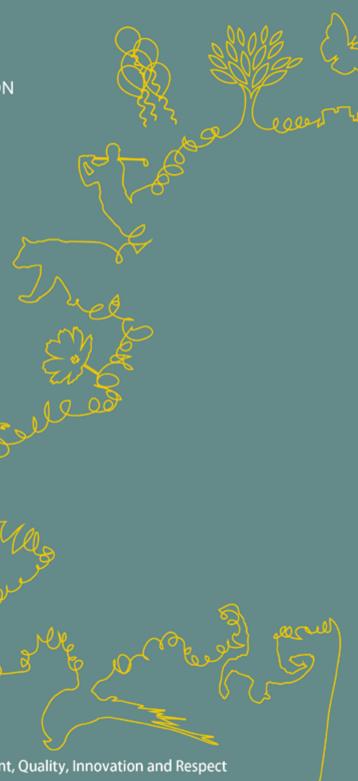
**GRAND PACIFIC** PETROCHEMICAL CORPORATION



Ethical management, Quality, Innovation and Respect

# 23 Operational Review

- 24 Company History and FinancialPerformance
- 28 Major Brands/Products/ServiceMarket
- 29 Joined Association and Collaboration
- 30 Financial Performance
- 35 Corporate Governance
- 38 Internal Audit and Internal Control System
- 40 Overview on Services for Investors
- 41 Operational Risk Management and Future Prospect

About the Report

05 About the "GRAND

PACIFIC PETROCHEMICAL

2021 CSR Report"

07

**Strategy and Vision** 

- 10 Corporate Social Responsibility Commitment and Organiza-
- 12 Stakeholder Negotiation and
  Sustainable Issue Managemen
- 20 Stakeholder Negotiation and Sustainable Issue Management

### 43

#### **Environment Sustainability**

- 44 Environmental Management Strategy Disclosure
- 46 Energy-saving Solutions and Greenhouse Gas Management
- 48 Environment Management and Environmental Protection Activities

## 56

#### **Labor Human Rights and Social Care**

- 57 Labor-employer Harmony and Employee Care
- 65 Occupational Health and Safety Management
- 76 Customer Service and Supplier Management
- 81 Social Care

## 87

#### **Appendix**

- 88 Table of GRI Standards
- 88 General Disclosure
- 90 Topic-specific Disclosure

### **About the Report**

This report is written based on the Core options of the GRI Standards from Global Reporting Initiative (GRI) Association to disclose Grand Pacific Petrochemical's strategy, philosophy, measures and performance in CSR.





#### About the "GRAND PACIFIC PETROCHEMICAL 2021 CSR Report"

Grand Pacific Petrochemical published CSR Report, aiming to present the Company's CSR practices and achievements, as well as its strategies and goals, to the public in a transparent and open manner. The Company's CSR Report is published on a regular annual basis; this "CSR Report" was published in June 2021, presenting the period from January 1 to December 31, 2020 regarding the environmental protection, corporate governance, and social participation for the Taipei/Taichung Office and Kaohsiung Plant of Grand Pacific Petrochemical as well as various performance data. Some of the performance data from 2019 was also used. The report considers the operating entities that affect the Group's operations; hence, the scope of the reporting thereof mostly includes the Company's Taipei Office and Kaohsiung Plant. The Company's main customers include chemical material manufacturers. We target the sales of ABS/Nylon products over China/Europe/USA/Japan, while the sales of SM products are mainly made domestically. Our product applications cover the electronics/chemical/automotive industries, not including other reinvestment companies; exceptions, if any, will be specified in the report.

This report is written based on the Core options of the GRI Standards from Global Reporting Initiative (GRI) Association to disclose Grand Pacific Petrochemical's strategy, philosophy, measures and performance in CSR.

To provide the reader with reliable public information, the report complies with AA1000 standard, applicable to the petrochemical industry .

The financial statements in this report are in New Taiwan dollars, and the performance related to environmental protection, safety and health is expressed in international common standards. If there are assumptions or conditions, they will be noted in the relevant sections

The report is scheduled to be issued annually on an ongoing basis.

Current version: Issued in June 2021 Last version: Issued in June 2020

Next version: Expected to be issued in June 2022

In response to environmental protection, we promote paperless initiatives; hence, this report is published in electronic version on the Company's website.

You are welcome to contact us for any comments to this report. Contact information:

Grand Pacific Petrochemical Corporation Assistant Manager Hong-Min Xue

E-mail: ESG@gppc.com.tw Website: www.gppc.com.tw

Address: Headquarter: No. 4, Xinggong Rd., Dashe Dist., Kaohsiung City Tel: 07-3513911 #289

### **Strategy and Vision**

to make the greatest contribution to the pursuit of the company's growth and sustainable development, and at the same time to fulfill social responsibility so that the company can become an outstanding corporate citizen.

59.7 billion

billion from fiscal 2020.

Grand Pacific Group's consolidated revenue for fiscal 2021 was NT\$22.55 billion, an increase of NT\$5.97 billion from fiscal 2020, and consolidated net income before income taxes was 3.8

With a score of 3.8 or higher for the stakeholders' concern





#### **Operator's Words**

#### Senior Management's Expectations

Grand Pacific Group's consolidated revenue for fiscal 2021 was NT\$22.55 billion, an increase of NT\$5.97 billion from fiscal 2020, and consolidated net income before income taxes was NT\$7.36 billion, an increase of NT\$2.25 billion from fiscal 2020. The consolidated net income after tax was NT\$6,080 million, and consolidated net income after tax attributable to the Company's owners was NT\$5,880 million. Styrene is the core niche of the company. We are extending our reach upward to nylon 66, a crystalline engineering plastic, and downward from the fundamentals to optimize the quality of ABS as our annual targets. We continue to strengthen the competitiveness of our core business, such as focusing on our main base of SM, ABS, hydrogen and nylon 66, optimizing cost, efficiency and quality, and trying to develop sales channels for niche products and create profits by constantly pursuing steady growth in quality and quantity and grasping the opportunities of high boom spreads. In addition, we are in the process of starting up and designing the future project of our carbon III industry chain, including 660,000 tons/year propane dehydrogenation and 450,000 tons/year polypropylene, in Quanzhou City, Fujian Province, and will reach full capacity production and commercialization by the end of 2023 to early 2024. In addition, regarding the R&D center under development, we have been actively developing high value diversified products such as high functional nylon fibers and engineering plastics in advance, so as to lay the foundation for the company to move forward to a new potential territory.

The direction of our efforts in the economic, environmental and social aspects of CSR is as follows:



#### 1. Economic Aspect

Grand Pacific regulates the ethical conduct of all employees, directors and managers in accordance with the Company Act, Securities and Exchange Act, and Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies, and regularly reviews its corporate mission, vision and values, as well as its core functions and management functions, and requires its personnel to comply with them. In addition to disclosing important CSR issues in publicly available annual reports, we also enhance the transparency of our operations through the regular publication of CSR reports.



#### 2. Environmental Aspect

The Company will continue to meet its commitment to achieve its targets and benefits in order to meet the demanding challenges of the internal and external environment. In order to meet the high standards of industrial safety and environmental protection such as safe production and carbon reduction, we have been making capital expenditures for the past 20 years to introduce advanced improvements such as the best controllable technology, and to establish our environmentally friendly production methods as a fundamental part of our operations at all times, thus actively demonstrating our sacred mission as a corporate citizen. Looking ahead, we hope that with the gradual improvement of our hardware and software facilities and the dedication of our corporate team, we will be able to live up to the trust of our shareholders and continue to create new businesses with new levels of operational efficiency.



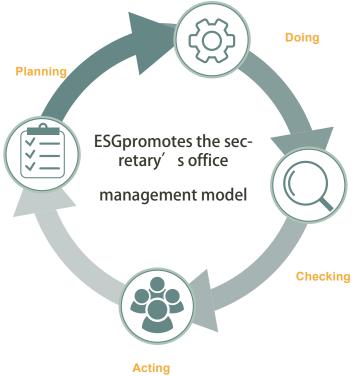
#### 3. Social Aspect

As a company that focuses on sustainability, "sustainability" or "CSR" has never been a single issue, but a core value that has been internalized in Grand Pacific's initiative. In addition to responding to stakeholders' concerns through this report, it is also my lifelong ambition to be a part of Grand Pacific Petrochemical. I am willing to redouble my efforts to carry out the mission without fear of hardship, to grasp the opportunity to lead a warm and benign corporate development culture, to establish an environmentally friendly organizational goal, to gather everyone's input and dedication, to create the best overall effect of the team, to uphold the spirit of "no best, only better", to actively act as effective management, to make the greatest contribution to the pursuit of the company's growth and sustainable development, and at the same time to fulfill social responsibility so that the company can become an outstanding corporate citizen.

#### Corporate Social Responsibility Commitment and Organizational Structure

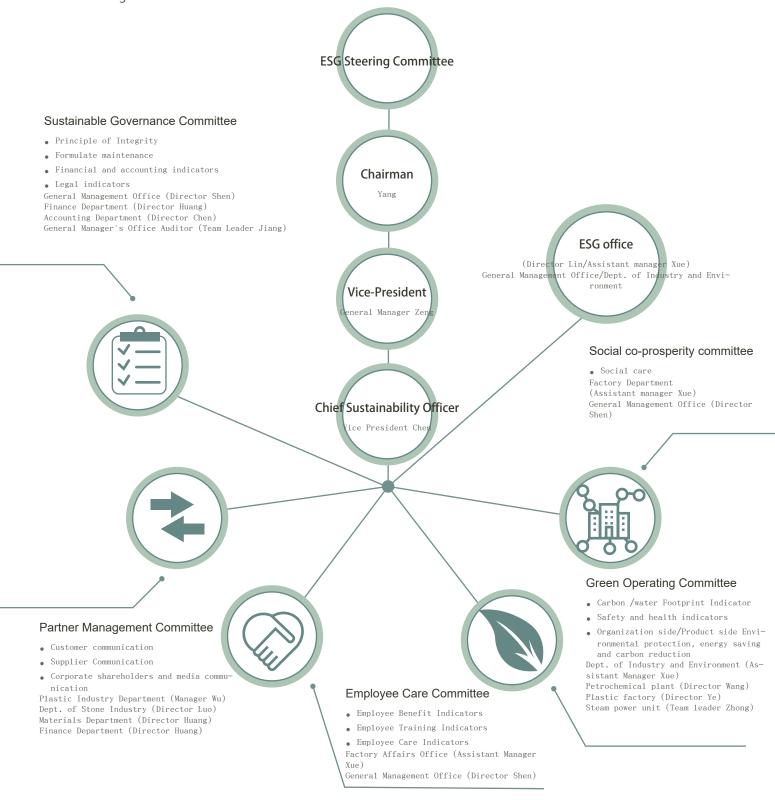
Grand Pacific Petrochemical ESG Project Organization, CSR Steering Committee, led by the General Manager and CEO, meets regularly to confirm and review the status and strategy of ESG initiatives. The structure with a total of 5 subcommittees are established underneath the Steering Committee as follows: "Promotion Secretariat", "Corporate Governance Committee", "Employee Care Committee", "Environmental Friendly and Energy Saving Committee", "External Communication Committee", "Social Care Committee" with management indicators in three aspects of CSR: economic, environmental and social . We successfully completed our plans, linking economic, environmental and social performance management indicators to our daily operations, integrating them into our routines, and caring for previously unnoticed topics.

ESG promotes the secretary's office to operate according to the "P-D-C-A" (Planning-Doing-Checking-Acting) management model to regularly identify stakeholders and collect and review stakeholder concerns and report at the annual meeting held in the first quarter to ensure that all major considerations are covered. After the Steering Committee confirms the action plan, the Executive Committee will start the action, and then report to the Steering Committee on the progress and effectiveness of the CSR-related business. The performance results were reported to the CEO, and then the CEO reported the results and future strategies to the Board of Directors.



#### **Grand Pacific Petrochemical ESG Implementation Team**

Grand Pacific Petrochemical' s ESG Committee reports directly to the Board of Directors and has the following structure



Grand Pacific Petrochemical ESG Implementation Team

#### Stakeholder Negotiation and Sustainable Issue Management

#### Analysis procedure of major consideration aspects

This report uses the material consideration analysis process to identify the sustainability issues of concern to stakeholders as a reference basis for information disclosure, to achieve the goal of effective communication, and to serve as an important basis for future planning of corporate social responsibility.

The communication and screening of stakeholders and important issues is the most important in CSR. We understand the issues of concern to the relevant stakeholders, and through the disclosure of the CSR report, we will let the relevant stakeholders understand the efforts of the Company in CSR and the performance achieved in 2021.

The ESG Steering Committee selects the key stakeholders and their issues of concern based on the mechanism for evaluating substantive issues in the daily operations of the Company's relevant departments and external business communications, and the ESG Promotion Secretariat convenes the ESG Committee subcommittees (Executive Committee) to search for stakeholders regarding the organization's operational communications and stakeholder inclusiveness, identify stakeholders, and select priority communication targets and their issues of concern for response. Stakeholders can be classified into seven categories, customers, employees/unions, investors, media, suppliers, community and government . The ESG Committee's sub-committees (Executive Committee) send out questionnaires to their respective stakeholders, and then the ESG Promotion Office compiles them to find significant indicators for disclosure.

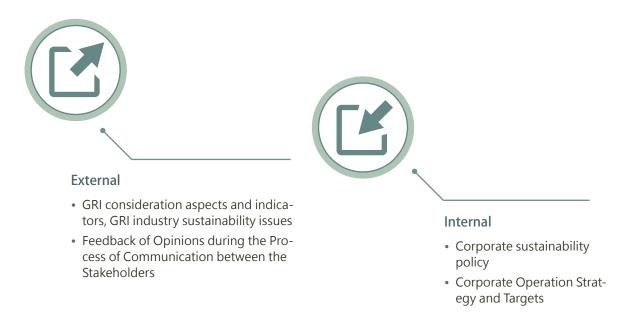
#### Stakeholders and Issues of Concern



In view of the fact that stakeholder negotiation is an important part of the Company's management of sustainability issues. In addition to interacting with stakeholders in various ways through our daily business, we also use various channels including telephone communication, meetings, satisfaction surveys, site visits, and participation in associations. The issues raised by stakeholders are identified as material considerations in this report.

#### Grand Pacific Petrochemical's Source of Sustainability Issues

Our process for identifying material considerations is based on the GRI G4 Sustainability Reporting Framework's Reporting Principles and Guidelines for Defining Report Content. Due to the wide range of sustainability issues, we use the following sources to gather information on issues relevant to our organization.



In 2020, in response to the launch of organizational sustainability management, a "CSR Mailbox" (ESG@gppc.com.tw) was set up for various stakeholders to communicate and give feedback, and a dedicated person is responsible for communication and response. The analysis of material issues in 2021 is based on the results of the annual questionnaire survey, and two factors: the level of concern of major stakeholders and the level of economic, environmental and social impact on the Company. We then identified the material issues of concern to stakeholders. The issues of high concern and high impact are disclosed in the relevant sections of the report.

#### Stakeholders of GRAND PACIFIC PETROCHEMICAL

Stakeholders	Concerned issues	Communication methods of GRAND PACIFIC PETROCHEMI- CAL	Commu- nication frequency	Sections of Response in the Report
Employee	<ul> <li>Occupational health and safety</li> <li>Employee diversity</li> <li>Educational training</li> <li>Labor-employer relations</li> </ul>	<ul> <li>Employee Welfare Committee (quarterly)</li> <li>Trade Union Congress</li> <li>Market Observation Post System</li> <li>Labor-management meetings</li> </ul>	<ul><li> Quarterly</li><li> Annually</li><li> Annually</li><li> Quarterly</li></ul>	CH3. Environment Sustainability CH4. Labor Human Rights and Social Care
Government (including FSC/ environmental agencies)	<ul><li>Emission</li><li>Water resources</li><li>Waste water and waste products</li><li>Product and service labeling</li></ul>	<ul> <li>Corporate Social Responsibility Report</li> <li>Government propaganda</li> <li>ESG mailbox established on Company website</li> <li>Regular regulatory filing of waste products/waste water/air pollution</li> </ul>	<ul><li>Annually</li><li>Random</li><li>Annually</li><li>Quarterly</li></ul>	CH2. Operational Review CH3. Environment Sustainability
Community/lo- cal people	<ul><li> Emission</li><li> Water resources</li><li> Waste water and waste products</li><li> Product service and labeling</li></ul>	<ul> <li>Random visits</li> <li>Industrial Park Business Families Association</li> <li>Industrial Park Service Center</li> <li>The Disclosure of Information on the Website of Corporate Social Responsibility Report</li> </ul>	<ul><li>Random</li><li>Random</li><li>Annually</li></ul>	CH1. Strategy and Vision CH2. Operational Review CH3. Environment Sustainability
Customer	<ul> <li>Customer privacy management</li> <li>Product service and labeling</li> <li>Customer health and safety</li> </ul>	<ul> <li>Annual customer satisfaction survey</li> <li>Annual interactive seminar</li> <li>Customer ESG audit</li> </ul>	<ul><li>Annually</li><li>Annually</li><li>Random</li></ul>	CH3. Environment Sustainability CH4. Labor Human Rights and Social Care
Shareholders/ Investors	<ul> <li>Economic performance</li> <li>Waste water and waste product management</li> </ul>	<ul> <li>Mailbox for Investors</li> <li>Market Observation Post System</li> <li>Dedicated phone number for the spokesperson</li> </ul>	<ul><li>Random</li><li>Annually</li><li>Random</li></ul>	CH1. Strategy and Vision CH3. Environment Sustainability CH4. Labor Human Rights and Social Care
Supplier	<ul> <li>Supplier environ- mental assessment</li> <li>Customer health and safety</li> <li>Product service and labeling</li> </ul>	<ul> <li>Vendor ESG propaganda</li> <li>Supplier ESG appraisal</li> <li>The Disclosure of Information on the Website of Corporate Social Responsibility Report</li> </ul>	<ul><li>Annually</li><li>Annually</li><li>Annually</li></ul>	CH1. Strategy and Vision CH2. Operational Review
Media	<ul> <li>Economic performance</li> <li>Occupational health and safety</li> <li>Customer health and safety</li> </ul>	<ul> <li>Market Observation Post System</li> <li>Random telephone communication</li> <li>The Disclosure of Information on the Website of Corporate Social Responsibility Report</li> </ul>	<ul><li>Annually</li><li>From time to time</li><li>Annually</li></ul>	CH3. Environment Sustainability CH4. Labor Human Rights and Social Care

#### Ranking of materiality issues



3.6 or higher for the impact on Guogiao as the material consideration in the report.

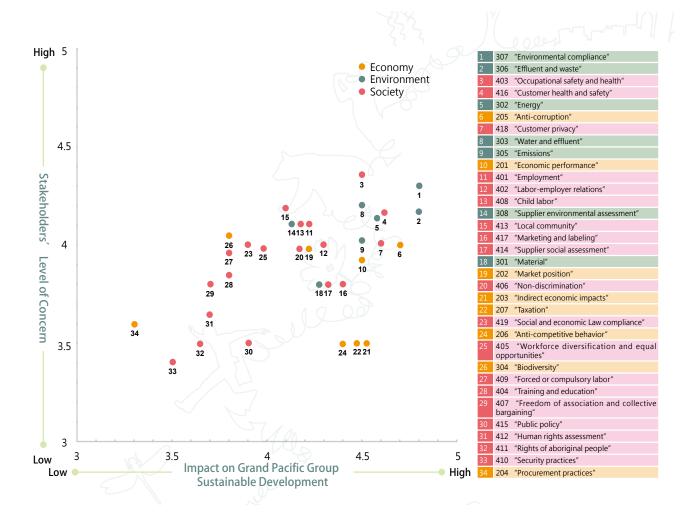
The Company conducted this survey based on a substantive issue selection mechanism. 35 valid questionnaires were collected through the questionnaire, and the AA 1000 principle was used to measure the level of stakeholder relationship with the Company, where the concern scores of each issue were weighted with the degree of relationship to understand the stakeholder's level of concern. The ESG Steering Committee rated the impact of each issue on the economic, environmental and social impact of the Company from the perspective of the management staff of the organization. After compiling all the scores, we ranked the material issues for the company's sustainable development, and considered the degree of information covered in the initial release to determine the threshold of materiality, with a score of 3.8 or higher for the stakeholders' concern and 3.6 or higher for the impact on Guogiao as the mate-



In 2021, in response to the launch of organizational sustainability management, a "CSR Mailbox" (CSR@ gppc.com.tw) was set up for various stakeholders to communicate and give feedback, and a dedicated person is responsible for communication and response. The analysis of material issues in 2021 is based on the results of the annual questionnaire survey, and two factors: the level of concern of major stakeholders and the level of economic, environmental and social impact on the Company. We then identified the material issues of concern to stakeholders. The issues of high concern and high impact are disclosed in the relevant sections of the report.

	Step1 Identification	-Stakeholders 7 categories	We identify key stakeholders based on the daily operations of our relevant departments and external business communications. Seven stakeholder categories were identified, including customers, employees/unions, investors, government (competent authority), media, suppliers, and society (including communities/NGOs/residents affected by operations, etc.) .
Identifica- tion	Step2 Identifica-	The Company's sustainability issues 34 items	We base our reporting principles and guidelines for defining report content on the GRI Standards Sustainability Reporting Framework, external references to relevant international sustainability standards and norms (GRI Standards), sustainability messages (United Nations Sustainability Goals SDGs) and feedback from stakeholder communication processes. We referenced corporate sustainability policy, corporate operation strategies and targets internally. The issues will be integrated with GRI consideration aspects after the meeting discussion.
	Step3 Attention	Questionnaire 121 pieces	In 2021, internal and external stakeholders were surveyed by means of questionnaires to gauge the extent to which various stakeholders were concerned about various sustainability issues. 35 valid questionnaires were collected during this period. The ESG promotion team used this as a basis to review major issues occurring in the external environment, agreed with the reasonableness of the survey results, and decided to adopt them.
Ranking	Step4 Impact	ESG Guidance Committee 7 pieces	In 2021, questionnaires were sent to members of the ESG Steering Committee to rate the impact of each issue on the Company's sustainable development. A total of 7 valid questionnaires were returned, with a 100% response rate.
	Step5 Priority	Annual Material Topic 12 items	For each identified material topic, we assess the status of the impact on stakeholders or external value chains.  The results of the "concern" and "impact" questionnaires were aggregated and multiplied to calculate the scores. The top one-third of the items were ranked in descending order, and a total of 12 items were selected as major themes.
Validation	Step6 Disclosure	GRI Topic-specif- ic and SDG Dis- closure	From the ESG questionnaire and the Materiality Matrix, we have selected 12 specific indicators to be the focus of this report and to correspond to the SDG, detailing the strategies, results and performance of the issues and identifying the boundaries.
Examina- tion	Step7 Result examination	Issuance of the Report Before 6/30	The report presents a complete picture of the company's performance and sustainability impact, and asks that the concerns of stakeholders be repeated in each relevant section. The report is submitted to the Steering Committee and the Board of Directors for review and public release, and stakeholder comments are collected for feedback in the next report.

#### Analysis of major consideration aspects



Significant consideration aspects responded to in this Report



#### **Material Topic Boundary**

For each identified material topic, we assess its impact and determine whether the topic has an impact on key stakeholders within or outside the organization.

Annual Material Topic			G	rand Pa	cific Petro	ochemic	al Value Chain	
		GRI Spe- cific	Procurement stage		Grand Pacific Petrochemi- cal		Impact on major	SDGs
		Topic	Sup- plier	Con- trac- tor	Kaoh- siung Fac- tory	Tai- pei Of- fice	stakeholders	
Energy sav-	Energy	302			•	•	Government	7 ATTOMATICANO
ing and emis- sion reducing	Emissions	305	•		•	•	Government, society and investors	6 CLIAN METER AND SANTATION
Green pro- duction	Water and Efflu- ents	303			•	•	Government, media, society	<b>A</b>
duction	Waste	306	•		•	•	Media, society	13 CLIMATE
Sustainable environmen- tal protection	Environmental Compliance	307	•	•	•	•	Government, media, society, investors	12 STATES
Ethical man-	Economic Performance	201			•	•	Investors, employ- ees	
agement	Anti-corruption	205	•	•	•	•	Customers, investors, employees	
	Employment	401	•	•	•	•	Employee	8 OCCUPATION AND
Equal right of labors	Labor/manage- ment Relations	402	•	•	•	•	Employee	<b>M</b>
	Child labor	408	•	•	•	•	Investors, employ- ees	
Safe manu- facturing	Occupational Health and Safety	403	•	•	•	•	Government, employees	
Custom- er-oriented	Customer Health and Safety	416			•	•	Government, customers	12 ESPONELY CONCEPTION AND PROPERTY OF THE PRO

Diagram	Illustration
NA	Not applicable
•	The following is fully disclosed in the Report
	Information unavailable



Step 1 Prioritize the SDGs



Measurement and Performance



Step 3 Reporting, Integration and Action

#### Grand Pacific's Material Topic and the Response to United Nation Sustainable Development Goals

In 2015, the United Nations announced the SDGs, which have become the common language of international sustainable development. SDGs are not only a global trend, but also an important business opportunity for companies in the future. The Company identifies the most important contributions to the SDGs based on the GRI criteria for evaluating significant themes, in terms of risks to people and the environment and the provision of effective products, services or investments, to identify the sustainability objectives linked to the SDGs.

Grand Pacific strengthens its sustainability strategy to promote economic growth, social equality and progress, and environmental protection in a holistic manner, thereby demonstrating the company's long-term value. Starting in 2022, Grand Pacific defines and prioritizes the Sustainable Development Goals (SDGs), and we will transform our sustainability performance from echoing the SDGs to realistic action plans through the product lifecycle and value chain stages. By integrating these goals into our daily activities, we will continue to review and revise the priorities of our sustainability goals to win the recognition of our investors and stakeholders and to create sustainable value. Topics and sustainability practices and goals are disclosed in each chapter.

Topics of the Com- pany	Response to SDGs Item	United Nation SDGs Notes	Grand Pacific Petrochemical Sus- tainable Development Practices and Targets
Energy	7 ACCREGABLE AND GLANCESCOPE	Ensure affordable, stable and sustainable modern energy for all people. 7.3_Double the rate of improvement in global energy efficiency by 2030.	Continuously promote ISO 50001 energy management system to produce products in a more energy-efficient way and reduce energy-intensity rate. [Target] Average annual energy saving percentage of 1% or more.
saving and emission reducing	13 SAME	Take emergency measures to address climate change and impacts.  13.2_Integrate climate change measures into policies, strategies and plans.	Continue to implement greenhouse gas management and reduction, in accordance with the national greenhouse gas reduction policy. [Goal] Achieve the national policy of net-zero greenhouse gas emissions by 2050.
Green pro- duction	6 COLLANDORDO	Ensure that all people have access to water resources and sanitation facilities with sustainable management. 6.3_Improve water quality through various means and significantly increase global waste recycling and safe reuse by 2030.	We are actively promoting water conservation measures by increasing the process wastewater recovery rate and production capacity deployment, and regularly discussing water conservation and wastewater reduction targets at ISO14001 management review meetings to achieve continuous improvement goals.
Sustainable environ- mental protection	12 REPORTED SOCIORISTICS CONTROL CONTR	Ensure the implementation of sustainable consumption and production models 12.5_ Reduce waste generation significantly through prevention, reduction, recycling and reuse by 2030.	We managed waste reduction and resource recycling to ensure environmental sustainability through the ISO 14001 environmental management system.
Ethical manage- ment	8 DELENT MINE AND CONTROL CHEMPTON	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs. 8.2_Increase the productivity of the economy through diversification, technological upgrading and innovation. We created peaceful, inclusive societies, promoted sustainable development, provided access to justice for all, and built effective, accountable, and inclusive institutions at all levels.	We continue to increase our revenue and enhance our economy's productivity through proprietary r&d and innovation.  Exercise sound corporate governance and risk management mechanism
Equal right of labors	8 SELECTION CONTROL	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs. 8.7_ Eradicate forced labor, modern slavery and human trafficking, prohibit and eliminate the worst forms of child labor, and end all forms of child labor by 2025. 8.8 Protect labor rights and promote a safe and secure work environment for all workers, including immigrant workers, especially female immigrants and those without stable employment	Through the ISO 45001 occupational safety and health management system and the ILO requirements, we are able to control emerging issues such as psychosocial hazards in the workplace and forced labor, and promote collective bargaining to protect labor rights.  We promote inclusive and sustainable economic growth, full and productive employment, such as employee care and the prohibition of child labor. Each production site is committed to not taking on child labor.

Topics of the Com- pany	Response to SDGs Item	United Nation SDGs Notes	Grand Pacific Petrochemical Sus- tainable Development Practices and Targets
Safe manu- facturing	8 DELETE MINISTER AND COMMUNIC CHAPTER	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs. 8.8_Protect labor rights and create a safe and secure working environment for all workers.	We formulated the "Safety and Health Policy" through the ISO 45001 Occupational Safety and Health Management System, in which we disclose our core values as people-oriented, and we pursue the goal of zero disasters and zero injuries through the principles of "technology", "safety and health culture", "responsibility" and "communication".
Custom- er-oriented	12 REPORTED TO THE PROPERTY OF	Ensure the implementation of sustainable consumption and production models.  12.6_ Encourage companies to adopt sustainable practices (publish sustainability reports), especially for large and multinational companies.	Based on the product lifecycle concept, we ensure the transparency of product information through REACH inventory and SDS to ensure user safety, and disclose sustainability indicators and reports to all customers to gain trust. [Target]  Our products comply with the requirements of REACH regulation in terms of SVHC information transmission  Our products have a 100% SVHC inventory achievement rate.

### **Operational Review**

We will continue to develop new products, new customers, and adjust our production and sales mix to meet the needs of our customers in both sides of the Taiwan Strait and in the three regions to enhance the added value of our products.

In 2021, no funds were loaned to others and no derivatives were traded.

29,417 Unit: NT\$1,000

Research and development expenses for the most recent year and up to the publication date of the annual report



#### **Operational Review**

#### **Company History and Financial Performance**

Company Profile

Date of Incorporation: September

25, 1973

Address of our Headquarter: No. 4,

Xinggong Rd., Dashe Dist., Kaohsi-

ung City

Tel.: (07) 351-3911

Taipei Office Address: 1F., No. 10,

Sec. 4, Nanjing E. Rd., Songshan Dist.,

Taipei City

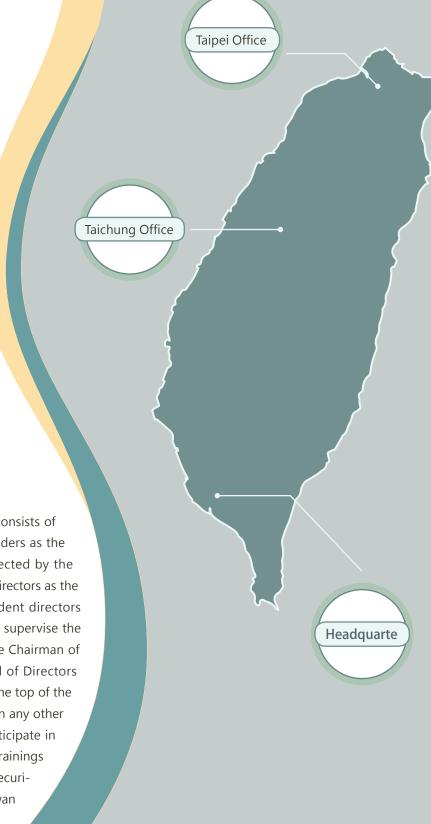
Taichung Office Address: 10F.-3, No. 1055,

Guanqian Rd., West Dist., Taichung City

Tel.: (02) 8770-4567

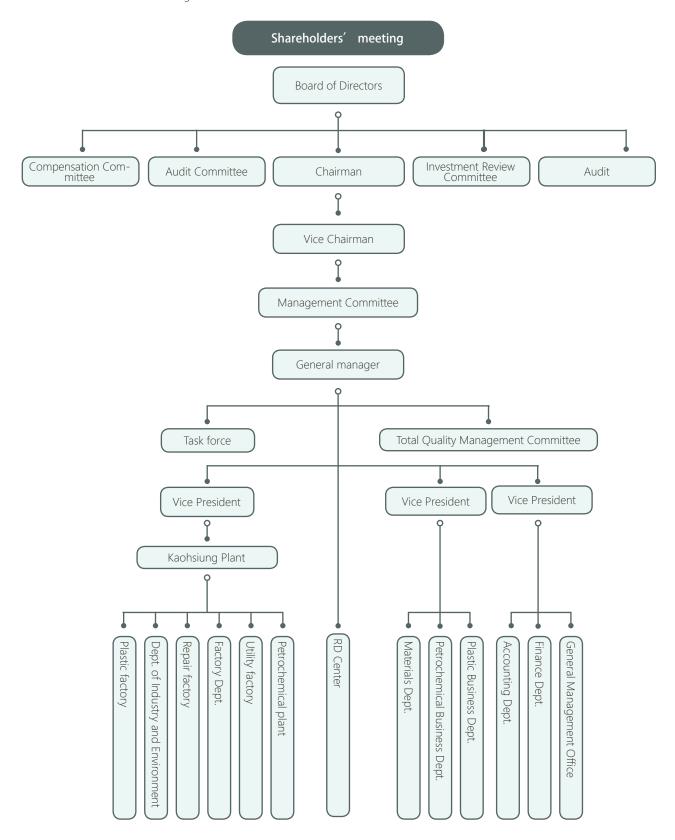
Total Employees: 376 persons

The Company's governance structure consists of a shareholders' meeting with all shareholders as the highest governing body. The directors elected by the shareholders shall constitute the Board of Directors as the executive body of the Company. Independent directors are elected to form an Audit Committee to supervise the execution of the Company's business. The Chairman of the Board is the chairperson of the Board of Directors and represents the Company externally as the top of the Company and does not work concurrently in any other administrative positions. Our directors participate in relevant corporate governance education trainings from time to time, which are held by the Securities and Futures Institute and the TCGA Taiwan Corporate Governance Association.



The corporate governance structure of the Company is as follows.

Grand Pacific Petrochemical Organizational Chart



#### **Company History**

1973	Grand Pacific was first established as Da Dechang Petrochemical Co., Ltd.
1974	The Styrene Plant I was officially completed, which was the first company in Taiwan to pro-
	duce styrene monomer.
1981	The Styrene Plant II was completed.
1984	Dadechang Petrochemical Co., Ltd. was reorganized and renamed as Grand Pacific Petro- chemical Co., Ltd.
	Completed the first ABS/SAN plant, which is the first step towards diversified products and
	vertical integration.
1987	ABS/SAN Plant was expanded to increase annual production capacity.
1988	Grand Pacific Petrochemical Corporation was officially listed.
1990	HIPS manufacturing company GPPC DEVELOPMENT CORP. was being merged to Grand Pacif-
	ic.
1991	HIPS/GPPS manufacturing company FORMOSA VIVATEX CO., LTD. was merged to Grand Pa-
	cific.
	Established Grand Pacific (Thailand) and acquired a local ABS plant in Thailand.
1992	ABS/SAN production capacity was expanded.
	Established Key Crown Technology in Malaysia to engage in the plastic dyeing and process-
	ing industry.
1994	ABS/SAN production capacity was expanded.
	Modified the second SM plant process.
1995	Acquired the hydrogen business of Dedechang Gas Co.
1996	Established Zhenjiang Guoheng Company in Jiangsu Province.
	Expanded ABS annual production capacity at Grand Pacific (Thailand).
1997	Received IS09002 and IS014001 from the Bureau of Standards, Metrology and Inspection,
	Ministry of Economic Affairs.
	Actively diversified our investments outside of our business.
1999	SM-3 Plant was built.
2000	Extended HIPS annual production capacity of Formosa Vivatex Co., Ltd.
	Expanded SAN/ABS annual production capacity of Zhenjiang Guoheng Company.
2001	Received ISO 9001 2000 certification from the Bureau of Standards, Metrology and Inspec-
	tion, Ministry of Economic Affairs.
2002	Expanded SAN/ABS annual production capacity in Zhenjiang Guoheng Company.
2003	Obtained Sony "Green Partner" certification and SGS OHSAS 18001 accreditation registration.
2004	Officially dismantled the first styrene plant and held a grand ceremony to mark the end of the
	first Styrene Plant in Taiwan.
2005	Obtained ASUS "Green Environment Management System" certification.

2006	0	Formosa Vivatex Co., Ltd. converted the original GPS production line was converted to SAN; Grand Pacific expanded its annual ABS production capacity and added ABS R&D grades for customer needs.
2007		Promoted the integration of ISO system, ISO-9001:2000 and ISO-14001:2004 to SGS Taiwan Limited for certification. Expanded SAN/ABS annual production capacity of Zhenjiang Guoheng Company. Began construction of a steam and power co-generation plant.
2008	$\perp$	Completed the integration into the German SAP information system operation.
	Ĭ	In April, the Company entered into a merger agreement with CHIMEI Corporation to merge
		its subsidiary, Zhenjiang Company, and the Company held 30.4% shareholding of the sur-
		viving company after the merger.
		The Specialty Chemicals Division was established in August.
2009	\(\frac{1}{2}\)	Grand Pacific (Thailand) was dissolved in August by the Ministry of Commerce of Thailand.
		Trial production was successfully conducted for the steam production facility of the cogen-
		eration plant in October.
2010	O	Completed the construction of a steam and power co-generation plant, which was officially
		put into operation in May.
		Zhenjiang Guoheng Company and Zhenjiang CHIMEI Company were officially merged on
		July 1.
		SM-3 Plant completed debottlenecking expansion project in December and increased an-
2011		nual SM production.
2011		Strengthened corporate governance by adding more than two independent directors.  Establishment of the Remuneration Committee.
2012	\( \rightarrow \)	Established Nylon Business Office in January and began production in July.
		Completed ABS capacity expansion and increased annual production.
		Our subsidiaries, Guoheng Chemical and Vivatex Chemical, were merged with Guoheng
2012		Chemical as the surviving company.
2013	Y	An Audit Committee was established to replace the functions of Supervisors in order to
2014	$\perp$	strengthen corporate governance.  Our nylon 66 products have passed UL's high temperature RTI certification.
2014	X	The second production line of Nylon 66 started production smoothly, making the Compa-
2010	Y	ny entering the engineering plastics and industrial silk industry.
2018	$\bigcirc$	Established Zhangzhou CHIMEI Chemical Co., Ltd. as a joint venture with CHIMEI Corpora-
	Ĭ	tion whose main business is the production of ABS products, in which the Company held
		30.4% shareholding.
2020	$\Diamond$	Established Quanzhou Guoheng Chemical Co., Ltd. as a wholly-owned subsidiary in Fujian
		Province, mainly engaged in the manufacture of propylene, polypropylene and hydrogen
		products through propane dehydrogenation.

#### Major Brands/Products/Service Market

Grand Pacific has sales offices in Taipei, Taichung and Kaohsiung. Our plant is located in the Dashe Shih Industrial Park in the Dashe District of Kaohsiung City. The environmental impact assessment has been considered during the construction of the plant, so the operation has not caused any environmental impact to the area. 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. We will continue to develop new products, new customers, and adjust our production and sales mix to meet the needs of our customers in both sides of the Taiwan Strait and in the three regions to enhance the added value of our products. With styrene as the Company's core niche, we extend our reach upward to nylon 66, a crystalline engineering plastic, and downward from the fundamentals to optimize the quality of ABS as our annual working strategies.



The following tasks will be carried out on an ongoing basis:

- 1. We will actively optimize the attachment of PBL large particle latex, and further improve ABS dyeing, actively develop high temperature nylon engineering plastics, and working towards energy saving and waste reduction as the three major indicators.
- 2. Since the PBL rubber attached to the large particle latex, we are able to further improve ABS dyeing quality, the plating grade, tube grade, flame retardant grade and automotive battery materials and high impact high rigidity ABS products.
- 3. We will expand the market of nylon industrial yarn and develop the derivative high temperature nylon, develop engineering plastics such as super nylon, heat resistant super nylon, soft, water transparent grade and PPO doped compound, in order to create high performance, high quality and high price nylon 66 plastic products.
- 4. In line with our long-term diversification strategy, we will invest in a new propane dehydrogenation and polypropylene project in Quanzhou, China and expand our reach from SM (styrene) series to propylene series.

To enhance the value of our customers and meet their needs as well as our competitive role in the international market, our technical service team selects experienced and talented engineers to provide technical and product application services to our customers at all times. In the future, Grand Pacific will continue to seek other better opportunities to make our competitiveness strong and firm.

Grand Pacific's products comply with the government regulations of various products and services, and comply with the EU RoHS/REACH regulations, without any hazardous substances. We provide customers with stable product quality through strict quality management. In order to ensure the quality of customer service and enhance customer satisfaction, we have set up a customer service hotline and a communication website, and regularly take the initiative to conduct customer service satisfaction surveys every year to strengthen the cooperative relationship with customers.



The mutually beneficial relationship with our customers is the cornerstone of our corporate sustainable development.

#### Joined Association and Collaboration

- 1. Member of Patrochemical Industry Association of Taiwan
- 2. Member of Dashe Industrial Park Business Families Association
- 3. Member of Chinese Society for Quality
- 4. Member of Industrial Safety and Health Association of the R.O.C (Taiwan)
- 5. Member of The Manufactures United General Association of Renda Industrial Park Of R.O.C
- 6. Managing Director of Taiwan Responsible Care Association
- 7. Member of Taiwan Plastics Industry Association
- 8. Member of Taiwan Safety Education Research Association
- 9. Member of Taiwan Institute of Chemical Engineers
- 10. Member of Chinese International Economic **Cooperation Association**
- 11. Member of International Council of Chemical Associations
- 12. Member of the Institute of Internal Auditors
- 13. Member of Chinese Industrial Machinery Association

The company simply participates in the above association without additional group agreement, and there are no external public affairs initiatives.

#### **Financial Performance**

Topics of the Company	Material Topic	Response to SDGs	United Nation SDGs Notes	Grand Pacific Petrochemical Sustainable Development Practices and Targets
Ethical manage-	Economic perfor- mance	8 ottava mon con	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs. 8.2_Increase the productivity of the economy through diversification, technological upgrading and innovation.	We continue to increase our revenue and enhance our economy's productivity through proprietary r&d and innovation. We aim to drive significant overall revenue growth and continue to improve existing profit margins.
ment	Anti-cor- ruption	m	We created peaceful, inclusive societies, promoted sustainable development, provided access to justice for all, and built effective, accountable, and inclusive institutions at all levels.	Exercise sound corporate governance and risk management mechanism

Grand Pacific Group's consolidated revenue for fiscal 2021 was NT\$22.55 billion, an increase of NT\$5.97 billion from fiscal 2020, and consolidated net income before income taxes was NT\$7.36 billion, an increase of NT\$2.25 billion from fiscal 2020. The consolidated net income after tax was NT\$6,080 million, and consolidated net income after tax attributable to the Company's owners was NT\$5,880 million.

#### **Consolidated Statements of Comprehensive Income**

Unit: NT\$1,000

ltem	2021	2020	Increase or decrease
Operating revenue	\$22,547,353	\$16,575,784	\$5,971,569
Operating costs	(17,904,667)	(13,468,788)	(4,435,879)
Operating gross profit	4,642,676	3,106,996	1,535,680
Operating gain or loss	2,912,804	1,756,878	1,155,926
Non-operating income and expenses	4,444,495	3,352,473	1,092,022
Income before tax	7,357,299	5,109,351	2,247,948
Current net income from continuing operations	6,076,588	4,320,555	1,756,033
Current income (loss)	6,076,588	4,320,555	1,756,033
Other current net comprehensive income after tax	2,179,533	(392,873)	2,572,406
Total comprehensive income	\$8,256,121	\$3,927,682	\$4,328,439
Net profit attributable to owners of the parent company Net profit attributable to non-controlling equity	\$5,881,161 195,427 \$6,076,588	\$4,108,803 211,752 \$4,320,555	\$1,772,358 (16,325) \$1,756,033
Total comprehensive income attributable to owners of the parent company Total comprehensive income attributable to non-controlling equity	\$7,377,146 878,975	\$3,826,623 101,059	\$3,550,523 777,916
Earnings per share	<u>\$8,256,121</u> \$6.47	<u>\$3,927,682</u> \$4.52	<u>\$4,328,439</u> \$1.95

#### Parent Company Only Statements of Comprehensive Income

Unit: NT\$1,000

	2021	2020	Increase or decrease	Increasing or decreasing percentage %
Operating revenue	\$18,163,272	\$12,524,992	\$5,638,280	45.02
Operating costs	(15,216,125)	(10,960,879)	(4,255,246)	38.82
Operating gross profit	2,947,147	1,564,113	1,383,034	88.42
Operating gain or loss	2,212,016	1,065,895	1,146,121	107.53
Non-operating income and expenses	4,304,458	3,351,881	952,577	28.42
Income before tax	6,516,474	4,417,776	2,098,698	47.51
Current net income from continuing operations	5,881,161	4,108,803	1,772,358	43.14
Current income (loss)	5,881,161	4,108,803	1,772,358	43.14
Other current net comprehensive income after tax	1,495,985	(282,180)	1,778,165	(630.15)
Total comprehensive income	\$7,377,146	\$3,826,623	\$3,550,523	92.78
Net income from reinvestment	\$4,271,075	\$3,338,905	\$932,170	27.92
Earnings per share	\$6.47	\$4.52	\$1.95	43.14

#### Ratio of each product

#### (1) Grand Pacific Group

Unit: NT\$1,000; %

Main products	2021 Business Revenue	Proportion of operating revenue
Petrochemical sales revenue (SM)	8,032,324	35.62%
Plastic sales revenue (ABS, HIPS)	9,113,266	40.42%
Advertising, video conferencing and channel operating revenues	1,775,010	7.87%
Package sales revenue	1,523,766	6.76%
Nylon sales revenue	1,341,712	5.95%
Others (Note)	761,275	3.38%
Total	22,547,353	100.00%

Note: Other sales revenues, including revenues from steam and power, copyrights and retransmission, are summarized as they account for less than 5% of sales.

#### (2) The Company (Parent Only Financial Statement)

Unit: NT\$1,000; %

Main products	2021 Business Revenue	Proportion of operating revenue
SM	9,579,384	52.74%
ABS	6,733,748	37.07%
H2	141,869	0.78%
Steam and power	366,559	2.02%
Nylon	1,341,712	7.39%
Total	18,163,272	100.00%

#### Main sales areas:

Main products	Major markets	Distribution method
Main products	Major markets	Distribution method
Styrene Monomer (SM)	Domestic	Direct marketing
Acrylonitrile-butadiene-styrene copolymer resin (ABS)	Taiwan (domestic), Mainland China, Hong Kong, USA, South Africa, Southeast Asia, etc.	Direct marketing, distributing
Hydrogen (H2)	Domestic	Direct marketing, distributing
Steam and power	Domestic	Direct marketing
Nylon 66	Taiwan (domestic), Mainland China, Hong Kong, USA, South Africa, Southeast Asia, India, etc.	Direct marketing

esearch and development expenses for the most recent year and up to the publication date of the annual report

2021 of **R&D** expenses accounted percentage of revenue % 0.16%

Unit: NT\$1,000; %

2021 of R&D performance

Technology or products developed in the most recent year and up to the publication date of the annual report.

- 1. Trial production of Nylon 66 industrial wire composite and heat resistant super tough nylon 66.
- 2. Completed trial production and material testing for the development of large particle emulsion with PBL technology.
- 3. 0710PBL small size latex is under development.
- 4. Completed trial production and material testing for the development of battery cells for uninterruptible power supply system.
- 5. Customer material testing for optimized charge tube and electroplating grade ABS.
- 6. Developed client trial certification for Nylon 66 plus glass fiber composite.
- 7. Trial production for the development of heat resistant super tough nylon 66 composite.
- 8. PCR(Post-Consumer Recycled Plastic)/ABS is under development.

#### **Corporate Governance**

The management team of Grand Pacific Petrochemical Company has been implementing the transparency of operation and financial information for a long time, with the goal of good corporate governance with ethical corporate standards and commitments, and the business philosophy of "modesty and harmony, integrity and trust": modesty is the key; honesty is the inside to create business opportunities; give back to the public, continue to develop the manufacturing technology of our products; be absolutely stringent on quality; provide timely and thoughtful after-sales service; be in harmony with colleagues; trust and believe in the Company; and full of vigorous ambition in any position. Grand Pacific has been striving to win the confidence of investors with its steady pace and active vigor, and to build up the image of the company with the spirit of integrity and public welfare. We abide by the laws and regulations, and attach importance to the openness and transparency of information in order to gain the recognition of relevant stakeholders and the public.

The names/positions of the directors and key managerial officers of the Company are listed below.

Title	Name	Major academic background and work experience
Chairman	Jing Guan Investment Co., Ltd. Representative: Yang, Pin-Zheng	M.S. In Chemical Engineering, National Cheng Kung University
Vice Chairman	Zhong Guan Investment Co., Ltd. Representative: Qiu, De-Xin	M.S. in Accounting, Case Western Reserve University
Director	Hong Wen Investment Co., Ltd. Representative: Tian, Zhen-Qing	Department of Law, Fu Jen Catholic University
Director	Hong Wen Investment Co., Ltd. Representative: Lin, Jin-Zhu	Department of Chemical Engineering, Feng Chia University
Independent Director	Chen, Wen-Zong	MBA, Rider University, USA M.L., Graduate School of Law, Soochow University
Independent Director	Chen, Mu-Xian	M.A., California State University
Independent Director	Xie, Zhi-Hong	J.D., National Chengchi University M.L., Waseda University

#### Major managerial officers

Title	Name	Major academic background and work experience
Chairman	Yang, Pin-Zheng	M.S. In Chemical Engineering, National Cheng Kung University
General Manager	Zeng, Jia-Xiong	M.S. in Chemical Engineering, National Taiwan University
Deputy General Manager	Zhou, Zhen-Ming	M.S. in Chemical Engineering, National Taiwan University
Deputy General Manager	Chen, Jing-Fu	B.A., Soochow University
Factory Manager	Lin, Wen-Hui	M.S. in Safety, Health and Environmental Engineering, National Kaohsiung First University of Science and Technology
Assistant Manager	Xue, Hong-Min	M.S. in Environmental Engineering, National Cheng Kung University
Assistant Manager	Zhang, Cong-Ming	M.S. In Chemical Engineering, National Cheng Kung University
Manager	Wu, Zu-Rong	Graduated from Secretarial Science, Tamsui Institute of Business Administration
Manager	Lin, Quan-Yi	B.S. in Systems and Naval Mechatronic Engineering, National Cheng Kung University
Director	Chen, Ling-Zhu	B.S. in Accounting, Department of Business, College of Liberal arts and Science, Providence University
Director	Chen, Hui-Ping	B.S. in Accounting, College of Liberal arts and Science, Providence University
Director	Shen, Mei-You	MBA, GOLDEY-BEACOMCOLLEGE, USA
Director	Wang, Jun-Jie	B.S. in Chemical Engineering, College of Medicine and Engineering, Chang Gung University
Director	Su, Wei-Da	M.S. in Fiber and Polymer, National Taiwan University of Science and Technology
Director	Huang, Se-Qin	B.S. in Banking, National Chengchi University
Director	Luo, Xiu-Can	B.S. in Chemical Engineering, Tamkang University
Acting Head	Yeh, Chong-Min	Department of Chemical Engineering, Lunghwa University of Science and Technology
Acting Director	Huang, Jin-Ji	MBA, National Kaohsiung First University of Science and Technology

In addition, to implement the equality of remuneration, the Company has established the Remuneration Committee Chapter and elected the Remuneration Committee Members to perform their duties and responsibilities. The members of the Committee shall faithfully exercise due care of a good administrator and be accountable to the Board of Directors, and submit their proposals to the Board of Directors for discussion.

- (1) Establish and regularly reviewed policies, systems, standards and structures for performance evaluation and compensation of directors, supervisors and managers.
- (2) Regularly evaluate and establish remuneration of directors, supervisors and managerial officers.
- (3) Other matters as authorized by the Board of Directors.

In accordance with the Company's Articles of Incorporation, the remuneration of directors and supervisors shall be based on the Company's annual net income after tax and distributable earnings and shall be prepared annually by the Board of Directors and submitted to the shareholders' meeting for resolution. For details of the remuneration ratio of directors and supervisors, please refer to the section on remuneration of directors and supervisors in the description of dividend policy in the annual report.



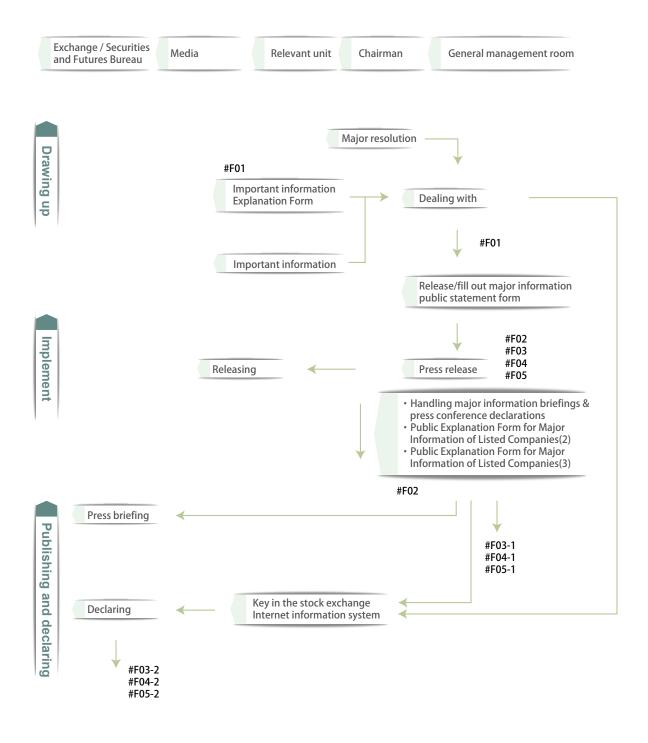
# Internal Audit and Internal Control System

In order to implement a quality corporate culture and maintain the company's image and corporate ethics, the Company has established a code of conduct for all employees, directors and managers in accordance with the Company Act, the Securities and Exchange Act and the Corporate Governance Best Practice Principles for TWSE/ TPEx Listed Companies and promote it for compliance. In the conduct of business and procedural standards, we avoid using our position to obtain improper benefits for ourselves and our relatives, and we strictly prohibit the disclosure of customer privacy. In addition, there are procedures for reporting, disciplinary actions and complaints. The "corporate mission, vision, and values" and "core functions" and "management functions" are regularly reviewed and required to be followed by the relevant personnel and implemented in the annual performance appraisal form for employees, and if there is any violation of the relevant regulations, the relevant disposition will be made according to the "Reward and Punishment Practice"

In accordance with the "Regulations Governing Establishment of Internal Control Systems by Public Companies" and related laws and regulations, issued by the Financial Supervisory Commission, Executive Yuan, Grand Pacific Petrochemical has established an internal control system for the Company, which has been approved by the Board of Directors for implementation in all operating standards to promote sound operation of the Company and to ensure that the Company's policies and regulations are effectively implemented to achieve the three main objectives of operational effectiveness and efficiency, reliability of financial reporting, and compliance with laws and regulations. The scope of this internal control system covers all daily operational activities such as the eight transaction cycles, information management and other management controls, and is integrated with international standards such as ISO 9001, ISO 14001 and ISO 45001 in the daily operational processes.

Grand Pacific Petrochemical Company has set up an internal audit unit, which is directly under the Board of Directors, to assist the Board of Directors and the management in checking and reviewing the internal systems and processes, and providing timely suggestions for improvement to ensure the continuous and effective implementation of the Company' s internal control system.





# Overview on Services for Investors

Information disclosure is one of the most important aspects of our investor services. Over the years, we have invested many resources in meeting the principles of completeness, accuracy, timeliness and reliability of information disclosure. In addition to the immediate posting of announcements and material information on the Market Observation Post System, all financial reports, annual reports, dividends, material information and other information can be accessed on the Grand Pacific's website and the Market Observation Post System.



# Operational Risk Management and Future

With reference to the results of the aforementioned stakeholder negotiations, most of the stakeholders are concerned about the Company's business performance/market image and even corporate governance. In this regard, the Company's management will consider more closely the impact of market risk, credit risk, important domestic and international policy and legal changes, and technological and industrial changes on the Company's financial operations and responses. In response to market risks, we collect information on changes in exchange rates, interest rates and inflation, establish forward contracts to hedge exchange rate risks, maintain close contact with banks to obtain favorable borrowing rates and reduce capital costs through multiple funding sources. The Company's policies on high-risk, high-leverage investments, lending of funds to others, endorsement and guarantee, and derivative transactions are all conservative and implemented in accordance with the Company's regulations. In 2021, no funds were loaned to others and no derivatives were traded.

In the future, we will focus on the long-term prospect and sustainable development of financial performance. In terms of credit risk, we need to go through credit verification procedures before entering into transactions with customers, set up information system control, continuously evaluate the collection status of accounts receivable, and set up an allowance for doubtful accounts based on the collection status. We keep a close eye on domestic and international political and economic developments, legal changes and industry changes, and evaluate and discuss them in our management meetings as appropriate.

# **Future prospect**

# 1. Management Approach



Make Grand Pacific stronger and implement sustainable development.



Strengthen crisis awareness and secure the survival niche.



Conduct annual survey and renovation works in a proper manner and stabilize the profitability from our marketing foundation.



Be able to stabilize and extend our existing competitive position and pursue continuous growth of the company.



Enhance the added value of individuals and teams.

### 2. Mid-term and Long-term Business Development Blueprint

Grand Pacific continue to strengthen the competitiveness of our core business, such as focusing on our main base of SM, ABS, hydrogen and nylon 66, optimizing cost, efficiency and quality, and trying to develop sales channels for niche products and create profits by constantly pursuing steady growth in quality and quantity and grasping the opportunities of high boom spreads. In addition, we are in the process of starting up and designing the future project of our carbon III industry chain, including 660,000 tons/year propane dehydrogenation and 450,000 tons/year polypropylene, in Quanzhou City, Fujian Province, and will reach full capacity production and commercialization by the end of 2023 to early 2024. In addition, regarding the R&D center under development, we have been actively developing high value diversified products such as high functional nylon fibers and engineering plastics in advance, so as to lay the foundation for the company to move forward to a new potential territory.

# **Environment Sustainability**

follow through the environmental policy of "resource efficiency, pollution prevention and continuous improvement"

No significant violations in 2021 Target: Average annual energy saving percentage of 1% or more.

# **Environmental Management Approach Disclosure**

Topics of the Company	Ma- terial Topic	Response to SDGs	United Nation SDGs Notes and Indicators	Grand Pacific Petrochemical Sus- tainable Development Practices and Targets
Energy	Energy	7 AFFECHAL INC	Ensure affordable, stable and sustainable modern energy for all people. 7.3_Double the rate of improvement in global energy efficiency by 2030.	We constantly promote ISO 50001 energy management system to produce products in a more energy-efficient way and reduce energy-intensity rate. Target: Average annual energy saving percentage of 1% or more.
saving and emission reducing	Emis- sion	13 COMMENT	Take emergency measures to address climate change and impacts.  13.2_Integrate climate change measures into policies, strategies and plans.	We will continue to implement green- house gas management and reduc- tion, in line with the national green- house gas reduction policy. Our long- term reduction target is to achieve net zero GHG emissions by 2050 in line with government policy.

# Build environmental management system and obtain certification



# We fully made use of resources, prevented pollution, and made continuous improvements.

In the spirit of sustainable corporate development, Grand Pacific has long been committed to improving environmental pollution problems such as waste water, air, noise, solid waste and soil and groundwater to follow through the environmental policy of "resource efficiency, pollution prevention and continue improvement". In addition to the continuous construction of environmental protection facilities, we have become lively promoting the carbon dioxide inventory in recent years, and also trying to implement the industrial waste reduction policy. In addition, we have implemented the ISO-14064-1 greenhouse gas inventory program. In 2011, the new steam and power co-generation plant has adopted Best Available Technology (BACT) and equipment to reduce the pollution caused by the production and transmission and storage process, and actively upgrade the equipment operation experience and skills to achieve the goal of environmental protection.



In 1997, Grand Pacific Petrochemical Company' s Kaohsiung plant was awarded ISO 14001 certification. In addition to the continuous operation according to the P.D.C.A. principle, the ISO system was integrated in 2007 and has been implemented since then. In addition to the ISO 14001 environmental management system certification, Grand Pacific Petrochemical Company's Kaohsiung plant has also obtained ISO 9000, ISO 45001, SONY GP (Sony Green Partner) and ASUS Green Environmental Management System certifications. We will continue to implement the environmental management mechanism, aiming for resource utilization, pollution prevention and continuous improvement. In the long run, Grand Pacific will cooperate with the government's policy on high-value chemical industry to produce environmentally friendly, low-pollution, and high-value-added petrochemical products.

# Exercise environmental management training

Environmental protection work is complex and diversified. It involves many different levels of interaction. Therefore, for field and environmental protection professionals, the only way to boost their work performance is to receive continuous professional development courses to acquire new knowledge about environmental protection. In recent years, Grand Pacific Petrochemical has continued to promote training courses related to environmental protection. No significant violations in 2021.

# **Energy-saving Solutions and Greenhouse Gas Management**

For plants with high energy consumption, we will continue to compile energy performance work plans through energy audit procedures, aim for our energy-saving targets on the existing energy baseline, and regularly review operational performance. We have always been focusing on climate change and energy efficiency improvement.

Energy utilization status of the Kaohsiung Plant in 2021 is shown as follows

#### 2021

Electricity generated by steam and power cogeneration 143,515.600 within the plant (kwh) 1. Electricity generated by steam and electricity cogenera- 52,700.000 tion used in the plant (kwh)\* 27,974.400 2. Purchased power consumption (thousand kWh)\* Total energy consumption 1,2 (MJ) 290,427,840.000 328 Number of employees in Kaohsiung Factory 885,450.732 Indirect energy intensity per capita (MJ/employee)

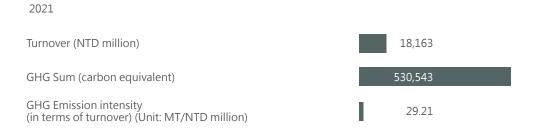
- 1. The survey was conducted on Grand Pacific Kaohsiung factory
- $2.\ 1\ degree=1\ kilowatt-hour\ (KW/H)\ 1W=1\ joule/second\ (J/S)\ 1=1000W*3600S/H=3,600,000\ joules=3.6\ million\ joules=1.$
- 3. 1 kilodegree = 0.0036 million joules

#### Total greenhouse gas emissions



<sup>\*</sup> Note

# Greenhouse gas emission intensity (in terms of turnover)



<sup>\*</sup> The survey was conducted on Grand Pacific Kaohsiung factory

To effectively control greenhouse gas emissions, Kaohsiung Plant replaced the machine host of air compressors with poor efficiency, replaced the old chillers with new ones, partially replaced old light bulbs into high-efficiency light bulbs and improved the process to stop the circulation pumps with the estimation that 1,700 kWh of electricity can be saved. From 2015 to 2021, we saved 1,182,280 kWh with an average annual electricity saving rate of 1.3%.

# Energy saving performance in 2021



# 2021 Energy Saving Program

2021	Implemented energy saving measures	Implemen- tation peri- od (month)	Annual en- ergy saving (KWH)
Full factory	Phase I air-conditioning replacement for Grand Pacific Petro- chemical Kaohsiung Plant (6 units)	07-12	7,352
	Replacement of the air trap in the Steam and Power Plant  with a non-consumptive six trap	01-04	51,662
Steam and Power Plant	with a non-consumptive air trap  3. Replacement of 50% finned tube in TT-608 steam-air heater to bare tube	01-03	112,829
Power Plant)	Replacement of the old air compressor GB-620B for a new one	12-12	15,120
Rlastic Factory	<ul> <li>Replacement of SAN air trap with non-consumptive air trap</li> <li>Installation of K-301K suspended centrifugal chiller in SAN kit to replace K-301F reciprocating chiller</li> </ul>	01-04 01-07	39,725 185,798
Petrochemical Plant	7. Complete replacement of A/B Fan Heat Sink in GT-303 cooling tower	01-03	10,039
		Total	422,525

# **Environment Management and Environmental Protection Activities**

Topics of the Com- pany	Material Topic	Response to SDGs	United Nation SDGs Notes and Indicators	Grand Pacific Petrochemical Sustainable Development Practices and Targets
Green pro- duction	<ul><li>Water</li><li>Waste water and waste products</li></ul>	6 COLAN NOTE AND	Ensure that all people have access to water resources and sanitation facilities with sustainable management. 6.3_Improve water quality through various means and significantly increase global waste recycling and safe reuse by 2030.	We are actively promoting water conservation measures by increasing the process wastewater recovery rate and production capacity deployment, and regularly discussing water conservation and wastewater reduction targets at ISO14001 management review meetings to achieve continuous improvement goals.

# **Environmental products**

When marketing ABS/SM related products, Grand Pacific Petrochemicals also evaluated the 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 regulated by customers and regulations (e.g. RoHS). The product specifications and performance and precautions for use are listed in the COA and SDS so that customers can understand the safe use of the product. In addition, SM has completed registration with the European Chemicals Agency (ECHA) to meet the requirements of REACH registration in the EU.



# **Environmental protection costs and effectiveness**

In order to reduce the environmental hazards caused by waste in the production process, Grand Pacific Petrochemicals strives to promote pollution prevention and industrial waste reduction. In addition to the establishment of the "Industrial Waste Reduction Implementation Procedures", the Company 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 offsite qualified removal and treatment vendors for cleaning. A three-part form will be created to control the waste and comply with the regulations. The following table summarizes the amount of waste to be cleaned up and the amount of waste to be disposed of by Grand Pacific Kaohsiung Plant from 2020 to 2021. .

No waste leakage in 2021.

# Outsourcing (in tons):

Year	2021	2020
Waste plastic mixture	0	3.45
Waste insulation material	6.27	0
Mixtures of waste glass, ceramic, brick, tile and clay	57.97	10.22
Organic sludge	527.16	220.64
Inorganic sludge	715.16	758.31
Incinerator fly ash	8.44	6.93
Incinerator bottom slag	80.16	66.5
Non-hazardous waste catalysts or mixtures thereof	93.41	279.3
Domestic refuse	119.67	124.65
Waste sludge	10.7	42.51
Waste sponge	3.17	0
Activated carbon	0	0
Coal-fired fly ash	25318.75	26870.4
Coal-fired bottom ash	1275.77	1478.7
Waste wood	2.73	0
Waste fiberglass	0	0

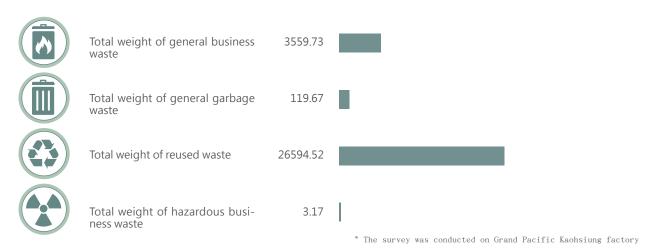
Our company conducts annual audits of waste removal and disposal companies by sending certificates.

# Self-handling (in tons):

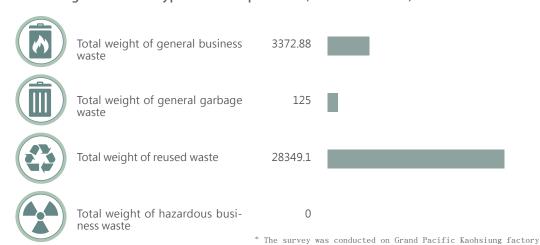
Year	2021	2020
Organic sludge	1637.79	1559.43
Waste plastic mixture	148.25	176.78
Non-hazardous organic wastes or waste solvents	271.69	248.81

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.

# 2021 Weight of various types of waste products (unit: metric tons)



# 2020 Weight of various types of waste products (unit: metric tons)



# **Air Pollution Control**

According to the characteristics of air pollution sources generated by petrochemical plants, they can be broadly classified into point source emissions and fugitive emissions. In order to maintain the safety and health of employees and residents around the plant, Grand Pacific Petrochemical 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. The other chimneys are regularly inspected to keep track of the source emissions. The condition of each discharge pipeline and the frequency of inspection at the Kaohsiung factory of Grand Pacific Petrochemical Corporation are listed below.

Area	Equipment name	Emission outlet no.	Outsourced analysis items and fre- quency	Approximate month of inspec- tion
SM2 plant, Zone 300	BA-301 Heater	P402	Particulate matter. NOx. SOx/semi-annually	Apr., Nov.
Steam and Power Team	HB-301A/B and HB- 302A/B	P701	RATA/quarterly: Switch to natural gas fuel, no testing	Jan., Apr., Jul., Oct.
SM3 field	HS-201/219 Heater	PB01	Particulate matter. Nox,x, SOx, THC / semi-annually	Apr., Nov.
Occu- pational Safety Office	Incinerator	PG01	Dioxin/biennial: Particulate matter, NOx, SOx, heavy metals, THC, hydrogen chloride, carbon monoxide/annually	Nov.
Cogene- ration	Coal-fired boilers	PF01	RATA/quarterly: Particulate matters/semi-annually Dioxin/biennial	Jan., Apr., Jul., Oct.

# Description of raw material use conditions

The amount of AN&BD&Benzene&Ethylene can be inquired from the declaration of air pollution fee with the following information:

Raw materials and energy usage in 2021

Name of raw materi- als and energy	Usage	Unit
Benzene	269,538.782	ton/year
Ethylene	98,407.723	ton/year
Acrylonitrile	19,920.200	ton/year
Butadiene	20,484.700	ton/year
Electricity consumption	171,490,000	degree
Fuel oil	631.803	kilolitre/ year
Coal	197,944	ton/year
Water	1,017,153	ton/year
Natural gas	17,361.736	M3/years

## Major product production

Product name	Production vol- ume	Unit
Ethylbenzene	369,403.4	ton/year
Styrene	341,677.345	ton/year
SAN plastic	63,605.2	ton/year
ABS plastic	95,774	ton/year
Power genera- tion	262,306,000	MWH

# Waste water pollution prevention and control measures

Waste water from petrochemical plants contains organic pollutants. Therefore, the main focus of effluent monitoring is on chemical oxygen demand (COD) and suspended solids (SS). 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. Grand Pacific Petrochemical Kaohsiung Factory is located in Dashe Industrial Park. There is a joint sewage treatment plant in the industrial area to collect the sewage of each factory for treatment. The current wastewater plant acceptance standards are COD: 400 ppm, SS: 240 ppm, PH: 5-9, and the wastewater discharge, COD discharge and SS discharge for the past three years are listed below.

Year	Waste water discharge (tons/year)	COD emissions (tons/year)	SS emissions (tons/year)
2019	1,025,931	99	43
2020	1,142,098	147	58
2021	1,044,771	99	39

<sup>\*</sup> The survey was conducted on Grand Pacific Kaohsiung factory.

# Water management measures

In view of the rapid changes in the water environment caused by climate change in recent years and the increasing frequency of alternating floods and droughts, external stakeholders are increasingly concerned about water resources issues. The Company has identified and responded to water risk factors and implemented water recycling in accordance with the water resource management policy and commitments in order to respond to the complex water resource issues early and effectively integrate the management concepts of prevention and conservation. The Company's water comes from the surface water of Gaoping River, and the water source area is not a water volume sensitive area. Relevant wastewater effluents complied with the standards for industrial parks. Total water consumption volume is shown in the table below.

Total water consumption Unit: thousand tons

# Total water consumption volume



2020 2,511 (thousand tons)





ltem	Recycled water volume (T/D)
A. Steam condensation recycle	2050
B. Vaporizer condensation recycle	1400
C. SM-3 Plant steam condensation recycle	385
D. GT-303 TO GT-302 recycle	293
E. GT-801 cooling water tower discharge to the absorption tower recycle	150
F. The recycling water from ultrapure water reclamation system was transferred to GT-601	153
G. The recycling water from old district pure water reclamation system was transferred to GT-601	4
H. GT-302 cooling water tower discharged water to the wastewater hydro extractor to clean the filter cloth	5
Total	4440



The Company recycled water volume of 1,620,600 tons/ year in 2021 (65.3% recycling rate).

65.3



It is estimated that the Company recycled water volume of 1,635,200 tons/year in 2022 (65.8% recycling rate) with an average water recovery rate (R2) of 86%.

# Soil and groundwater pollution prevention measures

In order to prevent and control soil and groundwater pollution, Grand Pacific Petrochemical 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 with environmental regulations

Topics of the Com- pany	Material Top- ic	Response to SDGs	United Nation SDGs Notes and Indicators	Grand Pacific Petrochemical Sustainable Development Practices and Targets
Sustain- able envi- ronmental protection	Legal compli- ance related to environmental protection	12 EUREPIA DESCRIPTION SEPTIMENTO	Ensure the implementation of sustainable consumption and production models 12.5_ Reduce waste generation significantly through prevention, reduction, recycling and reuse by 2030.	We managed waste reduction and resource recycling to ensure environmental sustainability through the ISO 14001 environmental management system.

Currently, there is no environmental pollution affecting the organization's earnings and competitive position. The Company is actively dealing with various environmental protection issues, and is doing its best to protect the environment by following the laws and regulations to carry out improvement work . The following table shows the overall environmental protection spending and investment by Grand Pacific in 2021.

Environmental costs - pollution prevention and reutilization fees

ltem	Monetary amount (NTD)
VOC detector maintenance and repair costs (Dept. of Industry and Environment)	84,200
Other air pollution prevention equipment maintenance and repair costs (incinerator/ABS/steam and power maintenance costs)	497,588
Maintenance and repair costs of wastewater treatment facilities (Dept. of Industry and Environment)	2,176,028
Soil and groundwater remediation costs (Dept. of Industry and Environment)	24,659,840
Planting and greening expenses (General HR)	1,320,000
Waste water separation pond submerged plastic recycling cost (Dept. of Industry and Environment)	155,000

# Environmental costs - operating costs and upstream and downstream associated costs

ltem	Monetary amount (NTD)
ISO 14001, ISO 45001 audit fee	120,900
Stationary source operation permit review and certificate fee	81,000
Toxicological and chemical operation permit review and certificate fee	0
Waste disposal plan review fee	3,000
Water pollution control measure proposal review and certificate fee	0
Tissue-type greenhouse gas inventory verification fee	230,000

# Environmental costs - monitoring environmental impact fees

ltem	Monetary amount (NTD)
Effluent and process wastewater testing fee	228500
Relative accuracy audit RATA testing fee	308000
Stationary source emission pipeline testing fee	787000
Expenses for the disposal of hazardous business waste	0
Expenses for the disposal of general business waste	10614625
Waste composition testing fee	126500
Toxic chemical operation site labeling fee	0
Equipment component testing fee	2863087
Groundwater inspection fees	148000

# Environmental costs - processing fees and taxes

ltem	Monetary amount (NTD)
Third party liability insurance for toxic chemicals	850,000

 $<sup>\</sup>ensuremath{^{*}}$  The survey was conducted on Grand Pacific Kaohsiung factory.

# **Labor Human Rights and Social Care**

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.

91.7%

Grand Pacific Petrochemical focuses on the development of its own industry. The on-site production unit places more emphasis on education and training, accumulating 5,590 hours of education and training, accounting for 91.7% of the total training hours.



# Labor-employer Harmony and Employee Care

Topics of the Com- pany	Material Topic	Response to SDGs	United Nation SDGs Notes and Indicators	Grand Pacific Petrochemical Sustainable Development Practices and Targets
Equal right of labors	<ul> <li>Labor-em- ployer relations</li> <li>Labor/ employer relations</li> </ul>	8 MILEY WAS AND COMMISSION OF THE PARTY OF T	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs.  8.7_ Eradicate forced labor, modern slavery and human trafficking, prohibit and eliminate the worst forms of child labor, and end all forms of child labor by 2025.  8.8 Protect labor rights and promote a safe and secure work environment for all workers, including immigrant workers, especially female immigrants and those without stable employment	Through the ISO 45001 occupational safety and health management system and the ILO requirements, we are able to control emerging issues such as psychosocial hazards in the workplace and forced labor, and promote collective bargaining to protect labor rights.

The protection of employees' labor rights and interests will help to retain talents and increase productivity.

In accordance with the R.O.C. government regulations regarding all human rights, the Company's labor equity right policy is as follows:



# Employee Relations: Employment, Dedication, and Enjoyment

In 2021, Grand Pacific Petrochemical had 381 employees, all of whom were full-time employees. The basic wages of both male and female employees meet the requirement of National Labor Laws. In addition, the Company provides long-term commitments to employees in order to provide stable care for their lives. In order to protect the working rights of local workers, the Company does not employ foreign workers and gives priority to local workers.

While continuously striving to improve production efficiency, Grand Pacific Petrochemical also pays attention to promoting labor market employment, creating a quality working environment, and providing long-term stable employment. Our years of hard work have paid off, with more than half of our colleagues having more than 10 years of experience. All employees are protected by the collective bargaining agreement through the union. We hope that they will recognize the Company's dedication and make Grand Pacific their lifelong ambition.

In the event that a worker is laid off by the Company in accordance with the law or a worker under an indefinite contract requests to leave the Company, a notice shall be given in advance of the contract termination date in accordance with Article 16, Paragraph 1 of the Labor Standards Act, and such notice period shall vary according to the length of service of the worker as follows:

- 1. The notice is given 10 days in advance for those who have worked for more than 3 months but less than a year.
- 2. The notice is given 20 days in advance for those who have worked for more than 1 year but less than 3 years.
- 3. The notice is given 30 days in advance for those who have worked for more than 3 years.

management, Quality, Innovation and Res

# The Company offers employee benefit plan obligations and retirement plans

We provide insurance coverage superior than the regulations, such as group insurance / dependents' group insurance, to protect the work and life safety of our employees. The Company provides many benefits such as meal subsidies, year-end dinners, annual health checkups, annual trips, employee longevity awards, and wedding, childbirth, injury, illness, and funeral gift subsidies, etc. The Company also provides discretionary subsidies to employees in need during the New Year holidays. Employees are the most important asset of the company. Hence, we established recreation room in the production plant zone with built-in sports equipment. We also provided a complete entertainment facility to enhance interpersonal interaction among employees, so that they can develop interpersonal relationships and make a positive impact while working.

The Company's specific benefit plan obligations and retirement plans are as follows:



# 1. Stable and long-term cooperation

Grand Pacific is committed to taking care of its employees and values its long-term commitment to them. The average length of service of our employees is about 14 years. Under the stable working environment, Grand Pacific pursues a long-term relationship with each of our colleagues.

# 2. Competitive salary

\*Guaranteed annual salary for 15 months\*



Under the belief of "Taking from the Society and Giving Back to the Society", and taking good care of the employees' life, the Company also provides competitive salary, hoping that the employees can create value for the company without worrying about the support.

In accordance with the Labor Standards Act, the Labor Retirement Act and its implementing regulations, and the accounting standards for pensions, the Company makes monthly contributions to the personal accounts of employees at the Bank of Taiwan and the Labor Insurance Bureau, and establishes the Labor Pension Fund Supervisory Committee, which meets regularly to review the use of pension funds to protect the retirement rights of employees. The amount of employee pension recognition account can be referred to in the publicly issued annual report. The Company also regularly (monthly) contributes a certain amount to the Employee Benefit Committee based on the revenue status/trash return.

# **Gender Equality**

Grand Pacific Petrochemicals has more male employees due to more physical effort required for on-site work. However, in terms of executive positions, the number of women reaches 40%, which shows that the Company is selects talents based on ability rather than gender.

# **Basic Salary Ratio for Male/Female Employees**

Grand Pacific insists on equality between men and women. 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. The following table shows the statistical salary status

2021



Average salary of full-time employees not in 1,588 thousand supervisory positions

Median salary for full-time employees not in 1,426 thousand supervisory positions



2020

Number of full-time employees not in supervi- 370 sory positions

Average salary of full-time employees not in 1,269 thousand supervisory positions

Median salary for full-time employees not in 1,209 thousand supervisory positions



### Age distribution



11.0% age of 21-29 42Employees



30.7% age of 30-39 117Employees



20.2% age of 40-49 77Employees



26.8% age of 50-59 102Employees



11.3% Age of 60 and older 43Employees

For the age distribution of all Grand Pacific Petrochemical employees, we have 24 years old as the youngest, 65 years old as the oldest, and most employees fall between 30 to 39 years old, followed by 50 to 59 years old, which shows that Grand Pacific Petrochemical is in its young and strong age and has no record of child labor.

The following table shows Grand Pacific Petrochemical's human resources status in 2021.

# 2021 Employee age, gender, and regional structure weighting

			Kaohsiung	Factory		Taipei Office				
Age catego- ries	Gender	General employ- ees Employee	Senior Supervi- sor	Persons with disabili- ties	Indig- enous people	General employ- ees Employee	Senior Supervi- sor	Persons with disabili- ties	Indig- enous people	
29 years	Male	33	0	0	0	5	0	0	0	
old and below	Female	2	0	0	0	2	0	0	0	
30-49	Male	181	0	0	0	4	0	0	0	
(inclusive)	Female	2	0	0	0	7	0	0	0	
50 years	Male	110	2	3	0	9	5	0	0	
old and above	Female	6	0	0	0	10	0	0	0	
Subtotal	Male	324	2	3	0	18	5	0	0	
Subtotal	Female	10	0	0	0	19	0	0	0	
Total	381	334	2	3	0	37	5	0	0	

			Kaohsiung	Factory		Taipei Office				
Age catego- ries	Gender	General Employ- ees	Senior Man- age- ment	Persons with	Indig- enous people	General Employ- ees	Senior Man- age- ment	Persons with	Indig- enous people	
29 years	Male	8.9%	0%	0%	0%	1.4%	0%	0%	0%	
old and below	Female	0.5%	0%	0%	0%	0.5%	0%	0%	0%	
30-49	Male	48%	0%	0%	0%	1%	0%	0%	0%	
(inclusive)	Female	0.5%	0%	0%	0%	1.9%	0%	0%	0%	
50 years	Male	29%	0.5%	0.8%	0%	2.5%	0%	0%	0%	
old and above	Female	1.8%	0%	0%	0%	2.7%	0%	0%	0%	
Culptotal	Male	85.9%	0%	0%	0%	4.9%	0%	0%	0%	
Subtotal	Female	2.8%	0%	0%	0%	5.1%	0%	0%	0%	
Total		88.7%	0.5%	0.8%	0%	10%	0%	0%	0%	

# We bear the unshirkable responsibility of staff training

Grand Pacific Petrochemicals places great emphasis on employee education and training. In our management policy, we clearly stated that the key objective is to "enhance the added value of individuals and teams by continuously strengthening education and training". In view of this, Grand Pacific Petrochemical has established the education and training regulations, specifying the categories of education and training, which are as follows:



1. Professional Courses:

There are four categories: Statutory, General, SOP/WI examination and Professional English, which are organized by the supervisor of each unit.



2. Environmental Safety and Health:

Course refers to the course on basic environmental safety and health concepts and knowledge that Kaohsiung plant employees should be quipped, which is organized by the Dept. of Industry and Environment.



3. Seminars on special:

Topics refer to seminars aiming to enhance the efficiency, quality, and potential of our employees, which are organized by the Human Resources Team and the General Human Resources



4 General skills test:

We held two kinds of tests, English proficiency and computer application, which are organized by the Human Resources Team.

Grand Pacific also reinforces ethical awareness and emphasizes anti-corruption policies and procedures in its employee handbook and recruit training. There were no incidents of corruption at the Company in 2021.

The training information for 2021 is compiled in the following table.

Course type		training Company	Internal training by external parties		External training by external parties		Total		Hours
Course type	training	peo- ple-time	training	peo- ple-time	training	peo- ple-time	training	peo- ple-time	Hours
Professional Courses - General	58	864	13	189	59	90	130	1143	2803
Professional Courses - Statutory					38	51	38	51	1016
SOP/WI Examination	2	80					2	80	80
Environmental Health and Safety Course	1	322					1	322	966
Environmental Health and Safety Training and Tests	5	464					5	464	632
Special lecture (Hours)	1	70					1	70	551
Proof of English Proficien- cy	10	37					10	37	44
Total	77	1837	13	189	97	141	187	2167	6092

The above-mentioned courses are conducted by the relevant units. The total number of courses conducted internally and externally in 2021 reached 186, with a total of 2,167 attendees, and a total of 6,092 hours, with an average of 2.81 hours of training per person.

Employee type	people-time	Total training hours	Hours %	Average number of hours trained per person
Senior supervisors	27	104	1.7%	3.85
First and second level supervisors	187	517	8.5%	2.76
Director labor	1047	2642	43.4%	2.52
Indirect labor	906	2829	46.4%	3.12
All employees	2167	6092		2.81

Grand Pacific Petrochemical focuses on the development of its own industry. The on-site production unit places more emphasis on education and training, accumulating 5,590 hours of education and training, accounting for 91.7% of the total training hours. We hope that through continuous learning, the Company can continue to move forward.

In addition to focusing on the development of the industry, the Company also attaches great importance to the environmental safety and health of the factory. Dept. of Industry and Environment has arranged 2,062 hours of environmental safety and health courses in 2021, demonstrating the spirit of Grand Pacific in pursuing safety and health first and giving priority to environmental protection, in order to continue to build a quality safety and health and environmental protection culture.

of education and training

Dept. of Industry and Environment has arranged 2,062 hours of environmental safety and health cours-

Accounting for 91.7% of the total training hours

Education and training statistics for 2021 (by department)										
		l training Company		l training nal parties		l training nal parties	T	otal		_
Department	training	peo- ple-time	train- ing	peo- ple-time	train- ing	peo- ple-time	train- ing	peo- ple-time	Hours	Exp
General Management Office					14	14	14	14	60	37,050
Human Resource Team (Project Management / Computer)	3	35					3	35		
Human Resource Team (English)	3	28			4	4	7	32	118	10,000
Human Resource Team (Newcomer Training/Professional Course)					5	6	5	6		
Audits					4	4	4	4	24	11,320
Accounting Department	5	15	1	3	8	8	14	26	70	18,435
Finance Department	1	14	2	5	3	3	6	22	32	
Procurement Department					2	2	2	2	8	63,952
Plastics/Petrochemical Business Department	1	3					1	3	9	-
Common Workshops	1	4			3	3	4	7	85	28,572
Nylon Factory	3	66			8	38	11	104	598	176,466
R&D Center, Enterprise Technology Team			2	29	1	3	3	32	96	-
R&D Center, R&D Team					4	4	4	4	85	38,670
Factory Department	2	26					2	26	58	28,480
General HR Team (Project Management)	6	219			3	5	9	224	582	
General HR Team (English Proficiency Tests/Profession- al English)	3	8					3	8	8	33,110
Petrochemical Plant	22	294	1	28	14	22	37	344	802	75,891
Maintenance Workshop	9	174	2	44	11	12	22	230	796	101,999
Plastic Factory	4	102			4	4	8	106	325	36,302
Industrial Environment Department	1	6	3	43	5	5	9	54		
Industrial Environment Team, Environmental Health and Safety Course	2	639	2	37	2	2	6	678	2062	171,551
Hydrogen Workplace	11	204			2	2	13	206	274	21,263
Total	77	1,837	13	189	97	141	187	2,167	6,092	853,061

# Occupational Health and Safety Management

Topics of the Com pany		United Nation SDGs Notes and Indica- tors	Grand Pacific Petrochemical Sus- tainable Development Practices and Targets
Safe manufac- turing	8 STEEN SPIRE ASS COMMENT CHAPTE	Promote inclusive and sustainable economic growth, achieve full employment, and create productive and quality jobs. 8.8_Protect labor rights and create a safe and secure working environment for all workers.	We formulated the "Safety and Health Policy" through the ISO 45001 Occupational Safety and Health Management System, in which we disclose our core values as people-oriented, and we pursue the goal of zero disasters and zero injuries through the principles of "technology", "safety and health culture", "responsibility" and "communication".

# Occupational Safety and Health Organization

Grand Pacific Petrochemicals constructed ISO45001 Occupational Safety and Health Management System. In addition to strengthening the concept of employee safety and health through education and training, a Labor Safety and Health Committee is formed according to the law, with a chairman and 13 representatives from the employer. And in accordance with Article 11, Paragraph 6 of the Labor Safety and Health Organization Management and Automatic Inspection Regulations, there are seven labor representatives, accounting for one-third of the total number of workers.

There are seven labor representatives

30.4%

With a chairman and 13 representatives from the employer

69.6%

# Occupational Safety and Health Policy and Promotion of Occupational Safety and Health Management System

Due to the process and product features, Grand Pacific Petrochemical uses and stores hazardous materials that meet the legal requirements. In order to provide a better working environment for our employees and contractors, the Chairman of the Board of Directors of Grand Pacific Petrochemicals has formulated the Guo Qiao Petrochemicals Safety and Health Policy:

"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." .



We hope that the announcement of the safety and health policy will encourage all employees to improve occupational safety and health.

In order to improve the overall corporate safety and health standards, Grand Pacific Petrochemical began to implement the OHSAS 18001 system in 2006 and officially obtained the ISO 45001 standard in 2018. We have been creating and implementing various occupational safety and health systems, and control the hazardous factors in all operations, in hope that it will become a set of institutionalized safety and health management standards for employees to follow, so that we can continue to make progress and will not stop before reaching the best.

# Coronavirus (COVID-19) prevention measures

Our measures for the prevention against coronavirus (COVID-19) pandemic in 2021 are as follows:

# Establishment of an epidemic prevention response team

In response to the need for prevention and preparedness for COVID-19 outbreak, the Company established an epidemic preparedness team. With the CEO as the convener, each unit also set up an emergency response team to take measures to prevent the epidemic. We also cooperate with government authorities to develop epidemic prevention methods, assess and respond to epidemic impacts, purchase protective equipment, monitor and audit the effectiveness of implementation, conduct education, training and promotion, and keep abreast of the latest epidemic prevention information and review epidemic prevention measures to enable the company to continue its operations.

#### Purchased sufficient supplies for pandemic prevention

For example, medical-surgical masks, hand sanitizer, 75% alcohol for medical use, ear thermometers, forehead thermometers, goggles, bleach and non-contact garbage cans with lids are distributed to specific high-risk employees in accordance with the resolution of the Epidemic Prevention Conference.

# Strengthened pandemic prevention and health education and promotion

√ Posters are posted at the entrance of the factory or other obvious places to encourage employees to manage their health at home when they are sick, observe cough etiquette and maintain hand hygiene, teach employees to wear surgical masks and wash their hands properly, and update the epidemic information on the bulletin board and the company's intranet.

√ Organized awareness seminars on pandemic prevention.

# Initiated employee health management care mechanism

- √ Employees are strictly controlled to go on business trips and travel to epidemic areas, and employees, visitors, and contractors who return to Taiwan from epidemic areas must make honest and independent notifications.
- √ Conducted access control measures, temperature monitoring and abnormality care.
- √ Emergency response mechanism for employees with suspected or confirmed cases of COVID-19

# Strengthened advocacy to avoid group activities

- √ Reduced non-essential meetings and conducted meetings by video conferencing preferably.
- √ Splitted dining sessions to avoid clusters of diners.
- √ In the factory with a cafeteria, open-form food grabbing was no longer in place; the setting was changed to lunch boxes for the staff to take back to their seats to enjoy.

#### Work from home

√ Work from home drill in batches for employees in factories and offices

#### Strengthened office environment cleaning

- $\checkmark$  Provision of alcohol disinfectant in common areas on each floor
- √ Cleaning and disinfecting all frequently touched surfaces in public areas with alcohol twice daily (morning/afternoon)
- √ Use disposable paper towels for staff to wipe surfaces after each
  disinfection of items, such as table and chair handles, computer
  equipment, elevator buttons, door handles and faucets.

# Highlights of occupational health and safety management

### Manufacturing process safety management system

In order to implement the commitment of environmental safety and health policy, Grand Pacific Petrochemicals has evaluated the environmental safety and health aspects and critical operations resulting from production-related activities, products or services, and assessed their positive or negative impact on the environment, safety and health by collecting and checking regulations, evaluating environmental safety and health aspects of production processes, identifying hazards and risk assessment, and reviewing past incidents and fines. By taking into consideration the opinions of stakeholders, local requirements or industry conventions, we select the significant environmental safety and healthconsiderations and critical operations for priority consideration in setting environmental safety and health objectives, targets and management plans.

Since the Kaohsiung August-first underground pipeline gas explosion incident, the Company has not only cooperated with the Industrial Development Bureau and the Kaohsiung City Economic Development Bureau in the joint investigation and inspection, but also continued to implement the "underground pipeline maintenance management plan" in 2021 to enforce the following control measures.



# Short-term/Control measures

- Open tube thickness measurement
- Close internal potential survey
- Implemented emergency response drills for underground pipelines
- Establish regional joint defense organizations and set up contingency plans
- Implemented underground pipeline pressure endurance test



# Mid-term/Control measures

- Implemented pipeline replacement
- Created smart through-tube inspection
- Established construction survey mechanism
- Conduct periodical risk assessment of pipelines

# **Health Promotion Systems and Disease Prevention**

Our Company 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.

The Company attaches great importance to the physical and mental health of its employees, and the industrial and environmental unit follows the hazard identification and risk assessment management method to comprehensively assess the socially oriented occupational safety and health impacts such as workplace psychological discomfort, verbal violence, sex discrimination and sexual harassment, and take early countermeasures to protect the rights and interests of employees.

We are also committed to promoting tobacco prevention and health promotion in the workplace, actively implementing tobacco-free and health promotion measures in the workplace, and establishing an excellent and healthy work environment. In 2021, we carried out the following activities to promote worker health:

- 1. Health screening programs for different age groups (over/under 40 years old) are planned annually according to the age, gender, and needs of the work environment of our employees, in order to detect health hazards and potential disease causing factors at an early stage.
- 2. On-site visits by clinical service physicians once a month.
- 3. the "Post-Epidemic Era Food Therapy" course is conducted based on the annual health examination report statistics and dietary survey analysis.
- 4. The "Workplace Illegal Violation Case Sharing Seminar" is held to let colleagues and supervisors understand more about the behaviors and words that have touched off bullying or aggression in the workplace through real-life case sharing.









In terms of specific occupational diseases, we instill correct safety and health concepts in our employees on a regular basis, effectively promote information about occupational safety and health in our company, provide professional training on occupational health for our employees to develop good work habits and reduce human error, and arrange for personnel engaged in special hazard operations to be tested in accordance with legal requirements. In accordance with ISO 45001, 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.

Issues for improving occupational safety and health in 2021 are as follows:

Issues for improvement discussed during 2021 occupational health and safety meeting



- Health examination and promotion
- Process and operation risk assessment
- Standardized management of safety production, in pursuit of zero disaster, zero injury planning activities and program safety
- Implementation of improvement measures for abnormal incidents



- · Discussion on contractor safety management matters
- "Occupational safety and health management" is included in the weighting of annual supplier management evaluation.

# Work safety audit system

Grand Pacific Petrochemical attaches great importance to the safety and health of employees and contractors, and actively promotes work safety audits, such as: senior supervisors' mobile management, pre-start safety audits and work safety classification audits of supervisors at all levels, etc. Any deficiencies found are tracked until improvement is completed to prevent accidents. Dept. of Occupational Safety has also established the criteria for industrial safety audits, conducted occupational safety and environmental performance evaluations, and conducted occupational safety audit training for supervisors to guide employees with the concept of behavioral safety, safety observation procedures and items, and promote the establishment of safe behavioral work, with the aim of improving continuous improvement mechanisms and enhancing industrial safety performance.



Intelligent tube detection process



Preparation before underground line in-

# Regularly hold occupational safety committee and management review meetings

Grand Pacific Petrochemical has set up a Labor Safety and Health Committee, which 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.

In addition, Grand Pacific Petrochemical regularly holds management review meetings on a quarterly basis, with the expectation that all units will work together to improve and promote safety, environmental and health issues.

#### Contractor safety management

In order to improve the safety and health performance of the company and reduce the unpredictable risks, Grand Pacific Petrochemical has formulated the "Contractor Safety and Health Management Procedures" and the "Safety Work Permit Procedures", and adopted the same standards for the safety management of the contractors as the employees of the company and strictly enforced them. In addition, we hold regular meetings of the mutual agreement organization to promote the concept of occupational safety and health to the contractor's staff, and our staffs perform the concept of "everyone should be aware of occupational health and safety" by going to the construction site from time to time to carry out unannounced inspections and perform corrective actions to reduce the risk of unsafe behavior of the contractor's staff.

Pipeline intelligent inspection instrument

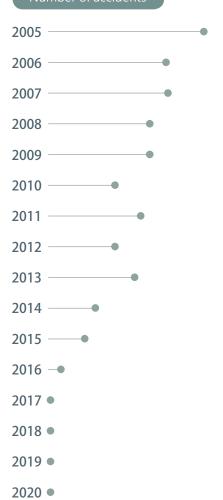
# Crisis and emergency response countermeasures

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.

#### Incident investigation and handling

The picture on the right shows the GPPC accident trend in the past ten years. The number of accidents is decreasing year by year. Since 2007, GPPC have encouraged employees to report false alarms, hoping that employees can report Near-miss and pay more attention to their own work safety.

In the Accident Investigation section, Grand Pacific Petrochemical has established accident investigation procedures. In case of an accident, in addition to the incident unit, various professionals will also participate in the accident investigation and release the investigation results to the employees for their information, and conduct improvement tracking through various auditing and management review meetings to prevent recurrence.



2021

#### **Equipment Security Management**

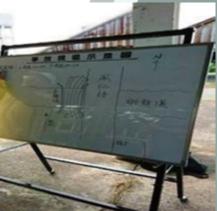
Due to the characteristics of the process, Grand Pacific Petrochemical has installed many dangerous machinery and equipment. In addition to regular primary maintenance, these process equipment are subject to non-destructive tests such as infrared inspection and ultrasonic inspection to predict the condition of rotating equipment.

### Fire Security Management

In addition to the regular inspection and reporting of fire safety equipment in accordance with fire safety regulations, Grand Pacific Petrochemical has established "Fire Safety Management Procedures" to ensure that all fire safety equipment is inspected regularly and kept in a state of readiness for use.

Our company is committed to providing a safe working environment for our employees. In addition to the industry-specific Responsible Care (RC) committee at the headquarters, there is a committee or special department in charge of occupational safety and health affairs, and regular meetings of occupational safety and health nature are held by the person in charge of the business operation or his agent. Labor representation >30%. We implemented the occupational safety system that requires communication and supervision between employers and employees, from the ignition characteristics of raw materials to the life safety of the working environment during operation activities.







In 2021, there were 0 occupational accidents and injuries to employees, as detailed in the table below; no one died on duty.



#### Occupational accidents and injuries to employee

2021	
Employee - Male	0
Contractor Employees - Female	0
Contractor Employee Male	0

Notel: Includes traffic accidents when commuting to work Note2: Statistics on the Company according to Occupational Safety and Health Act



## Rate for loss of working time and occupational injury rate

2021	
Work Injury Rate FR	0
Occupational Disease Rate (ODR)	0
Severity Rate SR	0
Number of occupational fatal accidents	0

Notel: Absence rate refers to actual days missed as a percentage of days that should have been worked in 2021. Absence: An employee's absence from work due to incapacity for labor, not limited to work-related injury or illness. Excludes approved leave, such as holidays, training, maternity/paternity leave and funeral leave.

Note2: Severity rate of incapacity (SR) = (days of lost work/total working hours) \*1000000; Days of lost work: The "number of days" of time that a worker is unable to perform daily work "lost" due to an occupational accident or occupational disease. Days lost are not counted when workers are engaged in limited duties or alternative work in the same organization

Note3: Injury Rate (FR)= (Total number of injuries/total hours)\*1000000

Note4: SR and FR statistics do not include traffic accidents and contractors.

Through the ISO45001 management system, we have compiled a list of jobs that require special medical examinations:

#### A list of jobs requiring special medical examinations





- (2) Annual health check for personnel engaged in special hazards at petrochemical plants (benzene)
- (3) Annual health checkups for personnel engaged in special hazards in the petrochemical/plastic/automotive/nylon business units (noise)

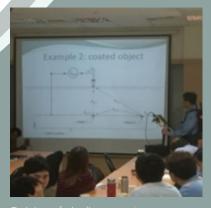
In the past years, disease arising from the work was not found on the health examination results of the personnel engaged in the special hazard operation of the Company.



Intelligent tube detection process



Emergency Response Drill Process



Training of pipeline operators

Topics of the Com- pany	Material Topic	Response to SDGs	United Nation SDGs Notes and Indicators	Grand Pacific Petrochemical Sustainable Development Practices and Targets
Custom- er-oriented	<ul> <li>Customer Health and Safety</li> <li>Customer privacy</li> </ul>	12 REPORTED SERVICE CON SERVIC	Ensure the implementation of sustainable consumption and production models.  12.6_ Encourage companies to adopt sustainable practices (publish sustainability reports), especially for large and multinational companies.	Based on the product lifecycle concept, product information transparency can ensure user safety. We actively discloses sustainability indicators and reports to gain the trust of stakeholders. Target  Our products comply with the requirements of REACH regulation in terms of SVHC information transmission  Our products have a 100% SVHC inventory achievement rate.  We publish annual sustainability reports and respond to customer sustainability questionnaires.

## **Customer Service and Supplier Management**

#### Customer Relationship: Protecting Customer Confidentiality and Improving Quality

As a petrochemical company and a plastic pellet manufacturer, Grand Pacific Petrochemical Company has made it its mission to provide safe and secure products and to improve customer satisfaction, in addition to promoting the importance of customer privacy in its employee code of conduct and preventing product quality and PL (product liability) issues before they occur. In 2021, there were no complaints of invasion of customer privacy or loss of customer information. The results of our satisfaction survey in recent years are as follows.

Summary of customer satisfaction performance of the Company's Main Products for 2020-2021



Communication details of our products and services implemented through SDS are listed below.

It is clearly stated on the company's products that sustainability is considered in the following process.



- 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.
- 3. Currently, all of our products utilize the above-mentioned sustainable product descriptions, and no lawsuits have been filed in 2021 in which penalties were imposed for violations of product specifications, voluntary guidelines, or product labeling.
- 4. 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).

In addition, our 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. Grand Pacific Petrochemical's plastic ABS products are tested annually by SGS for compliance with EU RoHS regulations and are free of the 10 environmental hazards. Incidents of non-compliance concerning the health and safety impacts of products and services

### Supplier and contractor management

Grand Pacific's business philosophy is a win-win situation with suppliers and customers, ensuring ethical and environmentally friendly suppliers and production principles at all times. In addition to regular audits of suppliers, we also regularly communicate with them and offer incentives such as shorter ticket periods to suppliers with excellent cooperation results, with the goal of achieving a win-win situation for both parties. Recognize the significant risk of child labor through supply chain awareness and corporate ethical practices by our operating sites and suppliers. The Company will also make it a supplier management objective to include human right clauses in the contractual agreement. (Supplier Environmental Assessment Management Guidelines) No significant changes in the Company's supply chain in 2021.

According to the safety management operation of the contractor, the contractor who enters the plant must not only arrange the safety and health education and training, but also sign the joint operation agreement to ensure that no additional waste and wastewater pollution will be caused in the plant. For all suppliers, this is done through executive advocacy. Grand Pacific's suppliers are 100% local manufacturers, such as SINOPEC/ Code of Conduct for Partners CPC/FPCC. In terms of environmental management of suppliers, we have incorporated environmental protec-Which requires our partners to tion and corporate social principles into our supplier comply with local laws and regumanagement mechanism, and in accordance with lations and not to force/express the spirit of ESG, we have established a "Code labor, legal working hours and of Conduct for Partners", which requires our wages, environmental safety and partners to comply with local laws and reghealth, and welfare, etc. ulations and not to force/express labor, legal working hours and wages, environmental safety and health, and welfare, etc.

Currently, Grand Pacific's management of all supplier selection indicators has included important indicators such as RoHS, ISO14001, ISO45001 and even corporate social responsibility. We require our suppliers to comply with norms such as freedom of association, prohibition of child labor, and even the elimination of labor-employer relations, in order to protect basic human rights. The aforementioned indicators are also included in the new supplier audit through the "New Supplier Evaluation Form".

In addition, we are committed to ensuring that suppliers comply with the Principle of Impartiality from Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy of the International Labor Organization.

Grand Pacific has implemented the management of suppliers and contractors (including security companies) through the procurement and general affairs units, and the overall management is summarized in the following table. The Company will gradually increase the proportion of suppliers that meet CSR-related requirements in the future.



Overview of CSR Management of Grand Pacific Suppliers and Contractors

Туре	Management Principles	Execution Ratio	Target Value	Subsequent Management Objectives
2021 New Supplier	Implementation of CSR Review by signing the "Grand Pacific Petrochemical Partner Code of Conduct"	100%	100%	Include the CSR clause in the commitment
2021 New Supplier	Completion of ESG evaluation through "Qualified Supplier Annual Evaluation Form	100%	100%	Increase the proportion of on- site evaluation
Contractor	Execution of Human Rights Review by signing the "Grand	70%	100%	The human rights clauses are set out in the contractual
Secure the Company	Pacific Petrochemical Partner Code of Conduct"	70%	100 //	agreement

Grand Pacific expects its partners to comply with the Supplier ESG Code of Conduct, which includes categories such as environmental protection, occupational safety and health, and protection of labor rights and ethics, and ensure that the products and services they provide comply with all national and other applicable laws and regulations.



#### 1. Protecting Labor Rights

Grand Pacific's suppliers are required to 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. No disciplinary action shall be taken to raise the safety awareness of employees.



#### 3. Environmental Protection

Grand Pacific'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

Grand Pacific'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.

Grand Pacific Petrochemical understands that enterprises are public instruments of society. In addition to its efforts to grow its business, it must also comply with social regulations such as fair competition and anti-corruption, and do its part to improve the society.

#### Social Care

"Taking from the society and giving back to the society" is not only a slogan or mission for Grand Pacific, we make it as one of our core values.

With gratitude in mind, our staff members have formed a Loving Heart Society to visit charitable organizations and nursing homes during holidays, and give donations and supplies to express their sympathy. In addition, we also give priority to ordering mooncakes for charity organizations to show our support for the New Year.

In view of the lack of educational resources for children from economically disadvantaged families, Grand Pacific assists social organizations in organizing academic counseling programs for disadvantaged children and subsidizing children from low- and middle-income families to attend international art performances, in order to enhance their academic achievement, expand their horizons in life, and improve the sound development of their personalities.



Order Mid-Autumn Festival gift box with Down Syndrome Associatio



Taisha Kyoraku Academy, Vulnerable children after school program, Mid-Autumn Festival concern

It is the responsibility of Grand Pacific to continue to care for the disadvantaged groups in society. We hope that we can use our modest efforts to care for the needy corners as much as possible.

#### Social feedback and sponsorship

"Taking from the society and giving back to the society" is not only a slogan or mission for Grand Pacific, we make it as one of our core values. As a testament to our commitment to giving back to the community, Grand Pacific continues to promote and support various social and community activities



Grand Pacific holds a regular blood donation event each year. Every employee is proud to donate blood and actively signs up for blood donation. The Loving Heart Society also gave out beautiful gifts to donors out of its own pocket to encourage colleagues to roll up their sleeves and contribute blood in times of blood shortage.

In order to promote the importance of environmental protection and the importance of not leaving garbage on the ground, Loving Heart Society organized a mountain cleaning activity to imple-



Sponsored Kaohsiung Nanzi Elementary School Music Banquet



Participate in local folk festivals

ment the corporate social responsibility of environmental protection and love for the earth, attracting nearly 100 employees' family members to participate. Our colleagues led family members to pick up, sort and pack by hand. This event poses educational meaning for the next generation and



strengthens the concept of Go Green in the daily life of our employees. To implement the concept of giving back to the community, we actively sponsor and support the government and non-government organizations to deeply understand the needs of the society. For example, we participated in the agricultural products cultural tourism season and the seasonal fruit subscription to support Taiwan's agricultural industry with practical actions. In addition, for the disaster prevention system, Grand Pacific sponsored the Renda Fire Department, the Renwu Volunteer Firefighters Association, and the Kaohsiung County Fire Department's community CPR and disaster prevention tour to provide direct support to firefighting units and jointly build a safe community.



Participate in local public welfare activities



Sponsor Renwu petrochemical industry Special Class



# Maintain good relations with our neighbors

With deep roots in Taiwan, Grand Pacific has actively established a symbiotic philosophy with community residents and has made every effort to co-organize various community activities and public welfare events to promote the development of the surrounding communities.

Grand Pacific provides scholarships to help encourage outstanding local students to continue their studies, local folk celebrations, festive events, local school recreation and cultural activities, local cultural and arts associations, community summer talent classes, local hiking activities, environmen-



Note 1:Webpage for Kaohsiung City Dashe District Office's Feedback Zone: http://www.dsrtg.gov.tw/p06\_07.aspx?type=5 以下可達

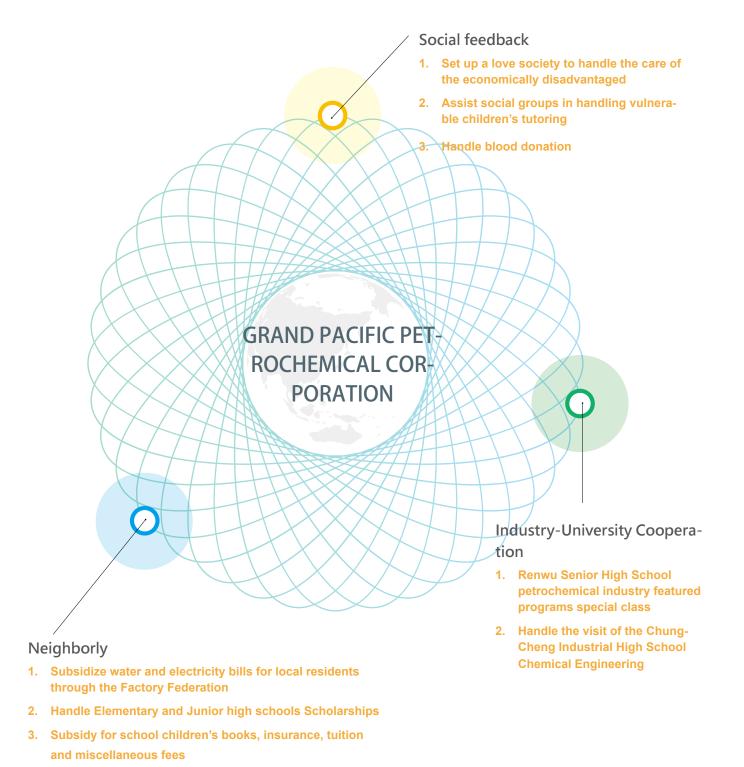
https://dsrtg.kcg.gov.tw/Content\_List.aspx?n=8E0D1E103BD-689DA

tal volunteer training camps, orphanage winter activities, underprivileged and evergreen organizations sponsorship, local sports activities participation, and assistance to government agencies in health promotion activities.

Grand Pacific and other companies in the Dashe Industrial Park give back to our neighbors through Manufacture Association (Under the operation of the Dashe Neighborly Feedback Fund Review Team, the rebate is used to subsidize local residents' utility bills, scholarships for school children, nutritious lunches for the elderly living alone and low- and middle-income households, and to further subsidize the cost of books, insurance, miscellaneous school fees, and classroom aids for elementary and middle schools in the region, as well as to enhance the teaching of American as a foreign language.).

In 2014, Guoqiao completed a memorandum of understanding with Renwu High School through the Dashe Industrial Park Manufacturers' Association and established the "Kaohsiung Petrochemical Industry Specialized Program Renwu University Class", which targets students from Renwu, Daishang, Dashu, Tosong, and Nanzhi districts. A fixed number of new students are enrolled each academic year. In addition to the general high school curriculum, the university also offers scholarships for the petrochemical industry, industrial safety and occupational ethics courses. Graduates with excellent grades will be given priority for future employment.

#### Grand Pacific's social responsibility care promotion project and outcome



## **Appendix**



## **Table of GRI Standards**

#### **General Disclosure**

GRI Stan- dards	Disclosure	Page No.	Remark	Exter- nal Verifi- cation			
GRI 101: Foundation 2016							
GRI 102: (	General Disclosure 2016 (by core option)						
	102-1 Name of the organization	24		0			
	102-2 Activities, brands, products, and services	5		0			
	102-3 Location of headquarters	6, 24		0			
	102-4 Location of operations	28		0			
	102-5 Ownership and legal form	5		0			
	102-6 Markets served	5, 6		0			
1. Organi- zational profile	102-7 Scale of the organization	24, 30	<ol> <li>Number of employees:</li> <li>Total number of business sites.</li> <li>Net sales or net income.</li> <li>Total capital.</li> <li>The number of products or services.</li> </ol>	0			
	102-8 Information on employees and other workers	61		0			
	102-9 supply chain	78	Business Sites     No Significant changes in supply chain	0			
	102-10 Significant changes to the organization and its supply chain	78		0			
	102-11 Precautionary principle or approach	41		0			
	102-12 External initiatives	29		0			
	102-13 Membership of associations	29		0			

GRI Stan- dards	Disclosure	Page No.	Remark	Exter- nal Verifi- cation
2. Strategy	102-14 Statement from senior decision-maker	8		0
3. Ethics and in- tegrity	102-16 Values, principles, standards, and norms of behavior	38		0
4. Gover- nance	102-18 Governance structure	11, 25		0
	102-40 List of stakeholder groups	12, 16		0
5.	102-41 Collective bargaining agreements	29		0
Stake- holder	102-42 Identifying and selecting stakeholders	10, 12		0
engage- ment	102-43 Approach to stakeholder engagement	13		0
	102-44 Key topics and concerns raised	14, 76		0
	102-45 Entities included in the consolidated financial statements	5		0
	102-46 Defining report content and topic Boundaries	5		0
	102-47 List of material topics	18		0
	102-48 Restatements of information	Not applicable		0
	102-49 Changes in reporting	Not applicable		0
6. Re-	102-50 Reporting period	5		0
porting practice	102-51 Date of most recent report	6		0
	102-52 Reporting cycle	6		0
	102-53 Contact point for questions regarding the report	6		0
	102-54 Claims of reporting in accordance with the GRI Standards	6		0
	102-55 GRI content index	88		0
	102-56 External assurance/validation	6		0

## **Topic-specific Disclosure**

Standard disclosures part: Topic-specific Standards The 200, 300, and 400 series topic specific Disclosures.

GRI Standards	Disclosure Items	Page number or URL	Exter- nal Verifi- cation
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	28	0
GRI 201: Economic per-	201-1 Direct economic value generated and distributed	30	0
formance 2016	201-3 Defined benefit plan obligations and other retirement plans	59	0
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>		0
GRI 205: Anti-corrup- tion 2016	205-2 Communication and training about anti-corruption policies	62	0
	205-3 Confirmed incidents of corruption and actions taken	62	0
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	44, 46, 47	0
GRI 302: Energy 2016	302-1 Energy consumption within the organization	46	0
	302-3 Energy intensity	46	0
GRI 103: Management Approach 2018	303-1 Interactions with water as a shared resource	48, 52, 53	0

GRI Standards	Disclosure Items	Page number or URL	Exter- nal Verifi- cation
GRI 303: Water and Effluents 2018	303-5 Water consumption:	53	0
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	44	0
	305-1 Direct (Scope 1) GHG emissions	46	0
	305-2 Energy indirect (Scope 2) GHG emissions	46	0
GRI 305: Emissions 2016	305-4 GHG emissions intensity	46	0
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	51	0
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	44, 48, 54	0
	306-1 Waste generation and significant waste-re- lated impacts	49	0
GRI 306: Waste 2020	306-2 Management of significant waste-related impacts	49	0
	306-3 Serious leakage	49	0
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	54	0
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	45	0

GRI Standards	Disclosure Items	Page number or URL	Exter- nal Verifi- cation
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	57	0
GRI 401: Employment 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	59	0
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	57, 58, 60, 62	0
GRI 402: Labor/Man- agement Relations	402-1 Minimum notice periods regarding operational changes	58	0
	403- 1 Occupational health and safety manage- ment system	65, 74	0
	403-3 Occupational health services	69	0
GRI 103: Management Approach 2016	403-4 Worker participation, consultation, and communication on occupational health and safety	65, 71, 72	0
	403-5 Worker training on occupational health and safety	63	0
	403-6 Promotion of worker health	69	0
GRI 403: Occupational	403-9 Work-related injuries	74	0
Health and Safety 2018	403-10 Occupational disease	75	0

GRI Standards	Disclosure Items	Page number or URL	Exter- nal Verifi- cation
GRI 103: Management Approach 2016	<ul> <li>103-1 Explanation of the material topic and its Boundary</li> <li>103-2 The management approach and its components</li> <li>103-3 Evaluation of the management approach</li> </ul>	57, 78	0
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	78	0
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	75, 76	0
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	77	0
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	77	0
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	76	0
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	76	0



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