2023 esg insight





GRAND PACIFIC PETROCHEMICAL CORPORATION

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

TCFD

OVERVIEW

GPPC 2023 Sustainability Report

Scope: GPPC's Taipei / Taichung offices and Kaohsiung plant

Independently verified by DQS in accordance with the AA1000 Assurance Standard V3(AA1000AS V3) (GRI 2-5)

Report Published Annually



Sustainability Practice Highlights

2022: Established the Sustainability Code of Practice

- 1. Reduce resource and energy consumption of products and services.
- 2. Reduce the discharge of pollutants, toxic substances and wastes and properly dispose of wastes.
- 3. Improve the recyclability and reuse of raw materials or products.
- 4. Maximize sustainable use of renewable resources.
- 5. Extend the durability of the product.
- 6. Increase the effectiveness of products and services.

2022: Established a "Corporate Social Responsibility Mailbox"

ESG@gppc.com.tw is a channel for communication and feedback from various stakeholders. Recognizing that stakeholder engagement is an integral part of our sustainable issue management, we maintain interaction with stakeholders through various means, including daily business interactions, telephone communication, meetings, satisfaction surveys, site visits, and participation in associations.

2023: Board of Directors Passed the Sustainable Development Committee Charter

Committee is led by 5 members including 3 independent directors and 2 directors and has 5 taskforce subcommittees are for implementation.

2024: Chief Sustainability Officer Appointed - President Chia-Hsiung Tseng

Certifications

Certification		Location	Verification Authority	Certification Validity
Environmental Management System	ISO 14001:2015	Kaohsiung (Ta-She) Kaohsiung (Lu-Chu)	SGS ASR	2023-2026 2024-2027
GHG Inventory	ISO 14064-1:2006	Kaohsiung (Ta-She)	SGS	2023
Quality Management System	ISO 9001:2015	Kaohsiung (Ta-She) Kaohsiung (Lu-Chu)	SGS ASR	2024-2027
Operational Health and Safety	ISO 45001:2018	Kaohsiung (Ta-She)	SGS	2022-2025

SONY "Green Partner" Certificate

ASUS "Green Environmental Management System" Certificate

ENVIRONMENTAL

Environmental Goals

GHG		Energy
2030	2050	Short-term Mid to Long-term
45%	Net	Average annual energy saving percentage of Management System
carbon reduction (base year 2015)	Emissions	1% 3rd or more Party Accreditation
Water		Wests
water		waste
Short Term	2025	2020 Onwards
Short Term Daily water savings of	2025 Water recovery rate exceeds	2020 Onwards annual reduction on general trash waste
Short Term Daily water savings of 270 tons	2025 Water recovery rate exceeds 65%	2020 Onwards annual reduction on general trash waste 5%

TCFD

In compliance with the TCFD structure, we identify and manage transition risks as well as physical risks of climate change and evaluate the financial impact of high-risk factors. The Company has also included climate change in the risk management structure for long-term tracking to ensure better governance results on climate issues.

14 risks and opportunities were identified during the evaluation process of which high priority and high impact factors are shown:

Transition Risks	Impact on GPPC	Duration	Countermeasures	Target/ TCFD Scope	Financial Impact	
2050 Net Zero Carbon Emission	2050 Net Zero Carbon Emission		Conducting energy checking and declarations in compliance with the laws and regulations, and achieving the requirement of 1% annual energy- saving rate.	According to the 10 energy-saving plans in 2023, a total reduction of 3,374 tons CO ₂ .	Decrease direct costs of NTD 200	
Emission Vision	Replace coal-fired boilers with natural gas boilers for	Long	Cogeneration plant reducing	Replace all the coal-fired boilers with gas boilers by 2040.	million in 2023.	
	combined heat and power generation.	and 2050) carbon (Natural on. gas substitution).		Reduce Scope 1 GHG emissions by 280,000 tons CO ₂ e.		
	Avoiding impacts	pacts		Increase the recycled	1. Total investment of NTD 14,660,000 (direct costs).	
Water Recycling	of drought caused by extreme climate change.	(2023- 2025)	Recycling water resources plan.	water from 100cm³/day to 270 m³/day.	2.Operating and maintenance fee: NTD 840,000/year (indirect costs) for 20 years.	

Opportunity	Impact on GPPC	Duration	Countermeasures	Target/ TCFD Scope	Financial Impact
Company	Develop various green energy plans such as hydrogen economy.	Short (2023- 2025)	Replacing natural gas combustion with dehydrogenation fugitive emission in factory heaters.	By 2050, 12,000 cubic meters of natural gas consumption and 24,700 tons CO ₂ -eq/year of GHG to be reduced.	1. Investing costs occupy less than 1 % of total operating revenue.
Company Reputation	Compliance with the FPA "VOC	Mid	Add mother burner to combustion tower	Reduce natural gas consumption by approx 70,000 m ³ .	2. Saving of NTD 6,000,000/year of natural gas fees due
	emission control regulation".	(2023- for energy-saving 2030) combustion project.		Reduce Scope 1 GHG emission by 1,750 tons of CO2e/year.	to compliance.
Govern- ment Reward for Renewable Energy	Maintain existing cogeneration plant operations as to avoid being regulated by "Regulations for the Management of Setting up Renewable Energy Power Generation Equipment of Power Users above a Certain Contract Capacity".	Long (2030- 2050)	Supervising and developing cogeneration operating plans.	Operating cogeneration equipment to be exempt from setting up new renewable energy equipment (Scope 2).	Saving a total of NTD 65,000,000 by operating cogeneration equipment without being obligated to build solar renewable energy equipment.

Impact for GPPC under Different Climate Risk Scenarios

Risk	Climate Scenario/ 2040 Temp Increase	Impact on GPPC	Financial Impact	Countermeasures
Transition Risk	IPCC AR6 SSP1-1.9 (Increase 1.2-1.7°C by 2040)	GPPC to transition to face the 1.7°C increase, if not, GPPC will not be able to meet 2030 carbon neutral and 2050 zero carbon emission and need to pay additional carbon fees.	Future carbon fees will be at least USD 5,300,000 /year (Based on carbon fee assumption of USD 10/Ton CO2e).	Evaluate more co-generation power or setting green energy equipment.
Physical Risk	IPCC AR6 SSP5-8.5 (Increase 1.3-1.9°C by 2040)	Climate abnormality will affect the styrene raw material storage quality and manufacturing will be interrupted due to heavy rain and drought.	At least 70% loss of production due to heavy rain and drought.	Implement emergency reaction and strength the disaster prevention facility and purchase property insurance.

Energy Management

To meet the challenges posed by internal and external environmental factors, Grand Pacific sells excessive electricity back to Taipower through cogeneration, which is then being used by other power users, to enhance the stability of power supply and the effectiveness of carbon reduction. Under the wave of sustaiability transition, we actively proceed with gradual carbon reduction in gas-fired power plants, expedite the installment of renewable energy, establish carbon cycle, and develop hydrogen economy. The various green electricity actions we have taken are steadily bringing us to net zero through energy transition.

Clean Sources of Energy

The Company has also built a smart electrical grid to ensure supply stabilization and increase energy efficiency management by digitalization. The Company will also work with green energy companies to build roof solar panels, increase self-generated green energy within the factories, enhance land utilization, and move towards green energy self-sufficiency.

Achieved Target: Actual reduction for 2023 is 1.06%. 2015-2023 average annual electricity savings of 1.54%.

In 2023 GPPC implemented 10 notable energy saving programs covering the full factory plant, cogeneration power plant, plastic plant and petrochemical plant, amounting to annual energy savings of 1,525,771 kWh. (See Sustainability Report p52)

	Unit	2021	2022	2023	
Kaohsiung Employees	Person	328	323	330	
ELECTRICITY					
Electricity Generated within Plant	MWh	262,306	106,488	214,548	
1. Electricity Consumed by Plant	MWh	143,516	65,184	100,438	
2. Purchased Electricity	MWh	27,974	72,494	42,203	
3. Sold Electricity	MWh	118,490	41,304	114,110	
STEAM					
Steam Generated within Plant	Ton	1,001,484	814,061	794,886	
A. Steam Consumed by Plant	Ton	848,048	721,845	749,622	
B. Purchased Steam	Ton	0	0	0	
C. Sold Steam	Ton	153,436	92,216	45,264	
Total Electricity Consumed (1+2)	GJ	617,364	495,641	513,508	
Total Steam Consumed (A+B)	GJ	2,395,736	2,040,291	2,127,967	
Total Energy Consumed (Electricity + Steam) GJ	3,013,100	2,535,932	2,641,475	
Energy Intensity per Capita	GJ/employee	9,186	7,851	1,556	
Electricity Consumed from Grid	%	16.31%	52.65%	100%	

GPPC's steam power plants generate steam and electricity for internal use and sells the excess to external parties.

GPPC joined the **"Industry Net Zero Alliance"** in 2021, and plans to integrate the supply chain from upstream to downstream to develop the green petrochemical supply chain.

To focus research and develop on carbon reduction for high-quality, standardized, and scale products. 5 aspects of discussion include "Renewable Energy", "Low-carbon Energy", "Carbon Capture Storage and Utilization", "Biofuel Raw Material", and "Plastic Recycling". As well as, start the Carbon Footprint Verification and relevant industry experience sharing.

GHG Management

GPPC began implementation of ISO-14064-1 GHG inventory emission inspection plan. The carbon inventory data in this report includes the Kaohsiung plant and has been independently verified by SGS.

The newly established cogeneration plant in 2011 has adopted the Best Available Control Technology (BACT) and equipment to mitigate pollution generated during production, transportation, and storage processes. Simultaneously, it enhanced equipment operation experience and operational skills to achieve environmental protection goals.

	Unit	2021	2022	2023	
Scope 1	tCO ₂ e	526,900	318,972	412,173	
Scope 2	tCO ₂ e	3,643	36,900	20,396	
GHG Total	tCO ₂ e	530,543	355,872	432,569	
Turnover	NTD million	18,163	18,180	12,775	
GHG Intensity	tCO ₂ e/NTD million	29.21	19.57	32.26	

Air Pollution

In order to maintain the safety and health of employees and residents around the plant, GPPC has set up a gas monitoring system in the plant and connected it to the monitoring center to keep track of the emission situation in the plant and established continuous automatic monitoring facilities in the steam and power boiler chimney, connecting to the Department of Environmental Protection to maintain the ambient air quality around the plant. Other chimneys are regularly inspected, for frequency of inspection at the Kaohsiung factory (See 2023 Sustainability Report p56).

In 2023, more than NT\$80 million was invested in the setup of a Regenerative Thermal Oxidizer (RTO); and later another NT\$40 million invested for a second backup RTO, in case of failure or maintenance. Removal efficiency is more than 95%. Each RTO can process 1,600 cubic meters of waste gases per minute.

Air Pollutants	Unit	2021	2022	2023	
NOx	ton	97.202	128.726	120.379	
SOx	ton	159.006	33.079	43.424	
Volatile Organic Compounds (VOCs)	ton	23.453	17.205	22.017	
Particulate Emissions	ton	6.525	7.774	7.354	

Circular Economy

GPPC seizes the trend of circular economy and focuses on the recycling of waste to make high-value applications of by-products such as hydrogen, sludge bacteria, and fly ash from steam power plants.

"Hydrogen," for example, is an important by-product that can be used as fuel for heaters or sold to gas suppliers, which can then supply to advanced technology electronic manufacturers. Moreover, GPPC has demonstrated a successful model of circular economy through supplying steam generated from its co-generation plant to other manufacturers in the industrial park.

Hazardous Substances and Waste Management

When marketing ABS/SM related products, GPPC considers its' competitive advantages and disadvantages of the products in terms of health and safety in the industry trend. Our products do not contain environmentally hazardous substances as regulated by customers and regulations (e.g. RoHS). GPPC provides product specifications regarding performance and use & care instructions are listed in the analysis report (COA) and material safety data (SDS), for customers to understand how to safely use the product. In addition, SM has completed registration with the European Chemicals Agency (ECHA) to meet the requirements of REACH registration in the EU.

GPPC also strengthens the management of waste reduction and thermal energy recovery through the construction of a sludge incinerator with an hourly capacity of 390 kg. All other wastes that cannot be handled are entrusted to off-site qualified removal and treatment vendors for cleaning.

No waste leakage in 2023.

Waste Management Kaohsiung Factory	Unit	2021	2022	2023
Waste by Type				
General Business Waste	ton	3,559.73	2,953.40	2,401.16
General Garbage Waste	ton	119.67	72.65	69.90
Reused Waste	ton	26,594.52	13,598.35	16,274.45
Hazardous Business Waste	ton	3.17	0	0

Waste Management Kaohsiung Factory	Unit	2021	2022	2023	
Total Waste	ton	30,277.09	16,624.40	18,745.51	
Outsourced Waste Treatment	%	93.2%	88.5%	90.32%	
Self-handled Waste Treatment	%	6.8%	11.5%	9.68%	

Notes: 1. Outsourced waste treatment is entrusted to offsite qualified removal and treatment vendors for cleaning. The Company conducts annual audits of waste removal and disposal companies by sending certificates.

2.Self-handled waste includes organic sludge, waste plastic mixture and non-hazardous organic wastes or waste solvents. The organic sludge is treated and recycled into compost by a professional manufacturer, while the inorganic sludge is thermally treated and used as a concrete blending material.

Water Management

Targets and Strategies

Short Term: Daily Water Savings of 270 Tons

Three-step anaerobic biological wastewater treatment systems; the recycled water after treatment is used to clean filter clothes of sludge dewatering machines, which is equivalent to reducing 100 tons of tap water consumption and effectively implements water recycle and reuse. **Mid-Long Term:** Water Recovery Rate Exceeds 65% by 2025

Integrate internal and external resources of the company, develop recycled water technology, and continue to implement process water saving and recycled water utilization.

Water Consumption

The Company has identified and responded to water risk factors and implemented water recycling in accordance with the water resource management approach and commitments.

The Company's water comes from the surface water of Gaoping River, and the water source area is not a water volume sensitive area.

	Unit	2021	2022	2023	
Waste Consumption	ton	2,469,000	2,004,000	1,973,000	
Recycled Water	ton	1,620,600	1,069,085	1,326,775	
Recycling Rate	%	39.63%	34.79%	40.21%	
Water Consumption Intensity	tons/NTD million	193	157	154	

The wastewater discharge volume has decreased by 6.27% every year since 2020.

Waste Water

Waste water from petrochemical plants contains organic pollutants and the focus of effluent monitoring is on chemical oxygen demand (COD) and suspended solids (SS).

Accepted Standards*		Unit	2021	2022	2023	
Waste Water Discharge		ton	1,044,777	821,398	902,110	
COD Emissions	400ppm	ton	98.93	76	81	
SS Emissions	240ppm	ton	38.58	29	28	

* The current wastewater plant acceptance standards refer to the sewage treatment plant in the Ta-she Industrial Park area, where GPPC Kaohsiung Factory is located.

The focus of prevention and control is to implement waste water source reduction, to implement measures such as waste water reduction and recycling, storm water diversion treatment, installation of storm water interception facilities, effective maintenance of existing waste water treatment systems and implementation of waste water recycling and reuse.

Soil and Groundwater Pollution Prevention Measures

In order to prevent and control soil and groundwater pollution, GPPC has completed groundwater surveys and set up groundwater monitoring well systems in all process areas and tanks to provide early warning functions; various preventive measures are taken for underground pipelines, oil tanks and equipment that may cause soil and groundwater contamination, such as installing cathodic anti-corrosion systems, changing oil-water isolation ponds to stainless steel and underground pipelines to prevent organic liquid leakage due to corrosion of equipment; and the delineation of responsibility areas and inspection of underground pipelines and related facilities and pipelines are carried out to achieve the purpose of soil and groundwater pollution prevention.

Legal Compliance

GPPC has no records of significant penalties in the reporting period.

GPPC actively deals with various environmental protection issues, and does its best to protect the environment by following the laws and regulations to carry out improvement work.

Environmental Protection Spending and Investment

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Environmental Spending and Investment		2021	2022	2023	
Pollution Prevention and Reutilization Fees	NTD	28,892,656	39,335,323	37,183,823	
Operating Costs and Upstream and Downstream Associated Costs	NTD	434,900	685,530	2,016,230	
Monitoring Environmental Impact Fees	NTD	15,075,712	15,474,857	6,606,662	
Insurance-Toxic Chemicals	NTD	850,000	850,000	850,000	
TOTAL	NTD	45,253,268	56,345,710	46,656,715	

Research & Development

Additionally, the R&D center continues to actively explore the diversified development of high-value products such as high-function nylon fibers and PP engineering plastics. Moreover, we actively seek cross-disciplinary industrial development such as semiconductor electronic chemicals and biomass materials.

In order to achieve sustainable operation, Grand Pacific is actively moving toward the goals of increasing production capacity, reducing production costs, increasing sales competitiveness and expanding market share, seeking corporate alliances, improving industrial structure and developing new products with high added value.

Working towards Energy Saving and Waste Reduction

Actively optimize the attachment of PBL large particle latex, and further improve ABS dyeing, actively develop high temperature nylon engineering plastics. Reduce Plastic Waste, Reduce Energy Consumption, Reduce Carbon Emissions and Implement Circular Economy

Development of post-consumer recycled plastic PCR ABS.



SOCIAL

Human Rights

GPPC adheres to UN "Universal Declaration of Human Right" and GPPC's human rights policies are based on the International Bill of Rights and the International Labor Organization's Declaration on Fundamental Principles and Rights at Work and other internationally recognized standards.

- Adhere to legal regulations and provide safe and healthy workplace
- Prohibit workplace violence, harassment and intimidation
- Respect employee's privacy and dignity
- No child labor
- Prohibit forced labor
- Avoid employment discrimination
- Ensure equal opportunity
- Freedom of association
- Respect employees' organization and participation in legally approved labor unions to defend their rights and interests at work

All employees are protected by the collective bargaining agreement through the union.

Human Rights Protection Training

New Employee

- sexual harassment prevention
- anti-discrimination
- anti-harassment
- working hours management
- humane treatment
- workplace health and safety

- Anti-harassment Anti-harassment
- awareness of their responsibility to help ensure no harassment or illegal infringement in the workplace.
- Make accessible the complaint hotline to create a friendly working environment.

Occupational Health and Safety

- health and safety education/training
- fire safety training
- emergency response
- first aid training
- chemical substances related training

Code of Ethics

Provide a healthy and positive workplace culture through education and training of daily behavior and ethical standards.

Workforce

In order to protect the working rights of local workers, GPPC does not employ foreign workers and gives priority to local workers. GPPC has more male employees due to more physical effort required for on-site work. The average length of service of our employees is about 14 years. Termination of employment is in accordance with the Labor Standards Act.

Employee Structure (including supervisors)	2021	2022	2023	
Male	352	357	340	
Female	29	32	37	
Total	381	389	377	
Females in Managerial Position %	25%	26%	30%	

Salary

GPPC insists on equality between men and women. Annual salary and reward that are better than or equal to competitors. Our salary is approved according to the individual's ability and job requirements. We uphold the principle of reasonableness and fairness without any differential treatment based on gender. Employees are guaranteed annual salary of 15 months.

Employees (non-supervisory positions)	Unit	2021	2022	2023	
Full-time Employees	Person	360	369	366	
Average Salary	Thousand NTD	1,588	878	891	
Median Salary	Thousand NTD	1,426	774	798	

The Company has set up an Employee Welfare Committee to regularly (monthly) contribute a certain proportion of employee welfare funds based on the revenue status/trash return. The Employee Welfare Committee plans the deployment of employee welfare funds. Apart from providing employees holiday bonus (May Festival, Moon Festival, and Spring Festival) and birthday bonus, it is also responsible for carrying out activities such as annual trips, educational subsidies, subsidies for marriages, celebration, or funeral services, emergency assistance, club activities, and meal allowance.

Turnover				Parenta	l Leave	
Turnover	2021	2022	2023	The reinst rate was 6	tatement rate was 10 57% for the unpaid pa	0% and the retention rental leave in 2023.
Retired	12	13	12	Co	lleagues with Children under Age of 3	Application for Unpaid Parent Leave
Resigned	20	31	31	Male	22	1
Newly Hired	38	50	30	Female	3	2
Turnover Rate	8.7 %	11.3 %	11.7 %	Total	25	3

Education and Training

Professional Courses	Environmental Safety and Health Course
4 categories: Statutory, general, SOP/WI evaluation and professional English. Organized by the supervisor of each unit.	Kaohsiung plant employees should be equipped with of foundational knowledge of environmental safety and health. Organized by the Dept. of Industry and Environment.
Expert Seminars	General Skills
To enhance the efficiency, quality, and potential of employees. Organized by the Human Resources Team.	English proficiency and computer application. Organized by the Human Resources Team.



GPPC also reinforces ethical awareness and emphasizes anti-corruption policies and procedures in its employee handbook and new recruits training.

Occupational Health and Safety

Safety and Health Policy

In order to improve the overall corporate safety and health standards, GPPC began to implement the OHSAS 18001 system in 2006 and officially obtained the ISO 45001 Occupational Safety and Health Management System standard in 2018.

GPPC commitment:

"In order to protect the lives and health of the employees of the company and the contractors, the company will strive to eliminate and prevent injuries and illnesses by continuously improving the operating environment and facilities, installing equipment that meets the laws and engineering standards, strengthening the education and training of employees, requiring and caring for the safety of contractors, and establishing a perfect safety and health system and operating procedures that can be operated to improve the safety and health standards of the entire company and establish a quality safety and health culture."

Labor Safety and Health Committee

- Represented by 63% from employer and 36% labor representatives.
- ▲ Formed in accordance to law, Labor Safety and Health Organization Management and Automatic Inspection Regulations.
- Responsible for promoting work safety, preventing accidents, improving the working environment and maintaining the health of employees.
- Meets quarterly and keeps track of the status of resolutions until they are completed.

Occupational Hazards

GPPC constructed the occupational safety hazard identification and risk assessment system in the ISO45001 Occupational Safety and Health Management System to perform major occupational safety and health risk assessment, and include the objectives and action plans for unacceptable risks and acceptable improvement opportunities to effectively control risks, and also construct the abnormal incident handling system to formulate the notification norms for different levels of safety and health events including false alarm events.

OHS Training

We have established the "Safety, Health and Environmental Protection Education and Training Method", and set up occupational safety and health business supervisors, occupational safety (health) managers and operators of dangerous machinery and equipment, and require all kinds of specialized personnel, managers and operators to retrain regularly during the in-service education and training period.

For general employees in the transfer of operations or change of duties, the new supervisor of the unit of duty will decide whether to arrange appropriate occupational safety and health on-the-job training.

2023 OHS Issues for Improvement

- FACTORY **SUPPLIER** Health examination and promotion Process and operation risk assessment Standardized management of safety production, "Occupational safety and health management" in pursuit of zero disaster, zero injury planning is included in the weighting of annual supplier activities and program safety
- Implementation of improvement measures for abnormal incidents

- Discussion on contractor safety management matters
- management evaluation

Pipeline Safety

Since the Kaohsiung underground pipeline gas explosion incident, GPPC has cooperated with the Industrial Development Bureau and the Kaohsiung City Economic Development Bureau in the joint investigation and inspection, as well as continues to implement the "underground pipeline maintenance management plan" in 2023 to enforce various short-term and mid-term control measures to ensure pipeline risk assessment and safety.

Internal Safety Audits

GPPC attaches great importance to the safety and health of employees and contractors, and actively promotes work safety audits.



Safety Review Meetings

GPPC Labor Safety and Health Committee is responsible for promoting work safety, preventing accidents, improving the working environment and maintaining the health of employees. The Committee meets quarterly and keeps track of the status of resolutions until they are completed. Additionally, management review meetings on a quarterly basis.

Contractor Safety Management

"Contractor Safety and Health Management Procedures" and the "Safety Work Permit Procedures".

Crisis Management

In order to control the accident situation, an "Emergency Response Plan" is formulated, and each unit then formulates crisis and emergency management organizations and countermeasures according to its own operation and environmental conditions, and regularly rehearses to familiarize itself with the response procedures in order to reduce the expansion of the disaster and minimize the loss of personnel and equipment in the event of an accident.

Equipment

The characteristics of the industry and production process means GPPC has many dangerous machinery and equipment. In addition to regular primary maintenance, rotational type of equipment are subject to non-destructive tests such as infrared inspection and ultrasonic inspection to inspect its condition.

Incident Investigation and Handling

The process safety incident case occurred in 2023 was a minor incident due to an ABS reaction. According to the regulations, no reporting was necessary as there was no injury or death.

Injury Rate	2021	2022	2023
Work Injury Rate FR	0	2.87	0
Occupational Disease Rate (ODR)	0	0	0
Severity Rate SR	0	47.37	0
Occupational Fatal Accidents	0	0	0
Near-Miss Frequency Rate (NMFR)		0.287	0.291
Total Recordable Incident Rate (TRIR)			0.29%
Number of Accidents	0	2	1
Employees Involved	0	2	1
Contractors Involved	0	0	0

Special Medical Examinations

According to the ISO45001 management system and operating environment monitoring, Grand Pacific conducts annual special physical examinations for certain job posts.

Job Post	Content of Special Physical Examination	Examination Result
Plastic Plant	Exposure to N, N-dimethyl formamide	Passed
Petrochemical Plant	Benzene intensity	Passed
Particular Noise Hazards	Hearing (Business Units: petrochemical, plastic, automotive, nylon)	Passed

The health examination results in 2023 of the Company did not show any occurrence of occupational disease.

Product Safety and Labeling

The Company is increasingly required to properly manage and disclose information on substances contained in various products throughout the product life cycle in accordance with the requirements of the European ELV Directive, RoHS Directive, and REACH regulations, and we are evaluating all new and existing suppliers to avoid the transmission of environmentally controlled substances. Our products comply with government regulations for products and services. GPPC's plastic ABS products are tested annually by SGS for compliance with EU RoHS regulations and are free of the 10 environmental hazards.

1

The SDS must be attached to each customer's first shipment, clearly indicating information on banned substances, disposal methods, and conditions of use, and the SDS can be provided at any time upon request.

2

Conduct HSF quality satisfaction surveys on customers at any time. We communicate with our customers on our website, during visits to customers, or in public (e.g., seminars, product launches, etc.) to emphasize our management philosophy of sustainable products.



Currently, all of our products utilize the above-mentioned sustainable product descriptions, and no lawsuits have been filed in 2023 in which penalties were imposed for violations of product specifications, voluntary guidelines, or product labeling.

To ensure that our products reach our customers safely, we comply with the "Hazardous and Harmful Substances Labeling and Identification Regulations" of the Labor and Safety Bureau during the transportation of our chemicals, and perform 100% labeling according to the GHS (Global Harmonization System for Classification and Labeling of Chemicals).

Supplier Management

GPPC's suppliers are 100% local manufacturers, such as SINOPEC/CPC/FPCC.

Key Supplier Management Implementations:

Code of Conduct for Partners" instills environmental protection and corporate social principles into our supplier management mechanism.

The Code requires our partners to comply with local laws and regulations and protection of basic human rights, including not to force labor, adhere to legal working hours and wages, environmental safety and health, and welfare, etc.

- "New Supplier Evaluation Form" to assess compliance indicators during new supplier audit such as RoHS, ISO14001, ISO45001, freedom of association, prohibition of child labor.
- Ensure suppliers comply with the Principle of Impartiality from Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy of the International Labor Organization.

Supplier ESG Code of Conduct:

1. Protecting Labor Rights

Commit to establish appropriate grievance mechanisms, prohibit child labor, provide reasonable benefits, prohibit workplace bullying, avoid employment discrimination, protect freedom of association, and continuously improve employee functions.

2. Health and Safety

Suppliers are required to follow ISO 45001 occupational safety standards to control potential hazards in the workplace that employees are exposed to through proper design, engineering and management controls, preventive maintenance and safe operating procedures. When the source of the hazard cannot be fully controlled by the above methods, employees should be provided with appropriate personal protective equipment. Disciplinary action shall not be used as means to raise the safety awareness of employees.

3. Environmental Protection

GPPC's suppliers required to take responsibility for environmental protection. The manufacturing process should minimize the negative impact on the environment and natural resources while protecting the health and safety of the public.

4. Ethical Standards

GPPC's suppliers are held to the highest standards of integrity in their business dealings, and corruption, extortion and bribery of any kind are strictly prohibited and no improper benefits are offered.



Supplier ESG Management Policies

GPPC prioritizes greenhouse gas issues when formulating suppliers ESG management policies. The management directions and policies of the value chain are as follows and are made through suppliers ESG advocacy (necessary to include ISO14064-1 and GHG Protocol).



High relevance and high emissions

Benzene: Requiring GHG inventory certification and setting the reduction target of 1% annual energy conservation.

Medium relevance and medium emissions Butadiene/Acrylonitrile: Completing GHG inventory and providing supporting information.

Low emissions or low relevance

Hexamethylenediamine/Australian coal: Completing the advocacy on GHG inventory.

Туре	Management Principles	Target	2021 Achievement	2022 Achievement	2023 Achievement	Subsequent Management Objectives
New Supplier	Implementation of ESG review by signing of "Grand Pacific Petrochemical Partner Code of Conduct"	100%	100%	100%	100%	Include the ESG clause in the commitment
New Supplier	Completion of ESG evaluation through "Qualified Supplier Annual Evaluation Form	100%	100%	100%	100%	Increase the proportion of on-site evaluation
Contractor/ Security Company	Execution of Human Rights Review by signing the "Grand Pacific Petrochemical Partner Code of Conduct"	100%	70%	75%	80%	The human rights clauses are set out in the contractual agreement
Existing Supplier	Completion of ESG evaluation through "Operational Procedures of Supplier Evaluation"	80% or More			89%	Increase the proportion of on-site evaluation
Existing Supplier	Requirement for domestic suppliers of bulk chemical products to execute greenhouse gas inventories (in accordance with ISO14064-1 or GHG Protocol)	100%			100%	Regularly follow energy saving targets

Contractor Safety Management

Contractors are often involved with high-risk work, therefore GPPC formulated the "Contractor Safety and Health Management Procedures" and the "Safety Work Permit Procedures", which strictly enforces the same standards of safety management for contractors as the employees.

Contractors entering the plant will undergo safety and health education and training and also sign the joint operation agreement to ensure that no additional waste and wastewater pollution will be caused in the plant.

Mutual meetings are regularly held to promote occupational safety and health of ALL persons. Unannounced random inspections are conducted at construction sites to reduce risk of unsafe behavior of the contractor's staff.

GOVERNANCE



Board of Directors

The Board is made up of 7 members including 3 independent directors. The 13th term members duly completed their 3-year fiduciary service, ending on 2023/6/11. The newly elected board members with term period from 2023/6/28-2026/6/27 were elected during AGM in June 2023 as the 14th term. In 2023, a total of 10 board meetings were held; 5 meetings convened by the 13th term and 5 meetings convened by 14th term.

3% Independent Director

Female Director

As of 2024/10/22 board of directors are:
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Director	Name	Representative	Gender	Age	Attendance of meetings in 2023
Chairman	Chung Kwan Investment Co., Ltd	Teh Hsin Chiu ¹	F	51-60	100%
Director	Jing Kwan Investment Co., Ltd	Pin Cheng Yang	Μ	61-70	100%
Director	Hung Wan Investment Co., Ltd	Chen Ching Ting	Μ	51-60	100%
Director	Chao Feng Investment Co., Ltd	Cheng Kai Chou ²	Μ	51-60	-
Independent Director	Mu Hsien Chen		Μ	51-60	100%
Independent Director	Chih Hung Hsieh		Μ	61-70	60%
Independent Director	Chung Hsin Wu ³		М	51-60	-

1. Chairman Pin Cheng Yang retired with effective date on 2023/08/11 and Teh Hsin Chiu was appointed as the new Chairman.

2. Representative for Chao Feng Investment Co., Ltd was reassigned from Chen Ling Chang to Cheng Kai Chou on 2024/3/22.

3. Independent Director Chun Fu Chang resigned with effective date on 2023/11/10 due to career planning where he transferred to public office. Chung Hsin Wu was appointed on 2024/6/7.

Board Diversity

In order to strengthen corporate governance and promote the sound development of the board of directors' members and structure, the Company has stipulated the policy of diversity in the Board of Directors in paragraph 2, Article 23, Chapter 3 of the "Corporate Governance Best Practice Principles".

The Company emphasizes gender equality in the composition of the Board of Directors. At present, there is one female director, accounting for 14% of the total number of directors. The Company intends to continue to maintain at least one female director and strive to increase the number of female directors in the future. No director is currently an employee.

Functional Committees

Tenure of office for functional committee members ended on June 11, 2023. Current members of the Committee are as in table below, due to Independent Director Chun Fu Chang's resignation and Director Pin-Cheng Yang's retirement, positions for the Audit and Compensation Committee were filled by Chung Hsin Wu in 2024/6/7 and 2024/4/25 respectively.

Board Title	Name	Audit Committee	Compensation Committee	ESG Sustainable Development Committee
Number of Members in Committee		3	3	5
Number of Meeti	ngs in 2023	8	5	2
Independent Director	Mu Hsien Chen	G (100%)	C (100%)	(100%)
	Chih Hung Hsieh	(100%)	(100%)	(100%)
	Chung Hsin Wu			- -
Director	Chih Hung Hsieh			G (100%)
Director	Chung Hsin Wu			(100%)

Nomination Committee under Preparation

The Board passed the Nomination Committee Charter on November 11, 2022. The nomination committee will have a minimum of 3 members with over half of the members being independent directors. As of 2023 the Nomination Committee has not yet been in operation.

ESG Sustainable Development Committee

GPPC's Board of Directors approved the staffing of Chief Sustainability Officer and appointed the President, Chia-Hsiung Tseng, on 2024/4/25 as CSO to strengthen our strategic goals of sustainable development.



Board of Directors

The Board of Directors acts as the highest level of decision-making unit in terms of climate management, supervises the Company's governance performance as well as achievement status of climate-related issues, and annually reviews corporate performance on sustainable governance.

Simultaneously, the Company will also include climate-related topics when reviewing significant capital expenses, risk management, annual budgets, and business plans.

ESG Sustainable Development Committee

The ESG Sustainable Development Committee Charter was passed by the board on May 11, 2023. At least two meetings are held per year and reports made to the Board annually.

ESG Office

The ESG Office is responsible for convening and implementing the identification and assessment of climate-related risks and opportunities, conducting monthly comprehensive analysis of climate-related indicators and goals.

In the future, the Company plans to link the ESG performance with rewarding mechanism.

Ethical Management

Our ethical management and fair business practices are grounded upon sound ethical management and preventative measures for high risk, dishonest behavior. In the conduct of business and procedural standards, we avoid using our position to obtain improper benefits for ourselves and our relatives.

ETHICAL CORPORATE MANAGEMENT BEST PRACTICE PRINCIPLES

Prohibit bribery and acceptance of bribes Prohibit inappropriate charitable donations or sponsorships Prohibit illegal political contributions Prohibit unreasonable gifts, services, hospitality Avoid unfair competition or other improper benefits Fulfill tax obligations **CODE OF CONDUCT FOR ENVIRONMENTAL. SAFETY AND HEALTH COMMUNICATION OPERATION PROCEDURES BUSINESS PERFORMANCE** Requires fair trade and anti-corruption principles Ensures various stakeholders can provide ESGto be integrated into the GPPC's daily operating related grievance communication and feedback mechanisms to confirm the effectiveness of procedure. remedial measures.

Whistleblowing

The Company has established the "Regulations on Whistleblowing Cases of Illegal, Unethical, or Dishonest Behavior" and has set up a public complaint box on the Company's website to have a dedicated staff to handle complaints and conduct investigations in a manner that keeps the identity of the complainant confidential, and expressly prohibits retaliation against the complainant.

All employees and other stakeholders are free to report cases of illegal, unethical, or dishonest behavior by accessing the Company's website, business locations, or the report box located in the Internal Audit Office.

Website: https://www.gppc.com.tw/gppc/Investment_PDF/1_51080628.pdf

Email: audit@gppc.com.tw

Mailbox: Head of Internal Audit, 8F, No. 135, Dunhua N.Road, Songshan District, Taipei City

No reports of illegal behavior were received by any of our units in the year 2023.