

Chung-Hsin Electric & Machinery Mfg. Corp.

Green Life

Ecology

Sustainable

ECO

SDGs

Recycle



Water



This English translation is based on the Chinese version and is provided for reference only. In the event of any inconsistency between the English and Chinese versions, the Chinese version shall prevail.

2024 永續報告書 Sustainability Report



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THE CHAIRMAN'S MESSAGE

In recent years, geopolitical conflicts have triggered global economic turmoil. The Russia-Ukraine war remains ongoing, tensions in the Middle East continue to escalate, China's economic growth is slowing down, and the changes in economic, trade, and foreign policies following the inauguration of US President Donald Trump have all added further complexity and unpredictability to the global economy. In this ever-changing environment, Chung-Hsin Electric & Machinery Mfg. Corp. ("CHEM" or the "Company") continues to uphold a prudent management strategy and strengthen its operational resilience. In 2024, thanks to the joint efforts of its management team and all employees, and benefiting from government-promoted energy transformation initiatives and Taiwan Power Company ("Taipower")' grid strengthening plan, CHEM once again achieved new milestones in its operations.

In recent years, while achieving outstanding operational performance, we have strived to fulfill its mission of environmental protection and our obligation to social responsibility. Through digital transformation, we have also implemented improvements in corporate governance, continuously advancing toward the goal of sustainable business operations. Through our solid performance in sustainable operations, we were honored to receive the Bronze Award in the "Sustainability Report – Traditional Manufacturing – Category 1" at the 17th TCSA Taiwan Corporate Sustainability Awards in 2024. Because of this, we have also earned widespread recognition and praise from the capital markets and external stakeholders.

1. 104 Job Bank collaborated with *Business Weekly* to conduct a major survey titled "Top 100 DEI Enterprises for the Experienced Workforce," selecting companies that are friendly toward hiring older workers and promote cross-generational diversity, equity, and inclusion ("DEI"). CHEM values the work experience and stability of middle-aged and senior workers, participates in the Ministry of Labor's training programs and subsidy projects for the continued employment of senior workers, and is committed to maintaining a friendly and supportive hiring environment for middle-aged and senior employees. As a result, CHEM was selected as one of the top 100 DEI enterprises for the experienced workforce, highlighting as an age-friendly workplace for all generations.
2. CHEM earned international recognition in Deloitte Global's Best Managed Companies program for its **operational management system**. The program is Deloitte Global's most representative international awards program. Over the past 30 years, it has been held in 35 regions around the world. The award is evaluated based on four key theoretical frameworks: strategy; capability and innovation; corporate culture and commitment; and governance and financial performance. In 2024, six companies in Taiwan, including CHEM, were selected as Best Managed Companies.
3. CHEM has always upheld its commitment to product and engineering quality and the promotion of green energy and environmental protection. In 2024, CHEM undertook Taipower's Hsinta Power Plant Gas-Fired Unit Renewal and Reconstruction Project – 345/161kV Switchyard SCADA Monitoring, Protection, and Auxiliary Power Equipment EPC Project. This project won double Excellence Awards in the Facilities category at the 24th Public Construction Golden Quality Awards for its design and quality. CHEM also received a Special Contribution Award for its proven track record of excellence in public construction projects over the years.

4. To enhance corporate governance and implement intellectual property management, the Taiwan Intellectual Property Management System ("TIPS") has been introduced into the Company since 2024. CHEM successfully attained TIPS Class A certification on the first application in December of the same year. With this certification, CHEM hopes to reinforce its systems and mechanisms related to the acquisition, protection, maintenance and management of intellectual property rights and establish high-standard protective measures so as to enhance corporate governance and sustainable competitiveness.
5. To strengthen corporate governance and reduce operational risks, CHEM implemented the international ISO 37001 Anti-Bribery Management System in 2024 and successfully obtained ISO 37001 certification. Through this initiative, CHEM aims to enhance organizational resilience and align with global sustainable business practices.

Looking ahead to 2025, with resilient and steady management, even in the face of unpredictable and ever-changing business challenges, CHEM will continue to leverage its competitive edge in electric power expertise. Guided by a bold and innovative business philosophy, CHEM aims to create a new corporate landscape and move forward toward the goal of sustainable development.



ABOUT THIS REPORT (2-2–2-5)

CHEM pursues sustainable management and enhances the transparency of information, and regularly discloses operational results other than financial performance, and issues this 2024 Sustainability Report (hereinafter referred to as "this report"). This report explains the measures and results of the Company's ongoing efforts in the areas of integrity management, green sustainability, building a happy workplace, and social care under the goal of sustainable management. CHEM is a company that takes action to realize the corporate vision of sustainable management. This report was issued in August 2025, and no information has been restated. The next report is expected to be issued in August 2026.

Boundaries and Scope

The information disclosed in this report covers the period from January 1, 2024 to December 31, 2024. The source of performance statistics for the economic category in this report is the consolidated financial statements of CHEM's 2024 Annual Report, with the head office and all subsidiaries as the scope of disclosure; the environmental category and the social category, the Linkou Plant (North Plant), the Chiayi Plant and the Nanke Branch (South Plant) are covered in the scope of disclosure, and the disclosure of information covers entities accounting for more than 90% of the consolidated financial statements' operating revenues. There were no significant changes in organizational size, structure, ownership and supply chain during the reporting period. For more detailed information on our affiliates, please refer to our 2024 Annual Report.

Compilation Guidelines

This report is written in accordance with the Sustainability Reporting Standards 2021 (GRI Standards 2021) issued by the Global Reporting Initiative ("GRI"). Regarding environmental aspects and greenhouse gas ("GHG") inventory, the content and structure are disclosed in accordance with the guidelines issued by the Task Force on Climate-Related Financial Disclosures ("TCFD"). Additionally, disclosures are made with reference to the industry-specific standards for electrical and electronic equipment and components set by the Sustainability Accounting Standards Board ("SASB"), covering key topics such as energy management, hazardous waste management, product safety, product lifecycle management, raw material sourcing, and business ethics. This report complies with the requirements of the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE-Listed and OTC-Listed Companies," and an GRI index is provided as an appendix to this report for reference by interested parties.

External Assurances

- The financial data in this report was obtained from Crowe (TW) CPAs in accordance with the International Financial Reporting Standards, and is expressed in thousands of New Taiwan Dollars (NT\$) to enhance the credibility of the financial data. The environmental protection, employee and occupational safety data was compiled by the responsible departments and confirmed by the department heads, and is presented using internationally accepted calculation standards.
- To ensure that its products and services meet customers' requirements, CHEM has obtained certifications for ISO 9001:2015 Quality Management System, ISO 14001:2015 Environmental Management System, ISO 17025:2017 Laboratory Quality Management System, ISO/IEC 27001 Information Security Management System, ISO 45001 Occupational Safety and Health Management System, AS 9100(D) Aerospace Industry Quality Management, ISO 37001 Anti-Bribery Management System and TIPS Standards, and continuously maintains the validity of these certifications.
- No external verification was conducted for this report.

External Initiatives

In addition to issuing a sustainability report in accordance with the GRI Sustainability Reporting Guidelines, CHEM also advocates the United Nations' 17 Sustainable Development Goals ("SDGs") towards building a sustainably managed enterprise. The Responsible Business Alliance ("RBA") Code of Conduct requires the Company to uphold the highest standards of social, environmental, and ethical responsibility internally; it also requires that the Company's suppliers do not use conflict minerals.

Locations

CHEM's head office is located at 3F, No. 801, Zhongzheng Road, Zhonghe District, New Taipei City, Taiwan, with the LinKou Plant as the main manufacturing base and branch offices in Taipei and New Taipei City, Taichung, and Tainan. For information on CHEM's subsidiaries in Taiwan, please refer to the table titled "Information on CHEM's Subsidiaries in Taiwan," and for information on CHEM's subsidiaries in other countries, please refer to the Annual Report.



Headquarters: 3F, No. 801, Zhongzheng Road, Zhonghe District, New Taipei City
Linkou Plant: No. 25, Wende Road, Guishan District, Taoyuan City
Chiayi Plant: No. 22, Machohouyuanqu 1st Rd., Lucao Township, Chiayi County
Taipei Branch: 2F, No. 19-5, Sanchong Road, Nangang District, Taipei City
New Taipei Branch: 3F, No. 801, Zhongzheng Rd., Zhonghe District, New Taipei City
Taichung Branch: 8F-5, No. 238, Jinhua N. Rd., Taichung City
Nanke Branch: No. 1, Muzha Gang West Road (adjacent to No. 7), Nangan Li, Shanhu District, Tainan City

CHEM's Subsidiaries in Taiwan

Subsidiary	Address
Cheng-Hsin Engineering & Services Co., Ltd.	3F, No. 801, Zhongzheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Sunrise Tech. Co., Ltd.	3F, No. 801, Zhongzheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Gloabl-Entech Co., Ltd.	8F-5, No. 238, Jinhua North Rd., North Dist., Taichung, Taiwan
Etrovision Tech. Co., Ltd.	2F, No. 19-5, Sanchong Rd., Nangang Dist., Taipei, Taiwan
San Feng Construction Co., Ltd.	2F, No. 19-5, Sanchong Rd., Nangang Dist., Taipei, Taiwan
Bao-Sheng Global Co., Ltd.	2F, No. 19-5, Sanchong Rd., Nangang Dist., Taipei, Taiwan
Wha Dun Building Mgt. Service Co., Ltd.	2F, No. 19-5, Sanchong Rd., Nangang Dist., Taipei, Taiwan
Findata Finance Tech. Corp.	2F, No. 19-5, Sanchong Rd., Nangang Dist., Taipei, Taiwan
Tian Chong Energy Co., Ltd.	2F, No. 1, Muzhagang West Rd., Shanhu District, Tainan City, Taiwan
Tian Peng Energy Co., Ltd.	2F, No. 1, Muzhagang West Rd., Shanhu District, Tainan City, Taiwan
Tian Cin Energy Co., Ltd.	2F, No. 1, Muzhagang West Rd., Shanhu District, Tainan City, Taiwan
Tian Fu Energy Co., Ltd.	3F, No. 801, Zhongzheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Chung Hsin Energy Tech. Inc.	3F, No. 801, Zhongzheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Stellar Power System Co., Ltd.	3F, No. 801, Zhongzheng Rd., Zhonghe Dist., New Taipei City, Taiwan

Issue Frequency

CHEM will issue a sustainability report every year. In order to enhance the transparency and accessibility of the information disclosed in the report, the electronic file of the full report can be downloaded from CHEM's official website.

Current release: August 2025


Next release: August 2026

Feedback

If you have any suggestions or questions about this report, you are welcome to contact us in any of the following ways. In order to fulfill our responsibility to disclose corporate information, we have also posted this report in the "Investor Relations" section of our company's official website for interested parties to download and review.



Contact: Ms. Jing-Feng Lai, Acting Spokesperson,
Chairman's Office
Address: No. 25, Wende Rd., Guishan Dist., Taoyuan City
33383, Taiwan
Phone: (03) 328-4170 ext. 2101
Email: tw006466@chem.com.tw
Website: <https://www.chem.com.tw/tc/index.aspx>

SUSTAINABILITY PERFORMANCE

Pillar	Sustainability in 2024
<div>  <div> <div>Governance/</div> <div>Economic</div> </div> </div>	<div> <ul style="list-style-type: none"> CHEM ranked in the 36%-50% range among listed companies in the 11th Corporate Governance Evaluation. CHEM was in the top 100 DEI enterprises in the survey conducted by 104 Job Bank and Business Weekly. CHEM won the Bronze Award in the Sustainability Report – Traditional Manufacturing – Category 1 at the 2024 17th TCSA Taiwan Corporate Sustainability Awards. CHEM was selected by Deloitte Global in 2024 as one of the Best Managed Companies (BMC) in Taiwan. CHEM won an Excellence Award at the 24th Public Construction Golden Quality Awards in the Facilities category for the quality and design of Taipower's Project for SCADA, Protection, and Auxiliary Power Systems for the 345/161kV Switchyard under the Hsinta Power Plant Gas-Fired Unit Renewal and Upgrade Plan. CHEM received a Special Contribution Award at the Public Construction Golden Quality Awards for continuous outstanding performance in public construction projects. CHEM implemented the TIPS and passed the TIPS Class A certification on the first application. CHEM implemented the ISO 37001 Anti-Bribery Management System and successfully obtained the ISO 37001 certification. CHEM obtained NT\$610,282,000 in government subsidy, R&D grant, and incentives. The number of hours of continuing education (including ESG specialization) per director was 7.4 hours. The attendance rate of members at the Remuneration Committee meeting was 91.7%. The attendance rate of members at the Audit Committee meeting was 94.4%. No reports of personnel violating integrity was received; no records of violations of corporate governance regulations; and no major deficiencies in internal control operations. </div> <div> <ul style="list-style-type: none"> CHEM's consolidated revenue reached NT\$25,609,456,000, a 15.65% increase from 2023. The net income was NT\$3,627,150,000, a 128.78% increase from 2023. The average score of customer satisfaction was 90.5 points. CHEM maintained its ISO 27001: 2022 Information Security Management certification. No major cybersecurity incidents occurred that disrupted company operations; no personal data breaches occurred. </div>





Pillar	Sustainability in 2024	
 Environmental Responsibility	<ul style="list-style-type: none">• The green procurement amount was reported to the Ministry of Environment, and certification was obtained.• CHEM maintained its ISO 14001:2015 Environmental Management System certification with 100% coverage for its operational sites.• Scope 1 emissions from the Linkou, Nanke and Chiayi plants amounted to 1,221.9297 metric tons of CO₂e (accounting for 19%), an 18% decrease from 2023.• Scope 2 emissions from the Linkou, Nanke and Chiayi plants amounted to 5,152.1435 metric tons of CO₂e, a 21.3% decrease from 2023.• Energy intensity per NT\$1 million in revenue has decreased by 16% compared to 2023.• The solar photovoltaic systems installed at the Linkou, Nanke, and Chiayi plants have a total of capacity of 5,001.31kWp.• All electricity produced by the solar installation was sold in full to Taipower, reducing CO₂e emissions by around 2,828.162 metric tons.• All plants are equipped with solar panels for power generation, and there are three solar farms in Qigu of Tainan (Tian Cin, Tian Chong, and Tian Peng) (generating a total of approximately 320 million kWh of green electricity).• 65 charging piles were set up to provide charging for electric vehicles ("EVs"), reducing CO₂e emissions by 46,286.2982 metric tons, equivalent to 120 times the annual carbon captured by Daan Forest Park.	<ul style="list-style-type: none">• A total of NT\$8,554,692 was invested in energy-saving projects, including optimization of lighting in the Linkou Plant, dormitory areas, and public areas, as well as the addition of smart lighting in the underground parking lot. The projects have reduced CO₂e emissions by around 265.3654 metric tons.• Through various energy-saving projects, the Linkou and Nanke plants reduced electricity consumption by 5% in 2024 compared to 2023.• An electronic invoicing system was implemented, reducing CO₂e emissions by 130.7864 metric tons in 2024.• No complaints related to hazardous substance management were reported; conflict minerals are not procured.• Environmental and human rights assessments and audits were conducted for 199 key suppliers, with the overall supplier ESG audit rate being 17.17%.• Local suppliers made up 93.01%, accounting for 65.36% of total procurement costs.• There were no instances of supply chain disruptions caused by suppliers violating regulations related to environmental protection, human rights, or occupational safety.
 Social Responsibility (including human rights)	<ul style="list-style-type: none">• In 2024, CHEM was once again honored with the Gold Award in the Manufacturing category of the 2024 Happy Enterprise voting activity organized by 1111 Job Bank.• In 2024, neither CHEM nor its suppliers were involved in any major risks or incidents related to child labor or forced labor. There were no violations of employees' rights to freedom of association and collective bargaining, nor any significant labor disputes.• CHEM provided 1,000 gravity foundation bases free of charge to the Hualien Works Section of the Ministry of Transportation for post-earthquake emergency road repairs by engineering units.• The average salary of non-supervisory employees increased by NT\$350,000 from the previous year; the median salary increased by NT\$55,000.• All senior executives at key business locations were hired from the local population.• The total cost of salaries and benefits amounted to NT\$2,104,284,000, a 14.14% increase from 2023.• The average training hours per employee was 8.51 hours, a 51% increase from 2023.	<ul style="list-style-type: none">• In 2023, CHEM hired 15 employees who turned 65 in that year, and 16 more in 2024 within the same age group.• CHEM signed industry-academia cooperation agreements with various schools to provide internship opportunities, employing five industry trainees and 17 senior-year interns in 2024.• The language learning subsidy granted to employees totaled NT\$732,472 over the past five years.• CHEM maintained its SO 45001:2018 Occupational Safety and Health Management System certification with 100% coverage of its operational sites.• There was no violation of labor laws and regulations.• A total of NT\$3 million was donated in 2024 to underprivileged groups and and relevant activities.

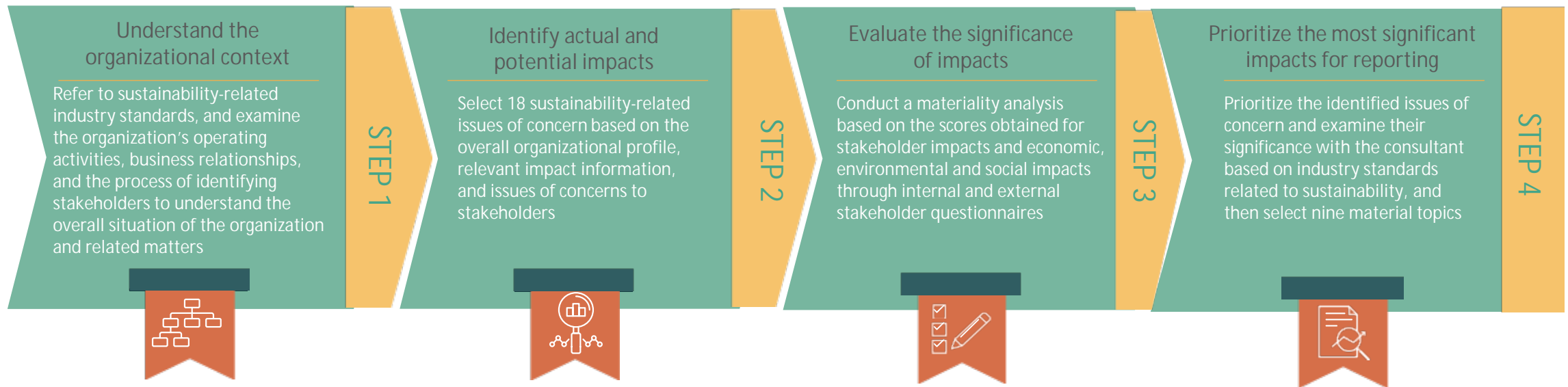




SHAREHOLDER ENGAGEMENT

Identification of Stakeholders and Material Topics (2-29)

Stakeholder Identification Process



Stakeholder Identification



Stakeholders are groups that affect or are affected by CHEM. CHEM initially screens the types of stakeholders contacted in routine business dealings by various departments, and then follows the five major aspects of the AA1000 Stakeholder Engagement Standard (AA1000 SES 2015). After that, six categories of stakeholders that are of significance to CHEM are selected based on their (1) dependency, (2) responsibility, (3) tension, (4) influence, and (5) diverse perspectives after discussion and resolution at an internal meeting. The selected six categories of key stakeholders that are important to the Company include: (1) investors, (2) employees, (3) customers, (4) suppliers, (5) in-charge authorities, and (6) the community.

Stakeholder Communication

In order to understand the interests and expectations of all of CHEM's stakeholders, recognize the significance and impact of the issues of concern, and conduct follow-up analysis and responses, CHEM communicated with stakeholders through regular meetings, telephone interviews, business interactions, routine surveys, and public information releases, etc., At the same time, based on the specific topics revealed in the GRI Sustainability Reporting Guidelines, CHEM collected a wide range of issues and focused on 18 topics covering economic, environmental, and social aspects, including: sustainable supply chain, raw material management, energy management, GHG management, water management, waste management, green products/services, compensation and benefits, labor and employment communication, occupational safety, talent cultivation, customer relationships, operational performance, complaint mechanism, procurement practices, anti-corruption, innovative research and development, and information security.

In addition, CHEM has set up a dedicated "Stakeholder Contact" area on its official website. Stakeholders may contact the Company by email at services@chem.com.tw. The Company also has a spokesperson, a proxy spokesperson, a stock affairs specialist and an investor relations contact. If a stakeholder has any queries, suggestion or complaint, they may send an email to the above email address to communicate freely and instantly with the Company. For more details on stakeholder communications, please see the table titled "Stakeholders' Concerns and Communications" below.



Stakeholders' Concerns and Communications

Stakeholder	Issue of Concern	Communication Frequency	Communication Channel	Response
Investor	Operational performance	Yearly Quarterly/yearly Unscheduled Yearly Yearly Unscheduled	<ul style="list-style-type: none"> Company annual report Company financial reports Investor Relations section on the Company's official website Annual General Meeting Investor Conference Public Information (MOPS) 	<ul style="list-style-type: none"> We disclose our financial performance through the stock exchange's website and our annual reports, and publicly disclose information on material operating events. We convene shareholders' meetings and investor conferences to explain operating results to investors and respond to issues of concern.
Staff	Compensation and benefits	Quarterly Quarterly Unscheduled Unscheduled	<ul style="list-style-type: none"> Welfare Committee meetings Enterprise union meetings Major employee rights communication meetings Review of appropriateness of group agreements 	<ul style="list-style-type: none"> Quarterly meetings of the Employees' Welfare Committee are held to review the Company's employee welfare activities and budgets, and to disseminate information on various activities to employees. A general meeting of the Company's enterprise union is held every six months, at which employees may engage in two-way communication and negotiation during meetings on topics such as improving working conditions. Quarterly meetings between management and the enterprise union are held to communicate internal staff issues. Meetings between senior management and the enterprise union are held as necessary to communicate the Company's strategic direction and engage in consultation.



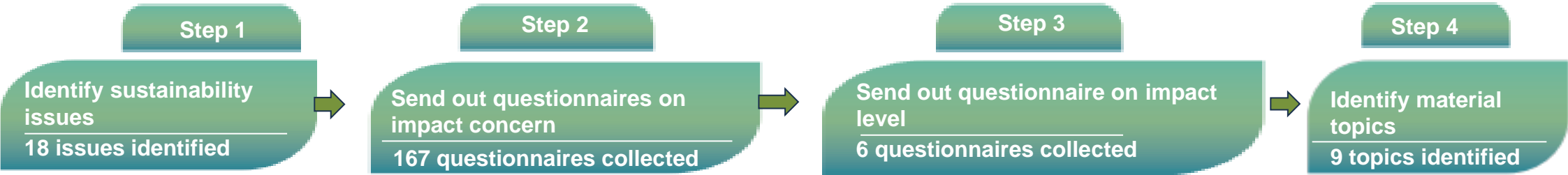
Stakeholder	Issue of Concern	Communication Frequency	Communication Channel	Response
Staff	Occupational safety and health	Yearly Once every two years Unscheduled Unscheduled	<ul style="list-style-type: none">Enterprise union meetingsHealth checkEducation and trainingOccupational health care visitsWalk-around management by safety officers and department supervisors	<ul style="list-style-type: none">The Company arranges for an occupational physician to conduct monthly inspections and provide recommendations for improvement of the working conditions, who also provides counseling services for the physical and mental health of the staff.Once every two years, the Company's medical office and the hospital jointly organize employee health checkups to help employees maintain their health and prevent work-related injuries at an early stage.Occasional training sessions are arranged by occupational physicians and nurses, e.g., seminars on awareness of hazards and the use of protective equipment.Dedicated safety and security personnel practise "walk-around & check-in management" to check and improve workplace safety at any time.The Company's old pipelines, switches, and work surfaces are thoroughly inspected to avoid occupational accidents.Lighting and rain shelters in the employee parking area have been improved to reduce workplace safety issues.
	Talent cultivation	Quarterly/unscheduled	<ul style="list-style-type: none">Education and trainingBonus incentive	<ul style="list-style-type: none">Quarterly training sessions are held for new employees to help them understand the Company and adapt to the corporate culture.Dedicated staff is responsible for the pre-employment and on-the-job training of staff, and various training activities are organized from time to time.A training assessment mechanism is in place, with tiered bonuses given to encourage participation.
		Unscheduled	<ul style="list-style-type: none">Education and trainingPromotion reference	<ul style="list-style-type: none">Training courses are organized to help supervisors understand their roles and responsibilities, gain essential knowledge about the Company's operations, and support effective training and job rotation.
Customer	Production management (quality, cost, delivery)	Weekly Unscheduled	<ul style="list-style-type: none">Production and sales review meetingDedicated staff (PM)	<ul style="list-style-type: none">Production and sales review meetings are held based on consumers' delivery dates to propose permanent solutions to customer/product problems promptly.Anticipatory stocking is employed to minimize lead times and costs.
	Innovation/R&D Green products	Unscheduled	Dedicated staff (PM)	<ul style="list-style-type: none">We are committed to researching and developing innovative and green products based on customer needs and market dynamics.



Stakeholder	Issues of Concern	Communication Frequency	Communication Channel	Response
Customer	Customer relations	Semiannually Unscheduled	<ul style="list-style-type: none"> Customer satisfaction survey Establishment of customer service system Achieving ESG goals with customers 	<ul style="list-style-type: none"> Customer satisfaction surveys are sent out every six months to collect customers' feedback, understand their preferences, and respond to their needs in a timely manner and make continuous improvements. We have a dedicated contact point for clients to accelerate coordination and response handling, thereby enhancing service quality. We have developed a system to establish customer service information and product history, enabling real-time information access to better serve clients. We work together with our customers in the ESG movement and collaborate in pursuit of corporate accountability.
Supplier	Corporate governance	During each transaction	<ul style="list-style-type: none"> Purchase contracts Supplier audit 	<ul style="list-style-type: none"> We require suppliers to comply with RBA, SA8000, ISO 37001 regulations.
	Information security	During each transaction	<ul style="list-style-type: none"> Purchase contracts Supplier audit 	<ul style="list-style-type: none"> We have a confidentiality mechanism for the identities of whistleblowers and those being reported, and conduct regular audits to ensure that the suppliers and our company are jointly committed to corporate social responsibility and the implementation of a clean supply chain.
	Supply chain sustainability management	New supplier Monthly delivery Once every two years	<ul style="list-style-type: none"> Purchase contracts Vendor delivery assessment Supplier audit 	<ul style="list-style-type: none"> We require suppliers to comply with all regulations and standards issued by the competent authorities, as well as our own information security and confidentiality policies. Through regular audits and cybersecurity awareness initiatives, we ensure that suppliers work together with us to safeguard a secure and trustworthy digital operating environment.
In-charge Authorities	Corporate governance Social participation Compliance Energy saving and carbon reduction	Unscheduled Regularly	<ul style="list-style-type: none"> Questionnaire survey Promotional seminar Consultation 	<ul style="list-style-type: none"> We require suppliers to conduct quality management and focus on sustainability issues. Through regular audits and evaluations, we verify that our suppliers have competitive pricing, excellent quality, stable supply and sustainability. We have dedicated personnel visit the collaborating vendors to ensure timely and quality delivery.
Community	Pollution prevention and control Information security	Unscheduled Unscheduled Regularly	<ul style="list-style-type: none"> Public welfare activity Emergency relief Sponsorships to community/school events 	<ul style="list-style-type: none"> We comply with the requirements of the competent authorities in accordance with the law and report the relevant information on a regular basis. We engage professional firms to assist us in reliably and qualitatively complying with various regulatory requirements.

Material Topics Identification (3-1)

Material Topics Identification Process

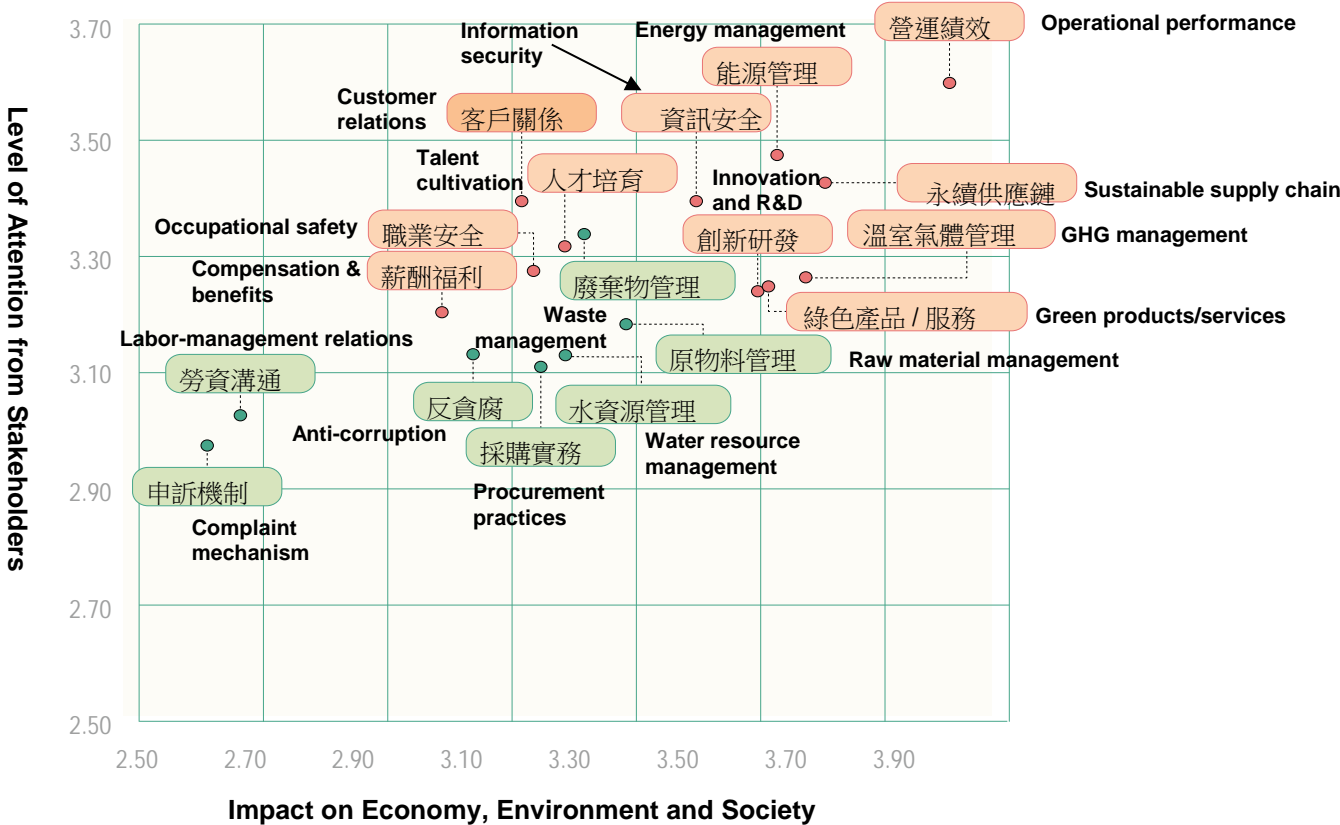


CHEM's ESG Team has identified 18 sustainability issues and invited key stakeholders to fill out an online questionnaire. A total of 167 valid questionnaires were collected, including 9 from investors, 52 from employees, 31 from customers, 68 from suppliers, 5 from authorities, and 2 from the community, which resulted in a rating of the degree of impact of the key stakeholders' concerns about each sustainability issue. The online questionnaire was then sent to 79 executives of the Company to fill in the score of the impact of each sustainability issue on the Company, and the two groups' scores were then aggregated to form a materiality matrix. After discussion by the ESG Team, the nine topics that should be prioritized for disclosure across environmental, social, and economic dimensions are: sustainable supply chain, energy management, GHG management, talent cultivation, customer relations, occupational safety, operational performance, information security, and innovation and R&D. Considering the sustainability of significant themes, the unselected 2023 green products and compensation & benefits were included as optional material topics. Based on the results of the identification of material topics, the Company has included relevant information on policies and commitments, goals and performance related to the material topics in the sustainability report for disclosure to all stakeholders for evaluation and decision-making purposes, and has reported annually to the board of directors on the annual sustainability performance and the implementation goals for the next year to facilitate CHEM's continuous promotion of its sustainable business development policies.

Dimension	Sustainability Issues
Environmental	Sustainable supply chain, raw material management, energy management, GHG management, water resource management, waste management, green products/services
Social	Compensation & benefits, labor-management relations, occupational safety, talent cultivation, customer relations
Economic	Operational performance, complaint mechanism, procurement practices, anti-corruption, innovation and R&D, information security



CHEM's 2024 Materiality Matrix



Glossary	
Anti-corruption 反貪腐	Labor-management relations 勞資溝通
Compensation & benefits 薪酬福利	Operational performance 營運績效
Complaint mechanism 申訴機制	Occupational safety 職業安全
Customer relations 客戶關係	Procurement practices 採購實務
Energy management 能源管理	Raw material management 原物料管理
GHG management 溫室氣體管理	Sustainable supply chain 永續供應鏈
Green products/services 綠色產品 / 服務	Talent cultivation 人才培育
Information security 資訊安全	Water resource management 水資源管理
Innovation and R&D 創新研發	Waste management 廢棄物管理

ESG Dimension	Material Topics (Positive Impact/Negative Impact)
Environmental	Sustainable supply chain management (positive), energy management (positive), GHG management (positive), green products/services (custom, positive)
Social	Talent cultivation (positive), customer relations (positive), occupational safety (positive), compensation & benefits (custom, positive)
Governance & Economic	Operational performance (positive), information security (positive), innovation and R&D (positive)



CHEM's Material Topics for 2024 and Their Boundaries

● Direct impact ○ Contributory to the impact ▲ Economic impact

	Material Topic	Corresponding Chapter	Corresponding GRI Indicators	Importance to CHEM	Stakeholders					
					Investor	Staff	Customer	Supplier	In-charge Authorities	Community
1	Operational performance	Chapter 2 Corporate Governance	GRI 201 Economic Performance	See the Chinese version of this report for full details of importance in all aspects.	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
2	Information security	Chapter 2 Corporate Governance	Custom topic		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
3	Innovation and R&D	Chapter 2 Corporate Governance	Custom topic		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
4	Energy management	Chapter 4 Green Sustainability	GRI 302 Energy GRI 305 Emission		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
5	GHG management				<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
6	Sustainable supply chain	Chapter 4 Green Sustainability	GRI 308: Environmental Assessment of Suppliers GRI 414: Social Assessment of Suppliers				<div></div>	<div></div>	<div></div>	
7	Talent cultivation	Chapter 5 Friendly Workplace	GRI 404: Training and Education			<div></div>			<div></div>	
8	Customer relations	Chapter 2 Corporate Governance	Custom topic		<div></div>	<div></div>	<div></div>	<div></div>		
9	Occupational safety	Chapter 6 Occupational Health and Safety	GRI 403: Occupational Health and Safety			<div></div>		<div></div>	<div></div>	
10	Compensation & benefits	Chapter 5 Friendly Workplace	GRI 401: Labor-Management Relations		<div></div>	<div></div>			<div></div>	

Sustainable Development Committee (2-14)



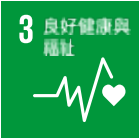
In order to fulfill its corporate social responsibility and contribute to economic, environmental and social progress, and to achieve the goal of sustainable development, CHEM's board of directors has adopted a code of practices on sustainable development, which has been reported to the shareholders at the annual general meeting and now serves as the basis for CHEM's sustainable development practices.

Since the issuance of CHEM's sustainability report in 2022, the management team has continued to report to the board of directors on the progress and results of the implementation of ESG sustainability development, and strengthened the Board's participation in the implementation of ESG within the Company. In addition, in order to achieve the sustainability objectives of environmental protection, social responsibility and corporate governance, CHEM expects to establish a sustainability committee under the board of directors in 2025 to assist the Board in continuously promoting the practice of corporate environmental, social and corporate governance, with a view to achieving the objective of sustainable management.

Sustainable Development Action Performance

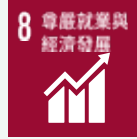

In order to guide the world to work together towards sustainability, the United Nations put forward 17 SDGs in 2015, with the expectation that during the period from 2015 to 2030, the SDGs will provide a direction for national and local governments, enterprises, and civic organizations to respond to the initiatives and formulate policies, so as to enable the environment, economy, and society to grow towards sustainable development. CHEM is committed to sustainable development and growth. It also recognizes sustainable development as a corporate responsibility and promotes various policies and activities in accordance with the SDGs initiative, in the hope of implementing relevant action plans and contributing to sustainability.






SDG Indicators	CHEM's SDG Acton Performance
<div> <div>1 消除貧窮</div> <div>  </div> <div>1.1</div> </div>	<ol style="list-style-type: none"> Established the "CHEM Charity Trust Fund," donating NT\$3 million in 2024 to underprivileged organizations and activities. Provided donations and sponsorships to non-profit organizations such as disadvantaged and critical care foundations. Sponsored children through the Taiwan Fund for Children and Families for more than 11 consecutive years. Provided employment opportunities for underprivileged groups. Supported the "Scholarship Program" and "Tutoring and Vocational Training Classes" to help underprivileged students build a hopeful future.
<div> <div>2 終止飢餓</div> <div>  </div> <div>2.1</div> </div>	<ol style="list-style-type: none"> Supported the Lunar New Year meal donation campaign by providing lunchboxes to elderly individuals living alone. Donated goods to low-income families in the neighborhood. Supported leasehold-friendly farmland. Purchased food and rice and provided them to underprivileged families. Donated and sponsored daily meals for primary and secondary school students.
<div> <div>3 良好健康與福祉</div> <div>  </div> <div>3.3/3.8</div> </div>	<ol style="list-style-type: none"> Provided employees, dependents and vendors with biennial health checkups. Provided health check report consulting services and organized for doctors to conduct on-site consultations. Provided training on the use of various types of protective gear to reduce the risk of occupational accidents. The in-house nurses practiced "walk-around management" in the plants/offices and took the initiative to inspect the plants/offices to care for the physical and mental conditions of the employees. Continued organizing activities such as smoking cessation, weight loss, and blood donation. Organized health and nutrition seminars and fitness courses every year. Arranged influenza vaccinations for employees. Installed AED equipment in the plants and arranged training for employees Provided various kinds of clubs, trips, hospitalization condolences and medical subsidies to promote the physical and mental health of employees.






SDG Indicators	CHEM's SDG Action Performance
 4.1/4.3/4.4	<ol style="list-style-type: none">1. Provided internal and external training for mid-to-senior managers.2. Collaborated with schools to provide internship opportunities, employing a total of five industry trainees and 17 senior-year interns in 2024.3. Donated to rural elementary schools' education fund and teaching equipment.4. Provided scholarships and financial aid for employees' children.5. Participated in the government's "Recharge and Restart" Training Program.6. Provided language and certification exam incentives to employees.
 5.1/5.5	<ol style="list-style-type: none">1. Hired three female senior executives, with one of them being the CEO/President.2. Provided childbirth subsidies (NT\$10,000 for the 1st child and NT\$8,000 for the 2nd child) and collaborated with kindergartens to provide preferential childcare.3. Provided priority parking spaces for pregnant employees.4. Set up a breastfeeding room with a dedicated refrigerator.5. Held talks on gender equality and prevention of sexual harassment from time to time.
 6.3/6.4	<ol style="list-style-type: none">1. Cleaned and disinfected water towers every year to ensure the quality of water used in the toilets, which is mainly rainwater and groundwater.2. Regularly inspected water dispensers within the plant.3. Installed sensor-activated water dispensers to save water resources.4. Replaced dosing pipelines and upgraded motors in the wastewater treatment factory in the plant to ensure the discharged wastewater meets regulatory standards.
 7.1/7.2/7.3	<ol style="list-style-type: none">1. Installed solar power systems (capacity of 2,500 kWp) in the Linkou Plant.2. Built a solar power plant in Tainan (capacity of 216MW), generating over 300 million kWh of electricity per year, capable of supplying electricity to over 83,000 households in a year and reducing annual CO2 emissions by 150,000 metric tons, equivalent to the environmental benefits of planting trees across 15,000 hectares.3. Participated in the government's wind turbine construction projects, accounting for over 10% of the Company's turnover.4. Set up a hydrogen energy R&D center to drive green energy transition.5. Built a laboratory, featuring Taiwan's highest-power fuel cell testing equipment.6. Currently the only company in Taiwan that can develop fuel cells with over 10KW.7. Ability to efficiently integrate multiple renewable energy sources, energy storage systems and fuel cells.

SDG Indicators	CHEM's SDG Action Performance
 8.5/8.6	<ol style="list-style-type: none">1. Signing industry-academia cooperation programs with various schools, providing internship opportunities to a total of five industry trainees and 17 senior-year interns in 2024.2. Hiring 27 people with disabilities in 2023.3. Continued to employ 15 employees aged 65 and above in 2023 and 16 more in 2024, being named an Outstanding Company for Continued Employment of Elderly Workers in 2021.4. The Company's enterprise union being named by the Taoyuan City Government as an outstanding union.5. Offering a NT\$3,000 referral bonus to employees who have recommended top talent to join the Company.6. Hiring a total of 1,919 employees, with 326 new employees.
 9.4	<ol style="list-style-type: none">1. In line with the domestic policy of promoting renewable energy, we have built a solar power plant in Tainan, and have officially started cogeneration since 2021, with a total capacity of 216MW, generating over 300 million kWh of electricity per year, which is equivalent to supplying electricity to more than 83,000 households in a year, capable of reducing annual CO2 emissions by 150,000 metric tons, which is equivalent to the benefit of afforestation of an area of 15,000 hectares.2. The hydrogen stack production line is automated, with automatic plate washing and coating to minimize the chance of contamination of personnel in the environment.3. In addition to the iCharging services at eight national highway rest stops at Hukou, Chingshui, Dongshan, Xiluo, Guansi, Suao, Taian, and Rende, CHEM expanded such services to the rest stops at Shiting, Hsinying South, Gukeng, Xiluo (South Station and North Station), Gukeng, and Hsinying in 2024. Adding new stations further expands the coverage of the highway charging network, helping EV owners avoid range anxiety during long-distance travel.4. We collaborated with direct-current charging operators to build EV charging stations throughout Taiwan, and by the end of 2024 we have built 65 fast-charging stations, and by leveraging Dodohome's payment system and large member base, we have enhanced customer loyalty through one-time parking/charging fees.



SDG Indicators	CHEM's SDG Action Performance
 10.2/10.3	<ol style="list-style-type: none">Set up a staff suggestion box, with suggestions sent to the responsible department and the President, in order to understand employees' needs.Providing equal employment opportunities for female co-workers in the same factories so as to increase female representation.Increased the fixed-amount bonuses in order to improve the income of rank-and-file employees.Donated patrol cars to the Fonglin Township Office, Hualien County.Purchased handmade products from the Children Are Us Foundation.Provided tablets, video teaching aids and scholarships for remote school children.Participated in the distribution of winter heating supplies in Wanrong Township, Hualien County.Since 2023, started using soap products handmade by Agape Sheltered Workshop as souvenirs for the annual shareholders' meeting, with an annual order of over 40,000 pieces.
 11.1/11.3	<ol style="list-style-type: none">Participated in the Dunan and Sanchong Urban Renovation projects to create a green, comfortable, safe, and secure living environment, and to provide a new urban atmosphere for older neighborhoods.Participated, for the first time, in urban renewal projects in 2020, with the Dunnan Project winning the 22nd National Architecture Gold Quality Award.Carried out façade renovation and upgraded public facilities and equipment at the Zhonghe office building, not only beautifying the cityscape but also enhancing the safety of the living environment for residents.
 12.2/12.4/ 12.5/12.6	<ol style="list-style-type: none">Sorted and recycled production waste to minimize waste so as to achieve recycling economic benefits.Required collaborating vendors to recycle their own packaging materials or reduce the use of plastic.Transported steel plates and bases from construction sites for reuse.Optimized production processes to reduce the waste of oil, gas, water and electricity resources.

SDG Indicators	CHEM's SDG Action Performance
 13.3	<ol style="list-style-type: none">Invested NT\$8,554,692, with estimated electricity savings of 537.1769 kWh, with a projected annual carbon reduction of 265.2780 metric tons of CO₂e.Optimized 154 sets of 1000W high bay lights.Optimized 556 sets of 400W metal halide high bay lights.Replaced 1,338 sets of 40W double-tube lamps and double-tube pendant lamps with LED lamps.In 2021, the Company started to conduct a carbon footprint inventory, and the total GHG emissions in 2024 amounted to 5,588.4 tCO₂e, 4.5% lower than that of 2023. However, gas emissions per million dollars of turnover decreased by 17.4%.
 15.1/15.2	<ol style="list-style-type: none">Organized one-person-one-tree planting activities.Adopted street trees in industrial areas.Planted 120 more trees.Regularly replaced activated carbon filters and upgraded wastewater facilities to prevent pollution from impeding the ecology of the neighborhood.
 16.5/16.6/ 16.7	<ol style="list-style-type: none">Prohibited employees from accepting unreasonable gifts, and provide appropriate reporting channels and penalties for violation of the regulations.Established a Personnel Review Committee and a Complaint Hotline with a dedicated unit to handle related matters.The Personnel Review Committee has the duty to protect the personal data of the person concerned and to ensure that he/she will not be subjected to improper handling as a result of the report.

The background of the slide features a large, stylized illustration. In the center is a large yellow lightbulb with a white filament, inside of which is a yellow globe showing continents. Below the lightbulb is a dark blue base. Surrounding the base are three yellow wind turbines with three blades each. In the foreground, there are several yellow houses with brown roofs, each with a solar panel on its roof. To the right of the houses is a grey city skyline with several tall buildings. The top of the slide has a white background with a few grey clouds. The left side of the slide has a solid dark blue vertical bar.

1 About CHEM

1.1 Company Overview

1.2 Awards and Management Systems

1.3 Participation in External Organizations

1. ABOUT CHEM (2-1)

1.1 Company Overview

Founded in 1956, CHEM has accompanied Taiwan's industrial takeoff and transformation, providing advanced power equipment and transmission and distribution engineering services required for all stages of power development, and is now a leading company in Taiwan's heavy power, parking management, and green energy industries.

Since its establishment, CHEM has continued to keep abreast of the times and pursue growth and transformation with the spirit of innovation and change. Based on the stable foundation of the electric power business, CHEM has developed six major business groups, including heavy power, system integration, parking management, CNC, new energy, and mainland China business, with electric power equipment, electric power engineering, and green energy as the main axes of operation. In recent years, in view of the worsening of global warming, CHEM has been actively cooperating with the government's promotion of green energy and carbon reduction policies, and contributing its professional expertise through active involvement in various renewable energy businesses, such as wind power, solar power, fuel cells, rechargeable piles, and microgrids, in the hope of fulfilling the Company's social responsibility of environmental protection and protecting the earth with green energy together with everyone in Taiwan.

Note: For information on CHEM's history, please see the agenda of the 2024 Annual General Meeting of Shareholders (2.2 Company History of Section 2 Company Introduction).



Company Name	Chung-Hsin Electric & Machinery Manufacturing Corporation
Location	No. 25, Wende Rd., Guishan Dist., Taoyuan City 33383, Taiwan
Capital	NT\$5.031 billion
2024 Consolidated Revenue	NT\$25,609,456,000
No. of Employees	1,919
Business Location	Headquartered at 3F, No. 801, Zhongzheng Road, Zhonghe District, New Taipei City, Taiwan, with its main manufacturing base in the Linkou plant (North Plant) and subsidiaries in Taipei City, New Taipei City, Taichung, and Tainan. For information on our subsidiaries in Taiwan and other countries, please refer to our Annual Report.
Major Products/Services	<p>CHEM is the No. 1 brand of heavy electrical equipment. CHEM focuses on the development of three major businesses, namely gas insulated switchgear (GIS), precision manufacturing and hydrogen energy. In addition, CHEM has developed diversified business groups. The scope of operations includes heavy electrical products, meter products, system air-conditioning engineering, power generators, power automation systems, parking management, charging piles, and EPC projects for power generation and substations.</p> <p>In 2008, we began to invest in the R&D of hydrogen energy, and we look forward to creating cleaner and more energy-efficient products for the public in the future.</p>

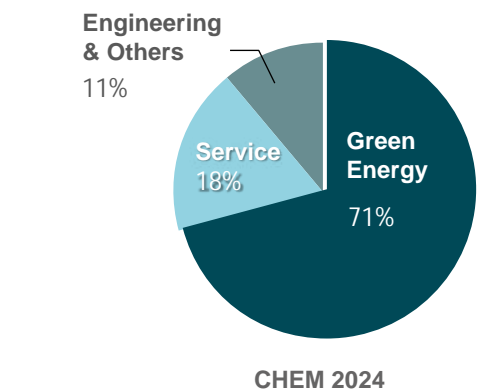
Business Scope

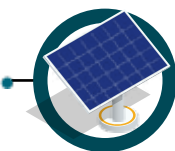
Having engaged in the heavy power industry for many years, CHEM has developed diversified business groups based on its strong competitive edge in the power industry. In recent years, CHEM has been actively transforming into a green energy business covering hydrogen energy, energy storage, microgrid and carbon emissions, to put the concept of environmental protection and love for the Earth into action. CHEM's successive completion of seven solar power plants with combined-meter power generation, growth in hydrogen energy product sales, and introduction of iCharging services for EVs at national highway rest stops all demonstrate that CHEM has been recognized as a green energy company and is actively fulfilling its corporate social responsibility.

Embracing Green Energy (2024)

Unit: 100 million NTD	Green Energy	Service	Engineering & Others
Revenue	181.6	46.8	27.7
Ratio	70.91%	18.27%	10.82%

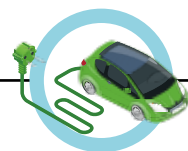
2024 Revenue Composition






Green Energy

- Solar energy
- Hydrogen energy, energy storage, microgrid
- Power supply & equipment



Service

- Parking management/ EV charging services
- Maintenance & management



Engineering & Others

- Urban Renovation
- System integration
- Precision Machining

CHEM's 6 Business Groups

1. Power Business Group	2. System Integration Business Group	3. Renewable Energy Business Group	4. CNC Business Group	5. Dodohome Business Group	6. Mainland China Business Group
1. Electricity supply and distribution products 2. Electricity engineering 3. Electricity meter products (single-phase/three-phase) 4. Power automation	1. System engineering 2. Air-conditioning products 3. Generator products 4. Maintenance and operation management of MEP and fire protection systems 5. Construction/urban renovation development 6. Energy saving management services	1. Hydrogen business (fuel cell, microgrid) 2. Contracting, construction, operation and maintenance of wind, solar and other new energy power projects	1. Precision machining of semiconductors, optoelectronic and aerospace components	1. Parking lot management and equipment manufacturing and sales 2. Operation and management of vehicle charging services	1. Semiconductor and optoelectronic components precision machining 2. GIS assembly and sales





Main Businesses, Products and Services

Manufacture and sale of air-conditioning products, electrical machinery products, electrical products, power supply equipment products, and industrial machinery parts and products.

Installation of electrical piping, contracting of air conditioning and electromechanical engineering projects, on-site maintenance of air conditioning equipment and electromechanical systems, and contracting and execution of system engineering works

Contracting and construction of incinerators, pollution prevention projects, and contracting and construction of power supply systems and power monitoring systems.

Contracting and construction of wind, hydro, thermal, and solar power generation projects, highway tunnels, electrical and mechanical fire-fighting projects, and substation EPC projects.

Parking lot management and charging station equipment manufacturing, sales, and operation management.

Manufacture and sale of smart grid power automation equipment.

R&D, manufacturing and sales of stationary fuel cell systems, mainly including the development of key components such as stack modules, power conditioning modules, methanol-based water reformers and fuel cell controllers.

Residential and building development for rent and sale.

Manufacture and sale of various types of hydraulic operators, pneumatic operators, spring operators, electric operators, electro-spring operators and medium-voltage switchgear used in 22kV–550kV GIS.

Manufacture of aerospace components, panels, semiconductor equipment cavities, and precision machining components.

Contracting and construction of solar power plants, as well as their operation and maintenance management



1.2 Awards & Management Systems

Due to the current lack of domestic electrical manpower, in order to cultivate more electrical talents, in addition to providing scholarships to assist outstanding electrical and mechanical students to complete their studies, and collaborating with a number of universities, such as Chang Gung University, National Taiwan University of Science and Technology, Lung Hwa University of Science and Technology, and National Chung Cheng University to invest in R&D of electrical projects, CHEM established a master's program in quality power supply with Taipei National University of Technology in 2007 to contribute to the cultivation of the next generation of excellent electrical talents.

CHEM's Collaboration with Various Schools

No.	School	Collaboration Details	Date/Duration
1	Taipei University of Technology	Letter of Intent for Collaborative Talent Development between Industry and Academia	2014.03.28
		Collaboration Contract for Employment (Internship) (Department of Energy and Refrigeration & Air-Conditioning Engineering/Department of Mechanical Engineering)	2014.07.14–2021.06.30
		Tripartite Agreement on Industry-Academy Training Cooperation (Department of Energy and Refrigeration & Air-Conditioning Engineering)	2016.06.23
		Practical Training Contract for Employment (Department of Energy and Refrigeration & Air-Conditioning Engineering)	2020.07.01–2022.06.30
2	Lunghwa University of Science and Technology	Consent Form for Workplace Experience (Department of Mechanical Engineering)	2021.07.05–2022.08.31
		University-industry Collaboration Agreement (Department of Mechanical Engineering)	2023.07.03–2025.06.30
		Tripartite Agreement on Industry-Academia Training (Department of Electrical Engineering)	2022.03.21–2024.06.15 2023.03.20–2025.06.15
3	National Chung Cheng University	Letter of Intent for Collaboration with the Center for Advanced Research on Forward-Looking Manufacturing Systems (CARD)	2012.06.01–2015.05.31
			2017.01.01–2019.12.31



Internship Opportunities

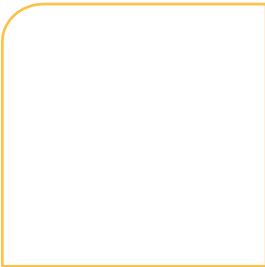
No.	School	Collaboration Details	Duration
1	Lee-Ming Institute of Technology	Contract with Student Internship Organization (Department of Mechanical Engineering and Department of Electrical Engineering)	2012.07.02–2015.08.31
		Student Internship Contract (Department of Electrical Engineering)	2020.02.01–2021.12.31
		Contract for Off-Campus Internship (Department of Electrical Engineering)	2023.01.09–2023.06.08 2023.09.01–2024.05.31
2	National Formosa University	Student Summer Off-Campus Internship Contract (Department of Power Mechanical Engineering)	2015.07.01–2015.08.31
		Individual Internship Program (Department of Electrical Engineering)	2025.02.03–2025.06.30
3	Longhwa University of Science and Technology	Student Internship Contract (Department of Mechanical Engineering, Department of Electrical Engineering, Department of Industrial Management, Department of Information Management)	2012.07.02–2023.06.30
		Student Internship Contract (Department of Mechanical Engineering, Department Electrical Engineering, Department of Electronic Engineering, Department of International Business)	2023.07.03–2024.06.30
		Student Internship Contract (Department of Mechanical Engineering, Department Electrical Engineering, Department of Finance)	2024.07.01–2025.06.30
4	Taipei City University of Science and Technology	Student Internship Contract (Department of Electrical Engineering)	2022.07.01–2023.06.30
		Contract for Off-Campus Internship (Department of Electrical Engineering)	2023.07.03–2024.06.30
5	Taiwan Normal University	Professional and Technical Training Contract (Bachelor of Science in Vehicle and Energy Engineering)	2023.07.03–2026.06.30



Corporate Social Responsibility Awards

In order to fulfill its corporate responsibility (CSR) and contribute to economic, environmental and social progress to achieve the goal of sustainable development, CHEM has implemented a CSR code of practice since 2015. The awards received for its efforts in this regard are listed below:

Corporate Social Responsibility Awards	
1	104 Uniform Invoicing Meritorious Operator Award
2	Selected as an Outstanding Supplier by Chunghwa Telecom in the 2015 Corporate Social Responsibility Dual Audit Award
3	Certificate of appreciation awarded to the Kaohsiung Shiulin Village Community-based Green Power System
4	Participated in the Ministry of Economic Affairs' voluntary green tariff system pilot program, subscribing to 700,000 kWh of green power in each of 2014, 2016, and 2017, as part of our commitment to corporate social responsibility in green energy and environmental protection
5	Silver Award in the Smart Grid Category at the 3rd APEC Energy Smart Communities Initiative (ESCI) Best Practice Awards
6	Special award in Taipower's 2018 Green and Environmentally Friendly Worksite Evaluation for introducing the concept of circular economy
7	Gold Award in the Smart Grid Category at the 4th APEC ESCI Best Practice Awards
8	Voted as one of the top 20 happiest companies in the category of precision machinery in the Happiness Survey organized by 1111 Job Bank
9	Gold-Level Certification in Chunghwa Telecom's 2019 Supplier Sustainability Rating
10	Gold Level Green Building Label Certificate in 2021 – Dunnan Urban Renewal Project
11	Supplier Excellence Award from Applied Materials (the only supplier in Asia receiving this award)
12	Gold-Level Certification in Chunghwa Telecom's 2022 Supplier Sustainability Rating
13	Taoyuan City's 2023 Enterprise with Harmonious Labor-Management Relations
14	Selected by 104 Job Bank and Business Weekly as one of the top 100 DEI Enterprises for the Experienced Workforce
15	2024 17th TCSA Taiwan Corporate Sustainability Awards – Sustainability Report: Traditional Manufacturing Industry – Category 1 Bronze Award
16	Gold Award in the Happy Enterprise Voting Campaign organized by 1111 Job Bank



Bsi Environmental Sustainability Statement



Excellence Award for design and quality and Special Contribution Award at the 24th Public Construction Golden Quality Awards



The Dunnan urban renewal project obtained a gold-level green building label certificate in 2021.



The only company in Asia receiving a Supplier Excellence Award from Applied Materials



Chunghwa Telecom Low-Carbon Alliance Member



Certificate of appreciation awarded to the Kaohsiung Shiulin Village Community-based Green Power System



Silver Award in the Smart Grid Category at the 3rd APEC ESCI Best Practice Awards



Gold Award in the Smart Grid Category at the 4th APEC ESCI Best Practice Awards



2024 Best Managed Companies, BMC



2024 17th TCSA Taiwan Corporate Sustainability Award



TIPS Taiwan IP Management – Grade A Certified



Other Awards & Recognitions

Highest Honor in Technology and R&D	
1	18 th Industrial Technology Awards
Corporate Honor	
1	Evergreen Enterprise Excellence Award - Taoyuan County
2	Winner of the 2 nd Taiwan Mittelstand Award
3	Selected as one of the "Top 100 Companies for Year-round Growth" in the CommonWealth Magazine's 2021 Top 200 Resilient Enterprises Survey
4	Selected as one of the "Top 100 Carbon Competitiveness Companies" in Business Weekly's 2023 survey
5	Gold-Level Certification in Chunghwa Telecom's 2022 Supplier Sustainability Rating
6	Named by Deloitte Global as one of the Best Managed Companies in 2024
Product Quality Certification	
1	ISO 9001:2015 Quality Management System
2	ISO 14001:2015 Environmental Management System
3	ISO 17025:2017 Laboratory Quality Management System
4	ISO/IEC 27001 Information Security Management System
5	ISO 45001 Occupational Safety and Health Management System
6	Certification of standards from the National Electrical Manufacturers Association (NEMA)
7	AS 9100 Aerospace Quality Management System Certification
8	OHSAS 18001 Occupational Health and Safety Management System Certification
9	NADCAP CMSP Holmaking Certification
10	Boiler pressure vessel certification from the American Society of Mechanical Engineers (ASME)
11	Laboratories accredited by the Taiwan Accreditation Foundation ("TAF"): power supply product testing lab, generator set testing lab, HVAC equipment testing lab, and calibration lab

12	New 69/161/345KV GIS certified by Italy's CESI Type Test and passing Taipower's Phase III evaluation for localization nationalization assessment
13	110/220/420/550KV Porcelain Post-Type Gas Circuit Breakers (GCBs) certified by Italy's CESI Type Test
14	ISO 37001 Anti-Corruption Management
15	TIPS – Taiwan Intellectual Property Management System
Awards for Products/Systems	
1	Excellence Award at the 5 th Public Construction Golden Quality Awards
2	Excellence Award at the 7 th Public Construction Golden Quality Awards
3	Distinguished Excellence Award at the 8 th Public Construction Golden Quality Awards
4	Excellence Award at the 9 th Public Construction Golden Quality Awards
5	Distinguished Excellence Award at the 9 th Public Construction Golden Quality Awards
6	Excellence Award at the 11 th Public Construction Golden Quality Awards
7	Distinguished Excellence Award at the 15 th Public Construction Golden Quality Awards
8	Excellence Award at the 16 th Public Construction Golden Quality Awards
9	Distinguished Excellence Award at the 17 th Public Construction Golden Quality Awards
10	Excellence Award at the 19 th Public Construction Golden Quality Awards
11	Excellence Awards and Special Contribution Award at the 20 th Public Construction Golden Quality Awards
12	Excellence Award at the 21 st Public Construction Golden Quality Awards
13	Distinguished Excellence Award at the 22 nd Public Construction Golden Quality Awards
14	2022 National Architecture Golden Quality Award in Residential and Commercial Buildings/High-Rise Category for the planning/design and quality of Dunnan Palace in the Dunnan urban renewal project
15	Best in Class Performance Award from Applied Materials Inc. in 2022
16	Excellence Awards and Special Contribution Award at the 23 rd Public Construction Golden Quality Awards
17	Excellence Awards and Special Contribution Award at the 24 th Public Construction Golden Quality Awards



Government Grants for CHEM's Projects in Recent Years

Ministry of Economic Affairs (MOEA)'s Grants for Science and Technology R&D Projects		Year of Approval
1	12kV GIS (dry air insulated environmentally friendly)	2016
2	R&D program of after-sales energy saving and warranty service platform for air-conditioner mainframes	2010
3	High-speed and high-precision 5-axis gantry machining centers and process value-added system	2012
4	Development Program for Water-Resistant Humidity-Free Fuel Cell Key Component and Its System	2012
5	Development Project for High Sensible Heat Rack-Type Air Conditioning Equipment and Monitoring System for Data Centers	2013
6	Program to Encourage Domestic Enterprises to Establish R&D Centers in Taiwan	2013
7	High-Value Aerospace-Grade Processing Equipment and Application Integration Project	2015
8	High-Efficiency Water-Cooled Fuel Cell Stacks and Key Technology Development Project	2020
Industrial Upgrading and Innovation Platform Guidance Program by the Industrial Development Administration, MOEA		Year of Approval
1	Development of an Energy-Saving Manufacturing Process for Extra-High Voltage Switchgear in Power Systems – Friction Stir Welding Process Development for GIS Copper Conductors	2023
Fuel Cell Demonstration Operation Verification Subsidy by the Bureau of Energy, MOEA		Year of Approval
1	Hydrogen Wind-Solar-House Hybrid DC Power Demonstration and Operation Verification Program	2009
2	SBN Global Studio Power Demonstration and Operation Verification Program	2010
3	Fuel Cell Backup Power Demonstration and Operation Verification program for Telecommunication Equipment Rooms of Far EasTone Telecommunications	2011
4	Fuel Cell Backup Power Demonstration and Operation Verification Program for Radio Repeater Stations of Fire Department, Ministry of the Interior	2012

1.3 Participation in External Organizations (2-28)

External Initiatives

1. United Nations Sustainable Development Goals
2. Global Reporting Initiative ("GRI") Sustainability Reporting Guidelines
3. The United Nations Global Compact (UNGC)
4. World Economic Forum (WEF) Partnering Against Corruption Initiative (PACI) – Principles for Countering Bribery

Participation in External Organizations

CHEM actively participates in various industry associations in order to build industry consensus. Through various platforms, CHEM shares new industry news, receives diversified viewpoints and professional knowledge, and further expects to promote the development and progress of industry public affairs. The Company also participates in relevant associations dedicated to green power generation and climate change mitigation (including the Taiwan Fuel Cell Partnership, Taiwan Hydrogen Industry Development Alliance, ROC Solar Power Generation System Association, and Taiwan Energy Conservation and Emission Reduction Association), and aims to contribute to Taiwan's green power development and energy conservation and carbon reduction.

In 2024, CHEM was a member of 43 public associations. In particular, CHEM's Quality Assurance Committee, Air Conditioning Factory, Electrical Factory, and Power Supply Factory participated in the National Accreditation Foundation for Consortiums (NAFC) as a member and all of them have been officially accredited by the TAF as testing laboratories.





CHEM's Participation and Membership in Various Associations

1	Quality Society of the Republic of China (ROC)
2	ROC Association for the Advancement of Industry and Commerce
3	Industry Safety and Health Association of the ROC (ISHA)
4	ROC CNS Certification Association
5	Atmosphere Protection Association of the ROC
6	Internal Audit Association of the ROC
7	ROC Electric Stagecoach Association
8	Middle East Economic and Trade Association of the ROC
9	Accounting Research and Development Foundation of the ROC (Taiwan)
10	National Accreditation Foundation
11	Taiwan Electrical and Electronic Industries Association (TEEIA)
12	Taiwan Machinery Industry Association
13	Taiwan Refrigeration and Air Conditioning Engineering Industry Association
14	Taiwan Water Pipe Engineering Industries Association (TWPEA)
15	Taiwan Electrical Engineering Industry Association (TEEIA)
16	Taiwan Fire Equipment Industry Association
17	Taiwan Refrigeration & Air Conditioning Association
18	Taiwan Smart Grid Industry Association
19	Taipei Electrical Appliances Trade Association
20	Taipei Computer Business Association
21	Taipei City Measurement Association
22	Taipei City Parking Lot Business Association

23	New Taipei City Fire Engineering Equipment Business Association
24	Taoyuan City Industrial Association
25	Linkou Gongsan Industrial Park Manufacturers' Association
26	Taipei City Refrigeration and Air Conditioning Technicians Association
27	Taiwan Power Development Association
28	Taiwan Aerospace Industry Association
29	Taiwan Electrical Equipment Inspection and Maintenance Engineering Industry Association
30	Taiwan Fuel Cell Alliance
31	Taiwan Energy Conservation and Emission Reduction Association
32	DLMS
33	Taiwan Hydrogen Industry Development Alliance
34	Taiwan Electronics Inspection Center (with ISO 9001, ISO 14001, OHSAS 18001)
35	Tainan County Industrial Association
36	National Association of Manufacturing Site Officers of the ROC
37	ROC Photovoltaic Power Generation System Merchants Association
38	Taiwan Electric Vehicle Supplemental Technology Industry Promotion Alliance
39	Allied Association for Science Park Industries
40	Taichung City Parking Lot Business Association
41	Taiwan Power & Energy Engineering Association
42	Information Software Association of the ROC
43	Chiayi County Industrial Association



2 Corporate Governance

- 2.1 Governance Practices
- 2.2 Risk Management
- 2.3 Customer Relations
- 2.4 Innovation and R&D
- 2.5 Information Security
- 2.6 Tax Management



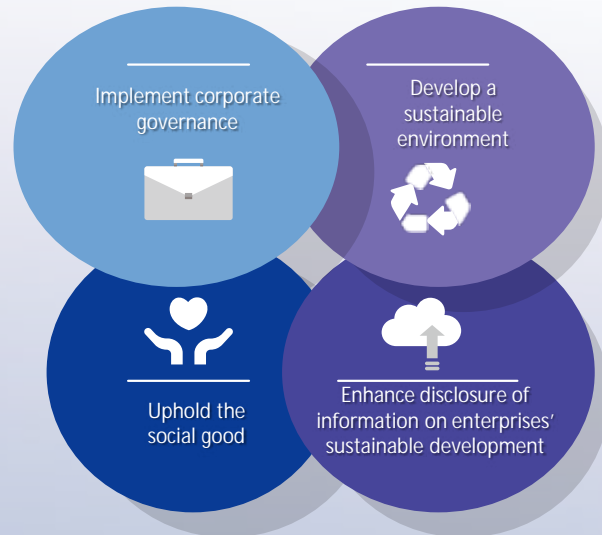
2. CORPORATE GOVERNANCE (2-13, 2-14, 201)

Sustainable Development Policy

In addition to pursuing sustainable operation and profitability, CHEM attaches importance to the environment, society and corporate governance, and protects the rights and interests of stakeholders. Therefore, it has, based on the Code of Practice on Sustainable Development for TWSE- and OTC-Listed Companies, formulated a "Code of Practice on Sustainable Development," with the senior management responsible for its implementation and reporting the implementation status to the board of directors from time to time. The board of directors will include any shareholder motion related to sustainable development as a shareholder meeting agenda item, in order to facilitate the Company's advancement toward ESG-driven sustainability.

CHEM's Code of Practice on Sustainable Development clearly defines the principles of corporate social responsibility and the key promotion items of the Company's sustainable governance, such as corporate governance, environmental protection, social welfare, and disclosure of sustainability-related information. CHEM closely monitors the development of domestic and international sustainability-related standards and changes in the environment, and uses these insights to review and improve its established sustainability systems and goals, in order to enhance the effectiveness of its sustainability efforts.

In addition, the Company will continue to consider the relevance of domestic and international sustainability trends to its core businesses, and the impact of the Company's and its corporate group ("the Group")'s overall operating activities on stakeholders, in order to formulate management policies and specific plans to promote sustainable development.



CHEM's Code of Practice on Sustainable Development



Corporate Governance Policy

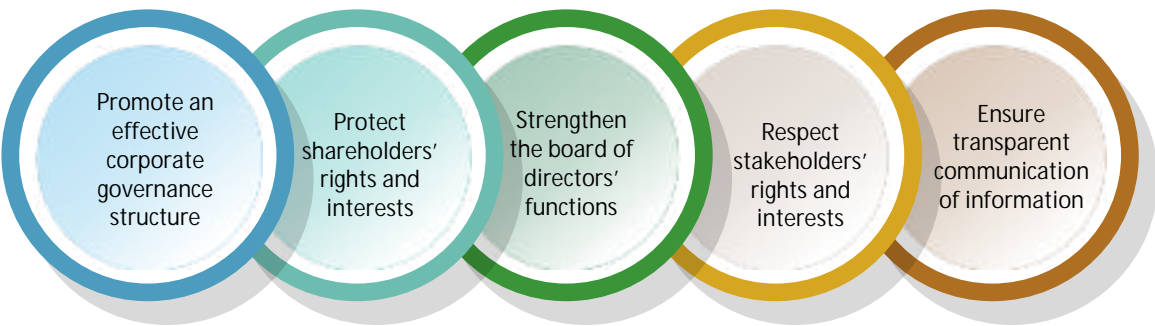
A sound corporate governance mechanism is the foundation of sustainable business operations. CHEM upholds the concept of integrity management and is committed to promoting an effective corporate governance structure, protecting shareholders' rights and interests, strengthening the functions of the board of directors, respecting the rights and interests of stakeholders, and implementing transparency of operational and financial information.

In order to implement corporate governance, CHEM's board of directors appointed Jing-Feng Lai as the head of corporate governance, with responsibilities including handling, in accordance with the law, information required by the board of directors for business operation, handling matters related to board meetings shareholders' meetings in accordance with the law, providing information required by the directors for business purposes, supporting the directors in assuming their roles and pursuing continuous education, and assisting the directors in complying with laws and regulations.

In order to continuously improve the effectiveness of corporate governance, CHEM has established an internal control system, conducted reviews and evaluations, assessed the performance of its board of directors, conducted further training for the head of corporate governance, and regularly published corporate governance reports to effectively respond to the rapid changes in the Company's internal and external governance environments, to assist management in flexibly formulating strategies for economic, environmental, and social issues, and to ensure that the system is designed and implemented in a sustainable and effective manner to maximize the benefits of the Company and its stakeholders. In the 2024 Corporate Governance Evaluation conducted by the Taiwan Stock Exchange, a total of 952 TWSE-listed companies and 754 OTC-listed companies were assessed. CHEM was ranked in the 36% to 50% range among the evaluated companies. CHEM obtained ISO 37001 Anti-Bribery Management System certification in 2024, and will continue to strengthen internal control systems and accelerate the transparency of company information, in line with international corporate governance trends.



CHEM's Five Principles of Corporate Governance



CHEM's 2024 Approach to Operational Performance and Its Evaluation

Material Topic		Operational Performance
Corresponding GRI indicator		GRI 201 Economic Performance
Policies and commitments		<ul style="list-style-type: none"> Pursue sustainable management and profitability Protect stakeholders' interests Maximize stakeholder's interests
Goals and objectives	Short-term	<ul style="list-style-type: none"> Consolidated revenue for the year exceeding NT\$20 billion and consolidated net income exceeding NT\$3 billion
	Mid- and long-term	<ul style="list-style-type: none"> Continue to enhance operational efficiency through organizational reforms and changes Seize the opportunities in the development of the green energy industry
Responsibilities and resources		<ul style="list-style-type: none"> Appoint a dedicated head of corporate governance to handle matters related to the board of directors' execution of duties in accordance with the law, support the directors in pursuing continuous education and assuming their roles. If a shareholder proposes a motion related to sustainable development, the board of directors will consider including it as a shareholders' meeting agenda item.
Evaluation mechanism and results		<ul style="list-style-type: none"> Annual consolidated revenue exceeding NT\$20 billion and consolidated net income exceeding NT\$2.5 billion; in 2024, the Company's consolidated revenue was NT\$25.609 billion and consolidated net income was NT\$3.627 billion.

Economic Performance

CHEM's 2024 Consolidated Financial Statements (unit: NT\$1,000 except otherwise stated)

Item	2022	2023	2024
Operating income	18,546,885	22,144,872	25,609,456
Gross profit	4,744,448	6,418,919	6,721,115
Operating profit and loss	2,851,135	4,386,497	4,536,921
Income tax	625,844	811,418	833,744
Net profit for the period	2,466,498	1,585,444	3,627,150
Earnings per share (unit: NT\$)	5.21	3.25	7.33
Staff salary and benefits	2,924,368	3,049,874	3,443,642

Note: CHEM's consolidated financial statements include the financial data of all subsidiaries. For information on domestic and overseas subsidiaries and affiliated companies, please refer to the financial report.

Financial Assistance from the Government in 2024 (unit: NT\$1,000)

Item	2022	2023	2024
Tax deductions and credits	383,942	611,862	597,254
Subsidies	3,220	4,239	4,183
Investment grants, R&D grants	15,363	32,421	7,803
Rewards	2	448	1,042
Royalty exemption period	-	-	-
Financial aid from export credit agencies (ECAs)	-	-	-
Financial incentives	-	-	-
Others	-	-	-
TOTAL	402,527	648,970	610,282

2.1 Governance Practices (2-9–2-12, 2-15–2-18, 2-21, 2-25–2-26, 405-1)

2.1.1 Board of Directors

CHEM established its board of directors in accordance with the Company Act. The current board of directors was re-elected in May 2023 for a term of three years until its expiration in May 2026, with a total of nine directors (including three independent directors), who are responsible for assisting CHEM in reviewing and assessing the results of the implementation of the Company's various business plans relating to the economic, social and environmental matters, as well as supervising CHEM's internal audit operations. The board of directors meets quarterly, and held six meetings in 2024, with an overall attendance rate of 92.6%. In addition, CHEM has formed functional committees, such as the Audit Committee and the Compensation Committee, in accordance with the law, to assist the board of directors in fulfilling its role of overseeing the quality of the Company's execution of relevant accounting, auditing and financial controls.

CHEM's various departments interact with stakeholders on a regular and irregular basis through routine channels. If there is a potential negative and significant conflict between a stakeholder and the Company, the responsible departments will conduct due diligence investigations into the stakeholder's finances, company operations, legal compliance records, environmental pollution, infringement of employees' rights, and health hazards, and will report the results of such investigations to the President and the Chairman of the Board. The Chairman will then evaluate whether to report the results to the board of directors depending on whether those results will cause significant harm to the Company's overall operation, and if so, the board of directors will make a resolution on the due diligence report and authorize the responsible department(s) of the Company to execute the resolution. In 2024, there was no potential significant conflict between the Company and any stakeholder, and thus no report was made to the board of directors. Through concrete implementation, CHEM is able to more fully carry out due diligence on stakeholders and strengthen its board of directors' role in addressing potential major adverse conflicts.

The board of directors emphasizes diversity and equality, and the professional expertise and experience of board members, along with the diversity in age groups, enabling the Company to make innovative and sound decisions in both overall strategy and leadership direction. In addition, in order to enhance the effectiveness of the board of directors' operations and to implement supervision, the Company has appointed three independent directors who meet the requirements of the Regulations Governing Appointment of Independent Directors and Compliance Matters for Public Companies, including relevant professional qualifications, independence criteria, and restrictions on concurrent positions, so as to achieve proper planning of corporate innovation and development strategies, safeguard shareholders' interests and strengthen corporate governance.

CHEM's board of directors possesses professional industry knowledge and extensive experience in corporate governance. Through continuous education and extensive reference to international trend reports, CHEM's board of directors is able to enhance its collective wisdom on environmental, social and economic issues. In addition to professional competence, the CHEM board of directors has adopted a "Board Performance Evaluation Method" to ensure that the conduct and ethics of the board members are in line with the

corporate culture and spirit of CHEM, and conducts internal evaluations of the performance of the Board, individual board members, and functional committees annually, as well as evaluations performed by an external independent professional organization or outside experts and scholars every three years, in order to enhance the integrity and management effectiveness of CHEM's governance. The [last external evaluation of the board of directors](#) was conducted in 2022, and the next one is scheduled for 2025.

Board of Directors' Performance Evaluation Mechanism	2024 Performance Self-Evaluation Results	Enhancement Program
<ul style="list-style-type: none"> Annual self-evaluation questionnaire Evaluation by outside experts every three years 	<ul style="list-style-type: none"> Average score of 4.85 for the board of directors Average score of 4.92 for board members Average score of 5 for the Audit Committee Average score of 5 for the Remuneration Committee 	<ul style="list-style-type: none"> Coordinating the in-person attendance of directors at board meetings Arranging professional development programs Enhancing effective communication between independent directors and internal auditors and accountants Enhancing directors' participation in the Company's operation





Diverse Members of CHEM's Board of Directors

Title	Name	Gender	Age Group	Education & Experience	No. of Attendance
Director/ Chairman	Fu-Nien Chiang	Male	41-50	Auckland Institute of Tourism Management Director, Dodohome Parking Management Business Group, CHEM	6
Director	Wei-Chuan Chang	Male	61 and above	China Marine College Vice President, CHEM	6
Director	Ming-Xian Weng	Male	61 and above	Department of Agricultural Engineering, National Taiwan University Chairman, CMC Magnetics Corp.	4
Director	Song-Qin Shen	Male	51-60	Graduate Institute of Engineering Science, National Cheng Kung University General Manager, Etrovision Tech. Co., Ltd.	6
Director	Hon-Ren Lin	Male	41-50	Department of Economics, University of Toronto, Canada	6
Director ¹	Chin-Chung Lin	Male	61 and above	Department of Electrical Engineering, National Taipei University of Technology Vice President, CHEM	5
Independent director	Gene-Tzn Chen	Male	61 and above	Department of Law, National Taiwan University Member of the Legislature; Delegate to the National Assembly; prosecutor; lawyer; Chairman, ICBC Securities Investment Trust (Taiwan) Co.; Chairman, Taishin Securities Investment Trust Co.; Independent director of Champion Building Materials Co.	6
Independent director	Sin-San Pai	Male	61 and above	D. in Law from Chinese Culture University; M. Arch. from National Cheng Kung University; B. Arch. from Chung Yuan Christian University; M.A., University of San Francisco, USA Advisor to the Presidential Office on National Policy; Chairman of the Taipei City Architects Association; Chairman of the Consumers Cultural and Educational Foundation of the ROC; director of the 228 Incident Memorial Foundation; member of the Public Works Procurement Complaint Review Committee, Executive Yuan	6
Independent director	Horng-Chi Chen	Male	61 and above	Doctor of Laws, Kinki University Associate Professor, Truth University; delegate to the National Assembly and member of the Legislative Council; Deputy Representative of the Taipei Representative Office in Japan; President of Taiwan-Japan Relations Association; independent director of Sinkang Industries Co., Ltd.	5

Note: Age groups are categorized as follows: 21–30 years old; 31–40 years old; 41–50 years old; 51–60 years old; and 61 and above.

Note 1: Assumed office on January 10, 2024

Board of Directors' Performance Evaluation

In order to implement corporate governance and enhance the functioning of its board of directors, CHEM has established a "Board of Directors Performance Evaluation Method" in accordance with the "Code of Practice on Corporate Governance for TWSE- and OTC-Listed Companies," which sets performance targets to enhance the efficiency of the Board's operation. Every three years, an external independent professional organization or a team of outside experts and scholars conducts the evaluation. The internal evaluation of the performance of the board of directors focuses on the performance of the Board as a whole, individual Board members and functional committees, and the performance evaluation results are categorized into five grades, ranging from (1) *improvement needed* to (5) *excellent*, and the results of the board of directors' performance evaluation in 2024 are set out in the table below, and the results of the board of directors' performance evaluation of individual directors and functional committees can be found on the Company's official website under "Board of Directors' Performance Evaluation."

The board of directors' performance indicators cover five major aspects and a total of 45 indicators. In the 2024 evaluation, 39 indicators were rated as "Excellent (5)," four indicators as "Good (4)," and one indicator as "Fair 3," indicating that the board of directors has been able to direct and supervise the Company's strategies, major businesses and risk management, and has established an appropriate internal control system in compliance with the requirements of corporate governance.

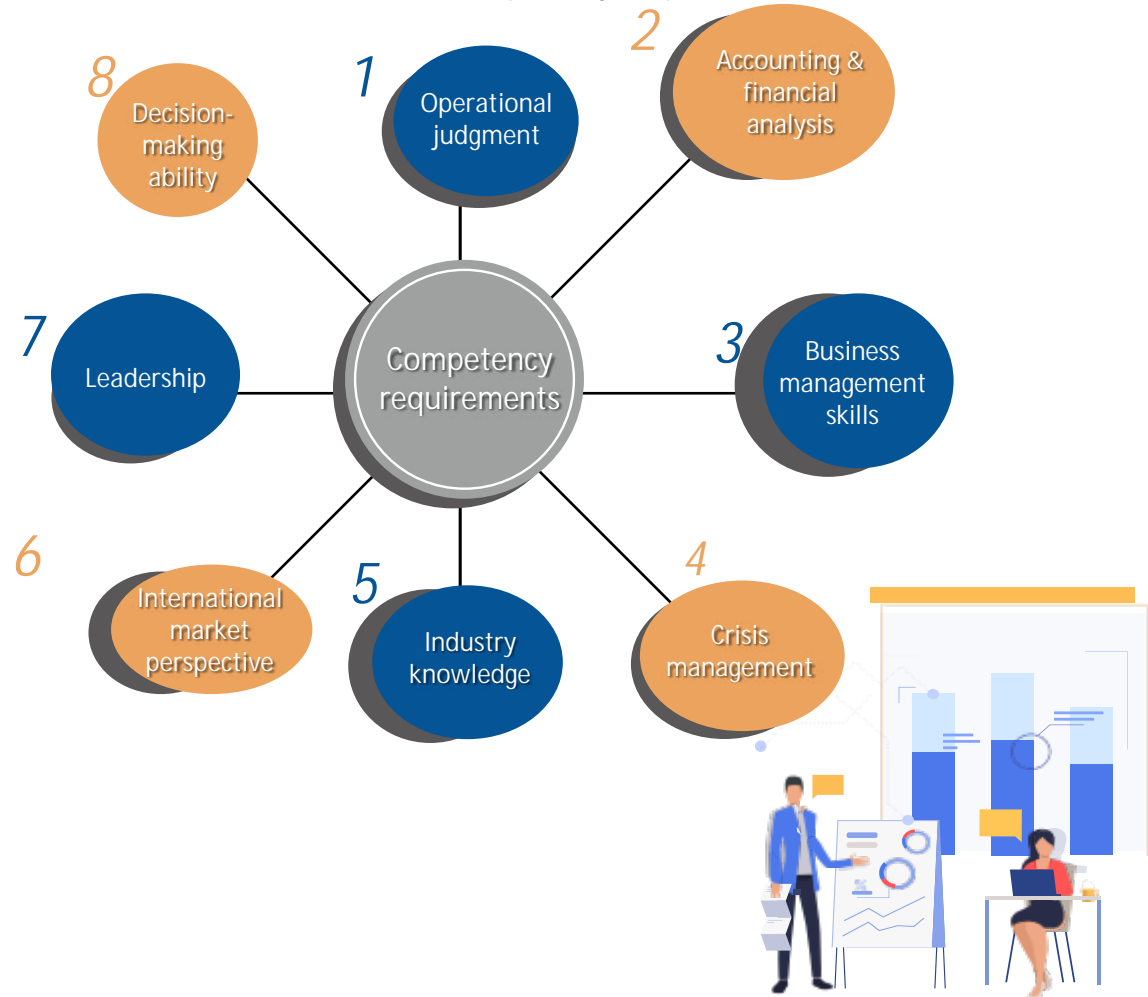
Board of Directors' Performance Self-Evaluation in 2024

Five Aspects of Self-Evaluation	No. of Evaluation Items	Evaluation Results
A. Degree of participation in the Company's operation	12	4.83 points
B. Enhancing the quality of the Board's decisions	12	4.83 points
C. Board's composition and structure	7	4.71 points
D. Directors' election and continuous education	7	4.86 points
E. Internal control	7	5.00 points

Progressive Governance Team

In order to achieve the ideal goals of corporate governance, CHEM’s Board members actively participate in further education to develop the knowledge, skills and professionalism required to perform their duties. In 2024, CHEM’s board of directors spent a total of 67 hours on further education, with an average of 7.4 hours per person, covering courses such as global trends, operations and management, and financial fraud prevention. In the future, additional training courses related to environmental and social issues will be provided to strengthen ESG knowledge, enhance the professionalism of the board of directors, and improve governance effectiveness and overall sustainable competencies.

CHEM’s Board of Directors’ 8 Core Competency Requirements



2024 Board Training Courses and Total Hours

Title/Trainee	Course	Hours
Director/Fu-Nien Chiang	Conference on Building a New Carbon Era with Sustainable Knowledge	6
	Summit on Strengthening Taiwan's Capital Market	3
Director/Hon-Ren Lin	Corporate Governance and Sustainable Business Management Workshop	6
Director/Wei-Chuan Chang	2024 Insider Trading Prevention Awareness Seminar	3
	Greenhouse Gas Protocol Corporate Standard and Scope 3 Standard Awareness Course	7
Director/Ming-Xian Weng	Accelerators of Corporate Sustainability — CSR, ESG, and SDGs	3
	Advanced Practical Seminar for Directors, Supervisors (including Independent Ones), and Corporate Governance Officers (Enhancing Corporate Sustainability Value and Improving Risk Management Systems)	3
Director/Song-Qin Shen	2024 Insider Trading Prevention Awareness Seminar	3
	Applications of Generative AI and ChatGPT	3
Director/Ching-Chun Lin	Seminar on Practical Approaches to Sustainable Development	3
	Seminar on Addressing Insider Trading and Financial Reporting Fraud: Practical Insights and Strategic Responses	6
	2024 Insider Trading Prevention Awareness Seminar	3
Independent Director/Gene-Tzn Chen	Fully Launching Corporate Innovation and Growth	3
	Guidance for Non-Financial Directors and Supervisors on Reviewing Financial Statements	3
Independent Director/Sin-San Pai	Board Performance Evaluation	3
	Fully Launching Corporate Innovation and Growth	3
Independent Director/Horn-chi Chen	Board Performance Evaluation	3
	Fully Launching Corporate Innovation and Growth	3
Total		67



2.1.2 Functional Committees (2-19–2-20)

CHEM has established an Audit Committee and a Remuneration Committee in order to have a complete governance structure, improve the supervisory functions and strengthen the management functions, and reduce the overall operating risks. The Audit Committee and the Remuneration Committee, except for those who are required by law to exercise their duties independently, are accountable to the board of directors, and also submit proposals to the board of directors for resolution. The Audit Office regularly evaluates and reviews risk issues and reports the results of such evaluations, and the Chief Auditor compiles major risk issues and regularly reports them to the Audit Committee and the board of directors.

Audit Committee

The Audit Committee assists the board of directors in monitoring the quality of the Company's execution of the relevant accounting, auditing and financial reporting processes and financial controls, and submits the evaluation results to the board of directors for discussion. CHEM's board of directors has approved the "Audit Committee Organizational Guidelines." Established under the board of directors, the Audit Committee has three members, who are all independent directors, with Mr. Gene-Tzn Chen serving as the convener and chairman. Six Audit Committee meetings were held in 2024, with a 94.4% attendance rate.

The head of internal audit holds a closed-door meeting with all independent directors at least quarterly to report on the status of the Company's internal audit, and the independent directors meet with the head of internal audit once during the year. In addition, the independent directors meet with the accountants once during the year. During the meeting, the accountants, in addition to reporting the results of the review of the financial reports to the independent directors, conducts legal briefings and exchange opinions. Overall, the independent directors communicate smoothly with the head of internal audit and the accountants.

Remuneration Committee

In order to improve the remuneration system for directors and managers, and to assess the operational performance of the directors and managers and evaluate whether the remuneration received by them are fair and reasonable, CHEM has established a remuneration committee under the board of directors through the Board's approval of the "Organizational Rules of the Remuneration Committee." The Committee has three members. All three members are independent directors with Mr. Gene Tze-Chen serving as the convener.

The main function of the Remuneration Committee is to evaluate, in a professional and objective manner, the Company's policies and systems for the remuneration of directors and managers, and to convene meetings at least twice a year and make recommendations to the board of directors for their decision-making. In 2024, the Remuneration Committee held a total of four meetings, with an actual attendance

rate of 91.7% for its members. The Remuneration Committee abides by the duty of care of a good manager and faithfully performs its duties of formulating and periodically reviewing policies, systems, standards, and structures for evaluating the performance and remuneration of directors and managers and periodically evaluating and determining the remuneration of directors and managers, and submits recommendations to the board of directors for discussion.

Compensation Policy

The performance evaluation and compensation policies for directors and managers are set forth in the Company's Articles of Incorporation. The Remuneration Committee determines the reasonableness of the compensation after reviewing the relevant parties' contribution to the Company's operational performance and submits it to the board of directors for approval. With the growing importance of corporate governance and sustainable development, in addition to linking the performance of CHEM's directors and managers with compensation indicators, non-financial performance aspects—such as ESG-related corporate governance, green finance, social care, and environmental sustainability—will gradually be incorporated into the evaluation scope and the Company's compensation policies.





2.1.3 Internal Audit

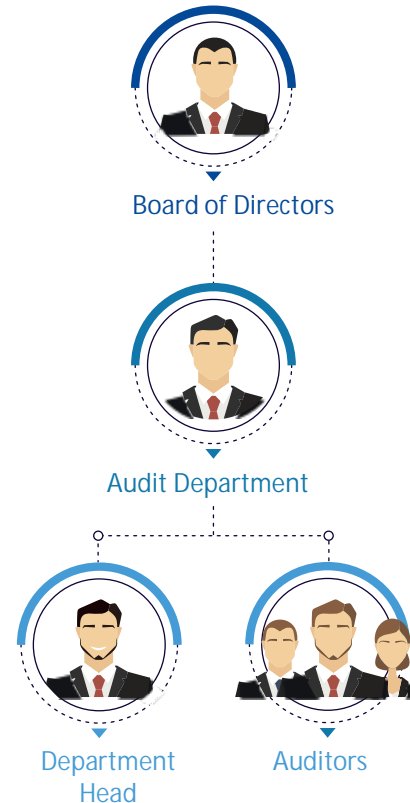
Internal Audit Operation

In order to assist the board of directors in identifying deficiencies in the internal control system, reviewing the reliability and completeness of financial and operating information, and measuring the results and efficiency of its operations, CHEM provides timely recommendations for improvement through internal control and internal audits to ensure that the system is consistently and effectively implemented.

CHEM's audit department reports directly to the board of directors. The appointment and removal of the head of internal audit must be approved by the Audit Committee and submitted to the board of directors for ratification. The appointment, removal, evaluation, and compensation of internal auditors must be conducted in accordance with CHEM's "Regulations on the Appointment, Transfer, and Departure of Employees," "Regulations on Ranking, Title, and Salary Approval," and "Regulations on the Examination of Employees," which must be signed by the Chairman of the Board and reported to the Securities and Futures Bureau ("SFB") annually.

Internal Audit Procedures

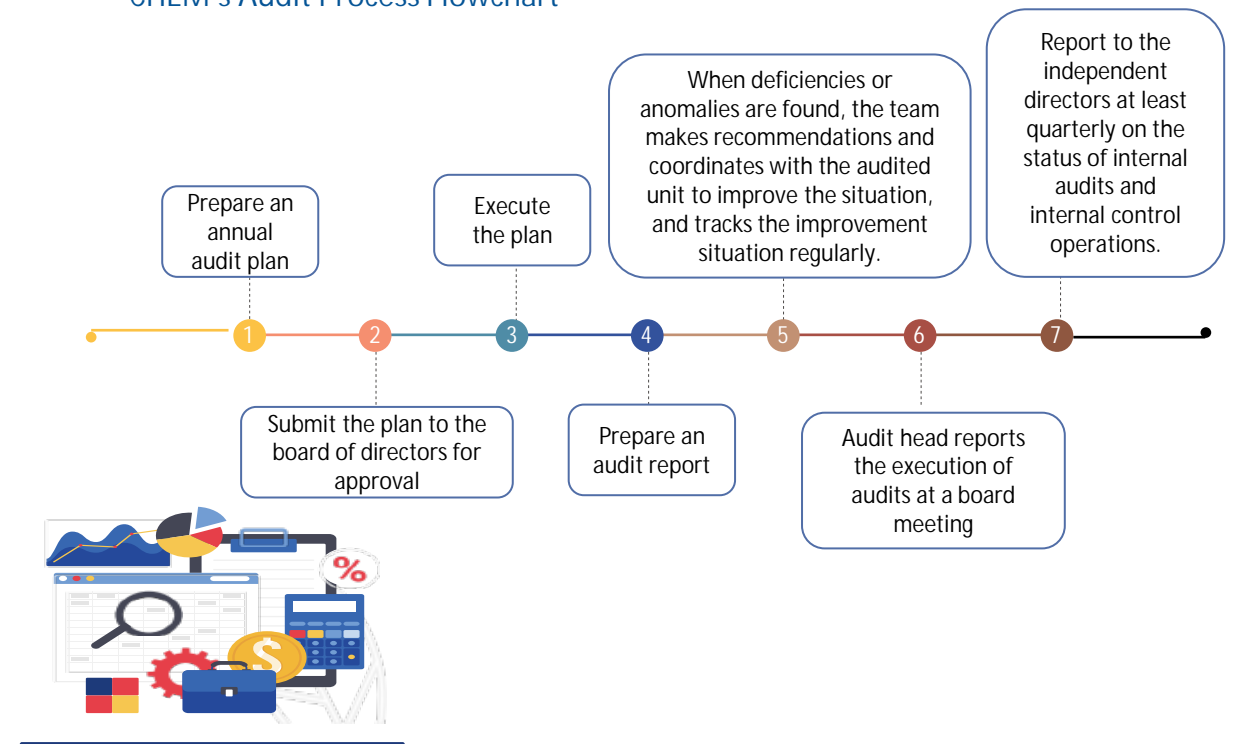
The purpose of CHEM's internal audits is to assist the board of directors and managers in examining and reviewing the deficiencies of the internal control system, measuring the effectiveness and efficiency of operations, and providing timely recommendations for improvement to ensure the continuous and effective implementation of the internal control system and to serve as a basis for reviewing and revising the internal control system. CHEM conducts internal audits through on-site audits and written audits, which cover the operations of all units and subsidiaries of CHEM, and the personnel of the units being audited are expected to cooperate closely. Audit work includes checking and evaluating audit planning, communication results and follow-up. The annual audit plan is based on risk assessment considerations, and should establish audit focal points for individual audit cases and document them in working papers. After the on-site audit work is completed, the audit findings should be fully communicated with the responsible personnel of the audited unit. An improvement plan and estimated completion date should be obtained from the audited unit, and the improvement results should be followed up accordingly. Finally, the audit and follow-up reports should be submitted to the independent directors for their review.



Time for CHEM's Internal Audits

Routine internal audits	Before the end of each year, the Audit Office draws up an annual audit plan based on the characteristics of the eight major trading cycles, the letters from the SFB regarding previous audits, the frequency of the Company's transactions, the ease of operation, and other practical operations, and then decides on the timing of the audit for each audit item.
Ad-hoc internal audits	In order to fully understand the current operation of the audited department, the audit department may establish audit items based on the importance, risk level, transaction frequency, and operational ease of each activity within the trading cycle.
Project-based internal audits	The senior management or the audit supervisor must designate the subject and time of the audit, and the auditor must conduct the audit within the determined time.

CHEM's Audit Process Flowchart





2.1.4 Ethics & Integrity (2-27, 205)

Ethical Management

In order to establish a corporate culture of integrity and sound development, CHEM has formulated a "Code of Conduct for Business Integrity" based on the "Code of Business Integrity for Listed and OTC Companies" and relevant laws and regulations, which has been approved by the board of directors. The Code explicitly prohibits unethical behavior, including offer and acceptance of bribes, illegal political contributions, improper charitable donations or sponsorships, acceptance of improper benefits, etc. It also requires strict compliance with contracts signed with customers and other relevant regulations to ensure that the management and all employees of CHEM conduct business activities in a fair and transparent manner.

In order to effectively manage and promote the Company's integrity management practices, the Management Division is responsible for formulating and implementing relevant programs and reporting to the board of directors on a regular basis.

Reporting & Protection Mechanism

If anyone suspects or discovers a violation of the Company's "Code of Ethical Conduct," "Code of Conduct for Business Integrity," or any laws, they can report it with relevant information to company management, the internal audit supervisor, the designated reporting channels, or directly to the HR department. Anonymous reports with clear evidence are accepted. The Company will investigate each report and protect the whistleblower's identity and personal information, ensuring that they do not face retaliation for reporting any illegal or unethical behavior. The Company has established and publicized independent reporting channels for both internal and external personnel (email: anti-corruption@chem.com.tw; phone: 03-3280811; address: 25 Wende Road, Guishan District, Taoyuan City, with attention to Ms. Lai; reporting webpage: <https://www.chem.com.tw/tc/contact.aspx>.)

In 2024, the Company conducted corruption risk assessments at two operational sites, achieving a 100% completion rate, with no related violations reported.

Training and Communication

In FY2024, CHEM organized internal and external training on issues related to ethical management, including courses on compliance with ethical management laws and regulations, anti-bribery and corruption, accounting systems and internal control, with 453 participants and 318 person-hours in total. In addition, to promote and emphasize the concept of ethical and honest business practices, relevant content on ethical integrity is incorporated into new employee training, enabling newcomers to understand the Company's policies and direction regarding ethical business conduct. In 2024, 100 people participated in the training sessions, and each session lasted 15 minutes.

Prevention of Insider Trading

To prevent the occurrence of insider trading, the Company has formulated insider trading prevention procedures to protect investors and safeguard its rights and interests. In order to implement insider trading prevention procedures, the Company provides education and guidance on the "Regulations for the Prevention of Insider Trading" and related laws and regulations to current directors, managers, and other insiders at least once a year, and provides new directors, managers, and other insiders with educational and promotional materials within two months of their assumption of office to ensure proper guidance and compliance.



Code of Conduct for Business Integrity



Insider Trading Prevention Procedures



Legal Compliance

Based on the management philosophy of integrity, transparency, and accountability, CHEM has formulated integrity-based policies, established good corporate governance and risk control mechanisms to create a sustainable business environment, and complied with the Company Act, the Securities and Exchange Act, the Business Entity Accounting Act, the Political Donations Act, the Anti-Corruption Act, the Government Procurement Act, the Act on Recusal of Public Servants Due to Conflicts of Interest, the regulations governing listing on the stock exchange and OTC markets and other laws and regulations related to business activities.

In order to implement honest management and compliance with laws and regulations, CHEM has formulated a "Dishonesty Prevention Program" in consultation with employees, the enterprise union, or members of other representative organizations, which includes operating procedures, behavioral guidelines, and education and training to ensure that employees meet the requirements for honest management of business activities. CHEM takes into account the legitimacy of agents, suppliers, customers, or other business counterparts, as well as whether or not they have a record of unethical behavior, before engaging in business transactions, and avoids engaging in transactions with those who have a record of unethical behavior, with 93% of suppliers signing an anti-corruption pledge in 2024.

Category	Year	No. of people receiving anti-corruption education & training	% of people receiving training and education on anti-corruption	No. of external partners signing the anti-corruption pledge	% of external partners signing the anti-corruption pledge
Supplier	2022	885	100%	885	100%
	2023	906	100%	906	100%
	2024	1,078	93%	1,078	93%

In addition, when entering into a contract with another party, the contract should preferably include a clause requiring the counterparty to comply with the Company's integrity management policies, and stating that if the counterparty is involved in any unethical act, the contract may be terminated or cancelled at any time, in order to ensure fair and transparent business activities. Overall, the Company has been operating well in terms of legal compliance, with no major violations such as work cessation, revocation of operating permits or forfeitures, except for one occupational safety and health incident, where the Company was fined NT\$110,000 for violating relevant occupational safety and health regulations during execution of the Procurement and Installation Project for Solar Photovoltaic and Wind Power Generation Equipment at the Third Nuclear Power Plant. The Company paid the fine immediately after receipt of the authority's letter and required once again in writing the sub-contractor to fulfill its engineering management responsibilities in accordance with the contract, and strictly comply with and implement occupational safety and health regulations.

ISO 37001 Anti-Bribery Management System Certification

ISO 37001 is an international standard issued by the International Organization for Standardization (ISO) in 2016, aimed at establishing anti-bribery management systems. It is designed to help organizations prevent, detect, and address bribery, and provides guidelines for implementing such measures.

Integrity is a fundamental cornerstone of any enterprise. To strengthen corporate governance and reduce operational risks, CHEM announced at the end of 2023 its adoption of the anti-bribery management system standard. The Company conducted bribery risk assessments for both internal operational processes and external business activities, and established risk control mechanisms across financial and non-financial aspects to build its anti-bribery management system.

During the implementation of the system, the Company has also incorporated climate change response and energy transition projects into its diversified anti-bribery management framework. For equipment procurement, engineering contracting, and supply chain cooperation, the Company has established stricter transparency and integrity requirements to prevent improper transactions or transfer of benefits that may arise during the process of low-carbon transition and renewable energy advancement.

In September 2024, the Company officially obtained ISO 37001 certification for its anti-bribery management system, aiming to enhance organizational resilience and align with global sustainable business practices.

2.2 Risk Management (2-23)

In order to strengthen its risk management mechanism, CHEM has formulated the "Risk Management Policies and Procedures," which require each management unit to regularly evaluate and review risk matters, and the president to execute risk management decisions and coordinate inter-departmental risk management interactions and communications. In the process of operation and management, the Company prevents and controls possible risks and formulate relevant early warning measures to ensure that it achieves the goal of sustainable operation.

Risk Management Response

Each level of management is responsible for the effective management of risk items, actively monitoring and controlling departmental risks, and, when necessary, reviewing manuals, external laws and regulations, and establishing relevant internal rules and procedures. In addition, for uncertainties that may threaten the operation of the Company, besides discussing them with the relevant internal departments, we will seek the advice of external consultants, as necessary, in order to effectively assess the risks and come up with countermeasures.

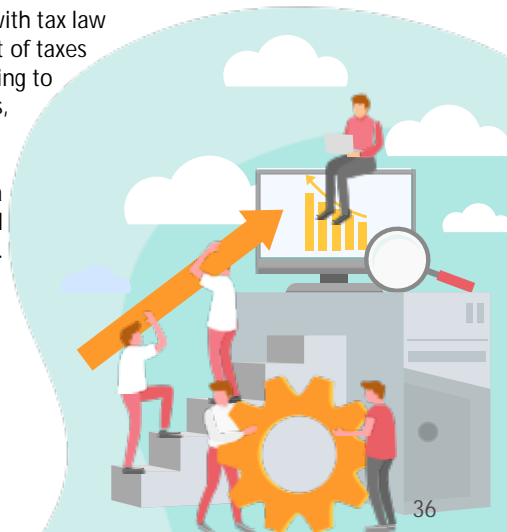


The audit department regularly conducts risk assessments using the internal risk assessment form. When abnormalities are identified, it promptly notifies the supervisors of the relevant departments and monitors the follow-up actions to ensure that all issues are fully resolved. For more information on the risk management policies and implementation results, please refer to the "Risk Management Policies and Procedures" on the Company's website.

CHEM's Risks

Type of Risk	Description
Operational risks	<ol style="list-style-type: none">1. Risks related to operations caused by negligence or neglect of the Company's internal controls.2. Credit risks arising from the inability of the counter-parties to fulfill their contractual obligations due to poor corporate governance or other factors that may cause the Company to incur losses.3. Failure to comply with the relevant laws and regulations of the competent authorities, or the contract itself is not legally binding, ultra vires, poorly regulated, or with omissions in the terms and conditions, resulting in legal risks of financial or goodwill losses.
Financial risks	<ol style="list-style-type: none">1. Fluctuations in interest rates, foreign exchange rates, and inflation result in changes in on- and off-balance-sheet values, creating market risk for the Company.2. Due to the drastic changes in the external environment, there is a sudden shortage of market liquidity, which leads to the liquidity risk of difficulties in the deployment of funds.
Political and economic risks	Political and economic risks arising from domestic and foreign political, economic and regulatory requirements that may affect the Company's finances or operations.
Raw material risks	Due to factors such as market conditions, the nature of the supplier's company or even natural disasters, the quantity, quality and delivery time of the goods supplied by the supplier may be affected, resulting in a higher risk of material shortage.
Information security risks	<ol style="list-style-type: none">1. There is a risk that the information system for business operations will not function properly due to an attack on the company's information system.2. Lack of information security awareness among employees creates information security risks.
Talent risks	Talent risks include issues related to personnel such as insufficient human resources, significant staff turnover, and labor disputes.

Type of Risk	Description
Environmental and health & safety risks	<ol style="list-style-type: none">1. Changes in environmental protection laws and regulations due to the tightening of environmental protection requirements and pressure from public opinion may also create uncertainties and risks for the Company.2. Lack of awareness of workplace safety and personnel disaster prevention leads to increased risk of labor safety and health incidents.
Climate change and energy risks	<ol style="list-style-type: none">1. Climate change has led to an increase in the frequency of windstorms, floods and droughts, all of which may affect suppliers and customers, indirectly leading to a reduction or interruption in the Company's production capacity, resulting in financial and business risks.2. With the rise of environmental awareness, carbon emissions may become a key item for customers to review, which will increase business uncertainty and risk.
R&D innovation and green products	<ol style="list-style-type: none">1. R&D projects have not fully considered the market demand.2. R&D projects have deviated from the Company's business objectives, resulting in improper allocation of resources and affecting future development.
Customer relations	<ol style="list-style-type: none">1. Market risks may arise from concentration of sales.2. Poor handling of customer complaints may negatively impact their purchasing volume from the Company.
Disruption of supply chain	<ol style="list-style-type: none">1. The Russian-Ukrainian war, the Israeli-Hamas war, the Red Sea crisis, China's proposal to terminate ECFA in whole or in part, geopolitical developments, and the shortage of professionals in the industry will affect the progress of supply, the cost of supply, transportation, and taxes in the relevant regions.2. Global inflation and the U.S.-China trade war have impacted material costs.
Tax-related risks	<ol style="list-style-type: none">1. Failure to declare tax payments in accordance with tax law requirements, and failure to pay or underpayment of taxes that should be paid, will result in risks such as having to pay back taxes, fines, additional late payment fees, criminal penalties, and damage to goodwill.2. The Company's business practices did not correctly apply the relevant tax laws, resulting in a failure to fully benefit from applicable preferential policies and leading to an unnecessary tax burden.



2.3 Customer Relations

CHEM's 2024 Approach to Customer Relations and Its Evaluation

Material Topic	Customer Relations	
Corresponding GRI indicators	Custom Topic	
Policies and commitments	1. Establish a service-oriented operation model and optimize service processes to enhance customer trust and create a win-win situation. 2. Apply innovative technology to control and improve product quality, and collaborate with customers to provide products and services that meet their needs.	
Goals and objectives	Short-term	Score 90 or above in the customer satisfaction surveys
		Receive awards at the Public Construction Golden Quality Awards organized by the Executive Yuan's Public Construction Commission
	Mid- and long-term	Continue to receive a Special Contribution Award at the Public Construction Golden Quality Awards organized by the Executive Yuan's Public Construction Commission
		In line with the government's green energy policy, develop green energy equipment and engineering business to create a win-win future for enterprises and the government.
Responsibilities and resources	In order to improve customer relationship management, the Company has designated the Sales Division to be responsible for establishing, maintaining and strengthening customer relations.	
Evaluation mechanism and results	1. The weighted average of customer satisfaction scores for the past three years is above 90. 2. CHEM won awards at the the Public Construction Golden Quality Awards.	

Following the requirements of the ISO 9001 quality management system, CHEM has established processes for customer communication, order processing, technical support, complaint handling, and after-sales service, and formulated "Customer Satisfaction Management Procedures" and "Corrective Measures Procedures" in order to improve the quality of its services in all aspects, win the trust of customers, and realize long-term profitability. CHEM monitors customer relations through customer satisfaction surveys and handling of customer complaints, and reviews and improves in response to customer feedback. In 2024, CHEM did not receive any customer complaints related to breaches of customer contracts or restrictions on the use of products (RoHS, WEEE, REACH).

In order to objectively collect our customers' opinions, we conduct a customer satisfaction survey by sending a questionnaire to our existing customers every year in accordance with our customer satisfaction survey management mechanism. After the questionnaire is returned, we compile the data, feedback, and suggestions and share them with the relevant departments and senior executives so that they can use such information to identify opportunities for improvement. If there are any significant feedback or suggestions for improvement, we will follow up with the customer directly by phone or in person, and provide improvement strategies in a responsible manner to continuously improve the quality of our products and services so as to ensure that the needs of our customers are understood and satisfied.

The overall average customer satisfaction score in 2024 was 91 points, achieving the annual target of 85 points. Additionally, no negative feedback was received, and the overall average score showed a slight improvement compared to 2023. The response rate for the 2024 customer satisfaction survey was 100%.

Customer Satisfaction Score		
2022	2023	2024
90.1	90.4	91.0

Note: The full score is 100 points.



2.4 Innovation and R&D

CHEM’s 2024 Approach to Innovation and R&D and Its Evaluation

Material Topic	Innovation and R&D	
Corresponding GRI indicators	Custom Topic	
Policies and commitments	R&D and innovation are the cornerstones of CHEM's sustainable development. CHEM uses technology to promote sustainability, to increase the proportion of sustainable materials used, to reduce the environmental impact of the manufacturing process, and to endeavor to develop innovative and energy-saving sustainable products and solutions.	
Goals and objectives	Short-term	No. of R&D projects: 10/year
		None of the CHEM products are in violation of any laws or regulations.
	Mid- and long-term	Build a sustainable materials library
		Enhance product recyclability and reuse
Responsibilities and resources	Continuously develop and promote environment-friendly products	
	The power-related industry is an important national infrastructure industry, and CHEM currently has the highest market share in Taiwan and is a leading manufacturer in related technologies. CHEM has a complete and leading product line of GIS equipment, rich experience in green energy engineering, and the professional ability to innovate green energy products. In the future, CHEM will continue to dedicate itself to its core businesses and actively cooperate with the government to promote the energy transformation, and deeply cultivate the green energy industry in a sustainable manner.	
Evaluation mechanism and results	Annual R&D expenditure over 1% of turnover	
	No. of R&D projects: 3/year	
	No violation of the law by CHEM products	

Innovation and R&D are the cornerstones of CHEM's sustainable development, and we are committed to developing sustainable products with low environmental impact and high added value. Over the past three years, the Company's investment in R&D manpower and expenses has shown a steady growth trend.

Item	2022	2023	2024
R&D costs (in NT\$1,000)	232,306	334,061	321,909
R&D/revenue ratio	1.25%	1.51%	1.26%
R&D manpower	245	270	276
Master's degree or above/R&D manpower ratio	24.90%	25.19%	25.97%

With diversified products, CHEM regularly conducts industry trend analysis and risk assessment. Building on our inherent strengths and understanding market trends, we actively engage in the development of various products, as outlined below.

1. Heavy Electrical Machinery

Taipower's 345kV ultra-high voltage transformer substation is a key project under the current "Enhanced Grid Reliance Construction Program," and CHEM is the only domestic manufacturer of 345kV GIS, which has passed the nationalization assessment. We have a strong R&D team and independent R&D and design capabilities, and has designed and produced key components inhouse, which is a promising prospect for the Company's development. As for the 69 kV GIS and 161 kV GIS, although there are many competitors, the Company still has the greatest advantage in terms of quality, delivery, production scale, after-sales service, product line integrity, and system integration capabilities, and is widely recognized by customers.

2. Engineering

(A) Generator Products

The development trend of generator sets can be divided into two parts. The first part is to develop higher quality generator sets. In this trend, new ideas and more sophisticated materials are used to increase the capacity and high efficiency of power generation units, which in turn increases the performance of the products and contributes to energy conservation and environmental protection. The second part of the development trend is a greater emphasis on the after-sales services of inspection, warranty and periodic maintenance for generator products. In order to implement this in the service field, the Company is not only increasing the manpower for service and maintenance, but also regularly organizes internal training sessions to enhance the professional maintenance ability of the technicians. In addition, the Company uses the SAP computer material system to record the relevant information of each discharged generating unit, so that the maintenance staff can provide better after-sales services to customers with complete information.



In terms of competition in the industry, the Company adopts a market segmentation strategy, utilizing complete testing equipment and strong R&D. The R&D team's competitive advantage is to focus on the production of precision power generation units and other large-scale public system integration projects that demand high specifications and quality, in the hope of creating a market segmentation from the general power generation unit industry.

(B) Air-conditioning Products

The development trends in the air-conditioning industry include energy conservation, improved indoor air quality, and automation. The design of air-conditioning systems within buildings is closely tied to indoor air quality, while energy conservation and automation are more directly related to the air conditioning products themselves. In addition to high efficiency, modern air-conditioning units must also integrate with intelligent building systems and become digital products—this is becoming the mainstream trend in the market. Providing users with energy-saving solutions and strong after-sales service is also a key operational direction for the air-conditioning industry. The products in the above two scenarios are not standard products sold in the market, but products tailored to meet the needs of users, which requires a better technical team, and this is exactly what separates CHEM's competitive advantage from the standard products in the market.

3. Electric Meters

Since the tendering method was changed from open to selective in the second half of 2022, two tenders have been issued, with five vendors participating in total. We obtained orders worth of \$360 million (17.27% of the bid) and \$1.47 billion (21.15% of the bid) for the single-phase three-wire meter. In 2025, we obtained orders worth of NT\$1.491 billion (21.2% of the bid).

4. Parking Lot Management

In view of the government's policy of streamlining personnel, it is expected that off-street parking lots in all counties and cities will gradually be opened up for outsourced operation. With its rich and solid management experience and cost-control capabilities, CHEM Dodohome believes that it can align with the government's contracting policy to deliver mutual benefits for the government, the company, and the public.

CHEM Dodohome has a leading position in the industry in terms of scale, service quality, and operating results. However, due to the large number of competitors and the formation of alliances among small vendors, CHEM Dodohome is forming strategic alliances both within and beyond its industry. It is also collaborating with other sectors on developing an application called "iParking," supported by the construction of its parking management system. Additionally, the company plans to create vehicle-related products that offer higher value-added parking services, aiming to generate new channel value in the future.

5. New Energy

CHEM's new energy business group focuses on comprehensive new energy solutions, integrating resources, developing new business models, and partnering with international energy companies to strengthen its competitive advantage.

(A) Hydrogen Energy (hydrogen production systems and stationary generators)

Through the acquisition of the stationary generator business of Ida Tech (2014) and Ballard (2016), CHEM ranks among the global top three in methanol-to-hydrogen patents, with products adopted by major global telecom giants. The Company is now expanding into renewable energy and distributed power generation, while also venturing into smart microgrids to build a complete ecosystem.





(B) Energy-as-a-Service (EV fast-charging service & microgrid management)

With its own brand iCharging, the Company integrates charging, smart parking, diverse payment systems, and energy management, while introducing intelligent energy storage and backup power to enhance energy efficiency. It currently operates 16 highway charging stations, optimizing power dispatch through smart microgrids and energy storage to reduce electricity costs and ensure continuous power supply during outages. It is now the EV charging service provider in Taiwan that offers the most comprehensive industry services in the industry and the most efficient use of electricity.

(C) New energy commercial vehicles (lightweight hydrogen-powered motorcycles and EVs)

CHEM is collaborating with governments around the world to promote low-carbon transformation in public transportation by providing comprehensive solutions for new energy commercial motorcycles, tricycles, government and logistics vehicles. The initiative also integrates hydrogen and fast-charging infrastructure to build a new energy transportation ecosystem and enhance market competitiveness.

6. Smart Grids

With global warming and energy depletion, the global demand for smart grids has become even more pressing, and the world's major power equipment suppliers are all pursuing the development of smart grids by enhancing the smart online monitoring functions of their equipment. In order to equip our major power products with self-diagnostic intelligent functions, we focus on the development of online monitoring systems for SF₆ gas density and water content, partial discharge, and circuit breaker operating status of GIS equipment, in the hope of enhancing the reliability of power equipment.

7. Operators & Operating Mechanisms

Taipower's launch of various projects has generated strong demand for 69-345kV high-voltage equipment. In addition, CHEM is the only qualified manufacturer that has passed the nationalization assessment for the 345kV voltage level in Taiwan, and has a 70% market share in domestic high-voltage switchgear above 69kV, which enables the operator products to maintain technological leadership and reinforce the situation of the strong becoming stronger.

8. Displays and Semiconductor Equipment Chambers

Applied Materials (AMAT) is actively involved in the OLED market in displays, providing a wide range of OLED manufacturing-related equipment and technologies, including organic material deposition, vapor deposition, grinding and testing. For semiconductors, it has created a dedicated organization to focus on the ICAPS market and has released more than 20 new products for ICAPS applications. CHEM continues to improve its own processing and soldering techniques, and actively integrates its supply chain (including surface treatment, assembly, and performance testing for special processes) to meet customers' requirements for delivery, cost, and quality, and was honored as the "Best Supplier" by AMAT in 2023.

Unit	Project	R&D Achievements
Design and R&D Office 4	MOEA's Science and Technology R&D Program – Development Plan for Energy-Saving Processes in Extra-High Voltage Switchgear Equipment for Power Systems	<ol style="list-style-type: none">1. Developed copper conductor friction stir welding tools2. Established analysis files for copper conductors and copper alloy materials.3. Established a copper conductor welding manufacturing process.
	161kV/50kA/4000A/1.4m GIS Development Project	<ol style="list-style-type: none">1. Increased GIS through-current capacity from 2000A to 4000A, which meets power system requirements.2. Expect to obtain the KERI supplementary test report for 161kV 4000 ACB circuit breaker trip in June 2025 and Taipower's letter of compliance in October 2025.
	345kV/63kA/6000A Hydraulically Operated GIS Development Project	<ol style="list-style-type: none">1. Increased (1) GIS current throughput capacity from 4000A to 6000A and (2) M-BUS current throughput capacity from 6000A to 8000A, which meet power system requirements.2. Passed a foreign test in November 2023.3. Obtained Taipower's letter of compliance in 2024.
	345kV/63kA Hydraulic Disc/Spring Operated GIS-CB Development Project	<ol style="list-style-type: none">1. Main achievements: (1) introducing simple and highly reliable spring operated handlers with high output force; and (2) making the GIS product line more complete with corresponding pneumatic, hydraulic, and spring-type products.2. Started the second phase of the operational trial in November 2024.3. Re-verification of baseline sampling and calibration to be conducted in March 2025.
	Development of 69kV/40kA Eco-Friendly GIS Equipment	<ol style="list-style-type: none">1. Conducted independent equipment testing and verification using a new design approach and environmental-friendly gas (C4-FN mixed gas).2. Completed make-break performance test in December 2024.3. Other tests to be completed in March 2025.



Unit	Project	R&D Achievements
Hydrogen Energy Product R&D Laboratory	Metal Fuel Cell Stack (Optimus Plan) Development Program	1. Completed development of a 10kW fuel cell system. 2. Completed the BOPs matching design and configuration of hydrogen, air, and water loops for a 10kW fuel cell system.
	Development of commercial vehicle fuel cell systems	1. Completed development of 1 st generation two-wheeler and three-wheeler.
	Commercial vehicle fuel cell system development program	1. Completed fuel cell test bench design and planning. 2. Completed fuel cell power generation system design & planning.
	Development of 10KW methanol-based reformer system and key technologies	1. Assembly of 15 reformers. 2. 10kW reformer LTT testing.
	Development of critical technologies for high efficiency methanol-based hydrogen production system and high purity hydrogen	1. Assembly of high-efficiency methanol hydrogen system. 2. Functional and performance testing of hydrogen-producing container.
	Development of second-generation commercial vehicle fuel cell power modules and key technologies	1. Second-generation two-wheeler entering the design verification test and production verification test. 2. Technology transfer for mass production of the two-wheeler. 3. Performance verification of the 3kW fuel cell system.
	Development of key technologies for 10kW methanol reforming fuel cell systems	1. Completed integration between the methanol reformer and the 10 kW fuel cell system. 2. Completed parameter design and interface matching technology between the reformer and the fuel cell system. 3. Completed BOPs design for the methanol-reforming fuel cell system.
	Development of pressure swing adsorption hydrogen production equipment	1. Cooling system design and testing. 2. Reformer modification. 3. Pressure swing adsorption system assembly and testing.
	Development of skid-mounted pressure swing adsorption hydrogen production system	1. Specification finalization for FPR hydrogen production container. 2. Design of the power distribution panel for FPR hydrogen production container. 3. Design of control cabinet for FPR hydrogen production container.

2.5 Information Security

CHEM's 2024 Approach to Information Security and Its Evaluation

Material Topic	Information Security	
Corresponding GRI indicators	Custom Topic	
Policies and commitments	Implement risk management to ensure information security and safeguard the sustainable development of our business.	
Goals and objectives	Short-term	1. Ensure spam system upgrades and build a mail malicious defense system, which comprehensively upgrades the protection ability of mail to avoid malicious attacks.
		2. Build backup power for the server room to ensure continuous operation of the equipment in that room.
		3. Real-time update anti-virus software and regularly check idle/special accounts.
	Mid-term	1. Organize education and training to promote employees' awareness of information security and strengthen their knowledge of related responsibilities.
		2. Use legal licensed software and conduct regular internal and external audits to ensure that all relevant operations are implemented.
		3. Expect to use the new ISO 27001:2022 version in 2025.
Long-term	1. Replace/update software and equipment of insufficient security to reduce risk of security attacks and ensure system & information security.	
	2. Continuously strengthen and improve the information security management mechanism to enhance the ability to respond to information security incidents and emergency response.	
Responsibilities and resources	The goal of information security management is to "build a resilient, secure and trustworthy enterprise," and CHEM is committed to promoting its digital transformation and has an information security management mechanism to ensure the accuracy of information processing, as well as the security of IT systems, equipment and networks.	
Evaluation mechanism and results	1. There were no cyber attacks or incidents in 2024 that materially and adversely affected the Company's business and operations.	
	2. In 2024, there was no information security breach that resulted in losses to the Company and its customers.	
	3. Information security education and training is included in the education for current employees and training of new employees, and in FY2024, a total of 51,657 people participated in the training.	
	4. The total number of malicious mails blocked in 2024 is 122,215.	



Information Security Management and Policy

In 2022, CHEM successfully passed the formal evaluation of ISO/IEC 27001 and obtained the Information Security Management System certification, establishing comprehensive information security management policies and related management procedures. The certification covers 100% of the business locations, and there were no information security breaches in 2024.

CHEM has formulated the “Information Security Management Measures” and obtained the ISO/IEC 27001 information security management system certification in 2022, establishing a secure and trustworthy information-based operating environment to ensure the security of the Company's computer data, systems, equipment and networks to maintain the Company's normal operation and sustainable development. A mechanism has also been established for data processing, exchange and security control to ensure information security and operational efficiency.

CHEM's information security team consists of the top management, the management representative, the information technology division and the person in charge of the quality assurance committee. Under the supervision of the top management and the management representative, the information unit is responsible for coordinating the planning and management of information security, while the quality assurance committee is responsible for the operation of the information security system. The information security team is responsible for formulating and implementing information security management plans, establishing and improving the Company's information security management system, and maintaining its effective and continuous operation.

In order to maintain the Company's competitive advantage, all employees must adhere to the Company's established information security rules, practice self-management, and maintain a strong awareness of information security. In addition to the information security control measures for the services provided by the information system, we emphasize the protection of confidentiality, integrity, and availability of important personal and transaction information. At the same time, we strengthen information security management to ensure the security of data, systems, equipment, networks, and other hardware and software information, create a healthy information environment, deploy innovative information security protection technologies, and implement and promote information security management operations to enhance the quality of secure services.

Information Security Management Plan

In order to maximize the benefits of information security management and effectively reduce information security risks arising from its operation process, CHEM has formulated information security management procedures and implemented the ISO/IEC 27001 information security management system, dealing with internal information security related issues including authority and responsibility, division of labor,

and the detailed specific measures of information security management, so as to ensure the effectiveness of CHEM's information security management. These include personnel management and security education and training, computer system security management, network security management, system access control management, system development and maintenance security management, information asset security management, physical and environmental security management, business continuity program management, personal data protection management and other security management issues.

Authorities and Responsibilities of CHEM's Information Security Team

Work Items	Authorities and Responsibilities
Planning	The information unit to research on, establish and evaluate information security policies, programs and key technical points.
Security control	The information unit is responsible for the security requirements, utilization management, and protection of data and information systems, and cooperates with the representatives of each business unit to handle these matters.
Personal asset control	The information unit is responsible for the formulation and implementation of the Company's personal data protection policy, which is handled by the information unit in cooperation with the representatives of each business unit.
Information security audit	Audits of information security and confidentiality to be conducted by the Audit Office in conjunction with the information unit and other related business units.
Access control	To be handled in accordance with the Company's access control regulations.
Outsourcing, third party and third-party vendors	To be handled in accordance with the relevant contract and in compliance with the Company's information security procedures.





Information Security Policy

1. Specialized duties: establish annual information security goals, complete technical introduction and related audits to maintain and continuously strengthen information security
2. System implementation: In accordance with ISO 27001 information security implementation standards, the Company's information security policy implementation system is enforced at all levels of its operations, and six business continuity programs are conducted from time to time to reduce the risk of information security and maintain uninterrupted operations.
3. Education and training: All new employees complete an information security education and training course before they arrive at work; complete the quarterly employee social engineering phishing email test a total of four times; every six months, we implement an information security education and training two times, and an information security questionnaire test twice every six months, in order to strengthen the staff's awareness of information security.
4. Information security bulletin: Information security notices are made from time to time to convey important rules and notes on information security protection and new tactics of hackers, and a total of 45 notices were made in 2024.
5. Commitment to information security: All new employees must sign an Employee Confidentiality, Ethics and Integrity and Creative Commitment Agreement, and all contractors must commit to all information security terms when signing the bargaining record.
6. Financial management: All information equipment, hardware and software are assigned to the financial department for asset management. Unauthorized installation of software or setup of personal information devices is strictly prohibited. Information equipment is always monitored for any signs of non-compliant activity.



2.6 Tax management

CHEM supports the government's efforts to formulate laws and regulations that are conducive to corporate innovation and economic growth, and is committed to information transparency and sustainability through the head of finance's annual review and approval of the Company's tax policy.



Tax Policy

1. Complying with the tax laws and regulations and the spirit of the legislation of all the countries where CHEM operates.
2. Handling transparent financial reporting information and tax disclosures in accordance with relevant regulations and standards.
3. Building a respectful relationship with the tax authorities based on mutual trust and transparency of information.
4. Analyzing the operational environment and applying the management mechanism to assess the tax risk.



Tax risk management

CHEM operates and expands its business around the world and complies with the tax laws of the countries in which it operates. Any adverse changes in tax laws and regulations could increase the Company's tax rate and adversely affect operational results. In order to effectively manage tax risks, CHEM follows an internal control process to identify, evaluate and manage tax risks arising from changes in regulations and its operations, and to appropriately measure, manage and control such risks.

Tax risk management has been incorporated into CHEM's risk management. The head of finance regularly evaluates and reviews the key risks and monitors effectiveness of tax matters, and provides the results to the President for use in making risk management decisions.

Tax governance

CHEM's head of finance is ultimately responsible for tax management. Day-to-day tax administration and management is delegated to the Head of Accounting, who is assisted by qualified and experienced tax professionals in fulfilling CHEM's tax obligations. In addition, professional knowledge is enhanced through the professional services provided by external tax consultancy firms.

CHEM's board of directors has delegated the Audit Committee to oversee the quality and integrity of CHEM's execution of relevant accounting, auditing, financial reporting processes and financial controls, and to regularly review significant matters including accounting policies and procedures, internal control systems, legal compliance, corporate risk management, etc., of which tax compliance is also included in legal compliance.

Domestic tax filing

CHEM complies with domestic tax laws and regulations and pays taxes in accordance with the law. The table on the right summarizes the tax status of CHEM for the last three years.

Statistics of CHEM's Domestic Taxes for the Past 3 years (in NT\$1,000)

Item/Year	2022	2023	2024
Operating income	18,546,884	22,144,872	25,609,455
Pre-tax profit/loss	3,092,342	2,396,862	4,460,893
Corporate income tax paid in cash	287,914	534,650	1,734,417
Gain/loss on accrual of corporate income tax	(625,844)	(811,419)	(833,744)



3 Sustainable Supply Chain

3.1 Supply Chain Profile

3.2 Supply Chain Management

3.3 Supplier Evaluation

3.4 Supplier Assessment

3.5 Sustainable Supply Chain



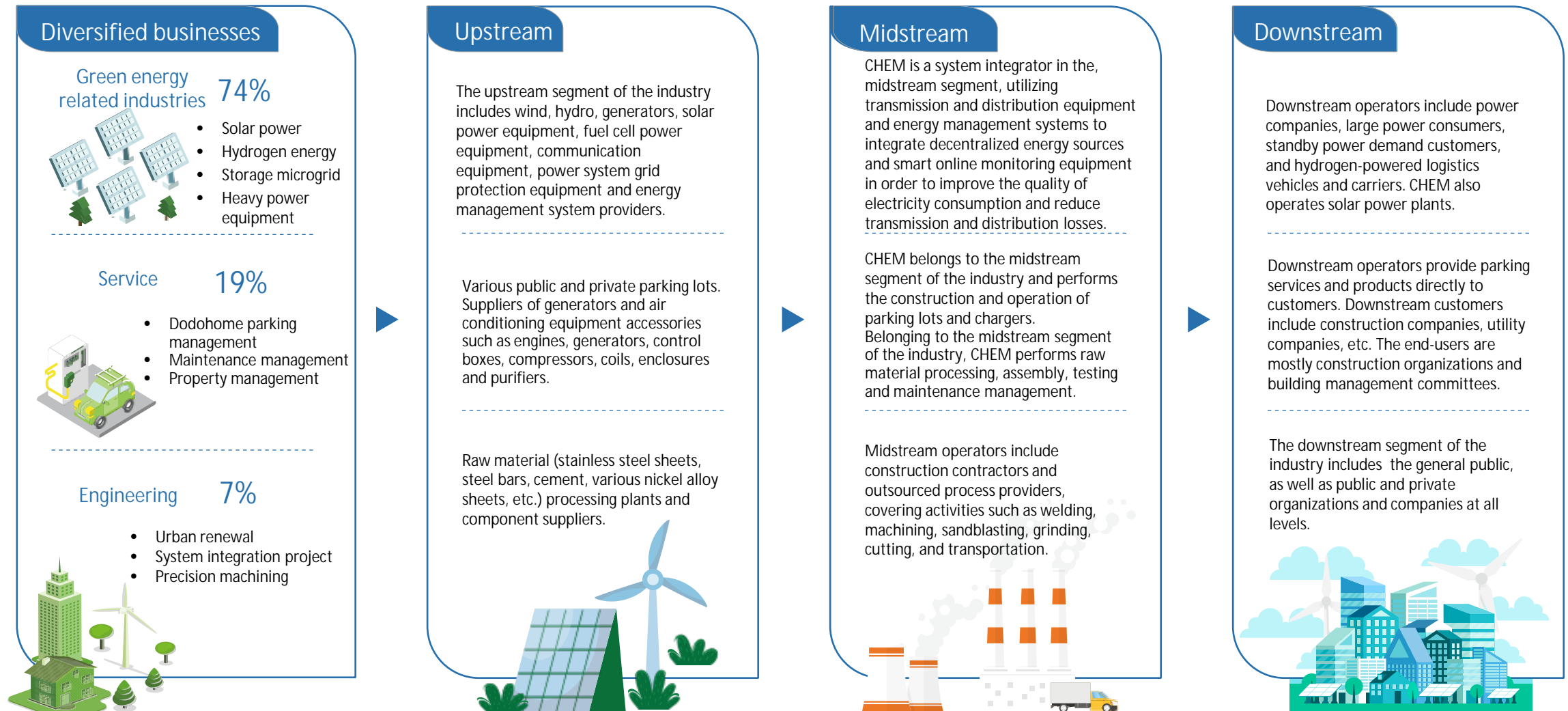
3. SUSTAINABLE SUPPLY CHAIN (2-6, 2-23–2-24, 414)

CHEM’s 2024 Approach to Sustainable Supply Chain Management and Its Evaluation

Material Topic	Sustainable Management of Supply Chain	
Corresponding GRI indicators	GRI 204-1, 308, 414	
Policies and commitments	1) Fulfill corporate social responsibility 2) Implement supplier risk control 3) Evaluate supply chain sustainability 4) Protect intellectual property rights 5) Maintain an ethical supply chain	
Goals and objectives	Short-term	1) On-time delivery rate of suppliers: ≥ 90% 2) Incoming materials return rate: ≤ 3% 3) Quarterly performance evaluation completion rate for suppliers: ≥ 90% 4) Development of new suppliers: 25 companies/year 5) Suppliers’ signing of “ <i>Supplier Social Responsibility and Code of Ethics Commitment</i> ” (including commitment to not use conflict minerals), “ <i>Integrity and Anti-Corruption Commitment Letter,</i> ” and “ <i>Information Security Responsibility Statement</i> ”: 100% 6) Implementation of electronic invoicing for suppliers: 100 companies/year 7) Zero incidents of bribery or information security breaches
	Mid- and long-term	1) Leverage group resources to form strategic alliances within the supply chain to meet stakeholder needs. 2) Guide the supply chain in setting carbon reduction targets and carbon neutrality plans, and ensure effective implementation. 3) Lead the supply chain in embracing ethical business practices and business integrity.
Responsibilities and resources	Coordinating Unit: Procurement Office, Management Division Responsibilities: Formulate and implement policies, procedures and objectives for supply chain management and communicate such policies, procedures and objectives internally and externally Resources: Entrust the Company’s Audit Office and Quality Assurance Committee and external accounting firms, customers, or third parties (e.g. ISO) to audit, supervise, and provide guidance on the achievement of various goals and operations.	
Evaluation mechanism and results	In accordance with the Procedures for Managing Suppliers and other procedures, regular and ad-hoc evaluations of suppliers were conducted to monitor and ensure delivery quality and timeliness, workplace safety and health, risk management, environmental protection, and compliance with labor and human rights standards.	



3.1 Supply Chain Profile





3.2 Supply Chain Management

Management Policies and Commitments

In order to optimize supply chain value and drive supply chain optimization, CHEM integrates the resources of the Group and enhances supply chain competitiveness through long-term strategic collaboration. In terms of supply chain risk management, CHEM actively focuses on the integration of the supply chain with the Group's resource utilization, revitalization and management, as well as information security and protection, and the introduction of an anti-bribery system, in order to cope with the impacts of environmental changes on the supply chain. In terms of social and human rights, the formulation of a policy on the non-use of conflict minerals has been completed, to ensure that there are no instances of conflict minerals indirectly leading to the harm of human rights in the entire supply chain of CHEM. All suppliers were also invited to sign and fulfil the "Supplier Social Responsibility and Ethical Code of Conduct Commitment" to ensure the health and safety of workers through sound management systems. In terms of environmental protection, CHEM has built a green supply chain and emphasized environmental friendliness, encouraging and promoting suppliers to move towards a circular economy. Through the ESG sustainable management of the supply chain, the Company has made the following five commitments in the hope of integrating the Group's capabilities to lead upstream, midstream, and downstream suppliers, as well as society at large, toward the goal of common good.



CHEM's Five Commitments



Fulfill corporate social responsibility

Starting from the principles of economic, environmental, and social responsibility, promote adherence to relevant social responsibility standards and the well-being of stakeholders across our organization and the entire supply chain.



Implement supplier risk control

Monitor and ensure the implementation of supply chain safety and health, environmental protection, human rights and information security, implement supply chain risk control, and proactively provide assistance when needed to maintain supply chain stability.



Evaluate supply chain sustainability

Establish a sustainability assessment method for supply chain vendors and include quality, delivery, finance, operation, service, information security, and anti-bribery as risk assessment criteria to stabilize supplier relationships and maximize supply chain value.



Protect intellectual property rights

Respect and protect intellectual property rights, and sign confidentiality contracts in order to protect the interests of stakeholders (TIPS certification obtained in 2024).



Maintain an ethical supply chain

Prohibit any form of improper acceptance of benefits, corruption, extortion, and misappropriation of funds with adherence to the principle of ethical management, and establish a whistleblowing mechanism ensuring the confidentiality of the identities of whistleblowers and those who are reported (with the ISO 37001 certification obtained in 2024).



Management Strategy and Execution

To implement its supplier management policies and commitments, CHEM has established supplier evaluation, assessment, counseling, and training processes. Suppliers are evaluated in terms of quality, finance, cost, delivery, service, sustainability, information security, and anti-bribery. In addition to ESG declarations, suppliers will be asked to provide relevant performance or supporting documents such as ISO 9001 quality management system certification and ISO 14001 environmental management system certification, and only those who meet the requirements of the Company will be allowed to become suppliers.

On the assessment side, suppliers are categorized according to their characteristics and risks, and are scored and graded according to the assessment mechanism. After entering the supplier development stage, we communicate with suppliers based on the evaluation and grading results and recommendations. The goal is to address any deficiencies in quality, process, technology, efficiency, and environmental protection. High-quality suppliers are recognized and offered preferential payment methods, feedback training and other measures; those that meet the minimum standards are counseled and trained to continuously reduce their risks; and those that do not meet the standards are eliminated.

Lastly, CHEM organizes supplier training from time to time or invites suppliers to participate in relevant external courses, including manufacturing process, safety and health, regulatory risks, operations, etc., in order to continuously improve the environmental, health and safety performance of suppliers and promote their compliance with the relevant norms and regulations, and to continue to lead the upstream and downstream manufacturers to make progress together.



Supplier Evaluation

1. We evaluate potential suppliers in terms of quality/finance/cost/delivery/service/sustainability, and ask them to present relevant achievements or supporting documents, e.g., ISO 9001, ISO 14001, and ISO/IEC 27001.
1. ESG Declaration
2. Only those who meet our requirements can become our suppliers.

Supplier Assessment

1. Scoring is based on our supplier classification and evaluation mechanism.
2. Classification is based on supplier characteristics and risks, while grading is based on the evaluation results.

Supplier Development

1. We communicate with suppliers according to the assessment results and provide suggestions for improving quality, process, technology, efficiency and environmental protection.
2. Suppliers with better performance will be recognized and provided with preferential payment methods and other measures and feedback training; those who meet the minimum standards will be counseled and trained to reduce risk. Those that do not meet the minimum standards are eliminated.




Supplier Training

- We regularly organize training or invite suppliers to participate in relevant outsourcing courses so as to improve environmental, health, safety performance and legal compliance. Courses include manufacturing processes, health and safety, regulatory risks, and ESG compliance.
1. Before each assignment, a supplier will receive a process description provided by our design department.
 2. The supplier's occupational safety personnel are required to participate in the annual retraining before their certification expires.



3.3 Supplier Evaluation

In order to reduce the Group's overall supply chain risk, CHEM regularly conducts risk assessments when adding new suppliers and proactively assists suppliers in implementing business continuity programs to meet quality, environmental and product safety requirements, as well as ensuring timely delivery of goods in accordance with schedules and the provision of after-sales services and maintenance. At the same time, we also implement origin inspections and regular reviews to continuously improve our risk management capabilities and supply chain value, and fulfill our corporate social responsibility.

 Business continuity program	 Origin inspection	 Periodic review
Suppliers are requested to propose contingency plans and procedures to minimize the impact on the supply chain and to respond to potential threats to capacity allocation in a timely manner.	The origins of key raw materials are inspected to prepare countermeasures and alternative plans in advance.	CHEM starts with itself and continues to promote and communicate the concept of sustainability with its supply chain, regularly evaluates the effectiveness of implementation, and considers ways to optimize strategies and practices in order to achieve sustainable development and continuous value enhancement.

Environmental Risk Assessment

In the environmental risk assessment stage, CHEM added a total of **278** new suppliers in 2024. The staff of the purchasing department of each new supplier are asked to fill in the "Vendor Survey Form" in order to enable CHEM to gain a preliminary understanding of the supplier's scale of operation, production and testing equipment, as well as certifications related to quality, environmental protection, safety and health. CHEM's purchasing department, together with the R&D, quality control and other related departments, will then request an evaluation team to conduct on-site audit based on the situation. If there is any change in the supplier's conditions, the information provided on the "Vendor Survey Form" will be re-verified, and follow-up will be made once every three years as a matter of principle.

Social Risk Assessment

In the social risk assessment stage, CHEM requires suppliers not to purchase and not to use conflict minerals, and to comply with the requirements of the RBA, SA8000, and ISO 27001 to safeguard human rights and provide a safe workplace. In accordance with its "Supplier Qualification and Assessment and Recognition Operating Procedures," CHEM requires suppliers to sign a "Declaration of Conflict Minerals" to promise that the products or components they supply, including minerals such as tin, tantalum, tungsten, and gold used in the products or components supplied by suppliers, including product accessories, packaging materials, and other accessories related to the delivery of products, will not contribute to the armed conflicts, and that if suppliers use the abovementioned minerals, they are required to disclose the sources of such minerals. This policy was incorporated into the procurement contracts in 2021, and the assessment of the suppliers was completed in 2022. Supplier risk assessments, investigations, and contract revisions are conducted every three years.

Governance Risk Assessment

In the governance risk assessment stage, CHEM requires suppliers to comply with the requirements of RBA, ISO/IEC 27001, and ISO 37001, sign an Integrity and Anti-Corruption Commitment Letter, and submit business continuity plans so as to establish an ethical supply chain and promote sustainable operations.



3.4 Supplier Assessment


In order to effectively control the supply chain and disperse risks, CHEM determines through annual audits and monthly delivery evaluations whether suppliers have the ability to fulfill their contracts. The evaluation team conducts written or on-site audits, and records whether there are any deficiencies in quality, delivery, or service during the order execution process, with deadlines for tracking and improvement. Improvement results will be provided in the improvement report and feedback to the supplier, such as quality management, delivery process, warranty repair or service process.

Supplier Delivery Assessment

CHEM regularly evaluates its suppliers and contractors, categorizing them according to their characteristics and risks, and adjusting the weighting of supplier delivery assessment items according to the significance of their impact on operations each year. CHEM's assessment items and weightings for 2024 are: 35% quality assurance, 35% delivery stability, and 30% supplier's cooperation. Suppliers with a score of 70 or above are classified as qualified suppliers; those with a score between 60 and less than 70 are considered as suppliers that need improvement and will be asked to make improvements within a certain period of time; and those with a score of less than 60 are classified as unqualified and will not be allowed to work with the Company. In 2024, a total of **687 suppliers** were evaluated, with a passing rate of 100%.

CHEM's 2024 Supplier Delivery Assessment Results

Passing Score	No. of Assessed Suppliers	No. of Qualified Suppliers	Passing Rate
70 points	687	687	100%



Supplier audit

CHEM conducts on-site or written audits every three years, in addition to annual assessments. CHEM selects suppliers for on-site audits based on four major criteria: "sole supplier," "supply volume greater than 50%," "transaction amount greater than NT\$10 million," and "industrial safety accidents/quality abnormalities." The Company then forms an auditing team from each unit to conduct on-site audits. If a supplier has any deficiencies such as unregulated upper and lower limits for process data or undefined return controls for finished products, the supplier is required to respond within one month of the audit with corrective measures to improve the deficiencies in accordance with the Company's regulations.

In terms of supplier ESG audits, the Company conducts regular ESG evaluations of suppliers and requires them to conduct ESG self-assessment questionnaires and on-site audits in addition to ISO 14001 Environment Management Systems, ISO 45001 Occupation Health and Safety Management Systems and others like ISO 9001 Quality Management to ensure that their operations are in compliance with the Company's supplier policy in terms of human rights, labor rights, freedom of association, business ethics, waste management, and other governance and environmental aspects. A total of 128 suppliers were evaluated and met the required standards during the on-site audit. For any supplier failing the evaluation, the Company will provide a development program and require the supplier to make improvements within a specified period of time. If the supplier fails to make improvements upon expiration of the time period, the Company will reduce the order or demand damages or remove the supplier from the supplier list in accordance with the terms of the contract. CHEM has collected the following statistics from the audits on the raw material suppliers with which it has had transactions in the current year:

Activities, Value Chain and Other Business Relationships




Supplier ESG Evaluation			
Item	2022	2023	2024
No. of suppliers	885	906	1,159
No. of suppliers that conducted ESG self-assessments	152	169	199
No. of suppliers assessed via on-site audits on ESG issues	7	30	128
Overall supplier ESG audit rate	17.17%	18.65%	17.17%



3.5 Sustainable Supply Chain

Sustainable Management Practices

In order to minimize the impact of various operating activities on the environment or society, CHEM has built a green supply chain through multi-directional planning, such as local procurement, green procurement, circular economy, research and development of renewable energy, and banning of conflict minerals. The proportion of CHEM's expenditure on local procurement reached more than 65.36% in 2024.

<div>Environment</div> 	<ol style="list-style-type: none"> 1. Priority will be given to products and suppliers that have obtained the environmental label recognized by the Environmental Protection Administration of the Executive Yuan, that are recyclable and resource-saving with low-pollution and made of recycled materials, and that have obtained the green building label, in order to minimize the impact of the supply chain on the environment. 2. In order to enhance the overall environmental performance of the supply chain, realize energy conservation and waste reduction, and achieve a circular economy, we work with the supply chain to develop designs that follow the 4Rs of environmental protection, including: Reuse, Recycle, Reduce, and Replace. For example, the Linkou Plant has purchased LED lighting to improve the quality of the working environment and reduce power consumption; rooftop photovoltaic facilities were built at the Linkou and South Plants to optimize the use of environmental space and combine the sustainable and efficient products of photovoltaic equipment vendors to achieve green power sharing. We also plan and implement the adoption of paperless operations by suppliers, including electronic invoicing and digital billing systems. 3. We require waste disposal bidding vendors to hold Class A clearance or relevant treatment licenses, ensuring compliance with applicable regulations. 4. We encourage suppliers to use green energy. For example, we assisted a supplier in Taichung installing rooftop solar photovoltaic systems with a capacity of 738.37kW.
<div>Society</div> 	<p>Conflict minerals are managed in accordance with the Conflict Minerals Disclosure Rules issued by the Securities and Exchange Commission, and we have implement conflict minerals risk assessments throughout our supply chain.</p> <p>From the supplier selection stage, there is a requirement that no conflict minerals from conflict-affected regions be included. We also take the initiative to investigate and confirm specific materials (gold, tantalum, tin, and tungsten), and require suppliers to sign the Conflict Minerals Non-Use Agreement or provide a declaration, in accordance with due diligence procedures. We also require them to sign the 'Supplier Social Responsibility and Ethical Conduct Commitment,' promoting standards such as RBA and SA8000, in order to fulfill our corporate social responsibility.</p>
<div>Governance</div> 	<ol style="list-style-type: none"> 1. Formulate and implement a Business Continuity Plan (BCP) in accordance with company objectives. 2. Implement a sustainable and ethical supply chain in compliance with supply chain policies, codes of conduct, and the ISO 37001 standard. 3. According to the regulations and standards issued by the competent authorities, ISO/IEC 27001, and the Company's information security maintenance guidelines, establish and maintain a secure and trustworthy information-based operating environment.

CHEM's local procurement spending in 2024

In response to the sharp increase in demand for power products, the total amount of materials purchased and the amount of local purchases have significantly increased in order to efficiently stock up and meet various requirements and to strengthen the resilience of the local supply chain.

Year	Total Procurement Amount	Local Procurement Amount	Share of Local Procurement	Share of Local Suppliers
2022	\$5,686,830,000	\$4,462,200,000	78.46%	92.26%
2023	\$11,987,970,000	\$9,145,390,000	76.29%	93.37%
2024	\$13,564,230,000	\$10,682,260,000	78.75%	93.4%





4 Green Sustainability

- 4.1 Climate-Related Financial Disclosures
- 4.2 Environmental Management
- 4.3 Energy & Carbon Reduction
- 4.4 Pollution Control
- 4.5 Material Management
- 4.6 Green Products



4. GREEN SUSTAINABILITY

As a global citizen, CHEM has always operated its business with the concepts of environmental friendliness and sustainable development. We have corresponding control measures in energy, GHG emissions, water resource management, and waste disposal to minimize the negative impact on the environment. We also recognize the concept of "Extended Operator Responsibility," which gradually leads to changes in the beliefs, attitudes, and values of our employees in a guided manner, which is then transformed into our company culture. This concept is not only reflected in all the products and services we provide to our customers, our quality target management operations, our daily operations, and our continuous improvement activities, but it also helps us to improve our corporate social responsibility and comply with the specific requirements of the governmental laws and regulations, and we are confident that we can contribute to the continuous development of Taiwan's economy and a sustainable environment.

4.1 Climate-Related Financial Disclosures

In response to global warming caused by GHG emissions and the potential impact of extreme weather on operations, CHEM has established an interdepartmental Climate Risk Team (Figure 4-1) since 2022 to systematically analyze and assess climate risks and to develop relevant strategies to address them. Based on the TCFD framework, analysis and planning are conducted through the four core elements: governance, strategy, risk management, and metrics and targets. By identifying potential climate change risks and opportunities, the Company can better understand the impact and influence of related factors on its operations and proactively formulate relevant response strategies and measures to prevent the risks and damages caused by climate change. Regular reports on related analyses, recommendations, improvements, and implementation results are submitted to the board of directors as a reference for corporate governance. Since as much as 80% of CHEM's products belong to the green energy industry, a total of 7 climate change risks and 11 climate change opportunities have been identified, which are depicted in Figures 4-2 and 4-3 and Tables 4-2 and 4-3 respectively.



Figure 4-1 Interdepartmental Organizational Structure in Response to Climate Change

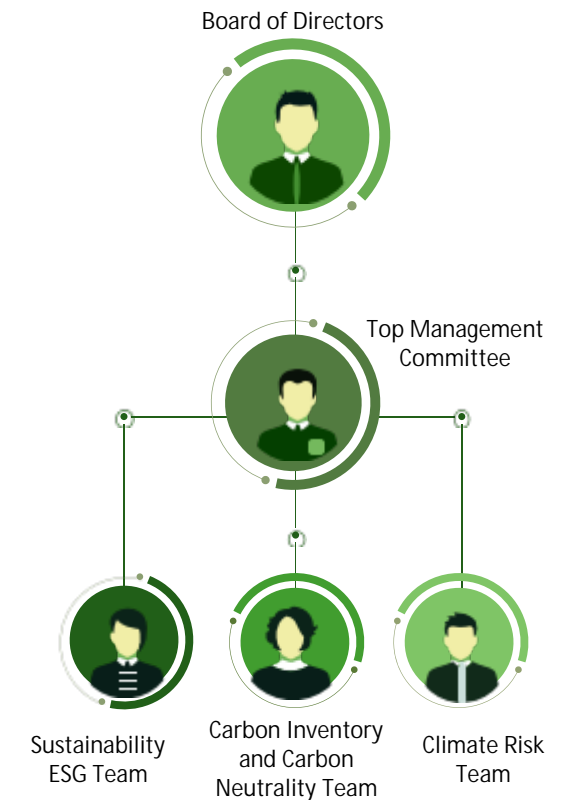




Table 4-1: TCFD Framework Analysis

Core Element	Unit/Topic	Responsibilities/Content
Governance	Top Management Committee	It is the highest-level organization for climate change and sustainability management within the Company, consisting of the Company's independent directors and senior management. The Committee is led by the Board's Chairman, with the President serving as the vice chairperson. The Committee has set up the Sustainability ESG Team, the Carbon Inventory and Carbon Neutrality Team and the Climate Risk Team. Each team meets at least twice a year, and reports the implementation results and annual plan for the next year to the Committee. The Committee then reports the implementation plans and results to the board of directors for oversight on a semi-annual basis.
	Sustainability ESG Team	It is a unit under the Top Management Committee and is responsible for planning and implementing activates related to the Company's ESG blueprint as formulated by the Committee. The unit has a team leader, who is responsible for coordinating the Company's administrative and business units to plan and implement matters related to environment, social responsibility, and governance. The team holds a meeting at least twice a year chaired by the Committee's vice chairperson to discuss implementation of ESG initiatives, evaluate their effectiveness, and conduct reviews and feedback.
	Carbon Inventory and Carbon Neutrality Team	It is a unit under the Top Management Committee and is responsible for planning and implementing activities related to the Company's carbon neutrality strategy as formulated by the Committee. The team leader is responsible for coordinating all administrative and business units to conduct the annual carbon inventory and seek for carbon reduction opportunities based on inventory results and progressively achieve the goal of carbon neutrality. The team holds a meeting at least twice a year, with the meeting chaired by the Committee's vice chairperson and focusing on the progress of the relevant inventory, analysis of the hotspots, and opportunities for carbon reduction and feedback and discussion on the carbon neutrality targets.
	Climate Risk Team	It is a unit under the Top Management Committee and is responsible for implementing the Company's climate risk plans in accordance with the strategy formulated by the Committee. The team has a leader, who is responsible for coordinating all administrative and business units of the Company to prepare for and execute response plans related to various climate issues. The team meets at least twice a year under the chairmanship of the President who is the chief member to evaluate the effectiveness of the implementation of climate-related initiatives, conduct reviews and provide feedback. Given the extreme climate disasters from time to time in recent years, the team will hold interim meetings in the event of a climate disaster to direct all departments to take countermeasures as regulated in the procedures, in order to reduce the impacts of climate disasters on the Company.
Strategy	Identification of risks and opportunities	Relevant climate risks and opportunities are identified to examine the impact and figure out countermeasures based on scenario analysis, with reference to the Intergovernmental Panel on Climate Change (IPCC), the Net Zero Emissions (NZE) of the International Energy Agency (IEA), and the pathways and strategies for Taiwan 2050 announced by the National Development Council (NDC). Through interdepartmental discussions, each business unit conducts a comprehensive assessment of the frequency, likelihood, time frame, impact level, response strategies, and opportunities for adjustments of extreme climate risks based on their expertise and experience and regional environmental conditions. Then the material risks and opportunities identified are ranked in the order of likelihood and impact level.
	Assessment of potential financial impacts	The assessment of potential financial impacts has the same procedures as the identification of risks and opportunities. After the identification of extreme climate risks and opportunities, all business units analyze and evaluate potential financial impacts on the Company's production, sales and operation in extreme climate scenarios. Meanwhile, the impacts of countermeasures or preventive measures taken on the Company's finance are also considered. Since 2024, an internal carbon pricing mechanism has been adopted, referencing the preliminary carbon fee standards set by the Ministry of Environment to assess the potential financial impact of carbon emissions related to operational activities.



Core Element	Unit/Theme	Responsibilities/Content
Risk Management	Adoption of TCFD Framework	Adopting the TCFD framework, the Company considers, among others, transition risks and physical risks in its risk management. Under transition risks, a comprehensive analysis of relevant policies, regulations, technology, market, corporate reputation, etc. is made, while the management of physical risks involves the consideration of acute and chronic risks. The Climate Risk Team brings together managers and staff from different departments to collaboratively discuss how risks and opportunities might impact the Company, regularly review identified risks and adjust response strategies to ensure timely feedback into company operations, helping to prevent or mitigate the negative impacts of climate change.
	Reporting of Identification Results	Based on the climate change risks and opportunities identified under the TCFD framework, the Corporate Sustainability Committee holds a meeting every six months to report the identification results and propose relevant countermeasures and risk management measures in response to expected financial impacts on the Company. During the meeting, the Committee carries out confirmation, review, and feedback to help develop more reasonable indicators and goals.
Indicators and Objectives	GHG Emission Reduction Target	The Company aims for a 3% reduction in GHG intensity per million revenue per year for 2022-2025 and reviews the progress annually.
	Climate Response Strategy	The strategies taken to improve energy efficiency include: using high-efficiency production equipment, improving products' performance for better carbon reduction, and reviewing key areas of GHG emissions and providing solutions to reduce GHG emissions.
	GHG Emission Disclosure	According to the GHG inventory schedule announced by the Financial Supervisory Commission ("FSC") based on the capital amount, CHEM and the Group belong to the second and third stages respectively; their GHG inventories should be completed in 2025 and 2026 respectively; third-party verification of CHEM's GHG emissions should be completed in 2027, and that of the subsidiaries' consolidated statements should be completed in 2028. The 2023 carbon inventory report was released in 2024, and it is expected that a GHG Inventory Statement Report will be published in 2025, along with the completion of third-party verification. In the future, issuance and verification will be conducted regularly on an annual basis. Starting in 2024, emissions under Scope 3 are also disclosed in accordance with the principle of materiality.

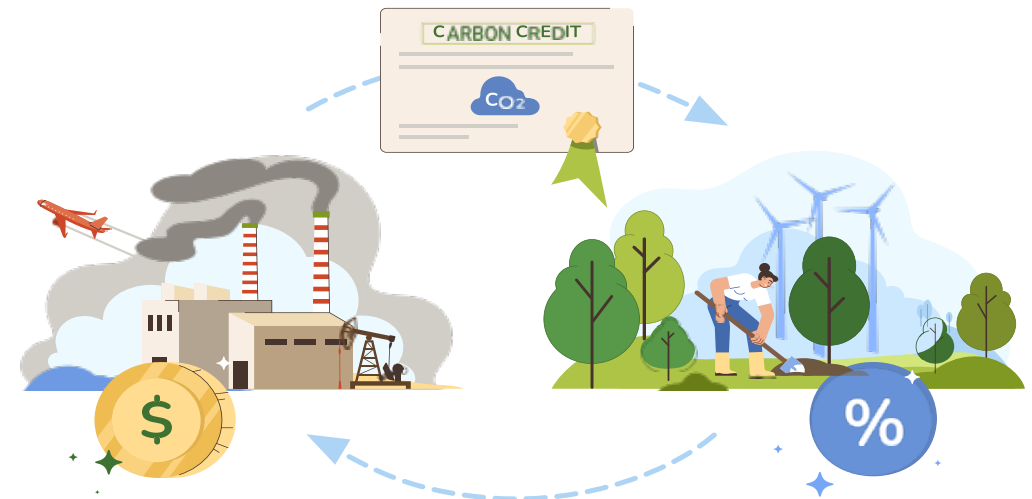




Figure 4-2: Risk Matrix

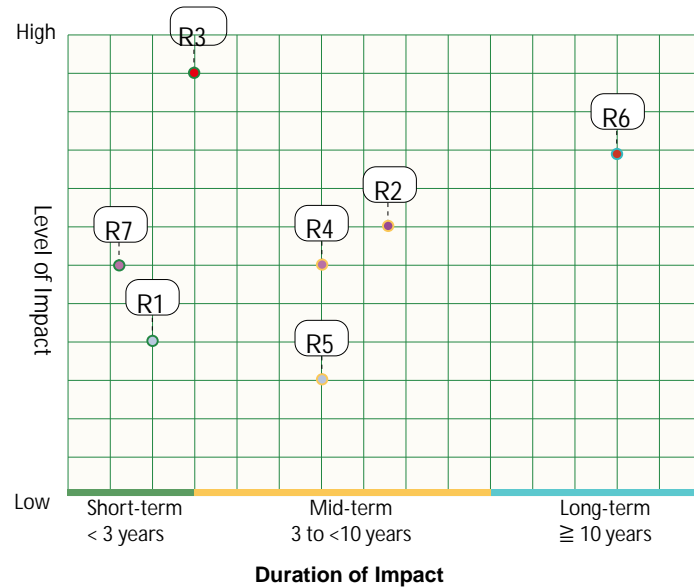


Table 4-2: Risk Items Based on TCFD Framework

Risk Identification Results	Item	Risk Type	Description	Actual Strategic Action	Time of Occurrence	Level of Impact
	R1	Transition risks	Increase in operating costs due to the introduction of national carbon tax legislation	Set short-, mid- and long-term GHG targets, incorporate an internal carbon pricing evaluation mechanism and continue reducing emissions to mitigate the impact of related charges.	Short-term	Low
	R2	Transition risks	Increase in operating costs during the low-carbon transition due to the overall increase in raw material prices	Implement carbon reduction plans and actively seek alternatives so as to reduce the impact of rising costs	Mid-term	Medium
	R3	Transition risks	Increase in challenges of product sales due to customers' stricter requirements for carbon footprints of equipment manufacturing processes and equipment use	Conduct carbon inventory ahead of legal requirements, identified key areas of GHG emissions in plants, evaluate and improve programs to lower product carbon footprints. Carbon footprint inventory and certification are planned for two products in 2025 to enhance product competitiveness.	Mid-term	High
	R4	Transition risks	In response to the trend of low carbon development, the Group actively researches and develops new equipment production or improves equipment technology, which increases operating costs.	Following an evaluation, the production facilities were identified as having Scope 2 emissions as their primary source. The facilities have actively optimized lighting systems and equipment to reduce electricity consumption.	Mid-term	Medium
	R5	Transition risks	In response to the trend of low carbon development, the Group has replaced equipment with high-efficiency production equipment, which in turn has increased operating costs.	A process air compressor and motor optimization plan was implemented to reduce operating costs and improve efficiency.	Mid-term	Low
	R6	Transition risks	Impact on raw material supply due to the overall supply chain's misalignment with low-carbon development	Reported the green procurement amount to the Ministry of Environment and obtained certification in 2024. Will gradually establish a green supply chain to enable suppliers to respond early or seek alternative suppliers.	Long-term	High
	R7	Physical risks	Increased frequency and severity of extreme weather events such as typhoons, rainstorms and droughts, which affect the production and distribution of products and the supply chain and impact operational efficiency	The Chiayi Plant officially started operation in 2024, reducing the production risks that may arise at the current single facility during extreme weather events.	Short-term	Low

Figure 4-3: Opportunity Matrix

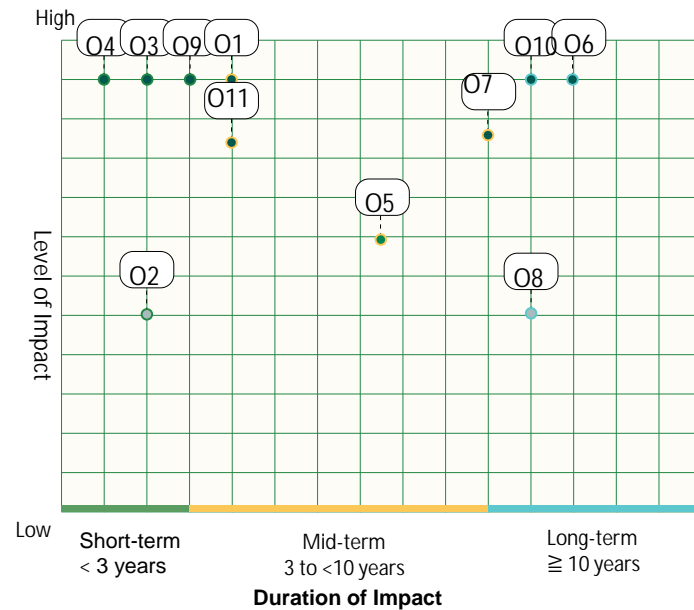




Table 4-3: Opportunity Items Based on TCFD Framework

Opportunity Identification Results	Item	Opportunity Type	Description	Actual Strategic Action	Time of Occurrence	Level of Impact
	O1	Products and services	In response to the global trend of net-zero carbon emissions, the Company will increase the global market penetration of its hydrogen energy products and expand the revenue of its business groups.	Develop hydrogen fuel cells to meet market demand.	Mid-term	High
	O2	Products and services	In response to the national energy transformation policy, the Company will increase the market penetration rate of its energy storage products and expand the revenue of its business groups.	Develop microgrid products to meet market demand	Short-term	Medium
	O3	Products and services	In response to the energy transition of vehicles, the Company will increase the market penetration rate of EV charging services integrated with parking operations, thereby expanding its business groups' revenue.	Offer EV charging services as part of the Company's parking lot operations.	Short-term	High
	O4	Energy source	In response to the national green energy transition, the Company will increase its solar power generation capacity, increase green energy supply and enhance the revenue of the business group.	Keep developing solar panel power generation services. All plants are now equipped with solar panels, and the three photovoltaic plants in Qigu District of Tainan (Tian Cin, Tian Chong, and Tian Peng) generate a total of about 320 million kWh of green power.	Short-term	High
	O5	Products and services	In response to the development trend of the national power grid, the Company will increase the market penetration rate of microgrid equipment and expand the revenue of its major business groups.	Actively promote microgrid products to expand market share and increase revenue.	Mid-term	Medium
	O6	Products and services	Development of the Company's carbon capture and reuse technology, low carbon emission technology, and provision of marketable low carbon products to assist in its transition.	Evaluate carbon capture and reuse technologies and low carbon emission technologies based on product characteristics; help customers to reduce carbon emissions.	Long-term	High
	O7	Market	In response to climate change, the international demand for low-carbon products has increased, thereby expanding the Company's overall new energy business in the international market.	Aim to become a fully green energy company by developing carbon reduction products, hydrogen energy products, energy-efficiency grade 1 products, and increasing charging stations, we are evaluating the feasibility of expanding internationally.	Mid-term	High
	O8	Resilience	To guide the supply chain to undergo a low-carbon transition, reduce the carbon footprint of raw materials and increase product competitiveness.	Depending on product demand, we will increase the number of suppliers with carbon reduction advantages.	Long-term	Medium
	O9	Resource efficiency	Through the research and development of new product technologies, we are able to reduce the carbon footprint of our products and increase their competitiveness.	The Company has design capabilities to develop and manufacture customized low-carbon products based on customer needs, enhancing market competitiveness.	Mid-term	High
	O10	Resilience	In response to the low-carbon transition, we will continue to develop diversified renewable energy sources and enhance our resilience to domestic and international carbon taxes.	Develop and provide diversified green energy products to reduce the potential carbon costs.	Long-term	High
	O11	Resilience	Actively engage in energy saving and carbon reduction, develop carbon credit and participate in the carbon market	Generate solar power for self-consumption and apply for green power certification to meet the Company's green energy goals.	Mid-term	High



4.2 Environmental Management Policy

Sustainable Environment

CHEM's 2024 Approach to Energy Saving and Carbon Reduction and Its Evaluation

Material Topic	Energy Saving and Carbon Reduction	
Corresponding GRI indicator	GRI 302 Energy	
Policies and commitments	<ul style="list-style-type: none">The power market is CHEM's main business. In order to reduce power consumption in the manufacturing processes, CHEM is exploring the shortening of those processes and miniaturization of products in the hope of contributing to the society towards low-carbon, high-efficiency, and clean energy.CHEM has been conducting its own GHG inventory since 2021 and planning to reduce GHG emissions. In the future, CHEM will comply with the relevant regulations of Taiwan's Climate Change Response Act and fulfill its responsibility to protect the global environment together. The relevant environmental management policy is published on the Company's website (Figure 4-4) to demonstrate its determination.	
Goals and objectives	Short-term	Promote energy conservation and carbon reduction, target key areas of GHG emissions (Scope 2) and reduce GHG emissions by 3% per year.
	Mid- and long-term	Support Taiwan's green energy industry by playing an important role in the government's vision of promoting energy security, a green economy and environmental sustainability.
Responsibilities and resources	<ul style="list-style-type: none">In 2008, CHEM established an R&D center dedicated to energy-saving and carbon-reduction processes, focusing on the development of green products and services centered around stable power supply and clean energy.Support the development of the green energy industry in line with the Solar Power Promotion Program.	
Evaluation mechanism and results	<p>1. Establishment of environmental management mechanism: The new Chiayi Plant began production in 2024, joining the Linkou and Nanke Plants. All three plants have passed ISO 14001 environmental management system certification with 100% coverage of CHEM's operation sites.</p> <p>2. Self-initiated GHG inventory: Since 2021, CHEM has started conducting GHG inventory. In 2024, the Company set the inventory boundary to include the Linkou, Nanke, and Chiayi Plants based on the operation control approach, disclosing information on Scope 1 direct emissions (from fossil fuel combustion, primarily liquefied petroleum gas and diesel), Scope 2 indirect emissions (from purchased electricity), and Scope 3 indirect emissions (related to product manufacturing—municipal water). In 2024, Scope 1 emissions from the Linkou, Nanke and Chiayi Plants amounted to 1,221.9297 metric tons of CO₂e (19%), while Scope 2 emissions amounted to 5,152.1435 metric tons of CO₂e (81%). The total Scopes 1 and 2 emissions were 6,374.0732 metric tons of CO₂e. Compared to 2023, the Chiayi Plant was added in 2024. Scope 1 emissions decreased by 18.0%, mainly due to decreased use of petrol for company vehicles, and Scope 2 emissions decreased by 21.3%, mainly due to the improvement of LED and the promotion of energy saving at the Linkou Plant.</p> <p>3. Development of diversified green energy services: Since February 2022, CHEM's CPO unit has been installing green energy-related environmentally friendly and sustainable equipment at highway rest stops and Dodohome parking lots across the country, mainly for the establishment of charging stations and provision of charging services for pure EVs. As of now, it has set up 65 charging piles (60kW-350kW) (Figure 4-3). The charging services at national highway rest areas in 2024 reduced GHG emissions by 46,286.2982 metric tons of CO₂e, equivalent to 120 times the annual carbon captured by Daan Forest Park. Solar photovoltaic systems were installed within the Linkou, Nanke and Chiayi Plants, with a total</p>	<p>capacity of 5,001.31kWp. Starting in 2024, the electricity generated from the solar photovoltaic systems are sold in full to Taipower, reducing GHG emissions by 2,828.162 metric tons of CO₂e. In 2024, the electricity generated by the three solar power plants in Qigu District of Tainan (Tian Cin, Tian Chong and Tian Peng) were sold in full to Taipower, reducing GHG emissions by 157,979.0842 metric tons of CO₂e.</p> <p>4. Continued improvement in energy saving within the plants. In 2024, CHEM continued to invest in energy saving programs, spending a total of NT\$8,554,692 on optimizing the lighting at the Linkou Plant, dormitories, and public areas and adding lighting at underground parking lots, thereby reducing GHG emissions by 265.278 metric tons of CO₂e. In terms of energy consumption, the total energy consumption of the Linkou, Nanke and Chiayi Plants in 2024 was 43,132 GJ, and the energy intensity per NT\$1 million in revenue decreased by 16.00%. Over the past three years (2022-2024), the Company's unit operational energy consumption intensity has consistently decreased, indicating its active efforts to improve energy efficiency. Starting in 2023, in response to energy saving and carbon reduction, 20 measures have been implemented for our facilities, including turning off lights when not in use, installing timers in restrooms and pantries, turning off lights during breaks, and cleaning air-conditioners regularly. The electricity usage proportions for the Linkou, Nanke and Chiayi Plants in 2024 were 80.8%, 15.8%, and 3.4%, respectively, a 2% decrease in total power consumption compared to 2023. If the Chiayi Plant was excluded, the reduction in total power consumption would be 5%. Water usage increased by 2% in 2024, mainly to due to pipe leakage at the Linkou Plant, increased operational activities, and the addition of the Chiayi Plant to operations. CHEM's full implementation of the electronic invoicing system resulted in a total carbon reduction of 130.7864 metric tons of CO₂e in 2024.</p>

The issue of climate change has attracted much attention in recent years, and many countries around the world have released their net-zero plans. On March 30, 2022, Taiwan announced its "2050 Net-Zero Emission Pathway and Strategy Master Plan," and on October 24, 2024, a pledge was made to intensify climate action in order to enhance the international competitiveness of industries, along with the establishment of new carbon reduction targets for Taiwan for the years 2032 and 2035. CHEM reviews its internal goals and adjusts them as needed to stay aligned with the overall national strategy.

Figure 4-4: CHEM's 2024 Environmental Policy



4.2.1 Environmental Policy

To fulfill its corporate environment responsibility, CHEM has, in addition to complying with relevant environmental laws and regulations, established an ISO14001 environmental management system to demonstrate its commitment to environmental protection. In terms of environmental management, CHEM has obtained ISO 14001 Environmental Management System certification, as shown in Figure 4-5 below.

Figure 4-5: ISO 14001 Environmental Management System Certificates for the Linkou, Nanke, and Chiayi Plants



4.2.2 Solar Power

To comply with the regulations of the Energy Bureau and support the Taoyuan City Government's vision of promoting a low-carbon, green city, solar photovoltaic systems have been installed at the Linkou, Nanke and Chiayi Plants, with a total installed capacity of 5,001.31kWp.



CHEM has been continuously contributing to the use of solar energy for green power generation. In 2024, the electricity generated by the three solar power plants in Tainan (Tian Cin, Tian Chong, and Tian Peng) (Figure 4-6), which is equivalent to a reduction of 157,979.0842 metric tons of CO₂e, was sold in full to Taipower.

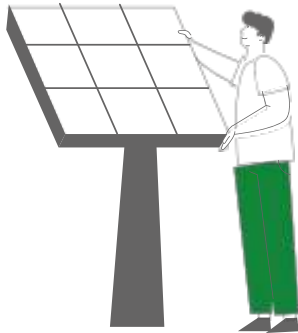


Figure 4-6: Solar power plant at Qigu, Tainan

4.2.3 Charging Services

Since February 2022, CHEM's CPO unit has been installing green energy-related environmentally friendly and sustainable equipment at highway rest stops and Dodohome parking lots across the country, mainly for the establishment of charging stations and provision of charging services for pure EVs. As of now, it has already set up 65 charging piles (60kW–350kW) (Figure 4-7). The charging services at national highway rest areas in 2024 reduced GHG emissions by 46,286.2982 metric tons of CO₂e, equivalent to 120 times the annual carbon captured by Daan Forest Park.

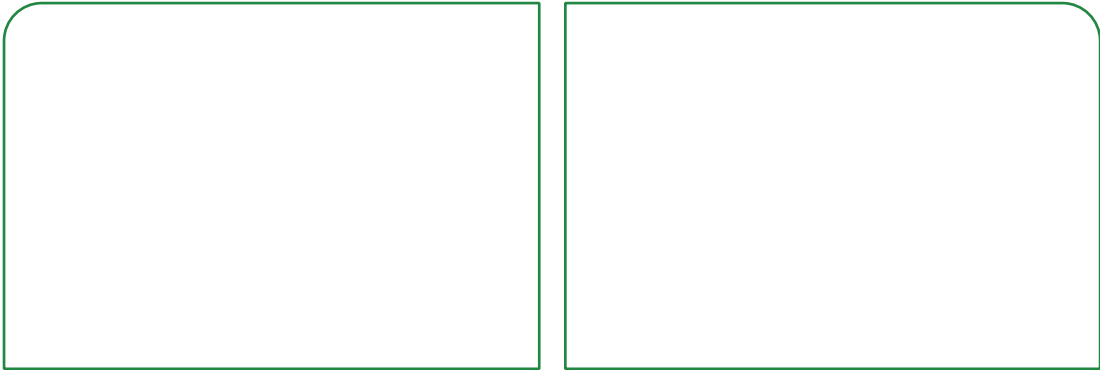


Figure 4-7: CHEM's Charging Stations

4.2.4 Green Energy Products

CHEM actively develops green energy ventures through systematic planning of processes and initiatives, focuses on the development of hydrogen energy and energy storage products, and promotes the nationwide adoption of the Company's hydrogen energy products under the hydrogen energy business group, contributing to global net-zero carbon emissions.





4.3 Energy & Carbon Reduction

CHEM mainly produces heavy electrical products, electric meter products, system air-conditioners, power generators and hydrogen energy products, etc., which use electricity in their manufacturing processes. The Company promotes various energy-saving initiatives, encouraging employees to adopt sustainable habits in their daily routines and fostering a culture of energy conservation and carbon reduction. It also seeks to optimize high-energy-consuming equipment, such as air conditioning and lighting systems, to improve energy efficiency.

4.3.1 Energy Management

In order to meet Taiwan's overall goal of net-zero carbon emissions by 2050, CHEM, after careful internal discussions, has gradually established the Group's energy management program starting in 2023, which is divided into three phases: short-term: 0–3 years (2022–2025), mid-term: 4–10 years (2026–2032), and long-term: 10–30 years (2033–2050). Three phases will be promoted. Starting from energy saving, water saving, and waste reduction, we plan to reduce the Group's carbon emissions, as well as planning for future use of low-carbon or green energy by choosing cleaner energy options. For details, please refer to Table 4-4 below.

Table 4-4: Group's Energy Management Goals

Stage	Goal	Program
Short-term: 0–3 years (2022–2025)	Formulate and implement measures to conserve electricity, water and non-hazardous waste within the Group: 1. 3% annual electricity saving 2. 3% annual water consumption savings 3. Industrial waste generated annually: <5%	1. Implement measures to conserve electricity, water and non-hazardous waste within the Group: 1% electricity saving in 2023 compared to 2022 (due to the in-factory LED lighting energy-saving project being gradually completed by the end of 2023, the benefits have not yet been fully realized); 2% electricity saving in 2024 compared to 2023 (mainly due to the addition of the Chiayi Plant into operations; if the Chiayi Plant was excluded, the percentage of electricity saving would amount to 5%). 1. 3% water consumption saving in 2023 compared to 2022; 2% water consumption saving in 2024, mainly due to a water pipe leak at the Linkou Plant, increased operational activities, and the addition of the Chiayi Plant into operations. 2. Reuse rate of general industrial waste: 82% in 2022; 82% in 2023, and 82% in 2024.
Medium-term: 4–15 years (2026–2032)	1. Adopt corresponding energy saving and carbon reduction measures in line with the national target of reducing GHG emissions by 20% in 2030 compared with the base year 2005. 2. Identify key areas of GHG emissions in the plants through carbon inventory and propose solutions to reduce GHG emissions.	1. Evaluate the energy-saving solution of the manufacturing process, as well as the feasibility of using green power and the proportion of usage. 2. Since the main carbon emission hotspots of the plants are Scope 2 emissions, the plants will gradually replace equipment or lamps with poor energy efficiency according to the evaluation results, and replace them with high-efficiency equipment, such as LED lighting, inverter air conditioners and inverter air compressors.
Long-term: 15–30 years (2033–2050)	1. Adopt corresponding energy saving and carbon reduction measures in line with the national target of reducing GHG emissions by 50% in 2050 compared with the base year 2005. 2. Continuously review energy usage based on carbon inventory results and find clean energy solutions.	1. Continue to conserve energy and reduce carbon emissions and waste, and reducing emissions has become the Group's mission. 2. Based on the current energy consumption status, continuously evaluate how to enhance energy consumption efficiency, or plan to increase renewable energy consumption.

4.3.2 Energy Efficiency Optimization

In 2024, CHEM spent NT\$8,554,692 mainly on the replacement of lighting at the Linkou plant, expecting to save 537,176.9 kWh of energy and reduce GHG emissions by 265.2780 metric tons of CO₂e. The statistics of its 2024 energy saving performance are given in the table below.

2024 Energy Saving Plans and Performance

Plan	Energy saved (unit: kWh)	Decrease in energy usage (unit: GJ)	Decrease in GHG emissions (unit: tCO ₂ e)
1. Optimization of 154 sets of 1,000W high-bay lights 2. Optimization of 556 sets of 400W metal halide high bay lighting 3. Replacement of 1,338 sets of 40W twin-tube lights and twin-tube pendant lights with LED lights	537.1769	1,933.837	265.2780

Note: Purchased electricity — 1 kWh = 3,600,000 joules; 1 kWh = 0.494 metric tons of CO₂e (based on Taipower's 2024 published emission factor)



400W–1,000W high-bay lights replaced by 50W–240W LED lights



Corridor lighting replaced by 20W lamps or panel lights



4.3.3 Energy Consumption Statistics

As can be seen from Table 4-5 below, the LPG, purchased electricity and municipal water consumption related to energy consumption have mostly been decreasing year-on-year at the Linkou Plant and the Nanke Plant. At the Linkou Plant, both liquefied petroleum gas and water consumption have risen—liquefied petroleum gas due to increased production, and water due to both production expansion and more employees being accommodated. The increase in water consumption at the Nanke Plant is mainly due to the increase in production volume. As for the Chiayi Plant, it started operations in 2024.

Table 4-5: Major Energy Consumption Factors for Linkou and Nanke Plants

Plant	Energy/Resource	Unit	2022	2023	2024
Linkou (North) Plant	Liquefied petroleum gas	Kilogram	19,570	18,830	25,340
	Diesel fuel	Kiloliter	126	141.368	112.921
	Electricity usage	kWh	9,195	9,013	8,494
	Municipal water usage	Cubic meter	21,606	20,822	25,050
Nanke (South) Plant	Electricity usage	kWh	1,752.80	1,672.80	1,662.80
	Municipal water usage	Cubic meter	4,090	4,184	4,525
Chiayi Plant	Electricity usage	kWh	—	—	361.22
	Municipal water usage	Cubic meter	—	—	8,290

Note: The Chiayi Plant started operation in 2024.



In reference to the SASB guidelines for the electrical and electronic equipment industry, statistics was compiled on total energy consumption and sources of electricity used under the energy management topic. In 2024, the total energy consumed by the Linkou, Nanke and Chiayi Plants was 43,132GJ, 2.9% less than 2023, indicating that the energy saving have shown initial results. The revenue in 2024 grew by 15.6%, compared to 2023. Therefore, energy consumption per NT\$1 million in revenue has decreased by 16.0%. Statistical data also shows that over the past three years (2022–2024), the Company's total revenue has increased, while energy consumption intensity per unit of revenue has continued to decline, indicating improved production energy efficiency. Currently, electricity is mainly sourced from the national grid, and renewable energy has not yet been used. The Company's energy management goals are given in Table 4-6 below.

Table 4-6: Energy Consumption Intensity per Million of Revenue in the Past 3 Years

Item	Unit	2022	2023	2024
Total energy consumption	GJ	44,841	44,400	43,132
Annual revenue	Million NTD	18,547	22,145	25,609.456
Energy intensity	GJ/Million NTD	2.39	1.98	1.66
Energy intensity compared to previous year	%	-3.6%	-17.1%	-16.0%
Share of renewable energy consumption	%	0	0	0
Share of grid power consumption	%	100	100	100

Note:

1. The energy calorific value coefficients are based on the Ministry of Environment's announcement in February 2024 and are converted according to the Ministry of Economic Affairs' standards: liquefied petroleum gas (LPG): 6,635 Kcal/L; and diesel: 8,400 Kcal/L. The conversion factor from Kcal to KJ is 4.18 KJ/Kcal. The energy coefficient for electricity is 3.6 MJ/kWh. 1 MJ is equal to 0.001 GJ. The energy consumption conversion factor for LPG has been revised, and the data has been updated accordingly.
2. Annual revenue is based on consolidated revenue.
3. Energy intensity per NT\$1 million in revenue (GJ per NT\$1 million) = total energy consumption (GJ)/company revenue (in NT\$1 million).



4.3.4 Greenhouse Gas Management

In order to comply with the Climate Change Response Act in Taiwan, CHEM conducts its own GHG inventory, promotes GHG emission reduction measures and establishes a corresponding energy conservation system.

Since 2023, the Group has gradually established its GHG management targets, as explained in Table 4-7 below.



Table 4-7: Group's GHG Management Goals

Stage	Goal	Status
Short-term: 0–3 years (2022–2025)	<ol style="list-style-type: none">1. Conduct carbon inventory for the parent company and its subsidiaries, identify emission hotspots, and gradually plan for reduction measures. Complete the GHG inventory for all group companies two years ahead of the FSC's scheduled timeline.2. To reduce GHG emissions, use 2020 as the base year for conducting reduction, identifying emission hotspots and proposing corresponding mitigation measures, with a target of reducing GHG emissions by 3% per NT\$1 million in revenue annually.3. Develop new energy businesses.	<ol style="list-style-type: none">1. Since 2020, CHEM has begun compiling its preliminary carbon emission data. Starting in 2023, carbon inventory data has been established for CHEM, and from 2024 onward, carbon inventories will be conducted in accordance with the GHG Protocol, with the inclusion of subsidiary data.2. From 2022 to 2024, GHG emissions per million in revenue have been reduced by 3.1%, 17.9% and 17.4%, respectively.3. New businesses of solar panel power generation and EV charging station services achieved carbon reductions of 2,828.162 metric tons and 46,286.2982 metric tons of CO₂e, respectively, in 2024.
Medium-term: 4–10 years (2026–2032)	<ol style="list-style-type: none">1. Starting in 2026, third-party verification of GHG emissions will be implemented, one year earlier than the schedule planned by the FSC.2. Based on the new national GHG net emission reduction targets: a 28±2% reduction by 2030 compared to 2020 levels; a 32±2% reduction by 2032 compared to 2020 levels. Plan to reduce Scope 1 and Scope 2 emissions in order to actively achieve these targets.3. Review inventory results and integrate product carbon reduction planning into green supply chain management.4. In response to net-zero carbon emission goals, incorporate new energy sources and carbon reduction strategies to effectively lower GHG emissions.	<ol style="list-style-type: none">1. The carbon inventory statistics have been fully established, and a third-party verification of GHG emissions is planned for 2025. Arrangements for the third-party verification are currently being made.2. From 2020 to 2024, GHG emissions from energy use at the Linkou and Nanke Plants have been reduced by 9%. Moving forward, the Company plans to implement an energy management system, convert the Nanke Plant's solar power generation to self-consumption, and apply for renewable energy certificates as part of its carbon management efforts to reduce Scope 2 emissions.3. Starting in 2024, the Company will conduct internal carbon pricing assessments based on the preliminary carbon fee rates planned by the Ministry of Environment, in order to understand the impact of carbon fees on operations. Two types of company products are planned for carbon footprint inventory and certification, and suppliers are encouraged to reduce emissions to further decarbonize the products. The Company will replace traditional electricity usage with its own green energy products, hydrogen energy products, and energy storage products, while continuously evaluating carbon reduction solutions for manufacturing processes and factory sites.4. The Company plans to convert the Nanke Plant's power generation to self-consumption and apply for renewable energy certificates.
Long-term: 10–30 years (2033–2050)	<ol style="list-style-type: none">1. New national GHG net emission reduction targets: a 38±2% reduction by 2035 compared to 2020 levels; a 50% reduction by 2050 compared to 2020 levels. Plan to reduce Scope 1 and Scope 2 emissions in order to actively achieve these targets.2. Explore and develop comprehensive green energy technologies such as hydrogen power generation and biomass power generation, to timely provide viable carbon reduction pathways for all sectors.	<ol style="list-style-type: none">1. The Company conducts regular reviews of carbon emissions from raw materials and manufacturing processes through carbon inventory data, and evaluates feasible alternatives or business models to actively reduce carbon emissions.2. The Company has increased its investment in hydrogen power generation facilities and promoted their adoption, gradually replacing traditional fossil fuel-based power generation; it is also developing biomass renewable fuel technologies to explore new investment and development opportunities.

4.3.5 GHG Emission Statistics

In order to comply with the Climate Change Response Act in Taiwan, CHEM conducts its own GHG inventory, promotes GHG emission reduction measures and has a corresponding energy conservation system.

Total GHG emissions from CHEM's major production plants over the past three years: Based on the GHG emission intensity converted from energy use, as shown in Table 4-8, the 2024 statistics include not only the Linkou and Nanke Plants, but also the Chiayi Plant, which began operations in its first year. The total GHG emissions from energy use across the three plants amounted to 5,588.4446 metric tons of CO₂e, a 4.5% decrease compared to 2023, which represents a 17.4% decrease in GHG emission intensity per NT\$1 million in revenue. The statistical data shows that over the past three years (2022 to 2024), the Company's GHG emission intensity has continued to decline, indicating that while increasing total revenue, the Company has also simultaneously reduced its GHG emissions.

Table 4-8: GHG Emission Quantity and Intensity for the Past Three Years

Plant	Emission	Item	Unit	2022	2023	2024
Linkou	Scope 1	Liquefied petroleum gas	tCO ₂ e	63.5835	61.1792	82.3304
		Diesel fuel		329.4971	347.1509	293.6835
	Scope 2	Electricity usage		4,680.30	4587.70	4204.63
	Scope 3	Municipal water usage		3.479	3.352	3.9079
Nanke	Scope 2	Electricity usage		892.2	851.4548	823.086
	Scope 3	Municipal water usage		0.658	0.674	0.7058
Chiayi	Scope 2	Electricity usage		—	—	178.8047
	Scope 3	Municipal water usage		—	—	1.2933
Total CO ₂ emissions					5,969.7176	5,851.5103
GHG emission intensity			tCO ₂ e/ million NTD	0.3219	0.2642	0.2182
Increase/decrease in GHG emission intensity compared to previous year			%	-3.1%	-17.9%	-17.4%

due to a revision in the conversion factor for LPG, the emissions for 2022–2023 have been adjusted accordingly.

In 2024, Scope 1 and Scope 2 emissions for CHEM (including all production plants and offices) amounted to 1,286.1563 metric tons of CO₂e (accounting for 20%) and 5,204.1678 metric tons of CO₂e (accounting for 80%), respectively, totaling 6,490.3241 metric tons of CO₂e, with electricity consumption as the primary source of GHG emissions. Considering statistical feasibility² and representativeness, CHEM also conducted a preliminary estimation of Scope 3 emissions for 2024, and the relevant information is disclosed in its annual report.



4.4 Pollution Control

4.4.1 Water Resource Management

CHEM's main operating location, the Linkou Plant, draws its water mainly from groundwater and municipal water plants, with groundwater accounting for more than 70% of the Company's water withdrawal and municipal portable water accounting for nearly 30% of the Company's water withdrawal. According to the World Resources Institute's "Aqueduct Water Risk Atlas," the risk of water resources in the entire region of Taiwan is classified as Low - Medium (1-2), which is not an area of water stress. Therefore, there is no risk of impact on water withdrawal in the local area for the time being. Meanwhile, the Company strives to conserve resources. In 2024, a total of 125.295 million liters of water were withdrawn by the Company, with the increase in water consumption due to increased water usage as a result of the addition of the Chiayi Plant and the expanded operations at the Nanke Plant, increasing by 22.699 million liters as compared with that of the previous year.

CHEM is required by law to discharge both wastewater and domestic sewage from the plant into the wastewater treatment facility in the industrial area and to cooperate with the management center in taking samples for testing on a regular basis. In early 2020, CHEM completed the replacement of the dosing pipeline and motor upgrade at the in-plant wastewater treatment facility, which helped enhance the in-plant wastewater treatment facility's water treatment capability so as to ensure compliance with wastewater treatment and discharge standards.

In order to implement water pollution prevention and control, the Company submits water pollution prevention and control plans and related documents to the competent authorities for review and approval in accordance with governmental announcements. All of our plants have water pollution control facilities set up in accordance with regulations, and are included in the pipeline system of the industrial area to discharge wastewater, which meets the local regulations and standards before being discharged into the receiving water body. In addition, there are wastewater treatment personnel who are responsible for keeping daily records of the amount of water withdrawal, the characteristics of water withdrawal quality, the amount of pharmaceuticals used in discharging water, the type and amount of pharmaceuticals used in the water discharge and the amount of electricity consumed, etc., which will be used as the basis for setting and reviewing annual energy-saving targets.



Water Withdrawal at CHEM's Linkou Plant in the Past 3 Years (in millions of liters)

Source of Water	2022	2023	2024
Underground water	69.79 (76.36%)	81.338 (79.28%)	85.733 (76.59%)
Municipal water	21.606 (23.64%)	21.258 (20.72%)	26.202 (23.41%)
Total	91.396	102.596	111.935

From the table shown above, it can be seen that due to the rapid increase in demand for orders form heavy power business in 2023, three new power supply factories have been added to the Linkou Plant within a year, resulting in an increase in the use of underground water compared to 2022. The increase in groundwater usage in 2024 is primarily due to heightened operational demands. The rise in municipal water consumption is attributed to increased production capacity and a higher number of dormitory residents. Overall water usage has slightly increased compared to 2023.

Water Usage at CHEM's Production Plants in 2024 (in millions of liters)

Type/Plant	Linkou Plant	Nanke Plant	Chiayi Plant	Total
Water withdrawal	111.935	4.997	8.363	125.295
Water discharge	104.353	3.597	6.690	114.640
Water consumption	7.582	1.400	1.673	10.655
Revenue (in million NTD)	-	-	-	25,609
Water withdrawal intensity (metric tons per million NTD)	-	-	-	4.893

Note: The water used at the Nanke and Chiayi Plants is all municipal water.

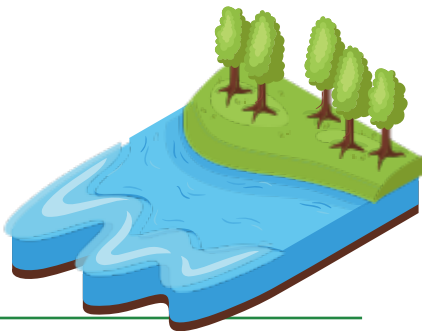
According to the statistics above, the Linkou, Nanke and Chiayi Plants consumed 7.582 million, 1.4 million and 1.673 million liters of water, respectively, in 2024. In the future, we will continue to monitor our water usage and establish relevant measures for water use optimization.

Monitoring Results of Wastewater Discharge from CHEM's Plants in the Past 3 Years

Source of Water	Year	2022	2023	2024
Amount of wastewater discharge (in millions of liters)	Linkou Plant	19.196	17.151	18.62
	Nanke Plant	—	—	3.597
	Chiayi Plant	—	—	8.363
Proportion of wastewater discharge relative to usage (%)	Linkou Plant	21.00%	16.72%	16.63%
	Nanke Plant	—	—	73.6%
	Chiayi Plant	—	—	80%
Chemical Oxygen Demand (COD) (mg/L)	Linkou Plant	58.4	79.3	148
	Nanke Plant	—	—	69.2
	Chiayi Plant	—	—	33
Suspended Solids (SS) (mg/L)	Linkou Plant	2.6	5.9	3.2
	Nanke Plant	—	—	17.2
	Chiayi Plant	—	—	10

- Note:
- The local regulations stipulate a maximum allowable COD of 800 ppm and SS of 600 ppm.
 - For the year 2022, the COD and SS values were the highest recorded values from the test reports.
 - The amounts of wastewater discharge from the Nanke and Chiayi Plants have been disclosed starting in 2024.

In line with the government's green energy policy, the Linkou Plant has been actively improving the existing manufacturing processes to reduce the generation of wastewater, so that the wastewater discharge in 2023 was reduced by 2.045 million liters compared to 2022. Wastewater discharge increased to 1.469 million liters in 2024 as a result of revenue growth.





4.4.2 Waste Management

CHEM entrusts the removal of waste to private waste removal and disposal organizations that have been licensed by the competent authority to remove and dispose of waste. All waste removal and treatment companies confirm the legality of their licenses and the proper handling of waste materials. Various types of waste collection points have been established at each plant and site to carry out sorting, storage, removal, recycling, and treatment. A dedicated unit oversees the overall waste management process, prioritizing source reduction and waste minimization during production. Secondary consideration is given to reuse and treatment. Finally, all operations and inspections related to the storage, removal, and treatment of industrial waste are thoroughly documented and properly archived for audit purposes.

To effectively manage industrial waste, the Company carries out waste sorting, collection, storage, administration, and transportation. These measures aim to ensure proper waste management in accordance with environmental regulations, including waste removal, treatment, and reuse. As part of ongoing improvement efforts, the Company has adopted strategies such as increasing the frequency of waste transportation to reduce monthly storage volumes. Other relevant measures are described below.

According to environmental protection regulations and the requirements of the ISO 14001 Environmental Management System, each plant has an industrial waste disposal plan and complies with legal regulations for handling 22 types of waste — including waste oil mixtures, scrap metal, and general industrial waste. These wastes are entrusted to government-approved professional contractors for removal and treatment, with online reporting of waste flow as required by the Waste Disposal Act to ensure compliance.

Before outsourcing the waste removal and treatment, the Company implements a two-stage internal pre-treatment process. The first stage involves waste segregation and collection at the production line. The second stage takes place in the plant's waste temporary storage area, where the waste is sorted and inspected according to signage, and the weight is confirmed to track the waste flow, ensuring compliance with the Waste Disposal Act.

The Company signs contracts for waste removal and treatment to entrust the relevant operations to private waste removal and treatment organizations authorized by the competent authority.

The removal and treatment of waste should be conducted in accordance with legal regulations by submitting waste transportation reports via online transmission. Additionally, the final disposal status of the waste should be tracked and verified within the specified deadline.

Suppliers are required to reduce packaging materials. Solid materials should be delivered in bulk without packaging directly to the plant for processing. Gaseous and liquid materials should be transported in barrels. For waste disposal, each unit should collect the waste, and the original supplier will retrieve it using reusable space-saving recovery bags. These bags can be reused multiple times, significantly reducing the estimated waste volume by approximately 10 metric tons.



In 2024, the total waste generated by the Linkou Plant was 1,199.0518 metric tons, out of which hazardous and non-hazardous industrial wastes amounted to 3.7918 metric tons and 1,195.26 metric tons, respectively. The total waste at the Nanke Plant was 30.515 metric tons, all of which was non-hazardous industrial waste. As for the Chiayi Plant, the total waste was 65.527 metric tons, all of which was non-hazardous industrial waste. Details are provided in the table below.

From the statistical data, it can be seen that the amount of hazardous industrial waste generated during CHEM's manufacturing processes has consistently been very low. All waste is entrusted to qualified contractors for professional disposal. CHEM's environmental management personnel conduct on-site inspections of the waste treatment facilities on an irregular basis to ensure that the waste removal and treatment processes comply with relevant regulations.

CHEM's Total Waste Volume and Weight by Disposal Method in 2024 (in metric tons)

Plant	Type of Waste	Amount of Waste Generated	Amount of Waste Transferred for Disposal
Linkou Plant	Hazardous industrial waste	3.7918	3.7918
	Regular industrial waste	1,195.26	1,195.26
	Total waste	1,199.0518	1,199.0518
Nanke Plant	Hazardous industrial waste	0	0
	Regular industrial waste	30.515	30.515
	Total waste	30.515	30.515
Chiayi Plant	Hazardous industrial waste	0	0
	Regular industrial waste	65.527	65.527
	Total waste	65.527	65.527
All three plants	Hazardous industrial waste	3.7918	3.7918
	Regular industrial waste	1,291.3020	1,291.3020
	TOTAL	1,295.0938	1,295.0938

Note: All waste is outsourced for processing, with no on-site disposal at the plant.



CHEM's Waste Disposal Transfer and Direct Disposal in 2024 (in metric tons)

Plant	Type of Waste	Off-Site Disposal Method	Waste Disposed
Linkou Plant	Hazardous industrial waste	Incineration	3.7918
		Other methods	—
	Regular industrial waste	Publicly declared reuse	—
		Incineration	1,195.26
		Other methods	—
	Subtotal	1,199.0518	
Nanke Plant	Hazardous industrial waste	Incineration	—
		Other methods	—
	Regular industrial waste	Publicly declared reuse	—
		Incineration	15.155
		Other methods	15.360
	Subtotal	30.515	
Chiayi Plant	Hazardous industrial waste	Incineration	—
		Other methods	—
	Regular industrial waste	Publicly declared reuse	—
		Incineration	65.527
		Other methods	—
	Subtotal	65.527	
Combined total of the three plants	Hazardous industrial waste	Incineration	3.7918
		Other methods	—
	Regular industrial waste	Publicly declared reuse	—
		Incineration	1,275.942
		Other methods	15.360
	Subtotal	1,295.0938	

Note:

1. Since the Chiayi Plant began operations in February 2024, the waste statistics period is from February 2024 to December 2024.
2. All waste is 100% outsourced for off-site treatment; there is no on-site processing.

4.4.3 Air Pollution Prevention and Control

To implement air pollution control measures, our company prepares an air pollution control plan for each production process that involves a stationary pollution source designated and announced by the central competent authority. We then apply to the relevant authority for installation and operation permits, and conduct operations in accordance with the terms of the issued permits. In 2024, all air pollutants were discharged in compliance with relevant legal standards. In addition, none of the plants engage in combustion, grinding, transportation, or other operations that resulted in the generation of significant particulate pollutants to prevent air pollutants from being dispersed into the air. All plants are also required to take appropriate preventive measures against the placement, use, baking, and storage of organic solvents or other volatile substances in construction, granular stockpiles, and transportation of construction materials, wastes, or other work, so as to prevent the generation of offensive odors, and to ensure that pollution prevention equipment is maintained and operated in a proper manner.

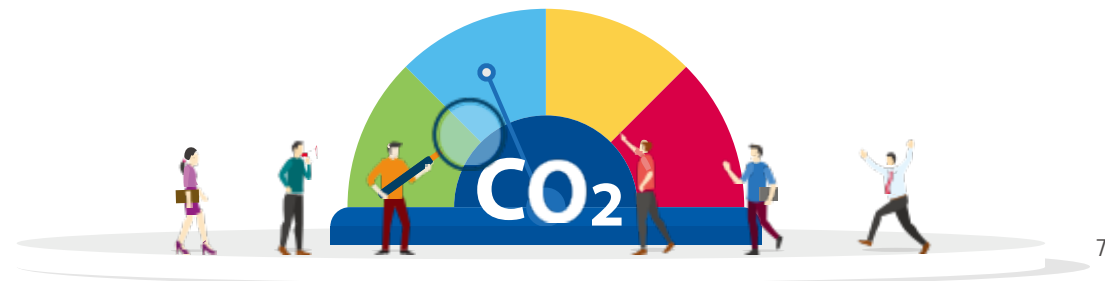
In terms of air pollution prevention, CHEM continues to invest in research and development to reduce direct emissions and fugitive pollutants from manufacturing processes, and to improve the efficiency of air pollution equipment for exhaust treatment to a level better than the legal standards.

Stationary Sources of Pollution at the Linkou Plant in the Past 3 Years (in kilograms)

Year	2022	2023	2024
Nitrogen oxides (NOx)	46.12	55.75	54.62
Sulfur oxides (SOx)	3.63	4.409	4.23
Volatile organic compounds (VOCs)	44,966.7	51,986.5	51,245.2

Source: Air pollution fees and emission declarations for stationary pollution sources

As shown in the table above, over the past three years, CHEM's stationary sources of NOx, SOx, and VOCs emissions have remained within a consistent range. CHEM will continue to monitor these emissions and gradually reduce air pollution levels, contributing its efforts to protect the environment.





4.5 Material Management

In order to minimize the impact of its operations on the environment and society, CHEM has built a green supply chain through multi-directional planning, including local procurement, green procurement, recycling, research and development of renewable energy, and banning the use of conflict minerals. In terms of raw material use, CHEM prioritizes products and suppliers granted with environmental labels certified by the Environmental Protection Administration, products that are reusable and recyclable, produce little pollution, and are resource-efficient, and suppliers certified with the Green Building Label to minimize the impact of the supply chain on the environment. From the stage of selecting suppliers, we have adopted the requirement that no conflict minerals from conflict zones should be included, and for existing suppliers, we proactively verify specific materials (gold, tantalum, tin, tungsten) and obtain signed conflict-free mineral declarations, or secure relevant statements, applying a due diligence approach to responsibly uphold our corporate social responsibility.



Weight of Materials Used by CHEM in the Past 3 Years (in metric tons)

Year	Renewable Material			Non-renewable Material				Total Material Used
	Carton Box	Wooden Pallet	Crate	Metalwork, Sheet Metal, Tubes & Pipes	Engine	Compressor	Others	
2022	10.70	15.72	0.00	1,120.77	594.00	13.00	253.32	2,007.50
2023	2.26	5.76	1.78	566.84	457.00	5.00	201.87	1,240.51
2024	3.1	7.89	2.44	776.57	626.09	6.85	276.56	1,669.5

Weight of Recycled Input Materials Used by CHEM in the Past 3 Years (in metric tons)

Year	Amount of Recycled Input Materials Used	Total Input Materials Used	Proportion of Recycled Input Materials Used
2022	26.42	2,007.50	1.3161%
2023	9.80	1,240.51	0.7900%
2024	13.426	1,699.5	0.7900%

Weight of CHEM's Reclaimed Products & Their Packaging Materials in the Past 3 Years (in metric tons)

Year	Amount of Reclaimed Products and Packaging Materials	Total Products Sold	Proportion of Reclaimed Products and Packaging Materials
2022	18.35	1,394.67	1.3157%
2023	10.01	1,266.69	0.7902%
2024	13.714	1,735.37	0.7903%

4.6 Green Products

CHEM's 2024 Approach to Green Products and Its Evaluation

Material Topic	Green Products	
Corresponding GRI indicators	Custom Topic	
Policies and commitments	Adhering to the beliefs of product and project quality as well as the promotion of green energy and environmental protection, we are committed to investing in the domestic green power generation infrastructure and actively promoting green products and services, such as the hydrogen energy series products and iCharging, in order to provide environmentally friendly products and services that comply with various environmental protection standards as our mission.	
Goals and objectives	Short-term	Actively promote green energy products and solutions to help customers save energy and reduce carbon emissions.
	Mid- and long-term	Support Taiwan's green energy industry by playing an important role in the government's vision of promoting energy security, a green economy and environmental sustainability.
Responsibilities and resources	The heavy electric industry is a key national industry. CHEM is one of the leading companies in Taiwan in terms of market share and related technologies. With its complete and leading GIS equipment product line, rich experience in green energy power generation projects and professional capabilities in grid integration, CHEM has the resources and strength to develop the green energy industry by combining key hydrogen energy technologies and solutions.	
Evaluation mechanism and results	Revenue contribution from green energy equipment or engineering >50%.	

CHEM's green products include: (1) heavy electrical products, which are sold directly to Taipower; (2) engineering services, which include wind power, hydroelectric, and solar power generation plans, as well as various types of EPC substations, hydroelectric systems, fire protection systems, and complete plant engineering projects; (3) new energy business, covering hydrogen energy, energy-as-a-service, and new energy commercial vehicles, offering comprehensive solutions and services; and (4) smart grids, including the related software and hardware equipment required for smart grid automation, technology integration, proprietary brand management, innovation and R&D, and strategic partnerships. CHEM is committed to enhancing energy efficiency and market competitiveness, promoting global low-carbon transition and sustainable energy development, and becoming a key player in the international new energy market. The output value of CHEM's green products in 2024 accounted for as much as 70.91% of total revenue.

1. Heavy electrical equipment

CHEM mainly produces products for power system protection, switching, regulation, power supply and metering purposes, including GIS (Gas-Insulated Switchgear), GCB (Gas Circuit Breaker), GCS (Gas-Insulated Switchgear), GIL (Gas Insulated Line), load start/stop switch (LBS), underground four-way automatic line switch, and so on. These products have passed Taipower's evaluation and have been widely used by IPP power plants, large scale public works, and large power users in the industrial sector. In particular, our company has won awards at the Executive Yuan's Public Construction Golden Quality Awards many times and recognition from Taipower for our excellent green construction sites. The quality of our products and projects is widely recognized and trusted by our customers.

CHEM has established the Power Engineering & Construction Division, which focuses on power generation, power transformation, electrical control, and automation engineering, in order to meet the needs of Taipower's wind, thermal, and solar power generation projects, hydroelectric power generation projects, substation projects, power plant renewal and expansion projects, and feeder automation projects, the Highway Bureau's E&M fire protection projects for highway tunnels, and large power users' or energy companies' substation construction projects.

- (A) Power generation: Since 2003, we have obtained the following new EPC projects for hydroelectric power, thermal power, solar power and wind power generation:
- a) Hydropower rehabilitation E&M projects: (9 units with a total installed capacity of 609.327MW)
 - b) New construction of thermal power generation: (6 units with a total installed capacity of 26MW)
 - Lanyu and Green Island Power Plant Units 3 and 4, each of 1,500 kW class, project awarded in 2022.
 - c) New construction of wind power: (85 units with a total installed capacity of 142.66MW)
 - New Construction of Yunlin Taisi Wind Turbines - 4 units with a total installed capacity of 9.2MW, scheduled for completion and inspection in August 2025
 - d) Construction, operation and maintenance of solar power plants
 - In line with the government's "Solar Power 2-Year Promotion Plan" and in support of the development of the green energy industry in Taiwan, TaiSugar has released non-arable land for the construction of solar power facilities. CHEM has acquired Area B in Tainan (Qigu) and installed solar power generation facilities, with a total installed capacity of 216.0576MWp. Since 2022, CHEM has been selling the power generated at that site. CHEM is required to provide 20 years of maintenance service for that site.
 - In 2022, CHEM was awarded the project for the procurement and installation of solar and wind turbines at Nuclear Power Plant No. 3, which requires the construction of solar power generation facilities with a total capacity of 45.9111MWp and wind power generation facilities with a total capacity of 12.6MW.



(B) Substation projects:

- a) The Datan Power Plant Expansion Project: completed and accepted in June 2025.
- b) The EPC Project for Upgrade of GIS in Switchyard of Kinmen Tashan Power Plant to 23kV: completed and accepted in February 2025.
- c) The T16F EPC Project for Lunbei Township Wind Farm in Yunlin County: the warranty period began in January 2024.
- d) Green Forever's Energy Storage Project for 161kV (200MW+100MV) booster station: warranty period for pipeline works, foundation platform (with buildings), and access facilities began on June 20, 2024; warranty period for electromechanical equipment (including but not limited to MTR, GIS and high-voltage switchgear enclosure, communication and fire protection facilities); Sen-Yung Machinery began warranty on June 20, 2024; Pao-Feng Machinery began warranty on June 20, 2024, and Shen He Xing began warranty on August 23, 2024.
- e) 161kV booster station and 161kV external pipeline under the Yunlin Douliu Taitron Energy Storage Project: completed and accepted on January 15, 2025.
- f) New 161kV reactor, GIS, cable, and auxiliary equipment for Meihu Line of Daitan Power Plant under the Offshore Wind Power Grid Enhancement Phase I Project: construction work started in September 2024.
- g) EPC project for new 161kV switchyard under the Tongxiao Power Plant Phase II Renewal and Reconstruction Plan – project awarded in January 2024.

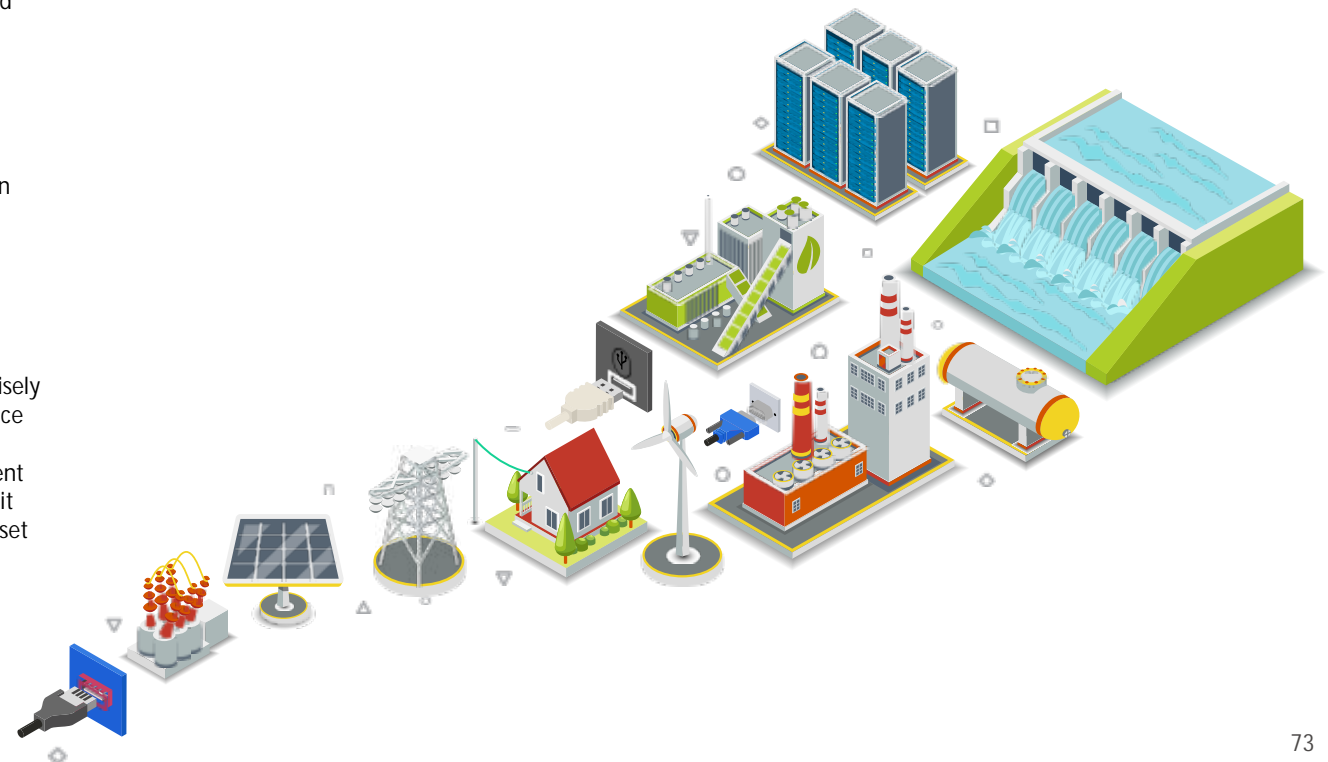
(C) Automation projects:

- a) EPC project for 345/161kV switchyard supervision and control (SCADA), protection and auxiliary power equipment under the Hsinta Power Plant Gas Unit Renewal and Construction Plan: completion and acceptance scheduled for July 2025.
- b) EPC project for 345/161kV switchyard supervision and control (SCADA), protection and auxiliary power equipment under the Taichung Power Plant Gas Unit Renewal and Construction Plan: completion and acceptance scheduled for September 2025.

Various types of generator sets designed and manufactured for different applications are all precisely tested using a computer-based testing system certified by the TAF, ensuring that their performance meets the requirements of the Republic of China or relevant international regulations. CHEM has been certified by Chunghwa Telecom as a manufacturer of generator sets below 1,800kW. In recent years, CHEM is moving towards the public works and flood control pumped-storage generator unit market, with the aim of diversifying operations and strengthening market share in the generator set sector.

2. Engineering

With comprehensive capabilities in manufacturing electromechanical and HVAC products, along with a professional team, CHEM integrates technologies such as generators, refrigeration and air conditioning, plumbing and fire protection, and instrumentation and control. We are actively expanding into the engineering markets for wind power, solar power, hydroelectric, and thermal power generation projects, electromechanical and fire protection engineering for highway tunnels, EPC substation projects, automation projects and integrated systems engineering. Only through our advanced technical expertise and strong project management and system integration skills have we been able to successfully deliver numerous major projects.





3. New Energy

(A) Hydrogen Energy

- a) On-site hydrogen production system: This is mainly used for hydrogen refueling stations, commercial logistics and hybrid vehicles in public transportation. With Taiwan as the demonstration site, CHEM is actively seeking overseas strategic alliance opportunities to promote the development of hydrogen energy infrastructure and enhance the breadth of market applications.
- b) Stationary generator set: CHEM's fuel cell generator sets have been used by various global telecommunications giants for over 10 years as backup power systems for base stations. Our market presence covers Taiwan, Japan, Malaysia, Thailand, Indonesia, South Africa and India. The new generation of products will further expand into data centers and AI factories, providing stable low-carbon backup power to meet the demand for long-duration, high-reliability power supply.

(B) Energy-as-a-Service

- a) EV fast charging services: Self-branded iCharging provides charging services to EV owners and one-stop installation and operation solutions to international car manufacturers. Currently with Taiwan as its base, iCharging has obtained the right to operate 16 highway charging stations and provides fast charging operation services to car manufacturers including BMW, Jaguar, Volvo and Tesla and is expanding its EV charging network by sharing the charging infrastructure with major charge point operators through charging roaming.
- b) Smart grid management: We focus on the integration of renewable energy, EV fast charging operation and offshore grid management. Taiwan is our main market for this business. We have implemented a Zero Carbon Demonstration Island plan on Donji Island of Penghu to maximize the use of renewable energy, reduce reliance on diesel fuel and enhance the stability of power grids in remote areas. In the future, we will, in line with the expansion of the new energy business, enter overseas markets to provide low-carbon smart energy management solutions.
- c) New energy commercial mobility vehicle: Light-weight hydrogen-powered motorcycles and EVs: End-to-end solutions for hydrogen power systems, full vehicle development, and hydrogen refueling station infrastructure are provided for commercial logistics, government vehicles and public transportation through self-branded Stellar, so as to support the global transition to low-carbon mobility.

4. Smart Grid

Our products cover software and hardware equipment required for smart grid automation, including: SCADA platform iFlex-EMS, RTU DS-32C, DS-32E FRTU IEDG, and FTU iPAC-CN. Our power automation equipment can be used in the dispatch center for power system monitoring and dispatching, and for substation automation and feeder automation projects, and is integrated with the Power CC power automation platform from international power company Siemens and the PACis power automation platform from French Alstom, as demonstrated by their implementation in Taiwan's major large-scale power plants and substations, such as the switchyard SCADA systems for Datan Power Plant, Xiehe Power Plant, Nuclear Power Plant No. 4 and various IPP power plants, as well as 19 primary substations, four ultra-high-voltage substations, two distribution centers, and many wind/solar power plants.



5 Friendly Workplace



5.1 Happy Workplace

5.2 Compensation & Benefits

5.3 Learning & Development





5. FRIENDLY WORKPLACE (2-7, 2-8, 2-30, 401, 404, 405-1)

Material Topic		2024 Approach	2024 Implementation Results
1	Occupational health and safety	<ul style="list-style-type: none">Embed a strong culture of occupational health and safety risk management throughout the organizationEstablish a safe workplace by continuously implementing source management of machinery and equipment to eliminate unsafe hazard factors	<ul style="list-style-type: none">The number of consultations with occupational physicians has reached 112 times.97% of employees have done a health checkup.Before purchasing machinery in 2023, equipment safety inspections should be based on IEC or IEEE standards.Vaccination coverage has increased, protecting nearly 2,000 families and maintaining 100% health.
2	Talent recruitment and retention	<ul style="list-style-type: none">For external talent, discover and nurture them by strengthening campus engagement and opening up diverse pathwaysFor internal talent, establish smooth communication and referral channels, and encourage cross-disciplinary and cross-sector collaboration to promote long-term talent retention	<ul style="list-style-type: none">Compared to 2023, the personnel replenishment rate decreased by 6.01%.The employee turnover rate slightly increased by 1.3%.
3	Talent development and training	<ul style="list-style-type: none">Conduct unit performance appraisals and ensure fairness and impartiality in performance assessmentMultidisciplinary talent development.Training with a simultaneous focus on social responsibility	<ul style="list-style-type: none">The Company promoted gender equality by providing both female and male employees with equal opportunities for promotion, ensuring no gender-based restrictions on career development.The curriculum emphasized both general education and specialized training to achieve diversified development.The annual training plan achievement rate reached 100%, with an increase in average training hours compared to 2023.Energy saving, carbon reduction, waste reduction, and emission reduction were the main themes of all training and proposal incentives.

Declaration of Respect for Human Rights

We respect the human rights of our employees, contractors, temporary employees, customers, suppliers and community and are guided by the United Nations Global Compact, the United Nations Guiding Principles on Business and Human Rights (UNGPR), the RBA, the International Labor Organization (ILO), and local laws. Based on the principle of fair treatment and respect for individual differences, we have formulated a "Code of Conduct on Corporate Social Responsibility for Suppliers" to require our suppliers or service providers to adhere to it and provide a safe and healthy working environment for all of our stakeholders.





We commit to the following:

1	Prohibiting human trafficking, forced labor and child labor	<ul style="list-style-type: none">During the recruitment stage, applicants are required to present their original ID cards with a photo and academic credentials during the interview to confirm their identity, so as to ensure they are not underage workers, and verify that they are not engaged in any form of involuntary labor. In addition, the purpose and need for recruitment are solely for manpower supplementation within CHEM and are not intended for manpower outsourcing, transfer, or any other illegal purposes.Compliance with labor laws, collective agreements, and related regulations is observed to ensure that employees work under legally compliant labor conditions and environments.
2	Protecting the right to freedom of association and collective bargaining	CHEM respects employees' rights to freedom of association and collective bargaining, and to participate in peaceful assemblies in accordance with local laws.
3	Equal employment Opportunity, treatment and non-discrimination	CHEM recognizes diversity and equal opportunity and does not discriminate in hiring or treatment on the basis of nationality, race, color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religious belief, political affiliation, association membership, or marital status.
4	Combating inhumane treatment and harassment	CHEM prohibits harsh and inhumane treatment of employees, including any form of sexual harassment, any form of harassment, bullying, sexual assault, corporal punishment, mental or physical oppression, or verbal abuse, or the threat of any such behavior. The Company provides a channel for employees to file complaints regarding human rights, labor, sexual harassment, harassment of any kind, bullying, etc. The Human Resources Department will handle the complaints and supervise the responsible unit to handle the cases as scheduled and propose improvement plans. In the case of sexual harassment, the Sexual Harassment Complaint Handling Committee will evaluate whether the case is substantiated or not, and the related personnel will be penalized according to the severity of the case.
5	Providing a safe and healthy workplace	CHEM follows the international environmental safety management system to build a healthy and safe environment and reduce occupational incidents.
6	Meeting customer requirements	CHEM regularly reviews and evaluates customer requirements, related systems and practices, and updates management approaches as needed.

Education and Training on Human Rights Policy

During onboarding training for new employees, CHEM enhances awareness of its human rights policy; all directly hired security personnel receive training on such policy.

5.1 Happy Workplace

5.1.1 Workforce Structure Analysis

The diverse abilities and creativity of employees are the fundamental driving force for the sustainable development of an enterprise. CHEM takes care of its employees and their families as its first mission, hoping to create a workplace with diversity, inclusiveness and happiness, and to provide employees with abundant resources so that they can show their talents and make progress together with the Company.

As of the end of 2024, CHEM had a total of 1,919 employees, including 225 supervisors/managers and 1,664 non-managerial employees. Due to the nature of the industry and the technical nature of the job roles—primarily engineers and technical operators—male employees accounted for 79.57% of the workforce (1,527 individuals), while female employees made up 20.43% (392 individuals). A total of 1,724 employees were of Taiwanese nationality, accounting for 89.84%, and 195 employees were foreign employees, accounting for 10.16%. In addition, 186 migrant workers were employed through intermediaries, five industrial trainees were employed through industry-academia cooperation, and 17 university interns were employed.





Information on CHEM Employees and Other Workers

Year	Major Category		Male				Female				Subtotal	
			Domestic		Foreign		Domestic		Foreign		No. of people	Percentage
			No. of people	Percentage	No. of people	Percentage	No. of people	Percentage	No. of people	Percentage		
2022	Employment contract	Non-fixed term	1,252	71.71%	4	0.23%	328	18.79%	0	0.00%	1,584	90.72%
		Fixed-term	35	2.00%	115	6.59%	5	0.29%	7	0.40%	162	9.28%
		Subtotal	1,287	73.71%	119	6.82%	333	19.07%	7	0.40%	1,746	100.00%
	Type of employment	Full-time	1,275	73.02%	119	6.82%	332	19.01%	7	0.40%	1,733	99.26%
		Part-time	12	0.69%	0	0.00%	1	0.06%	0	0.00%	13	0.74%
		Subtotal	1,287	73.71%	119	6.82%	333	19.07%	7	0.40%	1,746	100.00%
	Type of employee	Directly employed	575	32.93%	117	6.70%	61	3.49%	6	0.34%	759	43.47%
		Indirectly employed	712	40.78%	2	0.11%	272	15.58%	1	0.06%	987	56.53%
		Subtotal	1,287	73.71%	119	6.82%	333	19.07%	7	0.40%	1,746	100.00%
2023	Employment contract	Non-fixed term	1,313	69.14%	3	0.16%	357	18.80%	0	0.00%	1,673	88.10%
		Fixed-term	61	3.21%	149	7.84%	7	0.37%	9	0.48%	226	11.90%
		Subtotal	1,374	72.35%	152	8.00%	364	19.17%	9	0.48%	1,899	100.00%
	Type of employment	Full-time	1,343	70.72%	152	8.00%	360	18.96%	9	0.48%	1,864	98.16%
		Part-time	31	1.63%	0	0.00%	4	0.21%	0	0.00%	35	1.84%
		Subtotal	1,374	72.35%	152	8.00%	364	19.17%	9	0.48%	1,899	100.00%
	Type of employee	Directly employed	596	31.38%	149	7.85%	77	4.06%	9	0.48%	831	43.77%
		Indirectly employed	778	40.97%	3	0.15%	287	15.11%	0	0.00%	1,068	56.23%
		Subtotal	1,374	72.35%	152	8.00%	364	19.17%	9	100.00%	1,899	100.00%
2024	Employment contract	Non-fixed term	1,301	96.37%	3	1.69%	359	95.99%	0	0.00%	1,663	86.66%
		Fixed-term	49	3.63%	174	98.31%	15	4.01%	18	100.00%	256	13.34%
		Subtotal	1,350	100.00%	177	100.00%	374	100.00%	18	100.00%	1,919	100.00%
	Type of employment	Full-time	1,330	98.52%	177	100.00%	371	99.20%	18	100.00%	1,896	98.80%
		Part-time	20	1.48%	0	0.00%	3	0.80%	0	0.00%	23	1.20%
		Subtotal	1,350	100.00%	177	100.00%	374	100.00%	18	100.00%	1,919	100.00%
	Type of employee	Directly employed	535	39.63%	176	99.44%	65	17.38%	18	100.00%	794	41.38%
		Indirectly employed	815	60.37%	1	0.56%	309	82.62%	0	0.00%	1,125	58.62%
		Subtotal	1,350	100.00%	177	100.00%	374	100.00%	18	100.00%	1,919	100.00%

Current Workforce Structure

Year	Nationality	Male		Female		Subtotal	
		No. of people	Percentage	No. of people	Percentage	No. of people	Percentage
2024	Taiwanese	1,350	70.35%	374	19.49%	1,724	89.84%
	Vietnamese	119	6.20%	16	0.83%	135	7.03%
	Thai	33	1.72%	2	0.10%	35	1.82%
	Indonesian	25	1.30%	-	-	25	1.30%
	Total	1,527	79.57%	392	20.43%	1,919	100.00%





5.1.2 Talent Recruitment and Staff Retention

In 2024, CHEM had a total of 326 new employees including 268 males and 58 females. As for staff retention, the turnover rate for 2024 was approximately 11.67% (slightly increased by 1.3%, compared to 10.37% in 2023), all of which was voluntary departure. The Company will continue to strengthen work-life balance, enhance the competence of supervisors and provide employees with career development opportunities to promote employee retention.



Note:

1. Percentage of new employees = Number of new employees in each category/Total number of employees at the end of the period in that category
2. Percentage of departed employees = Number of departed employees in each category/Total number of employees at the end of the period in that category

New and Departed Employees by Age Group and Gender

Year	Category	Age Group	Male		Female		Subtotal	
			No. of people	Percentage	No. of people	Percentage	No. of people	Percentage
2022	New employee	18–30	119	41.32%	25	47.17%	144	42.23%
		31–50	104	16.43%	29	15.85%	133	16.30%
		51 and above	43	8.87%	5	4.81%	48	8.15%
	Subtotal		266	18.92%	59	17.35%	325	18.61%
	Departed employee	18–30	55	19.10%	15	28.30%	70	20.53%
		31–50	76	12.01%	14	7.65%	90	11.03%
		51 and above	45	9.28%	10	9.62%	55	9.34%
	Subtotal		176	12.52%	39	11.47%	215	12.31%
2023	New employee	18–30	181	52.46%	32	50.00%	213	52.08%
		31–50	120	17.34%	35	17.41%	155	17.36%
		51 and above	37	7.57%	7	6.48%	44	7.37%
	Subtotal		338	22.15%	74	19.84%	412	21.70%
	Departed employee	18–30	69	20.00%	14	21.88%	83	20.29%
		31–50	55	7.95%	17	8.46%	72	8.06%
		51 and above	38	7.77%	4	3.70%	42	7.04%
	Subtotal		162	10.62%	35	9.38%	197	10.37%
2024	New employee	18–30	129	36.34%	23	32.86%	152	35.76%
		31–50	100	14.56%	21	10.40%	121	13.61%
		51 and above	39	8.04%	14	11.67%	53	8.76%
	Subtotal		268	17.55%	58	14.80%	326	16.99%
	Departed employee	18–30	68	19.15%	15	21.43%	83	19.53%
		31–50	73	10.63%	10	4.95%	83	9.34%
		51 and above	50	10.31%	8	6.67%	58	6.52%
	Subtotal		191	12.51%	33	8.42%	224	11.67%



5.1.3 Workplace Equality and Inclusive Employment

In order to create a diversified and inclusive employment environment, CHEM employed 27 people with disabilities in FY2024 (accounting for 1.41% of the total employees), exceeding the required quota by 5. In addition, in order to encourage senior colleagues to pass on their work experience, give full play to their self-worth, and bring more energy to the Company, after being selected by the Taoyuan City Government as an "excellent enterprise continuing to employ elderly people in 2021" for hiring 11 employees who turned 65 years old in 2021. CHEM hired another 15 employees who turned 65 years old in 2023 and 16 more in 2024 within the same age group. In addition, 186 migrant workers were hired through intermediaries; five industrial trainees and 17 senior-year interns were hired through industry-academia cooperation. Six of those interns then became permanent employees.



Designing job roles to suit employee needs

In order to provide barrier-free employment for employees with disabilities, improvement of work equipment and design of related assistive tools have been carried out to help those employees better perform their tasks. In addition, suitable job duties are assigned to those employees, and they are given equal opportunities for promotion as ordinary employees.

Providing opportunities and stabilizing employment

Employees with disabilities work in different departments or workplaces, and if they have any issues in terms of their adaptability to the work environment or work conditions or encounter any difficulties at work, the Company's occupational health and human resources teams will provide timely care and assistance.

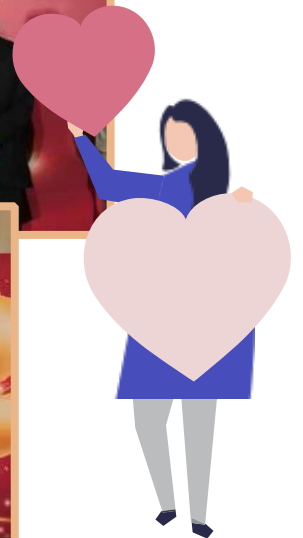
Recognizing job performance to create a win-win situation

The Company's employees with disabilities perform well and are able to work harmoniously with other staff. They demonstrate stable work performance and a diligent, appreciative attitude. By placing them in the right positions and fully leveraging their strengths, a win-win outcome can be achieved.



5.1.4 Recognition as a Happy Enterprise

In 2019, nearly 9,000 office workers voted for the happiest companies in the online "Survey on Happiness in the Manufacturing and Construction Brokerage Category" organized by 1111 Job Bank. CHEM was voted as one of the top 20 happy companies in the precision machinery category of the manufacturing industry. In 2024, CHEM was once again awarded the Gold Award in the Manufacturing Industry category of the "2024 Happy Enterprise" voting event organized by 1111 Job Bank. The Company's dedication to building a happy and friendly workplace has received widespread recognition from office workers.





5.2 Compensation & Benefits

CHEM's 2024 Approach to Compensation and Benefits and Its Evaluation

Material Topic	Compensation and Benefits	
Corresponding GRI indicators	GRI 401 Labor-Management Relations	
Policies and commitments	The Company has established a sound compensation and reward system to ensure that employees are rewarded for their abilities and performance through appropriate salary, compensation, bonuses and benefits.	
Goals and objectives	Short-term	<ul style="list-style-type: none">Timely adjust and enhance benefits based on the current year's performance.Increase maternity allowance, organize diversified welfare activities and invite participation of employees' family members, and promote interactive learning among families and departments.Make timely comparisons and adjustments based on the salaries offered in the relevant industries, so as to match the salary levels in the market and ensure the Company's competitiveness.
	Mid- and long-term	<ul style="list-style-type: none">Include more performance evaluation items and assess the salary adjustment rate based on the overall performance, so as to enhance employee satisfaction and foster greater team cohesion.Introduce new benefits to respond to the needs of employees.
Responsibilities and resources	HR Unit of the Management Division	
Evaluation mechanism and results	With benefits better than those required by the Labor Standards Act, CHEM was again honored with the "Gold Award" in the Manufacturing Industry category of the "2024 Happy Enterprise" program organized by 1111 Job Bank.	

5.2.1 Payroll Management

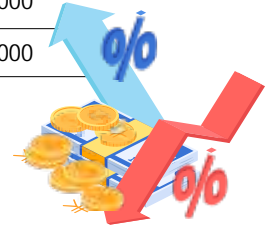
In addition to the annual salary adjustments for employees with outstanding performance, CHEM made salary adjustments for all employees in 2020 and 2022, in view of the year-on-year increase in the price level in recent years and in order to improve the living standards of its employees. Founded over 70 years ago, CHEM has a complete salary, benefits, and retirement system. The Company takes care of its employees and their families as its first duty, and offers competitive salaries to recruit and retain talent needed for its operations. CHEM emphasizes the value of equal pay for equal work, and there is no disparity in salary between employees based on gender, and the ratio of basic salary and compensation between men and women in 2024 was 1:1, which is in line with the Company's policy of equal pay.



Average & Median Salaries of CHEM's Full-Time Employees of Non-Supervisory Positions

Year	2022	2023	2024
Average salary	NT\$870,000	NT\$907,000	NT\$942,000
Median salary	NT\$769,000	NT\$773,000	NT\$828,000

Note: Non-supervisory positions refer to positions below the managerial level.



Average Monthly Salary of CHEM's Rank-and-File Employees

Salary	Gender	2022	2023	2024
Average standard salary of rank-and-file staff	Male	NT\$34,395	NT\$34,041	NT\$35,689
	Female	NT\$34,632	NT\$34,321	NT\$35,607
Average standard salary of rank-and-file staff/local minimum wage	Male	1.362	1.289	1.299
	Female	1.372	1.300	1.296

Note: 1. The local minimum wages in 2022, 2023 and 2024 were NT\$25,250, NT\$26,400 and NT\$27,470, respectively.

2. The standard salary of rank-and-file staff (i.e., associate engineers and below) includes regular production bonuses, but excludes special bonuses.

Females as CHEM's Mid-Level and Senior Executives

Year	2024
Mid-level	12.1%
Senior	16.5%

Note:

- Senior executives are directors (including deputy directors) and above.
- Mid-level executives are managers and deputy managers.
- Calculation formula: Number of female executives at each level/Total number of female and male executives)

Local Residents Employed as CHEM's Senior Executives

Year	2022	2023	2024
Total number of senior executives	31	36	35
Number of local residents employed as senior executives	31	36	35
Percentage	100%	100%	100%

Note: 1. Senior executives are directors (including deputy directors) and above.

2. Main business locations and local residents are those within Taiwan.

5.2.2 Labor-Management Relations

Smooth Communication Channel

In order to promote harmonious labor-management relations, CHEM holds four labor-management meetings per year and has set up an Employee Grievance Mailbox for employee complaints on the Company's internal website, among other communication channels, to understand the needs of employees and respond to their expectations.

CHEM regularly holds labor-management meetings with its enterprise union in accordance with Article 83 of the Labor Standards Act, and may convene interim meetings when necessary. The labor-management meetings engage in two-way communication and negotiation on issues such as promoting labor-management cooperation, coordinating labor-management relations, improving working conditions, and planning labor welfare. On February 26, 1979, the Company entered into a collective agreement with its enterprise union to promote labor-management harmony and enhance labor welfare, and to discuss labor-management issues such as members' working conditions, welfare measures, occupational safety, and the enterprise union's events and operations. Subsequently, upon the expiration of each collective agreement, both parties negotiate and sign a new collective agreement, and the latest collective agreement was signed on October 15, 2024 and is valid for three years from the date of signing. In 2024, the total number of employees covered by the collective agreement signed by the Company's enterprise union was 1,471, which accounted for 76.65% of the total number of employees.

For employees not covered by the collective agreement, CHEM implements the provisions of Article 13 of the Collective Agreement Act, which states that "without justifiable reasons, the working conditions agreed upon in a collective agreement may not be changed for workers not covered by the collective agreement." Additionally, statutory labor rights are used as the baseline for employment conditions.

The Company's senior executives participate in the enterprise union's activities twice a year to fully communicate with colleagues and resolve work-related issues. In addition, there are an Employee Grievance Mailbox and an Anonymous Reporting Mailbox for employees to raise any issues related to work, management, environment, etc. in a protected manner and all complaints are directly received and replied to by senior executives. For the Anonymous Reporting Mailbox, which was set up in 2023 and can be accessed by clicking on the link on the Company's external website (<https://www.chem.com.tw/tc/contact.aspx>), 152 complaints were received in 2023, all of which have been resolved. In 2024, a total of 114 complaints were received, a 25% decrease compared to 2023, and all those complaints were addressed and improvements implemented.

CHEM values employees' feedback to the Company and therefore conducts employee satisfaction surveys every year. The surveys cover a variety of topics such as satisfaction with job duties and work environment, interaction with coworkers and supervisors, sense of accomplishment at work, and outlook on the future development of the Company. The feedback from employees serves as a reference for continuous improvement or adjustment of the labor-management communication. The following is the actual implementation situation in the past three years. Statistical data shows that employees' satisfaction with the Company has been increasing year by year.

Employee Satisfaction Survey in the Past 3 Years

Year	2022	2023	2024
Average score	3.96	4.13	4.12

Note: Full score is 5 points.

Protection of Labor Rights

CHEM Human Rights Policy — Prohibition of employment discrimination, forced labor, and child labor

CHEM attaches importance to human rights and treats all employees and job applicants fairly and respectfully, regardless of their race, religion, color, nationality, family origin, political affiliation, ideology, place of birth, age, gender, sexual orientation, marital status, appearance, physical or mental disability, union membership, etc. CHEM strictly prohibits (i) undue discrimination in hiring and employment, (ii) the hiring of child labor under 16 years of age, and (iii) forced labor. Suppliers are also required to follow relevant international standards.

In addition, the Company has established "Sexual Harassment Prevention Measures, Grievance Procedures, and Disciplinary Regulations" to prohibit any sexual harassment in the workplace and to maintain a safe and healthy working environment, and these measures, procedures and regulations can be found on the Company's website. Annual training is regularly conducted for supervisors at the deputy manager level and above. The courses emphasize topics and case studies related to workplace misconduct and the prevention of sexual harassment, aiming to enhance supervisors' basic awareness, sensitivity, and observational skills in the workplace. This helps create a healthy and safe working environment for employees.

At the end of 2021, CHEM started the planning to introduce the RBA Code of Conduct in some departments such as Precision Machinery Factory No. 2 and the Nanke Plant, and underwent the Customer Managed Audit (CMA) in 2022 to ensure that the departments comply with the RBA Code of Conduct, and that the Company can protect labor rights, maintain employees' health and safety, and establish a management system that complies with environmental and ethical norms.

In 2024, the Company and its suppliers did not encounter any significant risks or incidents involving the use of child labor or forced labor. There were also no violations of employees' rights to freedom of association and collective bargaining, and no major labor disputes.

Labor-Management Relations

If the Company is about to undergo a significant change in its operations that may seriously affect the labor conditions of its employees, it will, in accordance with Article 16 of the Labor Standards Act, give the minimum notice period for termination of labor contracts in order to protect the employment rights of its employees and to minimize the impact on them. During the reporting period, there were no significant changes in the Company's operations.

5.2.3 Multiple Benefits

In order to provide employees with a safe and healthy workplace, CHEM has taken great care to create a place where employees can truly work happily. The Employee Support Program helps solve problems related to work, life and health that may affect the work efficiency of our employees, so that they can devote themselves to their work with a healthy body and mind. CHEM has launched the Employee Support Program since 2016 and has established a warm and caring work environment through a wide range of supplementary measures in the areas of health care, medical care, law, tax, finance, and childcare to improve the overall quality of work and life and level up the employees' sense of unity and cohesion towards the Company.

CHEM provides a comprehensive welfare system for full-time employees. In addition to basic rights such as labor and health insurance, annual leave, maternity leave, and parental leave, CHEM also provides life insurance, medical insurance, disability insurance, pension, emergency assistance, wedding and childbirth gifts, funeral subsidies, and dormitories for employees, as well as subsidies for parental leave and children's scholarships, and allocates welfare funds in accordance with the law. In order to continuously strive for the welfare of employees, an Employee Welfare Committee has been formed consisting of labor and management representatives, and each employee is entitled to approximately NT\$20,000 in welfare funds per year. CHEM also provides employees with more support and care in the areas of family life, learning and growth, creating a healthy and friendly workplace and continuously enhancing their loyalty towards the Company.

For example, we provide exclusive parking spaces for pregnant employees, offer occasional consultation and care from the in-house nurses, and have breastfeeding rooms. Leisure equipment is placed on each building of the Company to provide employees with the opportunity to relax in teams or individually after work. We sympathize with our employees for their overtime work, and increase the overtime incentives to a level higher than the legal requirements. The Company has installed a large number of lighting/surveillance equipment to ensure employees' safety at work. Health information is announced from time to time based on employees' occupational health inquiries. Our workforce is safeguarded through the joint efforts of in-house nurses and management.

CHEM's Total Cost of Employee Salary and Benefits in the Past 3 Years

2022	2023	2024
NT\$1,783,543,081	NT\$1,843,638,822	NT\$2,104,284,347

Note: The total cost of employees' salaries and benefits in 2024 increased by NT\$260,645,525 (14.14%) compared to 2023.

CHEM's Employee Welfare

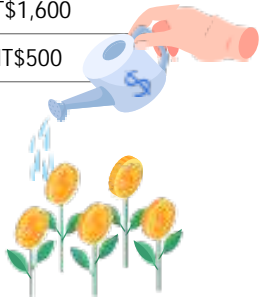
1. Life Balance

- Birthday Cash Gift:** Employees who have been on the job for one year or more will receive a birthday cash gift of NT\$2,000 per year.
- Travel Subsidy:** Domestic and overseas travel subsidy: NT\$2,000 for those who have been on the job for more than one year but less than two years; NT\$4,000 for those who have been on the job for two to under three years; and NT\$6,000 for those who have been on the job for three years or more.

2. Family Care

- Flexible Work Hours:** Employees can apply to have flexible work hours and adjust their work hours freely to accommodate family needs or child drop-off and pick-up schedules.
- Childcare:** We have signed a childcare contract with authorized childcare organizations in our vicinity (located in Guishan District of Taoyuan City and Linkou District of New Taipei City), and in addition to offering discounts to our colleagues, we also visit those organizations from time to time to check the childcare conditions so as to give our colleagues peace of mind about their children.
- Scholarship:** A scholarship for employees' children is provided once each in the first and second semesters every year.

Subsidy Levels for Scholarships and Grants to Employees' Children			
Category	Graduate School and College/University	Senior High School	Junior High School
Scholarship	NT\$3,200	NT\$2,400	NT\$1,600
Grant	NT\$800	NT\$600	NT\$500



3. Health Promotion

- **Vaccination:** We encourage employees to get vaccinated to increase protection, and invite external health units to the factories to administer vaccines to employees.
- **Health Promotion Activities:** CHEM has a diversified range of work modes, and we expect our colleagues to have more joyful interactions while they are engaged in their work. The smiles in the eyes and on the faces of our colleagues have always been the most important thing we care about, and it is also the goal we strive for, and even if it is just for a short time, it will form a long-lasting memory, so that we can have a family-like emotion and warmth.

Annual planning and implementation of employee health promotion programs, including: employee health screening, smoking cessation, weight loss, health seminars, stress relief activities and other activities to promote employee health.

- Indoor stretching and stress relief activities: Hire a professional fitness coach to guide both sedentary office workers and physically active staff through a series of stretching exercises designed for limited spaces.
- Massage therapy by visually impaired professionals to relax muscles and joints: Invite professional massage therapists to provide stress-relief massages for employees, helping to alleviate work-related stress and promote muscle relaxation, while also establishing a cooperative partnership with charitable organizations
- **Fitness Classes:** In addition to a contracted gymnasium, we offer online and in-person fitness classes, making exercise more diverse and convenient.
- Weight loss campaign: The medical office is equipped with a body fat scale to facilitate regular weight management discussions with colleagues. Through weight loss activities, it assists overweight employees in controlling their weight, continuously promoting effective weight management, establishing and maintaining healthy eating habits, and encouraging the development of regular exercise routines.

During the activity period, correct weight loss information was emailed to individuals employee every week. For foreign employees, translation assistance from the employment agency is provided during weight measurement.

In 2024, the number of participants increased by 29% and the total weight loss increased by 127%. This provides meaningful encouragement for our colleagues to manage their weight and helps cultivate a culture that promotes healthy weight loss.

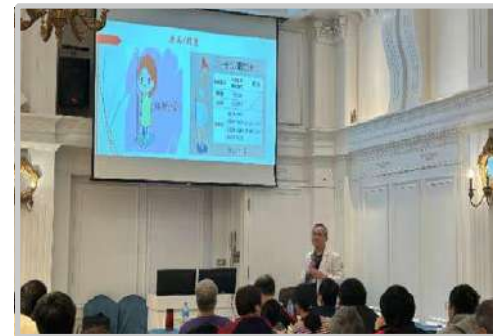
Vaccination



Stretching and stress relief



Health promotion



Massage therapy

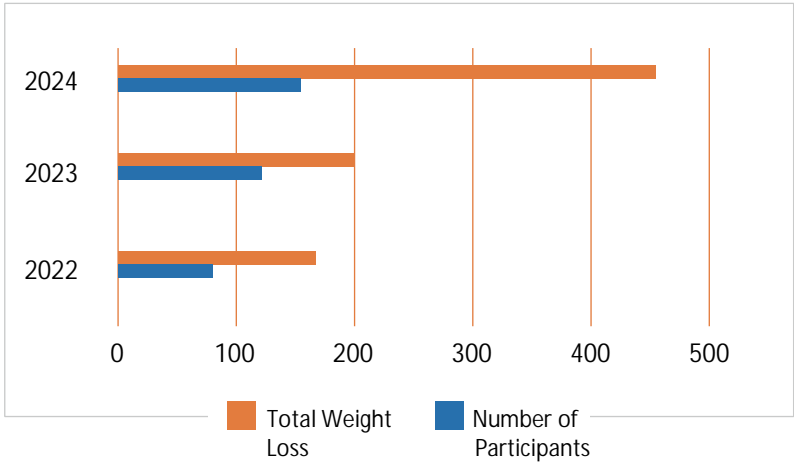


Fitness class



Year	Number of Participants	Total Weight Loss
2022	90	166.3 KG
2023	116	199.7 KG
2024	150	452.7 KG

Weight Loss Results



- Stress relief corner – a corner for colleagues to unwind and have fun:** Advocating more movement and more water intake, the Company has installed adequate drinking water facilities at each office and created a recreational corner featuring a basketball machine, soccer machine, pool table, and a play area, where employees can take breaks to relax, unwind, or enjoy light activities such as badminton.
- CHEM's 2nd Singing Competition:** The 2nd Singing Competition encouraged colleagues to break free from traditional singing conventions by incorporating creativity, humor, and physical dance performances. This allowed colleagues not only to showcase their vocal talents through music but also to explore and express different dimensions of performing arts, bringing joy and happiness to the workplace. Colleagues could also team up to win prize money together.
- Optimizing the workplace – a green miracle:** To cultivate a vibrant and nature-connected workspace, basic indoor potted plants were used to enhance the surroundings. Colleagues from various departments were encouraged to brainstorm and actively participate in the optimization process, fostering emotional connection among coworkers and strengthening ties with the environment, thereby creating a space filled with warmth.

Weight loss results



Stress relief corner



CHEM's 2nd Singing Competition



Optimizing the workplace



Emotional connection

- Christmas feedback poll and group photo event
- Emotion connection — festive activity — Gathering to eat sweet rice dumplings on the Winter Solstice, warming the heart and the stomach. In this traditional festival, we gathered together to warmly greet one another and enjoy sweet rice dumplings together.

4. Club Activities

- Diversified clubs: Currently, we have a bowling club, a badminton club, a hiking club, a billiard club, a charity club, a women's club and other clubs, which combine the resources and facilities of the community to encourage employees to participate in leisure.
- Club activities not only help relieve stress and promote physical exercise, but also enhance interaction and familiarity among colleagues from different departments, promoting mutual care, mutual assistance and teamwork. Employees' family members are welcome to participate in club activities so as to promote parent-child communication in addition to enhancing physical activity and life skills.

Club	Description
Hiking Club	Organize various hiking and trekking activities to embrace nature.
Dance Club	Primarily focused on studying ballroom dance and other social dances.
Badminton Club	Develop team spirit by playing with each other, and improve skills by playing friendly matches with other companies.
Bowling Club	Organize bowling tournaments for bowling enthusiasts to enhance their friendship.
Shrimp Fishing Club	Promote friendship and stress relief through shrimp fishing activities
Cycling Club	Cycling as the foundation of exercise routine and friendly interaction with other cycling groups
Billard's Club	Promote interaction among colleagues of different departments by learning from each other and improving their skills.
Women's Club	Enhance women's life skills, cultivate women's intellectual charm and personal value, and organize activities such as beauty care, handmade soap, dried flower art, and culinary skills sharing.
Coffee Lovers' Club	Learn, research and exchange all kinds of coffee knowledge and brewing techniques, and savor the mellow flavor of coffee with fellow coffee drinkers.
Charity Society	Identify individuals/families (regardless of nationality) in need of help, and provide care and assistance through donations and visits: gather the small love of colleagues into the power of greater love, and bring sunshine-like warmth to families trapped in dark corners due to poverty and illness.

Christmas feedback poll and group photo event



Gathering to eat tangyuan on the Winter Solstice





- Charity Society: It solicits donations and gathers the love of everyone to help underprivileged groups
- Hiking Club: Colleagues are encouraged to engage in travel activities such as mountain climbing, ocean viewing, and playing in the waves—whether it is hiking up into the mountains or trekking along the coastline—each moment of teamwork and companionship not only promotes physical and mental health, but also strengthens the bonds of friendship among colleagues.
- Bowling Club: The club is always full of laughters and consists of members of different generations. The club leader is very warm-hearted and always prepares famous delicious foods for members to try after the bowling game. Members can even team up to compete for prize money, and after the match, enjoy fun games and lucky draws—it always drives everyone wild.
- Shrimp Fishing Club: The club regularly organizes competitions to allow colleagues to engage in fishing activities during their leisure time to exchange skills and have fun, helping them relax and boost their energy.
- Women's Club: The club organizes a variety of handicraft activities such as baking and making earring charms, allowing colleagues to relax while enhancing their skills and confidence.
- Badminton Club: This is the most adrenaline-pumping and sweat-inducing club as badminton is an activity that increases one's focus and burns lots of body fat. A match is organized every season to keep physical training uninterrupted and enhance team harmony.

Badminton Club



Charity Society



Hiking Club



Bowling Club



Women's Club



5. Talent Recruitment

- Talent referral: In order to encourage employees to recommend excellent talent to join the Company, we offer a talent recommendation bonus of NT\$3,000.
- Staff dormitory: The Company provides accommodation for colleagues relocating from other regions.

6. Retirement

- CHEM's retirement system is governed by the Labor Standards Act and the Company's Employee Work Rules, and two types of retirement are available: voluntary retirement and mandatory retirement.
- In compliance with the law, the Company contributes 2% of the total monthly payroll as pension fund and deposit it into a dedicated trust account with the Bank of Taiwan's Trust Department, and pays pensions to retired employees in accordance with relevant regulations.
- For those who are subject to the new pension scheme under the Labor Pension Act, a monthly contribution of 6% of their wages will be deposited in the Individual Labor Pension Account set up by the Bureau of Labor Insurance in accordance with the law.

7. Subsidy & Benefit

- Meal subsidy: NT\$45 for ordering a meal at noon in the Company, and meals are provided in the evening and during holiday overtime hours.
- Medical subsidies: Employees hospitalized for more than three days will be provided with a condolence payment of NT\$1,000. For those hospitalized for more than 7 days due to illness or injury, a daily consolation payment equal to half of their daily wage will be provided. Additionally, medical subsidies for hospitalization are available for the individual employee or their dependents, with a maximum subsidy of NT\$10,000.
- Childbirth subsidy: Employees receive NT\$10,000 for the birth of their first child and NT\$8,000 for the birth of each additional child.
- Death benefit: NT\$5,000 for the death of the employee and NT\$2,500 for the death of the employee's dependents.

5.2.4 Gender Equality
Maternal Health Protection Program

Since its establishment 70 years ago, CHEM has continuously revised its salary and benefit system to fully protect the rights and interests of its employees. In order to advocate SDGs Goal 5 of Gender Equality, all salaries, benefits, positions, and promotions do not differ based on gender, thus realizing gender equality in the workplace. In addition, in order to implement the maternity protection policy, we provide individual health consultations and personalized hazard assessments for female employees who are planning pregnancy, currently pregnant, within one year postpartum, or breastfeeding, and assist them in improving their work environment when necessary. At the same time, we provide pregnant employees with priority parking spaces, allowing them to park in parking spaces near their work areas to alleviate their burden. In line with the breastfeeding policy of the Department of Health of the Executive Yuan, we have set up a breastfeeding room, and female workers who make appointments for breastfeeding are provided with a key to the room, which makes it convenient for them to continue breastfeeding after giving birth.

Parental Leave Statistics for the Past 3 Years

Year	2022			2023			2024		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Number of employees eligible to apply for parental leave	56	18	74	57	28	85	55	28	83
Number of people who applied for parent leave in that year	2	4	6	1	5	6	2	11	13
Estimated number of people returning to work after parental leave	3	2	5	1	1	2	1	7	8
No. of people who returned to work after parental leave in that year	3	2	5	1	1	2	1	6	7
Percentage of people who returned to work after parental leave that year	100%	100%	100%	100%	100%	100%	100%	86%	88%
Number of people who returned to work after applying for parental leave in the previous year	2	1	3	1	1	2	0	3	3
Number of people who applied for parental leave in the previous year, returned to work, and continued working for one full year	2	0	2	0	1	1	0	1	1
Parental leave in that year	100%	0%	67%	0%	100%	50%	0	34%	34%

Note: The number of employees eligible to apply for parental leave in 2024 is estimated based on the number of employees who applied for maternity leave or paternity leave over the past three years (2022–2024).

5.3 Learning & Development

CHEM's 2024 Approach to Talent Cultivation and Its Evaluation

Material Topic	Talent Cultivation	
Corresponding GRI indicators	GRI 404 Training and Education	
Policies and commitments	Create a favorable environment for employees' career development and establish effective training programs for career development.	
Goals and objectives	Short-term	Enrich colleagues' knowledge and functions, cultivating colleagues' ability to think differently and be creative, with the hope of changing work methods and improving work efficiency.
	Mid- and long-term	Establish a diversified system to cultivate talent and enhance individual's professional knowledge in a wide range of areas to strengthen the competitiveness of the team.
Responsible unit/complaint mechanism	We have dedicated staff responsible for pre-employment and on-the-job training of our staff, and the team organizes various training activities from time to time.	
Resources invested during the year	<ul style="list-style-type: none"> The HR team conducts training for new employees upon their arrival, providing them with an introduction about the Company and information on employee guidelines, and quality and environmental policies. New employees are provided with health and safety guidelines and other appropriate education and training by each unit in accordance with relevant procedures or operating standards before they enter the workplace. Staff training includes management training, departmental function training, and self-development training, and a variety of courses are offered depending on the needs of employees. Incentive payments are made to employees who have passed the National Technician Higher Examination and the National Technician Skills Certification. 	
Evaluation mechanism and results	<ul style="list-style-type: none"> In 2024, the average number of hours of training per employee was 8.51 hours, a 51% increase from 2023. The average number of training hours for male colleagues was 8.64 hours and and that for female colleagues was 8.03 hours. A language learning subsidy is provided to encourage employees to improve their job-related language skills. To support employees in pursuing a degree, a total of \$732,472 has been provided over the past five years. In 2024, we subsidized one employee to pursue a master's degree, fulfilling the goal of lifelong learning. 	

Performance Appraisal Management

CHEM enhances organizational and individual performance through a biannual performance evaluation system. In order to immediately and appropriately reward the results of staff's operational efforts and to encourage staff morale, CHEM approves the performance bonuses for each unit in conjunction with the Company's and unit's operational performance, and evaluates the performance of the employees for the current year in accordance with the Company's established evaluation practices and other methods for approving the granting of individual bonuses, which include the following: individual KPIs, organizational functions, quantitative and qualitative achievement, execution, and innovation.



By using the evaluation results as a reference for reward differences and promotions, employees are effectively motivated to achieve the team's and the Company's operational goals.

Staff Undergoing Regular Performance Appraisal

2022 Appraisals		No. of Employees Appraised	Total No. of Employees	%
Gender	Male	1,386	1,406	98.58%
	Female	335	340	98.53%
Type of Employment	Direct	749	759	98.68%
	Indirect	972	987	98.48%
2023 Appraisals		No. of Employees Appraised	Total No. of Employees	%
Gender	Male	1,412	1,526	92.53%
	Female	361	373	96.78%
Type of Employment	Direct	802	831	96.51%
	Indirect	971	1,068	90.92%
2024 Appraisals		No. of employees appraised	Total no. of employees	%
Gender	Male	1,255	1,527	82.19%
	Female	345	392	88.01%
Type of Employment	Direct	588	794	74.06%
	Indirect	1,012	1,125	89.96%

Note: Employee performance appraisals exclude new employees with less than six months of service.

Rich Training Resources

In terms of staff training section, there are dedicated staff responsible for pre-employment and on-the-job training of staff, and various training activities are organized from time to time.

On-the-job training includes management training, departmental skills training, and self-development training. We provide a language learning subsidy to encourage employees to improve their job-related language skills, support employees to pursue a degree, and provide incentives for employees to take the *National Technical Staff Higher Examination* or the *National Technical Skills Certification* related to the job content of their units, offering rewards for obtaining technical certifications, with a cumulative total of more than NT\$732,472 in subsidies over the past five years.

Training Hours of CHEM Employees by Job Title and Gender

Year	Staff Category	Total Training Hours		Average No. of Training Hours per Person	
		Male	Female	Male	Female
2022	Non-supervisory staff	19,244	2,215	15.77	7.26
	Supervisors	913.5	163	4.91	4.66
2023	Non-supervisory staff	7,923.83	1,540.67	5.98	4.61
	Supervisors	1,144.33	118.33	5.69	3.03
2024	Non-supervisory staff	9,300	2,010	6.99	6.04
	Supervisors	1,228	313	6.75	4.29

Note: Average number of training hours per person in each gender group = Total number of training hours in each gender group/Number of staff in each gender group in the current year

Continuing Employment Program

In order to create a friendly employment environment, CHEM has a re-employment program for senior retired employees who have made long-term contributions to the Company and grown with the Company. Under the program, they can continue to work for the Company or its affiliates to give full play to their professional knowledge and skills after their retirement, pass on their valuable skills and experience, and assist in the development of the Company, provided that they have both the willingness and the capability.

In 2024, CHEM was selected by 104 Job Bank, Business Weekly and industry experts as one of the Top 100 DEI-Friendly Companies for the Experienced Workforce, demonstrating that the Company is an age-friendly workplace for all generations.



6 Occupational Health and Safety

- 6.1 Occupational Health & Safety Policy and Management
- 6.2 Occupational Health Services
- 6.3 Promotion of Workers' Health



6. OCCUPATIONAL HEALTH & SAFETY (403)

6.1 Occupational Health & Safety Policy and Management

Material Topic	Occupational Health & Safety	
Corresponding GRI indicators	GRI 403	
Policies and commitments	1. Fulfill corporate social responsibility and pursue sustainable development 2. Comply with occupational safety and health laws and standards 3. Pay attention to safety and health issues, and establish an excellent working environment 4. Prevent occupational accidents and promote employees' safety and physical and mental well-being	
Goals and objectives	Short-term	1) Number of occupational injury cases: < 3 cases 2) Fire incident rate: $\leq 0\%$ 3) Number of occupational safety and health fines: 0 cases
	Mid- and long-term	1) Utilize group resources to promote employees' safety and physical and mental well-being. 2) Guide the supply chain in implementing contractor management and supervision, and ensure effective implementation. 3) Continuously strive for excellence to achieve the highest honor of the National Occupational Safety and Health Award.
Responsibilities and resources	Coordinating unit: Safety and Health Office of the Management Division Responsibilities: Formulation and implementation of policies and procedures related to the ISO 45001 Occupational Health and Safety Management System, and internal and external communication. Resources: The Safety and Health Office, the Quality Assurance Committee, and customers or third parties (e.g., ISO) are entrusted to audit, supervise, and provide guidance on the achievement of various goals and operations.	
Evaluation mechanism and results	In accordance with occupational safety and health procedures such as "Performance Measurement and Monitoring," supervision and measurement methods were established to control operations and activities that may pose unacceptable occupational safety and health risks. These methods will serve as the basis for performance evaluation and continuous improvement.	

In order to create an excellent working environment, CHEM pays great attention to the health and safety of its employees and aims to comply with domestic safety and health regulations and standards, and to strengthen the intrinsic safety design to prevent occupational accidents and promote the safety and physical and mental health of its employees. At the same time, we strengthen communication and cooperation with customers, suppliers, and outsourcers to improve the safety and health performance of the supply chain, and evaluate the effectiveness of implementation in a timely manner.

6.1.1 Occupational Safety and Health Management System

In order to maintain employee safety and prevent occupational hazards and to maintain the effectiveness of the ISO 45001 Occupational Safety and Health Management System in 2024, the activities of this system required the participation of all employees, including the policy oversight of the board of directors, the promotion of the system by the top and various levels of management, and the participation and cooperation of all employees. The locations covered by the ISO 45001 are CHEM's Linkou Plant, Nanke Plant and Chiayi Plant, and the scope of verification covers all the operational sites, regulating related workers and production activities.

In addition, in accordance with the Occupational Safety and Health Act and related regulations, an "Occupational Safety and Health Code of Practice" and an "Occupational Safety and Health Management Plan" have been formulated. Each department has, in accordance with the law, set up occupational safety and health units, assigned management personnel and first-aid staff in accordance with the law, and provides safety and health education and training every year.



CHEM's Linkou, Nanke and Chiayi Plants passed

the ISO 45001 Occupational Safety and Health Management System certification



Occupational Safety and Health Committee

In order to protect the rights and interests of employees, the Company has established an Occupational Safety and Health Committee in accordance with the requirements of the Occupational Safety and Health Administration Regulations. The Safety and Health Committee has a total of 22 members, including 1 medical staffer, 2 engineering and technical personnel related to occupational safety and health, and 11 departmental supervisors, overseers, and commanders, and 8 labor representatives, making the proportion of labor representatives greater than one-third of the total membership.

The duties of the Occupational Safety and Health Committee are to enhance the standard of safety and health management through planning, implementation, and evaluation and improvement of the occupational safety and health environment, and to realize the safety management objectives. The Occupational Safety and Health Committee meets on a quarterly/annual basis. During the meetings, the committee will, in addition to reporting and reviewing past violations, discuss how to identify and eliminate hazards, risk assessment, incident investigation and audits, as well as the formulation and management of audit standards for contractors and suppliers.

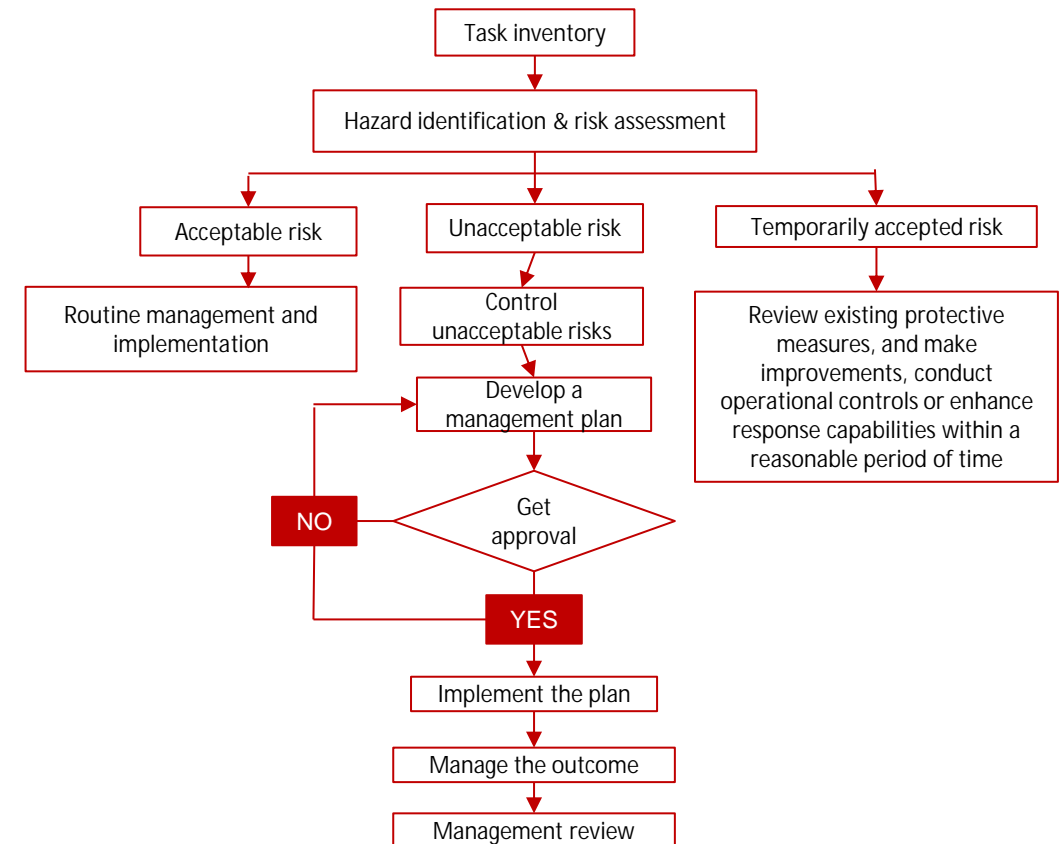
Allocation of Responsibilities of the Occupational Safety and Health Committee

- Safety and Health Office: formulation of the Hazard Identification Risk and Opportunity Assessment Procedures.
- Safety and health personnel in each plant: identification and evaluation of safety and health hazards in accordance with the Hazard Identification Risk and Opportunity Assessment Procedures
- Supervisors of each plant: review of the safety and health hazards identified and evaluated by each unit
- Plant directors: approval of hazard identification risk and opportunity assessments
- Management representatives: review of our Safety and Health Hazard Identification Risk Assessment Form

6.1.2 Hazard Identification and Risk Assessment

CHEM's Safety and Health Office has formulated the Hazard Identification Risk and Opportunity Assessment Procedures, and it is hoped that through the planning of occupational safety and health hazard identification and risk assessment, the Company can identify potential safety and health hazards and risks arising from various operational activities, employees, facilities, and the workplace environment. The procedures are supplemented by the establishment of objectives, operational controls, emergency response measures, and education or training programs. We also inform contractors of workplace hazards in order to minimize the risk of occupational safety and health hazards to employees and all workers. The scope of these procedures covers all safety and health hazards that may affect our Linkou Plant and Nanke Plant operations, employees, potential emergency situations, and visitors and contractors outside the plants.

CHEM's Hazard Identification and Risk Assessment Procedure

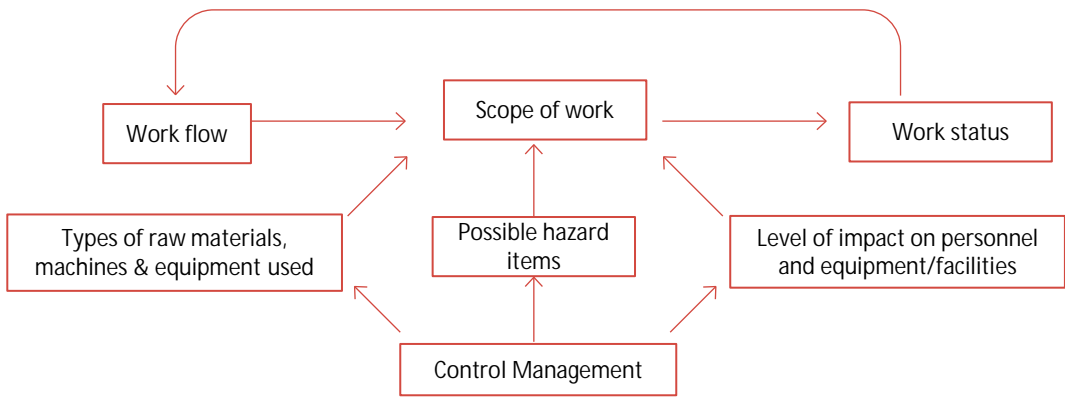


Implementation Methods

Hazard identification and risk assessment is carried out by the identification and assessment team, who will divide the operation based on each unit’s scope of responsibilities and record the following information in the Hazard Identification & Risk Assessment Form, which is used as the basis for conducting the safety and health risk assessment: the operation flow; operation content; operation status (routine and non-routine activities); raw materials used; types of machinery and equipment; possible hazard items; the degree of impact on personnel and equipment; and the current control measures.

Improvement plans based on the risk and opportunity identification must be provided in the Safety and Health Management Plan Form, indicating specific implementation methods, responsible units, and estimated improvement timeline. The Safety and Health Management Plan Form must be submitted to the President for approval after review by the supervisors of each level, and each responsible unit must carry out the improvement work in accordance with the approved management plan.

CHEM’s Hazard Identification & Risk Assessment Implementation



Control Measures

CHEM conducts safety and health risk assessment based on the Safety and Health Hazard Identification Risk Assessment Form, which is used as a basis for formulating policies and objectives. In the Safety and Health Hazard Identification Risk Assessment Form, relevant information is filled out based on the frequency of exposure, occurrence rate, probability of results, and severity of consequences. The risk level is automatically determined through computer calculations, and then the final risk rating is derived from the risk classification matrix chart. Finally, based on the risk classification table, corresponding risk control measures are formulated according to the determined risk level.

CHEM’s Tiered Risk Control Measures

Level of Risk	Type of Risk	Countermeasure
1	Vey high risk (unacceptable risk)	Immediately review the adequacy of existing protective measures and implement engineering, management improvement programs, or operational controls as soon as possible, and enhance response capabilities.
2	High risk (unacceptable risk)	Immediately review the adequacy of existing protective measures and implement engineering, management improvement programs or operational controls and enhance response capabilities within a reasonable period of time.
3	Medium to high risk (risk accepted for the time being)	Acceptable for the time being, subject to the availability of more effective protective measures or the adoption of appropriate operational procedures, controls and safety measures. Items identified for improvement at the Risk Appraisal Meeting will be reviewed to ensure adequacy of existing protective measures, and engineering, management improvement programs or operational controls will be implemented within a reasonable period of time to enhance resilience.
4	Medium risk	Acceptable for the time being, continue monitoring in the current manner
5	Low risk (acceptable risk)	Acceptable, continue monitoring in the current manner

Accident Investigation

CHEM has established the "Incident Reporting, Handling and Investigation Management Procedures" to standardize the incident notification and investigation processes. Through accident investigations, we can identify the causes of accidents, potential hazards in the work environment, and the types of injuries that may occur. This information can be used to implement preventive and improvement measures, reducing the likelihood of future accidents.



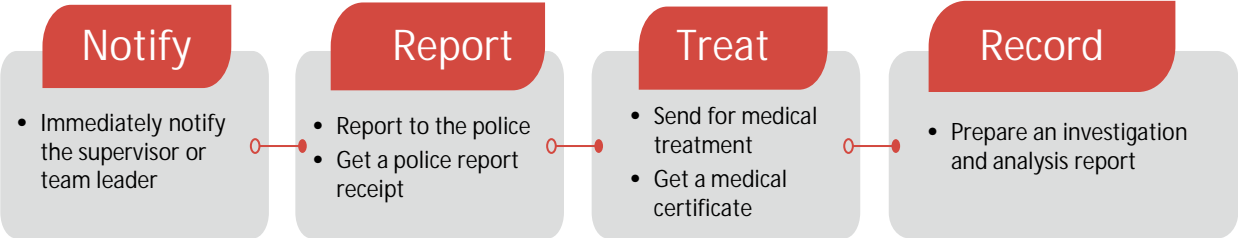
6.1.3 Performance Indicators

Occupational Injuries

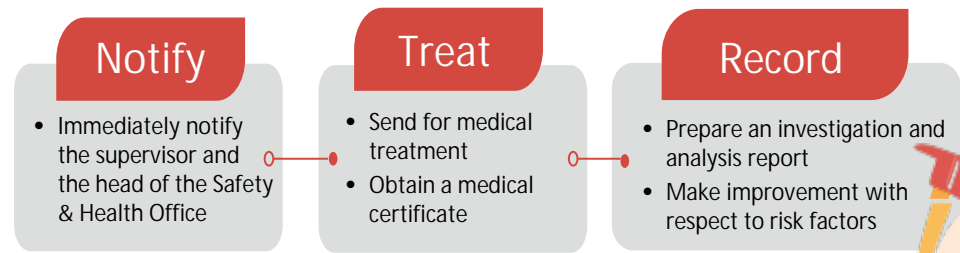
The main types of occupational injuries suffered by the employees of CHEM and its contractors include falls, collisions, cuts, abrasions, sprains, and crush injuries. Hazards refer to occupational risks that may lead to serious injuries. When an occupational injury occurs, the machine is shut down first, and simple troubleshooting is performed. Workers are advised to pay attention to the condition of the machine and to minimize the risk. The calculations in this section cover all workers.

The steps for reporting a workplace accident are provided below.

Accidents that occur outside the workplace



Accidents that occur within the workplace



Occupational Injuries at the Linkou Plant in the Past 3 Years

	2022	2023	2024
Work hours	3,331,406	3,513,634	3,589,308
Number of minor occupational injury cases	3	4	8
Rate of minor occupational injury cases	0.9005	1.1384	2.2288
Number of serious occupational injury cases	0	0	0
Rate of disabling injuries	0.9005	1.1384	2.2288
Lost time injury frequency rate (LTIFR)	0	0	0
Number of deaths	0	0	0
Fatality rate	0	0	0
Number of recordable occupational injury cases	3	4	8
Rate of recordable occupational injury cases	0.9005	1.1384	2.2288



Occupational Injuries at the Linkou, Nanke and Chiayi Plants in 2024

	Linkou Plant	Chiayi Plant	Nanke Plant	Total
Work hours	3,589,308	58,974	184,834	3,833,116
No. of minor occupational injury cases	8	0	0	8
Rate of minor occupational injury cases	2.2288	0	0	2.08
No. of serious occupational injury cases	0	0	0	0
Disabling injury frequency rate	2.2288	0	0	2.08
LTIFR	0	0	0	0
No. of deaths	0	0	0	0
Fatality rate	0	0	0	0
No. of recordable injury cases	8	0	0	8
Total recordable injury frequency rate	2.2288	0	0	2.08

Note:

- Occupational accidents statistics exclude commuting accidents.
- The contractors' historical work hours are estimated at an average of 8 hours per day, calculated by the following formula: (number of workers entering the factory per month × number of work days per month) × 8 for a full-year.
- The rate of minor occupational injury cases is the number of minor occupational injury cases per 1,000,000 work hours, which is calculated by the formula: number of minor occupational injury cases × 1,000,000/total number of work hours.
- The disabling injury frequency rate is the total number of disabling injury cases per 1,000,000 work hours. The total number of disabling injury cases is calculated as the total number of cases of disabling injuries including death, permanent total disability, permanent partial disability, and temporary total disability. The calculation formula is: total number of disabling injury cases × 1,000,000/total number of work hours.
- The LTIFR refers to the number of cases of occupational injuries resulting in death or permanent disability per one million work hours in a workplace. The calculation formula is: number of serious occupational injury cases (number of fatal or permanent disability injury cases) × 1,000,000/total number of work hours.
- The total recordable injury frequency rate (TRIFR) refers to the number of recordable occupational injuries per 1,000,000 work hours, which is calculated as follows: number of cases of recordable occupational injuries (including minor occupational injuries, serious occupational injuries, and fatalities) × 1,000,000/total number of work hours.



6.2 Occupational Health Services

6.2.1 Employee Health Check

In order to protect the physical and mental health of employees, CHEM has set up a medical office. Each year, based on the results of workplace environment monitoring, health examinations are conducted for personnel involved in particularly hazardous operations, and graded health management is implemented in accordance with the law. CHEM provides employees, dependents, and vendors with a general health checkup once every two years that is better than that required by law, which includes health checkup items such as multi-organ ultrasound, bone density, intraocular pressure, audio-visual machine hearing test, intraocular pressure, blood cancer screening, fecal occult blood, muscular strength, and screening for four types of cancers. The number of health checkup items for high prevalence diseases has increased year by year, and health check-ups for employees aged 65 or older and those engaged in special work types are conducted once a year.

In order to prevent noise-induced hearing loss, one of the most common types of occupational injury, CHEM employees use audio machines to test their hearing, and each high-decibel noise area within the plant is labeled at the entrance to warn entrants that they need to wear earplugs before entering, and all workers in noisy operations are given a yearly hearing comparison chart, and relevant arrangements are made based on the changes in hearing loss over the years, such as consultation with an occupational health physician and on-site inspections of the work hazards involved and the relevant worker's use of protective gear. We also provide health education again on the use of protective gear and awareness of potential hazards, and purchase a variety of protective gear to allow workers to choose based on their physiological characteristics and work condition constraints, in order to enhance their willingness and compliance in wearing protective gear.



The Right to Know

What are the meanings and statuses of the health check items and the successive changes of the numbers? How to improve? Only after understanding can we pay attention to them. CHEM arranges one-on-one health check consultation and hygiene education by medical examiners for those who need it after the health check, and for those who are not in the plant or their family members, they can make an appointment for online consultation on the day of the outpatient clinic.

Encourage Family Members and Vendors to Participate in Group Health Checks

We not only care about the health of our employees, but also uphold the first duty of "taking care of employees and their families" and "cooperating with our partners as a family." We open the door for employees' family members and partner companies to participate in group health checks, while those with abnormalities are still assisted in seeking medical treatment through the medical office's telephone interviews to avoid the leakage of privacy.

Our medical office actively encourages the relevant personnel to be examined, and many people immediately found malignant lesions through the health check, and were able to control the condition and restore health after seeking emergency medical treatment. In the future, we will continue to encourage our employees' family members to participate in health checks and prioritize wellness together.

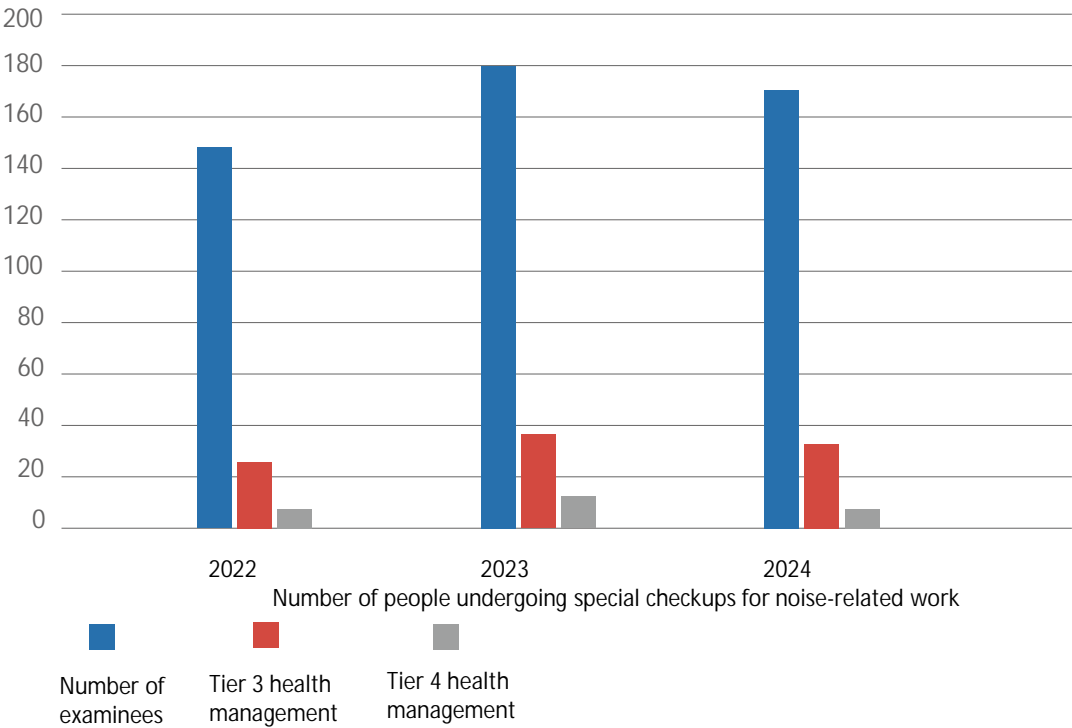
Tiered Health Check Management

After an employee health check, the in-house nurse and an occupational health physician will provide health education, follow-up health checkups, and other related assistance based on the results of the health check report.



Tiered Health Management for Employees Engaged in Special Operations in the Past 3 Years

Number of People Undergoing Special Checkups for Noise-related Work			
Year	2022	2023	2024
Number of examinees	152	179	170
Tier 3 health management	27	37	31
Tier 4 health management	9	12	8



6.2.2 On-Site Medical Services

CHEM arranges for two occupational health specialists to come to the plant three times a month to provide health education for employees undergoing a Tier 2 special checkup, on-site health services and other services related to occupational safety and health. In response to various symptoms and sports injuries that are common among modern people, we patiently and professionally assist our employees in identifying the problems and teaching them what to consult in the future or how to rehabilitate themselves at home.

Prior to resuming work, assessments are conducted and consultations provided for employees regarding various medical conditions and medications. In addition to offering professional and patient explanations, support is also given to assist with medical referrals and care.

On-Site Medical Services



6.2.3 Assessment and Training in Using Protective Gear

In order to effectively mitigate the risk of hearing loss resulting from noise-related work activities, CHEM provides a variety of earplugs, earmuffs, and other protective gear of different specifications and sizes based on the ease of operation for employees and individual physiological characteristics, allowing them to choose the most suitable gear for themselves, increase the rate of accurate fitting and reduce the risk of occupational accidents; at the same time, CHEM organizes seminars on hazard awareness and the demonstration and trial of various protective gear at each plant. For foreign migrant workers, we provide them with translations of the materials provided in those seminars and health education documents. When providing on-site medical services, we also ask employment intermediaries or agencies to assist with online translation so as to enhance understanding and facilitate communication between employees and medical personnel. These measures have been put in place to safeguard the health, safety, and rights of all workers.

Assessment and Training in Using Protective Gear



6.2.4 AED Installation and Training

According to recent statistics from the Ministry of Health and Welfare on the top 10 causes of death, heart disease consistently ranks among the top three. Most deaths from heart disease occur as a result of sudden cardiac arrest. If resuscitated with an AED, the pre-hospital mortality rate for such patients can be reduced. Therefore, CHEM has installed AED in each plant and has trained colleagues to obtain AED certification. Each year, the Company arranges for staff to attend first aid refresher courses to enhance their first aid knowledge.

AED Installation and Training





6.3 Promotion of Workers' Health

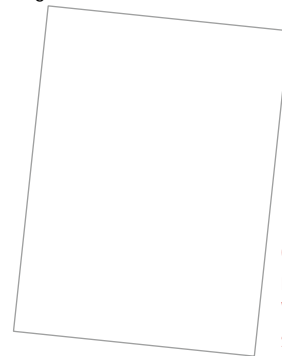
Wishing to help employees achieve work-life balance, CHEM actively integrates internal and external professional service resources. In addition to the aforementioned professional occupational health services, CHEM also cares about the physical and mental health of its employees. Our in-house nurses practice "walk-around management" by actively showing care for employees and paying attention to their physical and mental well-being. We also have a dedicated hotline "5880" for health issues, and require security personnel to notify the Company of any special situation at external locations. We hope that this multi-pronged approach can better safeguard the physical and mental health of employees.

6.3.1 Walk-Around Management and Proactive Care

In the course of walk-around management at the plant, if the in-house nurses find any health hazards (e.g., poor work posture, close proximity to bright light, or incorrect work habits), they will immediately discuss the issue with the relevant colleagues, senior colleagues at the plant, supervisors, occupational safety and health administrators, and the on-site physician, and will organize seminars on the understanding and prevention of hazards at the plant or purchase appropriate hardware and equipment to reduce human workload during operations, providing appropriate intervention and guidance. In the case of depressed colleagues, we will show care in the process of walking around management by communicating with them and giving them positive energy.

6.3.2 Quit Smoking and Lose Weight for a Healthy Workplace

Over the years, CHEM has been continuously promoting weight loss and other health activities, and their effectiveness has been recognized with the "Healthy Workplace Certification – Health Promotion Badge" awarded by the Health Promotion Administration of the Ministry of Health and Welfare.



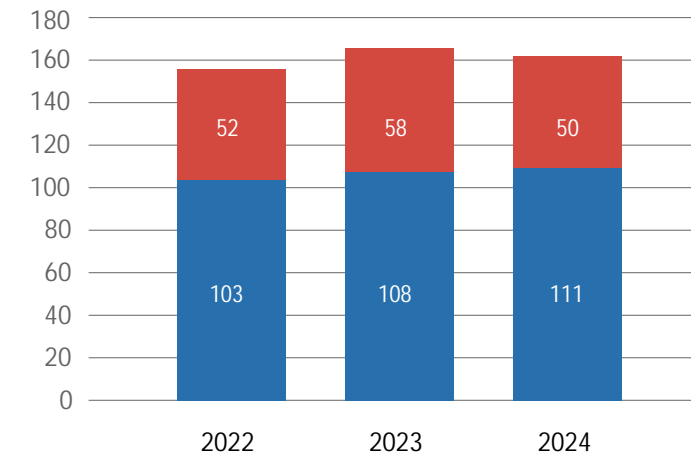
CHEM has been receiving Healthy Workplace Certification since 2014.

6.3.3 Multiple Sessions for Influenza and Other Vaccinations

CHEM has been providing influenza vaccinations for several years, and with the strong support and encouragement from the Company, employees have actively participated in getting vaccinated.

Since 2020, in addition to providing the quadrivalent influenza vaccine, the program has been expanded to include vaccinations related to COVID-19 or those that help prevent serious diseases, such as hepatitis A and B vaccines, varicella (chickenpox), pneumococcal vaccines, herpes zoster (shingles), and others. To better serve our colleagues, multiple vaccination sessions are being offered, allowing them to conveniently receive broader and enhanced protection.

Offering various vaccinations



Number of people vaccinated in the past 3 years



Number of people receiving government-funded vaccinations



Number of people receiving self-funded vaccinations





7 Social Care

7.1 Charity Work



7. SOCIAL CARE (203)

7.1 Charity Work

Social responsibility is an important part of CHEM's mission. CHEM is committed to charity through social welfare, industry-academia collaboration, scholarships and internships for outstanding students, donations to neighboring elementary schools and regular blood donation activities.

1. Public Welfare Initiatives

Since its establishment, CHEM has always been committed to giving back to the community. In many important moments of social need, such as the 921 Earthquake, the 88 Flood, and the Covid-19 Epidemic, CHEM has enthusiastically participated in the hope of creating a better community.

At an important moment of the 50th anniversary of its founding, CHEM looked back on its transformation process and felt the impact of social issues caused by societal changes, such as the increase in the number of single-parent and underprivileged families, and the growing gap between the rich and the poor. As a result, CHEM has established "CHEM Charitable Trust Fund" with the spirit of empathizing with others' hunger as if it were one's own, so as to realize its responsibility to the society. It is also hoped that those who are facing difficulties will be able to receive more tangible assistance and tide over their difficulties with the help of the Trust Fund. In addition, the Company's Charity Society has been established for more than 30 years, and over the years, in addition to donating to public welfare organizations, it has also made occasional visits to nursing homes and homes for the elderly to show its care and concern. The main subsidies given by CHEM Charitable Trust Fund are explained as follows:

(1) Subsidies for Major Illnesses and Disasters

Due to the excessive pressure in modern society, many people overlook the importance of their health while trying to make a living. For the current cases subsidized by the Trust Fund, they all involve families whose sources of income have been severely affected due to major illnesses such as cancer, kidney disease, high blood pressure, and related complications, resulting in the families falling into hardship. In addition to financial support, the Trust Fund stays attentive to their current life situation to determine if further support is needed.



(2) Livelihood Support

This subsidy is primarily aimed at supporting individuals in financial difficulty through scheduled assistance payments. At present, the Trust Fund has already offered assistance to families with relatives who have suffered from serious illnesses and need to pay huge medical expenses, and those whose family members have suffered from serious illnesses or deaths, resulting in family hardship, by providing a fixed monthly subsidy of NT\$3,000-20,000 for each family, so as to enable these families to tide over the difficult times.

(3) Other Subsidies

In addition to emergency assistance for families or illness, and the employment of more persons with disabilities than required, we also provide support to underprivileged families and children through organizations such as World Vision and the Taiwan Fund for Children and Families. In addition, we make regular visits and donations to Hong-Hwa Children's Home, the International Children's Village, and the Cosmos Children's Home, as well as subsidize school fees, lunch expenses, and daily necessities of the children from underprivileged families. Currently, we are sponsoring underprivileged children to help them grow up in peace and happiness. We also organize company-wide donation activities for second-hand clothes, shoes, books, and New Year meals to help those in need.





2. Community and Neighbors

Adhering to the principles of "being kind to one's neighbors," CHEM participates in local activities to strengthen ties and build harmony with our neighbors. In addition to encouraging the hiring of neighboring residents and opening company activities to them, we also sponsor activities for community associations, schools, institutions, etc. in the hope of growing and thriving together with the local community.

In recent years, CHEM has provided resources to a number of schools to help underprivileged students develop vocational skills and offered night-time tutoring, in order to respond to the medium- and long-term needs of the community and to show its concern for the community.

(1) Soccer Players' Lounge at Meilun Junior High School in Hualien County :

Located in eastern Taiwan, the Meilun Junior High School soccer team has been established for nearly 30 years. Although it is not as rich in resources as schools in the metropolitan area, the soccer players have developed amazing abilities and have won the National Junior Cup and the Secondary Schools Soccer League Championships several times. Numerous players of the national team are from this school.

CHEM has been investing in solar power infrastructure in Hualien since 2021, and has gained an in-depth understanding of the urban-rural differences in education in Taiwan. For example, Meilun Junior High School has won many awards on the soccer field, and in order to train closely and cultivate tacit understanding among the young players, most of them live in the school. However, with the use of classrooms converted into dormitories, the originally narrow dormitories have become old, simple, and insufficient for many years of use.

In order to support the domestic sports environment, give the players a more comfortable rest and accommodation environment, and fulfill its corporate social responsibility, CHEM has renovated the players' dormitory at no cost, and renewed the bed frames, beddings, desks and other equipment inside the dormitory. At the opening ceremony of the new dormitory, CHEM expressed its hope that through this renovation, the young players can have a comfortable environment for studying and resting, and a warm "home" in the school after practicing hard on the field.

(2) Jhuciao Junior High School, Qigu, Tainan: Jhuciao Junior High School is located in the Qigu District of Tainan City. Although the Qigu District is rich in natural landscapes and humanistic resources, due to the fact that it is situated in the coastal fishing village area of Tainan, population outflow and ageing are serious issues. Jhuciao Junior High School has fewer than 100 students, who have fewer learning resources than those in urban areas. CHEM has started a solar-powered green energy power generation project in Qigu since 2019. While promoting local employment opportunities, CHEM has realized that the disparity between the urban and rural areas has resulted in the lagging behind and insufficient education resources in the district. Therefore, we have invested funds to subsidize the school to set up evening classes, introduce an "Autonomous AI Intelligent Learning Platform" curriculum and build a cantaloupe technology greenhouse and other teaching facilities to shorten the gap between the city and the countryside and address the issue of low academic achievement among young people from underprivileged families.



(3) Emergency relief fund of Dacheng Township, Changhua County

Dacheng Township in Changhua County is located at the mouth of the Cho-shui River. Due to geographical and climatic constraints, most of the local residents rely on agriculture, resulting in an increasing exodus of young people from the area. CHEM deeply understands that economic development is not easy in remote areas, and in order to support the underprivileged families in that area, and to help them tide over their difficulties, CHEM donated NT\$3 million to the social assistance fund account of Dacheng Township in the hope that it will bring warmth to the dark corners of society.

(4) Da Gang Junior High School, Guishan District, Taoyuan City: Da Gang Junior High School is located in the Guishan District of Taoyuan City, near CHEM's headquarters. In order to assist the school's underprivileged students with their schoolwork and to cultivate their vocational skills, CHEM has been subsidizing the school to offer after-school classes such as beauty salon classes, English speaking classes, and classroom enhancement Classes, to empower young people to turn their lives around and realize their full potential.



Sponsored the renovation of the soccer players' lounge at Meilun Junior High School in Hualien



Donated to build a cantaloupe greenhouse at Jhuciao Junior High School to help children learn farming skills



Donated to the emergency relief fund of Dacheng Township in Changhua to help underprivileged families





(5) Donation of streetlights in Linkou Industrial Park:

Some sections of the roads in the Linkou Industrial Park were not adequately illuminated, which could affect the safety of driving and strolling. Upon the instruction of the CEO, we donated streetlight installations to enhance safety and beautify the surrounding public areas, and received a certificate of appreciation from the park.

(6) Signing a Memorandum of Understanding (MOU) on Disaster Prevention with Zhonghe District Office:

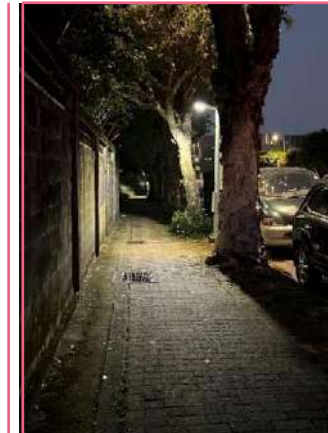
We have actively participated in disaster prevention drills, educational seminars on disaster prevention, and various disaster prevention activities to strengthen our skills in disaster prevention and to increase interactions with the community, to give full play to the spirit of being a good neighbor, and to become a model for the tripartite collaboration among the government, the enterprise, and the community in disaster prevention and relief in order to protect the people's safety.

(7) Providing the Ministry of Transportation with free use of gravity foundation bases along the Hualien engineering section:

In light of the multiple earthquake disasters in the Hualien area in 2024, the volume of road repair work within Hualien County has increased significantly. To assist local residents in returning to normal life as quickly as possible amidst the disaster, and to fulfill its corporate social responsibility, CHEM has provided the Ministry of Transportation with 1,000 gravity foundation bases free of charge for road repair work along the Hualien engineering section.



Donated to Da Gang Junior High School in Guishan District of Taoyuan City to set up a beauty salon class for cultivating skills.



Donated streetlights to the Linkou Industrial Park to enhance safety and beautify the surrounding public areas, and received a certificate of appreciation from the Park



Signing of MOU (Source: Pacific News Service)



Disaster Prevention MOU signed with Zhonghe District Office

3. Scholarships and Internships

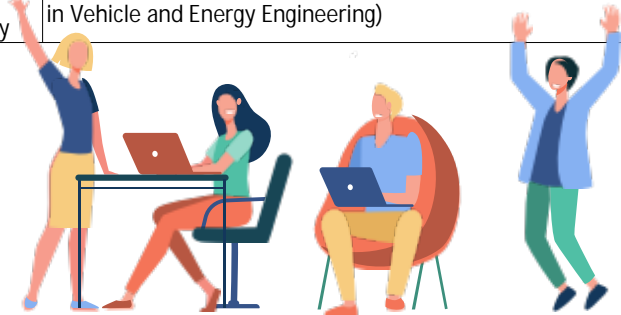
Since 1994, we have been offering scholarships to young students who are motivated and interested in studying, ranging from NT\$20,000 to NT\$40,000 per semester for bachelor's courses and NT\$50,000 to NT\$100,000 per semester for master's courses. In addition, due to the current lack of domestic manpower, in order to cultivate more electrical talent, in addition to offering scholarships to help outstanding, poor electrical and mechanical students to complete their studies, we have launched joint projects with a number of universities such as the Taipei University of Science and Technology, Lunghwa University of Science and Technology, National Chung Cheng University, Lee-Ming Institute of Technology, Hu-Wei University of Science and Technology, Far Eastern University of Science and Technology, Jian Hsing University of Science and Technology, Chang Gung University, and the City University of Science and Technology of Taipei. In 2007, we also had a joint project with the Taipei University of Science and Technology in organizing a master's degree program in quality power supply as part of our efforts to cultivate the next generation of excellent electrical talent. The table below provides additional information about the above-mentioned projects and internships.

Industry-Academia Projects

No.	School	Project	Period
1	Taipei University of Science and Technology	Letter of Intent for Industry-Academia Collaboration on Tailored Talent Development	2014.03.28
		Employment (Internship) Cooperation Agreement (Department of Energy and Refrigeration & Air Conditioning Engineering/Department of Mechanical Engineering)	2014.07.14–2021.06.30
		Tripartite Agreement for Industry-Academia Training Collaboration (Department of of Energy and Refrigeration & Air Conditioning Engineering)	2016.06.23
		Employment Practical Training Agreement (Department of Energy and Refrigeration & Air Conditioning Engineering/Department of Mechanical Engineering)	2020.07.01–2022.06.30
2	Lunghwa University of Science and Technology	Workplace Participation Consent Form (Department of Mechanical Engineering)	2021.7.5–2022.8.31
		Industry-Academia Collaboration Agreement (Department of Mechanical Engineering)	2023.7.3–2025.6.30
		Tripartite Agreement for Industry-Academia Training Collaboration (Department of Electrical Engineering)	2022.03.21–2024.06.15 2023.03.20–2025.06.15
3	National Chung Cheng University	Letter of Intent for Collaboration with the Advanced Institute of Manufacturing with High-tech Innovations	2012.6.1–2015.5.31 2017.1.1–2019.12.31

Internships for College Students

No.	School	Project	Period
1	Lee-Ming Institute of Technology	Off-Campus Internship Agreement for Students (Department of Mechanical Engineering and Department of Electrical Engineering)	2012.7.2–2015.8.31
		Student Internship Agreement (Department of Electrical Engineering)	2020.2.1–2021.12.31
		Off-Campus Internship Agreement (Department of Electrical Engineering)	2023.1.9–2023.6.8 2023.9.1–2024.5.31
2	National Formosa University	Off-Campus Summer Internship Agreement for Students (Department of Power Mechanical Engineering)	2015.7.1–2015.8.31
		Individual Internship Program for Students (Department of Electrical Engineering)	2025.02.03–2025.06.30
3	Lunghwa University of Science and Technology	Off-Campus Internship Agreement for Students (Department of Mechanical Engineering, Department of Electrical Engineering, Department of Industrial Management, Department of Information Management)	2012.7.2–2023.6.30
		Off-Campus Internship Agreement for Students (Department of Mechanical Engineering, Department of Electrical Engineering, Department of Digital Engineering, Department of International Business)	2023.7.3–2024.6.30
		Off-Campus Internship Agreement for Students (Department of Mechanical Engineering, Department of Electrical Engineering, Department of Finance)	2024.7.1–2025.6.30
4	City University of Science and Technology of Taipei	Off-Campus Internship Agreement for Students (Department of Electrical Engineering)	2022.7.1–2023.6.30
		Off-Campus Internship Agreement (Department of Electrical Engineering)	2023.7.3–2024.6.30
5	National Normal University	Professional Technical Training Agreement (Bachelor's Degree Program in Vehicle and Energy Engineering)	2023.7.3–2026.6.30





4. Contributions to Underprivileged Groups

Organization	Details
Renewal Foundation (Taiwan)	CHEM sponsored the Little Pearls Sponsorship Program to help remote students build self-confidence and foundational skills to become responsible, contributing citizens.
Custodial Fund Account of Taoyuan City's Da Gang Junior High School	CHEM donated to Taoyuan City's Da Gang Junior High School to hold beauty salon class, English speaking class, and class enhancement class in order to help underprivileged students with their homework and vocational skills, and to guide young people to turn their lives around and explore their full potential.
Collection Account of Tainan Jhuciao Junior High School	CHEM donated to Tainan City's Jhuciao Junior High School to set up evening classes, introduce the "Autonomous AI Intelligent Learning Platform" program, and build a high-tech cantaloupe greenhouses and other teaching facilities to shorten the gap between urban and rural areas and to help bridge the achievement gap for youth from underprivileged families.
Child Welfare League Foundation	The Foundation has launched a number of direct service programs, including adoption and foster care services, missing children search services, abandoned child protection services, and protection work for children in special circumstances. It also initiates anti-bullying campaigns, provides services for parent-child relationships affected by divorce, and offers support to families impacted by the pandemic. Through advocacy and service, the Foundation is working towards its mission of "creating a better world with children."
Taiwan Fund for Children and Families	This is an international non-profit organization that cares for underprivileged children and their families, using professional social work methods to enable children to have proper family care, protection for their physical and mental well-being, a healthy environment for growth, full access to education, and a happy learning life.
World Vision Taiwan	Through professional services and rich experience of about 600 social workers across Taiwan, World Vision Taiwan devotes itself to the ministries of education and nutritional support, family development and community training, child protection, disaster relief and family assistance, etc. Each year, World Vision Taiwan accompanies about 45,000 underprivileged children and their families through difficult times, helping them discover hope for change.
Dandelion Hope Foundation	Continuously caring for (1) people of all ages who are depressed or have a tendency to depression; (2) the value and character development of underprivileged youth, and (3) people who are affected by environmental hazards, the Foundation has developed the concept of "rich life, simple living and balanced ecology," nurturing hope for the future through this vision.
Garden of Hope Foundation	Guided by Christian love and justice, the Foundation works to prevent and eliminate gender-based violence, fostering a gender-inclusive society through service and advocacy.
Prison Fellowship Taiwan	The organization preaches the Gospel of Jesus Christ to all inmates, leading them to repentance and conversion, renewing their lives through the Holy Spirit, and helping them live a Christian life—so that they may not return to sin after their release from prison—and to promote peace and tranquility in the nation and society
Pingtung Christian Bethany Home	With a belief in respecting the Creator's gift of life, we care for individuals with intellectual and multiple disabilities, aiming to inspire their potential and enhance their ability to adapt and participate in society.
Onesiphorus Children's Home	The organization promotes the love of Jesus Christ and helps children and youth who are experiencing poverty and deprivation; who are subjected to abuse or other improper social behaviors; or who live with physical or intellectual disabilities.
Tzih Huai Social Welfare Foundation	The Foundation organizes parenting seminars, growth workshops, child and juvenile protection and crime prevention activities, youth growth study activities, leisure counseling, growth activities, and crime prevention advocacy activities in the hope of enhancing positive family interactions and parent-child communication, while strengthening children's and adolescents' legal awareness, interpersonal skills, and emotional management, in order to prevent and reduce maladaptive behaviors in youth.
Others	Emergency relief (Note)

Note: For households facing major illnesses among relatives or experiencing the loss or hardship of their primary income source, a fixed monthly subsidy of NT\$3,000 to NT\$20,000 per household will be provided to help them get through difficult times.

5. Blood Donation

Donate a bag of blood to save a life! For more than 20 years, CHEM has been organizing blood donation activities every year, inviting all colleagues to roll up their sleeves and donate blood for the public good. Every year, no matter the weather—hot, cold, or stormy—we always see our colleagues lining up and rolling up their sleeves to donate blood. Even if they have a meeting or a business trip right after, they are still willing to contribute their love and care to society. At the same time, the Company also provides items such as "nourishing and blood-replenishing herbal tea" after everyone donates blood, as a way to show appreciation for their efforts and to enable them to continue serving at their posts with renewed energy after donating blood.



6. Use of Sheltered Workshops' Products as Souvenirs for Shareholders' Meetings

In order to fulfill its corporate social responsibility and help people with disabilities to have stable employment opportunities and income, CHEM has selected the handmade soap products produced by sheltered workshops as souvenirs for its annual shareholders' meeting since 2023, with an annual order quantity of more than 40,000 units, so as to combine corporate operation with social welfare, and to make each souvenir for shareholders' meetings full of gratitude from CHEM and the producers.

In addition, the Company also reduces unnecessary packaging materials used for the souvenirs given at its shareholders' meetings in order to fulfill its environmental responsibility and do its part to care for the earth's environment.



2023 — Handmade soaps from the Joyce-Polio Care Association



2024 — Handmade soaps from the Eden Social Welfare Foundation



2025 — Travel cup from the Eden Social Welfare Foundation x Little Lamb



7. Gratitude Charity Event – Love Your Mom Week

This event was held to uphold the spirit of giving back to society. In addition to employee fundraising, the Company matched donations (matching gifts) at 10 times the amount. All proceeds have been donated to the emergency relief charity fund to expand the impact of compassion. We sincerely appreciate our colleagues' enthusiastic participation. The event was captured in a documentary now available on YouTube, highlighting the Company's commitment to fostering a warm and inclusive culture.



8. Other Activities

Donation of children's books



Care for underprivileged groups



Supporting a Rural Farmer by Buying Her Lemons

In a remote village of Nantou, an elderly farmer with limited mobility was unable to go to the market to sell her lemons due to aging concerns and sudden illness, and because her lemons were planted in an organic way, without pesticides or chemical fertilizers, the appearance of her lemons was less appealing, which made wholesalers reluctant to purchase them, resulting in poor sales. CHEM initiated a caring purchase campaign to help the farmer. The farmer later sent appreciation via her family members.

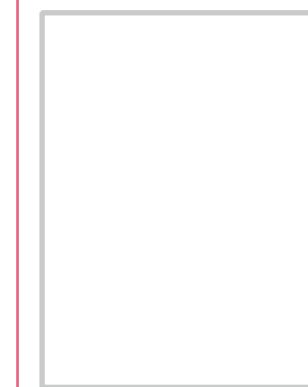
Hair Donation

Every year, tens of thousands of cancer patients in Taiwan face the plight of hair loss due to treatment. Seemingly ordinary hair is the key to affecting the self-confidence of cancer patients and supporting them on the road to recovery. CHEM encouraged colleagues to participate in the hair donation campaign and sent the collected hair to the Association of Cancer and Oncology Patients in the R.O.C., to help collect hair for the cancer patients.

Hair donation



Supporting a rural farmer





Appendix 1

GRI Index

★ indicates a material topic.

Statement of Use	CHEM has disclosed the content for the period from January 1 to December 31, 2024 in accordance with the GRI standards.			
GRI 1 standard used	GRI 1: Foundation 2021			
Applicable GRI industry standards	No applicable industry standards			
Topic	Disclosure Item	Description	Corresponding chapter/ disclosure explanation	Reason for omission/ necessary explanation
GRI 2: General Disclosure 2021				
Organizational and Reporting Practices	2-1	Organizational details	1.1 Company Profile	
	2-2	Entities included in the organization's sustainability reporting	About this Report	
	2-3	Reporting periods, frequency and contact persons	About this Report	
	2-4	Restatement of information	About this Report	
	2-5	External assurance	About this Report	
Operations and Workforce	2-6	Activities, value chain, and other business relationships	3.1 Supply Chain Profile	
	2-7	Employees	5.1.1 Workface Structure Analysis	
	2-8	No-employee workers	5.1.1 Workforce Structure Analysis	
Governance	2-9	Governance structure and composition	2.1 Governance Practices	
	2-10	Nomination and selection of the highest governance body	2.1 Governance Practices	
	2-11	Chair of the highest governance body	2.1 Governance Practices	
	2-12	Role of the highest governance body in overseeing impact management	2.1 Governance Practices	
	2-13	Person responsible for impact management	2 Corporate Governance	
	2-14	Role of the highest governance body in sustainability reporting	2 Corporate Governance	
	2-15	Conflict of interests	2.1 Governance Practices	
	2-16	Disclosure of key material events	2.1 Governance Practices	
	2-17	Collective knowledge of the highest governance body	2.1 Governance Practices	
	2-18	Performance evaluation of the highest governance body	2.1 Governance Practices	
	2-19	Compensation policy	2.1.2 Functional Committees	
	2-20	Remuneration determination process		
	2-21	Annual total compensation ratio	Disclosure omitted	Compensation is considered confidential by the Company



Topic	Disclosure Item	Description	Corresponding chapter/ disclosure explanation	Reason for omission/ necessary explanation
GRI 2: General Disclosure 2021				
Strategies, Policies & Practices	2-22	Sustainability strategy statement	The Chairman's Message	
	2-23	Policies and commitments	5 Friendly Workplace	
	2-24	Incorporation of policy commitments	5 Friendly Workplace	
	2-25	Procedures for mitigating adverse impacts	2.1 Governance Practices	
	2-26	Processes for seeking advice and raising concerns	2.1 Governance Practices	
	2-27	Legal compliance	2.1.4 Ethics & Integrity	
	2-28	Membership in public associations	1.3 Participation in External Organizations	
Stakeholder Engagement	2-29	Stakeholder engagement policy	Stakeholder Engagement	
	2-30	Collective agreement	5.2.2 Labor-Management Relations	
GRI 3: Material Topics 2021				
Material Topics	3-1	Process of determining material topics	Material Topics Identification	
	3-2	List of material topics	Material Topics Identification	
Economic Dimension				
★ Economic Performance				
GRI 3: Material Topics 2021	3-3		2 Corporate Governance	
★ GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2 Corporate Governance	
	201-2	Financial implications and other risks and opportunities due to climate change	4.1 Climate-Related Financial Disclosure	
	201-3	Defined benefit plan obligations and other retirement plans	5.2.3 Multiple Benefits	
	201-4	Financial assistance received from the government	1.2 Awards & Management Systems 2 Corporate Governance	
Market Presence				
GRI 202: Market Presence 2016	202-1	Ratio of Standard Entry-Level Wages by Gender to Local Minimum Wage	5.2.1 Payroll Management	
	202-2	Proportion of senior management hired from the local community	5.2.1 Payroll Management	
Indirect Economic Impact				
GRI 203: Indirect Economic Impact 2016	203-1	Investment in infrastructure and the development and impact of support services	7 Social Care	
	203-2	Significant indirect economic impacts	7 Social Care	
GRI 204: Procurement Practice 2016	204-1	Proportion of spending on local suppliers	3.5 Sustainable Supply Chain	



Topic	Disclosure Item	Description	Corresponding chapter/ disclosure explanation	Reason for omission/ necessary explanation
Anti-Corruption				
GRI 205: Anti-Corruption 2016	205-1	Operations assessed for risks related to corruption	2.1.4 Ethics & Integrity	
	205-2	Communication and training about anti-corruption policies and procedures	2.1.4 Ethics & Integrity	
	205-3	Confirmed incidents of corruption and actions taken	2.1.4 Ethics & Integrity	
Anti-competitive Behavior				
GRI 206: Anti-Competitive Behavior 2016	206-1	Disclosure of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No such case occurred in 2024.	
Tax				
GRI 207: Tax 2019	207-1	Tax policy	2.6 Tax Management	
	207-2	Tax governance, control mechanisms and risk management	2.6 Tax Management	
	207-3	Stakeholder engagement and management of tax-related concerns	2.6 Tax Management	
★ Innovation and R&D				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.4 Innovation and R&D	
★ Information Security		Custom material topic	2.4 Innovation and R&D	
★ Information Security				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.5 Information Security	
★ Information Security		Custom material topic	2.5 Information Security	
Environmental Dimension				
Materials				
GRI 301: Materials 2016	301-1	Materials used by weight or volume	4.5 Material Management	
	301-2	Recycled input materials used	4.5 Material Management	
	301-3	Reclaimed products and their packaging materials	4.5 Material Management	
★ Energy				
GRI 3: Material Topics 2021	3-3	Management of material topics	4.2 Environmental Management Policy	
★ GRI 302: Energy 2016	302-1	Energy consumption with the organization	4.3.3 Energy Consumption Statistics	Implemented according to the regulatory schedule
	302-2	Energy consumption outside the organization	No disclosure	
	302-3	Energy intensity	4.3.3 Energy Consumption Statistics	
	302-4	Reduction of energy consumption	4.3.3 Energy Consumption Statistics	
	302-5	Reductions in energy requirements of products and services	Not applicable to the nature of products and services	Not applicable



Topic	Disclosure Item		Description	Corresponding chapter/explanation	Reason for Omission/Necessary Explanation
Water and Effluents					
GRI 303: Water and Effluents Management Policy 2018	303-1	Interactions with shared water resources		4.4.1 Water Resource Management	
	303-2	Management of water discharge-related impacts		4.4.1 Water Resource Management	
★ GRI 302: Water and Effluents 2018	303-3	Water withdrawal		4.4.1 Water Resource Management	
	303-4	Water discharge		4.4.1 Water Resource Management	
	303-5	Water consumption		4.4.1 Water Resource Management	
Biodiversity					
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased or managed by the organization or the areas adjacent to such sites are located in protected areas or areas of high biodiversity value		The operational sites owned, leased or managed by CHEM or the areas adjacent to such sites are not located in protected areas or areas of high biodiversity value.	
	304-2	Significant impacts of activities, products, and services on biodiversity		CHEM's activities, products and services have no significant impacts on biodiversity.	
	304-3	Habitats protected or restored		No such case occurred during the reporting period.	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		No such case occurred during the reporting period.	
★ Emissions					
GRI 3: Material Topics 2021	3-3	Management of material topics		4.2 Environmental Management Policy	
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions		4.3.5 GHG Emission Statistics	
	305-2	Energy-related indirect (Scope 2) GHG emissions		4.3.5 GHG Emission Statistics	
	305-3	Other indirect (Scope 3) GHG emissions		4.3.5 GHG Emission Statistics	
	305-4	GHG emissions intensity		4.3.5 GHG Emission Statistics	
	305-5	GHG emissions reduction		4.3.5 GHG Emission Statistics	
	305-6	Emissions of ozone-depleting substances		No such emissions occurred.	Not applicable.
	305-7	Emissions of nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		4.4.3 Air Pollution Prevention and Control	
Waste					
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts		4.4.2 Waste Management	
	306-2	Management of significant waste-related impacts		4.4.2 Waste Management	
	306-3	Waste generated		4.4.2 Waste Management	
	306-4	Waste diverted from disposal		4.4.2 Waste Management	
	306-5	Waste directed to disposal		4.4.2 Waste Management	



Topic	Disclosure Item	Description	Corresponding chapter/explanation	Reason for Omission/Necessary Explanation
★ Supplier Environmental Assessment				
GRI 3: Material Topics 2021	3-3	Management of material topics	3.3 Supplier Evaluation	
★ GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	3.3 Supplier Evaluation	
	308-2	Negative environmental impacts in the supply chain and actions taken	3.3 Supplier Evaluation	
Green Products (voluntary disclosure)				
GRI 3 Material Topics 2021	3-3	Management of material topics	4.6 Green Products	
★ Green Products		Custom material topic	4.6 Green Products	
Social Dimension (including human rights)				
★ Labor-Management Relations (voluntary disclosure)				
GRI 3: Material Topics 2021	3-3	Management of material topics	5.2 Compensation & Benefits	
★ GRI 401: Employment 2016	401-1	New employee hires and employee turnover	5.2 Compensation & Benefits	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.2 Compensation & Benefits	
	401-3	Parental leave	5.2 Compensation & Benefits	
	Salaries	Organizations should disclose the number of full-time employees not holding managerial positions, the average and median annual compensation of these employees, and the year-over-year changes in each of these three metrics	5.2 Compensation & Benefits	
Labor/Management Relations				
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	5.2.2 Labor-management Relations	
Occupational Health and Safety				
GRI 403: Occupational Health and Safety 2018 – Management Policy	403-1	Occupational health and safety management system	6.1.1 Occupational Safety and Health Management System	
	403-2	Hazard identification, risk assessment, and incident investigation	6.1.2 Hazard Identification and Risk Assessment	
	403-3	Occupational health services	6.2 Occupational Health Services	



Topic	Disclosure Item	Description	Corresponding Chapter/Explanation	Reason for Omission/Necessary Explanation
★ Supplier Environmental Assessment				
GRI 403: Occupational Health and Safety 2018 – Management Policy	403-4	Worker participation, consultation, and communication	6.1.1 Occupational Safety and Health Management System	
	403-5	Worker training on occupational health and safety	6.1.3 Performance Indicators	
	403-6	Promotion of worker health	6.3.3 Multiple Sessions for Influenza and Other Vaccinations	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.1.1 Occupational Safety and Health Management System	
GRI 403: Occupational Health and Safety 2018	403-8	Workers covered by the occupational health and safety management system	6.1.1 Occupational Safety and Health Management System	
	403-9	Occupational injuries	6.1.3 Performance Indicators	
	403-10	Occupational illnesses	6.1.3 Performance Indicators	
★ Training and Education				
GRI 3: Material Topics 2021	3-3	Management of material topics	5.3 Learning & Development	
★GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	5.3 Learning & Development	
	404-2	Programs for upgrading employee skills and transition assistance	5.3 Learning & Development	
	404-3	Percentage of employees receiving regular performance and career development reviews	5.3 Learning & Development	
Diversity and Equal Opportunity				
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	2.1.1 Board of Directors 5.1.2 Talent Recruitment and Retention	
	405-2	Ratio of basic salary and remuneration of women to men	5.2.1 Payroll Management	
Non-Discrimination				
GRI 406: Non-Discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	5.2.2 Labor-employment Relations	
Freedom of Association and Collective Bargaining				
GRI 407: Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which workers' rights to freedom of association and collective bargaining may be at risk	Our investigation confirmed that no such cases were found.	



Topic	Disclosure Item	Description	Corresponding Chapter/Explanation	Reason for Omission/Necessary Explanation
Child Labor				
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	5.2.2 Labor-Management Relations	
Forced or Compulsory Labor				
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.2.2 Labor-Management Relations	
Security Practices				
GRI 410: Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	5 Friendly Workplace	
Rights of Indigenous Peoples				
GRI 411: Rights of Indigenous Peoples 2016	411-1	Incidents of violations involving rights of Indigenous peoples	No such incidents occurred during the reporting period.	
Local Communities				
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	No such incidents occurred during the reporting period.	
	413-2	Operations with significant actual and potential negative impacts on local communities	No such incidents occurred during the reporting period.	
★ Supplier Social Assessment				
★GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	3.3 Supplier Evaluation	
	414-2	Negative social impacts in the supply chain and actions taken	3.3 Supplier Evaluation	
Public Policy				
GRI 415: Public Policy 2016	415-1	Political donations	Neither CHEM nor its subsidiaries have made political donations.	
Customer Health and Safety				
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	CHEM's product and service categories have no significant health and safety impacts.	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and service	No such incidents occurred during the reporting period.	



Topic	Disclosure Item	Description	Corresponding Chapter/Explanation	Reason for Omission/Necessary Explanation
Marketing and Labeling				
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	CHEM complies with relevant regulations and international standards in the marketing and labeling of its products and services to ensure their quality.	
	417-2	Incidents of non-compliance concerning product and service information and labeling	No such incidents occurred during the reporting period.	
	417-3	Incidents of non-compliance concerning marketing communications	No such incidents occurred during the reporting period.	
Customer Privacy				
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No such incidents occurred during the reporting period.	
★ Customer Relations				
GRI 3: Material Topics 2021	3-3	Management of material topics	2.3 Customer Relations	
★ Customer Relations		Custom material topic	2.3 Customer Relations	



Appendix 2

TCFD Disclosures and Corresponding Chapters

Pillar	TCFD Disclosure	Corresponding Chapter
Governance	Board oversight of climate-related risks and opportunities	4.1 Climate-Related Financial Disclosures
	The role of management in evaluating and managing climate-related risks and opportunities	4.1 Climate-Related Financial Disclosures
Strategy	Climate-related risks and opportunities identified by the organization in the short, medium, and long term	4.1 Climate-Related Financial Disclosures
	Description of the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning	4.1 Climate-Related Financial Disclosures
	The organization's strategic resilience, taking into account different climate-related scenarios	4.1 Climate-Related Financial Disclosures
Risk Management	The organization's process for identifying and assessing climate-related risks	4.1 Climate-Related Financial Disclosures
	The organization's process for managing climate-related risks	4.1 Climate-Related Financial Disclosures
	How the identification, assessment, and management of climate-related risks are integrated into the organization's overall risk management framework	4.1 Climate-Related Financial Disclosures
Goals and Objectives	The indicators used by the organization to assess climate-related risks and opportunities in accordance with strategy and risk management processes	4.1 Climate-Related Financial Disclosures
	Disclosure of Scope 1, Scope 2, and Scope 3 (if applicable) GHG emissions and related risks	4.1 Climate-Related Financial Disclosures
	The targets an organization uses to manage climate-related risks and opportunities, and the performance in implementing those targets	4.1 Climate-Related Financial Disclosures

Appendix 3

Climate-Related Information for Listed Companies

	Item	Corresponding Chapter
1	Describe the board of directors’ and management’s oversight and governance of climate-related risks and opportunities	4.1 Climate-Related Financial Disclosures and the explanations that follow
2	Describe how the identified climate risks and opportunities affect the company’s business, strategy, and financial planning over the short, medium, and long term	4.1 Climate-Related Financial Disclosures and the explanations that follow
3	Describe the financial impacts of extreme climate events and transition actions	4.1 Climate-Related Financial Disclosures and the explanations that follow
4	Describe how the processes for identifying, assessing, and managing climate risks are integrated into the overall risk management framework	4.1 Climate-Related Financial Disclosures and the explanations that follow
5	When using scenario analysis to assess resilience to climate change risks, the scenarios, parameters, assumptions, analytical factors, and major financial impacts used should be explained.	4.1 Climate-Related Financial Disclosures and the explanations that follow
6	If there is a transition plan to address and manage climate-related risks, describe the content of the plan, as well as the metrics and targets used to identify and manage physical and transition risks.	4.1 Climate-Related Financial Disclosures and the explanations that follow
7	If internal carbon pricing is used as a planning tool, the basis for determining the price should be explained.	4.1 Climate-Related Financial Disclosures and the explanations that follow
8	If climate-related targets are set, information should be provided on the activities covered, the scope of GHG emissions, the planning timeline, and annual progress toward the targets. If carbon offsets or renewable energy certificates (RECs) are used to achieve these targets, the source and quantity of carbon offsets used, or the number of RECs, should be disclosed.	4.1 Climate-Related Financial Disclosures and the explanations that follow
9	GHG inventory and verification status	4.1 Climate-Related Financial Disclosures and the explanations that follow

In response to global warming caused by GHG emissions and the potential impact of extreme weather on operations, CHEM has established an interdepartmental Climate Risk Team (Figure 4-1) since 2022 to systematically analyze and assess climate risks and to develop relevant strategies to address them. Based on the TCFD framework, analysis and planning are conducted through the four core elements: governance, strategy, risk management, and metrics and targets (Table 4-1). The Group’s short-term, mid-term and long-term energy management goals are described in Table 4-2. By identifying potential climate change risks and opportunities, the Company can better understand the impact and influence of related factors on its operations and proactively formulate relevant response strategies and measures to prevent the risks and damages caused by climate change. Regular reports on related analyses, recommendations, improvements, and implementation results are submitted to the board of directors as a reference for corporate governance. Since as much as 80% of CHEM’s products belong to the green energy industry, a total of seven climate change risks and 11 climate change opportunities have been identified, which are depicted in Figures 4-2 and 4-3 and Tables 4-3 and 4-4 .

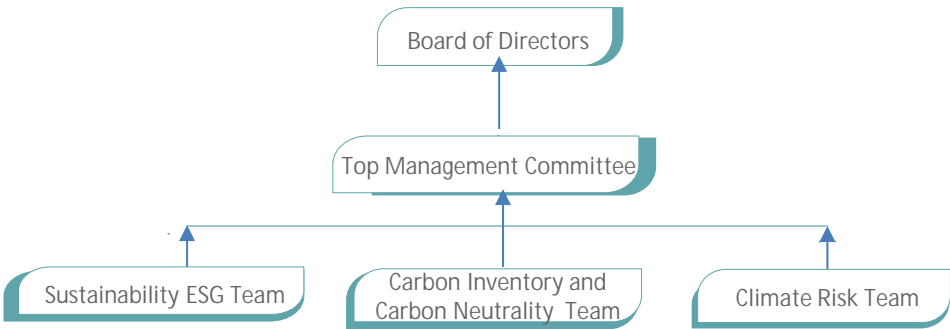


Figure 4-1: Organizational structure of climate change



Table 4-1: TCFD Framework Analysis

Core Element	Unit/Theme	Responsibilities/Content
Governance	Top Management Committee	It is the highest-level organization for climate change and sustainability management organization within the Company, consisting of the Company's independent directors and senior management. The Committee is led by the Board's Chairman, with the President serving as the vice chairperson. The Committee has set up the Sustainability ESG Team, the Carbon Inventory and Carbon Neutrality Team and the Climate Risk Team. Each team meets at least twice a year, and reports the implementation results and annual plan for the next year to the Committee. The Committee then reports the implementation plans and results to the board of directors for oversight on a semi-annual basis.
	Sustainability ESG Team	It is a unit under the Top Management Committee and is responsible for planning and implementing activates related to the Company's ESG blueprint as formulated by the Committee. The unit has a team leader, who is responsible for coordinating the Company's administrative and business units to plan and implement matters related to environment, social responsibility, and governance. The team holds a meeting at least twice a year chaired by the Committee's vice chairperson to discuss implementation of ESG initiatives, evaluate their effectiveness, and conduct reviews and feedback.
	Carbon Inventory and Carbon Neutrality Team	It is a unit under the Top Management Committee and is responsible for planning and implementing activities related to the Company's carbon neutral strategy as formulated by the Committee. The team leader is responsible for coordinating all administrative and business units to conduct the annual carbon inventory and seek carbon reduction opportunities based on inventory results and progressively achieve the goal of carbon neutrality. The team holds a meeting at least twice a year, with the meeting chaired by the Committee's vice chairperson and focusing on the progress of the relevant inventory, analysis of the hotspots, and opportunities for carbon reduction and feedback and discussion on the carbon neutrality targets.
	Climate Risk Team	It is a unit under the Top Management Committee and is responsible for implementing the Company's climate risk plans in accordance with the strategy formulated by the Committee. The team has a leader, who is responsible for coordinating all administrative and business units of the Company to prepare for and execute response plans related to various climate issues. The team meets at least twice a year under the chairmanship of the President who is the chief member to evaluate the effectiveness of the implementation of climate-related issues, conduct reviews and provide feedback. Given the extreme climate disasters from time to time in recent years, the team will hold interim meetings in the event of a climate disaster to direct all departments to take countermeasures as regulated in the procedure, in order to reduce the impacts of climate disasters on the Company.
Strategy	Identification of risks and opportunities	Relevant climate risks and opportunities are identified to examine the impact and figure out countermeasures based on scenario analysis, with reference to the Intergovernmental Panel on Climate Change (IPCC), the Net Zero Emissions (NZE) of the International Energy Agency (IEA), and the pathways and strategies for Taiwan 2050 announced by the National Development Council (NDC). Through interdepartmental discussions, each business unit conducts a comprehensive assessment of the frequency, likelihood, time frame, degree of impact, response strategies, and opportunities for adjustments of extreme climate risks based on their expertise and experience and regional environmental conditions. Then the material risks and opportunities identified are ranked in the order of likelihood and impact level.
	Assessment of potential financial impacts	The assessment of potential financial impacts has the same procedures as the identification of risks and opportunities. After the identification of extreme climate risks and opportunities, all business units analyze and evaluate potential financial impacts on the Company's production, sales and operation in extreme climate scenarios. Meanwhile, the impacts of countermeasures or preventive measures taken on the Company's finance are also considered. The Company has incorporated the internal carbon pricing mechanism since 2024, referencing the Ministry of Environment's preliminary carbon fee standards, to assess the potential financial impacts of GHG emissions related to operational activities.
Risk Management	Adoption of TCFD Framework	Adopting the TCFD framework, the Company considers, among others, transition risks and physical risks in its risk management. For transition risks, a comprehensive analysis of relevant policies, regulations, technology, market, corporate reputation, etc. is made, while the management of physical risks involves the consideration of immediate and long-term risks. The Climate Risk Team brings together supervisors and staff from different departments to discuss the impacts of risks and opportunities on the Company, with consideration to the changes in policies and regulations. The results of risk identification are regularly reviewed and countermeasures adjusted to ensure that the identification results can continuously reflect the current climate situation and avoid or mitigate the negative impacts of climate change .
	Reporting of Identification Results	Based on the climate change risks and opportunities identified under the TCFD framework, the Corporate Sustainability Committee holds a meeting every six months to report the identification results and propose relevant countermeasures and risk management measures in response to expected financial impacts on the Company. During the meeting, the Committee carries out confirmation, review, and feedback to help develop more reasonable indicators and goals.



Core Element	Unit/Theme	Responsibilities/Content
Goals and objectives	GHG Emission Reduction Target	The Company aims for a 3% reduction in GHG intensity per million revenue per year for 2022-2025 and reviews the progress annually.
	Climate Response Strategy	The strategies taken to improve energy efficiency include: using high-efficiency production equipment, improving products' performance for better carbon reduction, and reviewing key areas of carbon emissions and providing solutions to reduce carbon emissions.
	GHG Emission Disclosure	According to the GHG inventory schedule announced by the FSC based on the capital amount, CHEM and the Group belong to the second and third stages, i.e., the GHG carbon inventory should be completed in 2025 and 2026; third-party verification of the individual companies' GHG emissions should be completed in 2027, and that of the subsidiaries' consolidated statements should be completed in 2028. The 2023 carbon inventory report was released in 2024, and a GHG Inventory Statement Report is expected to be published in 2025, along with the completion of third-party verification. In the future, issuance and verification will be made on an annual basis. Starting in 2024, Scope 3 emissions are also disclosed in accordance with the principle of materiality.

Table 4-2: Group's GHG Management Goals

Stage	Goal	Status
Short-term: 0-3 years (2022-2025)	<ol style="list-style-type: none">Conduct carbon inventory for the parent company and its subsidiaries, identify emission hotspots, and gradually plan for reduction measures. Complete the GHG inventory for all group companies two years ahead of the FSC's scheduled timeline.To reduce GHG emissions, use 2020 as the base year for reduction efforts. Review emission hotspots and propose corresponding mitigation measures, with a target of reducing GHG emissions by 3% per NT\$1 million in revenue annually.Develop new energy businesses.	<ol style="list-style-type: none">Since 2020, CHEM has begun compiling its preliminary carbon emission data. Starting in 2023, carbon inventory data has been established for CHEM, and from 2024 onward, carbon inventories will be conducted in accordance with the GHG Protocol, with the inclusion of subsidiary data.From 2022 to 2024, GHG emissions per million in revenue have been reduced by 3.1%, 17.9% and 17.4%, respectively.New businesses, including solar panel power generation and EV charging station services, were launched, achieving carbon reductions of 2,828.162 metric tons and 46,286.2982 metric tons of CO₂e, respectively, in 2024.
Medium-term: 4-10 years (2026-2032)	<ol style="list-style-type: none">Starting in 2026, third-party verification of GHG emissions will be implemented, one year earlier than the schedule planned by the FSC.Based on the new national GHG net emission reduction targets: a 28±2% reduction by 2030 compared to 2020 levels; a 32±2% reduction by 2032 compared to 2020 levels. Plan to reduce Scope 1 and Scope 2 emissions in order to actively achieve these targets.Review inventory results and integrate product carbon reduction planning into green supply chain management.In response to net-zero carbon emission goals, incorporate new energy sources and carbon reduction strategies to effectively lower GHG emissions.	<ol style="list-style-type: none">The carbon inventory statistics have been fully established, and a third-party verification of GHG emissions is planned for 2025. Arrangements for the third-party verification are currently being made.From 2020 to 2024, GHG emissions from energy use at the Linkou and Nanke Plants have been reduced by 9%. Moving forward, the Company plans to implement an energy management system, convert the Nanke Plant's solar power generation to self-consumption, and apply for renewable energy certificates as part of its carbon management efforts to reduce Scope 2 emissions.Starting in 2024, the Company will conduct internal carbon pricing assessments based on the preliminary carbon fee rates planned by the Ministry of Environment, in order to understand the impact of carbon fees on operations. Two types of company products are planned for carbon footprint inventory and certification, and suppliers are encouraged to reduce emissions to further decarbonize the products. The Company will replace traditional electricity usage with its own green energy products, hydrogen energy products, and energy storage products, while continuously evaluating carbon reduction solutions for manufacturing processes and factory sites.The Company plans to convert the Nanke Plant's power generation to self-consumption and apply for renewable energy certificates.
Long-term: 10-30 years (2033-2050)	<ol style="list-style-type: none">Based on the new national GHG net emission reduction targets: a 38±2% reduction by 2035 compared to 2020 levels; a 50% reduction by 2050 compared to 2020 levels. Plan to reduce Scope 1 and Scope 2 emissions in order to actively achieve these targets.Explore and develop comprehensive green energy technologies such as hydrogen power generation and biomass power generation, to timely provide viable carbon reduction pathways for all sectors.	<ol style="list-style-type: none">The Company conducts regular reviews of carbon emissions from raw materials and manufacturing processes through carbon inventory data, and evaluates feasible alternatives or business models to actively reduce carbon emissions.The Company has increased its investment in hydrogen power generation facilities and promoted their adoption, gradually replacing traditional fossil fuel-based power generation; it is also developing biomass renewable fuel technologies to explore new investment and development opportunities.



Figure 4-2: Risk Matrix

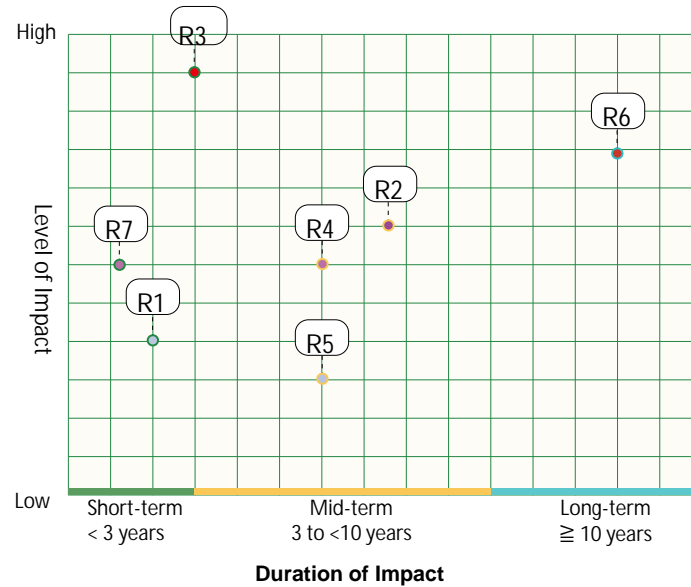


Figure 4-3: Opportunity Matrix

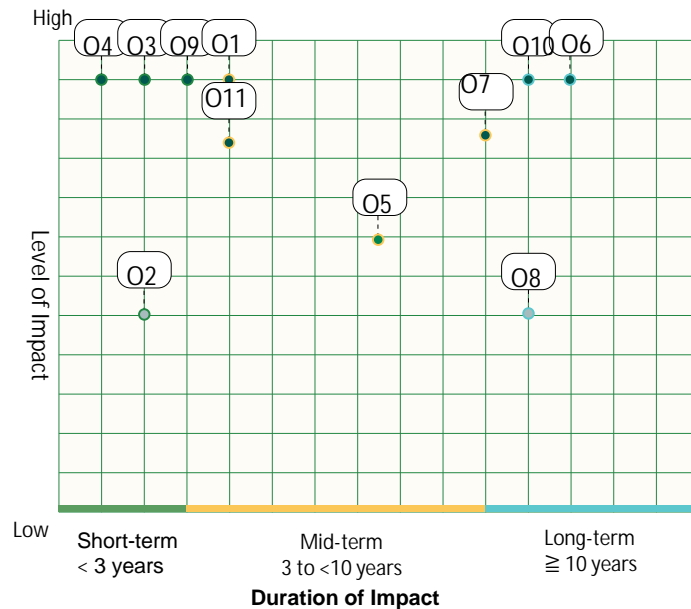


Table 3: Risk Items Based on TCFD Framework

Item	Risk Type	Description	Actual Strategic Action	Time of Occurrence	Level of Impact
R1	Transition risks	Increase in operating costs due to the introduction of national carbon tax legislation	Set short-, mid- and long-term GHG targets, incorporate an internal carbon pricing evaluation mechanism and continue reducing emissions to mitigate the impact of related charges.	Short-term	Low
R2	Transition risks	Increase in operating costs during the low-carbon transition due to the overall increase in raw material prices	Implement carbon reduction plans and actively seek alternatives so as to reduce the impact of rising costs	Mid-term	Medium
R3	Transition risks	Increase in challenges of product sales due to customers' stricter requirements for carbon footprints on equipment manufacturing processes and equipment use	Conduct carbon inventory ahead of legal requirements, identified key areas in plants, evaluate and improve programs to lower product carbon footprints. Carbon footprint inventory and certification are planned for two products in 2025 to enhance product competitiveness.	Mid-term	High
R4	Transition risks	In response to the trend of low carbon development, the Group actively researches and develops new equipment production or improves equipment technology, which increases operating costs.	Following an evaluation, the production facilities were identified as having Scope 2 emissions as their primary source. The facilities have actively optimized lighting systems and equipment to reduce electricity consumption.	Mid-term	Medium
R5	Transition risks	In response to the trend of low carbon development, the Group has replaced equipment with high-efficiency production equipment, which in turn has increased operating costs.	A process air compressor and motor optimization plan was implemented to reduce operating costs and improve efficiency.	Mid-term	Low
R6	Transition risks	Failure of the overall supply chain system to keep up with the demand for low carbon transformation, affecting the supply of raw materials	Reported the green procurement amount to the Ministry of Environment and obtained certification in 2024. Will gradually establish a green supply chain to enable suppliers to respond early or seek alternative suppliers.	Long-term	High
R7	Physical risks	Increased frequency and severity of extreme weather events such as typhoons, rainstorms and droughts, which affect the production and distribution of products and the supply chain and impact operational efficiency	The Chiayi Plant officially started operation in 2024, reducing the production risks that may arise at the current single facility during extreme weather events.	Short-term	Low



Table 4-4: Opportunity Items Based on TCFD Framework

Opportunity Identification Results	Item	Opportunity Type	Description	Actual Strategic Action	Time of Occurrence	Level of Impact
	O1	Products and services	In response to the global trend of net-zero carbon emissions, the Company will increase the global market penetration of its hydrogen energy products and expand the revenue of its business groups.	Develop hydrogen fuel cells to meet market demand.	Mid-term	High
	O2	Products and services	In response to the national energy transformation policy, the Company will increase the market penetration rate of its energy storage products and expand the revenue of its business groups.	Develop microgrid products to meet market demand	Short-term	Medium
	O3	Products and services	In response to the transformation of vehicle energy, the Company will increase the market penetration rate of EV charging services integrated with parking operations, thereby expanding its business groups' revenue.	Offer EV charging services as part of the Company's parking lot operations.	Short-term	High
	O4	Energy source	In response to the national green energy transformation, the Company will increase its solar power generation capacity, increase green energy supply and enhance the revenue of the business group.	Keep developing solar panel power generation services. All plants are now equipped with solar panels, and the three solar power plants in Qigu District of Tainan (Tian Cin, Tian Chong, and Tian Peng) generate a total of about 320 million kWh of green power.	Short-term	High
	O5	Products and services	In response to the development trend of the national power grid, the Company will increase the market penetration rate of microgrid equipment and expand the revenue of its major business groups.	Actively promote microgrid products to expand market share and increase revenue.	Mid-term	Medium
	O6	Products and services	Developing the Company's carbon capture and reuse technology, low carbon emission technology, and providing marketable low carbon products to assist in its transformation.	Evaluate carbon capture and reuse technologies and low carbon emission technologies based on product characteristics; help customers to reduce carbon emissions.	Long-term	High
	O7	Market	In response to climate change, the international demand for low-carbon products has increased, thereby expanding the Company's overall new energy business in the international market.	Aiming to become a fully green energy company by developing carbon reduction products, hydrogen energy products, energy-efficiency grade 1 products, and increasing charging stations, we are evaluating the feasibility of expanding internationally.	Mid-term	High
	O8	Resilience	To guide the supply chain to undergo a low-carbon transformation, reduce the carbon footprint of raw materials and increase product competitiveness.	Depending on product demand, we will increase the number of suppliers with carbon reduction advantages.	Long-term	Medium
	O9	Resource efficiency	Through the research and development of new product technologies, we are able to reduce the carbon footprint of our products and increase their competitiveness.	The Company has design capabilities to develop and manufacture customized low-carbon products based on customer needs, enhancing market competitiveness.	Mid-term	High
	O10	Resilience	In response to the low-carbon transformation, we will continue to develop diversified renewable energy sources and enhance our resilience to domestic and international carbon taxes.	Develop and provide diversified green energy products to reduce the potential carbon costs.	Long-term	High
	O11	Resilience	Actively engage in energy saving and carbon reduction, develop carbon credit and participate in the carbon market	Generate solar power for self-consumption and apply for green power certification to meet the Company's green energy goals.	Mid-term	High



2. Results of Energy-Saving and Carbon Reduction Efforts

1) In terms of energy management, the Company has actively promoted energy conservation and carbon reduction in recent years, and has optimized lighting fixtures and process equipment in the plant. In reference to the SASB guidelines for the electrical and electronic equipment industry, statistics was compiled on total energy consumption and sources of electricity used under the energy management topic. As shown in table 5-1 below, the statistics for 2024 includes the Chiayi Plant, in addition to the Linkou and Nanke Plants. The total power consumed by the three plants was 43,135GJ, 2.9% less than 2023, a 2.9% decrease compared to 2023, indicating the energy-saving efforts have shown initial results. The revenue in 2024 grew 15.6%, compared to 2023. Therefore, energy consumption per NT\$1 million in revenue has decreased by 16.0%. Statistical data also shows that over the past three years (2022–2024), the Company's total revenue has increased, while energy consumption intensity per unit of revenue has continued to decline, indicating improved production energy efficiency. Currently, electricity is mainly sourced from the national grid, and renewable energy has not yet been used. The Company's energy management goals are given in Table 5-2.

Table 5-1 Energy Consumption Intensity in the Past 3 Years

Item	Unit	2022	2023	2024
Total energy consumption	GJ	44,841	44,400	43,132
Annual revenue	Million NTD	18,547	22,145	25,609.456
Energy intensity	GJ/Million NTD	2.39	1.98	1.66
Energy intensity compared to previous year	%	-3.6%	-17.1%	-16.0%
Share of renewable energy consumption	%	0	0	0
Share of grid power consumption	%	100	100	100

Note: Annual revenue is calculated based on consolidated income; energy consumption data has been updated due to a correction in the LPG conversion factor.

Table 5-2: Group's Energy Management Goals

Stage	Goal	Program
Short-term: 0-3 years (2022-2025)	Formulate and implement measures to conserve electricity, water and non-hazardous waste within the Group: 1. 3% annual electricity saving 2. 3% annual water consumption savings 3. Annual reuse rate of non-hazardous waste: >80%	1. Implement measures to conserve electricity, water and non-hazardous waste within the Group: 1% energy saving in 2023 compared to 2022 (due to the in-factory LED lighting energy-saving project being gradually completed by the end of 2023, the benefits have not yet been fully realized); 2% energy saving in 2024 compared to 2023 (mainly due to the addition of the Chiayi Plant into operations; if the Chiayi Plant was excluded, the percentage of energy saving would amount to 5%). 2. 3% water saving in 2023 compared to 2022; 2% water saving in 2024, mainly due to a water pipe leak at the Linkou Plant, increased operational activities, and the addition of the Chiayi Plant into operations. 3. Non-hazardous waste reuse rate: 82% in 2022; 82% in 2023, and 82% in 2024.
Medium-term: 4-15 years (2026-2032)	1. Adopt corresponding energy saving and carbon reduction measures in line with the national target of reducing GHG emissions by 20% in 2030 compared with the base year 2005. 2. Identify carbon emission hotspots in the plants through carbon inventory and propose solutions to reduce emissions.	1. Evaluate the energy-saving solution of the manufacturing process, as well as the feasibility of using green power and the proportion of usage. 2. Since the main carbon emission hotspots of the plants are Scope 2 emissions, the plants will gradually replace equipment or lamps with poor energy efficiency according to the evaluation results, and replace them with high-efficiency equipment, such as LED lighting, inverter air conditioners and inverter air compressors.
Long-term: 15-30 years (2033-2050)	1. Adopt corresponding energy saving and carbon reduction measures in line with the national target of reducing GHG emissions by 50% in 2050 compared with the base year 2005. 2. Continuously review energy usage based on carbon inventory results and find clean energy solutions.	1. Continue to conserve energy and reduce carbon emissions and waste, and reducing emissions has become the Group's mission. 2. Continuously evaluate how to improve the efficiency of energy use, or plan to increase the use of green power, based on energy use.



- (2) To better understand and assess the financial and operational impact of climate change, we track our GHG emissions, water usage, and total waste output and, based on the information collected, formulate polices for energy conservation and carbon reduction, GHG reduction, water conservation, or other waste management. The acquisition of products such as renewable energy certificates and carbon credits is also included into the Company's future carbon reduction strategy. In 2024, we adopted the Ministry of Environment's preliminary plan of a carbon fee of NT\$300 per ton as the internal carbon pricing to estimate the impact of carbon emissions on operations. Our preliminary evaluation shows that the impact will be low. We will continue to formulate energy-saving and carbon reduction measures, such as introducing an energy management system and optimizing equipment and facilities, so as to reduce the financial operational impact of climate change.
- (3) In 2024, CHEM continued to implement pollution control and energy conservation within the plants. To reduce GHG emissions, CHEM has, in addition to implementing energy saving programs within the plants, upgraded the power efficiency of its air-conditioning and lighting equipment. To comply with the Energy Bureau's requirements and support the Taoyuan City Government's vision of a low-carbon, green city, CHEM has also installed solar facilities at the Linkou Plant, Taoyuan Plant, Nanke Plant and Chiayi Plant, with a total installed capacity of 5,001.21 kWp. In 2024, a total of 5,725.024 kW was generated and sold in full to Taipower, reducing approximately 2,828.162 metric tons of CO₂e. As part of our carbon reduction strategy, we plan to consider shifting some solar power from wholesale to self-consumption in 2025.
- (4) Through energy-saving actions, the Linkou and Nanke Plants together saved 529,000 kWh of electricity in 2024 compared to the year before, and reduced GHG emissions by 261.2232 metric tons of CO₂e.
- (5) Since February 2022, the CPO unit of CHEM has been providing charging services for pure EVs. To date, 65 charging piles have been established at highway rest stops and *Dodohome* parking lots nationwide. In 2024, the total charging volume at national highway rest stops reached 93,696,960 kWh, equivalent to a reduction of 46,286.2982 metric tons of CO₂e emissions, which is roughly equivalent to 120 times the annual carbon captured by Daan Forest Park.
- (6) In 2024, the three solar power plants in Tainan (Tian Cin, Tian Chong, and Tian Peng) generated approximately 320 million kWh of electricity, all of which was sold to Taipower. This is equivalent to a reduction of 157,979 metric tons of CO₂e emissions, which is the same as the annual carbon absorption of about 409 Daan Forest Parks.
- (7) In terms of GHG management, carbon emission intensity is calculated based on energy consumption. As shown in Table 5-3, the 2024 statistics include the Chiayi Plant (in its first year of operation), in addition to the Linkou Plant and Nanke Plant. The three plants generated a total of 5,588.4446 metric tons of CO₂e emissions, a 4.5% decrease from 2023, representing a 17.4% decrease in GHG emission intensity per million in revenue. It can be seen from the statistics that in the last three years (2022–2024), the Company's GHG emission intensity has been decreasing, indicating that as total revenue increases, the Company simultaneously reduces GHG emissions.

Table 5-3: GHG Emissions Intensity at the Plants in the Past 3 Years

Item	Unit	2022	2023	2024
Total carbon emissions	tCO ₂ e	5,969.7176	5,851.5103	5,588.4446
Carbon emission intensity	tCO ₂ e /Million NTD	0.3219	0.2642	0.2182
Carbon emission intensity compared to previous year	%	-3.1%	-17.9%	-17.4%

Note: Annual revenue is calculated based on consolidated revenue. For the years 2022 to 2023, GHG emissions were calculated with reference to the Ministry of Environment's Guidelines for Greenhouse Gas Emissions Inventory Operations (May 2022). Starting from 2024, calculations follow the GHG Protocol as required by the FSC. In addition, the emission factors for LPG in 2022–2023 have been revised, and the data has been updated accordingly.

In compliance with the FSC's requirements, CHEM has categorized its 2024 emissions under Scope 1 (direct GHG emissions) and Scope 2 (energy indirect emissions) according to the GHG Protocol. The Global Warming Potential (GWP) values are based on the latest version, AR6. The electricity emission factor for Taiwan adopts the latest value announced by Taipower in 2023. The operational control approach is used to define the organizational boundary for the inventory, which includes the Company's production sites (the Linkou Plant, Nanke Plant, and Chiayi Plant) and warehouse (the Taoyuan Plant) and business offices (Nangang and Taichung), disclosing CHEM's complete GHG emissions. The 2024 inventory shows that Scope 1 emissions amounted to 1,286.1563 tCO₂e (accounting for 18%) and Scope 2 emissions amounted to 5,204.1678 tCO₂e (accounting for 82%), totaling 6,490.3241 tCO₂e, with electricity consumption as a hotspot of GHG emissions. External verification has been scheduled for this year. In 2024, Scope 3 emissions were selected for calculation, covering key categories such as major raw materials, employee commuting, goods transportation, waste treatment and transport, as well as product use. The preliminary calculation indicates GHG emissions of approximately 73,768.2693 tCO₂e. Of all the sources, emissions from the insulating gas (SF₆) used during product testing account for the largest share. Prior to delivery, product testing in accordance with IEC 62271 must be conducted using SF₆. Additionally, inspections required by the customer's contract must be completed before installation. The GWP value is 25,184 (calculated according to AR6). The estimated quantity of fugitive emissions is approximately 54,805.4794 tCO₂e. Through improvements in product design and testing pipelines, the average annual fugitive emission rate in 2024 was 1.87% (compared to 2.17% in 2023).



Appendix 4

SASB Industry Standards Index (December 2023 Edition)

Industry: Electrical and Electronic Equipment

Topic	Standard	Disclosure Indicator	Type	Unit	Corresponding Chapter & Explanation
Energy Management	RT-EE-130a.1	(1) Total energy consumed	Expressed in a measurable unit	GJ	(1) 43,132 GJ
		(2) Total energy consumed	Expressed in a measurable unit	GJ	(2) 100%
		(3) Share of renewable energy consumption	Expressed in a measurable unit	%	(3) 0%
Hazardous Waste Management	RT-EE-150a.1	Quantity and percentage of hazardous waste produced	Expressed in a measurable unit	Kg	20,528.1 kg 100%
	RT-EE-150a.2	Number of leakage incidents, total leakage volume, and compensatory recovery volume during the supervision period	Expressed in a measurable unit	Kg	No hazardous waste leakage incidents occurred. 0 kg
Product Safety	RT-EE-250a.1	Number of recalls issued and total quantity recalled	Expressed in a measurable unit	Number of recalls, quantity of units	0 recall 0 quantity recalled
	RT-EE-250a.2	Financial loss due to litigation involving product safety	Expressed in a measurable unit	NT\$	0
Product Life Cycle Management	RT-EE-410a.1	Percentage of revenue from products containing substances listed in IEC 62474	Expressed in a measurable unit	%, out of total revenue	Not applicable; CHEM's products are not included in the IEC 62474 regulatory framework.
	RT-EE-410a.2	Percentage of revenue from certified products that meet energy efficiency standards.	Expressed in a measurable unit	%, out of total revenue	Not applicable
	RT-EE-410a.3	Revenue from products related to renewable energy and energy efficiency	Expressed in a measurable unit	NT\$	NT\$18.16 billion
Raw Material Procurement	RT-EE-440a.1	Risk management related to the use of critical raw materials	Discussion & analysis	Nil	See Chapter 2.2 (Risk Management) and Chapter 3 (Sustainable Supply Chain)
Business Ethics	RT-EE-510a.1	Explanation of policies and practices regarding (1) corruption and bribery; (2) anti-competitive behavior	Discussion & analysis	Nil	See Chapter 2.1.4 (Ethics and Integrity)
	RT-EE-510a.2	Financial loss related to litigation involving corruption and bribery	Expressed in measurable unit	NT\$	0
	RT-EE-510a.3	Financial loss related to litigation involving corruption and bribery	Expressed in measurable unit	NT\$	\$0



Chung-Hsin Electric & Machinery Mfg. Corp.

