上福全球科技股份有限公司
General Plastic Industrial Co., Ltd.

2023 ESG Report

永續報告書

Eco-friendly Cartridge Program

GPI's products are export-oriented and play a significant role in the consumables market. In response to both domestic and international net-zero emission policies and regulations, it is essential to advance towards a sustainable circular economy by enhancing R&D technology and capabilities. By leveraging core technologies, GPI ensures its products comply with regulations, thereby minimizing their environmental impact.

As a result, in June 2020, GPI began aligning with green economic trends. The Company has been dedicated to developing and utilizing alternative packaging materials, focusing on reducing non-environmentally friendly packaging (replacing plastic with paper pulp), recycling and reusing cartridges, and using recycled plastics for plastic components. This approach aims to integrate the Company's sustainable growth with ecological responsibility and lower resource consumption.

Goal Setting

Reduce:

Reduce: Focus on packaging materials to decrease the use of non-environmentally friendly materials and plastic clamshell cushioning, and instead use paper pulp cushioning and extruded polyethylene (EPE) cushioning.

Reuse:

Currently, European recyclers only process original manufacturer cartridges. GPI aims to collaborate on technology to assess and modify cartridge designs, making GPI cartridges easier to recycle and reducing recycling costs to attract industry cooperation. Since 2020, GPI has been evaluating the feasibility of recycling its toner cartridges and plans to establish a new line of eco-friendly cartridges. In 2022, GPI aimed to launch four recycled toner cartridge products in 2023. This initiative sought to gain a foothold in the eco-friendly trend, effectively recycling resources and mitigating environmental impact.

Recycling:

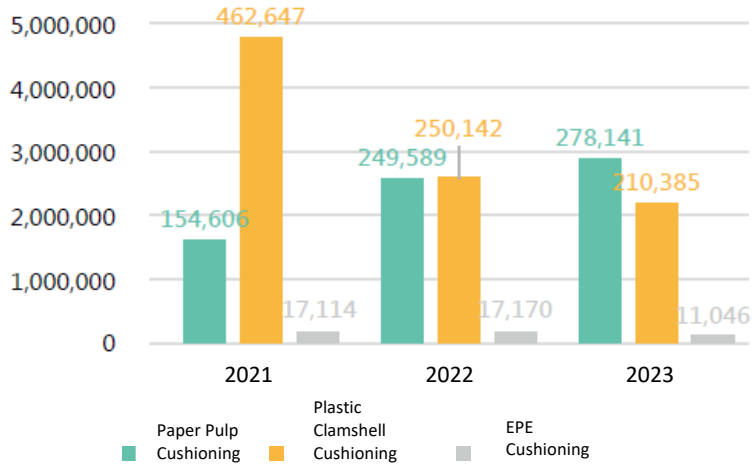
Use certified recycled plastics and incorporate them into plastic components.

2023 Target Achievement Performance

Reduce:

In 2023, the usage of plastic clamshell cushioning was 210,385 units (down 15.9% from 250,142 units in 2022). EPE cushioning usage was 11,046 units (down 35.7% from 17,170 units in 2022), while paper pulp cushioning usage was 278,141 units (up 11.4% from 249,589 units in 2022).

Cushioning Material Usage Over the Past Three Years Unit: Pieces



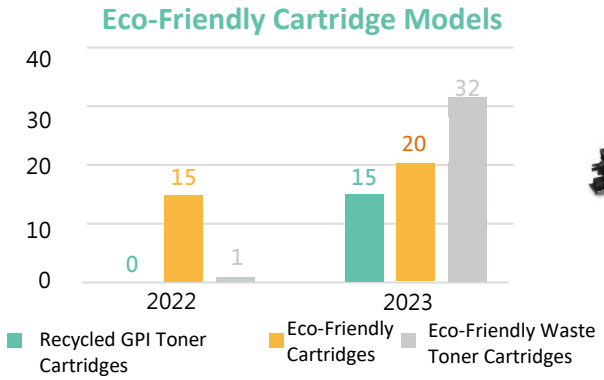
Reuse:

In 2023, GPI launched 15 recycled toner cartridge products and began collaborating with local recyclers in Europe in the third quarter of the same year.

2023 Target Achievement Performance

Recycling:

In 2023, the Company launched a total of 20 eco-friendly cartridges and 32 eco-friendly waste toner cartridges. Each of these products uses up to 95% recycled plastic, and the product packaging does not use plastic materials, achieving the goal of cutting the use of non-environmentally friendly materials. It is anticipated that in 2024, the Company will introduce one eco-friendly cartridge from another brand.



Quality Management

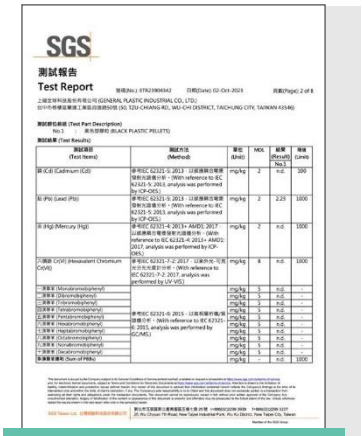
To provide customers with reliable and safe products, GPI regularly sends materials for SGS testing of harmful substances to ensure compliance with the EU Restriction of Hazardous Substances Directive (RoHS), the Registration, Evaluation, Authorization, and Restriction of Chemicals Regulation (REACH), and individual customer requirements regarding banned and restricted hazardous substances.

We enforce strict controls on raw materials and ensure that 100% of our products pass health and safety assessments. These assessments include compliance declarations, test and verification reports, and safety data sheets. Each quarter, we hold quality education and training sessions on new products, highlighting audit focuses and key considerations. We closely monitor both domestic and international policies and regulations that may impact our products. Through tracking and evaluating relevant laws, developing policy measures, and implementing educational training, we ensure that our company consistently complies with all applicable regulations and standards.

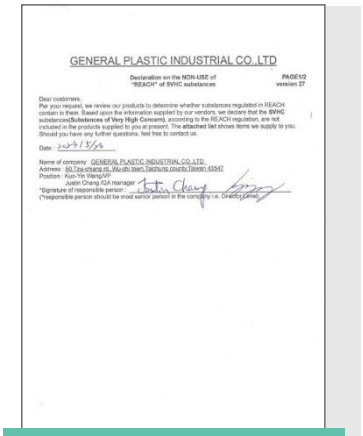
We also regularly audit all suppliers, implementing stringent controls on component materials and finished products. This systematic management approach ensures that the products provided to customers are safe for health.

GPI Product Health and Safety Certifications

Product Categories	Drum Gears	Cartridges	Waste Toner Containers	Toners	Raw Materials	Masks
RoHS	V	V	V	V	V	
REACH	V	V	V	V	V	
CE		V	V			
WEEE		V	V			
STMC		V		V		
UKCA		V	V			
ISO 13485						V
Medical Licenses						V



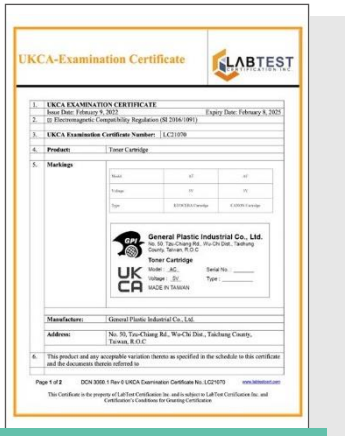
RoHS Testing Report



REACH Declaration

CE Certificate

WEEE Certificate



UKCA Certificate
Expiry Date: Feb 8, 2025

STMC Certificate
Valid Until: Dec 7, 2025

Supplier's Statement on the Non-Use of "Environmental Management Substances"

GPI ISO Certifications

ISO 9001:2015 Certificate
Expiry Date: July 7, 2027

ISO 14001:2015 Certificate
Expiry Date: August 8, 2027

Reduce Impact, Protect the Environment

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4.1 Climate Change Response

Governance

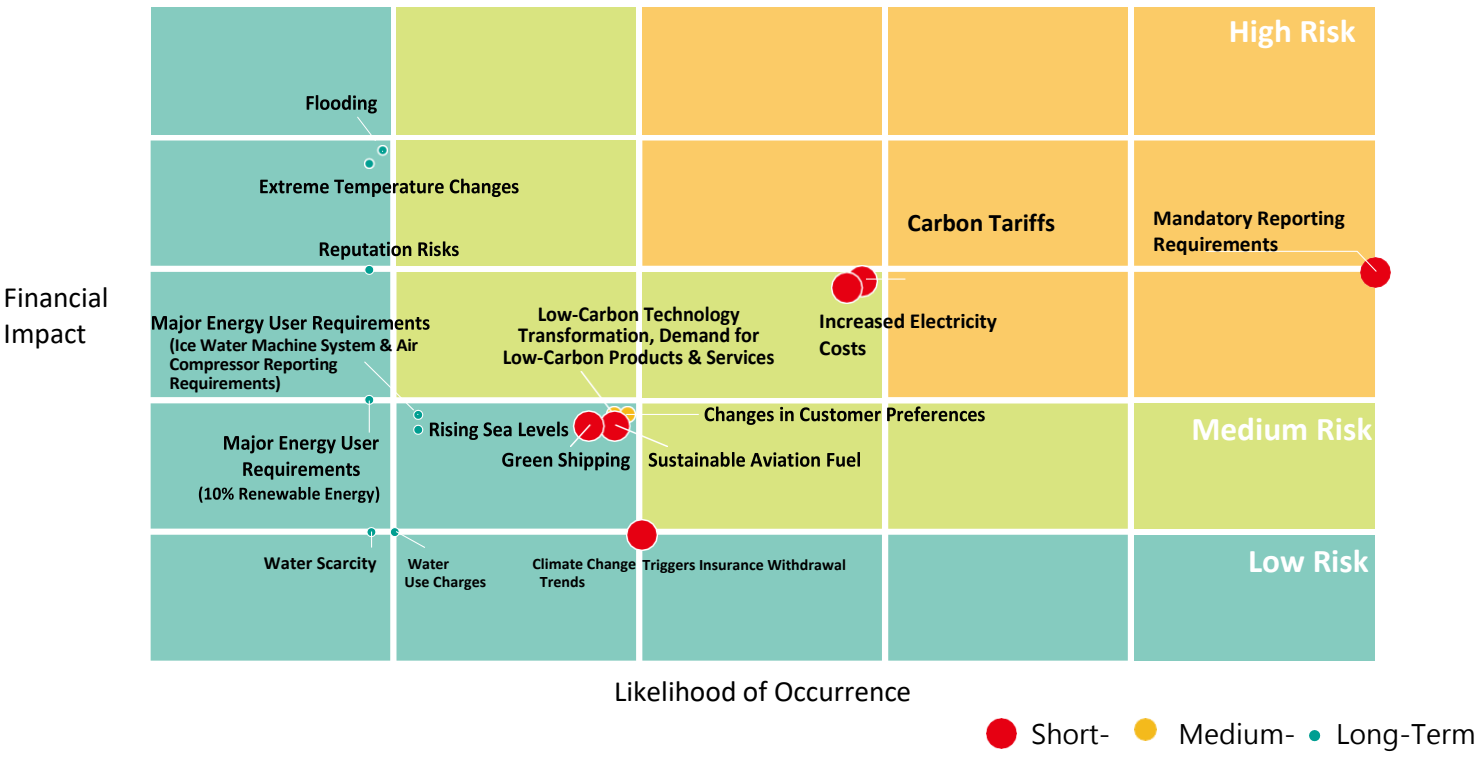
In response to the intensifying impacts of climate change on the global economy, environment, and human rights, GPI follows the Task Force on Climate-Related Financial Disclosures (TCFD) framework revealed by the Financial Stability Board (FSB). This includes core elements such as "Governance," "Strategy," "Risk Management," and "Metrics and Targets." Additionally, GPI adheres to the Taiwan Stock Exchange's " Rules Governing the Preparation and Filing of Sustainability Reports by TWSE-Listed Companies," which outlines recommendations for the disclosure of climate-related information. To address these requirements, the ESG Report Editorial Team, along with sustainability consultants, convenes a climate change identification meeting to assess risks and opportunities. The results of these assessments and implementations are reported to the board of directors on a regular basis (annually).

Risk Management

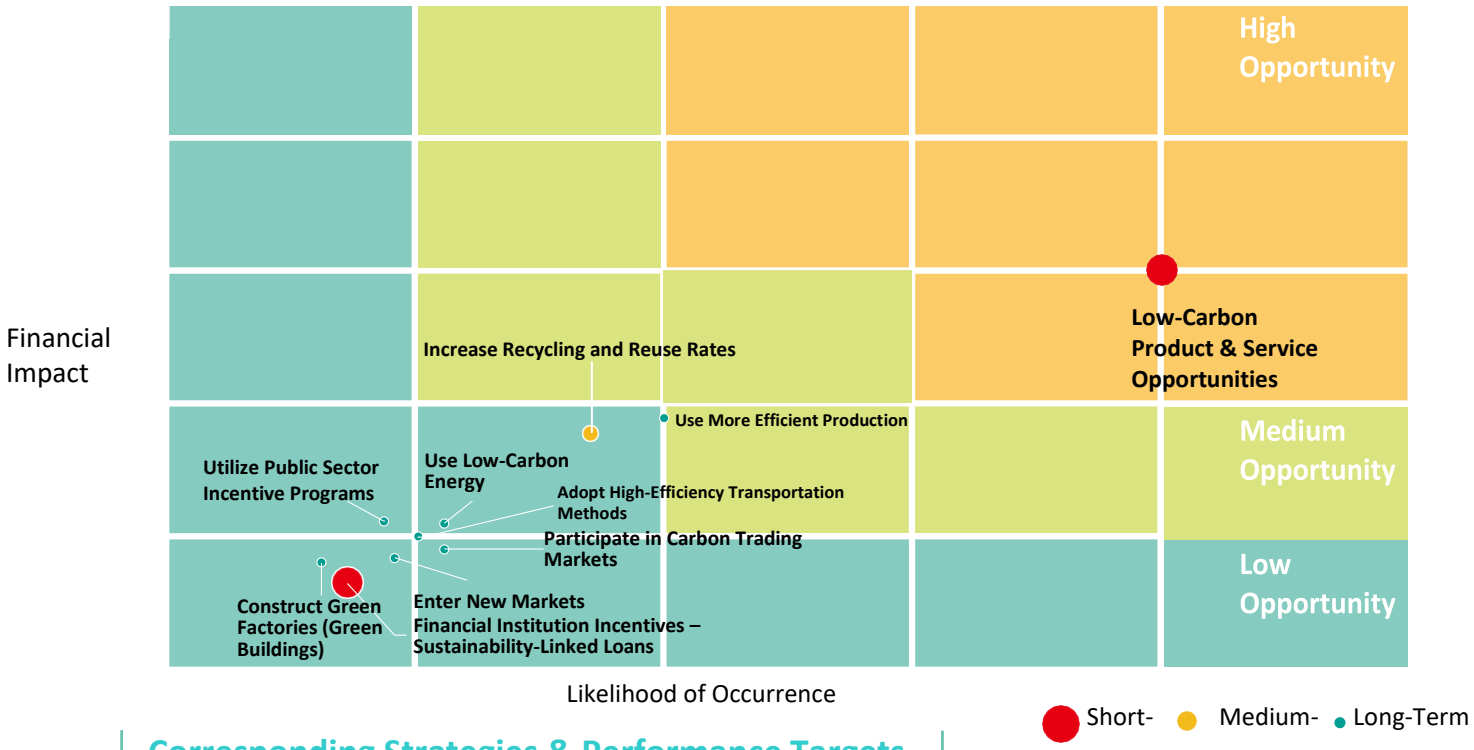
The Company refers to TCFD recommendations on climate-related risks and opportunities, including transition risks (policy and regulation, technology, market, reputation), physical risks (acute, chronic), and opportunities (resource efficiency, energy sources, products/services, market). The ESG Report Editorial Team and sustainability consultants hold climate change identification meetings to discuss and inventory potential risks and opportunities. These risks and opportunities are then assessed and categorized based on their likelihood of occurrence and financial impact.

In 2023, the Company prioritized medium and high-risk/high-opportunity issues, defined as those with a score of 9 or above for likelihood of occurrence and financial impact. This led to the identification of three potential climate change risks: policy and regulation risks such as mandatory reporting requirements and carbon tariffs, and physical risks including increased electricity costs; and the identification of one potential climate change opportunity: low-carbon product and service opportunities. The ESG Report Editorial Team, along with relevant departments, will continuously monitor and manage these risks and opportunities based on existing strategies and future response measures.

Climate Change Risk Matrix



Climate Change Opportunity Matrix



Corresponding Strategies & Performance Targets

Potential Climate Risks	Financial Impact	Corresponding Strategies & Performance Targets
Policy/Regulation - Mandatory Reporting Requirements	**Short-Term/High Risk** The Financial Supervisory Commission (FSC) has issued the "Sustainable Development Roadmap for TWSE and TPEx Listed Companies," which requires all listed companies to complete GHG inventories and assurance in phases within a specified timeframe. • GPI will need to inject manpower and resources for carbon inventory. If the carbon inventory results are inaccurate or not reported as required, the Company may face penalties from regulatory authorities, potentially **increasing operating costs**. • If carbon emissions reach the threshold for fees, GPI may need to pay carbon fees or carbon trading costs, which could **reduce profitability**. • To cut carbon emissions, GPI may need to invest in energy-saving and carbon reduction equipment or technologies, leading to **increased investment costs**.	1. Seek assistance from professional organizations and consultants to conduct carbon inventories. 2. Establish a carbon inventory management system: Define the scope, process, and responsibilities of carbon inventories, and regularly audit the carbon inventory process. 3. Strengthen carbon emission data management: Ensure that carbon emission data is complete and accurate. 4. Assess carbon risks: Evaluate carbon-related risks and develop response strategies. 5. As per the FSC's "Sustainable Development Roadmap for TWSE and TPEx Listed Companies," GPI's parent company plans to complete its GHG inventory and verification by 2025, while subsidiaries under the consolidated financial statement will complete their inventories and verification by 2026.
Policy/Regulation - Carbon Tariffs	**Short-Term/Medium Risk** Countries are implementing border carbon tariff systems to prevent carbon leakage on imported products. If GPI's exported products are subject to carbon tariffs, it will lead to **increased operational costs**. Additionally, product prices may rise, resulting in reduced consumer demand and subsequently **lower revenue and profitability**.	1. Reduce Carbon Emissions: Lower product carbon emissions by adopting energy-saving and carbon-reduction technologies or by switching to low-carbon materials or energy sources. 2. Develop Green Products: Create green products that meet consumer demand to boost product competitiveness. 3. Seek Government Subsidies: Pursue government support through subsidy programs and incentives.

Potential Climate Risks	Financial Impact	Corresponding Strategies & Performance Targets
Physical Risk - Increase in Electricity Costs	**Short-Term / Medium Risk** According to the government's 2050 net-zero emissions roadmap and the set renewable energy targets, the share of renewable energy is expected to reach 30% by 2030, with natural gas accounting for 50%. Most of Taiwan's electricity is provided by the state-owned Taiwan Power Company (TPC), which also controls electricity prices. Factors affecting future electricity prices include the cost of generating power from renewable energy (primarily solar and wind), natural gas, and coal. In recent years, the rising cost of raw materials has led to increased generation costs. Starting in April 2024, Taiwan's electricity rates will increase by 11%, with the average price rising by 9%. Industrial electricity rates will rise from NT$3.38 per kilowatt-hour to NT$3.72 per kWh. • The increase in electricity prices will lead to **higher production costs** for companies, **reducing profitability**. • Evaluating the replacement with new energy-efficient equipment may result in **increased capital expenditures**.	1. Optimize the Company's operations and production processes to reduce electricity expenses. 2. Assess new energy-saving equipment, optimize electrical devices to enhance energy efficiency, and replace high-energy-consuming systems or machinery.

Potential Climate Opportunities	Financial Impact	Corresponding Strategies and Performance Targets
Products and Services - Low-Carbon Product & Service Opportunities	**Short-Term / High Opportunity** Due to increasing demand in the green and eco-friendly market, there is a rising need for green and environmentally friendly products. GPI is investing in the development of new low-carbon product technologies and increasing the use of recycled materials to meet customer demand for low-carbon products. Despite **rising operating costs** during the R&D phase, it is expected to **boost GPI's revenue**.	**Short-Term** Actively invest in the R&D of green and eco-friendly products using recycled materials, and secure customer orders. The goal is to develop 2 new green products each year. **Medium to Long-Term** Increase the proportion of recycled materials to effectively recycle resources. Aim to produce more than 2 green products annually.

In the future, the Company will continue to follow the TCFD approach for identifying risks and opportunities, evaluating potential risks and opportunities. Relevant contingency plans will be developed for high-risk items.

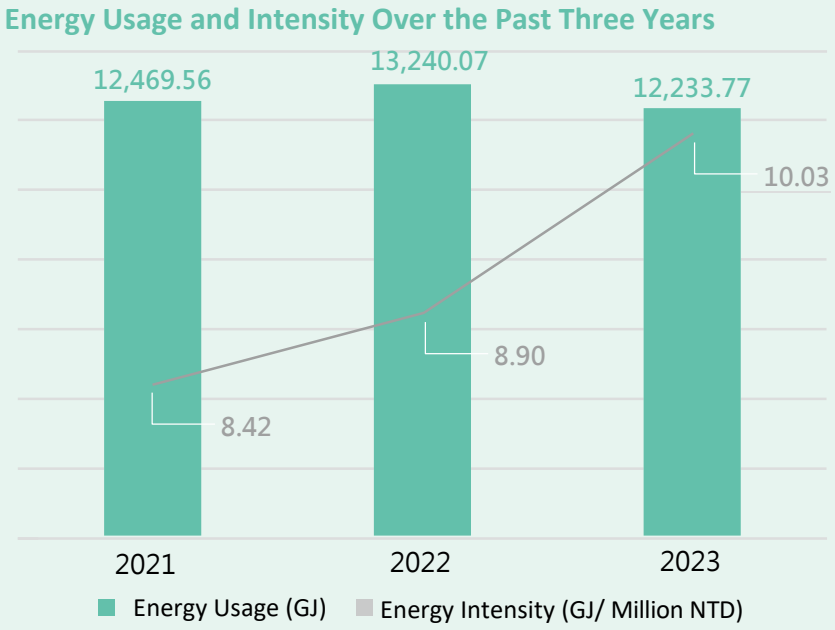
4.2 Energy Management

Energy Usage

According to Article 22 of the Taichung Low Carbon City Ordinance, GPI is required to install renewable energy generation equipment at the power-consuming sites. The total electricity contract capacity for the headquarters (main plant) and the second plant is 1,360 kilowatts, which requires at least 136 kilowatts of renewable energy equipment. GPI has installed a solar photovoltaic system with a capacity of 999.79 kilowatts, exceeding the ordinance requirement by approximately 7.4 times. In 2023, the system generated 1,272,800 kWh of electricity. However, this solar energy is currently sold wholesale to TPC, so no renewable energy was used on-site.

GPI's energy usage includes electricity and gasoline, with electricity being the primary source. In 2023, electricity usage totaled 3,340,760 kWh, and gasoline usage was 6,037.62 liters. Converted, the total energy consumption was 12,223.77 GJ, with an energy intensity of 10.03 GJ per million NTD.

GPI Energy Usage and Energy Intensity Over the Past Three Years				
Item	Unit	2021	2022	2023
Electricity Usage	GJ	12,265.92	12,948.77	12,026.74
Gasoline Usage	GJ	203.64	291.30	197.04
Total Energy Usage	GJ	12,469.56	13,240.07	12,223.77
Parent Company-only Revenue	Million NTD	1,481.04	1,487.36	1,219.22
Energy Intensity (Total Energy Usage / Parent Company-only Revenue)	GJ/Million NTD	8.42	8.90	10.03



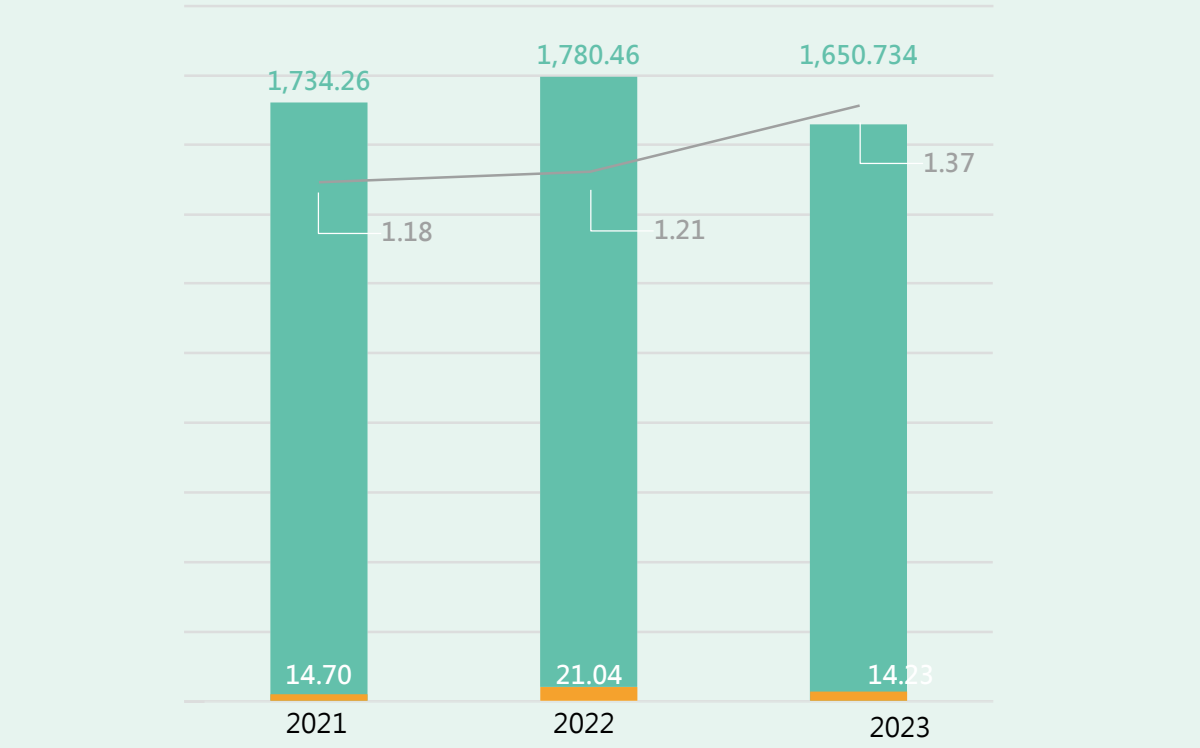
Notes:
1. Information Sources: The electricity data is aggregated from the monthly electricity bills of each facility. Gasoline consumption is based primarily on actual usage.
2. Energy calculations are based on GPI's Taiwan operations, including the main plant, second plant, and third plant.
3. Sources for the heat value conversion factors for various types of energy are as follows: the latest Greenhouse Gas Emission Factor Management Table V. 6.0.4 published by the Ministry of Environment (formerly the Environmental Protection Administration) and the Ministry of Economic Affairs Energy Statistics Handbook. The conversion factors are: Gasoline = 7,800 kcal/L (32,635.2 kJ/L); Electricity = 3.600 TJ/GWh (3,600 kJ/kWh).
4. The unit of measurement for parent company only revenue has been changed to "million NTD" to align with the Taiwan Stock Exchange's climate information disclosure requirements for TWSE and TPEx listed companies. Data for 2021 and 2022 has been updated accordingly.
5. 1 gigajoule (GJ) = 10^9 Joules (J).

Greenhouse Gas Management

GHG emissions are categorized into direct emissions (Scope 1) and energy indirect emissions (Scope 2). Scope 1 refers to direct GHG emissions from sources owned or controlled by the organization, while Scope 2 refers to indirect GHG emissions from the consumption of purchased electricity, heat, or steam. In 2023, GPI's Scope 1 emissions, primarily from gasoline use, totaled 14.23 metric tons of CO_2e. Scope 2 emissions, primarily from purchased electricity, amounted to 1,650.34 metric tons of CO_2e. The total GHG emissions were 1,664.57 metric tons of CO_2e, with a GHG emission intensity of 1.37 metric tons of CO_2e per million NTD.

GPI GHG Emissions and Emission Intensity Over the Past Three Years				
Indicators	Unit	2021	2022	2023
Scope 1: Direct GHG Emissions	Tonne of CO_2e	14.70	21.04	14.23
Scope 2: Indirect GHG Emissions	Tonne of CO_2e	1,734.26	1,780.46	1,650.34
Total Emissions = Scope 1 + Scope 2	Tonne of CO_2e	1,748.96	1,801.50	1,664.57
Parent Company-only Revenue	Million NTD	1,481.04	1,487.36	1,219.22
GHG Emission Intensity (Total Emissions / Parent Company-only Revenue)	Tonne of CO_2e / Million NTD	1.18	1.21	1.37

GHG Emissions and Emission Intensity Over the Past Three Years



Notes:
1. GHG emissions are aggregated using the operational control approach. The types of GHGs covered in the inventory include: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).
2. GHG calculations are based on GPI's Taiwan operations, including the main plant, second plant, and third plant.
3. GHG data has not been externally verified by a third party and is solely based on the Company's internal calculations. No base year for GHG emissions has been established yet.
4. Scope 1 only includes gasoline, primarily used for company vehicles; the source of the Global Warming Potential (GWP) data comes from the "IPCC Fifth Assessment Report (2013)" for the 2021 report and the "IPCC Sixth Assessment Report (2021)" for reports from 2022 onwards.
5. Scope 2 mainly includes purchased electricity. The emission factor for electricity is sourced from the Ministry of Economic Affairs' Energy Administration: 0.509 kg CO_2e per kWh for 2021; 0.495 kg CO_2e per kWh for 2022; and 0.494 kg CO_2e per kWh for 2023.
6. The source of the conversion factors used is the latest version (6.0.4) of the Greenhouse Gas Emission Factor Management Table, published by the Climate Change Administration of the Ministry of Environment.
7. The unit of measurement for parent company only revenue has been changed to "million NTD" to align with the Taiwan Stock Exchange's climate information disclosure requirements for TWSE and TPEx listed companies. Data for 2021 and 2022 has been updated accordingly.

In accordance with the "Sustainable Development Roadmap for TWSE and TPEx Listed Companies" issued by the FSC in March 2022, the Company presented its GHG inventory and verification schedule for GPI (parent company) and its subsidiaries included in the consolidated financial statements to the Board of Directors on May 10, 2022, and has been monitoring it quarterly.

GHG Inventory and Verification Schedule		
Tasks / Estimated Completion Time	Parent Company	Subsidiaries
Establishment of full-time/part-time units, number of full-time/part-time personnel, and their responsibilities	Dec 2025	Dec 2026
Development of inventory plan	Dec 2025	Dec 2026
Development of verification plan	Dec 2025	Dec 2026

Note: GPI, with paid-in capital of NT$1.276 billion, is required to complete disclosure of the GHG inventory information for subsidiaries in its consolidated financial statements by 2027. The base year for disclosure should be no later than 2026, and the reduction targets, strategies, and specific action plans for 2027 should be revealed. GPI plans to complete the disclosure of GHG inventory information and verification for subsidiaries in its consolidated financial statements by 2026. Going forward, GPI will further discuss and set reduction targets, strategies, and concrete action plans based on emission volumes.

Energy Conservation and Carbon Reduction

To effectively alleviate the environmental impact of the greenhouse effect, the Company has responded to energy conservation and carbon reduction initiatives. These efforts include utilizing skylights for natural lighting and water-cooled fans to lower indoor temperatures. Additionally, the Company has promoted energy management programs in offices and public areas to enhance staff awareness of energy conservation. In 2023, the Company replaced damaged and unusable fluorescent lighting with LED fixtures to decrease energy consumption. This is expected to save approximately 16,093 kWh of electricity annually, cutting energy usage by approximately 57.94 GJ and lowering Scope 2 GHG emissions by approximately 7.95 metric tons of CO_2e per year (calculated using the Ministry of Economic Affairs Energy Administration's 2023 power emission factor of 0.494 kg CO_2e/kWh).

4.3 Water Stewardship

GPI is located in the Related Industrial Park in the Wuci District of Taichung City. According to the World Resources Institute's "Aqueduct Water Risk Atlas,"* the water stress level in the region where the Company operates is categorized as "Low - Medium Risk (1-2)." The facility's water supply is entirely sourced from the Taiwan Water Corporation, with water drawn from the Liyutan Dam. This water is primarily used for domestic purposes within the Company. In 2023, the total water withdrawal was 19.72 million liters. The site is not located in a protected area, so it has no significant impact on the environment or biodiversity.

*Note: WATER RISK ATLAS website: https://reurl.cc/yyjme2.

GPI Water Resource Usage for the Past Three Years				
Item	Unit	2021	2022	2023
Water Withdrawal	Million Liters	17.06	19.15	19.72
Water Discharge	Million Liters	3.68	3.92	4.38
Water Consumption	Million Liters	13.38	15.23	15.34
Parent Company-only Revenue	Million NTD	1,481.04	1,487.36	1,219.22
Water Withdrawal Intensity (Water Withdrawal / Parent Company-only Revenue)	Million Liters / Million NTD	0.012	0.013	0.016

Notes:

1. Water Consumption = Water Withdrawal - Water Discharge.
2. Water resource usage calculations focus on GPI's Taiwan operations, including the main plant, second plant, and third plant.
3. Data Sources: Water withdrawal is based on the total monthly water usage recorded on water bills for each plant; water discharge is based on actual values recorded by water meters.
4. One million liters is equivalent to one thousand cubic meters.

Wastewater Discharge

The industrial park is equipped with a sewage treatment plant. All raw sewage within the plants is directed to the Related Industrial Park's centralized wastewater treatment facility before being discharged, preventing any direct release into surface water bodies. GPI's wastewater primarily originates from domestic sewage. It is collected through separate piping systems and directed to the wastewater treatment plant. The plant uses chemical agents and processing equipment to treat the wastewater to meet the regulated water quality standards before discharging it into the Longjing Lishui Drain, eventually flowing into the Taiwan Strait. Water pollution parameters include Chemical Oxygen Demand (COD) and Suspended Solids (SS). Over the past three years, GPI's wastewater / sewage discharge has consistently met or exceeded the effluent standards and complies with the Related Industrial Park's regulated water quality standards, with no negative impact on biodiversity.

GPI's Wastewater / Sewage Discharge and Related Industrial Park's Regulated Sewerage Quality Standards for the Past Three Years

Item	2021	2022	2023
Wastewater Volume (Million Liters)	3.68	3.92	4.38

Water Pollution Monitoring Items	2021 Regulated Standards	2021 Annual Average Monitoring Values	2022 Regulated Standards	2022 Annual Average Monitoring Values	2023 Regulated Standards	2023 Annual Average Monitoring Values
COD (mg / L)	480	147	480	161	480	162
SS (mg / L)	320	26	320	36	320	52

Note: Monitoring values are sourced from the sewerage fee notification.

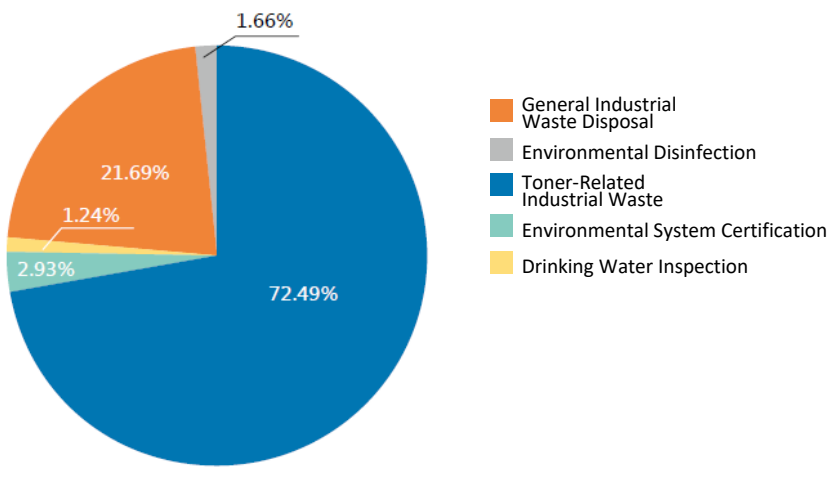
4.4 Pollution Prevention Management

Environmental protection is the foundation of sustainable corporate operations. Beyond implementing energy-saving and carbon-reduction initiatives, and promoting energy-efficient and low-energy processes to minimize environmental impact, GPI views pollution prevention as a critical responsibility within the framework of sustainable management. This includes minimizing domestic wastewater and general refuse, and conserving energy. GPI's processes do not involve the regular emission of air pollutants such as NOx, SOx, or VOCs from high-temperature combustion, nor do they produce process wastewater. The Company adheres to regulatory requirements by installing and executing relevant preventive measures and continuously enhancing pollution control equipment to reduce environmental pollution, thereby creating better environmental performance and moving toward a sustainable future.

To fulfill its corporate social responsibility towards the environment, GPI has injected funds into environmental protection efforts, including the treatment of general industrial waste and toner-related waste. In 2023, the Company's total environmental protection expenditures amounted to NT$1,811,214.

2023 Environmental Protection Expenditures

Expense Category	Expenses (NTD)
General Industrial Waste Disposal	392,920
Environmental Disinfection	30,000
Toner-Related Industrial Waste Disposal	1,312,894
Environmental System Certification	53,000
Drinking Water Inspection	22,400
Total	1,811,214



Waste Management

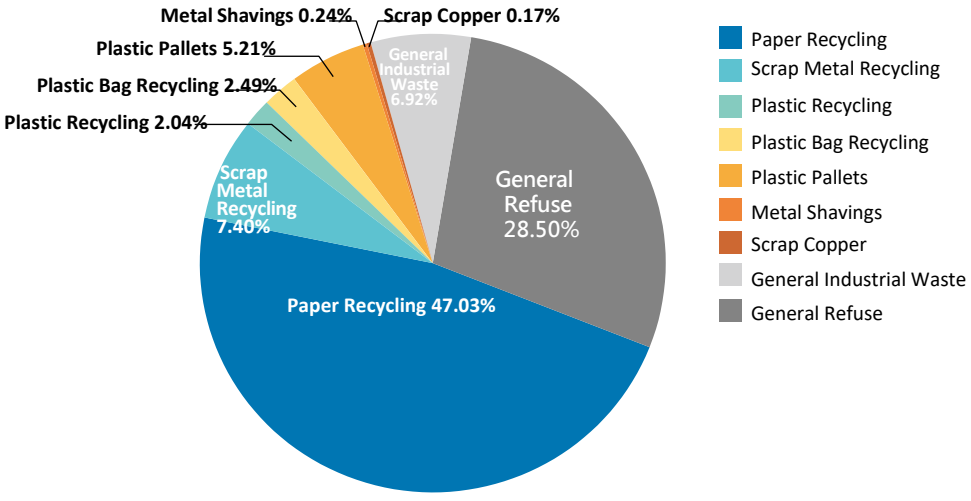
GPI's onsite waste includes general industrial waste, general refuse, and recyclable waste. The waste is classified, collected, stored, and treated in accordance with the Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste. These practices are also integrated into the plant's "Environmental Protection Management Procedures" and are implemented based on the Waste Disposal Act and related regulations.

The Company entrusted legally certified professional contractors with the transportation of general industrial waste and general refuse to incinerators. Contractors provided documentation to confirm that waste was handled according to contractual agreements. Recyclable materials, including scrap iron, waste paper, plastic pipes, plastic bags, plastic pallets, metal shavings, and scrap copper, were collected in the factory's designated recycling area. These materials were regularly sold to certified recycling companies. In 2023, the total waste amounted to 516.29 metric tons (with 182.88 metric tons directly disposed of and 333.41 metric tons diverted from disposal). No hazardous waste was generated or imported, and no significant leakage incidents occurred.

GPI Waste Quantity and Disposal Methods Over the Past Three Years

Waste Category	2021	2022	2023	Disposal Methods	
	Offsite			Type of Disposal	Disposal
General Industrial Waste	48.95	39.39	35.72	Direct Disposal: Incineration (Including Energy Recovery)	Sent to Houli Incineration Plant / Sent to Wurih Incineration Plant
General Refuse	76.96	97.08	147.16		
Paper Recycling	220.00	235.81	242.82	Waste diverted from disposal: Recycling	Scrap material recycled by vendors
Scrap Metal Recycling	15.00	20.71	38.19		
Plastic Recycling	12.18	11.99	10.55		
Plastic Bag Recycling	12.55	11.95	12.85		
Plastic Pallet	29.03	44.63	26.92		
Metal Shavings	3.19	1.21	1.22		
Scrap Copper	0.82	0.27	0.87		
Total (Metric Tons)	418.68	463.03	516.29		
Resource Recovery Rate (%)	69.93	70.53	64.58		

2023 Waste Quantity Proportions



Notes:
1. Waste calculations are based on GPI's Taiwan operations, including the main plant, second plant, and third plant.
2. Total waste quantities are based on actual measurements from the weighbridge.
3. Resource Recovery Ratio: Calculated as (Total Recycled Waste / Total Waste).

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