the standard operating procedure for emergency startup and shutdown of on-site equipment. It is a necessary measure during process operations, and thus no reduction measure is currently in place.

1131010 Ethylene Adsorption Bed Malfunction

This event was caused by the standard operating procedure for emergency startup and shutdown of on-site equipment. It is a necessary measure during process operations, and thus no reduction measure is currently in place.

4

Water Resources, Waste, and Chemical Safety Management

2024 Highlight Performance

Implementation of water resource recycling programs resulted in **204,020** million liters of recycled water use

In accordance with water resource management policies and commitments, **769** million liters of water were recycled, achieving a water recycling rate of **85%**

Circular reuse was implemented, with a waste recycling rate of **87.22%**

United Nations Sustainable Development Goals (SDGs)

- 4.1 Water Resource Management SDGs 6.3~5
- 4.2 Waste Management SDGs 6.3 SDGs 11.6 SDGs 12.4~5
- 4.3 Chemical Management SDGs 3.9 SDGs 6.3 SDGs 12.4

Management Approach

Material Topic: Water resource management

Impact Description

Positive Impact Description

Reduce wastewater discharge, improve water use efficiency, and lower water costs to maintain stable operations when facing water restrictions or water resource shortages.

Negative Impact Description

If water resources are not properly managed, wastewater discharge may cause environmental harm to areas surrounding the operating sites. Additionally, water shortages may lead to operational disruptions, which can impact the Company's operations and reputation.

Policies and Commitments

Utilize and manage water resources with a focus on regulatory compliance and sustainable development, and continually enhance water resource efficiency.

Goal Setting and Progress

Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025-2026)	2024 Performance
10% of cooling tower water uses reclaimed water.	▪ Number of violations of water pollution prevention-related regulations and standards: 0 cases. ▪ Water recycling rate maintained at 85% or above. ▪ Annual water recycling rate increased by 1%.	▪ Water circulation volume: 204,020 million liters. ▪ Recycled water volume: 769 million liters, achieving a water recycling rate of 85%.

Responsible Unit

Utilities Workshop

Resources

Annual capital expenditure budget

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management

- Establish emergency backup water supply plans, formulate water usage strategies and production response plans based on the Water Resources Agency's water status alerts and the flow rate of the Gaoping River, and implement water contingency measures.
- Install water meters to record daily consumption data, track areas with abnormal water usage, and conduct timely repairs.
- Actively implement the recovery of backwash and regeneration wastewater from the ultra-pure water system at the cogeneration plant. During pure water regeneration, collect backwash and regeneration wastewater for reuse as supplementary water for the cooling towers.
- Implement measures such as wastewater reduction and reuse, separation of rainwater and sewage, installation of stormwater interception facilities, effective maintenance of existing wastewater treatment systems, and thorough wastewater recycling and reuse.

Effectiveness Evaluation

Annual water recycling rate and water usage statistics

Material Topic: Waste management

Impact Description

Positive Impact Description

Implement effective waste treatment and reduction measures for the Company itself or the value chain (upstream and downstream), converting waste into resources or energy to enhance operational efficiency. Proactive waste management can enhance the Company's environmental image and sense of social responsibility, thereby boosting brand value and market competitiveness.

Negative Impact Description

Failure to meet investors' and the public's expectations regarding waste control may result in a long-term negative image and increase difficulty in obtaining funding.

Policies and Commitments

Strictly comply with waste-related regulations, reduce waste generation, and seek waste disposal methods with lower environmental impact.

Goal Setting and Progress

Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025-2026)	2024 Performance
Zero landfill waste by 2030.	Complete audits of waste treatment vendors every year.	▪ Complete audits of waste treatment vendors every year. ▪ Waste recycling rate is 87.22%.

Responsible Unit

- Storage area management: General Affairs Section
- Inspections and audits: Industrial Safety and Environmental Protection Section

Resources

Annual capital expenditure

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management

- Carefully manage waste storage areas, and entrust legal disposal and treatment vendors.
- Conduct self-inspections of waste storage areas quarterly and complete necessary audits of waste treatment vendors annually.
- Establish an audit system for waste disposal vendors.
- Promote pollution prevention and industrial waste reduction work; in addition to formulating the "Industrial Waste Reduction Implementation Procedure" to enhance management.

Effectiveness Evaluation

Annual statistics of various waste treatment methods

Material Topic: Chemical safety management

Impact Description

Positive Impact Description

Establish a hazardous substances list to assess the risk level of each chemical and confirm the appropriate timing for using PPE when handling chemicals, thereby effectively reducing harm to the human body caused by chemicals.

Negative Impact Description

If the timing of chemical risk assessments and the definition of PPE usage are not determined, it may cause irreversible harm to the human body.

Policies and Commitments

During the R&D, manufacturing, and laboratory stages, reduce the harm of hazardous chemicals to the human body and damage to the environment.

Goal Setting and Progress

Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025-2026)	2024 Performance
▪ No major incidents or pollution caused by chemicals. ▪ Replace highly hazardous chemicals with safer alternatives.	▪ Reassess all in-plant chemicals and conduct hazard assessments every three years. ▪ Regularly review whether on-site hazard labels are complete.	▪ Complete the triennial reassessment of all in-plant chemicals and execute hazard assessments. ▪ Complete regular reviews of hazard labeling in on-site units. ▪ No major incidents or pollution caused by chemicals. ▪ Use of safer alternatives to replace highly hazardous chemicals.

Responsible Unit

Industrial Safety and Environmental Protection Section

Resources

Personnel: Industrial Safety and Environmental Protection Section

Grievance Mechanism

The Company's website features a stakeholder communication mailbox for filing complaints. Email: audit@gppc.com.tw

Action Plan

Negative Impact Management

- Declaration and control of toxic and concerned chemical substances.
- Standard registration of existing chemical substances.

Positive Impact Management

- Raise employee awareness of chemical hazards within the plant.

Effectiveness Evaluation

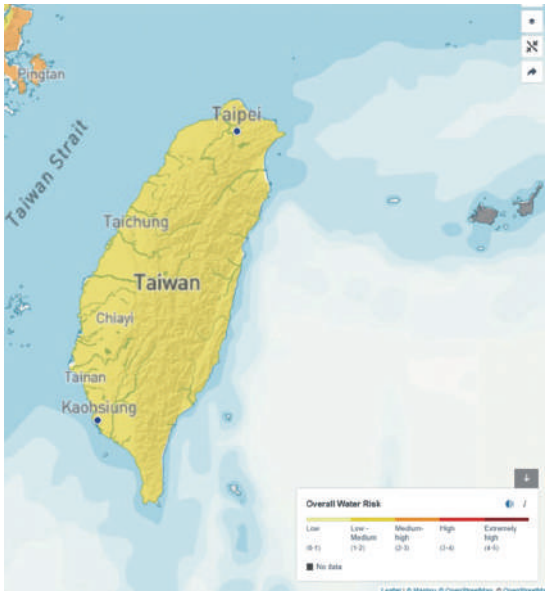
- Submit toxic chemical operation records monthly to ensure traceability without concern.
- Completed the registration of existing chemical substances in Taiwan; standard registration has been completed for 2 substances.

4.1 Water Resource Management

4.1.1 Water Risk Assessment

GRI 303-1、303-3、303-4、303-5；SASB RT-CH-140a.1

In view of the rapid changes in the water environment caused by climate change in recent years, with increasingly frequent alternation between floods and droughts, external stakeholders have shown growing concern over water resource issues. To respond promptly to complex water resource issues and effectively integrate management concepts such as prevention and conservation, the Company has identified and addressed water risk factors, and implemented water recycling in accordance with its water resource management policy and commitments. The primary operating site of the Company, the Kaohsiung Plant, draws its main water source from the surface water of the Gaoping River, which is located in a non-water-stressed region.



Note: This is the result of the overall water risk assessment for each plant using the Aqueduct Water Risk Atlas of the World Resources Institute (WRI) (Inquiry date: May 22, 2025).

Water Risk Identification

To avoid the potential risks to local ecosystems and residential water use from sourcing in high water-stress areas, GPPC uses the World Resources Institute (WRI) Aqueduct Water Risk Atlas tool to conduct comprehensive water risk assessments for all its operating sites. The results of this simulation analysis will be taken into account in future operational strategies. The overall water risk rating is low. Although there is no risk of water scarcity, the Company values water resources and carries out water recycling in accordance with its water resource management policy and commitments.

4.1.2 Water Withdrawal, Discharge, and Consumption

All water sources currently used by GPPC are surface water and tap water. Surface water is drawn from the bank filtration of the Gaoping River, and tap water is sourced via pipeline delivery from CPC's Kaohsiung Refinery. Factory discharge is consolidated and aggregated in accordance with local regulations and is discharged after treatment by the industrial zone's wastewater treatment plant where the site is located. In 2024, the total water withdrawal was 2,209 million liters, representing an increase of approximately 16.51% compared to 2023. This increase was due to rising market demand and expanded production capacity. GPPC actively implements the recycling of backwash and regeneration wastewater from the ultrapure water system of the cogeneration plant. During pure water regeneration, backwash and regeneration wastewater is recovered and reused as supplementary water for the cooling tower. An investment of approximately NT$1.63 million is planned to reduce water consumption by 54 million liters.

GPPC Water Data for the Past Three Years

Unit: Thousand Tons

Water Use Item		2022	2023	2024
Water Source	Surface water	2,004	1,896	2,209
	Third-party water (tap water)	0	77	6
Withdrawal volume		2,004	1,973	2,215
Consumption volume Note 1		1,183	1,071	1,225
Discharge volume Note 2		821	902	990
Water withdrawal intensity Note 3		0.14	0.15	0.13

Note 1: Water Consumption = Withdrawal Volume - Discharge Volume
Note 2: GPPC's wastewater is discharged only after being treated at the industrial zone wastewater treatment plant and confirmed to meet regulatory standards before being discharged into the receiving water body.
Note 3: Water Withdrawal Intensity = Annual Total Water Withdrawal / GPPC Revenue; Unit: Thousand Tons (Million Liters)/NT$ Million

4.1.3 Water resource management

GPPC strictly controls water resource usage and continuously improves water recycling efficiency to avoid excessive water withdrawal that could harm the surrounding environment. A water balance program has been promoted and water usage is adjusted on a rolling basis to reduce the risk of water waste. Water resource management measures in 2024 were as follows:

2024 Water Resource Management Measures

Item	Water Use Example	Method of Information Compilation	2024 Usage Volume (Thousand Tons)
Recycled water volume	Includes circulation within cooling towers, process circulation (e.g., cleaning), boiler water circulation, scrubber circulation, and recycled drainage from the pure water system	▪ Cooling water circulation volume (estimated) ▪ Absorption tower circulation water volume (estimated) ▪ Steam turbine condensate recovery water volume (actual)	204,020
Reused water volume	Such as boiler blowdown water reused; process water discharge reused; scrubber discharge water reused; ultrapure water system discharge reused; wastewater treatment system discharge reused.	▪ Discharge from cooling tower GT-801 to absorption tower (actual) ▪ Cooling tower GT-302 to wastewater dewatering unit (actual) ▪ Regenerated ultrapure water recovered to cooling tower (actual) ▪ Discharge from GT-303 to GT-302 (actual) ▪ Steam condensate recovery water – 2B2T intake volume (actual) ▪ SM3 steam condensate recovery water to cogeneration deaeration tank (actual)	769
Water consumption volume	Utility water usage (e.g., cooling towers, scrubbers, cleaning and irrigation, fire-fighting water)	Actual flow meter	1,296
	Process water usage (including soft water system, boilers, product water)	Estimated value	880
	Wastewater treatment	Estimated value	13
	Domestic water usage (including drinking, cleaning, toilet flushing)	Estimated value	26

4.1.4 Wastewater Management GRI 303-2；SASB RT-CH-140a.3

The wastewater discharged from petrochemical plants contains organic pollutants. Therefore, the key monitoring indicators of effluent are chemical oxygen demand (COD) and suspended solids (SS). The focus of prevention and control is to reduce wastewater discharge from the source and to implement measures such as wastewater reduction and reuse, separation of rainwater and sewage, installation of stormwater interception facilities, effective maintenance of existing wastewater treatment systems, and proper implementation of wastewater recycling and reuse. GPPC's Kaohsiung Plant is located in the Dashe Industrial Park, which is equipped with a centralized wastewater treatment plant responsible for collecting and treating wastewater from all factories within the industrial park. The wastewater quality over the past three years is shown in the following table:

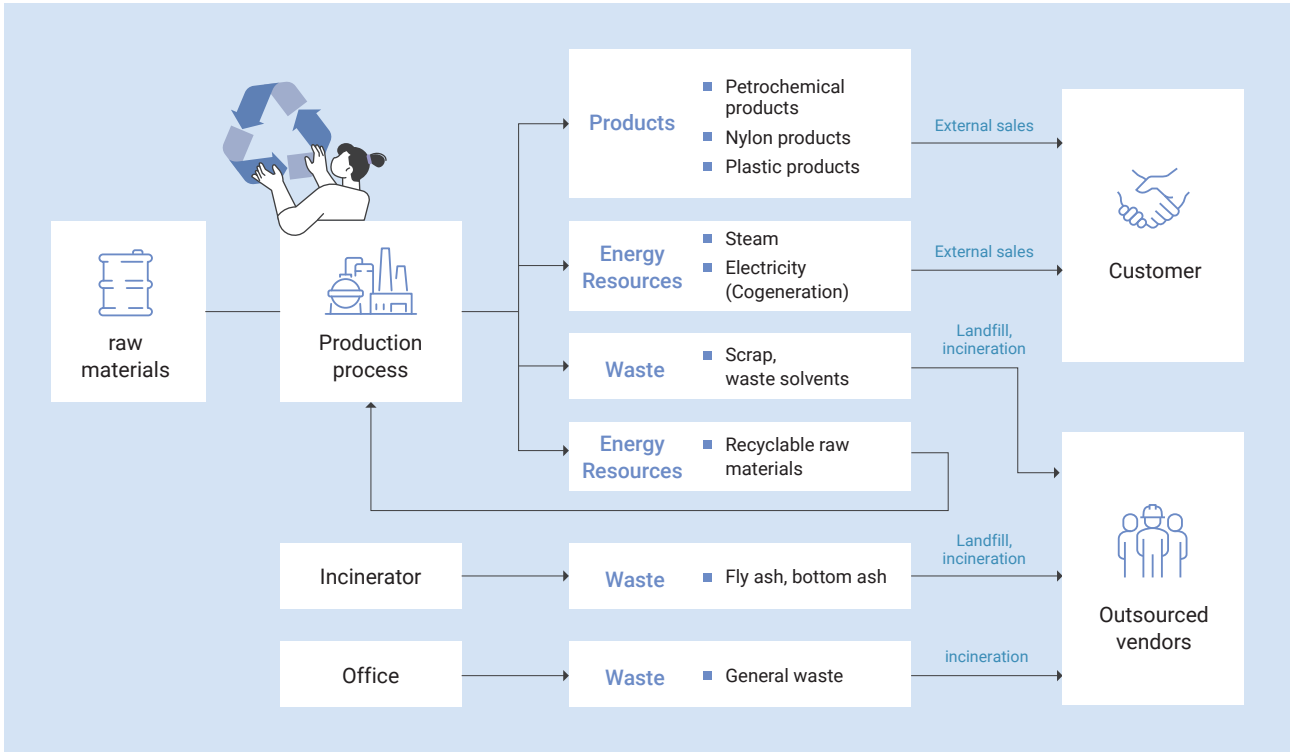
Water Quality Indicators	Unit	Regulated Standards	Wastewater Quality Data		
			2022	2023	2024
Average COD concentration	mg/L	400	93.80	92.80	94.80
Average SS concentration	mg/L	240	35.30	31.80	33.20
Average ammonia nitrogen concentration	mg/L	150	34.59	9.38	19.17

4.2 Waste Management

GRI 306-1、306-2、306-3、306-4、306-5；SASB RT-CH-150a.1

GPPC complies with all regulations governing waste removal to ensure that all generated waste is properly handled. To fully implement responsible production and the principles of a circular economy, the plant closely monitors the sources, types, and quantities of all waste and ensures that disposal methods and flows comply with all environmental regulations. Industrial waste is handled by qualified waste treatment vendors for recycling and reuse. Management procedures and practices are confirmed, and vendors carry out scheduled clean-up based on waste generation. In 2024, none of the contracted vendors violated any regulations.

To reduce the environmental impact of waste generated during production, GPPC is actively promoting pollution prevention and industrial waste reduction. In addition to establishing "Industrial Waste Reduction Implementation Procedures" to strengthen management, the Company has identified the sources of waste generation and the significant impacts related to waste, as follows:



4.2.1 Waste Generation

The outsourced and self-managed waste disposal volumes at GPPC's Kaohsiung Plant in 2024 are shown in the table below. There were no waste leakage incidents in 2024. In addition, since 2020, the Company has required at least a 5% annual reduction in general waste.

Waste Generation Status

Waste classification	Waste name	Unit	2022	2023	2024
Non-hazardous industrial waste	Waste materials Note 1	Tons	330.555	169.858	168.123
	Organic sludge	Tons	1,872.919	1,778.296	1,773.07
	Inorganic sludge	Tons	317.14	276.88	563.05
	Incinerator fly ash, bottom ash	Tons	107.38	52.77	62.81
	Non-hazardous spent catalysts or their mixtures	Tons	240.22	104.8	293.17
	Non-hazardous organic waste liquids or waste solvents	Tons	239.382	162.355	239.32
	General garbage generated from business activities	Tons	72.65	69.9	74.13
	Coal combustion fly ash, bottom ash	Tons	13,574.19	16,274.45	21,687.21
	Other waste Note 2	Tons	0.61	0	28.2

Note 1: Waste materials refer to mixed plastic waste, discarded insulation materials, and other mixtures such as waste glass, ceramics, bricks, tiles, and clay.
Note 2: Other waste refers to waste plastic, waste lubricating oil, and spent activated carbon.

2024 Direct Waste Disposal Status

Waste classification	Waste name	Treatment method	Unit	Outsourced treatment	On-site treatment	Total
Non-hazardous industrial waste	Waste materials Note 1	Incineration (non-energy recovery)	Tons	22.4	121.33	143.73
		Landfilling	Tons	12.64	-	12.64
		Physical treatment	Tons	11.75	-	11.75
	Organic sludge	Thermal treatment	Tons	172.77	-	172.77
		Incineration (non-energy recovery)	Tons	-	1600.30	1600.30
	Inorganic sludge	Landfilling	Tons	21.63	-	21.63
		Physical treatment	Tons	541.42	-	541.42
	Incinerator fly ash, bottom ash	Landfilling	Tons	62.81	-	62.81
	Non-hazardous spent catalysts or their mixtures	Landfilling	Tons	24.64	-	24.64
		Incineration (non-energy recovery)	Tons	268.53	-	268.53
	Non-hazardous organic waste liquids or waste solvents	Incineration (non-energy recovery)	Tons	-	239.32	239.32
	General garbage generated from business activities	Incineration (non-energy recovery)	Tons	74.13	-	74.13
	Coal combustion fly ash, bottom ash	Reuse	Tons	21687.21	-	21687.21
	Other waste Note 2	Reuse	Tons	28.2	-	28.2

Note 1: Waste materials refer to mixed plastic waste and discarded insulation materials.
Note 2: Other waste refers to waste plastic and waste lubricating oil.

Waste reduction strategies and actions are as follows:

Waste name	Description	Subsequent utilization methods
Coal combustion fly ash	Combusted petrochemical industry by-products	Can be added to cement
Coal combustion bottom ash	Combusted petrochemical industry by-products	Can be added to cement
Other waste (waste plastic, waste lubricating oil)	▪ Waste plastic: generated as offcuts from process ▪ Waste lubricating oil: generated from equipment maintenance	▪ Waste plastic: used as SRF raw material ▪ Waste lubricating oil: reprocessed into lubricating oil or base oil

4.3 Chemical Management

In promoting Grand Pacific Petrochemical's ABS and SM-related products, we also closely monitor industry trends and assess the competitiveness of our products in terms of health and safety. Our products do not contain environmentally hazardous substances regulated by customers or regulations (such as RoHS). The specifications, performance, and usage precautions for the products provided are included in the Certificate of Analysis (COA) and Safety Data Sheet (SDS), enabling customers to understand the safe usage methods. In addition, in compliance with the registration requirements of the European Union's REACH regulation, SM has completed registration with the European Chemicals Agency (ECHA).

Regulated Chemical Substance Usage Management

Our Company's various plants use a total of 58 types of chemical substances announced by the Ministry of Environment as regulated (of which 47 are for small-scale use or are low toxicity, used for laboratory research, testing, catalysts, or intermediates). To ensure safety in production, usage, storage, and transportation operations, and to ensure the normal operation of locations and facilities handling regulated chemical substances at each plant, approvals from the competent authority have been obtained as required. Furthermore, various declaration tasks and pipeline labeling are listed as items for departmental self-inspection and are incorporated into compliance, operational risk reduction, and disaster response management measures. The relevant management procedures are as follows:

Publicly hazardous substances management

Inventory control of publicly hazardous substances

- Procurement source control by production management personnel of responsible units

Maintenance and management of fire safety equipment at locations handling publicly hazardous substances

- In accordance with legal location, structure, and performance inspection standards, monthly PDA inspections of fire safety equipment are conducted at 55 affiliated sites

Implementation of safety inspections at locations handling publicly hazardous substances

- Conducting site supervision and self-inspections
- Inspections by the fire department; audit results confirmed that fire safety equipment and inventory control comply with legal requirements

Chemical Substance Risk Assessment

Preliminary hazard analysis

Analysis is conducted on all chemical substances regarding potential hazards such as fire, explosion, carcinogenicity, or poisoning due to long-term exposure in the event of a leak.

Major hazard analysis

Confirmation of potential hazards within the workplace, as well as the possible impact range, causes, and developments in the event of a hazard, is used to formulate corresponding emergency handling principles and improvement measures.

Hazard risk assessment

If the risk level is classified as Category 1 Major Hazard or Category 2 High Hazard, it is considered an unacceptable high risk, and equipment improvements must be implemented during the process. If classified as Category 3 Moderate Hazard or Category 4 Low Hazard, improvements are made through management measures.

Safety of Hazardous Chemicals

To ensure the safety of workplaces handling hazardous substances (including chemical substances regulated by the Ministry of Environment and hazardous chemical substances), in addition to requiring responsible personnel to obtain technical certifications and installing detection and alarm systems within the plant, related products undergo hazard assessments as legally required. Any unused chemical substances regulated by the Ministry of Environment are declared discarded in accordance with the law and are managed as hazardous industrial waste and properly handled.

For toxic and concerned chemical substances regulated by the Ministry of Environment, professional technical management personnel and professional emergency response personnel (holding legally required certifications) are appointed within the plant. The number of personnel exceeds legal requirements, and all personnel completed on-the-job training and registration as of October 2023.

Furthermore, according to the "Regulations of New and Existing Chemical Substances Registration," it is required to register various information—including the manufacturing or import status, hazard classification and labeling, toxicological and ecotoxicological data—of 106 chemical substances on the Ministry of Environment's Chemical Substance Register. The Company has completed the standard registration for all acrylic acid and sulfuric acid in 2022–2023, and registration for other substances is ongoing, with completion expected by the end of 2024.

5

Employees

2024 Highlight Performance

The average annual training hours per employee reached **15.46** hours

There were **no** incidents of human rights violations

The return-to-work rate and retention rate after parental leave for both male and female employees across the entire Company were **100%**

Due to the particular nature of the industry, employees at the Company and plant sites are generally male, whereas the gender ratio at the Taipei Office is close to 1:1, and the ratio of female to male employees at the Kaohsiung Headquarters is relatively higher, indicating that Grand Pacific Petrochemical values the development of **corporate diversity and equality**

United Nations Sustainable Development Goals (SDGs)

- 5.2 Talent Development and Retention SDGs 4.4
- 5.3 Salary and Benefits SDGs 1.3 SDGs 3.4 SDGs 5.4 SDGs 5.5
- 5.4 Human Rights Management SDGs 8.8 SDGs 8.7

Management Approach

Material Topic: Talent development and retention

Impact Description

Positive Impact Description

How the Company assists employees in career development and provides various education and training programs. Include information such as the average annual training hours per employee, employee competency enhancement and transition assistance programs, and the percentage of employees who receive regular performance and career development evaluations.

Negative Impact Description

Failure to implement employee training and career development planning may lead to challenges in meeting employee expectations or insufficient familiarity with work tasks, resulting in underperformance in productivity; particularly in a rapidly changing market environment, such situations may cause employee dissatisfaction and maladaptation, thereby reducing employees' sense of belonging and increasing turnover rates.

Policies and Commitments

GPPC is committed to creating a diverse and inclusive workplace environment, advocating a people-oriented and open communication workplace culture, and fostering a work atmosphere of continuous learning and development motivation. Talent development is promoted through fair and rigorous internal and external recruitment processes, helping the Company achieve its sustainable development goals while emphasizing gender equality, ensuring fairness in employment and promotion opportunities, and actively increasing the employment rate of minority groups. Through comprehensive employee education and training, new employees are helped to understand the Company culture, enhancing cohesion and sense of identification, and improving employee professional capabilities.

Goal Setting and Progress

	Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025–2026)	2024 Performance
Turnover rate reduction	Turnover rate (excluding retirement) is below 12%	Turnover rate (excluding retirement) is below 13%	Turnover rate (excluding retirement) is approximately 11%

Responsible Unit

Human Resources Section, General Administration Division

Resources

In 2024, the amount invested in education and training reached NT$1.1 million, with a total of 216 training sessions held, totaling 5,642 hours.

Grievance Mechanism

Human Resources Section email: myshen@gppc.com.tw

Action Plan

Negative Impact Management

- In order to maintain workforce stability and retain outstanding talent, GPPC regularly considers internal salary balance and market conditions to ensure the Company maintains competitive salary levels.
- The Company provides comprehensive and diversified employee benefits, safeguarding employees' rightful interests while also improving their job satisfaction and quality of life.

Positive Impact Management

- GPPC actively promotes talent development and training programs, offering diversified competency training to meet industry trends and future operational needs, planning five comprehensive training categories: general skills, core competencies, professional competencies, management competencies, and environmental safety and health.
- Senior employees are rehired as consultants to pass on experience in petrochemical industry management, customer relations, customer service, and financial planning.

Effectiveness Evaluation

- Training Management Guidelines: Through the Training Management Guidelines, ensure that all employees participate in relevant education and training, and link course hours and assessment performance to ensure the effectiveness of education and training.
- Conducting Labor-Management Meetings: Hold labor-management meetings every quarter, respond to resolutions, and track execution progress and management status to ensure that each issue is fully implemented, safeguarding employees' rightful interests.

5.1 Human Resources

5.1.1 Talent Recruitment

In the corporate culture of GPPC, talent is regarded as the foundation of the Company's innovation and success. In the recruitment process, the Company upholds the principles of fairness and impartiality. All recruitment criteria are based on capability and professional competence to implement the spirit of merit-based selection. No bias shall arise from personal factors such as race, skin color, religious belief, gender, age, ethnicity, sexual orientation, physical or mental disabilities, nationality, or marital status. Through this, the Company hopes to attract outstanding talents from all backgrounds to face challenges together and achieve excellence.

The Company conducts talent recruitment and selection in accordance with the Employee Recruitment and Appointment Guidelines. Applicants must pass rigorous preliminary screening and multi-stage interviews. The hiring departments and the Human Resources unit cooperate closely to review and evaluate applicants' qualifications to ensure they meet the selection criteria. During the recruitment process, the applicant's credentials and professional performance are fully considered, and after acceptance, labor conditions are thoroughly communicated to ensure clarity in rights and responsibilities for both parties. In addition, job vacancies are posted on platforms such as 104 Job Bank and 1111 Job Bank, and suitable talents are sought on these platforms and invited for interviews. At the same time, employees are also encouraged to refer outstanding talents who are suitable for the Company.

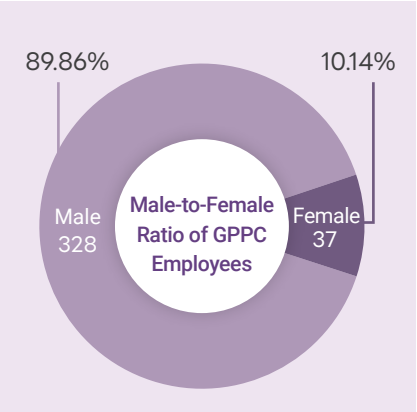
GPPC attaches great importance to employee rights, and labor contracts are the foundation for safeguarding employee rights and the Company's compliant operation. For this reason, the Company's labor contract signing coverage rate has reached 100%. This demonstrates the Company's strict compliance with labor laws and its strong commitment to occupational safety and the lawful rights and interests of every employee. Through comprehensive contract protection, a fair and safe working environment is created.

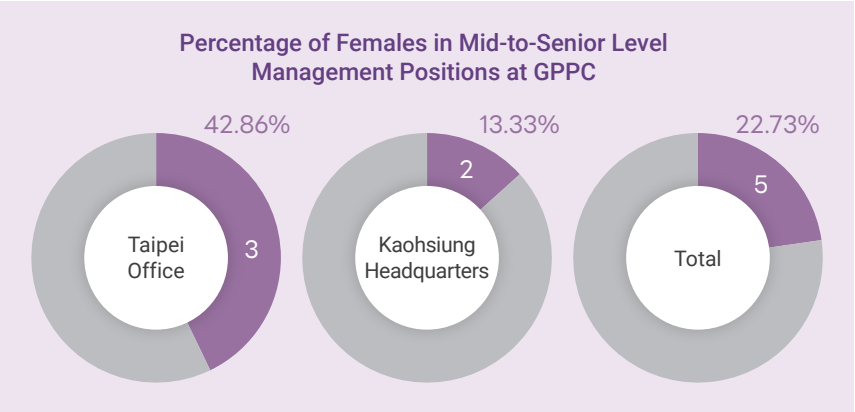
5.1.2 Workforce Structure GRI 2-7、2-8、401-1、405-1

As of the end of 2024, the total number of employees in the Company was 365. Due to the nature of the industry, male employees are the majority, accounting for 89.86%.

In 2024, common types of non-employee workers at GPPC included drivers, interns, operators, and contractors, totaling 9 people.

The male-to-female ratio among GPPC employees is approximately 90% male and 10% female. This difference is due to the nature of the industry and the types of work, and not due to gender-based employment opportunities. To build a gender-equal workplace environment, GPPC will continue to pay attention to issues of workplace inclusiveness and respect gender equality. To comply with the government's efforts to promote the employment of persons with disabilities, the Kaohsiung headquarters had two positions filled by persons with disabilities in 2024, in compliance with government regulations.





Note: The percentage is calculated as number of female employees in mid-to-senior level management positions / total number of people in mid-to-senior level management positions.

Employee Structure by Gender, Region, and Type of Employment Contract

Region			Taipei Office			Kaohsiung Headquarters			Total			Total
Age			<30 years old	30–50 years old	>50 years old	<30 years old	30–50 years old	>50 years old	<30 years old	30–50 years old	>50 years old	
Male	Permanent	Full-time	2	8	12	33	166	105	35	174	117	326
	Contract	Full-time	0	0	0	0	0	2	0	0	2	2
	Total male		2	8	12	33	166	107	35	174	119	328
Female	Permanent	Full-time	4	6	15	2	4	6	6	10	21	37
	Total female		4	6	15	2	4	6	6	10	21	365

Note 1: In 2024, there were no part-time contract employees at GPPC.
Note 2: In 2024, there were no employees at GPPC without guaranteed working hours.
Note 3: In 2024, there were no female contract employees at GPPC.

Employee Structure by Educational Background

Employee Category	Taipei Office						Kaohsiung Headquarters						Total
	Doctorate	Master's degree	Bachelor's degree	Junior college	High school (and below)	Total	Doctorate	Master's degree	Bachelor's degree	Junior college	High school (and below)	Total	
Senior executives	1	0	1	0	0	2	0	3	0	0	0	3	5
Senior managers	0	1	3	1	0	5	0	7	4	1	0	12	17
Managers	1	1	6	2	0	10	1	11	6	1	0	19	29
Indirect employees	0	2	24	4	0	30	0	37	56	29	15	137	166
Direct employees	0	0	0	0	0	-	0	0	92	34	21	147	147
Subtotal	2	4	34	7	0	47	1	58	158	65	36	318	365
Proportion	4.3%	8.5%	72.3%	14.9%	0%	100%	0.3%	18.2%	49.7%	20.4%	11.3%	100%	100%

Number and Ratio of New Employees in 2024

age	gender	Taipei Office		Kaohsiung Headquarters		Total	
		Number of people	Percentage	Number of people	Percentage	Number of people	Percentage
<30 years old	Male	1	0.3%	14	4.3%	15	4.6%
	Female	1	2.7%	2	5.4%	3	8.1%
	Subtotal	2	0.5%	16	4.4%	18	4.9%
30–50 years old	Male	0	0%	28	8.5%	28	8.5%
	Female	0	0%	0	0%	0	0
	Subtotal	0	0%	28	7.7%	28	7.7%
>50 years old	Male	1	0.3%	0	0%	1	0.3%
	Female	1	2.7%	0	0%	1	2.7%
	Subtotal	2	0.5%	0	0%	2	0.5%
Total		4	1.1%	44	12.1%	48	13.2%

Number and Ratio of Employee Resignations in 2024

age	gender	Taipei Office		Kaohsiung Headquarters		Total	
		Number of people	Percentage	Number of people	Percentage	Number of people	Percentage
<30 years old	Male	0	0%	9	2.7%	9	2.7%
	Female	1	2.7%	0	0%	1	2.7%
	Subtotal	1	0.3%	9	2.5%	10	2.7%
31–50 years old	Male	1	0.3%	21	6.4%	22	6.7%
	Female	1	2.7%	0	0%	1	2.7%
	Subtotal	2	0.5%	21	5.8%	23	6.3%
>50 years old	Male	2	0.6%	11	3.4%	13	4%
	Female	1	2.7%	0	0%	1	2.7%
	Subtotal	3	0.8%	11	3%	14	3.8%
Total		6	1.6%	41	11.2%	47	12.9%

Note 1: Employee types are described as follows:

Employee Type	Description
Senior executives	President, Vice President, Assistant Vice President, Plant Manager
Senior managers	Manager, Section Chief
Managers	Team Leader, Section Manager
Indirect employees	Engineer, Chemist, Researcher, Supervisor, Operator, Technician, Specialist
Direct employees	Supervisor, Operator

Note 2: The calculation method for the new hire and resignation ratio of male employees in each region and age group is: number of new hires or resignations of male employees in that region and age group / total number of male employees in the Company at the end of 2024; the calculation method for female employees is: number of new hires or resignations of female employees in that region and age group / total number of female employees in the Company at the end of 2024; the calculation method for the combined new hire and resignation ratio is: total number of new hires or resignations in that region and age group / total number of employees in the Company at the end of 2024.

5.2 Talent Development and Retention

5.2.1 General Competency Training GRI 404-1、404-2

GPPC firmly believes that the growth and development of human resources serve as the foundation of competitiveness and innovation. The Company's management policy explicitly states: "Enhance the added value of individuals and teams—continuously strengthen education and training" as the highest principle guiding competency development. The Company is committed to establishing a diversified education and training system, covering professional courses, environmental safety and health (ESH) courses, special lectures, foreign language courses, and general skill assessments, to meet current competency needs while also preparing employees for future career development. The 2024 training program includes professional competencies, core competencies, management competencies, and environmental safety and health, offering courses such as greenhouse gas inventory, energy management, workplace success positioning, and annual ESH training.

Through course satisfaction surveys, the Company ensures that the training content aligns with employee needs. Continuous feedback and adjustments are used to achieve the best learning outcomes. Through continuous provision of industry-relevant updates and training, the overall competency of the workforce is expected to improve, thereby reinforcing the Company's competitive position within the industry.

Professional competencies

- Greenhouse Gas Inventory
- Radiation safety seminar
- Energy management personnel training
- Underground pipeline training
- "The Path to Procurement Excellence"
- "From Data Organization to AI Applications" (online course)
- Hazardous substance emergency response training
- Personal protective equipment and safety regulations, etc.

Core competencies

In order to improve employee work efficiency, quality competencies, and potential development, relevant lectures are regularly held each year.

- Engineer training
- Workplace success positioning
- Work and professional ethics
- CTCI ESG sharing
- Carbon management trends and practices

Vocational Training

Environmental safety and health

Colleagues should possess basic ESH concepts and knowledge.

- Annual ESH training
- First-aid personnel training
- Professional emergency responders for toxic and concerning chemical substances
- Personal protective equipment and safety regulations, etc.

General skills

- Basic English writing
- English reading
- English listening comprehension
- Advanced English reading

Management competencies

Courses are regularly planned in line with government laws and policies.

- Analysis of amended regulations on "Gender Equality in Employment Act"

Training hours for specific courses at GPPC

company	2024	Anti-corruption	Other ethical management-related courses	Information security courses	Human rights courses
Taipei Office	Number of people	34	33	-	40
	Total training hours	42	45	-	55
Kaohsiung Headquarters	Number of people	18	21	2	100
	Total training hours	18	30	8	111

Average training hours at GPPC

Employee Category	Gender	Taipei Office			Kaohsiung Headquarters			Total		
		Total Training Hours	Total number of employees	Average training hours per employee	Total Training Hours	Total number of employees	Average training hours per employee	Total Training Hours	Total number of employees	Average training hours per employee
Senior executives	Male	34	4	8.5	41	2	20.5	75	6	12.5
	Female	7	1	7	-	-	-	7	1	7
Senior managers	Male	26	2	13	82	5	16.4	108	7	15.43
	Female	46	3	15.33	3	2	1.5	49	5	9.8
Managers	Male	52	3	17.33	305	17	17.94	357	20	17.85
	Female	123	6	20.5	39	2	19.5	162	8	20.25
employees	Male	201	14	14.36	2,486	134	18.55	2,687	148	18.16
	Female	272	18	15.11	96	8	12	368	26	14.15
Direct employees	Male	-	-	-	1,829	170	10.76	1,829	170	10.76
	Female	-	-	-	-	-	-	-	-	-
Total		761	51 註1	14.92	4,881	340 註2	14.36	5,642	391 註3	14.43

Note 1: As of December 31, 2024, the number of employees in the Taipei Office was 47. The 51 employees noted here include 4 individuals who had left or retired by year-end.
Note 2: As of December 31, 2024, the number of employees at the Kaohsiung Plant was 318. The 340 employees noted here include 22 individuals who had left or retired by year-end.
Note 3: As of December 31, 2024, the total number of employees in the Company was 365. The 390 employees noted here include 26 individuals who had left or retired by year-end.

Course Satisfaction Survey

This year, based on feedback from participants at the Taipei Office and Kaohsiung Headquarters, the satisfaction survey for education and training was rated as satisfactory.

The satisfaction survey was designed with multiple evaluation indicators to comprehensively cover all core aspects of education and training. The instructors' professional competence and their skills in experience sharing became one of the key areas of evaluation. Participants generally believed that the instructors possessed professional expertise and were able to clearly convey knowledge when sharing their extensive experience, which helped learners better understand and absorb the course content.

The alignment of course topics was also a core aspect of the evaluation. Participants unanimously agreed that the courses accurately matched the expected topics, enhancing the practicality of the training. At the same time, the clarity of the course structure and the appropriate level of difficulty were both affirmed, ensuring the depth and breadth of learning. Most participants indicated that the knowledge acquired could be effectively applied in their daily work. The overall direction of the course delivery and the learning atmosphere created were also rated as excellent by most participants. This positive atmosphere encouraged participants to remain highly engaged during the courses.

Feedback from Kaohsiung Headquarters noted that some of the training content covered role positioning and interpersonal relationship management, enabling participants to better understand their roles in the workplace and improve their interpersonal skills. Looking ahead, the Company hopes to continue enhancing and optimizing its education and training programs to further strengthen the instructors' professional capabilities and the practicality of the courses.

5.2.2 Employee Competency Enhancement Program

Experience Inheritance and Knowledge Building Project

GPPC places high importance on employee training and career development. Through diversified on-the-job training and learning opportunities, the Company continuously enhances and accumulates human capital. GPPC has established a comprehensive training system, including supervisory job instruction, general management knowledge, tier-based training, environmental safety and health training, new employee training, and acquisition of statutory certifications. Talent is cultivated through internal and external training as well as industry-academia collaboration. Employees can also engage in self-development through activities such as book clubs, seminars, and experience sharing. The Company also encourages employees to pursue academic degrees or participate in overseas training programs to broaden their horizons and professional skills. In 2024, education and training expenses amounted to NT$1.1 million. A total of 216 training sessions were conducted, accumulating 5,642 hours of training. On average, each employee received NT$2,800 in training investment and approximately 14.5 hours of training.

Rehiring Senior Employees as Consultants

GPPC understands that senior employees possess rich professional knowledge and valuable experience, which are indispensable assets for corporate development. Therefore, the Company adopts a rehire strategy, inviting retired employees from the finance, business, and R&D departments to serve as consultants. This approach not only effectively retains their professional expertise but also provides valuable guidance and support to the Company. The rehire practice demonstrates GPPC's emphasis on and flexible use of human capital to ensure knowledge transfer.

GPPC Consultant Rehire Overview

Type of Consultant	Years of Experience	Content Provided or Transferred
Industry	Over 25 years	Petrochemical industry management experience transfer
Sales	30 years	Customer interaction experience transfer
Finance	30 years	Financial planning experience transfer
R&D	30 years	Customer service experience transfer

GPPC New Employee Mentorship Mechanism

During the probation period, new employees will be assigned a suitable mentor by their supervisor based on their learning needs. For frontline personnel, the mentor is typically the team leader. For engineers, due to the broader learning scope, mentors may be senior engineers, on-duty team leaders, or personnel in the relevant unit. Supervisors may also serve as mentors if necessary.

5.3 Salary and Benefits

5.3.1 Remuneration and Performance GRI 404-3、405-2

Remuneration and Rewards

GPPC is committed to providing employees with comprehensive remuneration and rewards. In addition to considering internal pay equity and market conditions, the Company also evaluates employee job grades, academic and professional background, professional capabilities, and responsibilities to make appropriate adjustments and ensure that the salary level remains competitive in the market.

The Company offers performance bonuses and dividends to eligible employees, sharing its business results with employees in order to strengthen organizational cohesion, enhance overall productivity, and ensure more competitive compensation to attract top talent.

The Company emphasizes gender equality and the principle of equal pay for equal work. When providing compensation, it takes into account a variety of factors such as business performance, industry salary standards, job position, and the Company's future operational needs to ensure that all employees are treated fairly regardless of gender. Due to the nature of the industry, technical positions in the plant are typically held by men. However, the overall gender ratio at GPPC is close to 1:1, and the gender ratio at operating plants is relatively higher for women, reflecting GPPC's strong commitment to developing a diverse and equitable corporate environment. The Human Resources Department conducts internal and external market salary surveys annually to ensure the appropriateness and rationality of the salary structure, eliminate any unjustified salary disparities, and further build a gender-equal workplace.

Average Salary Ratio by Job Grade – GPPC Male to Female Salary Comparison (Male : Female)

Unit: New Taiwan Dollars

2024	Taipei Office	Kaohsiung Headquarters
Employee Category	Ratio (Female to Male)	Ratio (Female to Male)
Senior managers	0.95	1.06
Managers	1.00	1.20
Indirect employees	0.95	1.06
Direct employees	-	-

Note: The Taipei office does not have direct personnel.

Performance Evaluation and Promotion

GPPC conducts employee evaluations in accordance with the "Employee Performance Appraisal Policy," which consists of regular evaluations and annual appraisals. Regular evaluations are conducted by supervisors who assess employees' work performance, conduct, and capabilities at any time and serve as important references for annual appraisals. Annual appraisals are completed before the end of December each year. After preliminary evaluations, the Personnel Section compiles the results and submits them to upper management units for cross-departmental evaluation. Performance appraisals are classified into seven grades and serve as the basis for determining year-end bonuses and annual salary adjustments. If an employee is rated Grade C, they will undergo a re-evaluation six months later. If no improvement is observed, the labor contract may be terminated in accordance with Article 11, Paragraph 5 of the Labor Standards Act.

Three situations in which employees are not eligible to participate in the annual performance appraisal: those who have been employed for less than six months (excluding project-based appraisals), those who are mandatorily retired in accordance with Article 54 of the Labor Standards Act (except those with appraisals), and those who do not have an appraisal during the year-end bonus or annual salary adjustment period shall be deemed as Grade B.

For promotions, GPPC has established the "Employee Promotion Policy." Employees must be reviewed by supervisors, who evaluate their suitability and development potential. Promotion decisions also take into consideration job rotation records, foreign language certifications recorded in HR systems, and training records. Promotion criteria are based on converting annual appraisal results into points. Employees who accumulate sufficient points may be recommended for promotion by their supervisors, and the annual appraisal points will be reset after promotion.

GPPC Performance Evaluation Status

職位	Male			Female		
	Number of employees evaluated	Total number of employees	Evaluation coverage ratio	Number of employees evaluated	Total number of employees	Evaluation coverage ratio
Senior executives	5	5	100%	0	0	-
Senior managers	12	12	100%	4	4	100%
Managers	22	22	100%	7	7	100%
Indirect employees	131	142	92%	24	26	92%
Direct employees	134	147	91%	0	0	-
Total	304	328	93%	35	37	95%

Note: Explanation of less than 100% appraisal coverage:
According to the Employee Performance Appraisal Policy: Employees who have been employed for less than six months are not eligible for annual appraisals (i.e., they have no appraisal for the year).
In 2024, a total of 24 new employees (2 female, 22 male) were employed for less than six months, and 2 fixed-term contract employees were not included in the annual appraisal.

5.3.2 Employee Benefits GRI 201-3、401-2、401-3

Insurance System

GPPC safeguards the health of employees and their families through a comprehensive and diversified insurance system. The insurance coverage provided by the Company includes life insurance, accident insurance, and medical insurance covering a wide range of medical needs. In the unfortunate event that an employee is diagnosed with a major illness, the Company also provides support for surgery, hospitalization, and recuperation, offering strong backing in times of adversity.

For sales personnel and employees assigned overseas, the Company offers additional coverage and assistance, including basic medical protection for employees' spouses and children, ensuring access to appropriate support in case of accidental injury or health issues. GPPC demonstrates full care for every employee and their family through an outstanding and tailor-made insurance system, fulfilling the Company's commitment to being a trustworthy enterprise and protector of its employees.

Unit: New Taiwan Dollars

Employee

- Life insurance and accident insurance: NT$1.8 to NT$2.1 million
- Funeral allowance for family members: NT$15,000
- Accident medical insurance limit: NT$5,000
- Hospitalization medical insurance limit: NT$60,000
- Cancer insurance (surgery: NT$30,000 per operation, hospitalization: NT$1,000/day, post-discharge recuperation: NT$600/day, chemo/radiotherapy: NT$500/day)
- Additional accident insurance for sales personnel: NT$600,000 / accident medical insurance limit: NT$10,000
- Additional accident insurance for overseas assignees: NT$1.8 to NT$2.1 million

Employee's spouse

Accident insurance: NT$500,000, accident medical insurance limit: NT$5,000, hospitalization medical insurance limit: NT$60,000

Employee's children

Accident medical insurance limit: NT$5,000 and hospitalization medical insurance premium subsidy

Retirement System

In accordance with the Labor Standards Act, GPPC has established a "Labor Pension Reserve Supervisory Committee" and allocates 3% of monthly salaries to the labor pension reserve fund. As of December 31, 2024, the balance of the labor pension reserve fund was NT$553,464,154. In accordance with the Labor Pension Act, the Company contributes 6% of applicable employees' monthly salaries; in 2024, the total contribution across the Company amounted to NT$11,071,421.

Parental Leave and Childcare

Upholding the principle of gender equality, GPPC provides female employees with unpaid parental leave, prenatal check-up leave, and maternity leave during pregnancy and childbirth.

Male employees are also entitled to prenatal check-up leave and paternity leave when their spouse is undergoing prenatal check-ups or giving birth. For employees requiring childcare, the Company handles unpaid parental leave in accordance with the Gender Equality in Employment Act and the Regulations for Implementing Unpaid Parental Leave for Raising Children, and arranges for the employees to return to their original unit and position upon the expiration of the leave, actively assisting them in reintegrating into the workplace.

GPPC Taipei Office Parental Leave Application, Reinstatement, and Retention Statistics

類 別	2024	
	Male	Female
Total number of employees eligible for parental leave (A)	26	2
Number of employees who actually used parental leave in 2024 (B)	2	0
Number of employees who were supposed to return to work after completing parental leave in 2024 (C)	1	0
Number of employees who actually returned to work after completing parental leave in 2024 (D)	1	0
Number of employees who actually returned to work after completing parental leave in the previous year, 2023 (E)	1	1
Number of employees who remained employed for twelve months after reinstatement in 2023 (F)	0	1
Parental leave application rate (B/A)	8%	0%
Reinstatement rate (D/C)	100%	-
Retention rate (F/E)	0%	100%

Other benefits or systems

Learning grants
Scholarships and grants for employees' children.

Holiday gifts
Birthday gift vouchers and thoughtful gifts on specific holidays.

Marriage and funeral subsidies
GPPC cares for all employees and provides congratulatory cash gifts or condolence money in the event of marriage, childbirth, or the death of relatives, offering support through all of life's important stages.

Club activity subsidies
Subsidies for employee participation in sports club activities to promote physical and mental well-being.

Badminton club activities

Softball club activities

Other Welfare Measures

Number of welfare benefit uses in 2024

Wedding Gift Money	Health Checkup Subsidy	Bereavement Support Payment	Medical Insurance
6 uses	369 uses	18 uses	group insurance 114 uses labor insurance 6 uses

Note: Includes both the Taipei Office and Kaohsiung Headquarters.

5.3.3 Labor-Management Relations

Employee communication channels

GPPC, in accordance with the Labor Union Act, has established a labor union to represent all employees in voicing opinions and facilitating communication. Quarterly labor-management meetings are regularly held to discuss important matters such as performance-based salary adjustments, revisions to the salary system, and adjustments to night shift allowances. The Company responds to the resolutions passed during labor-management meetings and monitors the progress and management status of implementation to ensure that each issue is fully carried out, thereby satisfying both labor and management and promptly notifying employees of major announcements. The Company also actively engages in collective agreement negotiations with the union to further strengthen cooperation and mutual understanding between labor and management.

Labor-Management Meeting Minutes

Meeting Date	Number of Attendees (Labor, Management Representatives)	Discussion Topics
2024/3/21	Labor representatives: 6 persons; management representatives: 4 persons	▪ Adjustment to full attendance bonus payment method ▪ Professional license subsidies
2024/6/20	Labor representatives: 5 persons; management representatives: 3 persons	▪ Adjustment to full attendance bonus payment method ▪ Discussion on rising turnover rates ▪ 2024 salary adjustment and revision of upper and lower salary structure limits ▪ Labor education
2024/9/19	Labor representatives: 5 persons; management representatives: 4 persons	▪ Long-term service bonus
2024/12/19	Labor representatives: 6 persons; management representatives: 4 persons	▪ Year-end party ▪ Assessment of installing electric vehicle charging stations in the parking lot ▪ Labor education

5.4 Human Rights Management

GRI 2-23、2-24

5.4.1 Human Rights Policy

To fulfill the responsibilities of human rights protection and corporate social responsibility, GPPC has formulated a human rights policy applicable to the Company and its affiliated enterprises by referencing international human rights standards such as the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. This policy aims to eliminate any behavior that infringes upon or violates human rights, ensure a safe and reasonable working environment, and guarantee that all employees are treated fairly and with dignity.

GPPC Human Rights Policy and Implementation Status

Prohibition of Child Labor and Forced Labor

The Company strictly adheres to labor-related regulations. Employees' regular working hours, overtime hours, and leave arrangements all comply with legal requirements, and various leave entitlements are protected. As of the end of 2024, no incidents of forced or coerced labor involving unwilling employees had occurred. Regarding child labor, the Company has clearly stipulated the prohibition of child labor since the recruitment stage, and as of the end of 2024, there were no cases of employing child labor.

Diversity, Equality, and Anti-Discrimination

The Company is committed to equal treatment for employees and job applicants in matters of labor rights, including recruitment, compensation and benefits, training, promotion, dismissal, or retirement. There is no unfair treatment based on race, class, language, ideology, religion, political affiliation, place of origin, birthplace, gender, sexual orientation, age, marital status, appearance, facial features, physical or mental disabilities, zodiac sign, blood type, or other factors.

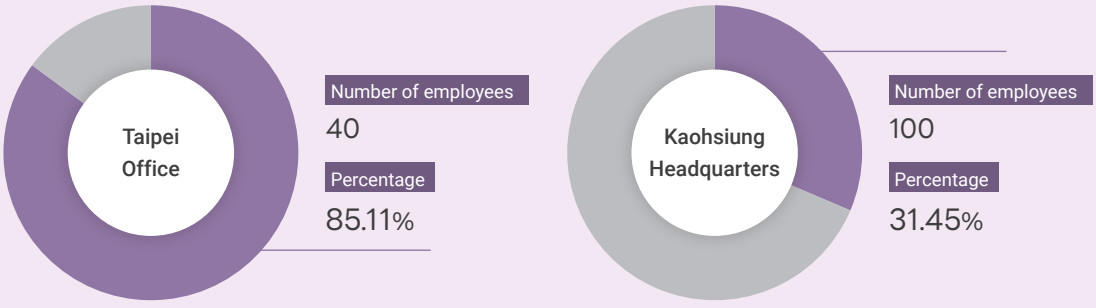
In 2024, no discrimination disputes or complaints occurred in the Company.

Employee Health and Safety

The Company has passed the audits and certifications of the ISO 14001 Environmental Management System and ISO 45001 Occupational Health and Safety Management System to ensure the provision of a safe working environment. In addition to complying with laws and regulations to provide a safe and healthy workplace, the Company has also established a dedicated occupational safety and health unit and committee, employed professional physicians and nurses, and regularly held training in safety, health, and fire prevention. Necessary preventive measures are taken to reduce the risk of occupational hazards and minimize danger in the work environment.

In 2024, no disputes or complaints due to health and safety occurred in the Company.

Percentage of GPPC Employees Who Received Human Rights-Related Education and Training



5.4.2 Prohibition of Forced Labor GRI 408-1、409-1

GPPC's human rights policy primarily ensures compliance with all labor laws and prohibits forced labor. The Company has implemented corresponding measures regarding employees' daily and weekly regular working hours, overtime, shift work, and duty on holidays or rest days, all of which comply with legal regulations to protect employee rights and reduce the risk of forced labor. In 2024, no incidents of forced labor occurred at GPPC.

Employee Attendance Management Regulations

In order to provide guidelines for employee leave, overtime, card-swipe corrections, project work hours, etc., specific employee attendance management regulations are implemented.

Leave: The entire Company follows the "Employee Leave Regulations" for leave management. Tailored management methods: The Taipei office follows the Taipei Office Attendance Management Regulations, and the Kaohsiung headquarters follows the "Kaohsiung Plant Attendance Operating Procedures." Leave categories include: marriage leave, personal leave, family care leave, ordinary sick leave, menstrual leave, bereavement leave, occupational sick leave, maternity leave, official leave, prenatal check-up leave, paternity check-up and paternity leave, and prenatal rest leave—12 types in total.

Overtime: Apart from fixed overtime for shift personnel, all employee overtime must be applied for in advance or verbally reported to the supervisor. Post-overtime applications must be completed within 72 hours of the overtime work. Employees are prohibited from working on holidays or rest days to substitute for others' compensatory leave, except when assigned by a supervisor.

Work Rules

Article 26 (Review of Extended Working Hours)
The personnel unit must thoroughly review employees' extended working hours. If abnormalities are found, a special review must be conducted.

5.4.3 Anti-Discrimination and Harassment GRI 406-1

GPPC has established a "Written Statement on the Prevention of Workplace Unlawful Infringement" and "Workplace Sexual Harassment Prevention Measures, Complaint and Disciplinary Regulations" to protect all employees from any form of physical, psychological, verbal, or sexual unlawful infringement while performing their duties.

The definition of workplace unlawful infringement includes cases where an employee, in a work-related environment—including commuting—is subjected to abuse, threats, or attacks. Specific behaviors include: physical unlawful infringement (e.g., hitting, scratching, punching, kicking, etc.), psychological unlawful infringement (e.g., threats, bullying, harassment, insults, etc.), verbal unlawful infringement (e.g., intimidation, interference, discrimination, etc.), sexual harassment (e.g., inappropriate sexual innuendos and behaviors, etc.), and stalking and harassment.

預防職場不法侵害書面聲明

工作場所性騷擾防治措施申訴及懲戒規範

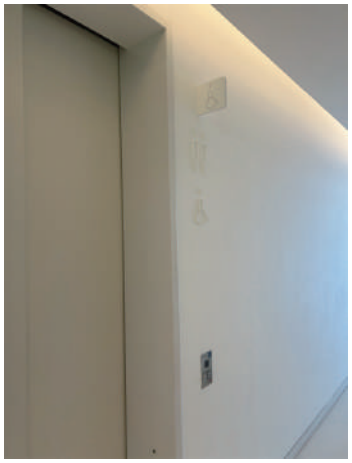
If an employee encounters unlawful workplace infringement during work, they should first seek help from a trusted colleague and record the perpetrator's behavior as evidence using audio recordings or other means and file a complaint with the Company. The Company commits to initiating a confidential investigation upon receiving a complaint. If the complaint is verified, appropriate disciplinary actions will be taken. The Company strictly prohibits retaliation against complainants, whistleblowers, or individuals who assist in the investigation. Any retaliatory behavior will also be subject to disciplinary action. The Company has established a complaint email: holing@gppc.com.tw and complaint hotline: 02-21754512.

GPPC also implements educational training on sexual harassment prevention. In 2024, sessions such as "Workplace Sexual Harassment and Unlawful Infringement" and "Explanation of Amendments to the Gender Equality in Employment Act" were conducted to promote proper understanding and behavioral standards among employees, raise workplace awareness, and foster a safe and harmonious working environment. As of the end of 2024, the Company has reported no incidents of discrimination or harassment.

GPPC is committed to protecting the rights of persons with disabilities, ensuring their equal participation in social, political, economic, and cultural activities. The Company actively promotes the independence and development of persons with disabilities. To improve the working environment for employees with disabilities, accessible toilets and dedicated ramps have been installed to provide a more friendly work environment.

Photos of accessible facilities

Taipei Office



Kaohsiung Headquarters

6

Occupational Safety and Health

2024 Highlight Performance

Operational plants have obtained **ISO 45001** certification, and coverage for 365 employees and 9 non-employees reached **100%**

No cases of occupational disease occurred

A total of **4,956** individuals, including employees, contractors, and occupational safety and health trainees, were trained, with a total of **6,230** training hours. The amount invested was approximately **NT$1.1 million**

Planning the application of **AI intelligence** in factory management, including safety and environmental management, image recognition, and real-time early warning functions for unsafe behavior at operational plants, to achieve the purposes of real-time early warning, disaster reduction, disaster avoidance, and disaster prevention

United Nations Sustainable Development Goals (SDGs)

- 6.1 Safety and Health Policy **SDGs 8.8**
- 6.4 Health Services and Promotion **SDGs3.8**

Management Approach

Material Topic: Occupational safety and health

Impact Description

Positive Impact Description

The Company effectively manages occupational safety and health, building a good working environment, thereby reducing the incidence of occupational injuries and diseases. This not only protects the health and safety of employees but also reduces medical expenses and work stoppage losses caused by occupational injuries.

Negative Impact Description

If improper occupational safety and health management results in occupational injuries, diseases, or workplace accidents, the Company could be forced to suspend operations for investigation, seriously affecting normal operations and corporate image.

Policies and Commitments

The Company is committed to practicing equality and eliminating unlawful workplace discrimination, ensuring that employees can work in a fair and safe environment. Through advocacy and training, the Company collaborates with employees to establish a safe, healthy, energetic, and friendly workplace, creating a healthy workplace culture and protecting the physical and mental health and safety of every employee.

Goal Setting and Progress

	Mid- to Long-Term Targets (2027–2030)	Short-Term Targets (2025–2026)	2024 Performance
Number of process safety incidents; Number of occupational safety and environmental protection fines	Process safety incidents fewer than 2; Occupational safety and environmental protection fines fewer than 1	Process safety incidents fewer than 4; Occupational safety and environmental protection fines fewer than 2	10 process safety incidents; 6 occupational safety and environmental protection fines
Installation of safety fences for nylon robots	Continue operator training to maintain safety awareness	After completion of protective fences for robot operations, training must be provided to unit personnel to ensure they understand the protective mechanisms.	Installation of nylon safety fences completed
Installation of leak prevention facilities and monitoring wells for regulated storage tanks	Regularly report storage tank monitoring items according to legal requirements	The construction schedule for storage tank overflow prevention facilities has been delayed; please urge the contractor to speed up construction to meet the schedule of submitting the improvement completion plan by the end of 2025.	▪ Construction of storage tank monitoring wells completed ▪ Implementation of storage tank leak prevention facilities in progress
Construction work for the ventilation system in the nylon boiler operating area	Before the summer arrives, heat hazard awareness will be promoted within the site. Please accelerate the construction of the ventilation system in the nylon boiler operating area, with the goal of completion before summer.	Ventilation systems in other boiler operation areas have been completed	Nylon ventilation system has entered the procurement stage

Responsible Unit

Safety and Environmental Protection Office, Safety and Environmental Protection Offices of each plant

Resources

Total capital expenditure: NT$16,285,000; manpower from the Industrial Safety and Environmental Protection Section also invested.

Grievance Mechanism

Complaint hotline: 07-3513911 #283

Action Plan	**Negative Impact Management** • Strengthen contractor management and implement occupational safety regulations for entering the plant • Enhance training on wearing protective equipment, enabling employees to build hazard awareness and wear proper protective gear • Implement inspection operations **Positive Impact Management** • Enhance the added value of individuals and teams—continue to strengthen training • Plan the application of AI intelligence in factory management, including safety and environmental management, image recognition, and real-time early warning functions for unsafe behavior, to achieve the purposes of real-time early warning, disaster reduction, disaster avoidance, and disaster prevention • Risk hazard assessment management: each unit proposes improvement measures or management plans for historically unacceptable risks, and continuously tracks and reviews execution results to reduce and eliminate potential risks.
Effectiveness Evaluation	• Ensure effectiveness through internal audit systems • Internal audit content follows the specifications in the "System Quality Manual" to ensure the accuracy of the audit content • Regularly track the organization's environmental safety performance through management review meetings, including supervision and measurement results, compliance with obligations, audit results, corrective actions for unmet targets, etc. • Confirmation of legal compliance to ensure the appropriateness of policies

6.1 Safety and Health Policy

6.1.1 Occupational Safety and Health Policy and Philosophy GRI 403-4

To protect the health and safety of GPPC employees and contractors, the Company is committed to eliminating hazards and preventing diseases as its top priority, continuously improving the work environment and facilities, and ensuring that all equipment complies with laws and relevant standards. At the same time, through in-depth education and training for employees and safety requirements for contractors, the Company maintains a sound occupational safety and health system and operating procedures. The Company upholds the spirit of full participation, striving to raise occupational safety and health standards with the goal of establishing a high-quality culture of occupational safety and health.

GPPC's safety and health regulations, strategy planning, hazard assessments and risk identification, and monitoring and management of environmental safety performance across all operational units are centrally managed by the Industrial Safety and Environmental Protection Section at the Kaohsiung headquarters. Additionally, an Occupational Safety and Health Committee has been established, composed of 21 members, including 8 labor representatives. The committee meets quarterly, with meeting content focused on data analysis of occupational safety and health and inspections of the work environment, and conducts in-depth discussions on the criteria for identifying occupational accidents. Furthermore, the meetings emphasize preventive advocacy, including responses to unlawful workplace infringement and heat hazards, ensuring the safe operation of dangerous equipment and compliance with scaffold operation standards, in order to comprehensively improve workplace safety.

GPPC's Occupational Safety and Health Policy and Philosophy

Strengthening safety education and awareness

- Regularly organize safety education and training for employees and contractors to enhance hazard awareness and proper use of protective equipment.
- Promote and popularize the concept of occupational safety and health, making safe behavior a habit for every employee.

Comprehensive safety management system

- Formulate and implement safety, health, and environmental policies in line with ISO 45001, and continuously improve the work environment and facilities.
- Establish the "Contractor Safety and Health Management Procedures" and the "Safety Work Permit Procedures" to ensure that contractors comply with the same safety standards.

Application of technology in safety management

- Plan to introduce AI intelligence into factory management to enable real-time image analysis and early warning of unsafe behaviors, enhancing disaster prevention capabilities.

Comprehensive inspections and risk control

- Conduct management walk-throughs by senior executives and multi-level safety audits, and follow up on discovered deficiencies for improvement.
- Hold regular meetings to review past incidents and risks, propose improvement measures, and achieve ongoing risk assessment and control.

Cooperation with contractors and shared safety consensus

- Regularly conduct safety and health philosophy advocacy with contractors and implement unannounced on-site inspections to ensure safe operations and reduce the risk of accidents.
- Promote the Company's safety culture to every contractor, creating an environment where everyone values industrial safety.

Key discussion topics of the Occupational Safety and Health Committee in 2024 were as follows:

Occupational safety and health statistics
Analyze and track data trends of internal safety and health incidents to formulate effective risk management strategies.

Work Environment Measurement Results
Regularly assess environmental factors in the workplace to ensure the health and safety of employees.

Occupational Accident Identification Criteria
Provide standardized processes and criteria to accurately identify and report occupational accidents, promote safety, and improve processes.

Unlawful Workplace Infringement Prevention Advocacy
Strengthen employee education to help identify and prevent unlawful acts in the workplace.

Heat Hazard Prevention Advocacy
Introduce the impact of heat hazards and prevention measures to ensure employee safety and comfort in high-temperature environments.

Hazardous Equipment Inspection Explanation
Provide detailed explanations of the procedures for regularly inspecting hazardous equipment to ensure safe operation and reduce accident risk.

Scaffold Operation Standards Advocacy
Strengthen promotion of scaffold operation safety standards to ensure proper assembly and usage, preventing construction site accidents.

Support and Participation of Senior Occupational Safety and Health Management

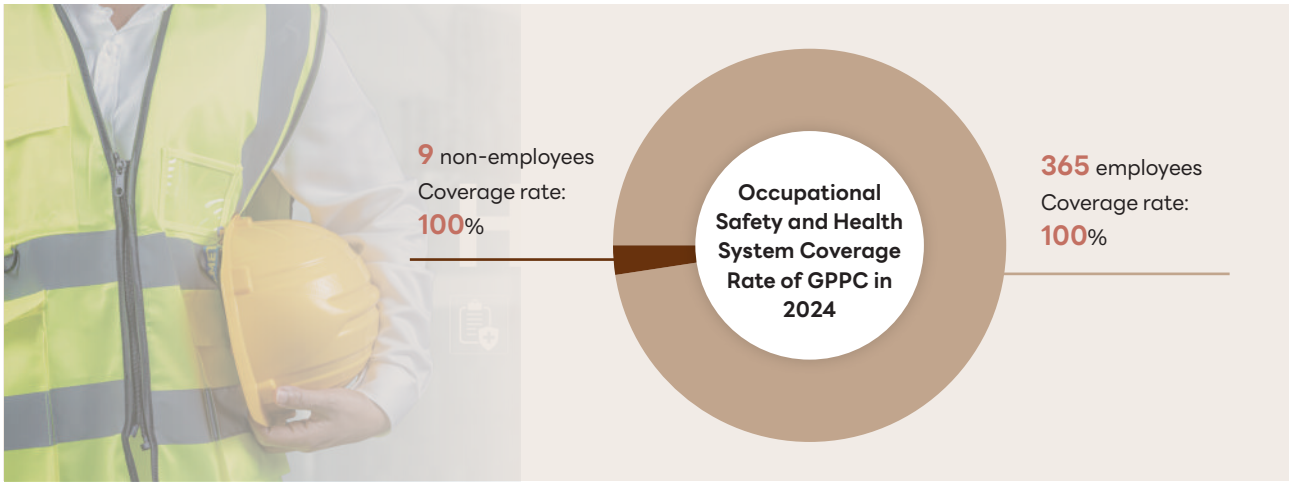
GPPC holds one occupational safety and health meeting per quarter, attended by members of the Occupational Safety Committee and chaired by the plant manager. During the meetings, each production site explains the implementation of improvement measures based on the meeting resolutions to promote occupational safety and health management. A total of 4 safety meetings were held throughout 2024.

6.1.2 Occupational Safety and Health Management System GRI 403-1、403-8

GPPC is committed to enhancing the overall safety and health standards of the enterprise. Since 2006, the Company has implemented the OHSAS 18001 system and obtained ISO 45001 certification in 2018. Through these occupational safety and health management systems, the Company is able to effectively identify all hazard factors in operations and establish standardized safety and health management standards to ensure the health and safety of employees. The formulation and implementation of this standard promotes continuous progress in the Company's occupational safety and health performance and represents the Company's pursuit of a comprehensive occupational safety and health system.

GPPC is dedidcated to rigorously evaluating the occupational safety and health impacts of its production activities, products, and services, and conducts hazard identification and risk assessments. The Company periodically reviews past incidents, considers the opinions of stakeholders, legal requirements, and common practices in the industry, and selects representative occupational safety and health topics. The results of the above evaluations and selections provide an effective basis for formulating occupational safety and health goals, targets, and management plans.

GPPC's occupational health and safety management system covers all Company employees, enabling every employee to work safely. Under the promotion of this system, the Company provides comprehensive personal protective equipment, including goggles, earplugs, earmuffs, and vertical fall arrest devices. The Company continuously conducts occupational safety and health training for employees and contractors to ensure they possess the necessary knowledge and skills to operate factory equipment safely.



The definition of GPPC's occupational safety and health management system includes workers, covering both Company employees and non-employees, such as contractors. The scope of management covers all employee work locations and includes areas where contractors perform labor-related tasks under the instructions of the employer or the employer's agent. As of the end of 2024, GPPC's Kaohsiung headquarters has obtained ISO 45001 certification, with 100% coverage of employees and non-employees (Note).

Note: The main types of non-employee workers include dispatched personnel: drivers, interns; technical service contracts: operators; contractors, etc.


Certificate TW17/00524 / 證書 TW17/00524
SGS
Grand Pacific Petrochemical Corporation Kaohsiung plant
國喬石油化學股份有限公司高雄廠
has been assessed and certified as meeting the requirements of
ISO 45001:2018
Issue 4. Certified since 31 May 2018
IAF

Kaohsiung Headquarters ISO 45001 Certificate (Certified for Occupational Safety and Health Management System)

6.2 Occupational Safety Risk Management

6.2.1 Hazard Identification and Risk Assessment GRI 403-2

GPPC has consistently adhered to comprehensive risk management in its production process to ensure the safety of employees and the operation of the Company. Through detailed analysis of all production process sections, the purpose of each section's design is clarified to accurately identify potential risks that could affect safety and production efficiency. The Company selects key process variables, such as temperature and pressure, and uses professional methods to analyze possible deviations and their consequences. Assuming all protective measures fail, the Company clarifies potential causes and formulates emergency response plans to reduce the likelihood of accidents.

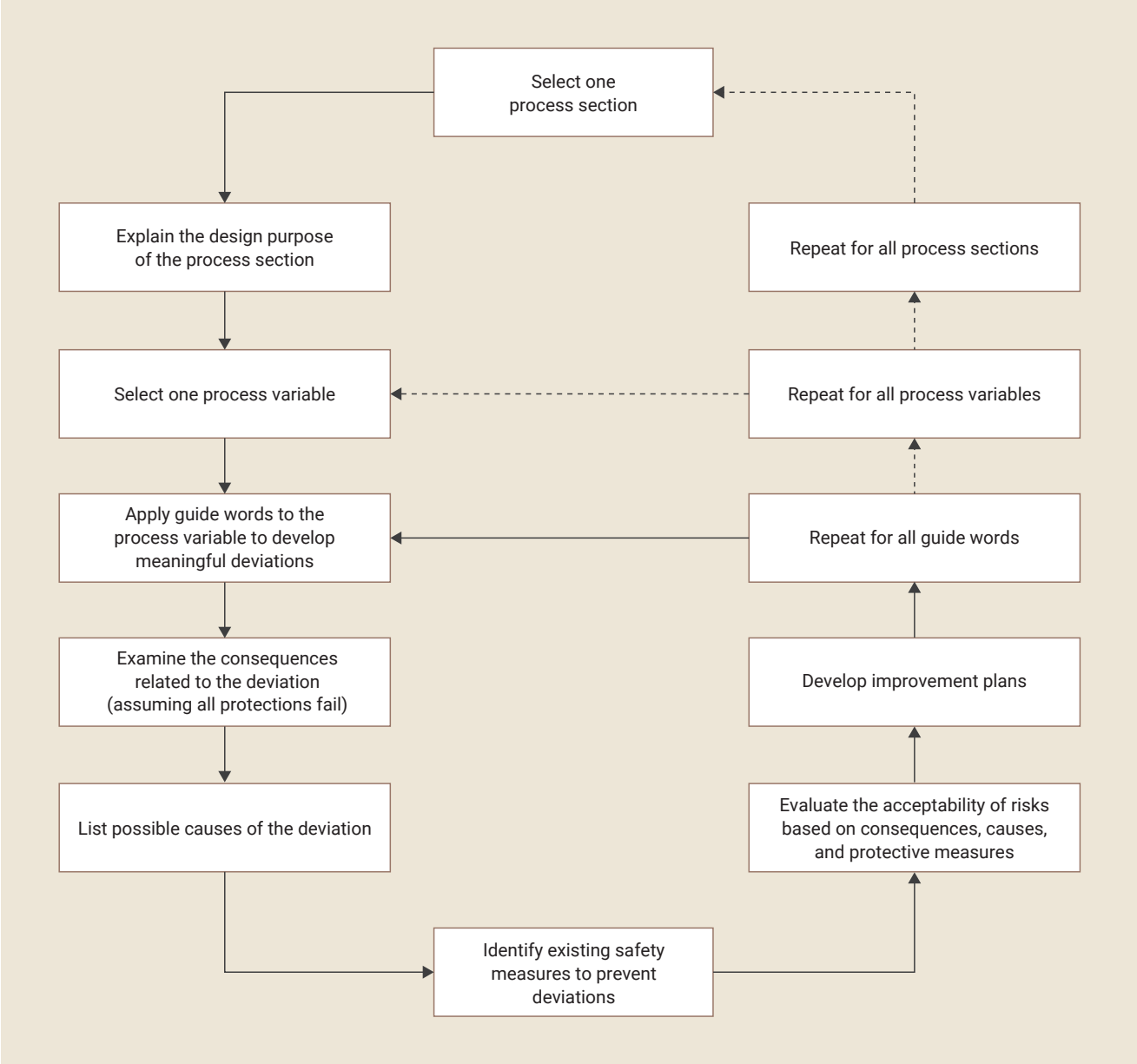
For identified risks, the Company evaluates the effectiveness of existing safety measures to ensure each part complies with the highest safety standards. When risks exceed acceptable levels, the Company formulates and implements improvement plans to continuously enhance the safety of the working environment and improve production efficiency.

Hazard Identification at the Kaohsiung Headquarters' Operational Site

Identified Hazard Category	Number of High-Risk Individuals	Proportion of High-Risk Individuals	Countermeasures and Preventive Measures
Injuries from contact with hazardous substances	280	76.7%	Require employees to wear appropriate personal protective equipment, including safety helmets, goggles, gloves, and other necessary gear depending on job nature, to ensure employee safety and health.
Forklift operations	156	42.7%	To ensure safe forklift operation, all operators must hold appropriate operation licenses and develop safe driving habits. Emphasis is placed on defensive driving skills; speed limits are also established to prevent safety incidents due to excessive speed.
Equipment cutting and entanglement	83	27.7%	When handling cutting and entangling equipment, power disconnection procedures must be strictly enforced to ensure equipment is completely powered off during maintenance, inspection, or any situation where personnel are at risk. Employees must also wear necessary personal protective equipment such as cut-resistant gloves and goggles to ensure safety during operation.

Risk Items and Countermeasures

Injuries from contact with hazardous substances	Forklift operations	Equipment cutting and entanglement
Operations involving contact with hot, cold, acidic, alkaline, and toxic substances	Collision or puncture of personnel or equipment by vehicles during item transport	Injuries caused by entanglement, cuts, or clamping during use, maintenance, or servicing of rotating equipment when usage regulations are not followed
Response Measures	Response Measures	Response Measures
Conduct regular hazard identification of harmful substances; require wearing of personal protective equipment.	Require forklift operation licenses for operators; cultivate habits of safe and defensive driving; enforce speed limits.	Implement power disconnection procedures; require wearing of personal protective equipment.


Select one process section
Explain the design purpose of the process section
Select one process variable
Apply guide words to the process variable to develop meaningful deviations
Examine the consequences related to the deviation (assuming all protections fail)
List possible causes of the deviation
Identify existing safety measures to prevent deviations
Evaluate the acceptability of risks based on consequences, causes, and protective measures
Develop improvement plans
Repeat for all guide words
Repeat for all process variables
Repeat for all process sections


HSE

6.2.2 Management of Hazardous Chemicals SASB RT-CH-410b.2

GPPC strictly adheres to regulations and chemical management guidelines to reduce occupational safety and health risks caused by hazardous chemicals. In accordance with Article 10 of the Occupational Safety and Health Act and Article 17 of the Regulations for the Labeling and Hazard Communication of Hazardous Chemicals

Management Item	Implementation Content
Management of the Hazardous Chemicals Inventory	Compile a hazardous chemicals inventory to keep track of the usage and storage information for each hazardous chemical.
Safety Data Sheet (SDS) Management	Compile safety data sheets to help employees understand the properties and potential hazards of hazardous chemicals. Relevant units shall place the safety data sheets in locations within the workplace where they are easily accessible.
Labeling of Hazardous Chemicals	Relevant units shall ensure that all hazardous chemicals within their jurisdiction are properly labeled. Labels should include hazard pictograms, name, hazardous ingredients, signal words, hazard statements, precautionary statements, and the name, address, and phone number of the manufacturer (or supplier).
Priority Management of Chemicals	Identify chemicals with relatively high hazard levels for priority management, and carry out periodic updates and reporting between April and September each year.
Management of Precursor Chemicals	Precursor chemicals are industrial raw materials that can be used to manufacture narcotics. Therefore, online reporting must be conducted in January, April, July, and October of each year. All reporting records must be kept for three years.
Management of Hazardous Substances at the Plant	Due to the nature of the industry, the usage of hazardous substances exceeds the regulatory threshold. Therefore, reporting to the competent authority is conducted regularly in January and July each year.
Evaluation and Classification Management of Hazardous Chemicals	Conduct evaluation and classification management of hazardous chemicals using a website approved by the competent authority. Records must be reevaluated once every three years and retained accordingly.
General Hazard Education and Training	Employees engaged in the manufacturing, handling, or use of hazardous chemicals within the plant (site), such as in processes involving the entry and unloading of hazardous chemicals, shall receive relevant occupational safety and health training according to the nature of their work (including an additional 3 hours of on-the-job training every three years). The aforementioned education and training is organized by the Safety, Health, and Environmental Protection Office, with coordination from all units. Records must be kept for three years.
Information Management of Types and Quantities of Chemicals in Plants and Warehouses	Manage information on the types and quantities of chemicals stored in warehouses and plants to facilitate emergency response decision-making and ensure the safety of emergency responders.

6.3 Emergency Incident Management GRI 403-2

6.3.1 Emergency Response Plan Operation

When an emergency hazardous incident occurs, GPPC adheres to the principle of rapid response to ensure the incident is properly handled and to prevent similar events from recurring.

At the first moment an incident occurs, relevant units must immediately take necessary response measures and report the incident to their supervisors to promptly initiate the incident investigation procedure. The responsible unit shall classify the incident based on its severity level. If the incident is classified as major, the duty supervisor must, within one hour of learning about the incident (or within 30 minutes if it involves toxic chemicals), notify the relevant supervisors and the Industrial Safety and Environmental Protection Section by phone to obtain guidance and assistance. The Industrial Safety and Environmental Protection Section shall, if necessary, report to the competent authority.

The supervisor of the incident unit must complete the incident report form within two working days and provide a detailed report so that the Industrial Safety and Environmental Protection Section can archive the report and forward it to relevant units for further handling. If necessary, the Company will convene an ad hoc incident investigation meeting within seven days to launch a comprehensive investigation in coordination with various departments, identify the root cause, and formulate an improvement plan.

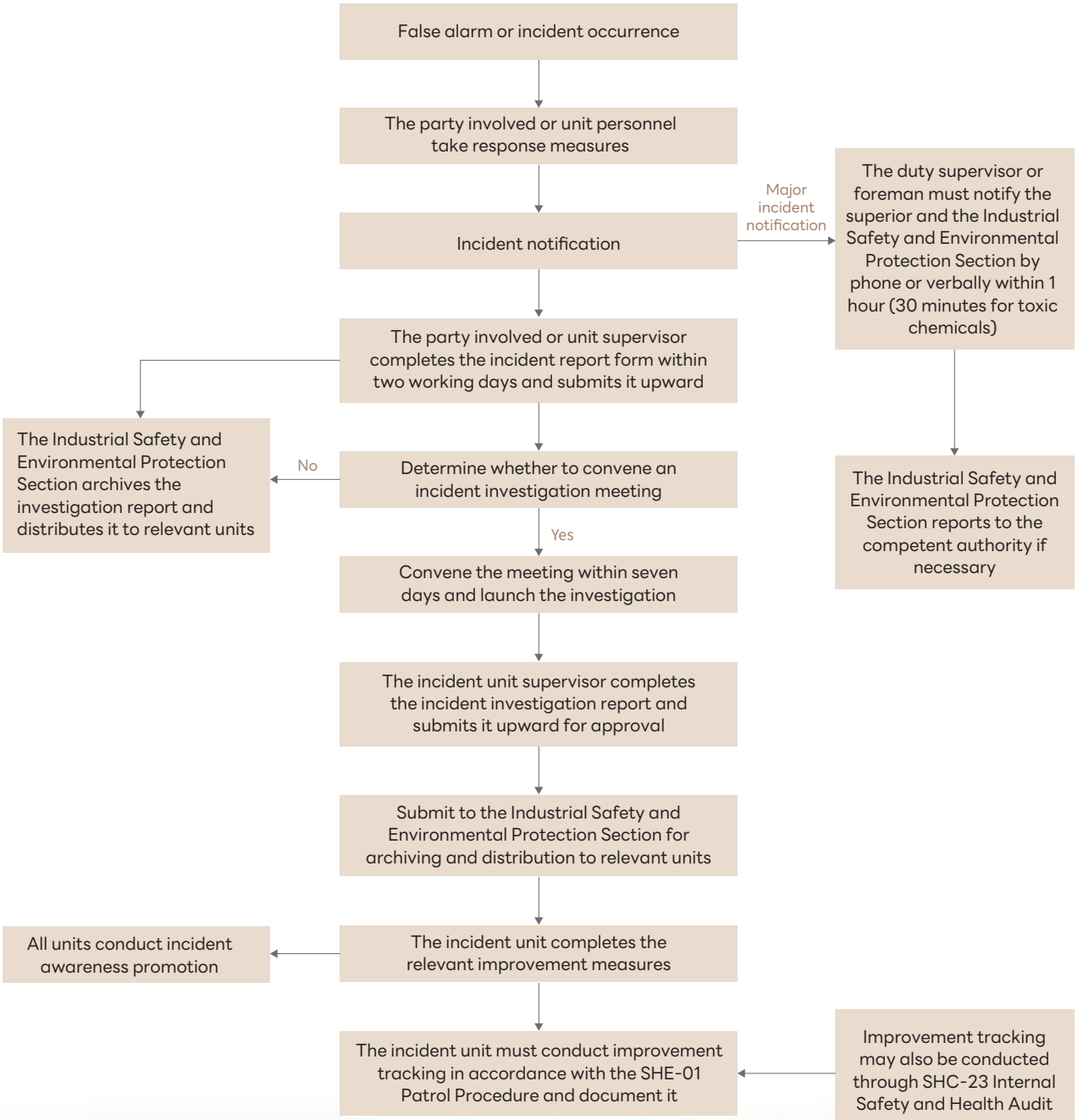
Upon completion of the investigation, all incident reports will be archived again and distributed to the Industrial Safety and Environmental Protection Section to ensure that all departments within the Company are informed of the detailed circumstances and causes of the incident. The Company encourages each unit to carry out awareness campaigns after incident handling is completed to raise employees' safety awareness.

The Company will conduct continuous incident review and improvement tracking. The incident unit shall perform patrol inspections in accordance with the Responsible Care System and the Responsibility Area Patrol System as a solution, implement necessary improvement measures, and regularly document and archive them to ensure the effectiveness of the management system. If the improvement plan permits, the Company will also conduct internal safety analysis through the Hazard Identification and Risk Assessment Procedure to achieve comprehensive safety improvements, with the goal of establishing a sound operational process for rapid response to occupational incidents and laying a solid foundation for safe production in the future.

Incident Classification

Incident Classification	Classification Level Description	On-Site Commander	Response Command Center
Level 1	The response area is the process area where the incident occurred. The on-site supervisor (duty supervisor/foreman) is responsible for the response, which focuses on on-site disaster rescue.	Duty Foreman of the Responsible Area	Control Room
Level 2	Involves large-scale leakage of harmful or polluting substances within the plant, medium-scale fire, or personnel injury requiring assistance from other in-plant units or personnel within the jurisdiction, without needing external support. The response area is the entire plant, and the plant manager is the responsible person. The response operation focuses on requesting external support. During Level 2 response, the following four points should be considered: a. Determine whether the process needs to be shut down. b. Determine whether factory evacuation is necessary. c. Determine whether to request external support. d. Determine whether the incident will escalate.	In-Plant: Plant Manager Incident Unit Supervisor	Plant Manager's Office
Level 3 (Disaster Extending Outside the Plant)	Involves large-scale leakage of hazardous or polluting substances or a large-scale fire that may spread to neighboring plants or residential areas and requires support from external units for rescue. Response operation focuses on community evacuation.	In-Plant: Plant Manager Off-Site: Kaohsiung City Disaster Relief and Ambulance Command Center	Plant Manager's Office

Emergency Incident Response Organization Chart and Emergency Response Plan Operation Flow



6.3.2 Emergency Incidents and Fire Safety Training

Facing potential crises within the plant, GPPC not only conducts fire drills every year but also formulates an annual emergency response drill plan. Through continuous drills, employees become familiar with response procedures, thereby minimizing the losses caused by disasters.

Number of drills at Kaohsiung Headquarters in 2024

Emergency response drill count	32
Fire drill count	2

Benzene Leakage Response Drill

Styrene Flammable Gas Leakage Response Drill




Ethylene Flammable Gas Leakage Response Drill



6.4 Health Services and Promotion SASB RT-CH-320a.2

6.4.1 Occupational Health Services GRI 403-3

GPPC is committed to providing comprehensive occupational health and safety services. Through the ISO 45001 management system and workplace environmental monitoring, the Company strictly manages the concentration of chemicals and noise levels in the workplace to ensure that employees work in a safe environment. Every six months, the Company conducts chemical testing for butadiene and benzene in the workplace and performs noise measurements in the compressor operation area of Styrene Plant III to continuously improve environmental safety standards.

In addition to environmental monitoring, the Company also focuses on the personal health management of employees. Annual health examinations are conducted to ensure that employees maintain optimal physical and mental health. In addition to general health examinations, employees of the Plastics Business Division undergo annual testing for dimethylformamide, while employees in the Petrochemical Business Division who are engaged in operations involving special hazards undergo benzene health checks. Furthermore, employees sensitive to noise—such as those in the Petrochemical, Plastics, Cogeneration, and Nylon Business Divisions—also receive annual special health examinations.

Employee health examination content in 2024

Health Examination Type	Number of people	Proportion of Total Employees	Description of Examination Items	Total Subsidy Amount (Unit: New Taiwan Dollars)
General Health Examination	352	96.4%	▪ Blood pressure ▪ Electrocardiogram ▪ Chest X-ray ▪ Blood and urine tests ▪ Abdominal ultrasound	746,250
Special Health Examination	170	46.6%	▪ Noise ▪ Benzene ▪ Ionizing radiation ▪ Butadiene ▪ Dimethylformamide	

6.4.2 Employee Health Promotion GRI 403-6

GPPC provides employee health promotion services, such as personal health consultation, importing health management system data into EHS, revision of the female health protection plan, revision of the abnormal overload-induced disease prevention plan, discussions on the health management of middle-aged and elderly workers, on-site stationed physicians and nurses, workplace stress management and emotional adjustment, establishment of micro fire stations, and installation of AED equipment.

Kaohsiung Headquarters Health Protection Measures

- GPPC has one full-time nurse stationed at the plant to provide immediate medical care on-site.
- To comply with labor health protection requirements, GPPC signed an on-site service cooperation contract with Kaohsiung Medical University Chung-Ho Memorial Hospital (KMUH), hiring KMUH medical personnel to provide on-site services, with monthly regular medical health consultations held at the plant. KMUH assigns medical personnel who meet the qualifications specified in the Labor Health Protection Rules as needed.
- Distribution of cooling vests to prevent heat hazards

full-time nurse stationed at the plant to provide immediate medical care

Distribution of cooling vests

To fully protect the health and safety of female employees, GPPC has implemented a series of maternal health protection measures and plans, such as maternity leave, flexible working hours, adjustments to the working environment (to prevent female employees from exposure to harmful substances or engaging in strenuous work), setting up lactation rooms, and providing specific medical health examinations. Supervisors will assist in submitting requests for workplace maternal health protection plans, covering those who are pregnant, planning pregnancy, postpartum (including those who experienced normal childbirth, stillbirth after 24 weeks of gestation, or are within one year postpartum and breastfeeding). If there are changes in job duties or in the health condition of female employees during the execution of the health protection plan, the Company will initiate corresponding health protection measures to ensure their needs are fully addressed.

In addition, the Company regularly conducts risk assessments in the workplace to minimize potential hazards to employees in the maternal stage. If the assessment reveals known risk factors, hazard control will be implemented to reduce or eliminate these risks. On-site medical personnel will provide necessary health guidance and protection measures according to the needs of maternal employees. When maternity employees report health issues, the Company will provide follow-up examinations and suitability assessments. If necessary, the employee will be referred to an obstetrician-gynecologist for further treatment and suitable job arrangements will be recommended. Meanwhile, an occupational medicine physician will conduct an on-site assessment to determine whether job adjustments are necessary.

Workplace Maternal Health Protection Measures

Taipei Office:
Establishment of lactation rooms

Setup of dedicated lactation rooms and refrigerators for breast milk storage

Kaohsiung Headquarters:
Establishment of lactation rooms

Lactation spaces and designated refrigerators for breast milk are installed in the administrative building

Enterprises bear the significant responsibility of safeguarding employee health. GPPC actively promotes health promotion activities to raise employee health awareness. In 2024, various health promotion activities organized by the Company received strong support from employees. For instance, the training on proper SOPs for myocardial infarction first aid was attended by 176 employees, accounting for approximately 48.2% of the total workforce. The goal was to enhance employees' ability to recognize symptoms of myocardial infarction and respond appropriately in emergencies. Another lecture, "A Strong Heart Starts Here," focused on heart health education, helping employees understand how to strengthen their heart health and better manage their own health conditions. A total of 166 employees participated, accounting for approximately 45.5% of the workforce.

In addition to promoting heart health education, the importance of understanding metabolic indicators should not be overlooked. Therefore, the Company conducted a campaign to promote knowledge of normal blood glucose levels. Blood glucose levels are an important indicator of overall health. This campaign helped employees learn how to control blood sugar levels appropriately to prevent and identify metabolic diseases such as diabetes early. A total of 168 employees participated, accounting for 46% of the total workforce.

Food safety is also a concern of the Company, particularly given the hidden risks of food poisoning commonly found in Taiwan. The Company launched the campaign "Food Poisoning Panic! Four Habits of Taiwanese That Hide Dangers," aiming to educate employees on the principles of consuming rice-based products and reduce the risk of food poisoning. A total of 164 employees participated in this campaign, accounting for 44.9% of the total workforce.

GPPC hopes that through the above lectures and the sharing of health education knowledge, employees will be better equipped to understand health-related topics and prevent potential sudden health conditions. The Company will continue to prioritize the health needs of its employees and provide more effective health promotion activities in the future.

2024 Health Promotion Activities and Campaigns	Activity Description	Frequency / Count	Participants	Number of Participants	Proportion of Total Employees
Proper SOPs for myocardial infarction first aid	Proper SOPs for myocardial infarction first aid	1	Kaohsiung Headquarters	176	48.2%
Normal blood glucose level	Explanation of normal blood glucose levels	1	Kaohsiung Headquarters	168	46%
Food Poisoning Panic! Four Habits of Taiwanese That Hide Dangers: Mortality Rate Can Reach Up to 40%	Principles for consuming rice-based products	1	Kaohsiung Headquarters	164	44.9%
A Strong Heart Starts Here	Heart health education	1	Kaohsiung Headquarters	166	45.5%

6.5 Occupational Safety and Health Education and Training GRI 403-5

6.5.1 Employee Occupational Safety and Health Education and Training

GPPC emphasizes the importance of occupational safety and health education and training. New employees are required to participate in a 3-hour "New Employee Safety and Health Education Training" and pass the test. Existing employees are also required to participate in occupational safety and health-related education and training on a regular annual basis. This includes annual environmental safety and health education, fire extinguishing training, and different levels of training on pipeline disaster awareness, response, and command integration, with the goal of enhancing workplace safety and disaster handling capabilities. The effectiveness of the education and training is ensured by a 100% course pass rate. In 2024, a total of 594 people participated in GPPC's occupational safety and health-related training, with total training hours reaching 1,868 hours, fully demonstrating its commitment and effort toward workplace safety.

GPPC Occupational Safety and Health Education and Training Statistics

Course Title	Number of Participants (Persons)	Total Training Hours (Hours)
Annual environmental safety and health course (use of personal protective equipment and health management)	292	876
Fire extinguishing training	292	876
Underground pipeline disaster awareness	5	50
Underground pipeline disaster response	3	42
Underground pipeline disaster command integration	2	24
Total	594	1,868

Note: Course content mainly includes: annual environmental safety and health education, fire extinguishing training, basic level education and training for underground pipelines—pipeline disaster awareness, technical level education and training for underground pipelines—pipeline disaster response, and command level education and training for underground pipelines—pipeline disaster command integration.

Types and key points of occupational safety and health and professional education and training implemented by GPPC are as follows:

Workplace and management related

- Occupation and workplace ethics
- Successful workplace positioning
- CTCI Group ESG experience sharing

Mechanical technology and engineering

- Introduction to mechanical shaft seals
- Introduction to bearings
- Introduction to vibration issues in rotating equipment
- Valve instrument selection
- Introduction to types of flow instruments
- Piping practice
- Pipeline guided wave inspection

Occupational safety and health

- Annual environmental safety and health education
- Fire extinguishing training
- Basic level education and training for underground pipelines – disaster awareness
- Technical level education and training for underground pipelines – disaster response
- Command level education and training for underground pipelines – disaster command integration

Occupational Safety and Health Education and Training for Non-Employees GRI 403-7

GPPC places great importance on contractor safety management. As engineering work often involves high-risk tasks, to enhance the Company's safety and health performance and reduce unknown risks, the Company has established regulations such as the "Contractor Safety and Health Management Procedure" and the "Safety Work Permit Procedure." The safety management of contractors is strictly held to the same standards as for company employees. These standards and regulations include regularly holding joint coordination organization meetings, requiring the establishment of standard operating procedures before construction, informing of operational hazards, and recommending types of personal protective equipment to be used. In addition, the Company communicates GPPC's occupational safety and health philosophy through meetings with contractors and conducts unscheduled, unannounced site inspections to ensure effective implementation, adhering to the concept that "Everyone is Responsible for Safety," and correcting unsafe behaviors of contractor personnel to reduce risks. Furthermore, the Company places great importance on contractor personnel education and training, covering operational training and training on wearing personal protective equipment, to ensure workers understand hazards and prevent injuries.

GPPC's Occupational Safety and Health Management Measures for Contractors

- **Regulatory Compliance:** Contractors shall comply with project contracts, the Occupational Safety and Health Act, and relevant regulations of the plant.
- **Safety and Health Reporting:** Contractors employing more than 30 people shall report safety and health management personnel before commencement and submit qualification documents; those with fewer than 30 people shall provide supporting documentation.
- **Proof of Insurance:** Proof documents of accident insurance and labor insurance shall be provided prior to commencement of work.
- **Personnel Concurrent Post Restrictions:** The reported safety and health management personnel may not concurrently serve in other roles.
- **Subcontracting Restrictions:** Work may not be subcontracted without written permission.
- **Legal Responsibilities and Cooperation:** Contractors shall be responsible for complying with relevant laws and accept guidance.
- **Safety Meetings:** During operations within the plant, the plant will inform of hazard factors and provide regulatory assistance.
- **Compensation Responsibility:** Contractors shall provide compensation if an accident occurs due to violation of regulations or work negligence.
- **Child and Female Labor Restrictions:** Employment of children under the age of 16 or female workers in hazardous work is prohibited.
- **Accident Reporting:** In the event of an accident, it shall be reported immediately; major accidents shall be reported to the labor inspection agency within 8 hours.
- **Safety Inspections:** Safety and health management personnel shall inspect the workplace daily and maintain communication with plant personnel.
- **Equipment Inspection:** Machinery and tools used shall be inspected and approved. Self-prepared equipment shall comply with regulations.
- **Safety Measures:** Safety warning signs shall be installed. In the case of assisting the plant in rescue operations, compensation may be requested.
- **Meetings and Access:** Regular participation in safety and health meetings is required. Employees shall wear access badges and comply with behavioral codes when entering the plant.

GPPC Contractor Education and Training

Title of Education and Training	Training Hours	Number of People	Average Hours
Contractor entry safety and health regulations	4,362	4,362	1

6.6 Occupational Injury Statistics

GRI 403-9、GRI 403-10、RT-CH-320a.1、RT-CH-540a.1、RT-CH-540a.2

GPPC attaches great importance to the safety and health of its employees, continuously providing a safe working environment while also caring for employees' physical and mental health. The Company firmly believes that only with healthy employees can it drive success. To ensure the effectiveness of occupational safety and health policy implementation, GPPC formulates various safety and health management plans based on annual goals and promotes continuous operational improvement in accordance with the management system. The aim is to reduce potential hazards to safety and health, prevent various types of accidents, and promote employee safety and health.

2024 employee occupational injury: 1 case

- Incident Type
  Post-incident Handling Measures
- Traffic accident
  The responsible department has strengthened the promotion of traffic safety matters

In 2024, there was 1 case of occupational injury among employees, which resulted from a commuting traffic accident. There were no occupational disease cases this year.

GPPC 2024 Occupational Injury Statistics

Item	Employee	Non-Employee
Total work hours [Note 1]	724,017	19,872
Number of general occupational injuries	1	0
Number of severe occupational injuries	0	0
Number of deaths	0	0
Total recordable occupational injury cases	1	0
Total recordable incident rate (TRIR) [Note 2]	1.38	0
Rate of severe occupational injuries [Note 3]	0	0
Fatal occupational injury rate [Note 4]	0	0
Frequency rate (FR) of disabling injuries [Note 5]	1.38	0
Lost workdays [Note 6]	30	0
Severity rate (SR) of disabling injuries [Note 7]	41.44	0
Total injury index [Note 8]	0.24	0

Note 1: Covers 100% of GPPC employees.
Note 2: TRIR = (Number of Recordable Occupational Injuries × 1,000,000 work hours) / Total Work Hours.
Note 3: Rate of Severe Occupational Injuries (excluding deaths) = (Number of Severe Occupational Injuries [excluding deaths] × 1,000,000 work hours) / Total Work Hours.
Note 4: Fatal Occupational Injury Rate = (Number of Deaths Caused by Occupational Injuries × 1,000,000 work hours) / Total Work Hours.
Note 5: Frequency Rate (FR) of disabling injuries (also known as Total Recordable Incident Rate) = (Number of Recordable Occupational Injury Cases × 1,000,000 work hours) / Total Work Hours.
Note 6: The total number of lost days for a single case is counted from the date of injury or death. It includes the number of days the injured party is temporarily (or permanently) unable to return to work, excluding the day of injury and the day of return to work, but including intervening days (such as Sundays, holidays, or business closure days), and any additional non-working days caused by the incident after returning to work.
Note 7: Severity Rate (SR) of Disabling Injuries = (Lost Workdays × 1,000,000 work hours) / Total Work Hours.
Note 8: FSI = $\sqrt{((SR \times FR) / 1000)}$; AR = (Hours of Sick Leave + Occupational Injury Leave + Menstrual Leave) / Total Work Hours × 100%

7

Supply Chain Management

2024 Highlight Performance

Completion rate of greenhouse gas inventory implementation by domestic bulk chemical suppliers reached **100%**

100% of suppliers signed the Partner Code of Conduct

100% of new suppliers in 2024 passed the social and environmental screening criteria

The qualification rate of evaluations for chemical products, contract suppliers, and engineering contractors all reached **100%**

Proportion of procurement from local suppliers reached **66%**

United Nations Sustainable Development Goals (SDGs)

- 7.1 Supplier Management SDGs 8.7 SDGs 12.4
- 7.2 Sustainable Procurement SDGs 12.7

7.1 Supplier Management GRI 2-6、2-24

GPPC holds fast to the business philosophy of "creating a win-win situation with suppliers and customers," ensuring that suppliers consistently comply with ethical and environmental standards and manufacturing principles. To effectively manage the potential risks faced by all vendors and workers within the supply chain, the Company not only conducts regular audits of suppliers but also maintains smooth communication between both parties. Suppliers with outstanding performance are encouraged through incentives such as shorter payment terms and are given priority consideration in the procurement list of key raw materials/equipment to improve order stability, with the goal of achieving mutual benefit.

In 2024, GPPC required suppliers to sign the "GPPC Partner Code of Conduct" and the "GPPC CSR Procurement Basic Policy." In the future, suppliers will be gradually required to achieve 100% signing compliance. The Partner Code of Conduct is mainly used to review each vendor's management status in ethical conduct, information transparency, and intellectual property protection. The CSR Procurement Basic Policy ensures that issues such as discrimination based on race, gender, religion, or identity, and the employment of child labor, do not occur within the Company's supply chain, thus protecting the Company's interests.

Total Number of GPPC Suppliers and Contract Signing Rate

Item	2022	2023	2024
Total Number of Suppliers with Actual Transactions	658	614	776
Percentage Signing the "GPPC Partner Code of Conduct" (%)	100%	100%	100%
Percentage Signing the "GPPC CSR Procurement Basic Policy" (%)	100%	100%	100%

GPPC expects its partners to comply with the Supplier ESG Code of Conduct, including categories such as environmental protection, occupational safety and health, labor rights, and ethical standards. It must also be ensured that the products and services provided comply with all applicable national laws and regulations.

GPPC Supplier ESG Code of Conduct

Environment

- Raw material suppliers must assume responsibility for environmental protection. In the manufacturing process, adverse impacts on the environment and natural resources shall be minimized, while protecting public health and safety.
- Construction contractors must sign the "Joint Operation Agreement" to ensure that no additional waste and wastewater pollution is generated within the plant.

Labor

- Suppliers are required to comply with regulations concerning freedom of association, prohibition of child labor, and elimination of improper labor relations, in order to safeguard fundamental human rights. The aforementioned indicators are also included in the "New Supplier Evaluation Form" as audit items for new suppliers.
- Suppliers must commit to establishing grievance mechanisms, prohibiting workplace bullying, avoiding employment discrimination, continuously improving employee competencies, and providing reasonable welfare.

Ethical Standards

- Suppliers shall adopt the highest standards of integrity in business transactions. All forms of corruption and extortion are strictly prohibited, and improper benefits shall not be provided.
- Environmental protection and corporate social responsibility principles shall be strictly incorporated into the supplier management mechanism. In accordance with ESG principles, the Company has established the "GPPC Partner Code of Conduct," requiring partners to comply with local laws, and prohibiting forced labor/exploitation, violations of legal working hours and wages, and neglect of environmental, safety, health, and employee welfare.

Safety and Health

- Suppliers must follow ISO 45001 occupational safety standards to prevent potential hazards in the workplace through proper design, engineering technologies, management mechanisms, regular maintenance, and safe operating procedures; when such hazards cannot be fully controlled by the aforementioned methods, appropriate personal protective equipment shall be provided to employees.
- According to the "Contractor Safety Management Procedures," contractors entering the plant for construction must arrange for safety and health education and training.

7.1.1 Supplier Selection GRI 308-1、414-1

The Company requires suppliers to uphold basic human rights and follow management standards such as RoHS, ISO 14001, ISO 45001, and Corporate Social Responsibility. These are included in the "New Supplier Evaluation Form" as audit items for new suppliers. This ensures that suppliers comply with the principle of equality in the “Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy” issued by the International Labor Organization (ILO). In 2024, GPPC had 107 new suppliers, 100% of whom passed the social and environmental selection criteria.

GPPC carries out relevant evaluations and management of existing suppliers and contractors (including security companies) through the procurement unit and the general affairs unit. The overall management status is shown in the table below. Moving forward, the Company will continue to increase the proportion of suppliers that meet Corporate Social Responsibility requirements.

2024 Number of New Suppliers and Screening Ratio

Number of New Suppliers	Number of New Suppliers Screened Using Environmental and Social Criteria	Percentage of New Suppliers Screened Using Environmental and Social Criteria (%)
107	107	100%

GPPC Supplier Management Overview

Management Principle	Implementation Data	Target Value	Follow-up Management Objectives
Evaluate suppliers through GPPC’s “Supplier Evaluation Procedure” based on whether any significant ESG violations occurred during the evaluation period, and complete ESG evaluations.	Average score 89 or above	Average score 80 or above	Increase the proportion of on-site evaluations
Require domestic bulk chemical suppliers to carry out greenhouse gas inventories (in accordance with ISO 14064-1 or GHG Protocol)	2024 completion ratio (100%)	2024 completion ratio (100%)	Regularly track energy-saving goals

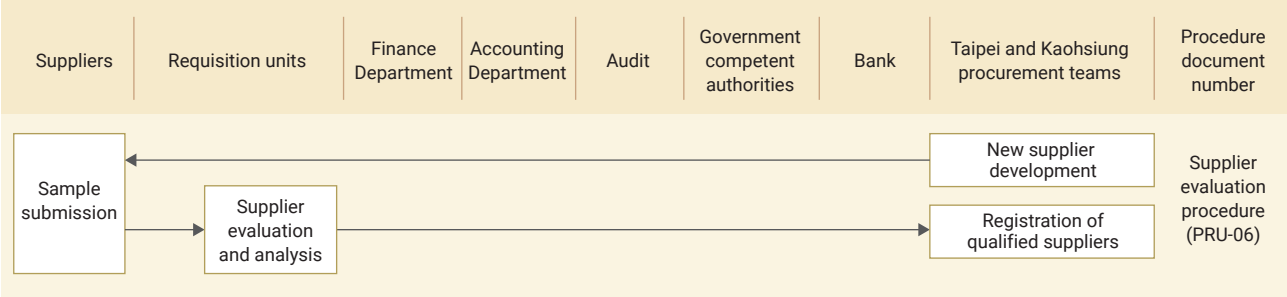
To enhance supply chain management and resource allocation efficiency, GPPC has established a three-tier supplier classification system based on the importance and usage volume of various raw materials in production operations. This classification is not based on the supplier’s operational quality rating, but rather on the criticality and usage volume of the raw material in the Company’s production process. It helps to clarify areas of concentrated risk and adjust procurement strategies and management intensity accordingly:

Classification Level	Classification Criteria	Greenhouse Gas Inventory Measures
Tier 1	Supplies the largest quantity and raw materials that are highly critical to the production of major products. For example, styrene is the Company’s largest output product, and its main raw material benzene is listed as Tier 1, making it a priority target for supply chain management.	GHG inventory certificate required, with an annual 1% electricity reduction target
Tier 2	Supplies secondary but still important raw materials, such as butadiene and acrylonitrile required for ABS products. Due to their lower usage compared to benzene, they are classified as Tier 2.	GHG inventory must be completed with supporting documentation provided
Tier 3	Supplies raw materials with relatively low usage and low impact on total production capacity or operational risk. These are listed as Tier 3 to maintain basic management and avoid resource waste.	GHG inventory promotion completed

For domestic bulk chemical suppliers, greenhouse gas inventory requirements are primarily based on industry type. The Company prioritizes the issue of greenhouse gases to establish ESG management direction and policy for the value chain, and promotes supplier ESG awareness (including ISO 14064-1 and GHG Protocol).

In addition, before cooperation, chemical suppliers must undergo on-site evaluations conducted jointly by the procurement, production, R&D, and quality control personnel based on the evaluation form. According to the second-phase implementation progress: R&D sample assessment, 1 to 3 qualified on-site trial productions, and final approval by the plant manager for registration as a qualified supplier.

GPPC Chemical Supplier Evaluation Procedure

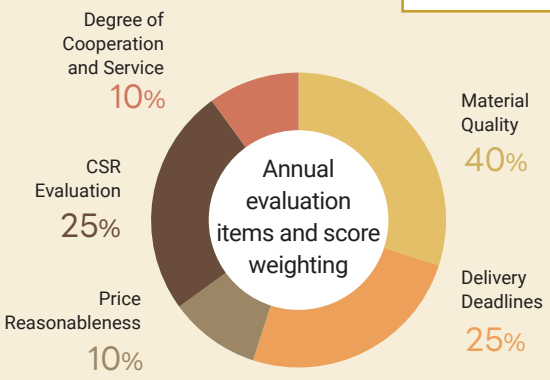


7.1.2 Supplier Evaluation

GPPC has established a set of supply chain evaluation standards. Each year, chemical/contract suppliers and qualified contractors Note with business transactions are scored in the form of a composite score. Chemical and contract suppliers are scored based on five indicators: material quality, delivery deadlines, price reasonableness, CSR evaluation and degree of cooperation and service. The full score is 100 points. If the evaluation score is below 70, transactions will be suspended or terminated in accordance with the regulations. Contractors are evaluated based on five indicators: schedule control, construction quality, operation management, CSR evaluation, and occupational safety, health, and environmental protection. The full score is also 100 points. The passing threshold for construction assessment operations is above 60 points. In 2024, the pass rate of construction assessment results at each plant reached 100%. The evaluated contractors accounted for 100% of contractors with transactions exceeding 500,000 in 2024.

Note: The engineering contracting policy is primarily based on local contractors. Management items include environmental safety, occupational safety, human rights, and labor practice issues.

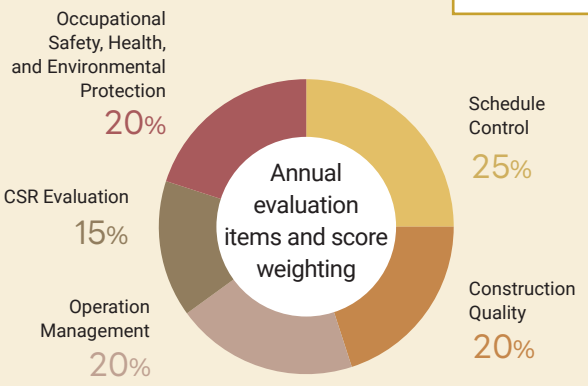
chemical and contract suppliers



Number of Qualified Suppliers and Qualification Rates in the Past Three Years — Chemical and Contract Suppliers

	2022	2023	2024
Number of Evaluated Suppliers	181	185	190
Number of qualified suppliers	181	185	190
Qualification Rate	100%	100%	100%

engineering contractors



Number of Qualified Suppliers and Qualification Rates in the Past Three Years — Engineering Contractors

	2022	2023	2024
Number of Evaluated Suppliers	45	42	43
Number of qualified suppliers	45	42	43
Qualification Rate	100%	100%	100%

7.1.3 Supplier Risk Management GRI

GRI 308-2、414-2

In order to fulfill its responsibility for supply chain management, GPPC has planned to refine the Group's supply chain control processes through three stages: ESG code of conduct, risk assessment, and supplier coaching programs. By establishing standard operating procedures at each stage and implementing mechanisms such as quality control, code of conduct signing, and on-site audits, the Company ensures the implementation of supply chain risk management.

To continuously grasp the sustainability risk status of the supply chain, the Company conducts regular social responsibility and environmental/health safety assessments of existing suppliers. The assessment items cover four dimensions: environment, ethical standards, labor, and health and safety. Through sustainability risk assessments, the Company identifies potential high-risk suppliers and formulates corresponding management strategies based on the assessment results.

Risk assessment dimensions, assessment content, preventive measures, impact response, and future plans

Environment

Risk Assessment Content	Preventive Measures
▪ If a supplier fails to fulfill its environmental protection obligations, it may result in violations such as excessive emissions, illegal discharges, or lacking environmental permits, which could lead to government penalties, negative media coverage, and consequently affect our brand image and operational stability. ▪ The global trend toward carbon neutrality also requires the supply chain to gradually achieve carbon footprint disclosure and reduction responsibilities.	▪ Add bonus points in procurement selection for suppliers with ISO 14001 or ISO 50001 certification. ▪ Establish an A/B/C supplier classification management system to increase audit frequency for high-risk suppliers. ▪ Require all chemical materials to have a safety data sheet (SDS) and be labeled according to the GHS system. ▪ Implement green procurement by prioritizing “low-emission raw materials, recyclable materials” in procurement choices.
Impact Response	**Future Plans**
▪ Pre-identify backup suppliers for the same product and establish an emergency order transfer operation process. ▪ In the short term, rely on inventory to support; in the mid-term, switch to low-risk suppliers.	▪ Encourage major suppliers to conduct carbon inventory and include it in procurement scoring items. ▪ Award extra points in procurement selection for suppliers that use recycled materials, renewable energy, or low-energy processes. ▪ Collaborate with third-party consulting firms to establish supplier sustainability training programs to enhance their environmental compliance and green transition capabilities.

Ethical Standards

Risk Assessment Content

- Whether suppliers, during operations or transactions with the company, comply with principles of business integrity, anti-corruption, information confidentiality, fair competition, equal treatment, legal operations, and social responsibility. This aspect not only relates to the supplier's internal governance but also affects the company's brand image, legal compliance, and stakeholder trust.

Preventive Measures

- Require suppliers to sign the "GPPC Partner Code of Conduct," which covers business integrity, information disclosure, intellectual property protection, fair trading, and competition.
- Include integrity and compliance performance as indicators for supplier evaluation and contract renewal decisions.
- Clearly specify disciplinary measures for violations of ethical standards, including disqualification from bidding, termination of cooperation, and legal action.

Impact Response

- Upon discovering supplier misconduct such as bribery, fraud, sexual harassment, or information leakage, the procurement, legal, or audit departments shall immediately activate the internal reporting mechanism and handle the case according to severity.
- If the violation causes financial loss or legal disputes for the Company, initiate penalty or compensation clauses in the contract and reserve the right to pursue legal action.
- Revise standard contract clauses to strengthen legal enforceability regarding integrity, information confidentiality, and public welfare conduct.

Future Plans

- Regularly update supply chain risk handling status in ESG reports or on the sustainability website to enhance stakeholder trust.
- Include suppliers with major ethical violations in the "Restricted Cooperation List." Future cooperation must be approved by senior management or prohibited.
- Encourage suppliers to develop their own "Code of Ethical Conduct" and proactively disclose their social activities (such as public welfare participation, human rights policies, etc.).

Labor

Risk Assessment Content

- If a supplier violates labor laws by hiring illegal foreign workers, imposing excessive working hours, withholding wages, forced labor or child labor, or engaging in discriminatory practices, it may lead to labor disputes, government penalties, and public opinion backlash. These issues not only affect production stability and delivery capabilities but also seriously damage the commissioning company's social reputation, especially as multinational clients increasingly emphasize human rights and labor conditions.
- If a supplier heavily relies on foreign or temporary workers and lacks a sound management system, it may lead to human rights controversies and legal risks. If exposed by the media or NGOs, it will severely damage the brand image and supply stability.

Preventive Measures

- Require suppliers to confirm compliance with the local Labor Standards Act or relevant labor laws.
- Require suppliers to sign the "GPPC CSR Procurement Policy," which prohibits discrimination based on race, gender, religion, or identity, and forbids the employment of underage child labor. These terms must be included in the contract, and any violations shall constitute grounds for contract termination.
- Employment and management of foreign workers must comply with local labor authority regulations; suppliers must not withhold passports, enforce forced labor, and must provide grievance mechanisms and translation assistance.

Impact Response

- If a supplier is involved in serious violations such as child labor, forced labor, or prolonged wage arrears, the Company shall terminate the partnership in accordance with the contract and cooperate with the legal department for contract termination and follow-up claims.
- In response to media reports or public incidents, proactively issue corporate statements clarifying the Company's stance and handling of the matter, and express zero tolerance for illegal labor practices.
- If labor disputes lead to strikes or labor shortages, the supplier must immediately initiate a material transfer plan to ensure uninterrupted production lines.

Future Plans

- Assist suppliers in conducting labor rights and legal education programs for employees to strengthen mutual responsibilities, and incorporate training hours and participation into supplier evaluation criteria.
- Integrate abnormal report records and industry reports from past years, combined with risk rating scores, to determine whether to renew the contract with the supplier.
- Provide language-friendly materials (such as mother-tongue manuals for migrant workers).
- Include suppliers with good labor conditions, sound union systems, and focus on worker career development in the green procurement list.

Safety and Health	
Risk Assessment Content	**Preventive Measures**
▪ If a supplier lacks a proper health and safety management system, it may lead to frequent occupational accidents, worker health issues, or even major casualties. If such incidents escalate into public controversies, it will damage brand reputation and potentially affect production line operations and delivery stability. ▪ Suppliers that violate the Occupational Safety and Health Act or relevant local laws may also face government penalties, affecting our supply chain safety.	▪ Regularly verify relevant licenses and training validity of each supplier. ▪ Establish and announce related penalties. If violations occur, require contractors to pay fines. In cases of serious violations or repeated failures to improve after counseling, suspend the supplier. ▪ Conduct regular occupational safety risk assessments to identify pre-operational hazards in the working environment, task execution steps, and surrounding environmental conditions. ▪ For foreign or temporary workers, require comprehensive onboarding safety training to avoid training gaps.
Impact Response	**Future Plans**
▪ Establish a backup supplier list for high-risk items to prevent supply chain disruption due to safety incidents. ▪ Depending on the situation, adopt emergency material reallocation or expedite alternative supplier validation. ▪ In case of a safety incident, the supplier must report within 24 hours and cooperate with investigation and improvement measures. ▪ If the incident escalates into a public relations issue, initiate the internal response team to issue statements and outline improvements to customers and media.	▪ Understand major raw material suppliers' ESG or CSR disclosure status. Suppliers who proactively disclose ESG or CSR statements are categorized as low-risk. ▪ Medium- and high-risk suppliers are scheduled for on-site audits within the next year. Through site visits and exchanges, the Company will provide recommendations, require corrective actions within deadlines, and track effectiveness. ▪ Plan annual occupational safety training activities, inviting key suppliers to participate. Incorporate safety compliance and improvement into "long-term partner" criteria to encourage proactive engagement by suppliers. ▪ Through briefing sessions, enhance transport suppliers' awareness of potential crises and implement vehicle and driver safety management to reduce transport-related risks.

Statistics on the Number of Suppliers Screened Based on ESG Dimensions

ESG Dimension Criteria	Environment	Society	Labor	Safety and Health
Total Number of Screened Suppliers	776	776	776	776
Number of Suppliers Identified with (or with Potential) Negative Impacts	2	0	0	0
Number of Suppliers that Have Made Improvements	2	0	0	0
Number of Suppliers with Terminated Contracts	0	0	0	0

On-Site Supplier Audits

To strengthen the supply chain as part of sustainable governance policy, GPPC implements a rigorous on-site audit procedure for suppliers [Note] to ensure they meet the Company's requirements in environmental management, social responsibility, and corporate governance. Through the processes of preliminary planning, on-site visits, data analysis, and follow-up tracking, the Company effectively improves the sustainable performance and operational transparency of suppliers, reduces compliance risks, and promotes the joint growth of partners. This audit system strengthens the stability and risk control of the supply chain, thereby enhancing market competitiveness and responding to the expectations of customers and investors for GPPC's sustainable operations.

Note: The supplier audit evaluation is based on the "importance of the supplied raw materials to production and operations," and is further screened based on conditions such as "single-source suppliers," "supply volume share," "total transaction amount," "occupational safety accidents/quality abnormalities," and "actual or potential negative ESG impacts." The Materials Division is responsible for evaluating the final list of suppliers to be audited on-site.

In 2024, two suppliers with actual or potential negative ESG impacts were identified through ESG dimension screening, with deficiencies identified and improvement promoted. Currently, audit targets are mainly ESG high-risk supply chain manufacturers in Taiwan. In the future, they will be uniformly included in the scope of "on-site and document audits of critical suppliers," to manage and disclose ESG information of GPPC's global suppliers, and continuously improve the implementation and effectiveness tracking of sustainable supply chain audits.

2024 Supplier Audit Status

Defined Audited Suppliers Note

- Number of High-Risk ESG Suppliers: 2
- Number of Critical Suppliers: 5

- Number of Suppliers Audited: 1
- Audit Ratio: 14.28%

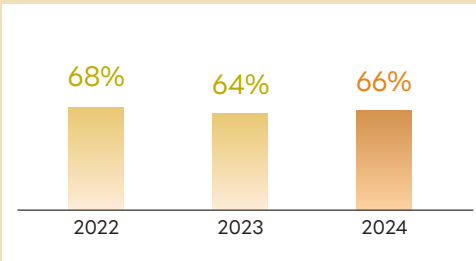
Note: As past audit targets mainly focused on suppliers with environmental hazard risks, they were recognized as high-risk ESG suppliers. However, considering that future audits will be included under the scope of "on-site and document audits of critical suppliers," this table also includes:

7.2 Sustainable Procurement

7.2.1 Local Procurement GRI 204-1

GPPC adheres to the philosophy of promoting local development and employment and actively prioritizes procurement from local Note 1 suppliers to achieve timely supply, reduce procurement risks, and lower management costs. By strengthening the connection with local supply chains, the Company not only reduces carbon emissions caused by long-distance transportation but also enhances the flexibility and stability of raw material supply, reduces the risk of supply disruption, and thereby improves operational efficiency and production reliability. In 2024, the proportion of local procurement at GPPC's major business locations Note 2 in Taiwan reached 66%, and the Company will continue to improve the implementation of its local procurement program.

GPPC Local Procurement Ratio



Note 1: Goods sourced and produced domestically are defined as local.
Note 2: Organizations with established companies or branches are defined as major business locations.

8

Local Communities

2024 Highlight Performance

Approximately **NT$3.12 million** in neighborhood scholarships were provided to schools in Kaohsiung's Dashe and Renwu areas

Visited the Huashan Social Welfare Foundation and the Down Syndrome Foundation R.O.C. and provided consolation funds of approximately **NT$27,000**

Through the Dashe Industrial Zone Manufacturers Association, GPPC and Renwu Senior High School jointly established the "**Kaohsiung Petrochemical Industry Specialty Course Ren-Da Program**"

NT$37.23 million was invested in community support for utility subsidies, scholarships, and nutritional lunches for elderly individuals from low- and middle-income households

Sponsored approximately **NT$25,000** to train disadvantaged groups in taiko drum and provided performance opportunities at the Company's year-end party

United Nations Sustainable Development Goals (SDGs)

- 8.1 Social Welfare Services SDGs 1.3 SDGs 1.4 SDGs 4.3 SDGs 4.4

8.1 Social Welfare Services GRI 413-1、413-2

GPPC's production and operation site is located in Dashe, Kaohsiung. The Company communicates with the local community and conducts environmental and social impact assessments through the Plant Association. Following communication and assessment, the Company did not cause any environmental or social impacts on the surrounding communities and neighborhoods during the reporting period.

"Taken from society, given back to society" is not just a slogan for GPPC—it has become one of the Company's core values. The Company not only causes no negative impact on the communities surrounding its operation site but also actively engages in communication with the local community and fosters closer ties with the public through the Plant Association and the employee-initiated charity club. In addition, GPPC maintains friendly relationships with charitable organizations and local schools, and continues to contribute its own resources to initiatives focused on "talent development," "charitable sponsorship," and "care for the underprivileged," thereby creating social welfare through concrete actions.

Social Welfare Activities Participated by GPPC in 2024

Aspect	Activity	Activity Description
Talent Development	Ren Da Good Neighbor Scholarship	The Plant Association regularly provides scholarships and grants to schools in the Dashe and Renwu areas of Kaohsiung to encourage students to continue their education.
	Kaohsiung Petrochemical Industry Specialty Course: Ren-Da Program	This program enrolls a fixed number of students each year. In addition to high school courses, petrochemical-related courses are also taught. Outstanding graduates are given priority admission opportunities.
	Campus Recruitment	Lectures and recruitment events are held at colleges and universities to increase employment rates in the industry.
Charitable Sponsorship	Community Rebate for Dashe Residents	Rebate funds are provided to subsidize utility bills, tuition and fees for elementary and junior high schools, and to supply nutritious lunches for the elderly in the local area.
Care for the Underprivileged	Sending Love Home on Dragon Boat Festival	Members of the Charity Club visited the Huashan Social Welfare Foundation to provide supplies and consolation money.
	Caring for Children with Down Syndrome	The Charity Club visited the Down Syndrome Foundation and provided consolation money Year-End Appreciation Banquet with Angel of Love: Taiko Drum Performance

8.1.1 Talent Development

The shortage of talent is not only a crisis for the petrochemical industry but also a shared dilemma currently faced by all industries in Taiwan. GPPC is fully committed to talent cultivation, offering its resources to schools near its operation sites to enhance students' willingness to learn and cultivate national talent. The Company's Plant Association regularly establishes Good Neighbor Scholarships and Grants for schools in the Dashe and Renwu areas of Kaohsiung, encouraging outstanding local students to continue their education. This program has received an investment of approximately NT$3.12 million.

Since 2014, GPPC has signed a memorandum of industry-academia collaboration with Renwu Senior High School through the Dashe Industrial Zone Manufacturers' Association, establishing the "Kaohsiung Petrochemical Industry Specialty Course: Ren-Da Program." This program is designed for students whose household registration is in the Renwu, Dashe, Dashu, Niaosong, and Nanzih areas. A fixed number of students is enrolled each year. In addition to general high school curriculum, the program strengthens petrochemical industry-related subjects such as industrial safety and professional ethics. Scholarships and grants are awarded based on merit, and graduates with outstanding academic performance are given priority employment opportunities. Additionally, to expand recruitment channels, the Company has conducted recruitment presentations at universities such as the National Kaohsiung University of Science and Technology since 2022. Through these efforts, GPPC aims to enhance national competitiveness, recruit top talent for the petrochemical industry, and improve the industry's employment rate.

GPPC Dashe Industrial Zone Manufacturers Association and Renwu Senior High School jointly established the "Kaohsiung Petrochemical Industry Specialty Course: Ren-Da Program"

GPPC conducted a campus recruitment presentation at National Kaohsiung University of Science and Technology.

8.1.2 Charitable Sponsorship

GPPC's Plant Association actively engages in dialogue and communication with residents in the Dashe area of Kaohsiung, aiming to establish a concept of coexistence. Through deep-rooted exchanges to understand community needs, the Company makes every effort to co-organize various community and public welfare activities or provide resources to promote the development of neighboring communities, in the hope of reducing the stereotypes of the petrochemical industry as polluting. In 2024, under the operation of the Dashe Neighborhood Good Neighbor Feedback Fund Review Committee, the Company's Plant Association provided community feedback funds to subsidize local residents' utility bills, scholarships and grants for schoolchildren, and nutritious lunches for elderly residents living alone and in low- to middle-income households. The fund also covered expenses such as books, insurance, tuition, and after-school tutoring for local junior high and elementary schools, and further supported English instruction in local elementary schools. This program received an investment of approximately NT$37.23 million.

GPPC subsidized facility construction and maintenance costs for the Dashe District Office of Kaohsiung and provided nutritious lunches for elderly residents in the area.

8.1.3 Care for the Underprivileged

For many years, GPPC employees have expressed their gratitude through action by voluntarily forming the Charity Club. During holidays, members visit charitable organizations and care homes, offering consolation funds and supplies as tokens of support. During holiday seasons, they also give priority to purchasing mooncakes from charitable organizations as a concrete action of support. In 2024, the Company organized the "Sending Love Home on Dragon Boat Festival" event during the holiday season. Employees visited the Huashan Social Welfare Foundation and donated consolation funds and supplies. In the same year, employees also visited the Down Syndrome Foundation, providing care to children with Down syndrome through tangible action and donated consolation funds. These care activities totaled approximately NT$27,000. In addition, GPPC has also devoted efforts to nurturing the artistic talents and skills of disadvantaged groups, providing funding for taiko drum training and inviting them to perform at the Company's year-end banquet. This sponsorship totaled approximately NT$25,000. The Company will continue to fulfill its responsibility as a corporate citizen and extend care through its modest strength.

GPPC's holiday visit for "Sending Love Home on Dragon Boat Festival" to the Huashan Social Welfare Foundation

GPPC's visit to the Down Syndrome Foundation and donation of consolation funds

Year-End Appreciation Banquet with Angel of Love

Appendix

Appendix 1: Report Boundary

For all material topics, GPPC has assessed its impact and disclosure boundaries:

Material topics	Description of impact	Within the organization	Outside the organization					
		GPPC Group	Shareholders and investors	Customers	Suppliers	Government agencies	Community/ Local residents	Media
Ethical management, anti-corruption and anti-competitive behavior	**Positive Impact Description** Establishing corporate trust and a reliable business reputation, as well as communication and training on relevant integrity and ethical policies and procedures, ensures compliance with corporate governance and ethical business conduct, providing reassurance to investors, customers, and partners. **Negative Impact Description** If a sound ethical management system and procedures are not established, and incidents such as corruption occur, it may damage the Company's image and affect customer and investor decision-making.	●	●	●	●	●	○	●
Corporate governance / legal compliance	**Positive Impact Description** The Company's operations follow corporate governance and the requirements of relevant local laws and regulations in all aspects, thereby strengthening the trust of investors and stakeholders, enhancing the Company's overall performance and market value, and establishing a sound business reputation. **Negative Impact Description** If the Company's operations do not comply with corporate governance and local legal and regulatory requirements, it may not only be subject to penalties and liabilities imposed by local competent authorities but also affect the perception of key stakeholders, thereby increasing external social and internal management costs.	●	●	●	●	●	●	●
Chemical safety management	**Positive Impact Description** Establish a hazardous substances list to assess the risk level of each chemical and confirm the appropriate timing for using PPE when handling chemicals, thereby effectively reducing harm to the human body caused by chemicals. **Negative Impact Description** If the timing of chemical risk assessments and the definition of PPE usage are not determined, it may cause irreversible harm to the human body.	●	●	○	○	●	●	●
Energy management	**Positive Impact Description** The Company effectively manages energy to reduce energy consumption and improve energy efficiency, which can significantly lower production costs and enhance competitiveness; furthermore, the use of renewable energy and implementation of energy-saving measures helps reduce the carbon footprint, which not only aligns with global environmental trends but also meets the growing demand from customers for low-carbon products. **Negative Impact Description** The Company faces new energy policies and regulations from local competent authorities. Failure to meet relevant requirements may result in negative reputational impact, inability to meet investors' and customers' expectations regarding energy conservation and carbon reduction, leading to increased difficulty in obtaining financing and decreased customer orders.	●	●	●	●	○	●	○

Material topics	Description of impact	Within the organization	Outside the organization					
		GPPC Group	Shareholders and investors	Customers	Suppliers	Government agencies	Community/ Local residents	Media
Water resource management	**Positive Impact Description** Reduce wastewater discharge, improve water use efficiency, and lower water costs to maintain stable operations when facing water restrictions or water resource shortages. **Negative Impact Description** If water resources are not properly managed, wastewater discharge may cause environmental harm to areas surrounding the operating sites. Additionally, water shortages may lead to operational disruptions, which can impact the Company's operations and reputation.	●	●	●	○	●	●	○
Air pollutant management	**Positive Impact Description** Effective management of air pollutants not only ensures compliance with regulatory requirements and avoids legal liabilities but also enhances corporate image and reputation, reduces environmental risks, and may improve operational efficiency and reduce long-term costs. **Negative Impact Description** If a large amount of capital and technical resources is not invested in air pollution control, and if related air pollution treatment equipment is not increased, management and technical challenges may lead to regulatory risks and production interruptions, thereby impacting company operations.	●	●	●	○	●	●	○
Greenhouse gas management	**Positive Impact Description** Actively managing greenhouse gas emissions can reduce additional operating costs such as carbon fees and enhance market competitiveness, demonstrating the Company's commitment to environmental responsibility. In addition, it enables the Company to better adapt to future environmental regulations and market changes. **Negative Impact Description** The Company faces and adapts to new energy policies and regulations issued by local competent authorities. Failure to meet relevant requirements would result in negative reputation, inability to meet investors' and customers' expectations for energy conservation and carbon reduction, increased difficulty in obtaining funding, and a decrease in customer orders.	●	●	●	●	●	●	●
Waste management	**Positive Impact Description** Implement effective waste treatment and reduction measures for the Company itself or the value chain (upstream and downstream), converting waste into resources or energy to enhance operational efficiency. Proactive waste management can enhance the Company's environmental image and sense of social responsibility, thereby boosting brand value and market competitiveness. **Negative Impact Description** Failure to meet investors' and the public's expectations regarding waste control may result in a long-term negative image and increase difficulty in obtaining funding.	●	●	○	○	●	●	●
Climate change risk governance	**Positive Impact Description** In the process of responding to climate challenges, the Company has discovered new market opportunities for low-carbon raw materials such as circular economy products, while simultaneously enhancing brand image and operational efficiency, and receiving government support and incentives. Through proactive management and adaptation to climate change risks, the Company can strengthen risk management and compliance capabilities. **Negative Impact Description** Failure to effectively manage and reduce the physical risks of climate change to operating sites and the transition risks related to compliance with local regulations may result in insufficient climate resilience and expose the Company to operational interruption risks.	●	●	●	●	●	●	●

Material topics	Description of impact	Within the organization	Outside the organization					
		GPPC Group	Shareholders and investors	Customers	Suppliers	Government agencies	Community/ Local residents	Media
Talent development and retention	**Positive Impact Description** How the Company assists employees in career development and provides various education and training programs. Include information such as the average annual training hours per employee, employee competency enhancement and transition assistance programs, and the percentage of employees who receive regular performance and career development evaluations. **Negative Impact Description** Failure to implement employee training and career development planning may lead to challenges in meeting employee expectations or insufficient familiarity with work tasks, resulting in underperformance in productivity; particularly in a rapidly changing market environment, such situations may cause employee dissatisfaction and maladaptation, thereby reducing employees' sense of belonging and increasing turnover rates.	●	●	○	○	●	○	○
Occupational safety and health	**Positive Impact Description** The Company effectively manages occupational safety and health, building a good working environment, thereby reducing the incidence of occupational injuries and diseases. This not only protects the health and safety of employees but also reduces medical expenses and work stoppage losses caused by occupational injuries. **Negative Impact Description** If improper occupational safety and health management results in occupational injuries, diseases, or workplace accidents, the Company could be forced to suspend operations for investigation, seriously affecting normal operations and corporate image.	●	●	●	●	●	○	●
Circular economy (materials)	**Positive Impact Description** Reducing dependence on virgin petroleum resources; bio-based nylon uses renewable biomass as feedstock, avoiding consumption of limited fossil resources. The reusing, remanufacturing, and recycling of resources maximizes resource efficiency, thereby lowering material costs and reducing environmental impact. This helps create new business opportunities and revenue sources. It can also attract environmentally responsible consumers and investors, thereby enhancing market competitiveness and promoting long-term sustainable development. **Negative Impact Description** The cost of bio-based feedstocks is higher than that of conventional petrochemical feedstocks, leading to high R&D costs and affecting market promotion. If an effective recycling and reuse system is not established, international trends or customer requirements for circular use of feedstock will not be met, resulting in lost orders and impacts on the Company's operations and financial condition.	●	○	○	○	○	○	●

Appendix 2：GRI Standards Index

Statement of Use	GPPC prepared the Sustainability Report in accordance with the GRI Standards. The scope of data and information is from January 1 to December 31, 2024.
GRI 1 Version	GRI 1：Foundation 2021
Application of GRI Industry Standards	None

GRI Standard	Disclosure Item	Corresponding Sections and Special Explanation	Page
GRI 2: General Disclosures 2021	2-1 Organizational details	About This Report 1.1 About GPPC	P.3 p.19
	2-2 Entities included in the organization's sustainability reporting	About This Report	P.3
	2-3 Reporting period, frequency and contact point	About This Report	P.4
	2-4 Restatements of information	Chapter 1: Corporate Governance Chapter 7: Supply Chain Management	p.15 p.125
	2-5 External assurance	About This Report	P.4
	2-6 Activities, value chain and other business relationships	1.1About GPPC 1.7 Business Performance 2.3 Circular Economy 7.1 Supplier Management	p.19 p.41 p.57 p.127
	2-7 Employees	5.1 Human Resources	P.93
	2-8 Workers who are not employees	5.1 Human Resources	P.93
	2-9 Governance structure and composition	1.2 Governance Structure	p.23
	2-10 Nomination and selection of the highest governance body	1.2 Governance Structure	p.24
	2-11 Chair of the highest governance body	1.2 Governance Structure	p.24
	2-12 Role of the highest governance body in overseeing the management of impacts	Sustainability blueprint 1.2 Governance Structure	P.9 p.24
	2-13 Delegation of responsibility for managing impacts	Sustainability blueprint	P.9
	2-14 Role of the highest governance body in sustainability reporting	Sustainability blueprint	P.9
	2-15 Conflicts of interest	1.2 Governance Structure	p.26
	2-15 Conflicts of interest	1.2 Governance Structure	p.25
	2-17 Collective knowledge of the highest governance body	1.2 Governance Structure	p.24
	2-18 Evaluation of the performance of the highest governance body	1.2 Governance Structure	p.28
	2-19 Remuneration policies	1.2 Governance Structure	p.26
	2-20 Process to determine remuneration	1.2 Governance Structure	p.26
	2-21 Annual total compensation ratio	1.2 Governance Structure	P.26
	2-22 Statement on sustainable development strategy	Message from the Chairman	P.5
	2-23 Policy commitments	1.3 Ethical Management 5.4 Human Rights Management	p.33 P.103

GRI Standard	Disclosure Item	Corresponding Sections and Special Explanation	Page
GRI 2: General Disclosures 2021	2-24 Embedding policy commitments	1.3 Ethical Management 5.4 Human Rights Management 7.1 Supplier Management	p.33 p.103 p.127
	2-25 Processes to remediate negative impacts	Chapter 1: Corporate Governance Chapter 7: Supply Chain Management	p.17-18 p.130
	2-26 Mechanisms for seeking advice and raising concerns	1.3 Ethical Management	p.35
	2-27 Compliance with laws and regulations	1.4 Regulatory Compliance	p.36
	2-28 Membership associations	1.1 About GPPC	p.22
	2-29 Approach to stakeholder engagement	Stakeholder Engagement and Material Topic Analysis	P.11
	2-30 Collective bargaining agreements	5.3 Salary and Benefits	P.102
GRI 3: General Disclosures 2021	3-1 Process to determine material topics	Stakeholder Engagement and Material Topic Analysis	P.12
	3-2 List of material topics	Stakeholder Engagement and Material Topic Analysis	P.13
	3-3 Management of material topics	Chapter 1: Corporate Governance Chapter 3 Climate Change Risk Governance Chapter 4 Water Resources, Waste, and Chemical Safety Management	p.17-18 p.63-66 p.81-83

Material Topics

GRI standard	Disclosure Item	Corresponding Sections	Page
Ethical Management, Anti-Corruption and Anti-Competitive Behavior			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 1: Corporate Governance	p.17
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	1.3 Ethical Management	p.34
	205-2 Communication and training about anti-corruption policies and procedures	1.3 Ethical Management	p.34
	205-3 Confirmed incidents of corruption and actions taken	1.3 Ethical Management	p.34
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	1.3 Ethical Management	p.34
Corporate Governance / Legal Compliance			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 1: Corporate Governance	p.18
GRI 2: General Disclosures 2021	2-27 Compliance with laws and regulations	1.4 Regulatory Compliance	p.36
Chemical Safety Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	4.3 Chemical Management	p.83
Climate Change Risk Governance			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 3 Climate Change Risk Governance	p.63
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	3.1 Climate Change Response	p.67
Greenhouse Gas Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 3 Climate Change Risk Governance	p.65

GRI standard	Disclosure Item	Corresponding Sections	Page
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	3.3 Greenhouse Gas Management	p.75
	305-2 Energy indirect (Scope 2) GHG emissions	3.3 Greenhouse Gas Management	p.75
	305-3 Other indirect (Scope 3) GHG emissions	3.3 Greenhouse Gas Management	p.75
	305-4 GHG emissions intensity	3.3 Greenhouse Gas Management	p.75
	305-5 Reduction of GHG emissions	3.3 Greenhouse Gas Management	p.75
Energy Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 3 Climate Change Risk Governance	p.64
GRI 302: Energy 2016	302-2 Energy consumption outside of the organization	3.2 Energy Management	p.72
	302-3 Energy intensity	3.2 Energy Management	p.72
	302-4 Reduction of energy consumption	3.2 Energy Management	p.72
Water Resource Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 4 Water Resources, Waste, and Chemical Safety Management	p.81
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	4.1 Water Resource Management	p.84
	303-2 Management of water discharge-related impacts	4.1 Water Resource Management	p.85
	303-3 Water withdrawal	4.1 Water Resource Management	p.84
	303-4 Water discharge	4.1 Water Resource Management	p.84
	303-5 Water consumption	4.1 Water Resource Management	p.84
Air Pollutant Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 3 Climate Change Risk Governance	p.66
GRI 305: Emissions 2016	305-6 Emissions of ozone-depleting substances (ODS)	All sites of GPPC have no relevant emissions.	-
	305-7 Nitrogen oxides (NOx), sulfur oxides(SOx), and other significant air emissions	3.4 Air Pollution Control	p.77
Waste Management			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 4 Water Resources, Waste, and Chemical Safety Management	p.82
GRI 306: Effluents and Waste 2016	306-1 Water discharge by quality and destination	4.2 Waste Management	p.86
	306-2 Waste by type and disposal method	4.2 Waste Management	p.86
	306-3 Significant spills	4.2 Waste Management	p.87
	306-4 Transport of hazardous waste	4.2 Waste Management	p.87
	306-5 Water bodies affected by water discharges and/or runoff	4.2 Waste Management	p.87
Talent Development and Retention			
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 5 Employees	p.92
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	5.2 Talent Development and Retention	p.96
	404-2 Programs for upgrading employee skills and transition assistance programs	5.2 Talent Development and Retention	p.98
	404-3 Percentage of employees receiving regular performance and career development reviews	5.3 Salary and Benefits	p.99

GRI standard	Disclosure Item	Corresponding Sections	Page
	Occupational Safety and Health		
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 6 Occupational Safety and Health	p.108
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	6.1 Safety and Health Policy	p.112
	403-2 Hazard identification, risk assessment, and incident investigation	6.2 Occupational Safety Risk Management 6.3 Emergency Incident Management	p.113 p.116
	403-3 Occupational health services	6.4 Health Services and Promotion	p.120
	403-4 Worker participation, consultation, and communication on occupational health and safety	6.1 Safety and Health Policy	p.110
	403-5 Worker training on occupational health and safety	6.5 Occupational Safety and Health Education and Training	p.122
	403-6 Promotion of worker health	6.4 Health Services and Promotion	p.120
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.5 Occupational Safety and Health Education and Training	p.123
	403-8 Workers covered by an occupational health and safety management system	6.1 Safety and Health Policy	p.112
	403-9 Work-related injuries	6.6 Occupational Injury Statistics	p.124
	403-10 Work-related ill health	6.6 Occupational Injury Statistics	p.124
	Circular Economy		
GRI 3: General Disclosures 2021	3-3 Management of material topics	Chapter 2 Product R&D, Innovation, and Circular Economy	p.47
GRI 301: Materials 2016	301-2 Recycled input materials used	2.3 Circular Economy	p.57-58

Other Topics

GRI Standard	Disclosure Item	Corresponding Sections	Page
	Tax Governance		
GRI 207: Taxation 2019	207-1 Tax payment method	1.7 Business Performance	p.43
	207-2 Tax governance, control, and risk management	1.7 Business Performance	p.43
	207-3 Stakeholder engagement and management of concerns related to tax	1.7 Business Performance	p.43
	Economic Performance		
GRI 201：Economic Performance 2016	201-1 Direct economic value generated and distributed	1.7 Business Performance	p.42
	201-3 Defined benefit plan obligations and other retirement plans	5.3 Salary and Benefits	p.101
	Diversity and Equal Opportunity		
GRI 405：Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	1.2 Governance Structure 5.1 Human Resources	p.24 p.93-95
	405-2 Ratio of basic salary and remuneration of women to men	5.3 Salary and Benefits	p.99
	Human Rights		
GRI 406：Non-discrimination 2016	406-1 of discrimination and corrective actions taken	5.4 Human Rights Management	p.104
GRI 408：Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	5.4 Human Rights Management	p.103

GRI Standard	Disclosure Item	Corresponding Sections	Page
GRI 409：Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.4 Human Rights Management	p.104
	Product R&D, Innovation		
GRI 301：Materials 2016	301-2 Recycled input materials used	2.3 Circular Economy	p.57-58
GRI 416：Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	2.4 Customer Relationship Management	p.59
GRI 417：Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	2.4 Customer Relationship Management	p.59
	Local Communities		
GRI 413：Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	8.1 Social Welfare Services	p.136-137
	Information Security and Customer Privacy		
GRI 418：Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	1.6 Information Security and Customer Privacy	p.41
	Supply Chain Management		
GRI 204：Procurement Practices 2016	204-1 Proportion of spending on local suppliers	7.2 Sustainable Procurement	p.133
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	7.1 Supplier Management	p.132
	308-2 Negative environmental impacts in the supply chain and actions taken	7.1 Supplier Management	p.130
GRI 414：Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	7.1 Supplier Management	p.132
	414-2 Negative social impacts in the supply chain and actions taken	7.1 Supplier Management	p.131-132

Appendix 3: Sustainability Accounting Standards Board (SASB) Index and Sustainability Disclosure Indicators

Sustainability Accounting Standards Board (SASB) Index

SASB Topic	SASB Code	Accounting Metric	Chapter	Page	Note
Greenhouse Gas Emissions	RT-CH-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	3.1 Climate Change Response	p.75	▪ Scope 1 emissions: 503,346 tCO_2e ▪ Percentage covered under emissions-limiting regulations: 100%
	RT-CH-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	3.1 Climate Change Response	p.74	▪ Short-term Target (2025–2030): A 20% reduction compared to the base year 2020. ▪ Mid- to Long-term Target(2030–2025) : Setting 2020 as the base year, the company aims to reduce greenhouse gas emissions by 20% by 2030 compared to the base year and achieve net zero carbon emissions by 2050.
			3.1 Climate Change Response	p.74	2024 Performance: Greenhouse gas emissions totaled 506,600 tCO_2e, representing a 9.84% reduction compared to the base year.
Air Quality	RT-CH-120a.1	Air emissions of the following pollutants: (1) NOX (excluding N2O), (2) SOX, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	3.4 Air Pollution Control	p.77	▪ NOx: 121.5 t ▪ SOx: 43.1 t ▪ VOCs: 22.7 t ▪ HAPs: 9.398 t
Energy Management	RT-CH-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable, (4) total self-generated energy	3.2 Energy management	p.72	▪ Total energy consumed: 5,273,837.91 GJ ▪ Percentage grid electricity: 100 % ▪ Percentage renewable: 0 % ▪ Total self-generated energy: 0 GJ
Water Management	RT-CH-140a.1	▪ (1) Total water withdrawn ▪ (2) Total water consumed ▪ (3) percentage of (1) and (2) in regions with High or Extremely High Baseline Water Stress	4.1 Water resource management	p.84	▪ Total water withdrawn: 2,215 kt ▪ Total water consumed: 1,225 kt ▪ Percentage of (1) and (2) in regions with High or Extremely High Baseline Water Stress: 0 %
	RT-CH-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	4.1 Water resource management	-	In 2024, there were no violations of water quality permits, standards, and regulations.
	RT-CH-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	4.1 Water resource management	p.85	▪ Establish emergency backup water supply plans, formulate water usage strategies and production response plans based on the Water Resources Agency's water status alerts and the flow rate of the Gaoping River, and executewater contingency measures. ▪ Install water meters to record daily consumption data, track areas with abnormal water usage, and conduct timely repairs. ▪ Actively implement the recovery of backwash and regeneration wastewater from the ultra-pure water system at the cogeneration plant. During pure water regeneration, collect backwash and regeneration wastewater for reuse as supplementary water for the cooling towers. ▪ Apply measures such as wastewater reduction and reuse, separation of rainwater and sewage, installation of stormwater interception facilities, effective maintenance of existing wastewater treatment systems, and thorough wastewater recycling and reuse.

SASB Topic	SASB Code	Accounting Metric	Chapter	Page	:
Hazardous Waste Management	RT-CH-150a.1	Amount of hazardous waste generated, percentage recycled	4.2 Waste Management	-	▪ Amount of hazardous waste generated: 0.0 t ▪ Percentage recycled: 0%
Community relations	RT-CH-210a.1	Discussion of engagement processes to manage risks and opportunities associated with community interests	8.1 Social Welfare Services	-	No relevant data in 2024
Worker health and safety	RT-CH-320a.1	(1) Total recordable incident rates (TRIR) and (2) fatality rate for (a)direct employees and (b) contract employees	6.6 Occupational Injury Statistics	p.124	▪ Total recordable incident rates: 1.38 ▪ Fatality rate: 0
	RT-CH-320a.2	Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	6.4 Health Services and Promotion	p.120	▪ General and specialized health examination provided ▪ One full-time occupational health nurse on site ▪ Regular medical and health consultations held
Product design	RT-CH-410a.1	Revenue from products designed for use-phase resource efficiency	2.1 Health Services and Promotion	p.49 p.52	▪ The cogeneration system recovers and utilizes the waste heat generated during the power generation process, which not only improves energy efficiency but also allows for the sale of excess energy to other companies, creating an additional source of revenue. ▪ The amount of revenue generated from the product has not been specified.
Safety & Environmental Stewardship of Chemicals	RT-CH-410b.1	(1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard assessment	2.1 Health Services and Promotion	p.55-57	▪ Percentage of products that contain GHS Category 1 and 2 Health and Environmental Hazardous Substances: 44% ▪ Percentage of such products that have undergone a hazard assessment: 100%
	RT-CH-410b.2	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/ or environmental impact	6.2 Occupational Safety Risk Management	p.115	▪ In accordance with relevant regulations, the company has established provisions for the management of hazardous chemicals, including hazard assessment and classification, labeling of hazardous chemicals, and employee education and training. ▪ Developed bio-based, renewable nylon with low water absorption, excellent flexibility, chemical resistance, and low-temperature performance.
Genetic modification	RT-CH-410c.1	Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/ or environmental impact.	-	-	Not applicable.
Management of laws and environmental regulations	RT-CH-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	1.4 Regulatory Compliance	p.36-37	In response to increasingly stringent sustainability regulations, GPPC will continue to monitor and analyze the latest developments in relevant laws and regulations concerning governance, environmental protection, product responsibility, and labor and human rights. The company will proactively prepare and deploy strategies in advance to ensure ongoing compliance with regulatory requirements and to demonstrate its commitment to sustainable operations.
Operational Safety, Emergency Preparedness & Response	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	6.6 Occupational Injury Statistics	p.124	▪ PSIC: 1 ▪ PSTIR: 1.38 ▪ PSISR: 0
	RT-CH-540a.2	Number of transport incidents	6.6 Occupational Injury Statistics	p.124	There was no transport incidents.

Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies: Sustainability Disclosure Indicators for the Chemical Industry

Code	Indicator	Category	Unit	Reference	Page
1	Total energy consumption, percentage of purchased electricity, utilization rate(renewable energy/total energy), and total self-generated and self-use energy.	Quantitative	Gigajoule (GJ), percentage (%)	3.2 Energy management	p.72
2	Total water withdrawn, total water consumption, mandatorily or voluntarily disclosed total wastewater (sewage) discharged	Quantitative	Cubic meter (m^3) , percentage (%)	4.1 Water resource management	p.84
3	Total quantity of hazardous wastes generated during the production process of products required to be disclosed under the law or to be disclosed voluntarily	Quantitative	Metric tons (t), percentage (%)	4.2 In 2024, GPPC's operations did not result in any hazardous wastes.	-
4	Number of employees in and rate of occupational accidents	Quantitative	Percentage (%), quantity	6.6 Occupational Injury Statistics	p.124
5	Operations with significant actual and potential negative impacts on local communities	Discussion and Analysis	Not applicable	In 2024, GPPC's operations did not result in any significant actual or potential negative impacts.	-
6	Concrete valid mechanisms and actions implemented by the company itself and its suppliers to mitigate negative environmental or social impact	Discussion and Analysis	Not applicable	7.1 Supplier Management In 2024, GPPC had a total of 1,264 active suppliers. Among them, 100% had signed both the supplier agreement and the GPPC CSR Procurement Basic Policy.	p.127
7	Production by product category	Quantitative	Varies by product category	2.1 Innovation and R&D	p.48

Appendix 4: Task Force on Climate-Related Financial Disclosures and Index table of climate-related information of listed companies

TCFD Recommended Disclosures		Climate-related Information for Listed Companies	Corresponding Chapter and Notes	Page No.
TCFD 1 (a)	Describe the board's oversight of climate-related risks and opportunities.	1. Describe the oversight and managing of climate-related risks and opportunities from board and management.	3.1 Climate Change Response	p.67
TCFD 1 (b)	Describe management's role in assessing and managing risks and opportunities.			
TCFD 2 (a)	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	2. Describe how the identified climate risks and opportunities affect the businesses, strategy, and financial planning(short, medium and long term).	3.1 Climate Change Response	p.68~69
TCFD 2 (b)	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	3. Describe the financial impact from extreme climate and company's transition actions		p.69~70
TCFD 2 (c)	Describe the resilience of the organization's strategy, taking into consideration different climate related scenarios, including a 2° C or lower scenario.	5. If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be explained.		p.69~70
TCFD 3 (a)	Describe the organization's processes for identifying and assessing climate-related risks	4. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	3.1 Climate Change Response	p.69~70
TCFD 3 (b)	Describe the organization's processes for managing climate-related risks.			
TCFD 3 (c)	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.			
TCFD 4 (a)	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	6. Explain the content of plan, and the metrics and targets used to identify and manage physical risks and transition risks if company has transition plan to manage climate related risks.	3.1 Climate Change Response	p.71
		7. Explain how the price is determined if internal carbon pricing is used.	No internal carbon pricing was used as the planning tool this year. It is under discussion, assessment, and planning.	-
TCFD 4 (b)	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	9. Condition of greenhouse gas inventory and assurance	3.1 Climate Change Response	p.71
TCFD 4 (c)	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	8. The covered activities, scope of greenhouse gas emissions, schedule planning and annual progress should be explained if company set are climate-related targets; if carbon offsets or renewable energy certificates (RECs) are used to achieve the targets, the source and quantity of carbon reduction credits to be exchanged or the renewable energy certificates (RECs) should be explained.	3.1 Climate Change Response	p.71

Appendix 5: Summary of Information Assured

<table>
<tr><th>No.</th><th>Assured Item</th><th>Information Assured</th><th>Page No.</th><th>Reporting Criteria</th></tr>
<tr><td>1</td><td>消耗能源總量、外購電力百分比、再生能源使用率及自發自用能源總量</td><td>▪ 2024 年本公司能源總消耗量為 4,740,253.64 十億焦耳 (GJ)
▪ 外購電力百分比為 0.52%
▪ 再生能源使用率為 0%
▪ 自發自用能源總量 574,923.78 十億焦耳 (GJ)</td><td>p.72</td><td>▪ 民國 113 年消耗能源總量 (十億焦耳)，包含燃料的消耗、購買而消耗的能源並排除出售的能源。
▪ 外購電力百分比 = 外購電力 / 消耗能源總量
▪ 再生能源使用率 = 外購或自發再生能源消耗量 / 消耗能源總量</td></tr>
<tr><td>2</td><td>總取水量及總耗水量</td><td>總取水量：2,215 千噸
總耗水量：1,225 千噸</td><td>p.84</td><td>▪ 統計民國 113 年度總取水量及總耗水量。
▪ 民國 113 年度總取水量 (百萬公升)，包含自來水，自來水數據來源為台灣自來水公司水費單。
▪ 民國 113 年度總耗水量 (百萬公升)= 總取水量 - 總排水量</td></tr>
<tr><td>3</td><td>所產生有害廢棄物之重量及回收百分比</td><td>2024 年本公司所產生有害事業廢棄物之重量為 0 公噸，回收百分比為 0%。</td><td>-</td><td>▪ 統計民國 113 年度有害事業廢棄物產生重量 (公噸) 及回收百分比。
▪ 有害廢棄物回收百分比 = 應回收廢棄物經處理後，所回收之有害廢棄物重量 / 處理應回收廢棄物所含有害廢棄物總量 ×100%。</td></tr>
<tr><td>4</td><td>說明職業災害人數及比率</td><td>可紀錄之職業傷害件數合計：1 件
可記錄職業傷害率：1.38</td><td>p.124</td><td>▪ 統計民國 113 年度屬於工安事件與工作直接相關之職業災害人數及職業災害比率
▪ 職業災害比率 = 屬於工安事件與工作直接相關之職業災害人數 / 依據人資提供總工作時數 ×1,000,000</td></tr>
<tr><td>5</td><td>依產品類別之主要產品產量</td><td><table><tr><th>Sales Products</th><th>Unit</th><th>2024</th></tr><tr><td>Styrene Monomer (SM)</td><td>KG</td><td>229,748,120</td></tr><tr><td>ABS/SAN Plastics</td><td>KG</td><td>58,099,485</td></tr><tr><td>H_2</td><td>M^3</td><td>10,146,147</td></tr><tr><td>Electricity</td><td>KWH</td><td>159,628,800</td></tr><tr><td>Steam</td><td>KG</td><td>45,997,938</td></tr><tr><td>Nylon</td><td>KG</td><td>17,106,302</td></tr></table></td><td>p.48</td><td>統計民國 113 年度依產品類別之主要產品產量</td></tr>
</table>

Appendix 6: Limited Assurance Report Issued by the Accountant

pwc 資誠

會計師有限確信報告

國喬石油化學股份有限公司　公鑒：

本會計師受國喬石油化學股份有限公司（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範疇與邊界段落述明。

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。

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。

資誠聯合會計師事務所 PricewaterhouseCoopers, Taiwan
110208 臺北市信義區基隆路一段 333 號 27 樓
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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、文件之檢查與量化方法是否適當之評估，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，以及攸關之內部控制，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包括查詢、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。

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。

pwc 其它事項 資誠

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 阮呂曼玉

中華民國 114 年 8 月 11 日

GRAND PACIFIC PETROCHEMICAL CORPORATION

www.gppc.com.tw