



3.Sustainable Development

Practicing sound corporate governance is the top priority of sustainability management. Therefore, we continue to develop and improve countermeasures for problems and actively improve the management system to create more fruitful results.

▶ (GRI 2-2、2-9 ~ 2-21、2-26、2-27、201-1、201-4、307-1、418-1、419-1)

SDGs ▶

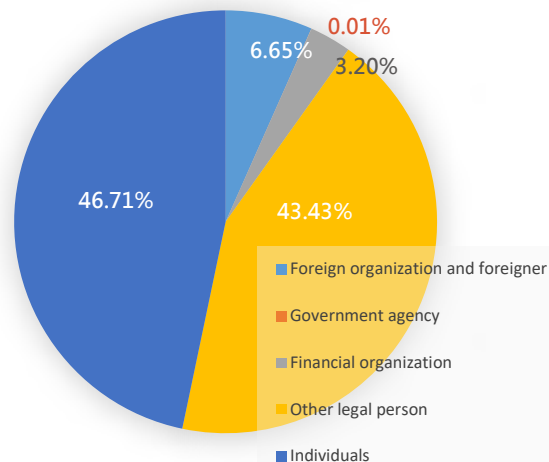


3.1 Corporate governance ► (GRI 2-16)

CGPC values the rights and interests of shareholders, and strictly abides by the relevant regulations on information disclosure, and provides information to shareholders on the Company's financial, business, insider shareholding and corporate governance conditions through the Market Observation Post System or the Company's website. We have established a corporate governance system in order to protect the rights and interests of shareholders and implement equal treatment of shareholders. A corporate governance system in which the shareholders have full rights to know, participate in and decide on material issues. (Please refer to [2023 Board of Directors' Resolutions](#)).



CGPC's composition of shareholders



Government unit awards	Taiwan Corporate Sustainability Awards	Taiwan Sustainability Action Awards
<ul style="list-style-type: none"> Ranked 6% - 20% in the 10th Corporate Governance Evaluation Won recognition of the Occupational Safety and Health Administration, was awarded the "2023 Healthy Workforce Sustainability Pioneering Enterprise Award, 2023 Chemical Industry Enterprise Sustainability Report Disclosure of Occupational Health and Safety Indicators Proactive Rating of Outstanding Enterprises". 	<ul style="list-style-type: none"> Integrated Performance Award: Taiwan Top 100 Sustainable Enterprises Award ESG Report: Traditional Manufacturing - Platinum Award 	<ul style="list-style-type: none"> Silver: SDG 6 Improving the performance and reducing sludge of aerobic system for high-chloride wastewater Bronze: SDG 8 AIOT Intelligent Manufacturing Bronze: SDG 12: Activated carbon Fluidized Bed Technology for VOCs Adsorption and Control

3.1.1 Transparent information disclosure ► (GRI 2-9)

We adhere to the business philosophy of ethics, care, discipline, innovation and trustworthy corporate governance principles. Through [our website](#), [the Market Observation Post System](#), [annual report](#), [ESG report](#), [investor conference](#) and other diverse information channels, we disclose the information related to corporate governance, operations, financial statements, institutional investor conferences, the Group's current information, etc. to improve the communication with stakeholders and the speed, quality and credibility of information disclosure.

In 2023, the 4 sessions of institutional investor conferences, annual general meeting and the abovementioned diverse information disclosure channels helped us collect shareholders' opinions which are given to the management team as reference for decision-making. In addition, we value the rights and interests of foreign investors and the globalization of enterprises, and have followed corporate governance evaluation standards to improve the annual report, update information on the MOPS and the Company's website and disclose information in English. We actively establish good two-way communication channels with shareholders through various ways to realize the protection of shareholders' rights and interests.

3.1.2 Information on appointment of the Board and the status of operation ► (GRI 2-9~2-21)

The election of directors and independent directors adopts the nominated candidate approach. Shareholders who hold more than one percent of the total issued shares and the Board may propose a list of candidates of directors and independent directors, subject to the Board's approval of their qualifications, and proposed to the shareholders meeting. Shareholders shall make their election choices from the list of candidates. The Company's current Board is composed of 9 directors who were elected and assumed their roles in 2022, with extensive experience in various professional fields. Among them, 4 are independent directors, accounting for 44% of the Board of Directors. The term of office of the directors is 3 years and they may be re-elected. A total of 4 Board meetings were held in 2023, and the attendance rate of all directors in person reached 91.43% (100% including proxy attendance). Please refer to the Company's [website](#) or [annual report](#) °

Board Members

Term: May 30, 2022 to May 29, 2025

Members: Directors: Yi-Gui Wu (Chairperson), Han-Fu Lin (Vice Chairperson and President), Pei-Ji Wu, Han-Tai Liu, Hong-Duo Wu

Independent directors: Tsu-Te Li, Ying-Pin Cheng, Liang-Hsien Li (Note), Cheng-Yi Hsu

Gender: All male

Age:	50 and under	1 person
	50 - 59 years old	2 people
	60 - 69 years old	1 person
	70 and over	5 people

Note 1: Independent director Liang-Hsien Li resigned on October 12, 2023, and a by-election will be held at the 2024 Shareholders' Meeting.

Note 2: On May 28, 2024, one female director was added to achieve the goal of gender diversity, and Ms. Chen-Ming Chang was welcomed as an independent director of CGPC Company.

Board of Directors' Resolution Submission Process

Please refer to the table below for the process for submitting proposals for Board meetings, the units responsible for Board meetings, and the important resolutions of the Board of Directors in 2023.

Authority and Responsibility unit

Submitting a proposal

Functional committees

Convene conference within the scope of relevant responsibilities. Conduct resolution report, discuss, make resolutions, and prepare minutes of the conference regarding the resolutions' results.

Submission to the Board of Directors

Conduct resolution report, discuss, make resolutions, and prepare minutes of the conference regarding the resolutions' results.

2023 Board of Directors' Important Resolutions (GRI 2-16)

(Please refer to The Company's [website](#) or [annual report](#)) Furthermore, we set up the "Group Secretary of Board of Directors" as the administrative unit responsible for planning and organizing board meetings. Its role is to enhance the efficiency of board meetings and assist in the implementation of resolutions.

3.1.3 Board diversity and directors' recusal due to conflicts of interest (GRI 2-9、2-10、2-11、2-15)**► Specific management objectives of board diversity**

Diversity Policy for Board Members: The composition of the Board of Directors should consider diversity and the board of directors should have the following capabilities: judgment on operations, accounting and financial analysis, business management, crisis management, industry knowledge, perspectives on international markets, leadership, decision-making, laws and environmental protection. To attract outstanding external talent to join the company's Board of Directors, the number of independent director seats for this term has been increased from 3 to 4 and appointed on May 30, 2022. Mr. Cheng-Yi, Xu was appointed as a new independent director. He holds a Master's degree in Business Administration from a Swiss business school and currently serves as the Chairman of the TTFB Group. With his extensive business experience, Mr. Xu will contribute to enhancing the quality of board review and fulfilling the goal of implementing the board's diversity policy. The future diversity goal for the company's board members includes adding one director with expertise in sustainable development, who can assist the company in achieving its carbon reduction goals and implementing green energy policies. Additionally, it is planned to add one director with expertise in business risk management to enhance the company's sustainability competitiveness and further improve the functionality of the board. Implementation Status of Diversity Policy for Board Members: Please refer to The Company's [website](#) or [annual report](#).

► Conflict of interest and avoidance of directors

- To improve corporate governance, the Board of Directors has formulated comprehensive rules and regulations for avoiding conflicts of interest among directors to protect the rights and interests of investors. (See [Rules of Procedures for Board of Directors Meetings](#), [Code of Ethics and Conduct for Directors and Managers](#), [Ethical Corporate Management Best Practice Principles](#), [Business Integrity Procedures and Behavioral Guidelines](#)).
- Measures to avoid conflict of interest: When the Board of Directors discusses matters related to directors with conflicts of interest, the Chair reminds the relevant directors of the need to recuse themselves from the discussion. If the Chair has a conflict of interest and needs to recuse himself or herself, an independent director without any conflict of interest is to be appointed to act as the Acting Chair.
- The secretarial department of the Board of Directors shall record the reasons for recusal and the implementation status of recusal in the Board meeting minutes for motions having a conflict of interest with directors according to the Rules of Procedures for Board of Directors Meetings.
- The motions for recusal of conflicts of interest were executed in compliance with the laws and regulations in 2023. Please refer to the [Annual Report](#) - Board of Directors Operations. 5. For the content of response to conflicts of interest between Board members and stakeholders, please refer to FY2023 "Board of Directors Composition Information", "Top 10 Shareholders" in the 2023 [Annual Report](#), and "Related Party Transactions" in the 2023 Financial Report.

3.1.4 Status of performance evaluation of committees ► (GRI 2-18)

► 2023 Performance Evaluation of the Board of Directors, Individual Directors, and Functional Committees

Established evaluation methods for the performance of the Board, and regularly conducts self-evaluation of the whole Board, individual Board members, and functional committees every year, which is carried out by the Office of the Board Secretary. The results serve as a reference for the Company to review and improve.

- ◆ The 2023 internal self-assessment performance of the Board as a whole, individual directors, and functional committees is as follows:

Parties Evaluated	Overall Board of Directors	Individual Board Members	Functional Committees		
Aspect of assessment	<ul style="list-style-type: none"> ◆ Participation in the operation of the Company ◆ Improvement of the quality of the Board's decision making ◆ Composition and structure of the Board ◆ Election and continuing education of the directors ◆ Internal control 	<ul style="list-style-type: none"> ◆ Understand the objectives and missions of the Company ◆ Understanding of directors' job responsibilities ◆ Participation in the operation of the Company ◆ Internal relationship management and communication ◆ Specialization and continuous education of directors ◆ Internal control 	<ul style="list-style-type: none"> ◆ Participation in the operation of the Company ◆ Understanding of the Audit Committee's job responsibilities ◆ Improvement of the quality of the Audit Committee's decision making ◆ Makeup of the Audit Committee and election of members ◆ Internal control 	<ul style="list-style-type: none"> ◆ Participation in the operation of the Company ◆ Understanding of Salary and Remuneration Committee's job responsibilities ◆ Improvement of the quality of the Salary and Remuneration Committee's decision making ◆ Makeup of the Salary and Remuneration Committees and election of members 	<ul style="list-style-type: none"> ◆ Participation in the operation of the Company ◆ Understanding of the duties of the ESG Committee ◆ Improve the quality of the ESG Committee's decision-making ◆ Sustainable Development Committee composition and membership
Assessment results	Overall, the average score for all aspects of the Board of Directors was over 4.6 points, indicating a positive result.	The average score of all aspects of each director is above 4.8 and the evaluation results are good.	The average score of all aspects of the Audit Committee is 4.5 and the evaluation results are excellent.	The average score of all aspects of the Salary and Remuneration Committee is 5, and the evaluation results are excellent.	The average score for all aspects of the ESG Committee reached 4.94 points, indicating a positive overall result.

Note: The evaluation score is expressed in the range of 0 to 5, with a full score of 5. The period being evaluated is from January 1, 2023 to December 31, 2023.

The results of the performance evaluation of the overall Board of Directors, individual directors, and functional committees will be presented to the Board of Directors in the first quarter of 2024.

Recommendations and implementation matters:

In light of the increasing global focus on environmental, social, and governance (ESG) issues, the Company has actively implemented various measures in accordance with the corporate governance 3.0 sustainable development blueprint released by regulatory authorities. These initiatives have been presented to both the ESG Committee and the Board of Directors, providing detailed explanations to the directors. During meetings, the directors have frequently offered valuable insights and recommendations.

In addition to continuously enhancing corporate governance effectiveness, the Company has placed particular emphasis on implementing carbon reduction goals and developing green energy strategies. We are carefully planning and executing these initiatives to meet international standards and achieve our ambitious goals for sustainable development.

3.1.5 Enhancing directors' professional competence ► (GRI 2-17)

In order to reinforce the professional competence of directors (including independent directors), we regularly provide information on relevant continuing education courses to directors and assists directors with registration in the courses. A total of 6 hours of internal training was planned. On July 5, 2023, Professor Ju-Ching Ming of the Department of Political Science, National Taiwan University, gave a lecture on "CCP's Politics and Economy, International Situation, and Cross-Strait Relations" for 3 hours, and on October 13, 2023, PwC partner, Lin-Shun Hsu, CPA, gave a 3-hour refresher course on "How Directors Should Supervise the Company's Effectiveness in Corporate Risk Management and Crisis Management".

In 2023, all directors also participated in various external courses, and the total number of training hours was 54 hours. All directors met the hour number requirements specified by the Directions for the "Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEx-Listed Companies", and the content of the courses is detailed in our [website](#).

3.1.6 Chief Corporate Governance Officer ► (GRI 2-9 、 2-17)

In order to protect shareholders' rights and interests of and strengthen the professional competence of the board, the board resolution on May 9, 2019, approved the appointment of the director Yung-Chih Chen of legal affairs holding the concurrent position as the chief corporate governance officer in charge of corporate governance-related affairs.

Director Yung-Chih Chen has more than 7 years of experience as the head of legal department of a publicly-traded company. His main responsibilities are to handle matters related to board meetings and shareholders' meetings, preparing the minutes of the board meetings and shareholder meetings, assisting in the appointment of directors of the board and their continuing education, providing directors with information required for business implementations, helping directors comply with the laws and regulations, etc. (For details, please see the description on the [website](#)).

3.1.7 Functional committees ► (GRI 2-9)

We have established three functional committees under the Board of Directors, the Audit Committee, Salary and Remuneration Committee, and ESG Committee. For details, please visit the website of the respective committees.

Job Title	Name	<u>Audit Committee</u>	<u>Remuneration Committee</u>	<u>ESG Committee</u>
Chairman	Yi-Gui Wu	-	-	Committee Members
Director	Han-Fu Lin	-	-	Vice Committee Chairperson
Independent director	Tsu-Te Li	Convenor	Committee Members	-
Independent director	Ying-Pin Cheng	Committee Members	Convenor	Committee Chairperson
Independent director	Cheng-Yi Hsu	Committee Members	Committee Members	Committee Members



Note 1: The statistics in this table are as of December 31, 2023.


Note 2: Li, Liang-Xian Independent Director resigned on October 12, 2023, and his vacancies on the Audit Committee, Salary and Remuneration Committee, and Sustainable Development Committee were taken over by Independent Director Hsu, Cheng-Yi.

Note 3: Hu, Chi-Hung EVP of CGPC, took over as President of CGPC and served as the Vice Chairperson of the ESG Committee from April 1, 2024.

Note 4: On May 28, 2024, the shareholders' meeting approved the addition of an independent director: Ms. Chang, Zhen-Ming serves as a member of the Audit Committee and the ESG Committee.

3.1.8 Functions and operations of each functional committee ► (GRI 2-10、2-19~2-21)

Name of Committee	Responsibilities/Functions	Operation and Communication Status	
<div></div> <div>Audit Committee</div>	<ul style="list-style-type: none">◆ Formulation/revision of the internal control system and the supervision of its operation.◆ Formulation/revision of the procedures for handling material financial and business activities and the supervision of the operation.◆ Supervision of appointment and resignation of CPAs and their independence.◆ Appointment and dismissal of financial/accounting/internal audit officers.◆ Supervision of the appropriateness of financial reports.	<div><div><p>1. In order to fully exercise their duties and gain a better understanding of the company's financial reports and financial and business conditions, independent directors engage in separate communication with the auditors and internal audit manager at least once a year, without the presence of other directors or management personnel.</p><p>2. Communication between Independent Directors and Accountants/Internal Audit Manager:</p></div><div><div><div><div>Date: November 2, 2023 The Audit Committee - 6th meeting of the 3rd Term</div><div>Separate communication matters: Accountants 1. Review implementation and conclusion of the 2023 Q3 consolidated financial statements. 2. 2023 annual financial report audit plan and key audit matters. 3. Introduction to IFRS S1 and S2 on Sustainability Disclosure. 4. Timeline for levying carbon fees and setting direction for carbon fees.</div></div><div>Internal audit supervisor 1. Implementation status of audit and the results. 2. Schedule of 2023 internal control self-evaluation. 3. 2024 audit plan.</div></div><div>Results of communication: No opinions</div></div><p>3. The project secretary of the Audit Committee will report on the operational status of risk management for the year.</p><p>◆ For detailed information, please refer to the official website - Audit Committee, Audit Committee's Organizational Regulations.</p></div>	
<div></div> <div>Remuneration Committee</div>	<ul style="list-style-type: none">◆ Stipulate and regularly review the performance of the directors and managers, as well as the remuneration policies, systems, standards, and structure.◆ Regularly evaluate and stipulate director and manager remuneration.	<p>1. The current term of office is from June 2, 2022 to May 29, 2025, with a total of 3 members, consisting of all independent directors.</p> <p>2. The committee convenes a minimum of 2 meetings per year and in 2023, a total of 3 meetings were held, with all committee members achieving a 100% attendance rate. Regarding the operation of this committee, please refer to the Company's website, Annual Report, or linked to the Market Observation Post System (MOPS) to research.</p> <p>3. The committee conducts regular reviews of the (1) compensation policies, systems, standards and structures, and (2) performance evaluations of directors and executives. It considers various factors, including industry median compensation levels, individual time commitment, responsibilities, individual goal attainment, compensation of comparable positions, achievement of short-term and long-term business goals, and the financial position of the company. Based on these factors, the committee establishes and evaluates the compensation of directors and executives, subject to the approval by the Board of Directors. (GRI 2-20)</p> <p>◆ Salary and Remuneration: Director compensation comprises remuneration, director fees, and business execution expenses. Executive compensation includes monthly salary, fixed bonuses, year-end bonuses, employee remuneration, annual special bonuses, retirement benefits, and welfare benefits as required by law. The remuneration for directors and employees is governed by the provisions of Article 25 of the company's bylaws. (GRI 2-19)</p> <p>◆ Vinyl Chain's total compensation ratio in 2023: 15.43:1. Total compensation change ratio: 33.40%. (GRI 2-21)</p> <p>◆ Performance evaluation: The aspect of assessment for directors' performance encompasses the understanding of company goals and missions, awareness of responsibilities, level of involvement in company operations, internal relationship management and communication, professionalism and continuous learning, and internal control, among others. The evaluation of managers' performance covers financial aspects (such as operating revenue, operating profit, and pre-tax net profit), customer aspects (customer satisfaction, service quality), product aspects (brand management, quality innovation), talent aspects (talent development, potential enhancement), safety aspects (zero pollution, zero emissions, zero occupational hazards, zero incidents, zero failure), project aspects (digital transformation, energy conservation and carbon reduction, circular economy, net-zero emissions), among which the weight of sustainability-related indicators is at least 5%. The president's performance indicators and sustainability-related items in 2023 include energy conservation and carbon reduction, process safety management, and new product development.</p> <p>Note 1: Total Remuneration Ratio: Annual total remuneration of the highest-paid individual in the organization divided by the median annual total remuneration of all employees (excluding the highest-paid individual).</p> <p>Note 2: Total Remuneration Change Ratio: Percentage increase in the annual total remuneration of the highest-paid individual in the organization divided by the percentage increase in the median annual total remuneration of all employees (excluding the highest-paid individual).</p> <p>◆ For detailed information, please refer to the official website - Remuneration Committee, Remuneration Committee's Organizational Regulations, and Annual Report.</p>	

Name of Committee	Responsibilities/Functions	Operation and Communication Status
 ESG Committee	<ul style="list-style-type: none"> ◆ Formulate sustainable development policy. ◆ Supervise the implementation of strategic planning of sustainable development, annual plan and project plans, and evaluate the status of implementation. ◆ Review the sustainable report. ◆ Report the annual implementation results of sustainable development to the Board every year. 	<ol style="list-style-type: none"> 1. The third term of office is from June 2, 2022 to May 29, 2025 and the 4 committee members include Chairperson Yi-Gui Wu, Vice Chairperson Han-Fu Lin who concurrently serves as the president, independent directors Ying-Pin Cheng and Cheng-Yi Hsu. 2. The ESG Committee convened two Board meetings in 2023, and the attendance of all committee members in person reached 87.50% (100% for including attendance by proxy). 3. Report 2023 sustainable development progress and annual sustainability plan report to the Board of Directors. <ul style="list-style-type: none"> ◆ For detailed information, please refer to the CGPC's ESG Area (ESG Committee meeting minutes), ESG Committee's Organizational Regulations.

3.1.9 Implement ethical management ► (GRI 2-13 、 2-14 、 2-15)

Ethical operations is CGPC's corporate culture, we improve the behaviors and professional ethics of all employees to establish sound business operations and enterprise management, we explicitly prohibit unethical behavior, and the standard applies to directors and officers, employees or people who have substantial control over the Company. To promote management in ethical operations, the head of [Corporate Governance](#) provides regular reports (at least once a year) to the Board of Directors. (For detailed information, please refer to the [official website](#).)

Professional ethics and management

► Establish systems

CGPC has established the business philosophy of ethics, care, discipline and innovation, and formulated code of conduct for business activities, such as [the Ethical Management Best Practice Principles](#), [the Procedures for Ethical Management and Guidelines for Conduct](#), [the Directors and Managers Ethical Code of Conduct](#), and [the Code of Conduct for Employees Taking Part-Time Jobs](#). These standards apply to everyone who conduct business activities on behalf of the Company, including the employees, management, directors and members of subsidiaries. The contents include the prohibition of unethical behaviors and conducting bribery or receiving bribery, recusal from conflict of interests, the prohibition of leaking business opportunities, insider trading, improper charitable donations or sponsorships or illegal political contributions.

► Ethical management

CGPC has set up an "[Audit Committee mailbox](#)" on the Company's website, which handles whistleblowing cases related to the obligations of the Audit Committee. The board and the Audit Committee also have approved the "Measures Handling Reporting of Illegal and Unethical or Dishonest Behaviors." The whistleblowing measures stipulate the handling measures for the notification and the relevant confidentiality measures, and designate responsible units for handling the cases. We spare no efforts in confidentiality and protection of the whistleblowers, participating investigators and the case content. If the whistleblower is an employee, we guarantee that the person will not be mistreated.

CGPC abides by the Ethical Operations Management Best Practice Principles and all employees must abide by the Company's rules and policies. We use the ERP system to enable relevant employees and managers to obtain the necessary information immediately, which reflects the actual performance of the operation, and formulate relevant standards according to the Company's policies after risk assessment. The internal control self-evaluation can examine the compliance with laws and regulations, awareness of business ethics, and assessment of potential risks in order to achieve self-supervision. The internal whistleblowing measure files grievances through the Company's internal direct supervisor, head of human resources and head of audit supervisor. The prudent acceptance and handling process respects the parties involved and the confidentiality of the incident investigation. Suggestions or grievances filed from external stakeholders can also be handled by dedicated personnel through the mailbox on CGPC's official website. The "[Contact Us](#)" section, "[Audit Committee mailbox](#)" in the Investor Services, and the "[Employee Complaint Channel](#)" in the Human Resources section of the website did not receive whistleblowing or grievance cases in 2023.

Note: ERP (Enterprise Resource Planning).

Operation and Annual Implementation of Ethical Management

For the Company's directors, managers, and employees to understand the Group's integrity and ethical standards and to strictly abide by them, the Company's employment conditions explicitly stipulate that employees must abide by the Group's Ethical Corporate Management Policy. Upon election, all directors and senior managers will sign the Ethical Corporate Management Statement, which is kept for future reference.

► Promotion education

For employees to understand the Company's professional ethics, new employees must sign the Letter of Undertaking on their arrival on the day when they are on the job, in accordance with the Company's regulations. The Letter of Undertaking clearly states the Company's policy on ethical corporate management, and employees must also promise to abide by the Company's code of ethics. In addition to announcing the integrity-related regulations on the Company's website for colleagues to browse and abide by, the Company continuously invites well-known scholars, experts, or lawyers to conduct education, training, and promotion sessions for directors, officers, employees, and substantial controllers, so they can understand the Companies' resolve to implement ethical corporate management, the related policies, prevention programs, and the consequences of committing unethical conduct.

In order to improve employees' professional competence, an internal continuing education seminar on ethics was arranged in 2023, with a total of 861.5 hours and a total of 441 person-times in attendance. For details, please refer to the following:

Item	Ethics seminars	Hours	Per-son-time	Total hours
1	[Ethical Seminar] Stop and listen to the traps of information security	2	137	274
2	[Ethical Seminar] Legal Awareness in the Smart Era and Countermeasures	2	95	190
3	[Ethical Seminar] Promotion of Legal Awareness - Insider Trading and Gender Equality	2	67	134
4	[Ethical Seminar] Preventing Workplace Misconduct and Violations	2	125	250
5	[Ethical Seminar] Legal Liabilities of Breach of Trust and Case Study	3	1	3
6	[Ethical Seminar] Internet Copyright and Legal use of Software	2	47	94
7	[Ethical Seminar] Introduction to the Trade Secrets Act and Case Study	3	56	168
8	[Ethical Seminar] Copyright Protection and Fair Use	2	7	14
9	[Ethical Seminar] Crossing the USSIG Island	2	1	2
10	Code of Conduct Training	1	839	839
Total			1,375	1,968

Note: The statistics of the three companies, CGPC, TVCM, and Taiwan Highpolymer do not include the training of directors and the head of corporate governance.

► Education and training sessions and seminars on ethics



2023/06/07 [Ethical Seminar] Stop and Listen to the Traps of Information Security



2023/09/19 [Ethical Seminar] Legal Awareness in the Smart Era and Countermeasures

3.1.10 Intellectual property rights management plan

In order to enhance the Company's industrial status and maintain the existing technological achievements, we integrate intellectual property rights with operations objectives and R&D resources. It is expected that the establishment of the Company's intellectual property management system can improve the Company's competitive advantage in the industry and obtain higher benefits through high-value products and services (using the PDCA cycle to construct an intellectual property management system).






Report on the annual implementation status of intellectual property rights:

The "2023 Intellectual Property Management Implementation Status and 2024 R&D Plan" was submitted to the Board of Directors for approval on November 2, 2023. (For details, please see the description on the [website](#))

3.2 Operating performance ► (GRI 2-2、201-1、201-4、3-3)

In order to enable shareholders and investors to obtain more on-time and accurate information of CGPC when carrying out investment decisions, the information on the monthly revenue release, quarterly financial reports, annual general meetings and institutional investor conference, is made available in the "[Investor Services](#)" section of the Company's website or the [MOPS](#). Shareholders and investors can also contact the spokesperson or acting spokesperson by phone, or use the "[Contact Us](#)" on the Company's website and the USI Group's "[Contact Us](#)" on its website to submit any questions and suggestions, and all opinions will be handled by dedicated personnel.

Material issue: Economic performance

	The Significance and Impact of CGPC	It is the foundation of the Company's sustainable development, enabling shareholders to obtain reasonable return on investment and the Company to have sufficient resources to take care of employees. The Company also creates mutually beneficial and win-win relationships with clients, suppliers, and collaborating partners to facilitate the growth of both the society and the Company. Affected parties: government agencies, employees, investors, suppliers.
	Develop Strategy	Improve product value, provide customers with satisfactory service quality, and maintain stable profits and sustainable development of the enterprise.
	Policy Commitment	Implement corporate governance and environmental protection measures for energy conservation and carbon reduction to create a workplace of wellness.
	Grievance Unit	President's Office
	SASB Indicator	--

Promotion policy	Unit	2023 goal	2023 result	2024 goal	2025 goal	2030 goal
Reinforce differentiation of PVC resin products, upgrade equipment to improve quality and output and establish stable sales channels.	PVC resin production growth rate (%)	3.3	2.1 	3.7	4.0	8.0

Note 1: 2019 is the base year.

Note 2: Reasons for failure to achieve: In 2023, the global economy was overshadowed by factors such as the Russia-Ukraine war, inflation, interest rate concerns and hikes, and China's economic recovery was not as expected after the lockdown was lifted, the overall downstream demand was weak, leading to a slowdown in demand. In response to these challenges, CGPC proactively adjusted our operations in a rolling manner to minimize the negative impact (For detailed information, please refer to 3.2 section).



Exceeded Target



Achievement



Partially achieved



Not met

► Operational performance:

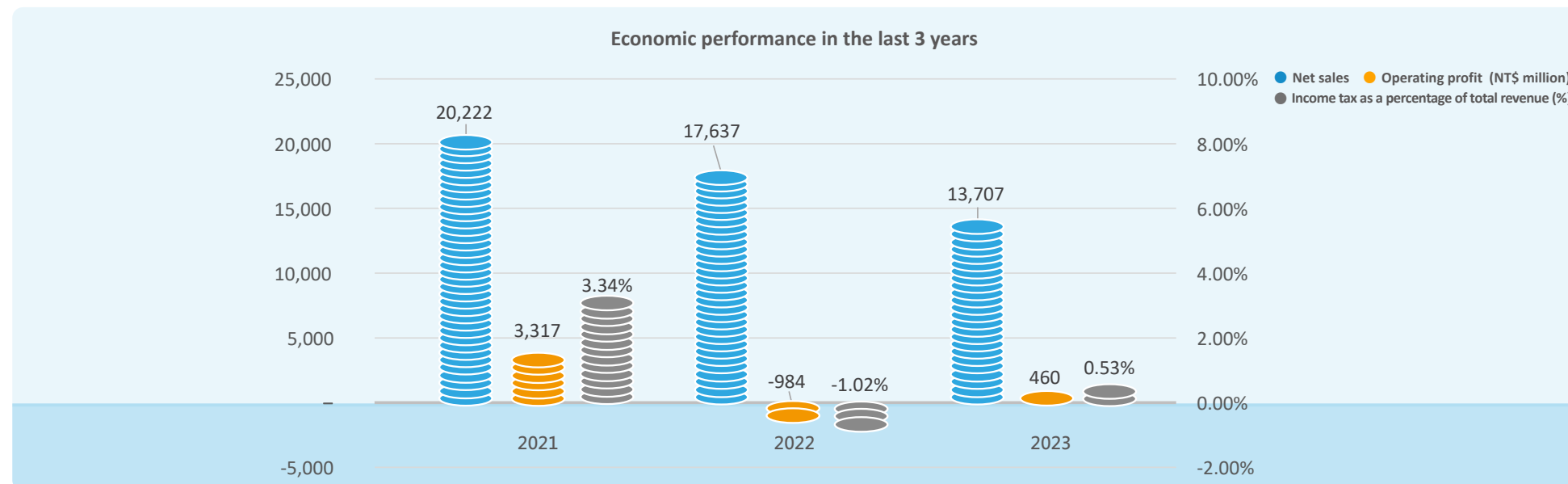
Focusing on the trends of global net-zero emissions and domestic carbon fee collection, CGPC actively implements ESG sustainable operations. Our efforts include: replacing energy-consuming equipment, increasing the proportion of low-carbon energy sources, building photovoltaic devices, and introducing AI to optimize processes, improve energy consumption and safety. In 2023, the Board of Directors approved spending NT\$4.5 billion to upgrade the compound tanks and surrounding equipment. This can increase production capacity, equipment safety, and reduce unit consumption and VOCs escape. The company's management team will exert a vertical integration to expand its niche, implement industrial safety and environmental protection, continue to reduce costs, and fulfill social responsibilities, so as to achieve the goal of total sales of 520,000 tons of various products in 2024 and the goal of corporate sustainability. For details, see Annual Report: 2023 Business Report.

(Unit: NT\$)			
Item	Amount (NTD million)	Budget Achievement rate	Compared to the same period last year (NTD million)
Consolidated Net sales	13,707	85%	-3,930
Consolidated net operating profit (loss)	460	54%	1,444
Consolidated profit (loss) after tax	394	60%	732
Consolidated net loss after tax attributable to the Company's owners	342	55%	712

► Sales volume of each product in 2023 (10,000 tons)

Product	Production volume (10,000 tons)	Sales volume (10,000 tons)	Budget Achievement Rate
VCM	42.60	3	125%
PVC resin	39.10	35.40	-4.0%
Chemicals(100% concentration meter)	6.90	5.50	-9.0%
Fabricated products			
Building materials products	2.00	1.90	-5.0%
Tape products	2.00	2.00	-20.0%
Rubber Products (10,000 yards)	513	534	-33.0%

3.2.1 Economic performance (net sales and operating profit)



Note 1: Adopted the International Financial Reporting Standards (IFRS) recognized by the Financial Supervisory Commission starting 2014.

Note 2: The relevant financial information can be found at the [MOPS](#).

Note 3: The operational performance is expressed based on the consolidated financial statements.

3.2.2 Profit distribution

1. Dividend policy stipulated in the Company's Articles of Incorporation: please refer to the explanation in [Article 33](#).

2. Proposal to distribute cash dividends at the Shareholders' Meeting:

For the distribution of 2023 profit, the Board proposed to distribute cash dividends of NT\$0.35 per share, which would be subject to the approval by the resolution of the annual general meeting held on May 28, 2024, before being carried out in accordance with the regulations. (For details, see the official website - [Material Information](#))

- ◆ As the Company is in a mature industry, the distribution of profits takes into account the needs of research, development, and business diversification, and the shareholder dividends shall not be less than 10% of the distributable profits for the current year, of which cash dividends shall not be less than 10% of all dividends. However, if the annual distributable profit per share is less than NT\$0.1, it shall not

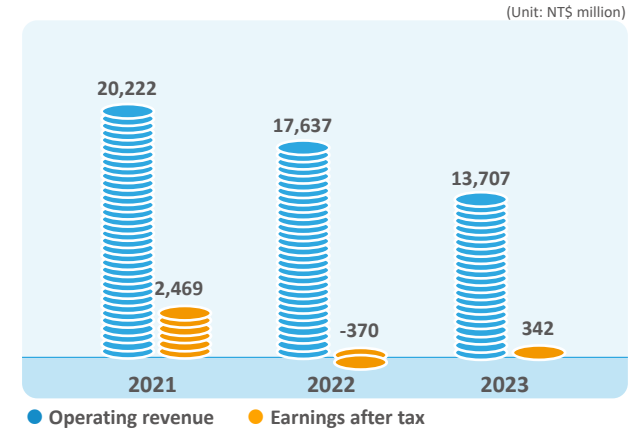
3.2.3 The revenue and dividend distribution in the last 3 years are as follows (excluding subsidiaries)

(Unit: NT\$ million)

Item	2021	2022	2023
Operating revenue	20,222	17,637	13,707
Earnings after tax	2,469	-370	342
Earnings after tax per share (NT\$/Share)	4.25	-0.64	0.59
Dividends distribution (Including cash and stock dividends)	1,453	174	203
Cash dividends per share (NT\$/Share)	2.50	0.30	0.35
Stock dividends per share (NT\$/Share)	0	0	0
Total Dividends distribution (%)	59	-47	59
Price/Earnings Ratio	8.33	-43.80	41.75
Price/Dividends Ratio	14.16	93.43	70.37
Cash Dividends Yield(%)	7.06	1.07	1.42

Note: (1) Price-Earnings ratio = Average closing price per share / Earnings per share of the year
(2) Price-Dividends ratio = Average closing price per share / Cash dividends per share of the year
(3) Cash dividends yield = Cash dividend per share / Average closing price per share of the year

▶ Operating revenue and after-tax profit in the last 3 years



3.2.4 Description of direct economic value generated and distributed by the organization

(Unit: NT\$ thousand)

Item	2021	2022	2023
Direct economic value generated			
Net sales revenue	20,222	17,637	13,707
Service revenue	3	3	3
Financial investment revenue	55	40	58
Asset sales revenue	20	8	17
Total	20,300	17,688	13,786
Economic value distributed			
Operating costs	15,570	17,028	12,091
Employee salary and benefits	1,392	1,113	1,130
Payments to funders	1,571	201	273
Payments to the government			
Income tax	676	(179)	73
Land value tax/House tax/Others	20	27	26
Community investment (including charitable giving)	6	10	2
Total	19,235	18,201	13,595
Economic value retained	1,065	(512)	190

Note 1: Adopted the International Financial Reporting Standards (IFRS) recognized by the Financial Supervisory Commission starting 2014.
Note 2: The relevant financial information can be found at the [MOPS](#).

3.2.5 2022 Government subsidies

(Unit: NT\$ thousand)

Abstract	Amount
Domestic Investment Interest Subsidies	6,949
Occupational safety and Health Administration, Ministry of Labor	140
Taoyuan-Hsinchu-Miaoli Branch of the Workforce Development Agency, Ministry of Labor	59
Bureau of Labor Insurance, Ministry of Labor	48
Total	7,196

3.3 Risk Management ▶ (GRI 2-9、2-11、2-12、418-1)

CGPC identifies relevant risks that may affect the Company's sustainable development from its daily operations, and formulates relevant management strategies and countermeasures to reduce the possible risks of operational disruption. At present, specific matters or significant risks are identified, evaluated, and screened by each implementation and responsible unit, and relevant plans for corresponding measures are prepared. The Audit Office conducts supervision and follow-up to achieve continuous improvement and PDCA cycle to reinforce risk management practices. The challenges and responses of various risks at this phase are described as follows:

3.3.1 Risk types and countermeasures ▶ (GRI 2-9、2-11、2-12)

In order to establish sound risk management within the company, our board of directors ensures effective evaluation and oversight of various existing or potential risks. In December 2020, the board approved the "[Risk Management Policies and Procedures](#)." The General Manager's Office provides an annual report to the board on the company's risk management operations, allowing the directors to have a comprehensive understanding of the risks faced by the company. This enables them to provide more specific recommendations regarding the company's operating strategies in a timely manner.

Description of risk management

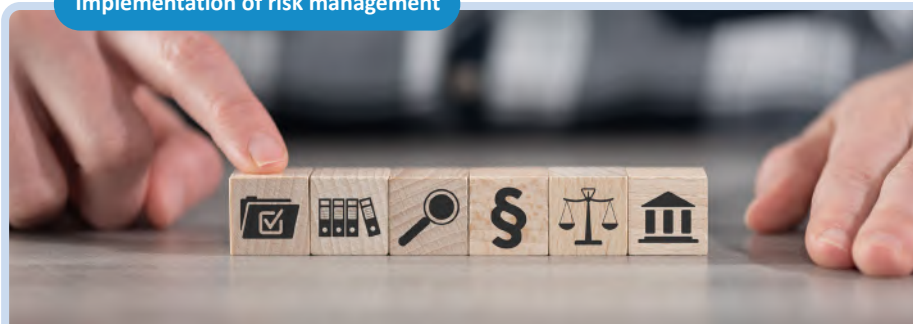


The ESG Committee conducts analysis based on the principle of materiality of the ESG Report to communicate with internal and external stakeholders, and reviews domestic and foreign research reports and literature and consolidates the evaluation data of various segments and subsidiaries to evaluate the materiality of ESG issues, formulate risk management policies for effective identification, measurement, monitoring and control, and take specific action plans to reduce the impact of related risks.

The Audit Committee and the board approved the Risk Management Policy and Procedures" in 2020. The main contents include risk management policies, risk management organization, risk management process, categories and practices, etc., to effectively control the risks arising from business activities. The status of the current year's risk management operations is reported to the Audit Committee and the board at least once a year.

Comply with the relevant laws and regulations of the competent authority, formulate the operating standards of each risk management unit, and carry out risk management and control of daily operations. Follow the development of international and domestic risk management systems at all time, review and improve risk management policies accordingly, and continuously adjust and improve the risk management methods in response to changes in the internal and external environment, so as to reinforce the effectiveness of the Company's risk management implementation, and protect the interests of the Company, employees, shareholders and stakeholders.

Implementation of risk management



We have always complied with the relevant laws and regulations of the competent authority in the formulation the operating standards of each risk management unit and the implementation of risk management and control of daily operations.

The main risks faced in 2023 include the continuation of the Covid-19 epidemic、2050 net zero emissions, the supplydemand imbalance and shipping variables caused by extreme global climate change, Russian-Ukraine war, inflation, interest rate hikes, the "Zero COVID" policy in mainland China, and unexpected incidents in Asian manufacturing have led to a global imbalance in supply and demand, the decline in prices in the Asian market for over eight months, the clauses for large power users, etc. The status of each risk management unit is summarized in the [Sustainable Development \(ESG\) Area - Risk Operations Scenario](#).

Review response measures which can be effectively and appropriately identified and measured by risk management procedures. Currently, all risks can be controlled with an acceptable scale.

(For details, please see the description on the [website](#)).

► Risk management identification process

The risk identification process involves each responsible functional department assessing and identifying significant risks based on recent international economic developments, the latest ESG regulations, and risk and opportunity assessment management methods. This ongoing evaluation and rolling revision process ensures that risks are promptly assessed and appropriate adjustments are made. Finally, the results of the identification of significant risks from each department are compiled by the General Manager's Office and reported to the Board of Directors. The risk assessment boundary is mainly for the Company, while the scope of risk assessment includes subsidiaries that have been financially stated.

Environmental

Description of Risks	Response Measures
Climate Change and Environmental Risks	<ul style="list-style-type: none"> USI Group has set the 2030 carbon reduction goals of "27% reduction in carbon emissions in 2030 compared to 2017" and "carbon neutrality by 2050" as long-term corporate goals. As of the end of 2023, the cumulative grid-connected capacity of CGPC Main Plant has reached 2.1MW. The Group promotes the goal of "zero grams of leakage", safety and environmental audit plans, formulating plant visits for energy conservation and carbon reduction, and continuously monitoring changes in relevant policies and regulations, as well as publicizing energy conservation and carbon reduction policies, providing self-test information, and introducing the ISO 50001 energy management system, obtaining certificates, and regularly tracking the implementation progress. Passed management system certifications for greenhouse gases, product carbon footprints, water resources management, and organizational water footprint. We have verified our greenhouse gas emissions and uploaded them to the national greenhouse gas registration platform of the Ministry of Environment, Executive Yuan. In 2023, the Company joined the supply chain to participate in the two environmental themes of "Climate Change" and "Water Security" from the Carbon Disclosure Project (CDP) and received a B- and B respectively. In 2023, we established the Climate-related Financial Disclosure (TCFD) Adjustment Management Group at the CGPC Main Plant, which analyzes potential impacts and impacts of climate change, identifies possible risks and opportunities, conducts financial impact analysis, and plans response measures for climate change.

Social

Description of Risks	Response Measures
Human Resources Risk	<ul style="list-style-type: none"> Talent selection: Search for talents suitable for vacancies using the talent bank and social media website and establish industry-academia collaborations with well-known universities in Taiwan. Talent development: Establish training maps, development plans, new employee training, management function training, professional function training, common general education courses, language courses, and actively re-model and reengineer employee skills. An annual promotion reporting system has been established. Talent management: Streamline the management personnel reserve and reporting process and enhance execution efficiency. Strengthen talent identification and training planning, and concretely implement successor training. Prevention of talent loss risk: We continue to maintain good communication with the labor union and establish a competitive remuneration system. In addition to setting reasonable and competitive remuneration levels, we also pay employees based on local laws, industry practices, and the subsidiaries' overall operational performance.
Occupational Safety Risks	<ul style="list-style-type: none"> The Group holds the annual technical case study presentation meeting of the group's factories and the semi-annual meeting on the resource integration of the northern plant to encourage each plant to accumulate 1,000 safety days with an excellent performance trophy and public praise to reduce the occupational safety hazard factor. Resource integration meeting of CGPC Main Plant: Held on April 21, 2023 and October 18, 2023. The Group implements the annual safety and environmental protection audit plan, organizes annual safety and environmental protection training, and audits the compliance of industrial safety and health, environmental protection, and fire safety regulations in each plant. Strengthen the safety management of contractors and establish the "USI Group's Contractor Penalty Reference Standard for Violation of Important Industrial Safety Regulations". We promote the CCPS "Process Safety Beacon" e-newsletter at the beginning of each month and the process safety column of the Petrochemical Industry Magazine in the middle of each month, so as to continuously promote and instill process safety knowledge among the personnel of all plants. The training has been introduced into the USA with the golden rules of industrial safety (preserving life) for the petrochemical industry. The training is divided into the southern zone and the northern zone. The northern session is to be held on 8/17 at the CGPC Main Plant. In February 2023, we entrusted the international organization BSI to train 10 PSM internal auditors and strengthen the auditors' capabilities through cross-plant (Group friend plant) mutual audits to further improve the PSM process safety management system. In September 2023, the Company signed a letter of intent with Toufen City Health Center to promote the correct concept of oral health care, implement oral cancer prevention, and promote a healthy workplace culture. In 2023, Kaohsiung University of Science and Technology assisted in the development of the "Computerized Maintenance Management System (CMMS)" to calculate the Mean Time Between Failures (MTBF) and Mean Time To Repair (MTTR). This in turn increases equipment reliability and reduces occupational safety and health risks from equipment failures. In 2023, the Company made improvements to the noise caused by the high noise during the pulverizing process of PVC plastic pipes in the plant. The noise in the area was reduced from 95.3 dBA before the improvement to 81.1 dBA. In 2023, the AOI intelligent sensing safety system for forklifts was introduced. It has been installed on 6 forklifts, and the trial operation is in good condition. We will continue to expand to the whole plant in the future. In 2023, we invited the supply chain to respond to the "Self-Evaluation Scale for Corporate Sustainability Occupational Health and Safety Performance Table" of the Occupational Safety and Health Administration, MOL, to conduct a self-evaluation on the achievement status. Subsequently, the evaluation and analysis results were used as reference for improvements to the supply chain occupational health and safety weaknesses.

Governance

Description of Risks	Response Measures
Production, Marketing, and Operational Risks	<ul style="list-style-type: none"> ◆ We adopt a vertically integrated strategy from materials procurement, production, and sales, and regularly review raw material and finished product inventories. ◆ Production and sales scheduling: Flexible adjustment of production plans and response to market changes by reviewing inventory changes on a rolling basis, stabilizing product interest spreads, and preventing devaluation losses. ◆ To comply with the circular economy and the development of environmentally friendly products, we developed non-PVC plastics and other processed products, and obtained the international GRS certification to facilitate the promotion of environmentally friendly product areas.
Financial Risk	<ul style="list-style-type: none"> ◆ Interest rate fluctuation: Central banks around the world have raised interest rates to curb inflation. During the rising interest rates, short-, medium-, and long-term capital needs are adjusted accordingly. The loan limit is increased and the proportion of short-term, medium-term, and long-term loans is adjusted accordingly while monitoring the market trends and changes in order to reduce the risk arising from interest rate fluctuations. ◆ Exchange rate fluctuation: The US Federal Reserve hiked interest rates significantly to combat inflation, resulting in extreme volatility in the international foreign exchange market. In principle, the Company adopts a 100% hedging of the net position during foreign exchange operations. However, when the exchange rate market is clearly favorable to the company, the hedging ratio is appropriately adjusted within the risk scope. ◆ Property Insurance: we mitigate risks by obtaining various property insurance policies, effectively transferring the risk to insurance companies. For example: fire insurance, business interruption insurance, cargo transportation insurance. ◆ Endorsement guarantee: implemented in accordance with the "Procedures for Making Endorsements and Guarantees". ◆ Accounts receivable risk: actively care about customers' business conditions or analyze customers' financial reports. <ul style="list-style-type: none"> (1) Domestic customers: add substantial guarantees and qualified joint guarantors. (2) Export customers: increase the amount of credit insurance and increase the letters of credit insurance for certain countries.
Disaster Risk	<ul style="list-style-type: none"> ◆ Intensive drill: On August 24, 2023, 30 seed personnel were dispatched to the "Petrochemical Disaster Rescue Training Course (Actual Fire Training)" at the Training Center of the Fire Department of the Ministry of the Interior. In September of the same year, the security inspectors who passed the training were selected to carry out the structure and equipment maintenance, self-inspection, and safety management of public dangerous goods places. ◆ Continue to create and update the H-CARD for public dangerous goods to facilitate the provision of disaster relief information. ◆ In response to the explosion accident at the Pingtung Plant of Ming Yang International, a total of 3 organic peroxide (catalyst) locations in the plant were inventoried in September 2023. The storage and use are in compliance with the laws and regulations of the existing locations. ◆ In June 2023, we began to promote the establishment of a chemical cloud in the plant to facilitate the subsequent systematization of chemical information, providing the plant chemical type, quantity, location, layout, location plan, and necessary rescue information.
Technology and Information Security Risk	<ul style="list-style-type: none"> ◆ Audits and verifications: The Company has passed ISO 27001 certification for 9 consecutive years this year. Through external audits, social engineering drills, and information security education, training, and tests are conducted every six months to strengthen the information security awareness of employees. The Company also conducts information environment and information security health checks and the Group's Internal Audit Department conducts 2 information security audits every year. Continue to create and update the H-CARD for public dangerous goods to facilitate the provision of disaster relief information. ◆ Security management: Two sets of endpoint detection and response software with important heterogeneous information assets and a three-stage defense system (before, during, and after the event) are deployed to manage information security, and to perform the recycling, inventory, and scan of the Group's USB external storage devices and anti-virus health checks. ◆ Establish an information security responsible unit, responsible manager, and personnel to be responsible for planning, monitoring, and executing information security management operations and supervise them. ◆ Introduction of artificial intelligence (AI): Moving toward the goal of smart factories. Project: Manufacturing process (drying process) optimization, manufacturing process safety and supervision, electric plate AOI thermal image identification, fully automatic 3D storage system, pipe production line automatic detection and adjustment, safety identification for PVC resin packaging machines, intelligent sensing safety system for forklifts.
Others	<ul style="list-style-type: none"> ◆ R&D risk: Incorporate carbon emissions into product development, define circular economy, clean processes, green energy, and other aspects for product development, and meet regularly to review the competitiveness of product development. ◆ Legal risk - dispute resolution: In 2023, the Company provided legal advice and assistance for the air pollution incident at the Toufen Main Plant and the issue of idle land at the Zhongshan Plant. On the others, in terms of legal compliance risk, transaction risk, and legal compliance awareness and behavior, all have operated normally this year.

3.3.2 Cybersecurity risk management ► (GRI 2-9, 2-11, 2-12)

We adopt the 「[Risk Management Policies and Procedures](#)」 as the standards for the establishment and development, operation, review and continuous improvement of the overall information security management system. We also establish information policies and objectives according to our operating activities and risks to carry out information security management and effectively control risks.

1 Establish an information security promotion team with the following duties:

- ◆ Formulate information security risk management framework and information security policy.
- ◆ Conduct information security risk assessment and analysis.
- ◆ Information security maintenance and execution.
- ◆ Confirmation of the effectiveness of information security operations.

3 Protection of customers' confidential information

- ◆ Comply with laws and regulations to formulate relevant standards.
- ◆ Personal data de-identification and monitoring of abnormal traffic of network access.
- ◆ Reinforce firewall management and authorization control for data access.
- ◆ Carry out internal and external information security risk assessment and improvement through external audit.

4 Risk types and countermeasures – Risks and challenges

- ◆ Facing the increasingly severe information security attacks, strengthening information security protection without affecting the yield of the production line is a great challenge for information administrators.
- ◆ We have referred to industry practices and the advice of information security consultants, and applied the use of firewall equipment to separate the computers of information tasks and the computers of the industrial control operations system. The implementation shows immediate results in preventing damage causes information security incidents.

2 Develop management solutions

Regulations and standards:

- ◆ In terms of personal data protection, we follow the European Union's [General Data Protection Regulation (GDPR)].
- ◆ In terms of customer data protection, the Group's Information Technology Division has formulated the General Principles of Information Security Management Policy; the System Development and Maintenance Management Standards; the Key Points for Application System Program Online Operations Management; the Key Points of Database Management; the Information System Authorization and Equipment Protection Management and other standards to carry out the care of privacy information in the aspect of information security management.
- ◆ Formulate information security related policies, planning, governance, supervision and implementation in accordance with ISO 27001 to ensure the Group's information security protection capabilities and reinforce employees' information security awareness.

Information security awareness:

- ◆ Regularly hold education, training and promotion sessions
- ◆ A professional consulting company is commissioned to perform social engineering drills twice a year.
- ◆ Promote the Zero Trust network security protection model.

Defense tools:

- ◆ Prudent authorization control, masking and restricting personal data fields to be read.
- ◆ Reinforce measures such as firewall management, system vulnerability scanning, operating environment segmentation and de-identification processing.
- ◆ Establish network traffic monitoring and analyze potential threats to prevent illegal intrusions or improper disclosure of information.

Information security governance:

- ◆ Hold information security management review meetings for the information security management system (ISMS).
- ◆ Improve employees' information security awareness and reinforce information security education and training.
- ◆ Conduct information security risk assessment and analysis.
- ◆ Review information security infrastructure design.
- ◆ Continue to obtain ISO 27001 certification every year.

5 Implementation of risk management

Regulations and standards:

- ◆ Comply with the EU GDPR regulations to protect personal data.

Audit:

- ◆ Internal audits are conducted, twice a year.
- ◆ External audit is conducted once a year by a third-party organization.

Information security education and training:

- ◆ 4 hours of education and training are performed by information personnel every year.

Strengthen the control of external devices of industrial equipment:

- ◆ Restrict USB access to prevent data leakage and external information security hazard attacks from affecting production lines.

Social engineering drills:

- ◆ Implemented twice a year.

External storage media health check:

- ◆ Implement a comprehensive inspection of external storage media and reduce the risk of data loss and hidden information security hazards from external devices through regular anti-virus scanning, inspection, and inventory.

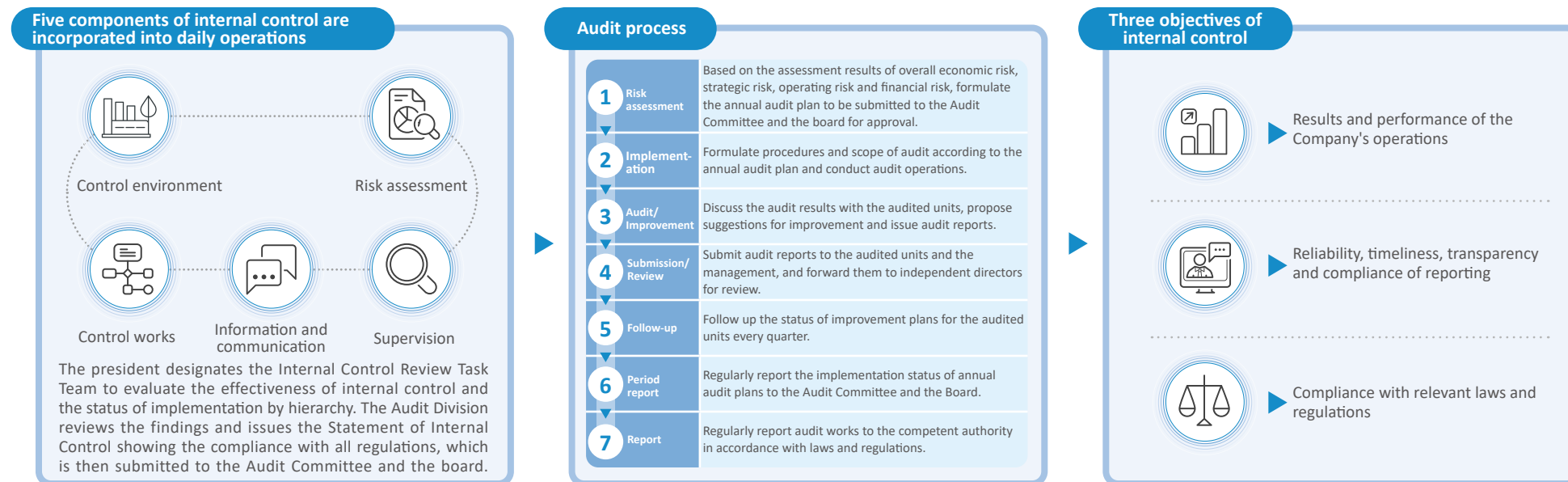
Vulnerability scanning and detection:

- ◆ Regularly perform vulnerability scanning and detection of the server's operating systems to identify potential risks for system correction or propose compensatory measures to improve system security. This is done once a year, and has been implemented continuously for 8 years.

3.3.3 Internal control (GRI 2-26)

Internal audit system

CGPC has set up an independent internal audit unit directly under the board to evaluate the design and implementation of internal control and formulate and implement annual audit plans. The audit supervisor has an international internal auditor certificate, and conducts audits based on the principles of independence, ethics, and integrity. The audit supervisor regularly attends meetings of the board and the Audit Committee, reports on major audit findings, and follow up subsequent improvements. The audit supervisor is also the dedicated person responsible for the [mailbox of the Audit Committee](#) and the grievance filing hotline to handle grievances.



Conduct risk assessment and formulate audit plans

In 2023, the internal audit unit completed the audit on schedule according to the audit plan approved by the Board and issued 48 audit reports and 4 follow-up reports. The recommended items have been improved, and the summary is as follows:

Name of Audit Process	Summary of Recommendations	Summary of Improvement Status
Production cycle and regulatory compliance matters	Random checks of the equipment operations and form records at the production site showed that some operation items were inconsistent with the process specified in the operation standard. The requirements of the standard did not meet the current operation requirements. It is recommended to re-evaluate and revise the standard according to the actual operation needs.	The production unit has re-evaluated and revised the operating standard according to the actual operation situation.
Industrial Safety and Health Operation	The personnel responsible for regular equipment inspection do not have the equipment operation license. As the inspection items may require actual operation, it is recommended to assign personnel with the equipment operation license to perform the regular equipment inspection.	We have adjusted the inspection personnel for the relevant equipment and arranged for personnel with the relevant equipment operation license to be responsible for the regular inspection of the equipment.
Industrial Safety and Health Operation	Some of the equipment in the Toufen Main Plant has been replaced with new equipment. It is suggested that the contractors and their personnel working in the plant should be educated and supervised to follow the safety operation regulations.	We have incorporated safe operation regulations into the key check items of occupational safety and health inspections and require contractors to promote them in the daily toolbox meeting.

3.4 Regulatory Compliance ► (GRI 2-27, 307-1, 419-1)

CGPC strictly requires employees, supervisors at all levels and members of the board to abide by laws and regulations, and act in accordance with the law as the operating principle. In terms of regulatory compliance, we follow changes in relevant domestic and foreign laws and regulations that affect the Company's operations, and hold training courses related to laws and regulations from time to time. We also actively participate in the dissemination of information on laws and regulations, ethical management and corporate social responsibility courses and seminars organized by the competent authority.

Considering the increasingly stringent regulatory standards and penalty criteria, the company continues to implement various improvement measures in order to further reduce the number of deficiencies and the amount of fines (Definition of significant fine amount: fines exceeding NT\$300,000 for a single incident). In 2023, CGPC, TVCM, and CGPCP did not have any major environmental protection penalties. For environmental protection measures, see [5.4 Air Pollution Control](#).

Environmental protection

CGPC is committed to the pursuing a safer work environment and complies with important government and international industrial safety, labor health and environmental protection regulations and promote the ISO 14001, ISO 45001 and other management systems to ensure that the Company's daily operations have minimal impact on the community. We also conduct active communication to understand employees and local residents and other key stakeholders and then propose solutions for improvement.



Occupational safety

CGPC has established an occupational safety and health management system in compliance with the law. It actively reviews the causes of accidents, reduces hazards and prevents their recurrence. In the event of an incident, immediate response measures are taken, and care for employees is provided. In 2023, CGPC, TVCM, and CGPCP did not experience any significant violations resulting in fines. Please refer to [6.4 Safe and Healthy Workplace](#)



Product, service and customer relationship

We spare no efforts in providing customers with satisfactory services, and hope to establish long-term partnerships with customers. In 2023, we did not receive complaints about violating customer privacy and losing customer information nor have there been any violations, fines or penalties related to products and services.

Please refer to [4.1 Customer service management](#)



Labor and human rights

We abide by relevant labor laws and regulations, protect the legal rights of employees and respect the principles of basic human rights recognized internationally. We also have formulated relevant standards and work policies to protect workers' basic labor rights. In 2022, we did not have violations of relevant labor laws and regulations. Please refer to [website](#) or [6.2.3 Human Rights and Protection](#)



3.5 Technology Research and Development ► (GRI 3-3)

Material issue: Technological research and development



The Significance and Impact of CGPC

R&D and innovation are the focus of our sustainable development. We improve the manufacturing process technology to have product quality and reduce costs. We develop value-added new products to contribute to the sustainable development of the society and the environment.
Affected parties: government agencies, employees, investors, supplier.



Develop Strategy

We follow the latest environmental protection regulations and global trends to develop products which incorporate the design elements of environmental protection, energy conservation and carbon reduction to improve products' added value and competitiveness.



Policy Commitment

Innovate products and improve manufacturing process to comply with the latest international regulations.



Grievance Unit

Processing Technology Section



SASB Indicator

RT-CH-410a.1

The R&D department embraces the spirit of "green environmental protection, circular regeneration, zero emissions, and sustainable materials" as a generational legacy. It introduces environmentally sustainable materials, implements carbon reduction and energysaving processes and continuously improves the use of recycling technologies. The department focuses on developing high-value-added products, while closely monitoring international market trends and providing customized services. It is committed to innovation and transformation, aligning with the international community to create a better quality of life for humanity.



Promotion policy	Unit	2023 goal	2023 result	2024 goal	2025 goal	2030 goal
Promote product applications and development of eco-friendly technologies	Ten-thousand	12	4	12	16	20
Raw materials antagonists: Developed low-toxic and low-cost alternative raw materials:	Number of development projects	8	15	10	10	15
New Product development	Number of development projects	10	16	10	10	15

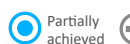
Note: Reason for the sales volume of environmental protection materials not meeting the target: Due to factors such as the Ukrainian-Russian War, the Israel-Hamas War, and inflation the global economy went into a significant recession and demands greatly declined. The Company has suspended its promotion and sales of eco-friendly materials due to the renewal of the Calender machine of eco-friendly materials of the PVC leather plant.



Exceeded Target



Achievement



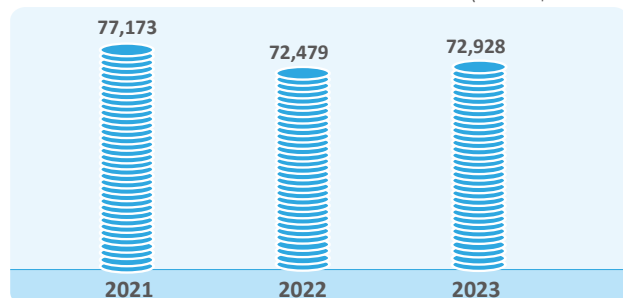
Partially achieved



Not met

3.5.1 R&D expenditure in the last 3 years

(Unit: NT\$ thousand)



Note: The amount of R&D expenditure includes Taiwan and overseas subsidiaries.

Promotion projects

- ◆ Four new patent applications have been submitted:
 1. Recyclable Synthetic Leather Structure (M630391) : The patent for this structure was granted in August 2022.
 2. New Slow Temperature Rising Leather Structure (M631078) : The patent for this structure was granted in September 2022.
 3. Scratch and Stain Resistant Leather Structure (M636680) : The patent for this structure was granted in January 2023.
 4. Anti-Viral Coating Structure for Eyewear (M630340) : The patent for this structure was granted in January 2023.
 5. Antibacterial and anti-mildew layer structure(M645877) : The patent for this structure was granted in September 2023.
- ◆ Added a PVC pilot reactor to the 30L pilot plant, and completed in 2022. The applications are as follows:
 1. Research of PVC resin formula and manufacturing process improvement (such as conversion rate, formula, etc.).
 2. Evaluation of new raw materials and countermeasures (such as specific gravity and others).
 3. Discuss root causes of quality issues and make improvements (such as thermal stability improvement etc.), and develop new products with market competitiveness.
- ◆ Benefits:
 1. Evaluation of optimized raw materials and incorporate advanced testing capabilities for countermeasures to reduce the testing time.
 2. Optimize manufacturing process parameters and adjust advanced testing capabilities.
 3. Develop ultra-high polymerization powder, ultra-low polymerization powder, high B.D powder and high CPA powder to enhance market competitiveness.
- ◆ A total of 15 new products was developed in 2023, including : car floor mats and wiring harnesses Tape cloth products, automobile, motorcycle and bus seat rubber and other products, please refer to the [website](#) description.

Circular economy - Products developed with the latest curing technology (antibacterial function)

► Solution: Use natural marine biological shell powder to replace chemical antibacterial agents

► Description of promotion:

CGPC, in response to sustainable development and circular economy issues, has utilized technological methods and creative ideas through its research and development team. By leveraging the antibacterial properties of calcined marine bio-shell powder and innovative approaches, the company gradually replaces the use of chemical synthetic antibacterial agents with natural non-toxic marine bio-shell powder. This is applied in plastic-related products, creating a circular economy and contributing to environmental protection. We adopt the latest curing technology to add natural shell powder to resin to be applied to the surface of plastics, which can pass the mold resistance testing (ASTM G21) and antibacterial test (JIS Z-2801).

Note 1: PS1 - Mold resistance testing (ASTM G21) includes testing against *Aspergillus niger*, *Chaetomium globosum*, *Trichoderma viride*, *Penicillium funiculosum*, and *Aureobasidium pullulans*.

Note 2: PS2 - Antibacterial testing (JIS Z-2801) includes testing against *Staphylococcus aureus* and *Escherichia coli*.

We highly value the sustainable development of ESG. While pursuing sustainable operation and profit, our three core strategies of sustainable vision "R&D and innovation," "stable operation" and "social inclusion" are to co-create value with stakeholders to improve our competitive advantage of sustainable development.

► R&D and Innovation Goals:

Sustainable Development Goals: In the future, we will continue to plan and develop new green and eco-friendly antibacterial products, use nano and compound materials, etc. to develop products with diverse antibacterial effects. We will grasp market trends, understand customer needs, and improve our long-term competitive advantage.

► R&D and Innovation Benefits:

Our R&D team follows global trends, and is committed to meeting the Company's goals in circular economy, reduction of waste and environmental protection. The breakthrough technology research and development can improve morale, demonstrate the Company's contribution to environmental protection, enhance corporate image, make the business more competitive, and win the trust of customers.



Develop "Chroma cool" in response to climate change

► Solution: Chroma cool

► Description of promotion:

In extreme climates, the duration of hot weather can be longer than the number of cold days, we have developed a new type of "Chroma cool," which can be used for motorcycle seat cushions and outdoor sports equipment. The products are available in various colors. Compared with traditional leather, they can reduce the temperature by 10 to 20 degrees, which is a great benefit for motorcyclists and sports enthusiasts.

► Implementation Status:

We have been actively marketing and pursuing a strong market presence, resulting in a cumulative sales volume of 110,265 yards from 2021 to 2023.

► Benefits:

It is estimated that market demand will continue to rise in the future. In response to market changes, the future goal is to continue to improve other functions and enhance market competitiveness.

► Obtained the patent for new invention no. [M631078](#) in 2022.



3.5.2 New products to be developed



- ◆ GRS certification
- ◆ Development of virus-resistant door panels
- ◆ Development of Antiviral hard fabric
- ◆ TPO automotive console/floor mat
- ◆ Recycled TPE rubber in finished products
- ◆ POE fish-electricity symbiotic water pond fabric
- ◆ Wire harness tapes for European and Indian markets
- ◆ Easy-cut edge banding tape for door panels
- ◆ High softening temperature automotive floor mats
- ◆ Japan's Tape fabric for marking lines
- ◆ Research and analysis of PVC pink color difference
- ◆ Development of soft leather with a slippery feel for marine use
- ◆ Development of 3rd-generation soil-resistant rubber
- ◆ High softening temperature automotive floor mats
- ◆ Development of TPU earphone cover fabric
- ◆ TPE car seat rubber
- ◆ Development of Bio-shell powder antibacterial and anti-mold leather
- ◆ Low-VOC PVC/TPE leather
- ◆ Utilize the 30L PVC superimposed experimental tank to analyze the countermeasures of each auxiliary material.
- ◆ Development of TPU earphone cover fabric
- ◆ Development of benzene-free/solvent-free PVC paste cloth
- ◆ Development of benzene-free/solvent-free TPE paste cloth
- ◆ PVC/TPE rubber solvent-free surface treatment
- ◆ Development of synthetic casting soft leather for furniture
- ◆ Development of high hydrolysis resistance TPU materials and related products
- ◆ Development of TPO anti-static transparent film

3.5.3 Overview of technology and research and development



► Newly-developed technologies or products

1. Technologies successfully developed

- (1-1) PVC resin Moisture AI Monitoring
- (1-2) Production technology of PVC hard foam pipes
- (1-3) Production technology and formula of PVC hard foam door panel
- (1-4) GRS certification

2. Newly-developed products

- (2-1) Japan's Tape fabric for marking lines
- (2-2) Wire harness tapes for European and Indian markets
- (2-3) Easy-cut edge banding tape for door panels
- (2-4) High softening temperature automotive floor mats
- (2-5) Soft leather with a slippery feel for marine use
- (2-6) Virus-resistant door panels
- (2-7) Antiviral hard fabric
- (2-8) TPO automotive console/floor mat

Recycled Tires



TPE Leather (Furniture)



- (2-9) Recycled TPE rubber in finished products
- (2-10) POE fish-electricity symbiotic water pond fabric
- (2-11) CG-A Casting
- (2-12) CG-AQC truck seat & rubber interior
- (2-13) Seoul - Car seats & soft leather upholstery
- (2-14) Ju Tai - Sanyang Motorcycle Seat Rubber
- (2-15) Pengda - Nissan Car Seats & Upholstery
- (2-16) Development of soft leather for furniture by Meng Zhe

► Sales of newly-developed products

In response to climate change and various functional market demands, we have improved the added value of products and market share. We have also developed non-PVC leather that comply with environmental regulations, meet the needs of domestic and foreign manufacturers that adopt the green concept, and expand to new markets that demand value-added products.

Product category	Product item	2023 Sales target (tonnes/thousand yards)	2023 Sales quantity (tonnes/thousand yards)	2023 Sales revenue (NT\$ thousand)	Achieved or not Achieved	The proportion of each new product to the revenue of the product category (%)
Leather	PVC leather	200.0	203.3	33,545	Yes	4.9 %
	TPE eco-friendly leather	120.0	41.0	5,757	No	0.8 %
Total sales of 2023 new products		320.0	244.3	39,302		

Note 1: New products are defined as those within 2 years of the successful development.

Note 2: Reasons for TPE non-achievement: due to factors such as China's lockdown measures, the Russia-Ukraine war and inflation, the global economy experienced a downturn, leading to a significant decrease in demand.



► R&D plans in recent years

2023 R&D plans	R&D expenses needed to be committed again (NT\$ thousand)
Decathlon TPO fully recycled shoe rubber	500
Liqi GRS certified TPU foam	500
Hung Li PP flame-retardant rigid adhesive tapes	300
Silica gel coating/film lamination products	300
TPO car foot mats, scratch-resistant tape	800
Translucent leather/cloth products	600
CGA TPO wallpaper	800
CGA TPO ventilation hose cover	500
Low-VOC PVC/TPE leather	15,000
Development of TPU earphone cover fabric	500
Development of benzene-free/solvent-free PVC paste cloth	500
Development of benzene-free/solvent-free TPE paste cloth	300
PVC/TPE rubber solvent-free surface treatment	1,000
Development of high hydrolysis resistance TPU materials and related products	300
TPO anti-static transparent film	500
Development of 3rd-generation soil-resistant rubber	200
Development of synthetic casting soft leather for furniture	1,000
PVC wire harness tape fabric (Philippines)	500
PVC High Temperature Resistant Colored Wire Harness Tape	500
Flame-retardant decorative fabric	500
Low-odor automotive tape	500
Utilize the 30L PVC superimposed experimental tank to analyze the countermeasures of each auxiliary material.	300
30L test tank new formula	300
Total	26,200



► Green products

Green products

Media mentioning the significant environmental impact of PVC materials (the negative impact of plasticizers on the environmental hormones and heavy metals). In fact, the advancement of technological research and development and the selection of new varieties of plasticizers and stabilizers have been eliminating the impact of environmental hormones and heavy metals. The use of non-PVC materials (TPE/TPU) by the processing industry has gradually developed green products that can be used in daily life.

PVC products meeting new regulatory requirements

The products sold by CGPC comply with the EU Restriction of Hazardous Substances Directive (RoHS for short) and the requirements of the Substances of Very High Concern (SVHC) listed in the EU REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), the EU Toy Safety Directive EN-71-3, the Proposition 65 of California, USA, California's The Safer Consumer Products Regulations, etc. We have the strategic planning for the new green R&D mindset (non-toxicity) that meets regulatory requirements and successfully incorporated the abovementioned standards into our operations to develop new products that can reduce environmental impact.

Non-PVC products

We have researched and tested non-PVC synthetic leather and cloth products, and successfully developed and continued to promote PVC materials alternatives that meet the requirements of environmental protection regulations and have relevant physical properties to meet market needs. CGPC actively develops differentiated products inhouse, and offers high-performance POE, TPE, TPU and other plastics to produce more eco-friendly non-PVC leather fabrics to meet the needs of domestic and foreign manufacturers that adopt the green concept, and expand to new markets that demand value-added products. The varieties and applications of successfully sold products have gradually expanded. The product examples are as follows:

- ◆ Eco-friendly waterproof materials (no phthalate, no heavy metals, for breeding and water storage purposes)
- ◆ Eco-friendly exhaust pipe (heat-resistant, conductive)
- ◆ Eco-friendly furniture (used in sofas, seats, bicycle seat cushions)
- ◆ Eco-friendly shoe materials (applied to functional sneakers)
- ◆ Eco-friendly bags (applied to various slip-resistant functional parts)

3.6 Intelligent Management ► (GRI 3-3)

The Company's top priority is to build a smart factory and move towards intelligent manufacturing. In order to accelerate digital transformation, the Chlor-Alkali Business Group has established an AI team to develop various plans and execution schedules. Through machine learning, we aim to cultivate skilled professionals and face the increasingly fierce industry competition!



The Significance and Impact of CGPC

Improve equipment efficiency, and reduce the impact of production on the environment as much as possible in order to achieve the eco-friendly goals of low pollution and low energy consumption. Affected parties: employees, community residents, government agencies, customers, suppliers/contractors, investors.



Develop Strategy

Renovation and replacement of old equipment and Improve equipment efficiency in order to achieve the eco-friendly goals of low pollution and low energy consumption.



Policy Commitment

Enhancing Operational Safety, Reducing Accidents, Minimizing Resource Consumption, Building an Intelligent Factory.



Grievance Unit

Technology Research and Development Lecture



SASB Indicator

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Promotion policy

Promotion policy	Unit	2023 goal	2023 result	2024 goal	2025 goal	2030 goal
Inclusion of AI in the processes	Number of projects	3	3	3	4	5
AIOT Intelligence Manufacturing	Number of projects	3	3	3	3	3



Exceeded Target



Achievement



Partially achieved



Not met

► Various projects towards the promotion of smart factories

Establishment of an AI factory

1. Process optimization & safety monitoring

- ◆ Distillation Column Systems of TVCM
- ◆ Each PVC drying system of CGPC (Utilizes AI models to provide optimal program settings (SP) and implementing AI-based intelligent control optimization which allow us to rapidly achieve the best energy consumption conditions).
- ◆ Absorption tower process safety monitoring



2. AOI image recognition

- ◆ Electrical Panel AOI with Thermal Imaging
- ◆ AI-Assisted Safety System for Stackers
- ◆ Image Recognition for Tanker Truck Loading Operations
- ◆ Fabricated plant product defect identification system
- ◆ Pipe AOI Image Detection System



3. Intelligence factory

- ◆ Situation Room at Main Plant
- ◆ CGPC Automatic Warehousing System
- ◆ Energy Efficiency Performance Management Platform



Sustainable Management through Industry-Academia Collaboration

- ◆ Providing AI Education Scholarships
- ◆ Establishing AI Team in Chlor-Alkali Business Group
- ◆ Sharing Practical Experiences in Industry-Academia Collaboration
(Please refer to [the section on High Quality Intelligent-based Transition](#))

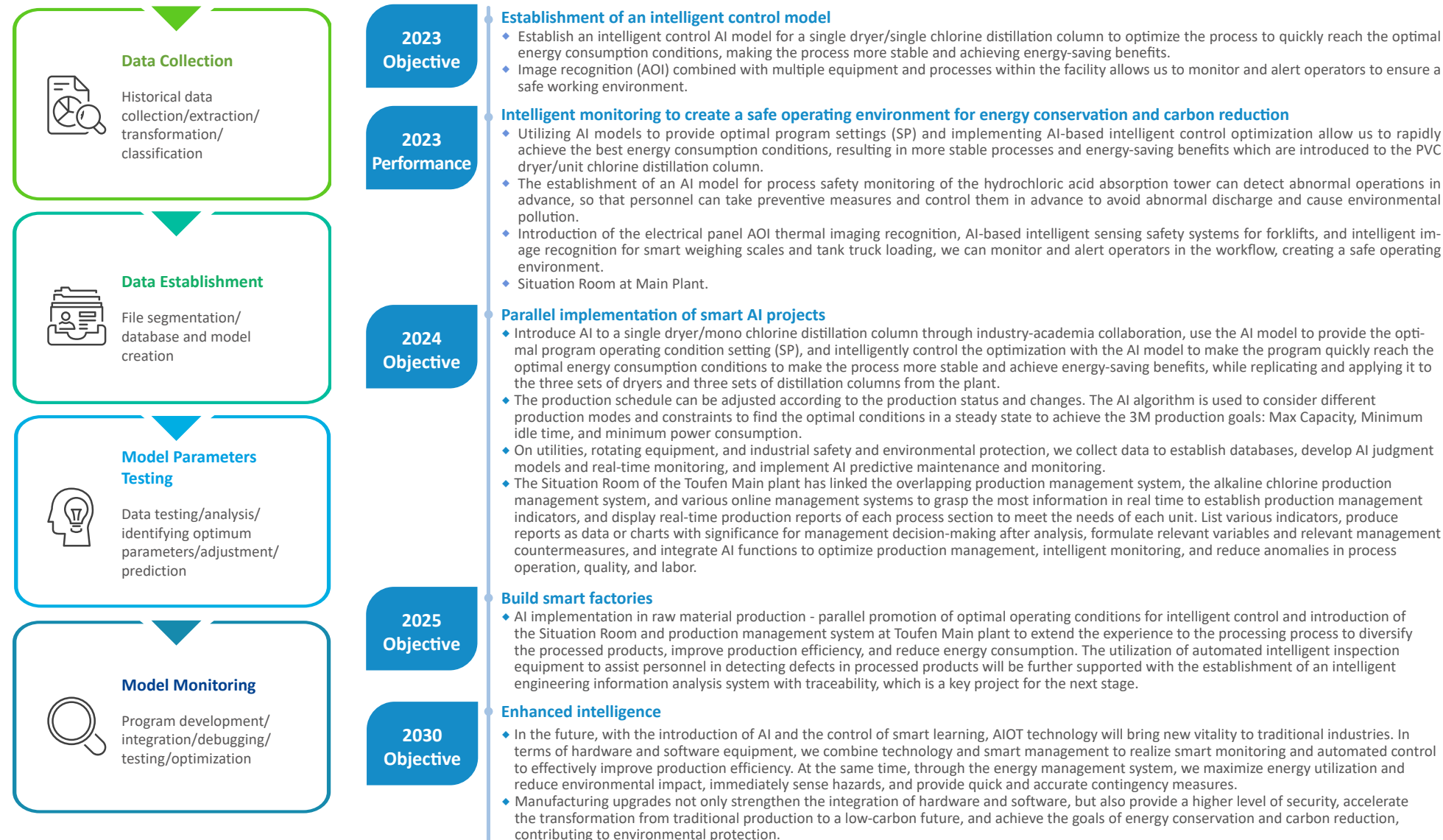


ESG Benefits

- ◆ Energy Conservation, Carbon Reduction, Environmental Protection
- ◆ Stable Quality, Economic Prosperity
- ◆ Reducing the Probability of occupational Accidents



► Introduce AI workflow into manufacturing process

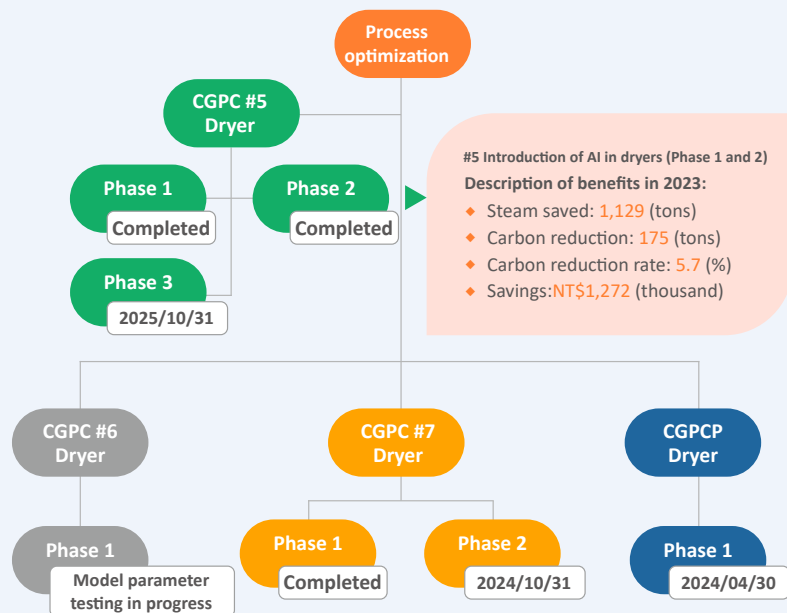




Chung Yuan Christian University Industry-Academia Cooperation

Process optimization - dryer planning progress and benefit description

Phase 1: Best operating conditions
Phase 2: AI intelligent control
Phase 3: Product moisture control design



Project Benefits

- ♦ AI intelligent control: Overall improvement of the mean deviation (SP set value) by 31.19%.
- ♦ Process operation consistency: Improve the instability of slip feeding conditions and the inconsistency of artificial control.
- ♦ In 2023, the #5 dryer can save steam consumption by 5.7%.
- ♦ Reduces steam consumption by 17.7% at maximum capacity.

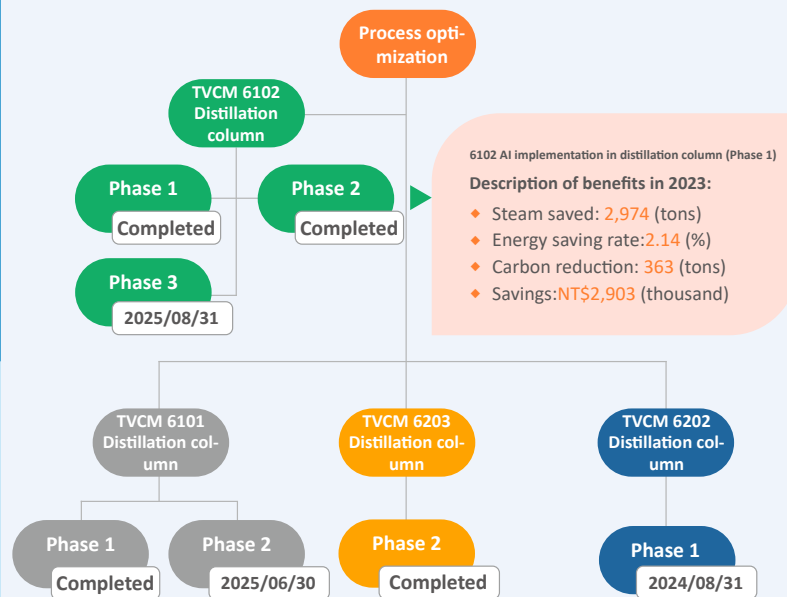
Note: 1. The average unit price of steam is NT\$1,000/ton 2. The average carbon emission coefficient of steam: 0.130 tons CO₂e/ton, 3. The carbon fee is estimated at NT\$300 per ton.



Chung Yuan Christian University Industry-Academia Cooperation

Process optimization - the planning progress and benefit description of the distillation column

Phase 1: Best operating conditions
Phase 2: Control optimization
Phase 3: AI smart process monitoring and process maintenance



Project Benefits

- ♦ Process operation consistency: Improve the inconsistency of manual operation control of the distillation column.
- ♦ AI intelligent control: AI-based steam calculation and automatic control of backflow make process control more stable.
- ♦ In 2023, the unit steam consumption of the 6102 distillation column was reduced by 2.14%.

Note: 1. The average unit price of steam is NT\$1,000/ton 2. The average carbon emission coefficient of steam: 0.130 tons CO₂e/ton, 3. The carbon fee is estimated at NT\$300 per ton.