



## **About this Report**

In addition to presenting operational results to shareholders through the annual report, Hua Eng also strives to ensure and support employee well-being and sponsor social welfare activities. To further fulfill the responsibilities of a global citizen and meet the demands of business development trends, we engage with and communicate with Hua Eng's stakeholders and the general public. We disclose not only our business and economic activities but also our efforts and results in social and environmental aspects. Since 2015, we have continuously published our Corporate Social Responsibility (CSR) reports. In response to the "Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies", we released our first "Sustainability Report" in 2021. In 2023, we continued to disclose climate-related issues (TCFD) and prepare for the greenhouse gas inventory and assurance in accordance with the requirements of ISO14064-1. This demonstrates Hua Eng's local commitment, good corporate nature, and determination to protectour beautiful homeland.

The data and figures in this report are collected and provided by the respective department heads of the Company after their review. The information is then compiled and written by the Sustainability Report Team. The draft is reviewed and revised by the Sustainable Development Task Force, and further examined through internal administrative procedures to ensure its relevance for the report's purposes. The final version is approved and published upon the Chairman's approval. The Company's internal administrative procedure review process follows the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" to establish the operating procedures for the preparation and verification of sustainability reports by listed companies, and incorporates them into the internal control system.

#### **///** Report boundaries and scope

The scope of the data in this sustainability report is to fully disclose the impact of the Hua Eng Group on sustainability issues, focusing on the major operational sites of HUA ENG WIRE AND CABLE CO., LTD. (hereinafter referred to as "Hua Eng" or "the Company"). The financial information includes the operational activities of Hua Ho Engineering Co., Ltd. under the Group; the environmental and social data only disclose the individual data of Hua Eng, and are compiled and statistically presented by the responsible departments of Hua Eng using internationally accepted indicators. To enhance the quality of information disclosure, the subsidiary's information is independently presented in the "First Copper Technology Sustainable Report," with its content detailed at www.fcht.com.tw. In the future, we will consider including subsidiaries in the complete disclosure scope of corporate social responsibility based on the overall operating scale of the company group. The report information covers the three major aspects of Environment, Social and Governance that are of concern to the public.

#### Reporting period

This report discloses the Company's performance for the period from January 1, 2024, to December 31, 2024. In addition to presenting past performance, this report also provides appropriate planning for future development directions, with a focus on the management and performance of material topics to present the execution results of each issue in this report.

#### Contact information

Any comments, inquiries, or suggestions regarding this report or Hua Eng's sustainable development are sincerely welcome. Please feel free to contact us.

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Financial report information is taken from the financial report audited by accountants; the content within the [Environmental Protection] and [Occupational health and safety management system] sections mainly involves the adoption of relevant international standard management systems (ISO 14001 Environmental Management System and ISO 45001 Occupational Health and Safety Management System), with regular internal audits and annual external audits. The Company has engaged KPMG Taiwan to perform limited assurance on the subject information in accordance with Assurance Standard No. 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the Accounting Research and Development Foundation. Please refer to the appendix for the assurance report regarding the limited assurance on the subject information.

#### **///** Reference guidelines

The content structure of this report follows the guidelines of the Global Reporting Initiative (GRI) for the preparation and publication of the sustainability report, adopting the core option for disclosure. It also references the "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies", the industry standards of the Sustainability Accounting Standards Board (SASB), and the Task Force on Climate-related Financial Disclosures (TCFD) framework for disclosure in various aspects.

#### Reporting cycle

This is the third year of issuing the sustainability report, marking the 9th year since the Company began promoting corporate social responsibility and sustainable development. The issuance cycle is scheduled to be implemented annually. The electronic version of the report is available on the Company's website for public download.

- First publication date : December 2016.
- Previous issue : August 2024.
- Current issue: August 2025.
- Next issue: Scheduled for August 2026



(Sustainability Report)





Wang Hong-Ren
Chairman

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## Dear friends,

Looking back on 2024, facing political conflicts, extreme climate threats, rising electricity prices, and imposition of carbon fees tested the resilience and adaptability of businesses. We thank our employees, customers, and suppliers for their continued support throughout this challenging year. Hua Eng has always followed laws and regulations, upheld our corporate culture, and promoted information transparency. We have established comprehensive corporate governance rules and effective internal control systems to implement corporate governance and our commitments to society, safeguarding the rights and interests of shareholders and stakeholders. In response to the international trend and pressure for net-zero greenhouse gas emissions, Hua Eng completed a self-assessment of greenhouse gas emissions in 2024, which was verified by the Metal Industries Research & Development Centre (MIRDC), moving us closer to our net-zero emission goal.

Affected by the Israel-Palestine and Russia-Ukraine conflicts, the EU Carbon Border Adjustment Mechanism (CBAM), the imposition of carbon fees domestically, and the cancellation of ECFA tariff concessions in China, the Company faced even greater operational challenges. Fortunately, thanks to the proactive attitude and flexible responses of all employees, Hua Eng continued to move forward steadily. In 2024, the Company's core business achieved record profits, marking the second-highest level in history. To show appreciation for the dedication and efforts of all employees, the Company implemented a 4% company-wide salary increase in January 2025. Going forward, the management team will monitor changes in U.S. tariffs, strengthen green procurement and raw material risk control, and differentiate the market for oxygen-free copper wire DIP characteristics by developing high-value copper wire and shaped material markets, including electric vehicles, ultra-thin wires, solar energy, and medical applications. The Company will also actively participate in the power company's "Grid Resilience Strengthening Construction Plan" to secure orders, contributing to stable power supply amid the Al wave, while aiming to achieve even greater business performance.

Climate change has affected rainfall patterns, and in 2024, extreme rainfall from Typhoons Krathon and Gaemi caused significant damage. In response to this severe climate challenge, Hua Eng has implemented mitigation measures and, to fulfill its environmental sustainability vision, has replaced all plant lighting with 781 energy-saving LED fixtures, saving 820,050 kWh of electricity annually and reducing carbon emissions by approximately 405 tons. The first phase of the 780 kW solar photovoltaic system is expected to be completed by October 2025, while the second phase will proceed after further planning and evaluation. The plant continues to implement energy-saving improvements in its processes, responding to global energy-saving and carbon-reduction trends, and fulfilling its responsibility as a global citizen.

In today's fast-paced society, employees are facing increasing work-related stress. Hua Eng values employees' work-life balance and, in addition to encouraging outdoor leisure and social activities, organized the Hua Eng Group Employee Chengcing Lake Hiking and Team-Building Event on May 5, 2024. This activity allowed employees to enjoy nature with their families during their time off, strengthening bonds among colleagues while helping to relieve physical and mental stress.

Looking ahead, Hua Eng will continue to pursue self-improvement and strengthen corporate governance, while closely following international net-zero developments and domestic sustainability strategies. The Company remains committed to fulfilling its social responsibilities, providing proper care for employees, and working hand in hand with stakeholders to create a better future together.

# Contents



Table of Contents
About this Report
Chairman's Message
Sustainability
Performance

2024

SUSTAINABILITY REPORT

#### Communication and Interaction with Stakeholders

Stakeholder Communication and Response 6

Communication with Stakeholders 8

Identification and Response of Material Topics 10

Management Policies for Material Topics 13

03

#### **Environmental Protection**

Response to Climate Change64Resource Recycling73Pollution Control74Water Resource Management75Waste Management76

01

## Operation and Governance of Hua Eng

Business Development 17
Supply Chain Management 28
Business performance 32
Corporate Governance 33
Operational Risk Management 39

02

#### **Products and Services**

Introduction of Products and Services	4
Quality Management and Customer Service	5
Green Products	6
Certification Achievements	6

0

#### Friendly Workplace

Employees of Hua Eng 78
Happy Workplace 83
Occupational Health and Safety 88

05

#### **Social Care and Feedback**

#### **Appendix**

GRI, SASB Index	98
Limited Assurance Report by CPAs	10





## **Sustainability Performance**

ustainabilityPerformance	Item	2022	2023	2024
	Operating revenue (NT\$100 million)	79.26	71.15	82.04
	EPS (NT\$)	(0.09)	2.23	1.55
ிரியியி Governance	Return on assets (%)	(0.2)	9.36	6.38
aspect	Return on equity (%)	(0.49)	12.94	8.47
	Annual sales volume (tons)	26,561	24,472	25,240
	Resource recycling volume (tons)	458.6	436.8	526.082
	Heat intensity (GJ of total heat/NT\$ million of operating revenue)	15.81	17.01	14.40
Environmental Aspect	GHG emissions intensity (tCO <sub>2</sub> e/NT\$ million)	2.20	2.13	1.773
Азрест	Water consumption in the process (million liters)	53.284	71.168	58.608
000	Labor relations (Total employee benefit expenditure in NT\$ thousand)	9,360	7,869	10,074
	Employee salary (Average annual salary in NT\$ thousand)	704	779	827
Social Aspect	Key Indicators of work-related incidents (Frequency-severity indicator I.R)	0	0	0
CDP Score	Climate change (Climate Change)  (Average score of global electro-mechanical)	С	С	С



# **Communication and Interaction with Stakeholders**

p.05-15

2024 SUSTAINABILITY REPORT

Stakeholder Communication and Response	6
Communication with Stakeholders	8
Identification and Response of Material Topics	10
Management Policies for Material Topics	13



# Communication and Interaction with Stakeholders

In order to understand the opinions of various stakeholders and respond to the issues they prioritize, Hua Eng operates through the "Sustainable Development Task Force" led by the General Manager. The task force integrates internal group organizations, including departments related to corporate social responsibility such as finance, stock affairs, business, factory production, quality assurance, research and development, internal control and audit, general affairs, procurement, information, factory affairs, and environmental safety and health. Each department addresses issues pertinent to stakeholders such as investors, employees, customers, suppliers, the government and society. Through questionnaires and statistical analysis, the task force identifies and delineates major issues and boundaries, which serve as a reference foundation for the preparation of this report. Additionally, to comply with regulatory requirements, internal meetings of the "Sustainable Development Task Force" communicate and integrate the impact of climate change on company operations into major issues and formulate corresponding responses.

Hua Eng is committed to ensuring that, based on the selected material topics and corresponding indicators, relevant information is transparently disclosed in the report. In the future, it will continuously and systematically integrate this into internal management, incorporating ESG sustainability items into the annual work plans of respective responsible units. Through the Sustainable Development Task Force, it will annually review and report on implementation results and allocate appropriate budgets to facilitate policy promotion. Additionally, it will maintain various communication channels to understand the needs of stakeholders, respond appropriately, and handle issues properly.

In response to the Sustainable Development Best Practice Principles for TWSE/TPEx Listed Companies announced at the end of 2021, Hua Eng revised the content of its "Practical Guidelines on Corporate Social Responsibility." On May 9, 2022, the Board of Directors of Hua Eng approved the revision and update of the "Sustainable Development Best Practice Principles," providing a basis for the Company's promotion of sustainable management. (The detailed content of "Sustainable Development Best-Practice Principles" in this report can be found at:

https://www.hegroup.com.tw/userfiles/Investor/H2022forever.pdf



Sustainable Development Best-Practice Principles



#### **Sustainable Development Task Force**

General Manager





Corporate Governance Corporate Governance Manager
Deputy General Manager, Administration
Accounting Manager
Audit Manager

**External Investor** 

Information Manager
Stock Affairs Manager
Deputy Manager of Plant Affairs

Customer Supply Chain

Business Manager
Procurement Manager

**Employee Care** 

Deputy Foreman of the Plant Plant Affairs Manager General Affairs Manager

Environment, safety and health

Foreman of the Plant
Head of ESH Office
Manufacturing Division Manager



## **Communication with Stakeholders**

	Key Issues	Stakeholder	Reference Chapter	
Corporate Governance	<ul> <li>Corporate Governance</li> <li>Compliance with Laws and Regulations</li> <li>Confidentiality Management</li> </ul>	● Employee ● Government Authority	Operations and Governance of Hua Eng	
Risk management	■ Risk Management ■ Crisis Management ■ nternal Sudit	● Investor	Cotomanos di rida Eng	
Customer Services	Customer Reports and Satisfaction	er Privacy ● Customer		
Supply Chain Management	Supply Chain and Raw Materials Risk Management     Supplier Management	●Supplier	Operations and Governance of Hua Eng	
Employee Care Training	<ul> <li>Talent Recruitment and Retention</li> <li>Employees' Physical and Mental Health and Safety</li> <li>Employee Training and Development</li> <li>Grievance Mechanism for Labor Human Rights Issues</li> </ul>	●Employee	Healthy and Friendly Workplac	
Environmental Protection Safety and Health	<ul> <li>Environmental Policy and Management System</li> <li>Energy Use Efficiency</li> <li>Environmental Protection Expenditure</li> <li>Environmental Issue Feedback Mechanism</li> <li>Occupational Health and Safety Policy and Management</li> <li>Pollution Control</li> <li>Carbon Emissions and Carbon Rights Management</li> <li>Product Environmental Responsibility</li> <li>Green Supply Chain</li> </ul>	<ul> <li>Employee</li> <li>Government Authority</li> <li>Supplier</li> <li>Investor</li> <li>Community</li> <li>Non-Governmental Organization</li> </ul>	Environmental Protection Products and Services Healthy and Friendly Workplace	

▼ Before compiling the 2024 Sustainability Report, Hua Eng Group's Sustainable Development Task Force held a meeting. ▼







#### **Communication with Stakeholders**

The sustainability report is one of the main channels for communicating ESG issues with stakeholders. For this reason, in addition to daily stakeholder communication channels, we also engage with stakeholders through the material topics analysis process to identify positive and negative impacts of sustainability issues and determine material topics. Further, we disclose relevant information in the sustainability report to fully convey the content and performance of the management of material topics.

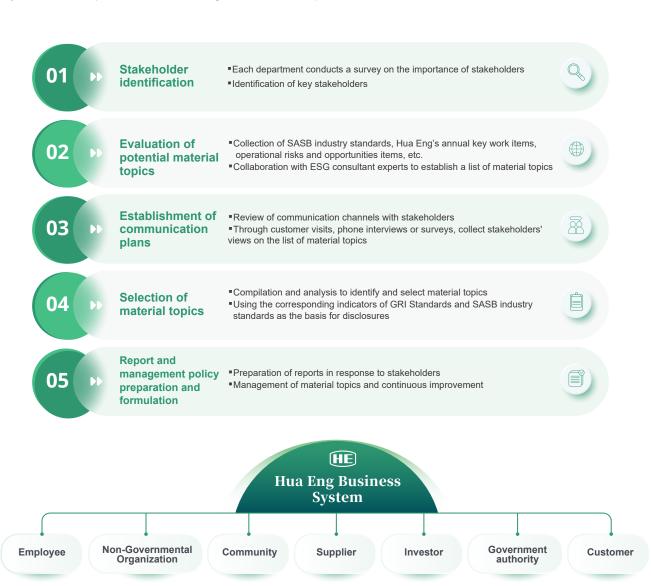
#### Analysis Methods and Processes

Correctly identifying the stakeholders of a company and establishing effective communication with them is a crucial foundation for a company to move forward and achieve sustainable development. Therefore, the first step that Hua Eng takes in preparing its sustainability report is to identify its key stakeholders who are significantly related to the Company through a systematic analysis model.

After identifying key stakeholders closely linked with Hua Eng through the stakeholder identification process, Hua Eng re-examined and reviewed the communication channels and issues with each type of stakeholder. Through customer visits, phone interviews, or surveys, major considerations were analyzed and duly responded to in this report.

#### Stakeholder identification

Hua Eng's ESG team members convened a discussion meeting based on the operating attributes and conducted stakeholder engagements according to the five assessment factors of the Stakeholder Engagements Standard (AA1000 SES:2015), which includes Dependency, Responsibility, Tension, Influence, and Diverse Perspective. The investigation was conducted in the form of Q&A within various departments. Department representatives, based on their daily interactions and records, carried out brainstorming to list the stakeholders of various aspects. This included all directly and indirectly related personnel/organizations. After joint discussion and decision-making, Hua Eng identified its stakeholders, which are divided into seven categories: employees, customers, government authorities, suppliers, investors, communities, and non-governmental organizations (NGOs).





2024 SUSTAINABILITY REPORT

## **Communication Channels between Hua Eng and Stakeholders**

In addition to daily business interactions, the Company continuously enhances various communication channels with stakeholders, addresses the issues of concern to various stakeholders, strives to respond to their needs, and will present the operational results of these communication issues in subsequent reports.

Hua Eng believes that establishing good interactions with stakeholders not only helps the Company better capture social and environmental trends and challenges, but also creates greater value for the Company and society. This enables the enterprise to continually progress and become a key driver of sustainable growth and innovation.



Stakeholder		Interacting parties	Key Issues	Communication channels / forms	Topics of communication and responses		
Investor		Investor	Financial Information Disclosure Addressing Investor Concerns Dividend Policy	General meeting of shareholders, annual report (once a year) Investor conference (twice a year)	Business operation status and future development direction; in accordance with financial statement reports and Q&A with senior executives		
			Effective Two-way Communication Annual Report Preparation	Spokesperson system (irregular)	Major information about the Company's operations; public websites and media		
Customer		Customer	Improve service efficiency and quality	Visits (regular/irregular)	Price/quality/delivery; reply to customers after review in the production and sales meeting		
			to meet customers' needs	Customer requested meetings (irregular)	Supplier corporate social responsibility; Cooperative factory inspection		
			Talent Development and Retention Employee Training and Development	Union member meeting (once a year)	Labor rights and conditions communication and suggestions; factory management assigns personnel to participate in the meeting, and resolutions are submitted to the factory affairs meeting for review		
Employee	••	Full-time employee	Employees' Physical and Mental Health and Safety Grievance Mechanism for Labor Human Rights Issues	Safety and health committee (once every three months)	Occupational safety training, occupational safety inspections; personnel training, tracking and improvement		
Linployee		Part-time employee		Labor-management meeting (once every three months)	Labor disputes (such as pensions); jointly go to the Department of Labor for mediation and arbitration		
			Labor/management relations / employment Salaries, Benefits, and Care	Benefit committee meeting (once every three months)	Employee benefits, meals, etc.; strive to increase the distribution proportion		
Supplier	••	Supplier Contractor Outsourcer	Raw Materials Risks and Sustainable Supply Chain Management Supplier Evaluation Management Sustainable Procurement Policy and Corporate Social Responsibility of Suppliers Contractor and Outsourcing Safety	Email/phone/documents/relevant meetings (irregular)	Quality/price/delivery/service; establish qualified suppliers; negotiate and compare prices for contracting Procurement contracts; quality issues are addressed through communication channels		
Government <b>&gt;&gt;</b>		Competent business authority	•	•	Pollution Control	On-site inspection/visit [ regular (Department of Labor), irregular (Commodity Inspection Bureau, Environmental Protection Department, Department Labor, Fire Department) ]	Regular inspections of cranes, inspection reports from third-party certification bodies, labor safety, pollution, fire safety audits; supervision of tests, issuance of inspection or audit reports; or submission of improvement follow-up reports
		Municipal government	Ethical Management, Anti-corruption Carbon Emissions and Carbon Rights Management	Issuance of letters [ irregular (Department of Transportation And Communications, Police Department, Department of Labor, Water Resources Bureau) ]	Improvement of road traffic facilities and request for police support; request for the establishment of breastfeeding rooms and childcare centers, and the registration of groundwater usage volume		
Community		Local community	Community Concerns on Pollution- Related Issues	Neighborhood activities (occasionally through feedback from the head of the neighborhood)	Noise and pollution control; dispatch personnel for inspection and measurement, and list cases for follow-up and improvement		
Community		near the plant	Community and Neighborhood Relations Sustainability Report Publication	Phone calls, invitations [ irregularly (community development association, District Offices) ]	Community feedback (such as sponsoring event funds, providing scholarships, and community patrol motorcycles); donations in cash or in kind		
Non-		Public association	Environmental Issue Feedback Mechanism Product Safety and Environmental	Issuance of letters (irreguilar)	Seminars, briefings, etc.; personnel participation		
Governmental Organization	••	Academic institution	Responsibility Energy Use Efficiency Green Supply Chain	Industry meetings (regular; irregular)	Industry exchange; market information; personnel participation		

2024 SUSTAINABILITY REPORT

# Identification and Response of Material Topics

The ESG Sustainability Development Task Force, through ongoing engagement with stakeholders, convened a meeting on February 20, 2025, to identify the sustainability topics for 2024. Through internal consultations, sustainability topics for consideration were selected. A total of 16 topics were reviewed, and feedback was collected from both internal and external stakeholders, resulting in 139 valid questionnaires. After compiling the stakeholder responses and consulting with external expert advisors, it was decided to retain the 2023 sustainability topics while expanding disclosure to include three additional topics. To ensure objectivity and alignment with international trends, the questionnaire results were further reviewed through discussions with external expert advisors and by incorporating weighted considerations based on material issues identified in global semiconductor industry assessments. Finally, a materiality matrix is plotted based on the product of the degree of impact of issues and the frequency/likelihood of occurrence. The results of the materiality analysis are produced and confirmed by the Sustainable Development Task Force and ESG consultants after discussion. The disclosure items in this report will be primarily based on these results. Additionally, relevant ESG information from various aspects will be appropriately disclosed to fully present the Company's ongoing efforts in sustainable management.



#### Process of Materiality Analysis

## Understand the organization's background

16 issues

#### A list of sustainability issues in 2024

Based on the Hua Eng's sustainable development policy, by referencing the latest GRI Standards, SDGs, international guidelines such as issues of concern to the wire and cable industry and key industry trends, the relevance of Hua Eng's operational activities and business relationships to sustainable development is analyzed. Key stakeholders are identified and their feedback is considered to compile a list of sustainability issues.

#### External experts were invited in 2024

Identify the positive and negative impacts of various issues on the external environment, integrate the impact content into questionnaires for description, and invite external experts to provide adjustment suggestions based on the questionnaire content.

#### **Identify impacts**

External experts

## Assess the significance of the impacts

139 questionnaires

## A total of 139 internal and external questionnaires were collected in 2024

We invited stakeholders to participate in the materiality survey to assess the level of impact and the likelihood of occurrence for various issues. The significance of the impacts was determined based on the survey results.

## Prioritize the most significant impacts for reporting

Material topics for 10

#### **Material topics for 2024**

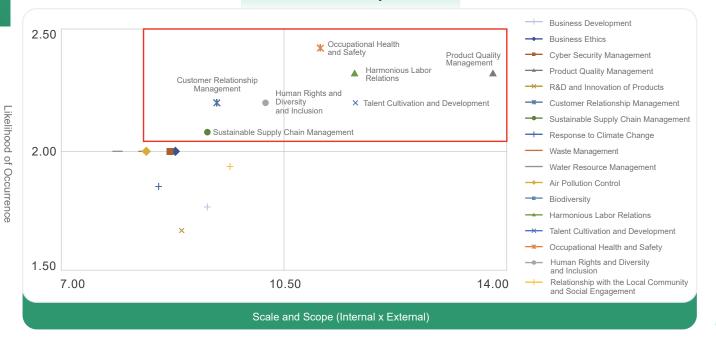
Sort various issues based on impact significance, with the threshold set for positive impact (scale and scope: internal x external), negative impact (degree of impact: internal x external), and the likelihood of occurrence.

Material topics ranking. Material topics are reviewed by members of the Sustainable Development Task Force. After internal meetings and communication within the "Sustainable Development Task Force," the impact of climate change on the Company's operations is included as a material topic.



#### **Positive Impact**





#### negative Impact



#### Material Consideration Boundary Settings

This report only discloses the actual data available within the organization for each material topic; regarding external information of the organization, efforts will be made to gradually guide related members to disclose the information through awareness communication and enhanced interaction.

This report defines the targets and boundaries of various material topics within and outside the organization through internal discussions, as detailed in the list.

## Positive Impact of Sustainability Issues

Product Quality Management

Harmonious Labor Relations

Occupational Health and Safety

Talent Recruitment and Development

R&D and Innovation of Products

Human Rights and Diversity and Inclusion

Customer Relationship Management

#### Negative Impact of Sustainability Issues

R&D and Innovation of Products
Sustainable Supply Chain Management
Climate Change and Energy Management

Harmonious Labor Relations

Talent Recruitment and Development

#### Other Issues of Concern

Waste Management and Recycling Water Resource Management Biodiversity

Relationship with the Local Community and Social Engagement

Air Pollution Control

Cyber Security Management

Sustainable Investment Transition



#### Material Topics Boundary Settings

ı	Material Topics	Materiality Description	Direct Impact	Impact or Relati	Impact on Business Relationship		Other Indirect Impact		
			Hua Eng	Customer	Supplier	Government Agency	Community	Non- Governmental Organization	
	R&D and Innovation of Products	Wire and cable is a mature industry in the domestic market, with competitive advantages focusing on technological advancements and cost reductions, aiming for innovative products and new technologies to boost the Company's competitiveness and achieve sustainable operations.	•	•				•	
	Product Quality Management	Procurement of high-quality raw materials, good process monitoring and improvement, and rigorous quality control testing in compliance with environmental laws and regulations can reduce the product's environmental impact.	•	•		•			
Governance	Customer Relationship Management	Improve service efficiency and quality to meet customers' needs.	•	•					
and Economic Aspect	Sustainable Supply Chain Management	Ensure the quality and stability of raw material supply to meet the production and operational needs of the Company	•		•				
Aspect	Occupational Safety and Health	Create a friendly and healthy workplace environment and take care of colleagues' health	•		•	•			
	Harmonious Labor Relations	Employees are important assets. Value and listen to employees' voices to increases trust and cohesion	•		•	•	•		
	Talent Recruitment and Development	Talent is a core element of the Company's competitive advantage. By evaluation, training, and developing internal talent, the Company aims to achieve its sustainable development goals	•	•					
Environmental Aspect	Climate Change and Energy Management	Identify and manage risks and opportunities due to climate change to achieve the "2050 net zero emissions" target	•	•	•	•		•	
Social Aspect	Relationship with the Local Community and Social Engagement	Focus on the corporate philosophy of "taking from society and giving back to society"	•				•		
	Air Pollution Control	Compliance with laws and regulations to ensure pollution control	$\circ$	$\circ$			$\circ$	0	
Other Topics of Concern	Water Resource Management	Comply with laws and regulations to effectively implement pollution prevention	0			0	0	$\circ$	
(Non-material Topics)	Cyber Security Management	Value the implementation of cyber security management, ensure stable operation of the enterprise and maintain the Company's brand reputation.	0	0					
	Sustainable Investment Transition	Continuously research cost reduction and develop new products to respond to market changes and trends, making the Company more competitive in the market.	0	0	0				

Note: "•" indicates the relevance with material topics with corresponding information disclosed in this report; "O" indicates the relevance with non-material topics.



## **Management Policies for Material Topics**

Topic	Materiality Description	Policy	Short-term (2024) Goals  Action Pl	Medium-to-Long Term (2025-2030) Goals ans and KPIs	Responsible Unit
Sustainable Supply Chain	Ensure the quality and stability of raw material supply to meet the production and operational needs of the Company	Implement procurement policies that are favorable and friendly to the environment, focus on the impact of hazardous chemicals on the environment, and prioritize the selection of local suppliers from Taiwan to support relevant domestic industries, reduce transportation of raw materials and materials, and minimize environmental impact.	Ensure a stable supply chain and maintain a continuous, uninterrupted supply of raw materials.  Action plan  1. Business information is collected so that technical and production functions can respond in advance.  2. Continuously develop alternative materials to avoid raw material supply shutdowns and reduce single supplier risks.  3. Prioritize local procurement and respond flexibly to production requirements.	Continue to adopt environmentally friendly green procurement strategy, prioritize local suppliers in Taiwan.  Action plan  1. Maintain the ratio of domestic procurement amount (excluding bulk metal raw materials) to total procurement amount at 60% or more.  2. Ensure new suppliers commit to and sign the "Letter of Commitment to Corporate Social Responsibility."  3. Increase the number of on-site audits of suppliers.	Procuremen Office
Sustainable Investment Transition	Through experience and technologies that have been passed on for years, Hua Eng conducts research on cost reduction and develops new products on a continuous basis to respond to market changes and trends, enabling the Company to be more competitive in the market. Based on this, the Company formulates long-term, short-term, and mid-term operational development plans.	Focusing on the market and balancing production and marketing, we prioritize the domestic market, supplemented by export sales. We achieve reasonable production costs, improve the development of new material sources and the production management, adjust the proportion of products to achieve high quality, reduce the delivery time, and boost the market competitiveness.	Short-term business development action plan  1. High-quality oxygen-free copper, electric vehicle motor rectangular wires  2. Turnkey projects, ultra-high voltage 161KV turnkey projects and 345KV emergency repair engineering projects  3. Green energy industry, high-efficiency thermal power plant rubber cables, medium and high voltage cables for solar and wind power generation, RoHS environmental protection cables  4. Track and traffic, special armored optical fiber cables for the Railways Administration, LSFH cables for MRT  5. Special armored cables for petrochemical plants	Mid-to-long-term action development plans  1. Further research and develop high value-added products, integrate resources from research institutions such as the ITRI and universities to seek for opportunities in new industries.  2. Recruit and train talents to enhance the talent training program implemented together with the academic community on a continuous basis.  3. Establish core technical capabilities.  4. Plan to study the feasibility of reducing carbon emissions in response to the "Domestic Climate Change Act" and the EU's "Carbon Border Adjustment Mechanism (CBAM)" to achieve ESG goals and sustainable corporate operations.	Sustainable Developmel Task Force, Corporate Governance Managemel (Stock Affair Division)
Product R&D and Innovation Management	Wire and cable is a mature industry in the domestic market, with competitive advantages focusing on technological advancements and cost reductions. Therefore, we are expanding overseas, reducing the production of low value-added products, and actively diversifying our portfolio towards innovative products and new technologies to enhance the Company's competitiveness and ensure sustainable operation.	Innovative technology towards sustainable development	KPIs In line with the government's energy policy to develop green energy products  Action plan  Obtain IEC 62930 and EN 50618 certification for solar cables (PV Cable or Solar Cable)	KPIs  Develop high value-added products, diversify operations, and develop new technologies to enhance efficiency  Action plan  1. Add 345kV Furukawa EB-A certification and apply for Taipower compatibility test  2. Develop coiled WTR web optical cables  3. Develop 600C fine-diameter grooved optical cables and 432-core multiplier fiber optic cables filled with micelles	Technical Departmen



## **Management Policies for Material Topics**

Tania			Short-term (2024) Goals	Medium-to-Long Term (2025-2030) Goals	Responsible
Topic	Materiality Description	Policy	Action Plans and KPIs		
Product Quality Management	As a global citizen, Hua Eng is committed to the environmental responsibility of its products. We comply with environmental regulations by sourcing high-quality materials, maintaining excellent process control and improvements, and conducting rigorous quality assurance testing to minimize the impact of our products on the environment.	Reliable and consistent quality to meet customers' needs	Achievement of 80% of the target defective rate by product category. Customer complaints of 24 cases/year  Action plan  1. Oxygen-free copper production technology and quality improvement plan.  2. A total of 77 maintenance and repair tasks were scheduled for high-voltage cable equipment CS61, PA3400, PCV161-2, PA81, PE150, and PVM-1, with 99% completed as of the end of November.  3. An additional 18B planetary cabling machine was purchased to relieve the workload of PA40.  4. Planned upgrade of PA81 wire feeder shaft transmission gear due to wear and resulting tension instability.  5. Upgraded plan for PCV25-1 CV machine head wear defects that can lead to extrusion of dead material.	KPIs     Achievement of 87% of the target defective rate by product category     Customer satisfaction of 92 points     Maintain effective operation of ISO 9001 quality system and TAF 17025 laboratory      Action plan     Strengthen personnel operational skills training to enhance quality awareness     Maintenance and updates of equipment to improve production efficiency and increase product yield     Implementation of quality process audits and QC engineering improvement projects	Quality Control Department
Customer Relationship Management	Improve service efficiency and quality to meet customers' needs.	Actively understand customers' needs and resolve issues to provide high-quality services, with the goal of growing together with customers	Enhance distribution network operations, understand and gather various customer needs.	In the future development of information network operations, we will create surveys based on collected demands, regularly gather customer data and respond to relevant factory units accordingly in order to continuously meet customer needs.	Business Department
Cyber Security Management	Corporate operational activities heavily rely on information and communication systems. With the ever-evolving and significant impact of cybersecurity threats, companies must place greater emphasis on implementing cybersecurity management to ensure stable operations and maintain brand reputation.	Carry out an effective information management system, and maintain the confidentiality, completeness and availability of the important information system, so as to ensure the secure operation of information system and equipment network and achieve the goal of sustainable management.	Strengthen infrastructure security, enhance information security and promote the use of legal software.	In compliance with legal requirements, we are gradually implementing ISO27001 information security certification to improve the information security domain and enhance corporate information security awareness through education and training.	IT Department
Climate Change and Energy Management	Due to the increasing severity of global climate change issues, in response to international developments and national policy changes, as well as the risks and opportunities associated with climate change, identification and management are conducted to achieve the "2050 Net Zero Emissions" goal.	Establish the sustainability development team to execute projects related to risks and opportunities caused by climate change, and track and review the execution results in ESG sustainability meetings.	Identify climate change risks and opportunities, and implement energy-saving and carbon reduction  Action plan  1. Issue an ISO 14064-1 greenhouse gas inventory report and have it verified by a third party.  2. Evaluate the installation of a solar photovoltaic system on the roof of self-built plants to meet 10% of the large electricity users' needs.  3. Gradually replace halogen bulbs in production areas with power-saving LED bulbs.  4. For the traditional oil-fired energy-consuming boilers, implement a complete replacement with liquid nitrogen with zero carbon emission.	KPIs No air pollution violation incidents  Action plan  1. Based on the ISO 14001 management system, continue to effectively manage air pollution prevention.  2. Strengthen the training of dedicated personnel.  3. Deepen the development of environmental technology monitoring equipment to achieve the goal of reducing total air pollution and ensure environmental sustainability.  3. Establish an Energy Management System (EnMS) to identify energy-saving opportunities. Using the PDCA management cycle, continuously improve energy efficiency, reduce energy costs, and lower greenhouse gas emissions.	Sustainable Development Task Force



## **Management Policies for Material Topics**

Topic	Materiality Description	Policy	Short-term (2024) Goals	Medium-to-Long Term (2025-2030) Goals	Responsible
,	Materiality Description	r oney	Action PI	ans and KPIs	Unit
Air Pollution Control	Compliance with laws and regulations to ensure pollution control	In accordance with the Air Pollution Control Act, testing and reporting of fixed pollution source emissions are conducted. Emissions are released upon proper treatment. The detected values of air pollutants are far below the control standards for each process location.	KPIs No air pollution violation incidents  Action plan  1. Based on the ISO 14001 management system, continue to effectively manage air pollution prevention.  2. Fixed pollution sources are all equipped with pollution control equipment such as baghouse dust collectors, scrubbers, and various filters.  3. According to the Air Pollution Control Act, obtain operating permits for each process and facility, and conduct regular testing and reporting. Currently, the detected values of air pollutants (sulfur oxides SOx, nitrogen oxides NOx, volatile organic compounds VOCs, particulate pollutants) are all well below the control standards at various process locations.	KPIs No air pollution violation incidents  Action plan  1. Based on the ISO 14001 management system, continue to effectively manage air pollution prevention.  2. Strengthen the training of dedicated personnel  3. Deepen the development of environmental technology monitoring equipment to achieve the goal of reducing total air pollution and ensure environmental sustainability.	Safety and Health Office
Relationship with the Local Community and Social Engagement	Based on the corporate philosophy of "taking from society and giving back to society," Hua Eng not only implements sustainable operations and cares for its employees, but also actively gives back to the community. The Company assists and participates in community efforts to promote the development of arts and culture, and engages in various public welfare activities to foster good neighborly relations.	Sponsor community development and actively promote community care	Engage in social care, promote community development, and advance social welfare  Action plan  1. Provide scholarships to outstanding students in the Kao-Nan community, from elementary school to Ph.D. programs. As long as academic and conduct grades meet the standards, scholarships are awarded. A total of NT\$119,000 was sponsored in scholarships in 2024.  2. Improve the neighborhood environment and beautification efforts, as well as maintain environmental cleanliness.  3. Participate in community activities such as the Lantern Festival riddles and drawings, Dragon Boat Festival zongzi making and donation event, and neighborhood walking activities, with a total sponsorship of NT\$40,000.  4. Sponsor the construction of a warehouse and temple building at Wuhe Community Shande Temple and assiste in installing community surveillance cameras to maintain neighborhood safety, with a total sponsorship of NT\$230,000.	1. Actively support and participate in the development of community culture and activities to enhance the quality of life and culture in the community.  2. Focus on sustainable development and environmental protection, reduce pollution, and minimize the Company's environmental impact.  3. Utilize corporate resources and influence to enthusiastically engage in public welfare, and give back to society through donations, manpower mobilization, or materials donations.  Action plan  1. Establish trusts or foundations for charitable causes that the Company recognizes and cares about, to provide more stable and long-term assistance.  2. In line with government policies, conserve energy and reduce carbon emissions to achieving net zero carbon emissions by 2050  3. Sponsor community activities to beautify the environment  4. Actively participate in social welfare activities	General Affairs Office, Plant Affairs Office
Talent Development	Talent is a core element of the Company's competitive advantage. By evaluation, training, and developing internal talent, the Company aims to achieve its sustainable development goals	Recruit outstanding talent and actively invest in education and training to enhance employee skills, reduce turnover rate, establish sustainable talent development, and drive company growth.	<ul> <li>KPIs</li> <li>Employee turnover rate (excluding retirements) ≤ 5.5% Ensure training course completion rate 率≥90%</li> <li>Action plan</li> <li>1. Continuously implement employee training programs to meet the Company's development goals.</li> <li>2. Encourage employees to pursue further studies and strengthen industry-academia collaboration.</li> <li>3. Evaluate market salary levels and make appropriate adjustments and planning for employee remuneration, giving special consideration and promotion opportunities to high performing talent in order to maintain competitive salaries.</li> </ul>	<ul> <li>KPIs</li> <li>Employee turnover rate ≤5.0%</li> <li>Ensure training course completion rate ≥95%</li> <li>Action plan</li> <li>1. Establish a comprehensive talent development and training system to support employee learning, growth, and career planning.</li> <li>2. Implement a complete remuneration and benefits program to foster a happy and harmonious workplace, promote employee stability, and reduce turnover rate.</li> </ul>	General Affairs Office Quality Control Department



# Operation and Governance of Hua Eng

p.16-45
2024 SUSTAINABILITY REPORT

Business Development	17
Supply Chain Management	28
Business performance	32
Corporate Governance	33
Operational Risk Management	39

## **Business Development**

## Operation and Governance of Hua Eng

Wire and cable is a mature industry in the domestic market, with competitive advantages focusing on technological advancements and cost reductions. Therefore, we are expanding overseas, reducing the production of low value-added products, and actively diversifying our portfolio towards innovative products and new technologies to enhance the Company's competitiveness and ensure sustainable operation.

Through experience and technologies that have been passed on for years, Hua Eng continuously conducts research on cost reduction and new product development to respond to market changes and trends, enabling the Company to be more competitive in the market.

Based on this, we formulate long-term and short-to-mid-term operational development plans.



#### Short and medium-term business development plan

#### High-quality oxygen-free copper materials

- Develop electric vehicle motor rectangular wires
- Expansion of our market share in Mainland China, Southeast Asia, and Japan
- Development of copper materials to meet the demand of wind power generating units
- Development of high-quality copper materials to meet the demand of the domestic semiconductor industry

#### **Turnkey project**

Ultra-high voltage 69kV, 161kV, and 345kV engineering turnkey projects

#### Communication cables, wire and cables

- Development of web optical cables, multi-core and fine-diameter fiber optic cables
- Special armored cables for factory construction in the petrochemical industry
- Rubber cables for power plants
- Various cables for rail transportation (special armored optical fiber cables for the Railways Administration, LSFH cables for MRT)
- Various wires and cables for large-scale factory construction in science parks



- Gradual replacement with high-efficiency machines
- Establishment of key technologies for high-quality oxygen-free copper materials, and integrate into the global electric vehicle market supply chain
- Reorganization of equipment in production plants to optimize site utilization and maximize overall efficiency







### **Company Profile**

HUA ENG was established in 1956 under the name "Hua Eng Copper and Iron Industrial Co., Ltd.," initially focusing on the production of copper wires. On October 5, 1987, it was renamed "Hua Eng Wire & Cable Co., Ltd.". On July 11, 1988, its stocks were issued and listed. As of 2024, the Company marked its 68th year of operation.

Since 1968, in response to national development and customer needs, we have continuously introduced the latest production technologies from abroad and cooperated with Japanese wire and cable manufacturers to produce various wire and cable, communication cables, submarine cables, optical fiber cable, optical fiber passive components, and high-quality oxygen-free copper materials. Recently, we have been actively involved in undertaking turnkey projects for ultra-high voltage wire and cable lines and are now one of the top three cable manufacturers in Taiwan.

Hua Eng's core wire and cable industry primarily targets the domestic market while exports play a secondary role. The prosperity of the market is closely related to the domestic demand market. Additionally, upstream raw materials for wire and cable are mostly imported and are easily impacted by international political and economic situations. In the domestic market of Taiwan, there is an oversupply of general copper wire. Hua Eng's oxygen-free copper focuses on high quality, competing with the general SCR (Southwire Continuous Rod) copper in terms of quality difference, and aims to achieve market segmentation by ensuring stable sales and profits. Furthermore, Hua Eng is expanding its market towards high value-added products such as semiconductor diode leads, ultra-thin enameled wires, flat enameled wires, and the automobile industry.



#### 2024 SUSTAINABILITY REPORT





November 24 - Gushan factory completed the construction of the wire plant, started production of various wire products.

1966



February 15 - The construction of the first phase of the Kao-Nan factory was completed. It started production of various power and communication cables.



January 18 - Hua Eng Head Office Building opened (No. 170 Chung Cheng 4th road Kaohsiung).

1983



July 1 - Established Photoelectric Research Institute in Kao-Nan plant; Taiwan's first optic fiber cable manufacturer.

December 26 - Taiwan's first introduction of dry vulcanization equipment (Completely Dry Curing and Cooling system, CDCC), produce high voltage XLPE power cable.

July 11 - The Company's stock was listed (Stock code: 1608).

1956

(Year)

1956

1971

1976

1985

1987

1988

1990

December 8 - Established "Hua Eng Copper and Iron Industry Co., Ltd.", operating copper wire manufacturing processing business.

March 1 - Approved the use of "Hua Eng" brand, as a registered trademark.

December 8 - The 20th **Anniversary Celebration** Ceremony and Oxygen-free Copper plant Grounding Ceremony were held in Kao-Nan factory.

1977



June 15 - Taiwan's first completion "Kinmen ~ Lieyu submarine communication cable" production and deployment, and won the award from the Ministry of Transportation and Communications.



October 5 - The Company's name changed to "Hua Eng Wire & Cable Co., Ltd."

August 3 -Established "Hua Ho Engineering Co., Ltd." joint venture with Japan Showa Electric Wire & Cable Co., Ltd.









### **History**



March 1 - Obtained ISO 9001 Quality Management System certificate of the Ministry of Economic Affairs.

November 1 - Renting 123,177 m2 of land from Taiwan Sugar Company established Jen-wu plant.

1996



Passed ISO-9001 quality management system UL certification.

1999



April 23 - Passed the ISO-14001 environmental management system UL certification.



December 15 - "Zhenbei ~ Chungtao 161kV Electrical and Mechanical Engineering turnkey project" won the golden award.



Completed the manufacturing and laying of the 25kV submarine power cable for Taiwan Power Company in Matsu Nankan ~ Beigan

Completed the "turnkey project of the 161kV underground ultra-high voltage cable for Taiwan Power Company in Meishan ~ Jioucyu".

1992

(Year)

1994

1998

2000

2004

2008

2009

2011

Installation of a new generation of DIP oxygen-free copper production equipment, produce high quality product



of oxygen free copper.

On December, obtained Taiwan Power Company 69kV high voltage cable Procuct Certificate.

May 13 - Passed Taiwan Power Company ACSR overhead aluminum wire product qualification certification.

December 15 - Acquired Taiwan Power Company 161kV ultra-high voltage cable product qualification certificate.



January 15 - Acquired Taiwan's first turn-key case of voltage power cable project "Beiying ~ Jiachang".

2006

November 15 - Obtained CNLA laboratory evaluation passed the length and temperature calibration laboratory qualification certificate.



March 26 - Cable passed the Japan PSE product safety mark certification.

August 20 - Acquired Taiwan Power Company 345kV UHV Cable Localization Evaluation Qualification Certification.



January 31 - Obtained UL ISO 18001 (OHSAS Occupational Health and Safety Management System)certificate.

February 10 - Acquired Taiwan Power Company 69kV anti-ant high voltage cable product certificate.

June 3 - Acquired orders for Taiwan Power Company Kaogang~Wujia 345kV UHV cable.



#### Operation and Governance of Hua Eng

2024 SUSTAINABILITY REPORT

### History



Successfully completed Taiwan Power Company "Kaogang ~Wujia 345kV Electrical and Mechanical Engineering turnkey project".

August 27 - Acquired the Taipower "Dalin ~ Xingao Port 345kV electromechanical engineering turnkey project"

2015



December 8 - Hua Eng Company celebrates its 60th anniversary.

December 30 - First issued the "Hua Eng Corporate Social Responsibility Report (CSR)".

2018



December 4 - Hua Eng was awarded the "Gold Certificate" in Supplier Evaluation and "CSR Information Disclosure Performance" by Chunghwa Telecom Co., Ltd.

December 24 - Through completing Taipower's 161kV turnkey project, Hua Eng won the 19th Executive Yuan Public Construction Commission Golden Quality Award.

2020



2022

October 5 - Ranking among the Top 500 Excellent Exporters/Importers in 2022 by the International Trade Administration.

Awarded by the Ministry of Finance as an exemplary business for the outstanding use of uniform invoices in 2023.

(Year) 2013 2014

Acquired Taiwan Power Company Tainan ~ Yu Nong 161kV underground ultra-high voltage power cable turnkey project. May 5 - Acquired Taiwan Power Company "Linkou ~ Dinghu 345kV Electrical and Mechanical Engineering turnkey project".

2016



the "Information Disclosure Excellence" Award from Chunghwa Telecom.

September 15 - Completed the 345kV Dalin to Xingaogang project, and received a certificate of appreciation from Taipower.

2021

November 5 - Completed Hua Eng corporate identity signage advertising renewal.



February 21 - The Company's "Testing laboratory" received the certificate of ISO/IEC 17025(2017) TAF laboratory for the following test items: conductivity, acidity, specific optical density, halogen content, oxygen index, temperature index, toxicity index, and single vertical combustion test.

2023

September 13 - PV cables received dual certification of IEC 62930 and EN 50618.

October 1: Issued the 2023 Greenhouse Gas Inventory Report. December 26: Received greenhouse gas verification opinion from MIRDC.



December 14 - Received the "Information Disclosure

2019

2024



#### Hua Eng Group Affiliates Introduction and Business Overview

### **Q** Headquarters

No. 170, Zhongzheng 4th Rd, Qianjin District, Kaohsiung City

- **Q** Taipei Branch
  - 11F, No. 210, Section 3, Nanjing East Road, Zhongshan District, Taipei City
- Taichung Office
  5F-1, No. 186, Section 2, Dongxing Road,
  Nantun District, Taichung City

#### Address and usage status of the plant:

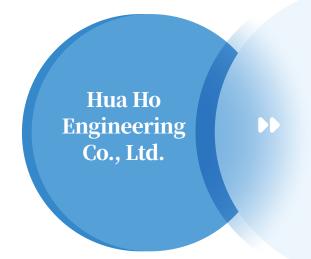
#### **Q** Kao-Nan Plant

No. 30, Kao-Nan Highway, Renwu District, Kaohsiung City Land area of 37,252 ping

#### **Q** Renwu Plant

No. 36, Kao-Nan Highway, Renwu District, Kaohsiung City Land area of 37,261 ping Leased from Taiwan Sugar Corporation on November 1, 1994





Address

2F, No. 170, Zhongzheng 4th Rd, Qianjin District, Kaohsiung City

- Current Chairman
  Mr. Wang Hong-Ren
- Founding Time
  August 3, 1990

- Capital
  NT\$ 35 million.
- Main products and business
  Contracting underground power line continuity
  and installation projects
- Hua Eng's equity holdings 49.31%

Jointly invested by the Company and SWCC Corporation



#### **III** R&D of new products to lead the cable industry in Taiwan









## The first company in Taiwan

The first company in Taiwan to produce the highest quality oxygen-free copper wire.

#### **Exclusive in Taiwan**

The exclusive manufacturer of submarine cables (communication, power, optical fiber) in Taiwan, with high-quality products used in Taiwan's outer and outlying islands.

## The first company in Taiwan

The first company in Taiwan to produce optical fiber cable and pass the inspection by the Taiwan Telecommunications Bureau as a qualified supplier.

## The first company in Taiwan

The first manufacturer in Taiwan to produce dry sulfurized ultra-high voltage cross-linked PE power cables.

#### The first company

The first company to obtain and complete the 161kV underground cable turnkey project launched by Taiwan Power Company.





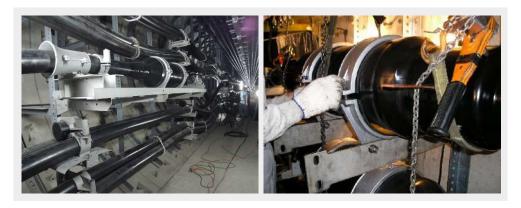
#### Hua Ho Engineering Co., Ltd. Company Profile

With urban development, the establishment of high-tech science parks, and the increasing demands of local residents for a better living environment, the proportion of underground high-voltage transmission lines in these areas is rising. However, the success of overall public engineering and the stability of power supply heavily depend on the selection of high-voltage equipment and the quality of the cable installation and jointing process.

August 3, 1990, Hua Eng and SWCC Corporation jointly invested in the establishment of "Hua Ho Engineering Co., Ltd." The main business involves undertaking the installation of high-voltage transmission lines and power cable installation, with a dedicated mission to execute electrical and cable engineering projects. Hua Ho is committed to providing comprehensive solutions for clients by integrating system design, equipment supply, on-site construction, technical supervision, and warranty services, effectively enhancing the overall reliability of the power supply system. Over the past thirty years, with numerous 69kV, 161kV and 345kV underground cable transmission lines added to the system and positive feedback from customers, Hua Ho continues to play an essential role in optimizing Taiwan's power supply quality. Hua Ho Engineering Co., Ltd. and Hua Eng Wire & Cable Co., Ltd. are affiliated enterprises. Hua Eng Wire & Cable Co., Ltd. subcontracts contracted cabling and equipment installation projects to Hua Ho Engineering Co., Ltd. In recent years, it has mainly been responsible for the installation of cable accessories, including the installation of outdoor cable terminal boxes, gas-sealed cable terminal boxes, cable joint boxes, and cable protective covering devices.



The contracted 161kV and 345kV electromechanical engineering projects for Taipower Company's were recognized for its excellent quality and received awards.



Cable installation construction by Hua Ho Engineering Co., Ltd.











Hua Ho's engineering technicians were performing terminal assembly at the substation







Outdoor construction of the UHV substation Scene after completion of outdoor terminal insulator assembly of UHV substation



## Operation and Governance of Hua Eng 2024 SUSTAINABILITY REPORT

## Hua Ho undertakes Hua Eng's related cabling installation service projects

Year	Project name
2002	- Taipower Taiyuan-Fangliao 69kV Cable Project - Taipower Renwu-Shewu Line 161kV Cable Project
2003	- Taipower Taichung-Gonjia Red and White Line 161kV Cable Project - Taipower Wenzi-Wufeng via Wenxin Line 161kV Cable Project - Taipower Luodong-Xinda Line 69kV Cable Project - Taipower Annan-Nanbin Line (Double Conductors) 161kV Cable Project - Taipower Wanfong-Caotun Project 69kV Cable Project - Taipower Data-Baiyu Second Road 161kV Cable Project
2004	- Taipower Gangshan-Ganggao Line 161kV Cable Project
2005	- Taipower Chachang-Beiying 161kV Cable Project - Taipower Nantou-Tianzhong Line 161kV Cable Project - Taipower Datan-Guanyin 161kV Cable Project
2006	- Taipower Fengle-Xuetian 161kV Cable Project - Taipower Changbin-Hanbao 161kV Installation Project - Taipower Luzhu-Tianxin 69kV Cable Project - Taipower Zhenbei-Zhongdao 161kV Cable Project - Taipower Neihu Airport 161kV Cable Project
2008	Taipower Meishan-Jiuqu 161kV Electrical Cable Project     Taipower Zhonggang-Zhongshi 161kV Electromechanical Engineering Project     Taipower Bailing-Toujie 161kV Cable Project     Taipower Zhonghuo-Zhonglian 161kV Electrical Cable Project
2009	Taipower Tainan Science Park-Daoye 161kV Electrical Cable Project     Taipower Shude-Fuying 161kV Electrical Cable Project

Year	Project name
2010	<ul> <li>Taipower Xizhi-Luzhou 161kV Electrical Cable Project</li> <li>Taipower Xizhi-Minquan 161kV Electrical Cable Project</li> <li>Taipower Nanzih -Jiachang Red and White Line 161kV Electrical Cable Project</li> </ul>
2011	- Taipower Luodong-Yuanshan 161kV
2013	- Taipower Gaogang-Wujiashan 345kV Electrical Cable Project - Taipower Zhubei-Hubei 161kV Electromechanical Engineering Project - Taipower Banqiao-Banchao 1234 Route 161kV Electromechanical Engineering Project - Taipower Zhongxi-Wenxin 161kV Electromechanical Engineering Project - Taipower Boai-ShuiShang 69kV Electromechanical Engineering Project
2015	<ul> <li>Taipower Zhanglin–Caohu–Puyan 69kV         Electromechanical Engineering Project</li> <li>Electromechanical Engineering Project for Nangang         Station of High-Speed Rail</li> <li>161kV Electromechanical Project for Taipei Metro         Circular Line</li> </ul>
2016	- Taipower Linkou-Dinghu 345kV Cable Electromechanical Project
2018	<ul> <li>Taipower Dalin-Xingaogang 345kV Electromechanical Engineering Project</li> <li>Taipower Zhugong E/S 345kV Electromechanical Engineering Project</li> </ul>
2019	Taipower Annan-Nanbin 161kV Electromechanical Engineering Project     Taipower Annan-Nanbin II 161kV Electromechanical Engineering Project
2020	Taipower Donglin-Luzhou 161kV Electromechanical Engineering Project     Taipower Annan-Nanbin III 161kV Electromechanical Engineering Project     Taipower Beigang-Sihu 161kV Electromechanical Engineering Project     Taipower Zhangyi-Zhonggang 161kV Electromechanical Engineering Project

Year	Project name
2021	- Taipower Zhongke E/S (EBA) 345kV Electromechanical Engineering Project - Taipower Tainan Science Park-Ji E V 161kV Electromechanical Engineering Project - Taipower Tainan Science Park-Sanfu 161kV Electromechanical Engineering Project - Taipower Tainan Science Park-Sanfu V 161kV Electromechanical Engineering Project - Taipower Qigu-Jiangjun 161kV Electromechanical Engineering Project - Taipower Houli-Yihe 345kV Electromechanical Engineering Project - Taipower Jiujiamin-Tainan Science Park Road 1 345kV Electromechanical Engineering Project - Taipower Emei-Yihe 345kV Electromechanical Engineering Project
2022	- Taipower Wujia E/S 345kV Electromechanical Engineering Project - Taipower Houli E/S 345kV Electromechanical Engineering Project - Taipower Dal-Xingao Port 345kV Line Reconnection Electromechanical Engineering Project - Taipower Datan-Linkou 161kV Electromechanical Engineering Project - Taipower Xiaying D/S-Grid Connection Station 161kV Electromechanical Engineering Project - Taipower Donglin P/S Linkou Line 161kV Electromechanical Engineering Project - Taipower Donglin P/S Ocean Line 161kV Electromechanical Engineering Project - Taipower Qigu S/Y-Jiangjun S/Y White Phase Auxiliary 161kV Electromechanical Engineering Project - Taipower Qigu S/Y 161kV Electromechanical Engineering Project - Taipower Shiji~Ji 7 Line 69kV Electromechanical Engineering Project
2023	Taipower Wufeng-Tanzi 69kV Electromechanical Engineering Project     Taipower Ershui Divergence 69kV Electromechanical     Engineering Project     Taiwan Power Grid Connection Station-Beimen R/S 161kV     Electromechanical Engineering Project     Taipower Shanshang-Sanzhu 161kV Electromechanical     Engineering Project     Taipower Longqi E/S 161kV Electromechanical Engineering Project     Taipower Zhuyuan E/S 345kV Electromechanical Engineering Project
2024	Taipower Madou Industrial Park-Tainan Science Park 161kV     Electromechanical Engineering Project     Taipower Madou Industrial Park-Dong Xue 161kV Electromechanical Engineering Project     Taipower Xiongji II 161kV Electromechanical Engineering Project     Taipower Zhuyuan-Emei North-South Line 345kV Electromechanical Engineering Project     Taipower Zhanggong 345 kV Booster Station Construction Project



Hua Eng maintains rigorous standards for quality assurance in the production process and environmental requirements. It has obtained international certifications such as ISO 9001. ISO 14001. and ISO 45001. Additionally, Hua Eng actively participates in activities organized by relevant industry associations and unions. Through cooperation and interaction with other members, the Company aims to enhance its understanding of industry trends, market information, and government labor regulations. This also facilitates collaboration with other enterprises, ensuring the Company keeps pace with technological advancements, while simultaneously enhancing its brand image and market visibility.







The Company, by participating in the organizations, understands the industry information of the cable sector and relevant government regulations to ensure applicable rights. It also communicates with the government or regulatory authorities through the associations.

While obtaining important information about industries and exhibitions, as well as acquiring data on domestic and foreign traders and compilations of national industry regulations, we can facilitate our industrial upgrade, enhance product quality, reduce production costs, and boost industry competitiveness.

By participating in the associations, the Company stays informed about the current developments in new industrial technologies and equipment trends, serving as a reference for equipment improvement and procurement.



The Company participates in the associations to enhance communication efficiency with workers, protect workers' rights, improve workers' knowledge and skills, aid in industry upgrades, promote mutual assistance between labor and management, adjust labor relations, and seek employee benefits.



By participating in the associations, the Company stays informed about the current developments in new industrial technologies and equipment trends, serving as a reference for equipment improvement and procurement.



The Company participates in industry associations to understand Regulations Governing the CNS Mark and its policy directions, enhancing product image and gaining the trust of consumers, businesses, and procurement units.



## **Supply Chain Management**

#### Value of Hua Eng's Oxygen-free Copper and Wire and Cable

#### **Upstream**



**Copper mining** 

South America

smelting

Japan, South Korea, Chile

# Productio

Production of oxygen-free copper rods

**Hua Eng** 

Wire drawing



Wire and cable production

#### **Upstream supply chain**

The supply of overseas copper materials to Hua Eng is entirely imported. Copper ore is produced from mining sites in South America and is smelted into copper cathode plates by mining companies in Japan, South Korea and Chile. The A-grade copper plates registered with the LME are then exported to Taiwan.

#### Oxygen-free copper rods (wires), cable production

Imported copper plates are refined into oxygen-free bare copper wires via Hua Eng's DIP process and supplied to the Kao-Nan plant. The copper wires, after being drawn in the factory, are used for the production of wire and cables, communications cables, and optical fiber cables.



#### Down

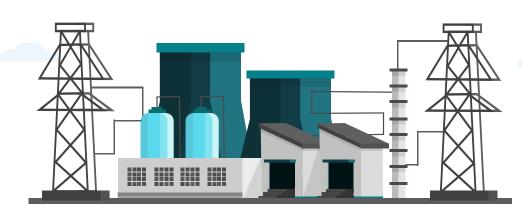
#### Copper conductor Manufacturers

Power transmission and distribution engineering

**Communications engineering** 

#### **Downstream customers**

Hua Eng produces oxygen-free copper rods (wires) for use by manufacturers of wires and cables with various copper conductors and producers in the electrical, electronic and automotive industries.





#### Supply Chain Management

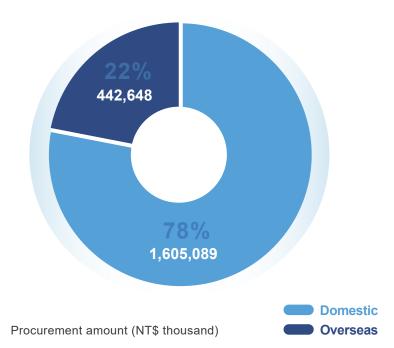
For external procurement items, except for bulk metal raw materials (copper and aluminum) that are not produced locally in Taiwan and rely on imports, Hua Eng prioritizes the use of local Taiwanese suppliers to enhance the flexible operation of the supply chain, shorten delivery times, and reduce unnecessary transportation within the supply chain. This approach aims to support related domestic industries and reduce the transportation of raw materials and materials, thereby minimizing environmental impact.

To avoid raw material shortages or reliance on a single supplier becoming a risk factor in supply chain management, Hua Eng not only follows existing raw material supplier selection rules but also collaborates with quality assurance units to evaluate and establish qualified suppliers. For non-exclusive or certified specification products, at least two suppliers are established for procurement specifications. Additionally, Hua Eng actively monitors market trends for various raw materials and informs the manufacturing units to prepare materials in advance to ensure normal production and reduce the risk of delivery delays. As there is no domestic copper mining, electrolytic copper plates need to be imported. The Company adjusts its procurement policy twice a month during meetings based on capacity, orders, and supplier supply conditions to ensure a stable supply of copper plates.

In 2024, Hua Eng's domestic procurement amount excluding bulk metal materials was NT\$1,605,089 (thousand), accounting for 78.38% of the procurement amount; the overseas procurement amount excluding bulk metal materials was NT\$442,648 (thousand), accounting for 21.62% of the procurement amount. Compared to 2023, the change in domestic procurement amounts in this report is mainly due to cables, connection works, and newly purchased equipment, while the change in overseas procurement amounts is attributable to new equipment purchases and imported high-voltage cable materials.

#### Procurement amount in 2024

(excluding bulk metal raw materials)



## Procurement amount in the past three years

(NT\$ thousand)



#### Green Procurement

Hua Eng's procurement policy is committed to "green purchasing" and "energy conservation and carbon reduction." The procurement unit, in line with various internal requisitions, strives to follow these principles when carrying out procurement and project contracting. In 2023, recyclable packaging materials totaled NT\$20,238 (thousand), and eco-friendly, energy-saving projects totaled NT\$2,604 (thousand). In 2024, recyclable packaging materials totaled NT\$21,845 (thousand), and eco-friendly, energy-saving projects totaled NT\$3,196 (thousand). Compared with the previous year, total expenditures continued to rise.

#### Green Procurement Expenses of Hua Eng (NT\$ thousand)



Hua Eng, driven by the responsibility of protecting the Earth and the environment, will continue to promote procurement policies that are favorable and friendly to the environment, focusing on the impact of hazardous chemicals on the environment. Plastic product suppliers are required to provide a "Substance Safety Data Form" or "Ingredient Analysis Test Report" to strictly control the use of substances harmful to the environment and protect it from pollution.

#### Evaluation of Raw Material Suppliers

The Company has established "Raw Material Supplier Evaluation Standards" and "New Raw Material Sample Inspection and Control Procedures" to ensure the quality of raw materials meets standards. These measures are implemented for the selection and management of suppliers, creating an "Qualified Supplier List" to ensure the quality and stability of raw material supply, satisfying the needs of the Company's product production and business operations.

In 2024, the composition of suppliers was classified into six major categories based on the amount.

	2024 Supplier Composition					
By supplier	Electromechanical materials category	Packaging materials category	Other raw materials category	Administrative Materials category	Bulk materials category	Engineering and maintenance category
Amount Percentage	0.8%	1.0%	7.39%	0.01%	73.9%	16.9%

#### Supplier Evaluation

Hua Eng arranges annual random inspections of suppliers, either through on-site evaluations or written self-assessments, to emphasize the importance of product quality to the suppliers. For any deficiencies found during the evaluations, procurement personnel must investigate and track the effectiveness of the suppliers' corrective actions based on the "Supplier Annual Quality System Audit Improvement Report." In 2024, Hua Eng evaluated suppliers with transaction amounts exceeding NT\$ 1.5 million, issued 14 "Supplier Annual Audit Forms" and reclaimed 14 forms, achieving a 100% reclaim rate. It conducted on-site evaluations for 4 suppliers.

Number of suppliers evaluated (in the past three years)						
Year	2022年		2023年		2024年	
Audit method	Document	Factory visit	Document	Factory visit	Document	Factory visit
Number of audits	15	2	16	3	14	4
Audit results	Grade A	Grade A	Grade A	Grade A	Grade A	Grade A
Evaluation criteria: Grade A (excellent manufacturer), Grade B (qualified but needs improvement), Grade C (not considered)						

#### Supplier Integrity Commitment

Sustainable Procurement Policy

To implement sustainable supply chain management, Hua Eng requires all suppliers to sign the "Letter of Commitment to Corporate Social Responsibility," through which they assess their own practices and commit to complying with relevant domestic and international CSR regulations and standards. As the supplier base is most heavily weighted by "Bulk raw materials," with electrolytic copper plates being the most critical component, Hua Eng requires its suppliers to provide data in alignment with the Company's sustainable procurement strategy, including:



#### Supplier Integrity Commitment

To ensure that both suppliers and the procurement unit maintain integrity in transactions, Hua Eng requires new suppliers to sign a "Statement of Integrity Commitments" before any transactions. Suppliers commit to strictly adhering to all integrity management regulations set forth by Hua Eng for transaction parties. They pledge not to request, promise, or deliver any bribes or offer any other improper benefits to Hua Eng employees and their related persons, and/or designated persons. The content of the "Statement of Integrity Commitments" can be found on the Company website

(http://www.hegroup.com.tw/userfiles/Investor/H2023incorruptible.pdf).



Statement of Integrity Commitments

#### Corporate Social Responsibility of Suppliers

In order to fulfill its responsibilities as a global citizen and respond to the severe challenges of global climate change, Hua Eng not only complies with government regulations but also continues to invest in energy-saving and carbon-reducing environmental protection equipment to minimize the environmental impact of the production and manufacturing process.

The Company will take an even more proactive attitude to supplier management by fully considering environmental, social and economic aspects and keeping a close eye on significant or potential risks across the supply chain. By exercising our influence, we also urge suppliers to cultivate concepts and management ability in sustainable development. This will foster a positive cycle in the industry.



Letter of Commitment to Corporate Social Responsibility

#### Hua Eng suppliers should commit to fulfilling corporate social responsibilities, including:

# Environmental aspects 1 Localization of procurement to reduce pollution and conserve resources 2 Give priority to renewable

- raw materials

  3 Compliance with environmental laws and regulations regarding wastewater, waste and noise
- Prohibition of hazardous substances use

## Regarding human rights

- Prohibit any bribery
- 2 Prohibition of procurement of conflict minerals

#### Regarding ethics

- Prohibit child labor
- Respect for freedom of association and labor negotiations
- Prohibition of forced labor
- 4 Compliance with Gender Equality Policy
- 5 Prohibition of any harassment, violence, and intimidation acts

#### Labor safety aspects

- 1 Compliance with labor safety and health regulations
- 2 Providing a friendly and healthy labor environment

Since the end of 2018, the procurement unit has promoted supplier signing of the "Letter of Commitment to Corporate Social Responsibility." To date, 384 suppliers have signed, and in 2024, 100% of new suppliers signed the letter. Suppliers are required to commit to corporate social responsibility, adhering to clauses regarding labor health and safety, ethics and integrity, environmental protection, prohibition of using minerals and related products from conflict areas such as Congo, and continuous improvements during the course of their business and the process of production and manufacturing. Suppliers are also required to adhere to relevant domestic and overseas laws and standards on corporate social responsibility, ensure a safe work environment across the supply chain, and respect and dignity to employees. In addition, companies must assume accountability in environmental protection, practice codes of conduct, and work together in corporate social responsibility. In addition to fulfilling our own corporate social responsibility, we also ask suppliers to honor their responsibility to society. The content of the "Letter of Commitment to Corporate Social Responsibility" can be found on the Company website (http://www.hegroup.com.tw/userfiles/Investor/H2023responsibility.pdf).

Year	2022年	2023年	2024年
Number of signatures	60	54	67
Signing ratio	100%	100%	100%



### **Business performance**

The Company sets annual operating budgets and capital expenditure budgets each year, which are reported to the Board of Directors for approval. At each Board meeting, the Accounting Department explains the financial performance, and the General Manager reports on the operational business status during Board meetings and monthly management meetings, ensuring that the highest governance level accurately grasps and supervises the progress of budget achievement.

In 2024, copper prices rebounded sharply due to market expectations of a U.S. Federal Reserve rate cut cycle, strong electricity demand from consumer electronics inventory replenishment and Al applications, and the London Metal Exchange responding to new sanctions by the U.S. and U.K. against Russia. However, China's economic performance continues to have a decisive impact on global copper prices. Amid slower economic growth and a weak real estate sector in China, copper prices were unable to sustain the rapid gains seen in the second guarter. Since mid-November, a stronger U.S. dollar and higher import tariffs imposed by President Trump led to copper prices trading within a narrow range. Since 2023, Taipower has been investing NT\$560 billion over the next 10 years to strengthen grid resilience and ensure stable distributed power supply. In 2024, the Company continued to support the production of advanced plans for 345 kV and 161 kV ultra-high-voltage cables. With growing demand for copper from the electric vehicle and renewable energy storage industries, the Company increased production of high-quality oxygen-free copper to meet domestic and international market needs. Efforts were also made to secure orders for private power plant projects and building wire applications, continuously upgrade electrical control equipment, reinforce cable production lines, and expand capacity to improve production efficiency and competitiveness, thereby driving revenue growth and operational profitability. In 2024, Hua Eng's capital amounted to NT\$6.327 billion, with revenue of NT\$8.204 billion, an increase of NT\$1.089 billion, representing a 15.31% growth compared with 2023.

Government subsidy in 2024was NT\$903 thousand.

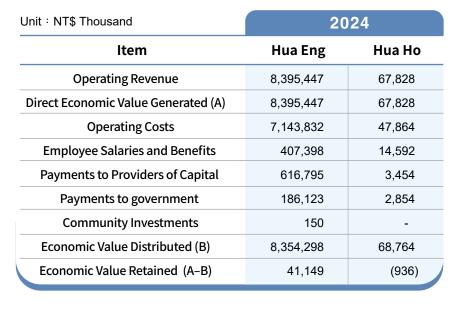
(For detailed financial information, please refer to the Company's financial report, website: www.hegroup.com.tw)

	出進口績優 廠商 證明標章授予證書
	華榮電線電纜股份有限公司
	華護111年度出班口積級融高前500名。 特投予接明複華・以資板廳。
	# 展 12 文 元
	中華民國 132 年 10 月 5 日
Out	Award for International Trade standing Export/Import Business Certificate
	This is to certify that
	HUA ENG WIRE & CABLE CO , LTD
	has been tissued this Award in special recognition of its outstanding business exist in 2022; residing it among this top 500 comparise in narms of opportunition partnermones, and to offer secouragement.
	Cycle 120
Saber	Cyrrifva Kang Director-General mational Trade Administration , Ministry of Economic Affairs (MDEA
	5" of October 2023

Ranking among the Top 500 Excellent Exporters/Importers by the International Trade Administration in 2022 (Awarded in 2023)



Selected by the Ministry of Finance as an Outstanding Business Using Uniform Invoices in 2023





Outstanding Business Using Uniform Invoices in 2023 by the Kaohsiung National Taxation Bureau of the Ministry of Finance

### **Corporate Governance**

Title	Name	Nationality	Gender	Work (industry) experience	Professional background or skills
Chairman	Wang Hong-Ren	R.O.C.	Male	Chairman, Hua Eng Wire & Cable Co., Ltd. Chairman, First Copper Technology Co., Ltd. Chairman, Hua Ho Engineering Co., Ltd. Chairman, Taiwan Times Co., Ltd.	•MBA, Lindenwood College, USA
Director	Wang Yu-Fa	R.O.C.	Male	•Founder of Hua Eng Wire & Cable Co., Ltd. •Founder of First Copper Technology Co., Ltd.	Former Chairman, Hua Eng Wire & Cable Co., Ltd.     Honorary Doctorate in Business Administration, Columbia College     Honorary Doctorate in Business Administration, Kennedy University
Director	Yang Ming-Shan	R.O.C.	Male	•Director, Hua Eng Wire & Cable Co., Ltd. •General Security Team Leader of ASE Technology •Working for Mei-Da Co., Ltd.	•Department of Industrial and Systems Engineering, Chung Yuan Christian University
Director	Wang Wen-Ling	R.O.C.	Female	<ul> <li>Director, Hua Eng Wire &amp; Cable Co., Ltd.</li> <li>Director, Hua Horng Investment Co., Ltd.</li> <li>Director, Mei-Da Co., Ltd.</li> <li>Director, International Ship-breaking Enterprise Co. Ltd.</li> </ul>	Department of Electronics,     Darong High School of Technology
Independent Director	Wu Tong-Shung	R.O.C.	Male	Director, Taishin International Bank Co., Ltd. Chairman, Taishin Asset Management Co., Ltd. Director, Taishin Real Estate Management Co., Ltd. Supervisor, Taishin Securities Co., Ltd. Supervisor, Taishin Venture Capital Investment Co., Ltd. Chairman, Shen-Tung Construction and Development Co., Ltd.	National Chengchi University     Department of Accounting and Statistics
Independent Director	Chang Jinn-Der	R.O.C.	Male	Director, Crown & Co., CPAs Independent director, PharmaEssentia Corporation Independent director, Jukao Engineering Corp. Director, Taiwan Institute of Business Adjunct professor, Department of Law of Open University of Kaohsiung Director, Crown Global Business Consulting Ltd. Director, Concord Securities Co., Ltd.	<ul> <li>PhD in Accounting, Federal International University</li> <li>Doctor of Laws, National Chung Cheng University</li> </ul>
Independent Director	Sun Chin-Feng	R.O.C.	Male	General Manager, SAGA Unitek Ventures Chairman, FiTek Photonics Corporation Independent director, Wonderful Hi Tech Co., Ltd. Independent director, Tah Tong Textile Co., Ltd. Independent director, Chicony Power Technology Co., Ltd.	<ul> <li>University of Michigan         Master of Business Administration         (MBA)     </li> <li>Master of Materials Science (MS),</li> <li>Wayne University, Michigan State, USA</li> </ul>

The Company upholds the principles of ethical management and sustainable development, fulfilling its corporate social responsibilities. In accordance with the Company Act, the Securities and Exchange Act, and other relevant laws and regulations, we have established a corporate governance framework to enhance the operational efficiency of our governance.

We further formulate the "Corporate Governance Best Practice Principles for HUA ENG WIRE AND CABLE CO., LTD." as a guideline for establishing a comprehensive corporate governance system, aiming to "protect shareholders' rights," "enhance Board of Directors' functions," "leverage the Audit Committee's role," "respect stakeholders' rights," and "improve information transparency."

December 5, 2011, the Board of Directors established the Remuneration Committee; in 2017, the Company set up Independent Directors and the Audit Committee to replace the Supervisors, thereby enhancing the independent oversight mechanism and operational efficiency of the Board of Directors.

#### Board of Directors

The highest governance body of the Company is the Board of Directors, which is responsible for the management and operating performance of the Company. Its duties include the appointment of managers, supervision of the execution of various objectives, determination of operational and sustainability policies, review of the Company's sustainability issues (including environmental, human rights, and economic impacts), and examination of various proposals. Currently, the Board comprises seven directors (including three independent directors), who are professionals with expertise in business management, accounting, financial analysis, or relevant work experience required for the Company's operations. The current directors are listed in the table below (term of office: until June 20, 2026).



#### **Audit Committee**

Assist the Board of Directors in performing supervision and regulatory compliance duties; and fulfill the Company's implementation of the quality and integrity of accounting, auditing, and financial reporting procedures.

#### **Remuneration Committee**

Assist the Board of Directors in executing and evaluating the Company's overall remuneration and benefit policies, as well as the remuneration of Directors and Managers.

#### **Sustainable Development Task Force**

The Sustainable Development Task Force, chaired by the General Manager, is responsible for convening meetings and making decisions on ESG sustainability promotion matters (including business governance, corporate integrity, environmental protection, risk management, social care, and major issues of concern to stakeholders), as well as confirming and reviewing ESG sustainability promotion strategies, specific plans, and implementation results such as management policies, KPI indicators, or other ESG-related improvement proposals. It reports to the Chairman for decision-making on major issues.

#### **Auditing Office**

Ensure that the Company adheres to business regulations and supervises the professional ethics of personnel.

It conducts various audits of each department in accordance with the annual audit plan approved by the Board of Directors, and submits the audit results and subsequent improvement plans to the Board of Directors and management for the purpose of implementing the effectiveness of the audits.

#### **Management Department**

In charge of the Company's accounting, cost, stock affairs, finance, general affairs, procurement, reinvestment evaluation, and computerized operations, as well as assist in the system management of various affiliated companies.

#### **Sales Department**

In charge of the Company's business, delivery, planning, and trade, as well as business matters in Taipei and Taichung.

#### **Production Department**

Company product production plans, manufacturing, inspection, quality assurance, production technology,R&D of products and materials, etc.

#### **Operation of the Board of Directors**

The Company's Board of Directors hold at least a meeting per guarter. Each director has professional knowledge, professional skills, and competence or management ability to lead required to execute their duties, perform functions and powers in accordance with laws and regulations, the Company's Articles of Incorporation and shareholders' meeting resolutions, provide operating policy, financial planning, and professional technology, and offer effective and specific advice and consultation on business development. If a director or a juristic person that the director represents is an interested party in relation to a proposal and the relationship is likely to prejudice the interest of the Company, the director may not participate in the discussion or voting on such proposal and shall recuse himself/herself from the discussion and voting. The director's spouse, relatives within the second degree of kinship, or companies having a controlling or subordinate relationship with the director are also deemed to have personal interests in the matter, and shall recuse themselves from the discussion and voting.

In 2024, the Board of Directors reviewed approximately 21 ESG-related issues, such as business operations reports, financial status reports, internal audit reports, information security management, Board performance evaluations, and the implementation progress of greenhouse gas inventory and verification schedules. Various responsible units communicated the following major matters with the Board, including business plans, audit plans, internal control systems, final accounts (including earnings distribution), quarterly financial reports, the election of directors and independent directors, appointment of Remuneration Committee members, appointment and remuneration of managers, distribution of employee and director compensation, evaluation of the independence and competence of CPAs, and revisions to corporate governance-related regulations. These discussions aimed to review corporate performance and key strategic issues, including environmental, social, and economic impacts, risks, and opportunities.

#### Resolutions of the Board of Directors in 2024

Date	Meeting type	Material resolution
2024.03.04	5th Session of the 25th Board of Directors	Approved the motion for the "Statement of Internal Control System" for 2023.     Approved the assessment on the independence and the suitability of the certified public accountants who audited the financial reports.
2024.08.05	7th Session of the 25th Board of Directors	<ol> <li>Approved the compilation of the Company's 2023 Sustainability Report.</li> <li>Approved the establishment of the Company's "Rules Governing Financial and Business Matters Between the Corporation and its Related Parties."</li> <li>Approved the amendment of the Company's "Corporate Governance Best Practice Principles."</li> <li>Approved the amendment of the Company's "Standard Operating Procedures for Handling Directors' Requests."</li> <li>Approved the amendment to the Company's "Internal Control System."</li> <li>Approved the amendment to the Company's "Internal Control System for Stock Operations."</li> <li>Approved the review of various remunerations for the Company's directors.</li> <li>Approved the review of the policy, system, standard, structure and performance evaluation method of remuneration to the Company's managerial officers.</li> </ol>
2024.11.04	8th Session of the 25th Board of Directors	<ol> <li>Approved the amendment to the Company's general principles for pre-approved non-assurance service policies.</li> <li>Approved the supplement to the Company's "Internal Control System."</li> <li>Approved the Company's 2025 audit plan.</li> <li>Approved Company's employee salary adjustment.</li> <li>Approved the remuneration of the Company's Chairman.</li> </ol>

Note: The resolutions listed above are part of the ESG-related information disclosure. For complete resolutions, please refer to the information disclosure. Complete information URL:

https://www.hegroup.com.tw/index.php?option=module&lang=cht&task=pageinfo&id=151&index=2

In 2024, in response to climate change and societal attention to sustainability issues, the Company has formulated a schedule for GHG inventory and verification according to the content of the "Sustainable Development Roadmap for Listed Companies" and reported it to the Board of Directors. Subsequent progress is reported quarterly to the Board of Directors, thereby promoting the Company's energy-saving and carbon reduction efforts to achieve the goal of sustainable corporate development.

In 2024, the Board of Directors held a total of 4 meetings. The total number of meetings that all directors should have attended was 28, with an actual attendance of 23, resulting in a director attendance rate of 82.14%.



#### **Directors' Continuing Education**

To improve the function of the Board of Directors and enhance Directors' knowledge in legal, economic, environmental, and corporate sustainable development fields, the Company continuously advances the Board's risk management capabilities through Directors' continuing education. The types of training hours for Directors are diverse and include but are not limited to finance, operations, legal affairs, accounting, risk management, sustainable development, internal control systems, and financial reporting responsibilities. For example, in 2024, 5 of the Company's directors attended the "2024 Cathay Sustainable Banking and Climate Change Summit" organized by the Taiwan Stock Exchange, with a total of 6 hours of course instruction. Information on Directors' continuing education in 2024 can be found in the 2024 annual report under "Continuing education of directors in the most recent year".



#### **Directors' Continuing Education for ESG-related Courses in 2024**

Course title	Organizer	Number of participants	Course hours
2024 Cathay Sustainable Banking and Climate Change Summit	Taiwan Stock Exchange	5	6
2024 Taishin Net Zero Power Summit	Chinese National Association of Industry and Commerce	1	3
Sustainable Development Best Practices Promotion Conference	Securities & Futures Institute, R.O.C	1	3
Sustainability Internal Control Overview	CPA Associations R.O.C. (Taiwan)	1	3
2024 KPMG Taiwan Business Leader Academy Forum: Steering the Course of Corporate Wisdom: Governance Leading the Way	Taiwan Investor Relations Institute	1	3

#### Audit Committee

To improve corporate governance and strengthen the functions of the Board of Directors, we set up the Audit Committee in compliance with the Securities and Exchange Act and the "Regulations Governing the Exercise of Powers by Audit Committees of Public Companies" in 2017 and established the Audit Committee Charter.

The Audit Committee comprises all (3) independent directors, and at least one of whom should have accounting or financial expertise. The Committee shall assist the Board of Directors in performing supervisory duties and be responsible for proper presentation of the Company's financial statements, selection (dismissal) of CPAs and assessment of their independence and performance, effective implementation of the Company's internal control, the Company's compliance with relevant laws and regulations, and control of existing or potential risks faced by the Company.

The Audit Committee meets at least once each quarter. In 2024, the Audit Committee met four times with a 100% attendance rate by the members.

#### Remuneration Committee

The remuneration system is a crucial part of corporate governance. In 2011, the Remuneration Committee was established to assist the Board of Directors in evaluating the Company's overall remuneration and benefit policies, directors' and managers' remuneration, and improving the Company's remuneration system for directors and managers. The Company has also established the Remuneration Committee Charter for compliance.

The 20235th Remuneration Committee is composed of three Independent Directors. The Committee regularly reviews the policies, systems, standards, and structures of various remunerations for the Company's Directors, as well as the policies, systems, standards, structures, performance targets, and evaluation methods for the Company's managers' remuneration. The Remuneration Committee meets at least once every six months. In 2024, the Remuneration Committee held a total of three meetings, with a member attendance rate of 100%.

#### **Annual Total Remuneration Ratio**

In 2024, the ratio of the total annual remuneration of the highest-paid individual to the median total annual remuneration of all other employees was 4.17. The ratio of the year-over-year increase in total annual remuneration for the highest-paid individual to the median year-over-year increase for all other employees was 0%.

#### Report on the Performance Evaluation of the Board of Directors, Individual Directors and Functional Committees

The Company, in order to implement corporate governance and enhance the functions of the Board of Directors, has established the "Performance Evaluation of the Board of Directors" in accordance with Article 37 of the "Corporate Governance Best-Practice Principles for TWSE/TPEx Listed Companies." Commencing from 2020, the performance evaluation of the Board of Directors, its members, and functional committees is conducted once a year.

## The performance evaluation of the Board of Directors includes the following five aspects:



- 1. Involvement in the Company's operation.
- 2. Improvement of the quality of decisionmaking by the Board of Directors.
- Formation and structure of the Board of Directors.
- Election and continuing education of Directors.
- 5. Internal control.

## The performance evaluation of Directors covers the following six aspects:



- 1. Understanding of the Company's goals and tasks.
- 2. Knowledge of Directors' duties.
- 3. Involvement in the Company's operation.
- 4. Internal relation maintenance and communication.
- 5. Directors' professional qualification and continuing education.
- 6. Internal control.

## The performance evaluation of functional committees include the following five aspects:



- 1. Involvement in the Company's operation.
- Knowledge of the responsibilities of functional committees.
- Improvement of the quality of decision-making by functional committees.
- 4. Formation and member election of functional committees.
- 5. Internal control

To ensure independence in the performance evaluation of the Board of Directors, self-assessment surveys are completed by the Directors and subsequently reclaimed by the agenda working group of the Company. The agenda working group compiles and evaluates the results based on the indicators and scoring criteria, and reports it to the Board of Directors in the first quarter of the following year as a reference for further review and improvement. For detailed information on the performance evaluation in 2024, please refer to the "Report on the performance evaluation of the Board of Directors, individual directors, and functional committees" in the 2024 Annual Report.



#### **Information Disclosure**

The Company ensures full transparency of information by regularly publishing operational and financial information on the Company's website and disclosing relevant information on the Market Observation Post System (https://mopsov.twse.com.tw/mops/web/index) for stakeholders' reference.

The Company has established a stakeholder section, managed by dedicated personnel responsible for handling and coordinating matters related to stakeholders, providing the best service through smooth communication channels.





## **Operational Risk Management**







# Internal Control, Risk Management and Code of Conduct

#### Internal control

The Company has established an internal control system according to the "Regulations Governing Establishment of Internal Control Systems by Public Companies" to enhance corporate governance. The purpose is to promote sound management of the Company and to provide reasonable assurance of achieving the following objectives:

- 01
- Effectiveness and efficiency of business operations: including goals such as profitability, performance, and safeguarding of assets.
- 02

Reporting reliability, timeliness, transparency, and compliance with relevant regulations: Reports include internal and external financial and non-financial reports. External financial statements are prepared in accordance with the Regulations Governing the Preparation of Financial Reports by Securities Issuers and Generally Accepted Accounting Principles (GAAP). Transactions are properly approved, among other objectives.

03)

Compliance with relevant laws and regulations.



#### Risk management

To establish the Company's self-supervision mechanism, timely respond to environmental changes, adjust the design and implementation of the internal control system, and improve the inspection quality and efficiency of the internal audit department, the procedures and methods of evaluation were formulated in accordance with the relevant provisions of the "Regulations Governing Establishment of Internal Control Systems by Public Companies" to ensure that the design and implementation of the internal control system remain effective continuously.

Regular risk control meetings: Production, business, procurement, and accounting units hold monthly Copper Group meetings and management meetings; each unit evaluates and establishes risk categories, potential risks, management strategies, and practices.

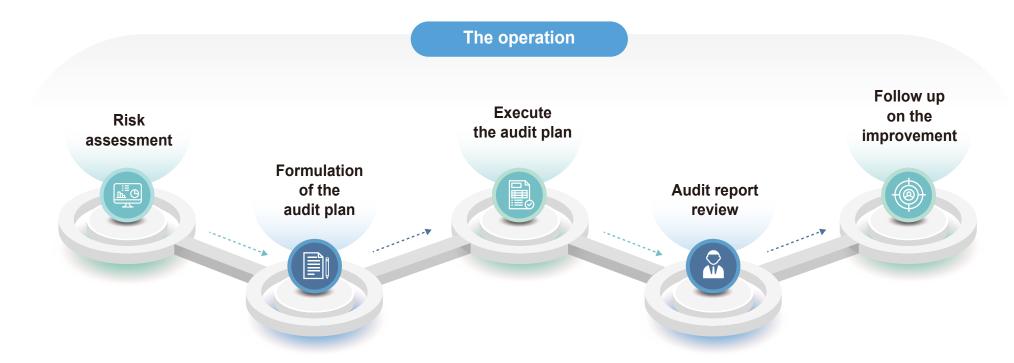
Based on the results of the risk assessment, the Audit Office formulates the annual audit plan which is approved by the Board of Directors and reports audit operations to the Audit Committee members, with the Audit Director attending the Board of Directors meetings to report the matters.

The primary audit activities are carried out according to the annual audit plan, inspecting and reviewing deficiencies in the internal control system. Special audits are conducted as needed or as directed by the Board of Directors. After the audit work report is completed and approved as required, it is sent to the independent directors for review. Follow-up reports on the deficiencies discovered by the Audit Office and the improvement status are made available for management to understand the improvements in the internal control system's deficiencies.

The Company conducts a self-assessment of the internal control system by each internal unit and subsidiary at least once a year, and reports to the General Manager and Chairman to understand whether each unit implements self-oversight. Improvements are then prioritized based on the importance and urgency of the impact caused.

Major operational policies, investment projects, acquisition or disposal of assets, bank financing, and other matters are all evaluated and analyzed by relevant responsible units and resolved by the Board of Directors. Each year, based on the results of the risk assessment, the audit unit formulates and executes audit plans to implement a supervisory mechanism and control the management of various risks.

The Company has implemented risk management policies of "not loaning to others" and "not providing endorsements/guarantees for others" as resolved in the shareholders' meeting.





## **///** Risk management and control measures

Risk categories	Potential Risks	Control strategies and measures	Responsible unit	
Figure states at the	Interest rate changes	Budget planning on a weekly, monthly and annual basis to optimize funding tools and lower capital costs Maintaining good relations with banks to obtain best interest rates by leveraging the Company's healthy financials Appropriate borrowing periods and floating/fixed interest rate structures to reduce interest rate risks	Finance Department	
Financial risks	Exchange rate changes	Keeping an eye on exchange rates each day, to stay on top of the market information and adjust the schedule for export bill negotiations accordingly.  Natural hedging of assets and liabilities denominated in foreign currencies and financing with receivables denominated in foreign currencies to mitigate exchange rate risks	Finance Department	
Supply chain and raw materials risks	Components on procurement list out of production and disruption to raw materials supply	Business intelligence and development trends are collated so that technical and production functions can respond in advance.  Cautious and continuing development of alternative materials. Reduction of single supplier risks to mitigate the risk associated with the supplier's cease of production or disruption of suppliers.  Prioritization of local procurement and flexible response to production requirements.		
Management risks	Personnel changes	Step-up in employee training and key technical personnel development, to avoid disruption of normal operations due to gap in technical talents Equal pay for equal work, greater transparency, enhanced inter-department interactions, higher corporate identification and lower staff turnover	General Affairs Office	
	Labor relations	Regular labor meetings to enhance the communication and promote harmony between the employer and employees.	7.11.01.0	
	Imbalance of production and sales	Simulation of a range of production and sales scenarios with forecasts of expected orders, in order to dynamically coordinate production plans.		
	Market Response	Monitor industry, market, and customer developments as well as market demand trends to guide sales strategies.	Sales	
Market Response	Price Fluctuations	Set reasonable selling prices based on costs and by referencing industry competitors' pricing.		
	Product Qualification	In response to the government's forward-looking rail infrastructure projects, cable manufacturers are required to obtain TAF certification. Plans have been made to apply for TAF testing laboratory accreditation.		
Climate change risks	Carbon emission control	Continuing management in energy efficiency and carbon reduction The cross-function organization discusses and identifies climate change related risks and opportunities Management of the proportion of energy reliance on petrochemicals, electricity and gas to improve resource efficiency and cost savings		
Environment, safety and health	Environment, safety and health	1. Enhancement of training and education in safety and health and strengthening of occupational safety and health. 2. Continuous promotion of plans and implementation of automated inspection. 3. Enhanced occupational safety and health management by implementing ISO45001.		
	Respond to climate change risks, comply with environmental protection regulations, and move towards net zero carbon emissions	Change to power-saving LED lighting in production areas to save energy and reduce carbon emissions.     Install solar photovoltaic systems on the roof of the plant.     Continue the power-saving improvements to oxygen-free copper furnace as planned.		
Factory management	Increased typhoon intensity Response to the greater risk of flooding due to extreme rainfall	Sequential clearing and maintenance of the plant's drainage channels.     Installation of an additional standby pump at the Kao-Nan Plant substation.     Re-evaluation of Hua 2nd Road and construction of an additional east—west drainage channel to increase the Kao-Nan Plant's drainage capacity.     Establishment of a typhoon emergency response task force and sequential clearing and maintenance of the plant's drainage channels.	Kao-Nan Plant	
risks	Maintenance of oxygen-free copper production equipment to ensure high operational reliability.	Overhaul and replacement of the main drive couplings.     Replacement of worn idle rollers.     Upgrades to the M3 and M4 induction furnaces to improve oxygen-free copper melting efficiency.		
	Difficulty in obtaining electronic control components for old equipment, increasing the risk of downtime for repair	1. Planned electrical control system upgrades for PE120-2, PE100-2, and PA40 due to discontinued spare parts. 2. Planned upgrade of PE90-1 winding machine due to aging equipment and discontinued electrical spare parts. 3 Procurement of new PE75-6/7 intelligent IV extrusion machine to meet growing low-voltage IV wire demand, reduce costs, and increase profitability.		
Cybersecurity concerns	Security concerns with IT system	Continuing updates of cybersecurity equipment to protect, manage, monitor systems and network activities Continuing data backups and deployment of redundancy mechanisms Regular drills in disaster recovery. Continuing advocacy of the importance of cybersecurity, intellectual property and personal data backups and integrity.	IT Department	

Risk assessment of Hua Eng production factories in 2024.

#### Factory management risks

Respond to climate change risks, comply with environmental protection regulations, and move towards net zero carbon emissions

- Replacement of energy-saving LED lighting across the plant to reduce energy consumption and carbon emissions.
- 02 Install solar photovoltaic systems on the roof of the plant
- O3 Continue the power-saving improvements to oxygen-free copper furnace as planned

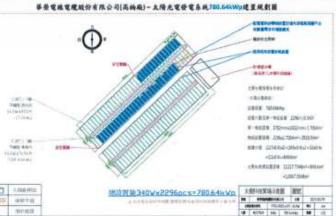
#### Management results

- 1. Replacement of energy-saving LED lighting across the plant, saving 820,050 kWh of electricity annually and reducing approximately 405 tons of carbon emissions.
- Installation of the first phase of a 780 kW solar photovoltaic system in line with government policy, expected to generate 929,400 kWh annually for self-consumption.











#### Factory management risks

Maintenance of oxygen-free copper production equipment to ensure high operational reliability.





Upgrade of the oxygen-free copper induction furnace.

Replacement of oxygen-free copper idle rollers.

#### Management results

- 1. Overhaul and replacement of the main drive couplings scheduled together with the M3 induction furnace upgrade, completed on April 2.
- 2. Replacement of worn idle rollers, with trial run completed on August 30.
- 3. Upgrade of the M3 oxygen-free copper induction furnace conducted from March 18 to March 27.

Response to the risk of flooding caused by increased typhoon intensity and extreme rainfall



Sequential clearing and maintenance of the plant's drainage channels.

#### **Management results**

- 1. Sequential clearing and maintenance of the plant's drainage channels.
- 2.Installation of an additional standby pump at the Kao-Nan Plant substation.
- Re-evaluation of Hua 2nd Road and construction of an additional east—west drainage channel to increase the Kao-Nan Plant's drainage capacity.
- 4. Establishment of a typhoon emergency response task force.

## Factory management risks

#### Pavement repairs to reduce workplace safety risks





Pavement repair project at the Kao-Nan Plant and parking lot.

#### **Management results**

The pavement repairing of the Kao-Nan Plant and parking lot was completed with asphalt paving on March 24.

#### Increased risk of downtime for aging equipment









Increased risk of downtime for aging equipment.

#### **Management results**

- 1. Electrical control system upgrades have been completed for the FSZ optical cable stranding machine and PE120-2 extrusion machine, with further upgrades ongoing.
- 2. PA81 wire feeder shaft transmission gear upgraded on November 29 to address wear and tension instability.
- 3. New PE75-6/7 intelligent IV extrusion machine purchased to meet growing low-voltage IV wire demand,educe costs, and increase profitability.
- 4. PE90-1 accumulator and winding machine were upgraded on August 19.



#### Code of Ethical Conduct

The Company established the "Work Rules" to regulate employee behavior, enhance management, and improve work efficiency. These rules are distributed upon an employee's arrival and serve as guidelines for new employee training and management. The Company also stipulates penalties for employees using their position to seek illegal benefits, preferential treatment, gift, commission, embezzlement, or other forms of illegal benefits to prevent unethical conduct.

#### **Ethical management, anti-corruption**

To establish a corporate culture of ethical management and robust risk control management, the Company has formulated clear principles such as the "Ethical Management Code," "Code of Ethical Conduct," and "Integrity Management Procedures and Code of Conduct Guidelines." The Company explicitly states, in its regulations and external documents, the policies of ethical management, as well as the commitment of the Board of Directors and the management to actively implement these ethical management policies. They are effectively executed in internal management and business activities, and the corporate culture of ethics and integrity is widely promoted and deepened based on the principles of ethical management, conducting business activities in a fair and transparent manner.

#### **Grievance and reporting channels**

In the implemented work rules, relevant behavioral guidelines are repeatedly emphasized, and a "Reporting Policy" is established, specifically prohibiting bribery. At the same time, we promote relevant anti-bribery policies to all suppliers or partners, and request suppliers to sign the Statement of Integrity Commitments in order to eliminate issues related to procurement transactions.

The Company maintains open grievance channels, with a special section on the Company's website dedicated to "Stakeholder Communication and Communication Channel Information." It provides a platform for both internal and external stakeholders to offer suggestions or grievances, with designated personnel handling related grievance letters and calls based on stakeholder categories. The Company's management maintains open communication channels with employees through direct dialogue in labor-management meetings and has established the "Employee Grievance Handling Procedures" and communication mailboxes.

To prevent insider trading, avoid improper information leaks, and ensure consistency and accuracy of information disclosed to the public, The Company's Directors, managers, and relevant personnel attend external training each year. Relevant regulations are communicated to all employees, and those aware of significant information must not disclose it to others or inquire about or collect major undisclosed company information unrelated to their duties, in order to implement the management guidelines on prevention of insider trading.

#### **Training on Code of Conduct**

In November 2024, at the headquarters and Kao-Nan Plant, a 1.5-hour training session was conducted on the "Ethical Management Code, Integrity Management Procedures and Code of Conduct Guidelines, Code of Ethical Conduct Reporting Policies, Employee Grievance Handling Procedures."

#### Description of policies or actions to prevent anticompetitive behavior

The Company engages in business activities based on the principles of fairness, honesty, trustworthiness and transparency. Fully understanding that fair trade is an important principle to be strictly adhered to in business activities, the Company has established the "Integrity Management Procedures and Code of Conduct Guidelines." These guidelines stipulate that in the course of performing duties, Company personnel must not, directly or indirectly, offer, accept, promise, or solicit any improper benefits, or engage in other actions that violate integrity, are unlawful, or breach their fiduciary duty in order to gain or maintain benefits.

The Company has established the "Integrity Management Procedures and Code of Conduct Guidelines." Before entering into any business relationship, the procedures require a review of the legality and integrity policies of agents, suppliers, customers, or other business partners, and an assessment of whether they have ever engaged in dishonest practices. This ensures that all business operations are conducted fairly, transparently, and without solicitation, offering, or acceptance of bribes.



Ethical Management Code



Code of Ethical Conduct



Integrity Management
Procedures and Code of
Conduct Guidelines

In 2024, Hua Eng did not experience any incidents of corruption, conflict of interest, or anticompetitive behavior;



# 02

# **Products and Services**

p.46-62
2024 SUSTAINABILITY REPORT

Introduction of Products and Services	47
Quality Management and Customer Service	51
Green Products	60
Certification Achievements	62

#### **Introduction of Products and Services**

In addition to having a beautiful vision and comprehensive business strategy, a company must also have solid technical strength as a support. HUA ENG WIRE AND CABLE CO., LTD., with over sixty years of experience and technological evolution, is managed by a trustworthy management team and supported by innovative core strategies. By aligning with market trends, we continuously develop niche products and improve product quality while seeking strategic alliances with other industries to create greater overall industrial benefits.

#### Products and Services

Hua Eng, through its excellent quality management mechanisms, provides rapid and high-quality products and after-sales services to both domestic and international customers. In response to recent changes in project types, Hua Eng has also actively engaged in ultra-high voltage and submarine cable projects, offering services from pre-construction investigation and design to turnkey engineering. This has gradually become one of Hua Eng's core competitive strengths.



Oxygen-free copper, used as a conductive material, has significant advantages over general SCR tough-pitch copper, including extremely high electrical and thermal conductivity, workability, ductility, high purity, and resistance to hydrogen embrittlement at high temperatures. Our products are widely used in automobiles, motors, profiles, the electronic industry, ultra-thin drawing wires, and high-quality audio/high-definition video cables. They are well-regarded for their excellent quality and have received high praise from customers.

#### Hua Eng's oxygen-free copper has the following characteristics

- Purity reaches **over 99.995%** with good conductivity
- extremely low oxygen content can significantly reduce wire breakage rate to below 3ppm ↓
- The crystal structure is consistent and uniform, and the processability is excellent.
- Applicable for various automotive alternators, motors enamel wire, and solar photovoltaic ribbon (PV ribbon) transmission, with excellent energy conversion efficiency.













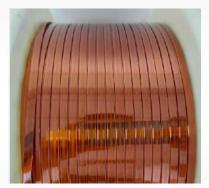
#### Electric vehicle market advantages

Most electric vehicle motors use flat enameled wires, and the base material of these flat enameled wires is Hua Eng's main product "High-quality oxygen-free copper." This high-quality oxygen-free copper can meet the four major characteristics of flat enameled wire: mechanical properties, chemical properties, electrical properties, and thermal performance. Most of the enameled wires available on the market today are round in shape. However, the biggest problem with these round enameled wires is their relatively low slot fill factor after winding, which significantly reduces the performance of the corresponding electrical components. For general round enameled wires, the slot filling rate is about 78% when fully wound, making it difficult to meet the technical development requirements for part flatness, lightweight, low power consumption, and high performance. With the continuous advancement in technology, flat enameled wire has emerged.

#### Characteristics of flat enameled wire

Compared to round enameled wires, flat enameled wires possess superior flexibility and pliability. They exhibit excellent performance in terms of current carrying capacity, transmission speed, heat dissipation, and space occupancy. They are specifically suitable for use as jumper wires between circuits in electrical and electronic equipment.

Under the same volume, flat enameled wire windings have characteristics such as higher energy density, superior motor efficiency, corona resistance, high insulation strength, zero pinholes, and a smooth surface. Therefore, flat enameled wires can be used in new energy vehicle motors, replacing traditional round enameled wires. Under the premise that the space remains unchanged, the volume of filled copper can theoretically increase by 20-30%. Flat enameled wire windings can increase the slot fill rate by 20% within the same space. With the motor space remaining unchanged, the maximum current that the motor windings can carry can be increased by approximately 15%, which is equivalent to a 15% increase in maximum torque and motor power. Conversely, under the same power conditions, this can reduce the outer diameter and volume of the motor, thereby reducing the volume of Other materials required by the motor.





#### Various types of power, communications, and optical fiber wire & cable

Hua Eng, in response to the nation's foundational needs for power and communication infrastructure and societal development trends, stays abreast of industry technological advancements. It actively focuses on developing a diverse range of wire and cable products needed across various industries.

For the manufacturing of ultra-high voltage cables with superior electrical performance, Hua Eng has obtained type certification for the 345kV voltage level. Through independently developed production technology, Hua Eng has achieved delivery and installation records of hundreds of thousands of meters. It holds a leading position in the high voltage and ultra-high voltage wire and cable market in Taiwan.

#### Turnkey engineering

Since the establishment of the Engineering Business Division, we have received substantial 161kV and 345kV cable turnkey engineering projects from Taiwan Power Company through our excellent track record and strong technical team, earning widespread recognition for our outstanding achievements.

#### The supply chain of Hua Eng products in the industry

Hua Eng continues to pursue forward-looking layout strategies, aiming for innovative corporate growth. We consistently engage in technical research and development to provide rapid integration services and optimal solutions for our customers and the market.

Oxygen-free copper material



#### Raw material supplier

- Copper ore mining and cathode copper refining manufacturing industries
- Electric power supply and combustible gas manufacturing industries

#### **End customer**

- Manufacturers of wires and cables using various copper conductors
- Manufacturers in electrical, electronic, and automotive industries

Wire and cable



#### Raw material supplier

- PE, PVC plastics and rubber manufac turing industries
- Manufacturing of metal tapes and wires for armoring, and wrapping cloth and plasticized tapes.

#### **End customer**

- Communications, data, and power transmission industries
- Construction, household appliances, and manufacturing industries
- Defense and shipbuilding industries

Turnkey engineering project



#### **Upstream supplier**

- Suppliers of high voltage cable splicing and terminal ancillary materials
- Suppliers of metal iron fittings for installation and protection

#### **Cooperating cable contractor**

- Civil engineering contractors
- Cable laying and splicing services

#### **End customer**

- Large-scale communications, data, and power transmission industries
- Offshore wind power generation industry



## Sales volume of Hua Eng

## Hua Eng's Main Products and their Revenue Proportion

Item	2022	2023	2024
Copper wire	26.45%	30.76%	32.71%
Power cable	59.04%	56.34%	55.05%
Communication cable	0.68%	0.76%	0.40%
Optical fiber cable	2.38%	2.00%	1.22%
Engineering and others	11.45%	10.14%	10.62%

#### Sales Volume of Hua Eng (2024)

Item	Domestic market		Ex	port
	Quantity (metric tons)	Amount (thousand NTD)	Quantity (metric tons)	Amount (thousand NTD)
Copper wire	5,199	1,617,524	3,518	1,065,529
Power cable	14,523	4,516,253	-	-
Communication cable	100	32,555	-	-
Optical fiber cable	173	99,988	-	-
Engineering and others	1,727	871,806	-	-
Total	21,722	7,138,126	3,518	1,065,529



## **Quality Management and Customer Service**

#### **Quality management**

#### **Product quality management guidelines**

#### Consistent and reliable quality to meet customer needs

As a responsible corporate citizen of the Earth, Hua Eng takes its environmental responsibility for products seriously. We comply with environmental regulations through the procurement of high-quality raw materials, excellent process monitoring and improvement, and rigorous quality assurance testing to reduce the impact of our products on the environment.

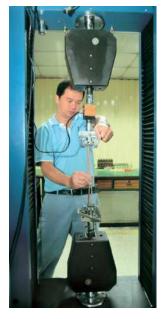
In addition to having TAF calibration laboratory certification, starting from 2020, Hua Eng has successively established TAF testing laboratories. On May 31, 2021, it officially passed the evaluation and recognition of the TAF certification foundation. Hua Eng has obtained dual certification for calibration and testing laboratories. Not only does it ensure stricter traceability for measuring instruments and testing equipment, but it also demands accuracy in complying with the standards for testing methods. Hua Eng is one of the few wire and cable companies to obtain both calibration and testing laboratory certifications, thereby improving product quality control and gaining customer trust in the Company's products.



Testing Laboratory TAF Certificate



Calibration Laboratory TAF Certificate



Copper material testing



Wire and cable material tensile and elongation testing

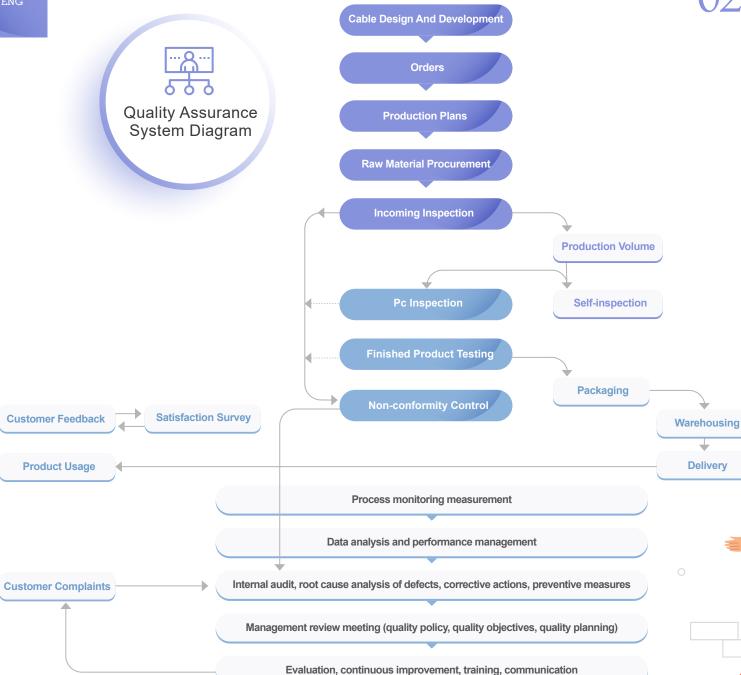


61kV withstand voltage testing



345kV ultra-high voltage cable partial discharge testing

. . .



#### Quality Control Plan

Wire and cable is a mature industry in the domestic market, with competitive advantages focusing on technological advancements and cost reductions. To enhance product competitiveness, "consistent and reliable quality to meet customer demands" is the quality policy of Hua Eng. Under the foundation of pursuing sustainable management, we set KPI targets for product defect rates and customer complaints annually. Through process equipment improvement, technology enhancement, and personnel training, we review the KPI achievement results and future efforts direction in monthly quality reports and management review meetings, in order to ensure that the product quality meets customer requirements and expectations.

#### **Quality Improvement Project for 2024**

#### Improvement Plan

High-quality oxygen-free copper production technology and quality improvement plan

#### **Implementation**

- Control points for the surface roughness of Ø8mm copper rods have been identified. Research and improvements are being conducted on equipment such as the rolling mill and coiling machine. During each stoppage, pinch rollers and rolling rollers are inspected for damage, and replacements are carried out monthly as needed to ensure the copper rods meet appearance quality standards.
- 2 Rubber pads were placed on the bottom of copper rod trays, and 6 upright posts on each side were fitted with PVCsleeves to prevent scratches from rods falling.

#### Improvement Plan

Ultra-high-voltage XLPEcable insulation lay length issues

#### Implementation

PA81 tension control upgraded.



#### **Improvement Plan**

Poor extrusion quality and cross-linking degree of low-voltage cross-linked PE cable insulation

#### Implementation

- Conducted DSC and TGA analysis on incoming raw materials to verify material stability.
- Established UV lamp cleaning schedules, UV intensity testing, and production line speed control and monitoring. Installed an additional UV irradiation unit on PE120-3 to enhance insulation crosslinking strength.



#### Improvement Plan

The optical cable assembly area is in an open space, with serious dust and falling dust issues. The poor production environment is likely to cause fiber breakage and quality issues such as irregular segments.

#### Implementation

Epoxy paint, partitions, and air conditioning in the optic cable assembly area room





## 2024 Quality Improvement Results





29 out of  $\bf 33$  indicators achieved, with an achievement rate of 87%.





Customer Complaints KPI

(24 cases/year)

In 2024, **16** customer complaint cases were recorded.

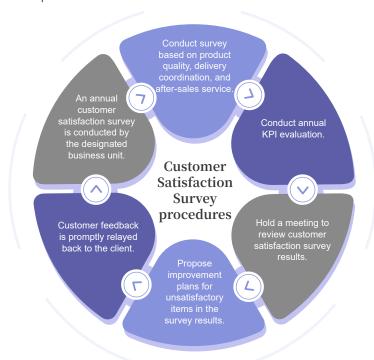
#### Customer Services

#### **Customer relationship management policy**

#### Enhance service efficiency and quality to meet customer needs

Hua Eng has always maintained the product quality policy of "meeting customers' needs, and ensuring uniform and reliable quality", serving as a commitment to our customers. We proactively understand customers' needs and solve problems to provide high-quality services, with the expectation of growing together with our customers. In addition to communicating with customers through various channels such as the internet, email, traditional phone, and fax lines, we also engage in face-to-face communication during regular and irregular visits by our sales and technical personnel. During these visits, we gather product-related information, listen to customer feedback, and promptly respond to customer needs or suggestions.

Providing high-quality products and establishing good and long-term partnerships with customers to create win-win situations has always been Hua Eng's service principle for its clients. In the future, under the premise of improving quality and being environmentally friendly, we will offer better products and service standards to our customers with a steadier pace.



#### Customer Satisfaction Survey

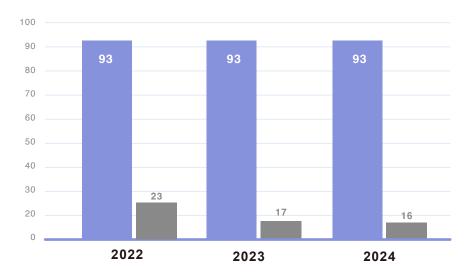
To accurately understand customer satisfaction with product quality, delivery coordination, and complaint handling, which serve as important references for the Company's corrective, preventive, and continuous improvement measures, we conduct customer satisfaction surveys quarterly through mail, telephone interviews, and on-site visits. Starting from 2019, customers can also provide real-time feedback and suggestions on the Company's website, serving as a basis for the Company to revise or improve products or services.

For the year 2024, a total of 22 customers were surveyed for satisfaction. In aspects of product quality, delivery coordination, and complaint handling satisfaction, the average score of 93 met the annual KPI target (90 points).

Due to the wide application and high-quality requirements of copper wire shaped material customers (non-wire drawing usage), process control is a major challenge. Through the efforts of process control and quality assurance units, high-quality copper material shipments have shown a stable increase.

# **Customer Satisfaction Score and Number of Customer Complaints**







#### Recent Achievements of Engineering Projects from Taiwan Power Company

#### 2019

#### **Taipower Engineering Achievements**

Contracting the "161kV cable turnkey engineering project from Shanshang-Yungong, Tainan" from Taipower, we won the "13th Golden Security Award." "Award of Excellence from the Ministry of Economic Affairs." and the "19th Public Works Gold Award." These honors and recognitions from customers and government agencies affirm Hua Eng's excellence.

#### Certificate (Letter) of **Appreciation**



#### 2020

#### **Taipower Engineering Achievements**

In September 2020, we undertook the "345kV Daling-Xingao Port Cable Line Project" and received a certificate of appreciation from the Southern Construction Branch of Taiwan Power Company.

#### Certificate (Letter) of **Appreciation**



#### 2021

#### **Taipower Engineering Achievements**

In November 2020, the Company received an urgent notification from Taipower to repair a power line fault in the Southern Taiwan Science Park. The Company immediately mobilized maximum manpower and material resources and successfully completed the task within the given deadline. On January 28, 2021, the Chairman Power Supply Zone of Taipower sent a letter of appreciation, and Deputy Director Wang visited the factory to express their gratitude.



#### Certificate (Letter) of Appreciation



#### 2019

#### **Taipower Engineering Achievements**

In June 10, 2022, we received a letter of appreciation from Taipower, acknowledging the Company's participation in the 345kV cable improvement and accident recovery project at Taipower's Southern Taiwan Science Park UHV substation This contribution ensured that the project was completed on schedule and integrated into the system smoothly.

#### Certificate (Letter) of **Appreciation**



#### Recognition from **Customers**

In cooperation with the national power construction project and in addition to the original production and sales of cables, Hua Eng participated for the first time in the 161kV ultra high voltage cable line engineering project launched by Taiwan Power Company in 2004. Amid fierce competition from domestic and foreign companies, with an excellent and strong turnkey team. Hua Eng has successfully obtained projects such as "Beiying-Jiachang (TaiPower's first turnkey engineering project)," "Zhenbei-Zhongdao (Port of Kaohsiung canal crossing project)," "Meishan-Jiuqu,"and "Tainan-Yunong (under construction)."

From 2014 to 2015, we received several projects of 345kV grade, including Wu-jia-Port of Kaohsiung (won the Excellent Engineering Award by Taiwan Power Company), Dalin-Xingao Port, and Linkou-Dinghu. During the period, inspections and evaluations were made by the owner, Taiwan Power Company, and the Public Works Quality Inspection Team of the Ministry of Economic Affairs, all of which received very high ratings. These projects were first turnkey engineering projects completed among those launched by Taiwan Power Company, successfully achieving the goal of early completion and power delivery, and received commendations and awards from Taiwan Power Company.





Chunghwa Telecom launched the "Sustainable Supply Chain Initiative" in collaboration with the Sustainable Alliance for Low-carbon Economy in 2018, implementing the "Supplier Sustainability Grading" system. It established ESG audit standards tailored for the telecom industry and commissioned an independent third party SGS to conduct on-site supplier audits, classifying suppliers' ESG performance for tiered management. In 2022, Hua Eng was honored with the "Gold Certificate" in the sustainability partnership certification from Chunghwa Telecom. At the meeting, the "Sustainability Grading Certificate" was awarded by General Manager Guo Shui-Yi. As part of the supplier network, Hua Eng enhances the transparency of its ESG and carbon management information, and continues to participate in Chunghwa Telecom's Sustainable Partner Certification to contribute to global climate change efforts.





#### 中華電信 CONFIDENT 稽核總結報告

廠商名稱

主要連絡人員姓

電子郵件

稽核日期

稽核領隊

稽核成員

電話

傳真

華榮電線電纜股份有限公司

高雄市仁武區高楠公路30號 (稽核地點)/ 高雄市前金區中正四路170號 (總公司)

李睿麒 品管課長/陳建誠工程師

ryli@hegroup.com 886-7-3426333 #810 886-7-3422077 2022年8月3-4日 趙福城 Gary Chao

Gary Chao 2022/8/4

<b>制持</b> 報告					
Totals	推議改勢時間				
0	<10 天				
0	<30 天				
3	< 60天				
97					
֡	0				



#### CERTIFICATE

For Sustainability Certified Supplier

Gold Level Certified Supplier

#### 華榮電線電纜股份有限公司

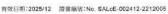
The Gold Level Certified Supplier status confirms that the above-mentioned company is presented in recognition of achieving

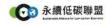
Gold Level Status in accordance with the Chunghwa Telecom Supply Chain Sustainability Qualifications.

Through demonstrated results, this supplier has exhibited excellent performance in sustainability. The supplier has maintained a Gold Level of performance from (2023/01) to (2025/12).

Chairman of Sustainable Alliance for Low-carbon Economy











#### **Quality Assurance**



All manufacturing plants of Hua Eng have acquired ISO 9001:2015 (valid period: January 28, 2027) International Quality Management System Certification. Starting from material intake inspection, structural inspection, to final product inspection, all are implemented following a strict quality control system.

In addition, to ensure inspection quality, besides regularly sending our testing equipment to TAF calibration laboratories for calibration, we have established TAF temperature and length calibration laboratories. We are currently actively applying for TAF testing laboratory certification and a total of 21 items have been accredited. This aims to enhance testing skills, provide product assurance, extend cable lifespan, and ensure electrical safety.

Since 2015, Hua Eng has been conducting process improvement research and strict quality control for oxygen-free copper wire. Currently, the oxygen content quality level of some special copper materials can be controlled within 2 ppm, superior to the world's highest standard for electronic-grade oxygen-free copper wire, ASTM B49 (10100), which requires an oxygen content below 5 ppm. This makes Hua Eng one of the best suppliers of oxygen-free copper materials in the world. The copper materials are regularly sent to SGS for testing of restricted hazardous substances (RoHS), EU REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals), halogens, polycyclic aromatic hydrocarbons (PAHs), perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and eight major heavy metals, to ensure compliance with EU regulations and the high-quality copper wire requirements of special customers.





2023

2024





#### Product Information Labeling

2020

All of Hua Eng's products are clearly labeled according to regulations or customers' requests with company data, product information, product certification details such as (CNS, UL, product testing & certification by the Standards, Metrology & Inspection, RoHS (Restriction of Hazardous Substances Directive)); specific content ingredients labeling (such as lead-free marking LR, low-smoke, zero-halogen marking SFH, and compliance with EM-IL environmental mark). By doing so, customers can fully understand the supplier information and safety of product use. This facilitates appropriate measures to process end-of-life product, to mitigate the environmental and social impact.

2021



經濟部標準檢驗局 从储液 感謝肤 電線電纜股份有限公司 電線電纜股份有限公司 線電纜股份有限公司 自 109 年 1 月至 109 年 12 月期間 自 110 年 1 月至 110 年 12 月期間 自112年1月至112年12月期間 自 113 年 1 月至 113 年 12 月期間 自111年1月至111年12月期間 積極推廣正字標記貢獻卓越 積極推廣正字標記貢獻卓越 積極推廣正字標記貢獻卓越 積極推廣正字標記貢獻卓越 積極推廣正字標記貢獻卓越

2022

Issued by the Bureau of Standards,
Metrology and Inspection, Ministry of
Economic Affairs
Awarded the Certificate of Honor for CNS
Mark for 50 Years "Promotion of CNS
Mark Verification"

Received the Certificate of Appreciation for "Outstanding Contribution to Promoting the CNS Mark" from the Bureau of Standard, Metrology and Inspection, Ministry of Economic Affairs for five consecutive years.



#### Cybersecurity Risk Management

## 01. Cybersecurity risk management framework

- The Company's IT Department is responsible for its cybersecurity and takes charge of planning, implementing and promoting matters related to cybersecurity as well as increasing awareness for cybersecurity.
- The Company's Audit Office is the audit unit for cybersecurity control. If any shortcoming is found, the audited unit is required to propose the improvement plan and submit such a plan to the Board of Directors' meeting. Subsequently, regular follow-up shall be made to further reduce the internal cybersecurity risk.
- The organizational operation is managed with the PDCA method to ensure the achievement of reliability goal and continual improvement.

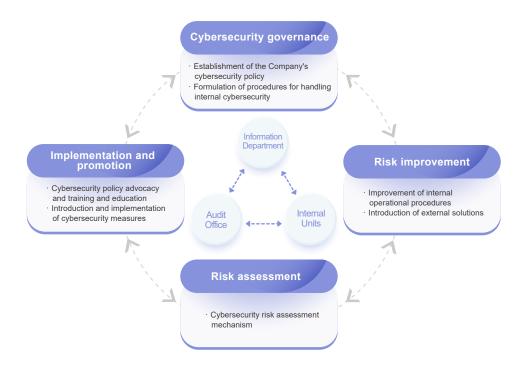
## 02. Cybersecurity policy (management guidelines)

This policy is stipulated in an effort to carry out an effective information management system, and maintain the confidentiality, completeness and availability, so as to ensure the secure operation of information system and network and achieve the goal of sustainable management.

## 03. Specific management program

#### **Cyber Security Management Program**

Item	Description	Relevant Measures
Privilege Management	Management for personnel accounts and privileges and measures for system user behaviors	Management and approval for personnel account privilege management Regular stock-taking of personnel account privileges
Access Control measures for channels of personne internal and external systems and transmitt		Control measures for internal and external accesses User behavior tracking record
External Internal potential vulnerability, management and preventive measures for infections		Host/Computer vulnerability assessment and update measures Antivirus and malware assessment
System Availability	Syetem availability status and processing measures for disrupted services	Monitor and alert measures for system/network availability status Data backup measures, local/remote backup Regular disaster recovery drill



## 04. Resources investments of Cybersecurity Policy

O1 Manpower Currently, the two members of the IT Division areresponsible for related cybersecurity.

Regular review of cybersecurity meetings and disaster recovery drills, signing of maintenance contracts with professional vendors for information equipment fire insurance and related equipment systems to ensure the stable operation of the system, and regular promotion of cybersecurity and software licensing to enhance colleagues' cybersecurity awareness.

For information equipment expenses and related equipment system maintenance expenses, totaling approximately NT\$1.38 million in 2024.

#### 60

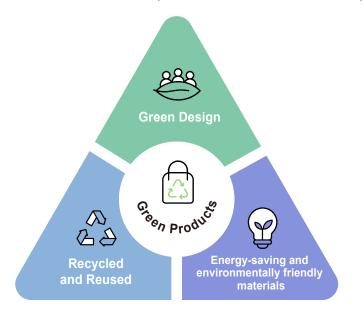
#### **Green Products**

#### Hua Eng Green HELPER

The implication is that Hua Eng's products are low pollution, environmentally friendly, and recyclable. By taking the initial letters of Green, the company name HE, and Low Pollution, Environmental protection, and Recyclable (L, P, E, R), we form the acronym Green HELPER, signifying a green helper or assistant. This represents Hua Eng's contribution to the grand goal of being a leader in the green environmental wave.

#### Solar Cable (PV Cable or Solar Cable)

In recent years, under the global climate change, the government has established an energy transition vision and specific quantitative targets, as well as five major areas: energy governance, energy conservation, electricity, new and renewable energy, and green energy technology industry, to balance energy security, green economy, and environmental sustainability. Due to the government's expansion of renewable energy source promotion, the Ministry of Economic Affairs has set a policy goal of achieving 20% renewable energy source power generation by 2025. Currently, it is actively promoting solar photovoltaic and wind power generation as renewable energy sources, aiming for a solar photovoltaic installation capacity of 20GW by 2025. The significant amount of cables required for solar power generation represents a major opportunity for Hua Eng as a cable manufacturer. Additionally, Hua Eng's customer Taipower is evaluating and planning the necessary power grid constructions to meet the 2025 solar photovoltaic system installation target and grid connection requirements. Manufacturers of solar-related power generation panels provide a 25-year warranty period. Therefore, it is also recommended to consider it as the life cycle of solar cables. The materials of the cables connected to the supporting system play a crucial role in the overall operational capacity and safety of a solar power plant. However, without understanding the working temperature and conditions, it is impossible to accurately assess the rated usage time of general cables. Solar cables can meet the requirements of solar photovoltaic equipment. Hua Eng, in line with the government's goals of energy security, a green economy, and environmental sustainability, aims to contribute to its own sustainable development and environmental sustainability. The short-term goal (2021~2022) is for the cable products to pass tests and prove that they comply with the internationally recognized IEC 62930 Electric cables for photovoltaic systems standards. Hua Eng obta





**Green Design** 

Centered on green design and environmental considerations, the production process insists on avoiding the use of raw materials containing hazardous substances to reduce the impact of environmental pollution.



**Recycled and Reused** 

Continuously conducts research to increase the recycling rate of cable materials and practice the production concept of resource conservation.



Continual development of suppliers for energy-saving and environmentally friendly green materials, launching green wire and cable products.

#### Certification schedule and product certificates for solar cables









ISO/IEC 17025:2017

(Calibration Laboratory)

(Valid from March 1, 2023 to

February 28, 2026)



#### **Certification Achievements**

#### ISO/IEC 17025:2017 ISO 45001:2018 ISO 9001:2015 ISO 14001:2015 Quality Management System (Valid from January 29, 2024 to Occupational Health and Laboratory Management System ISO/IEC 17025:2017 Laboratory Management January 28, 2027) **Environmental Management System** Safety Management System Management System (valid from January 27, 2023 to system type Prior to the issuance of this report. Hua (valid from January 27, 2023 to (Testing Laboratory) January 26, 2026) Eng has passed the re-evaluation on January 26, 2026) (valid from May 31,2024 to May 30,2027) January 29, 2024, and the certificate of this report has been updated accordingly. Environmental awareness has Employees are important assets to ISO/IEC 17025 Laboratory The ISO 9001:2015 Quality ISO/IEC 17025 Laboratory become a global trend. Establishing the Company. Through ISO 45001: Management System certification Management System is a globally Management System is a globally the ISO 14001:2015 Environmental 2018 Occupational Health and is a set of quality management recognized laboratory quality recognized laboratory quality Management Systems offers a Safety Management Systems, we standards established by the management system. Hua Eng, in management system. Hua Eng. in systematic approach, facilitating the establish a predictive risk International Organization for terms of equipment accuracy and terms of equipment accuracy and Company to successfully implement elimination system for potential risk Standardization (ISO), Companies credibility of test reports, can credibility of test reports, can long-term and viable measures. It factors, reduce the occurrence of provide credible test results. can use the quality management provide credible test results, framework provided by ISO 9001 helps balance social and economic industrial safety incidents, and reduce possible quality control reduce possible quality control development with changing protect employee life safety. risks, and enhance customer to ensure the consistency of their risks, and enhance customer environmental conditions, thereby confidence. product and service quality. confidence. promoting sustainable corporate development. Systematically and efficiently The Company has obtained ISO Enable businesses and organiza-TAF testing laboratory certification TAF calibration laboratory utilize resources, reduce costs and 9001 certification, which internally tions to prevent injuries and ensures credible test results that certification ensures credible minimize waste, implement waste Core enhances organizational efficiency diseases, improve Occupational meet client requirements for wire calibration test results that meet and product quality improvement, reduction and reclamation for reuse. Health and Safety performance, and cable specifications. client requirements for wire and purpose of Achieve the goals of reducing costs reduces waste and errors, and and achieve sustainable business providing clients with reliable cable specifications, providing the and environmental protection. increases productivity to ensure operations. testing outcomes. clients with reliable testing Understand domestic and management consistency in product and service It enables the Company to achieve outcomes. quality. Externally, it serves as a international environmental the purpose of fulfilling social system regulations and take preventive and "passport" for national trade, responsibility. corrective measures to reduce positioning the Company to remain pollutant emissions and protect the competitive in terms of product quality. (TAF) CERTIFICATE das 品質管理系統證書 CERTIFICATE 封羅法人主義採證易合會 @ 認證證書 Hua Eng Wire & Cable Co., Ltd. 學學與**與實際和**自10000000 ann **等餐食蔬菜罐股份有限公司** 测试實验室 高雄市(A.提高的企作)# 代 **Applications** NAME OF THE OCCUPANT OF THE PARTY OF T 為本會認證之實驗室















03

# **Environmental Protection**

p.63-76

2024 SUSTAINABILITY REPORT

Response to Climate Change	64
Resource Recycling	73
Pollution Control	74
Water Resource Management	75
Waste Management	76

## **Response to Climate Change**



**Climate Change and Energy Management Policy** 

Establish a Sustainable Development Task Force to execute projects related to risks and opportunities caused by climate change, and track and review implementation results in ESG sustainability meetings.

#### Clean Production and Environmental Protection Management

For a long time, Hua Eng has prioritized environmental protection measures in its factories. Management of air, water, waste, toxins, and noise in the factory areas strictly adheres to government environmental regulations. The management (Occupational Health and Safety Management Committee) reviews these processes to continuously improve and enhance safety and health performance.

Hua Eng obtained ISO 14001:2015 Environmental Management System Certification in 2019. Since then, we have been driving waste classification, recovery and reduction, pollution control and continuous improvements as stipulated in the Environment, Safety and Health Policy. Improvement for energy efficiency of oxygen-free copper (OFC) furnaces is continued as planned. Traditional boilers running on fuels and energy inefficient are being replaced across the board with zero-emission liquid nitrogen. Old forklifts with high waste emissions are gradually being phased out.

We only have one Earth, and natural resources are limited. As a part of this world, Hua Eng fully recognizes the significance of "conserving resources." Not only must we prevent environmental pollution and reduce resource waste, but we must also actively seek high-quality alternative energy sources. In the production process, we implement the 3R movement (Recycle, Reuse, and Reduce) for materials and continuously promote projects like "waste classification and reduction" and "resource recycling." Resource recycling bins are set up in the plant area for proper waste classification, giving reusable resources a "reclaimed" opportunity. This promotes a positive cycle of resources, achieving environmental resource conservation and pursuing the goal of sustainable development.

The project to modify the discharge pipe sampling port outside the perimeter was included as part of the 2024 ISO14001 management program.





#### CDP SCORE REPORT - CLIMATE CHANGE 2023 Hua Eng Wire & Cable Co., Ltd The CDP Score Report allows companies to understand their score and indicate which categories require attention to reach higher Region scoring levels. This enables companies to progress towards environmental stewardship Country/Area Taiwan, China through benchmarking and comparison with peers, in order to continuously improve their Climate Change governance. Investors will Questionnaire General additionally receive a copy of the CDP Score Report upon request. For further feedback please contact your account manager or your key CDP **Activity Group** Electrical & electronic equipment contact Your CDP score Average performance Electrical & Global Average



#### **Environment, Safety and Health Policy**

Hua Eng is a specialized manufacturer of wire and cable products established in 1956. The Company primarily produces bare copper wire, wire and cable, communications cable. and fiber optic cable. During the process of product research and development, manufacturing, testing, and sales, we are required to adhere to safety and health regulations, environmental protection regulations, and other relevant requirements, while also continuously improving environmental impact and occupational safety. The aim is to prevent unsafe behavior and environmental abnormalities, prevent occupational hazards and environmental pollution, and fulfill the responsibility of ensuring employees' safety and maintaining a good working environment.



#### We hereby undertake:

- Comply with government safety and health laws, environmental regulations, and other required matters.
- Ensuring the safety and health of employees is the primary responsibility and obligation of supervisors at all levels within the organization.
- 03 The highest management has absolute responsibility for the effectiveness of the environmental management system and bears full responsibility for the prevention of work-related injuries and illnesses, as well as for providing safe and healthy workplaces and activities. This is to ensure the protection of all employees, suppliers, contractors, and visitors entering the organization.
- Ensure and promote continuous improvement of the occupational health and safety management system and safety and health performance.
- Encourage all employees to participate in providing suggestions for safety and health, establish and maintain good communication and consultation channels between the organization's top management and employees, and protect workers from retaliation when reporting incidents, hazards, risks, and opportunities.
- Enhance resource utilization efficiency through energy conservation, industrial waste reduction, and resource recycling.
- Waste classification, recovery, waste reduction, and pollution prevention.
- Guide and support internal employees, and external stakeholders such as residents, suppliers, contractors and customers, to promote concepts of safety, health, and environmental protection, and strengthen communication and understanding.
- 09 Continuously provide necessary education and training to employees, suppliers and contractors to communicate the importance of effective occupational safety and health management, meeting occupational safety and health management system requirements, as well as effective environmental management and meeting environmental management system requirements. This ensures awareness of safety and health and correct behavior to prevent accidents.

# Environmental Protection 2024 SUSTAINABILITY REPORT

#### Climate Change

## The response to climate change is an opportunity for sustainable corporate operations.

Following the consensus of the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP26) to achieve global net zero emissions by 2050, our country amended the "Greenhouse Gas Reduction and Management Act" to the "Climate Change Response Act" on January 10, 2023, aiming for net zero carbon emissions by 2050. For many stakeholders, climate change will bring significant financial challenges and opportunities both now and in the future. Considering the impact of climate change risks on its operations, Hua Eng has introduced the Task Force on Climate-related Financial Disclosures (TCFD) framework to carry out the inventory and disclosure of management of climate change risks and opportunities. Based on the four major aspects, including "governance," "strategy," "risk management," and "indicators and targets," the Company has built its management framework in response to climate risks, identified risks and opportunities related to climate change, and adopted relevant response strategies to reduce and mitigate the substantial impact of climate risks on the Company's business.

## Identification of Climate Change Risks and Opportunities

The Company pays close attention to trends in global climate change and to the development of international responses. Through the ESG Sustainable Development Task Force, it includes climate change as one of the material topics and crucial risks for sustainable corporate development. It continues to conduct analysis and management to identify potential major risks and opportunities for operations. We have specified our goals and promote management actions for carbon reduction strategies, regularly reporting to the Board of Directors to track the effectiveness of implementation and to strengthen the Company's resilience to climate change.

Governance

The Company established the CSR Committee in 2015 and renamed it the Sustainable Development (ESG) Task Force in 2021. Authorized by the Board of Directors, the Sustainable Development Task Force is the highest-level organization for climate change management within the Company. It is responsible for overseeing and executing related climate change risk strategies. The General Manager serves as the chairperson, reviewing climate change-related risks and opportunities annually, formulating promotion plans, and compiling execution results to report regularly at Board of Directors meetings.

Strategy

- The cross-function organization meeting discusses and identifies climate change related risks and opportunities.
- opportunities on the Company's operational strategy and finances.
- Conduct scenario analysis and evaluation to set carbon reduction targets.

Risk management

- Use of the TCFD framework to construct the workflow of identifying the Company's climate change risks.
- Management of the proportion of energy reliance of electricity, fossil fuel and gas, and enhancement of resource utilization efficiency and cost saving.
- os Integration with the ISO14001 risk management process to identify climate related risks and create the opportunity to improve and address climate issues.

Indicators and targets

- 1. Execute ISO 14064-1 carbon inventory standard, establish an energy baseline, control energy usage, and set annual targets for reducing GHG carbon emissions.
- In line with the government's "green energy and carbon reduction" goal, the Company commits to continuously purchase green power every year to stabilize energy use and reduce carbon emissions.
- Reduce by 10% compared to the base year (2023) in 2030.

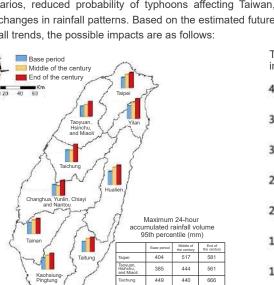
For information on the implementation of climate-related information by listed and over-the-counter companies, the Company's greenhouse gas inventory and verification status for the past two years, greenhouse gas reduction targets, strategies, and specific action plans, please refer to the 2024 Annual Report/Corporate Governance Report, P.43–P.49.

https://www.hegroup.com.tw/index.php?option=module&lang=cht&task=showlist&id=3&index=1



#### **Scenario Analysis and Evaluation**

Currently, Hua Eng only conducts a risk assessment of flooding disaster risks under climate change scenarios for the locations of its production facilities. Immediate physical risks are referenced from the scientific highlights of the sixth assessment report of the IPCC on "Impacts, Adaptation, and Vulnerability" and the updated report on the assessment of climate change impacts in Taiwan (Ministry of Science and Technology, 2022.03.01). Based on the climate change impacts in Taiwan, these include rainfall trend changes and their impacts, increased intensity of extreme rainfall under future warming scenarios, reduced probability of typhoons affecting Taiwan, and changes in rainfall patterns. Based on the estimated future rainfall trends, the possible impacts are as follows:



414

427

440

502 621 780

516 679 754

540 602

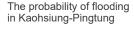
(a) Extreme rainfall variation trends

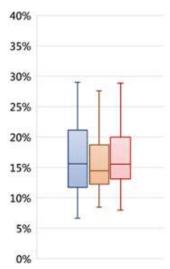
**Flooding** 

Extreme rainfall across Taiwan (95th percentile of the maximum 24-hour cumulative rainfall) shows an increasing trend in all regions except the central area, which sees a slight decrease in the middle of the century. Taking the flooding probability in the four regions of Taipei, Yilan, Tainan, and Kaohsiung-Pingtung as examples (simulated under current conditions), the flooding probability in the middle of the century is flat or slightly increased compared to the baseline period, and the increase is more significant by the end of the century.

scenario

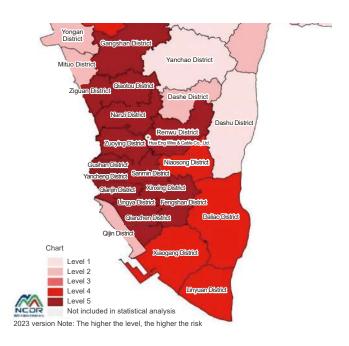
The period when +1.5°C global warming is most likely to occur is around 2021~2040. Achieving net zero emissions by the middle of the century or before the end of the century would keep warming within 1.5°C or 2°C, thereby meeting the targets of the Paris Agreement.





Base period / Middle of the century / End of the century

(b) Regional (Kaohsiung-Pingtung) flood occurrence probability variation trends



(c) Flood disaster risk map under AR6 climate change scenario (1.5°C) (Hua Eng - Renwu District designated as Level 5 high risk)

Source of information: (a) Extreme rainfall variation trends (b) Trends in flood occurrence probabilities in four separate regions, extracted from the scientific highlights of the 6th Assessment Report of the IPCC on "Impacts, Adaptation, and Vulnerability" and the updated report on the assessment of climate change impacts in Taiwan (Ministry of Science and Technology, 2022.03.01), (c) Flood disaster risk map under different climate change scenarios of AR6 is sourced from the National Science and Technology Center for Disaster Reduction (NCDR), which provides flood disaster risk maps for different warming scenarios (county and city edition for the 1.5°C scenario).



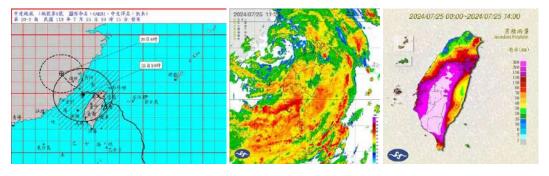
#### Carbon Fee Evaluation

The carbon fee in Taiwan has been set at NT\$300 per ton, with adjustments every 2 years. The carbon fee will take effect on January 1, 2025. A trial declaration will be conducted in May 2025 without payment, and starting from May 2026, payment will be required based on 2025 emissions. The first batch of carbon fee targets includes companies with annual emissions of 2.5 tons or more, including industries such as steel, cement, power, and semiconductors, with an estimated 500 factories affected. There are 2 carbon fee standards, depending on whether a company meets the designated targets and submits an emissions reduction plan. The carbon fee is calculated using the formula: (Emissions – 25,000 tons CO2e) × NT\$300. In 2024, Hua Eng's total Scope 1 and Scope 2 greenhouse gas emissions amounted to 14,543 tons, which does not exceed the currently established threshold. Therefore, no carbon fee is required.

### TCFD Climate Change Scenario **Analysis and Risk Response**

In 2024, Hua Eng experienced two major disasters: Typhoon Gaemi in July and Typhoon Krathon in October. Typhoon Gaemi caused flooding throughout the plant, resulting in repair costs of approximately NT\$200,000. Typhoon Krathon brought strong winds and heavy rain, causing significant damage to facilities, with total repair costs of approximately NT\$680,000.

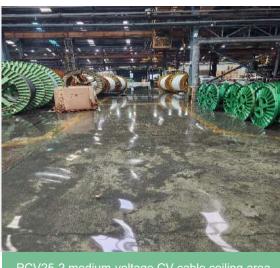
#### **Typhoon Gaemi Damage Incident Images**



Figures: Typhoon Gaemi track map, satellite rainfall cloud image, and cumulative rainfall chart



Hua 2 Road Area, Kao-Nan Plant



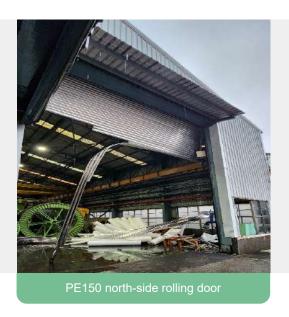
PCV25-2 medium-voltage CV cable coiling area

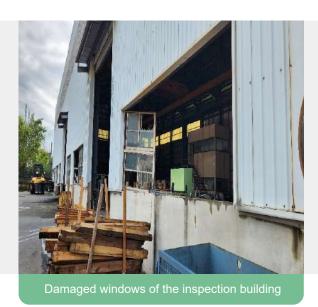


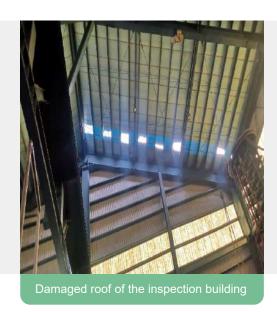
PCV25-2 medium-voltage CV cable coiling area



#### **Typhoon Krathon Damage Photos**











#### **Climate-related Risks and Opportunities**

Ca	tegory	Risk	Potential risks Financial impacts	Opportunities	Potential opportunities Financial impacts	Risk countermeasures
		Introduction of the carbon border tax	Increased operating costs (mid-term)	Adopt low-carbon energy and strengthen energy substitution/diversity	Reduced operating costs (long-term)	Participate in domestic regulation seminars and training, and continue to focus on domestic and international trends and developments (i.e., ESG, carbon neutrality, and carbon trading systems).
		Imposition of carbon fees	Increased operating costs (mid-term)	Install of green energy equipment	Increase in asset value (mid-term)	of ISO 14064-1.  3. Continue to implement the ISO 14001 environmental management system to improve energy efficiency, conserve energy and reduce carbon emissions.
Transition	Introduction of the carbon border tax	Renewable Energy Development Act (large electricity user regulations) - compliance with related expenditure	Increased operating costs (short-term)	Improve in production process efficiency and reduction in resource consumption	Increased in operating income (long-term)	4. Continue implementing power-saving improvements to the oxygen-free copper furnace according to the plan.  5. Evaluate the installation of solar photovoltaic systems on the roof of self-built plants to meet 10% of the electricity demand for large users.  6. Traditional boilers running on fuels and energy inefficient are being replaced with zero-emission liquid nitrogen.  7. Old forklifts with high waste emissions are gradually being phased out.  8. Continuously monitor water consumption for abnormalities and correct issues on a timely basis.
Risk		Water consumption charges	Increased operating costs (mid-term)		Reduced operating costs (long-term)	9. Ensure the integrity of water pipes and water circulation equipment in the plant to reduce waste. 11. Install sewage treatment facilities, recycle and reuse process cooling water. 12. Change to power-saving LED bulbs (originally halogen bulbs) in production areas.
	Market	Market trend changes fails to meet customer needs	Decreased operations (short-term)	Develop green energy cables (solar cables, environmentally friendly cables, etc.) using energy-saving and environmentally friendly materials.	Increased in operating income (long-term) Increased operating costs (long-term)	Recycle and reuse packaging materials (used ironwood shafts and sealing plates).     In line with market trends, develop low-smoke, non-toxic, environmentally friendly wires and cables, and solar cables (IEC 62930, EN 50618, UL 4703).
	Company reputation	Financial institutions may raise interest rates on loans offered to high-carbon industries	Increased operating costs (mid-term)	ctively participate in domestic and foreign energy conservation and carbon reduction initiatives, promote various carbon reduction measures in line with national policies, and improve goodwill	Increased in operating income (mid-term)	Actively participate in international sustainability evaluations (e.g., CDP) and continue to refine ESG-related sustainability strategies and, in turn, increase market recognition.
Physical Risk	Immediate	Increased typhoon intensity Flooding due to extreme rainfall	Increased capital expenditure (short-term) Decreased operating	Strengthen the ability to resist and respond	Improved climate resilience, decreased operational disruptions,	Establish an emergency response organization to respond immediately and reduce losses due to climate incidents.     Regularly check the pumps, set up emergency power generation and water storage systems, and regularly dredge drainage channels.
	Long-term	Drought and water shortage	revenue (interruption of production) (short-term)	to extreme climate disasters.	and potential company losses (short-term)	Strengthen contingency measures against typhoons to ensure stable production in the event of natural disasters.     Carry out the drainage channel reconstruction project at the plant to accelerate drainage speed of the plant and reduce the risk of flooding due to heavy rain.

mn	lementation results	
	lementalion results	

Cost effectiveness Energy-saving effectiveness Investment expense

The additional nitrogen pipeline expense of NT\$912,000

Cost difference of NT\$225.7 per hour Annual savings of NT\$986,000

Annual energy saving of 7,524 kWh Annual saving of 48,153 liters of diesel fuel



The main direct energy sources are natural gas at 367,596 cubic meters and diesel at 48,700 liters. The primary indirect energy source is purchased electricity. The total heat value percentages of direct and indirect energy consumption are 13.22% and 86.78%, respectively.

Hua Eng, in accordance with the "Regulations for Management of Renewable Energy Power Generation Equipment for Power Users with a Certain Contract Capacity or Above," submitted an application to the Bureau of Energy, Ministry of Economic Affairs, for a change in the "Renewable Energy Obligated User Obligation Implementation Plan," which has been approved for record. The Company will obtain the registration of renewable energy power generation equipment by December 31, 2025, with a total installed capacity of 780.7 kW. The percentage of renewable energy in 2024 was 0%.



#### **Energy Resource Utilization in 2024**

Energy type Year	Diesel(liters)	Natural gas (m³)	Liquefied petroleum gas(kg)	kWh
2022	74,000	383,202	1,420	30,068,783
2023	60,200	370,826	1,720	29,113,150
2024	48,700	367,596	1,860	28,476,783
Calorific value (kcal / unit)	8,400	9,000	6,635	860
Thermal energy	409,080,000	3,308,364,000	12,341,100	24,490,033,380

Note: Direct energy consumption items include diesel, natural gas, and liquefied petroleum gas, while indirect energy consumption items include electricity.

1000 kcal = 4.187 gigajoules (GJ), with reference to the unit calorific value table of energy products. 1 kg=1.818 liters

#### Total Calorific Value (GJ) of Energy Resource Utilized in 2024

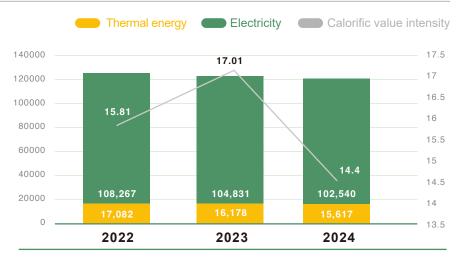
Calorific value Year	Thermal energy	Electricity	Total calorific value	Operating revenue (NT\$ million)	Calorific value intensity
2022	17,082	108,267	125,349	7,926	15.81
2023	16,178	104,831	121,009	7,115	17.01
2024	15,617	102,540	118,157	8,204	14.40

Note: The source of the calorific value of electricity is based on the conversion of the Company's power consumption according to the Ministry of Economic Affairs Energy Handbook.

The calorific value of natural gas is based on the calorific value statistics provided by the supplier.

#### **Electricity Usage Percentage by Department in 2024**

Department	Oxygen- free copper	Wire material	Optical cable	Cross-linked	Plastic	Utilities and others
2022	39.45%	27.09%	3.72%	20.25%	5.45%	4.04%
2023	38.65%	27.55%	3.28%	20.48%	5.74%	4.30%
2024	39.60%	27.05%	3.68%	21.01%	5.86%	2.8%



Note: Calorific value intensity = Total calorific value / Operating revenue (NT\$ million)



# Identification of GHG Emission Sources

With the global trend towards a low-carbon economy, companies are bound to play an increasingly important role in environmental risk management. To implement carbon management operations, the Company regularly collects emissions information from various production plants. The status of carbon emission inventory is as follows:

## **Identification of GHG Emission Sources**

In 2024, Hua Eng's GHG emissions were identified as originating from stationary combustion, process emissions, mobile combustion, and fugitive GHG sources.

Due to the replacement of traditional oil-consuming boilers in the production process, the emissions volume from stationary combustion sources has significantly improved.

# GHG emissions(CO<sub>2</sub>e/year)

	2022	2023	2024
Scope 1	1538.69	1,048.52	1,040.3607
Scope 2	15876.32	14,127.77	13,502.8471
Total emissions	17415.01	15,176.29	14,543.286
Emissions intensity	2.2	2.13	1.773

Note: GHG emissions intensity = total GHG emissions (tons) / operating revenue (NT\$ million) Following third-party verification, the GHG emissions and intensity data for 2023disclosed in the report have been revised in the current year.

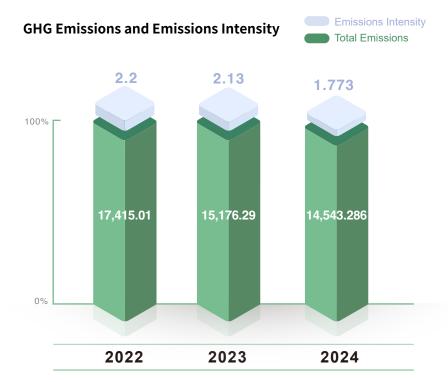
The greenhouse gas emissions for 2024 have been verified by the Metal Industries Research & Development Centre. The relevant greenhouse gas inventory report and verification opinion can be found on the Company's website.

https://www.hegroup.com.tw/index.php?option=module&lang=cht&task=pageinfo&id=268&index=4

# **GHG Emissions Intensity**

Hua Rong's GHG emissions include direct and energy indirect types, with carbon dioxide as the main emitted gas. The emission intensity was 1.773 (total  $CO_2e$  14,543.286 tons/million).

	2022	2023	2024
total CO <sub>2</sub> e ton	17,415	15,176.29	14,543.286
Production value: million	7,926	7,115	8,204
Emission intensity	2.2	2.13	1.773



# Reduction of GHG emissions

To effectively reduce environmental pollution, decrease GHG emissions, and use energy reasonably and efficiently, the Company has established the Task Force for Energy Efficiency and Carbon Reduction Management within the production plant. Main departments are responsible for appointing members to promote tasks within each unit.

To review the effectiveness of energy-saving and carbon reduction measures in various plants, regular monthly meetings are held to evaluate and review energy consumption, and to check for any waste of energy. Energy-saving items and targets are set each year for better administrative management and necessary engineering control to achieve the annual progressive goals of energy-saving and carbon reduction measures.

2024

Quantity

3,788,926

18,821,763

0



# **Resource Recycling**



# **Resource Utilization**

The Company is engaged in the manufacturing of wire and cable products, mainly using bulk raw materials such as electrolytic copper plates, cross-linked PE pellets, PVC powder, plasticizers, aluminum materials, and optical fibers.

The main materials include: iron shafts, wooden shafts, sealing plates, cartons, and pallets. Copper raw materials are primarily purchased from regions such as Japan and Chile. Additionally, the insulation cross-linked PE pellets used in high-voltage cables require very specific properties and cannot be produced in Taiwan; therefore, they must be imported from the United States, Sweden, and South Korea.

Hua Eng reclaims all packaging materials that can be recycled and reused to avoid resource consumption; these mainly include pallets, iron frames, iron shafts, wooden shafts, and sealing plates. The recycling rate of packaging materials is approximately 80%. Other industrial waste is managed according to environmental regulations and in compliance with the ISO 14001 environmental management system.

# **Use of Recycled Materials**

Effectiveness of **Using Recycled Packaging Materials** 

		2022	
	Quantity	Savings(%)	Expense savings (NT\$)
Used iron shafts	3,723 shafts	80	40,953,000
Used wooden shafts	5,189 shafts	70	4,670,100
Used sealing plates	62,905 units	75	2,830,725
Used pallets	3,342 pallets	85	685,110

	2023	
Quantity	Savings(%)	Expense savings (NT\$)
3,345 shafts	75	40,140,000
4,584 shafts	72	4,584,000
82,874 units	80	4,558,070

83

3,000 pallets

Product name

Insulation

coating

material

materials

materials

Metal

Other

Volume of primary raw materials and materials used

Unit

kg

kg

m

2022

Quantity

4,487,986

18,732,210

111,888,000

etc. Other materials include optical fiber filaments, trench bodies, etc.

660,000

Note: Insulation coating materials include PE materials, PVC materials, PVC powder, etc. Metal materials include electrolytic copper plates, aluminum strips, galvanized iron wires,

2023

Quantity

2,843,437

19,785,820

25,200,000

	2024	
Quantity	Savings(%)	Expense savings (NT\$)
3,272 shafts	70	39,576,000
5,079 shafts	75	5,079,000
62,872 units	78	3,457,960
2,600 pallets	91	780,000

Volume	and Amoun
of Recy	cled
Resour	ces



	2022		
	Quantity (tons)	Amount (NT\$)	
Metals	209.8	2,118,142	
Plastics	215.6	887,956	
Waste paper	33.2	66,380	
Subtotal	458.6	3,072,478	

2023				
Quantity (tons)	Amount (NT\$)			
190.9	2,246,572			
216.4	597,279			
29.5	52,275			
436.8	2,896,126			

2024				
Quantity (tons)	Amount (NT\$)			
263.116	2,866,616			
212.976	560,091			
49.99	75,900			
526.082	3,502,607			

# **Pollution Control**

# Compliance with Laws and Regulations

The Company, in accordance with laws and regulations and other requirements, fully collects and manages operational systems to timely and accurately inspect, acquire, identify, register, and communicate data related to various environmental considerations of the plant, such as air pollution, water pollution, waste disposal, management of toxic chemicals, noise control, and occupational health and safety, etc. In 2024, Hua Eng had 1 case of non-compliance with the Water Pollution Control Measures and Test Reporting Management Regulations, resulting in a fine of NT\$10,000, and 1 case of non-compliance with the Air Pollution Control Act, resulting in a fine of NT\$150,000.



# **Air Pollution Management**

**Air Pollution Prevention and Control Policy** 

Implement monitoring and reporting of fixed pollution source emissions as required by the Air Pollution Control Act. Emissions are properly treated before discharge, and the detected values of air pollutants are significantly below the control standards for each process location.

# Air Pollution Management and Emissions

# Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

Regarding the Company's emissions of air pollutants from 2022 to 2024, as shown in the table below, the pollutants include volatile organic compounds, particulate matter, sulfur oxides, and nitrogen oxides. Pollution prevention equipment such as baghouse dust collectors, scrubbers, and various filters are installed at all fixed pollution sources.

Furthermore, in accordance with the Air Pollution Control Act, the Company conducts monitoring and reports the emissions volume from stationary pollution sources. Operating permits for various processes and facilities have been obtained, and the air pollutants from all locations are properly treated before being discharged. The detected values of air pollutants at all locations are significantly lower than the control standards for their respective process positions.

Fixed Source Emissions Volume	2022 ¥	2023	2024 *
Sulfur oxides (SOx)	0.861	0.524	0.541
Nitrogen oxides (NOx)	4.493	4.132	4.331
Volatile organic compounds (VOC)	10.186	8.231	8.474
Particulate matter	2.139	1.992	2.154

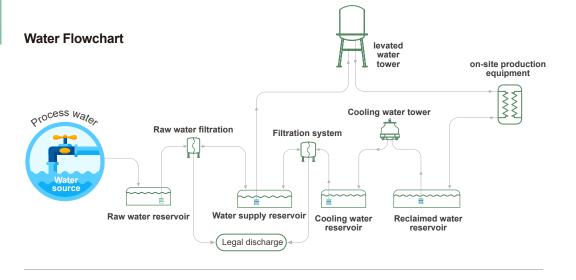
Unit: tons

# **Water Resource Management**

aCurrently, Hua Eng's production plant has two sets of wastewater treatment facilities. One set is for the cooling water, which is recycled and reused in the cable manufacturing process after cooling, through water resource reclamation treatment. The other set is for domestic sewage, which is collected and treated at the wastewater treatment plant through biological treatment before being discharged.

Daily inspections are conducted to ensure normal operation. In case of any abnormalities, emergency response measures are implemented according to the content of the water pollution prevention permit approved by the competent authority, in order to prevent factory wastewater from contaminating external surface water

The factory's water source comes from groundwater and tap water, and follows the legal requirements to conduct semi-annual inspections and reporting of wastewater, along with regular wastewater testing. The treated wastewater from our plant is discharged into the dedicated sewers of the Water Resources Bureau, and we apply for discharge permits from the Water Resources Bureau. The quality of the discharged wastewater meets the effluent standards set by regulations.





# Water consumption

	Process water		Domestic water		ater	
	2022	2023	2024	2022	2023	2024
Water consumption	76.869	73.999	59.259	22.027	19.60	21.263
Water discharge	23.585	2.831	0.651	1.669	1.84	1.385
Water consumption	53.284	71.168	58.608	20.358	17.76	19.878

Unit: million liters

Water consumption = Total water withdrawal - Total water discharge

# Wastewater quality inspection

		2022	
Inspection item	D01 Process wastewater	D02 Domestic wastewater	Process recycled water
рН	7.8	8.1	8.6
COD (mg/L)	ND	16.2	19.3
BOD (mg/L)	ND	ND	2.3
SS (mg/L)	ND	ND	3.9
Saturation	<50	_	<50
Escherichia coli CFU/100ml	_	<10	_

	2023		
D01 Process wastewater	D02 Domestic wastewater	Process recycled water	D01 Process wastewater
7.7	8.7	8.5	7.9
ND	ND	ND	ND
ND	ND	ND	ND
ND	ND	ND	ND
ND	_	<50	<50
_	<10	_	]

		2024	
	D01 Process wastewater	D02 Domestic wastewater	Process recycled water
	7.9	8	8.5
	ND	14.3	<10
ı	ND	ND	ND
	ND	ND	ND
	<50	-	<50
	-	25	_



# **Waste Management**

**Waste Control and Management** 

To effectively manage the waste from the production process, Hua Eng Wire & Cable has established Waste Management Regulations. The reusable industrial waste is converted with onsite facilities into raw materials, properly classified and stored, for the factory.

The remaining waste is collected and treated by qualified processors recognized by environmental authorities. Waste processors are required to keep track of the destination of wastes. Audits are conducted to ensure that all wastes are legally and process treated or reused.

Waste can generally be classified into general waste, general industrial waste, and hazardous industrial wastes. The Company's general waste, such as domestic garbage, is collected by qualified contractors and sent to incineration plants for processing. General industrial waste, including waste oil, waste optical fibers, and waste wood pallets, as well as hazardous industrial wastes such as waste solutions, are temporarily stored according to the Waste Disposal Act and classified with specific codes before being handed over to qualified disposal agencies for processing. All waste requires online reporting in triplicate before disposal (some codes, such as R-type waste, are exempted from reporting as announced by the regulatory authority). After processing, disposal agencies issue documentation proving the legal completion of waste disposal for the factory.

# **Volume of Industrial Waste Disposal**

	Item	2022	2023	2024	Processing item	Percentage of items handled in 2024
	Waste oil disposal	57.17	96.83	174.84	Physical treatment and recycling	24.66%
**	Waste fiber optic cable disposal	0	15.37	0	recycling	0%
General	Waste Wire Treatment	0	0	88.115	Physical treatment	12.43%
waste	Waste wooden pallets	79.87	125.67	140.63	- Incineration	19.84%
	General waste disposal	342.45	255.90	275.93	memeration	38.92%
Hazardous waste	Waste solvent disposal	13.9	13.82	29.45	Chemical treatment	4.15%
			Total weight	708.965		100%

Note: The reclaimed rate of hazardous waste is 0%

Unit: tons



# Toxic Substance Management

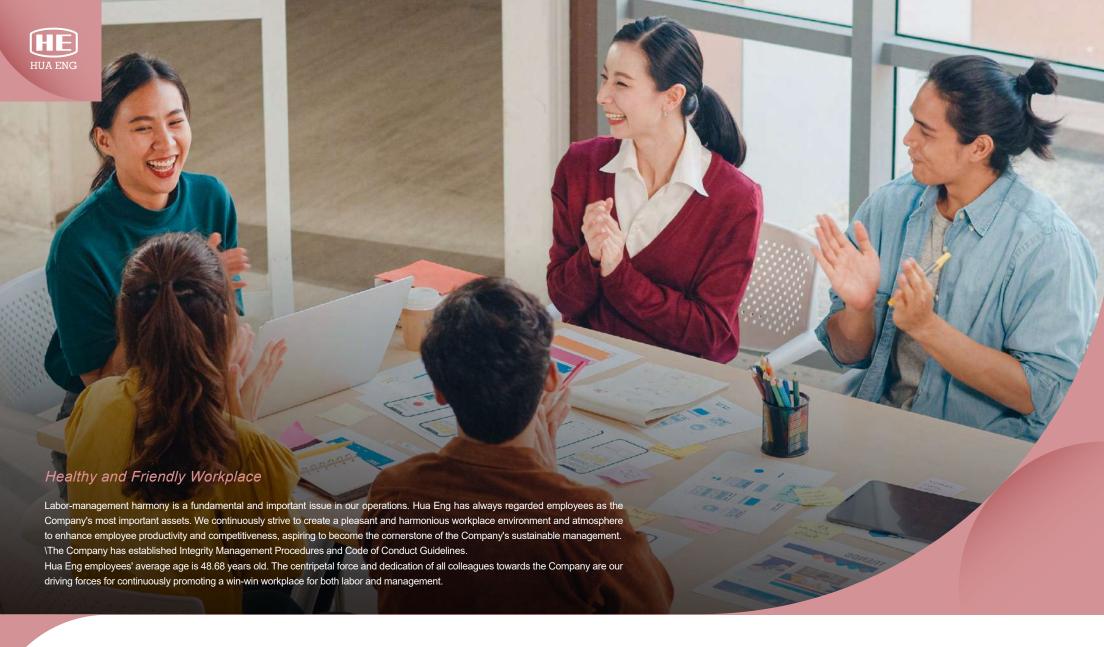
Hua Eng has established comprehensive "Toxic Chemical Operations and Chemical Disaster Prevention and Drill" procedures at its production facilities. Due to the use of plasticizers such as DEHP, DIDP and DINP in the production process of plastic materials, which are regulated toxic chemicals by the Environmental Protection Administration, the operation volume must be reported monthly, the release volume must be reported annually, an emergency response drill must be conducted once a year, and unannounced drills must be conducted twice a year as required by laws. The Company complies with these regulations and conducts the reporting and drills accordingly.

To effectively handle incidents of plasticizer leakage, during emergency response drills, scenarios were simulated where a barrel rupture led to plasticizer leakage. Employees were guided to wear basic protective gear such as protective clothing, gloves, and masks, and performed actions such as handling the ruptured area and removing waste liquid. All employees successfully completed the drill according to the plan.

▼ Simulation of leakage scenarios for removal and cleanup







# 04

# **Friendly Workplace**

p.77-93
2024 SUSTAINABILITY REPORT

Employees of Hua Eng 78

Happy Workplace 83

Occupational Health and Safety 88



# **Employees of Hua Eng**

# **Talent Structure**

During the 2024, Hua Eng and Hua Ho had a total of 431 employees.

All employees of the Company are subject to the "Labor Standards Act" and their salaries are determined according to the provisions of the "Labor Standards Act". Based on the principles of meritocracy and job suitability, all applicants are treated equally regardless of race, gender, age, religion, nationality, or political affiliation. Employees are recruited through an open and fair selection process.

Personnel transfers and promotions, as well as talent development measures, are conducted based on individual ability and performance evaluations. The average tenure of employees at Hua Eng is 18.79 years, and the employee turnover rate is 7.18%.

All of our subsidiaries are traditional industries. Due to the nature of the work (requiring physical labor, on-site working environment, or shift work), the employee composition ratio is predominantly male over female. At Hua Eng, females accounted for 19.04% of management positions, higher than the proportion of females in the overall workforce, 18.18%.

Hua Eng supports and protects employment policies for people with disabilities. As of the end of 2024, a total of 5 people with disabilities have been employed, exceeding the legal requirement. Additionally, four indigenous employees were hired. All company employees hold ROC (Taiwan) nationality.



# 2024 Employee Composition (Employment Contract and Type/Gender/Age)

Туре			Company	Hua	Eng	Hua	н Но			
				Number of shareholders	%	Number of shareholders	%			
			Below 30 years old	29	6.94	1	7.69			
		Male	30~50 years old	143	34.21	6	46.16			
	Irregular		Above 50 years old	170	40.67	5	38.46			
Employment	Contract		Below 30 years old	6	1.44	0	0			
contract		Female	30~50 years old	20	4.78	0	0			
		·	Above 50 years old	50	11.96	1	7.69			
	Regular	Pegular	Regular	Regular	Male		0	0	0	0
	rtegulai	Female		0	0	0	0			
			Below 30 years old	29	6.94	1	7.69			
		Male	30~50 years old	143	34.21	6	46.16			
	Full-time		Above 50 years old	170	40.67	5	38.46			
Employment	ruii-iiiiie		Below 30 years old	6	1.44	0	0			
type		Female	30~50 years old	20	4.78	0	0			
			Above 50 years old	50	11.96	1	7.69			
	Part-time	Male		0	0	0	0			
	r art-time	Female		0	0	0	0			
Total r	Total number of employees			418	100	13	100			



# 2024 Personnel Changes

Туре	pe		Hua E	Eng	Hua	Но
			Number of shareholders	, %	Number of shareholders	%
		Below 30 years old	5	1.2	2	15.39
	Male	30~50 years old	17	4.06	5	38.46
New		Above 50 years old	2	0.48	1	7.69
employees		Below 30 years old	2	0.48	0	0
	Female	30~50 years old	3	0.72	0	0
		Above 50 years old	0	0	0	0
		Below 30 years old	3	0.72	4	30.77
	Male	30~50 years old	12	2.87	10	76.92
Employee turnover		Above 50 years old	14	3.35	3	23.08
( Including retired employees )		Below 30 years old	0	0	0	0
	Female	30~50 years old	0	0	0	0
		Above 50 years old	1	0.24	0	0

Note: 1. 14 male former employee aged over 50 years old, of which 8 were retirees.

# **Gender Ratio of the Management**

Title	Gender	Hua Eng		Hua	Но
		Number of shareholders	%	Number of shareholders	%
Section chief	Male	30	47.62	2	50.00
(deputy) level	Female	5	7.94	0	0
Manager/deputy	Male	17	26.99	0	0
manager level	Female	6	9.52	0	0
Foreman	Male	2	3.17	0	0
(deputy) Level	Female	0	0	0	0
Deputy general	Male	2	3.17	2	50.00
manager and above	Female	1	1.59	0	0
Total		63	100	4	100

# Other diversity

	Hua Eng	Hua Ho	合計
Number of persons with disabilities to be employed	4	0	4
Actual number of persons with disabilities employed	5	0	5
Number of indigenous peoples to be employed	4	0	4
Actual number of indigenous peoples employed	4	0	4
Foreign employees	0	1	1

<sup>2.</sup> Employees who joined during the Year are considered new employees. New employee ratio = Number of new employees / Number of employees at year-end. Employee turnover rate = Number of former employees / Number of employees at the end of the year.

# **Talent Development**

# **Talent Development and Retention**

Hua Eng upholds a strong brand image by offering competitive remuneration and benefits, supporting employees' career development and growth opportunities, promoting diversity and inclusion in the workplace, and fostering a friendly and healthy work environment, as part of its strategies to attract talent and retain outstanding employees.

To ensure adequate staffing and meet the needs of various departments, Hua Eng recruits new talent in accordance with its human resources procedures. The Company hires employees at all levels based on education, character, competence, experience, and physical suitability for the respective roles, with recruitment conducted primarily through examinations or selection processes. Hua Eng's recruitment practices comply with the Employment Service Act, Gender Equality in Employment Act, and Labor Standards Act, and the Company does not employ child labor.

The Company seeks suitable talent through diverse channels. In addition to providing on-the-job training, professional development resources, and comprehensive benefits, salary adjustments are made based on business performance to attract high-potential talent. To support employee retention, the Company offers immediate bonuses, special contribution awards, and merit-based salary increases to encourage employees to stay. Talent development drives the Company's growth, as talent is critical to business competitiveness. By strengthening training mechanisms, the Company prepares for a competitive talent landscape, cultivates a new generation grounded in human values, responds to employee needs, supports personal growth, ensures employees are well-matched to roles, and builds sustainable talent pipelines, thereby reducing turnover and fostering a fulfilling workplace. While pursuing profitability, the Company also invests in employee care and understanding. When employees feel valued and happy, they naturally commit more energy to their work, enhancing productivity, fostering a positive corporate culture, and ultimately driving higher profitability.

# **Training**

Talent is the foundation of a company's sustainable operations. Company growth is closely linked to the learning and development of employees. By establishing development plans and learning channels for employees, the Company provides them with the opportunities for self-development and growth, which serves as a key driver for the Company's continuous progress. Hua Eng allocates resources for talent cultivation and training without regard to gender and age, implementing the concept of training for all employees. Each year, we develop annual training plans based on strategies, guidelines, and competencies required. Besides sending employees to external programs to acquire new knowledge and professional skills, we actively cultivate internal instructors within the organization. Through various types of learning activities, trainees can enhance learning efficiency and relate it to their job responsibilities, so that they can apply it practically after the course to improve the quality and efficiency of their work.

Hua Eng 's training and education system is divided into two categories of "new employee training" and "on-the-job training for employees":

# New employee training

The training content focuses on organizational introduction, Company history, personnel regulations, salary and benefit, insurance, work environment, operational safety, labor safety and health, on-site practice, and promotion of ISO systems, quality, and environment, safety and health policies.



2024 New Employee Training

# Employee on-the-job training

Training content is divided into "external training" and "internal training" according to different job functions.

Internal training courses and scheduling are planned and implemented according to the annual plan, generally conducted by internal instructors. Post-training performance evaluations are conducted through "in-class tests" or "practical assessments." In 2024, a total of 52 internal training courses were executed. achieving a 100% execution rate, with all employees passing the performance evaluations, thereby enhancing their knowledge and job skills to further improve work performance.













2024 On-the-Job Training

2024 Optical Cable Training

External training courses are primarily based on job requirements and continuing training for employees. The training expense in 2024 was NT\$268,770.

In recent years, Hua Eng's management has paid special attention to improving employees' on-site safety education. In addition to strengthening on-site safety inspections and promotions, according to Occupational Health and Safety regulations, personnel operating hazardous machinery and equipment such as stationary cranes, nitrogen storage tanks, forklifts, and special operations must undergo training to obtain the necessary permits and regularly take on-the-job training within the specified period. This is to enhance employees' safety awareness and reduce the probability of injury.

Currently, a total of 133 employees in the entire plant have obtained the qualified operation licenses for stationary cranes, accounting for 78.9% of the 193 on-site workers.

# **Internal Education and Training**

		2022			2023				2024			
	Session	Total number of persons	Total hours	Ses	ssion	Total number of persons	Total hours	Session	Total number of persons	Total hours		
Management	17	251	413	(	3	18	34	6	47	60		
Operational skills	30	201	309	2	5	230	321	30	240	412		
Quality control skills	2	20	60	1	5	86	150	9	99	151.5		
Environment, safety and health	2	22	22	(	6	79	277	5	69	237		
Computer information	0	0	0	4	2	8	31	2	12	36		
Total	51	494	804	5	1	421	813	52	467	896.5		

# **External Education and Training**

		2	022		2023			2024				
	Session	Total number of persons	Hours	Expense amount	Session	Total number of persons	Hours	Expense amount	Session	Total number of persons	Hours	Expense amount
Management	20	255	479	27,800	14	18	296	105,840	4	5	138	60,560
Specialized study and training	67	311	845	97,020	19	59	105	29200	18	168	204.5	38,000
Quality control	0	0	0	0	0	0	0	0	0	0	0	0
Environment, safety and health	12	35	221	98,810	43	66	791	199720	29	76	778	170,210
Computer information	0	0	0	0	6	6	18	0	11	14	57	0
Total	99	601	1,545	223,630	82	149	1,210	334,760	62	263	1,177.5	268,770

Performance Evaluation

Hua Eng encourages employees to participate in continuing education at universities and colleges, skills enhancement programs, and targeted professional development training. This learning model gives employees a strong sense of engagement and tangible benefits, fostering continuous growth and a culture where employee satisfaction drives corporate development, helping to create a better working environment and retain top talent.

Additionally, professional EMBA programs are the preferred choice for management-level employees seeking further education. Employees promoted to managerial positions can also benefit from situational leadership courses and comprehensive training programs, learning how to lead teams and communicate effectively with their departments. This approach eliminates the need to navigate challenges alone, rapidly enhancing employee capabilities and cultivating a positive, growth-oriented workplace atmosphere.

# Industry-Academia Collaboration to Develop Talent

Hua Eng supports talent development by actively seeking collaborations with university offering professional master programs in industry. Beyond cultivating local high-level talent and enhancing the sustainability and R&D capacity of key industries, the Company also aims to attract new talent through these partnerships.

To understand the performance of its employees, Hua Eng has established the "Employee Performance Evaluation and Rating Management Procedures." This ensures that the performance and contributions of employees and various levels of supervisors over a period of time are assessed fairly and reasonably. The initial evaluation is conducted by the direct supervisor of the employee, which is then reviewed by the next level supervisor, who provides comments and amendments to understand the actual performance of the employees and prevent biased evaluations by a single supervisor.

The Company will also appropriately link the year-end bonus to the employees' individual annual evaluation results. Job performance will be used as the standard for increasing or decreasing the year-end bonus for all levels of personnel, as well as the basis for salary adjustments and promotion assessments.

Promotion assessment items include seniority, educational background, performance appraisal, professional skills, etc. As long as colleagues meet the qualifications for promotion within the year, the unit supervisor can submit the application on their behalf. After being approved by the factory division's personnel review committee and the Company's review process, the promotion process can be completed.

	Applicable personnel	Evaluation item	Evaluation cycle
Supervisor	Managers (including deputy managers) and above	Planning ability Management ability Employment ability Ability to lead Responsibility and loyalty	Per year / session
Supervisor	Section Manager, leader	Execution and control Teamwork Initiative Work improvement ability Loyalty	Per month / time
Indirect support personnel	Technical, administrative, support, and other non-direct production work such as teachers, staff, workers, security personnel, and temporary or fixed-term contract personnel	Work skills Work performance Work attitude Teamwork Cooperation	Per month / time
Direct production personnel	Personnel, workers, or fixed-term contract personnel directly involved in on-site production	Workload Cooperation Environmental awareness	Per month / time
Sales personnel	Sales duties but non-executive staff, employees, or contract personnel	Business performance Work quality Work attitude	Quarterly / time



# **Happy Workplace**

# **Labor / Employment Management**

# **Harmonious Labor Relations**

Harmonious labor relations are the foundation for the Company's continuous growth. Hua Eng establishes various personnel management regulations in accordance with relevant laws and implements humanized management. During employee education and training, policies related to employee rights are promoted.

In addition to actively implementing various employee benefit measures, Hua Eng also respects the employees' right to organize unions. The Hua Eng labor union has one chairman, nine directors, and three supervisors. The Company also regularly holds labor meetings to coordinate labor relations and promote labor cooperation. Smooth communication channels ensure that differing opinions can be integrated, and a grievance system and channels are established to reduce and resolve potential labor disputes.

Labor relation discussion items, such as:

- 01 Recommendations on employee salary adjustments.
- Recommendations for improving cafeteria environment and facilities.
- 03 Recommendations for Labor Day and staff social events.
- 04 Recommendations on year-end bonuses.

The Hua Eng Union aims to protect members' rights through mutual cooperation, increase production, enhance employees' knowledge and skills, promote employee benefits, and assist the government in implementing policies related to national defense production.

# **Union's tasks**

- 1. Unite members to increase production through mutual cooperation
- 2. Research and improve production technology to enhance quality
- 3. Organization of member savings
- 4. Organization of labor education
- 5. Establishment of libraries and press agencies, and publication of printed materials
- 6. Organization of member recreation activities
- 7. Mediation of disputes between members or between the Company and members
- 8. Survey of the living conditions of member families and compilation of labor statistics
- 9. Signing of Collective Bargaining Agreements
- 10. Improvements in working conditions and promotion of member benefits
- 11. Matters consistent with the purposes set forth in Article 3 of these Articles of Incorporation and other legal provisions







Hua Eng's personnel management regulations are established in accordance with the Labor Standards Act and related regulations, and the Company actively implements various employee welfare measures.

The Company offers a competitive remuneration system, providing starting salaries above the domestic average to attract and retain top talent while supporting grassroots employees. Welfare programs are designed in compliance with legal requirements and take employee needs into account, offering a comprehensive range of benefits.

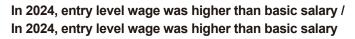
Hua Eng's salary system includes base salary and various allowances. The approved amount is determined based on the authorized position level, individual educational background and experience, professional skills, and job performance, which may be adjusted with changes in job position. There is no gender difference involved. In recent years, Hua Eng employees have received annual salary adjustments of 3 to 4%.

The remuneration system for managerial officers and employees, as well as performance evaluations, are implemented in accordance with the reports and approvals of the "Remuneration Committee" and the "Board of Directors," and follow internal regulations such as the "Performance Evaluation and Rating Management Procedures," "Employee Bonus Calculation Regulations," and "Employee Remuneration Calculation Regulations." Remuneration is determined based on individual performance, job responsibilities, goal achievement, level of engagement in company operations, and business performance, ensuring that remuneration is fair and directly linked to the Company's operational performance.

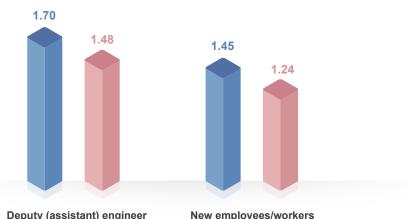
# Salary Information for Full-time Employees not in Supervisory Positions

Year	2022	2023	2024
persons	408	404	402
Average Annual Salary (in NTD thousands)	704	779	827
Median Annual Salary (in NTD thousands)	685	757	800

The average salary in 2024 increased compared to the previous two years, primarily due to the annual salary adjustment and the Company's excellent operating performance and profitability. Bonuses were awarded in accordance with company management regulations, contributing to the increase over the past two years.









General employee

All employees

Note 1: The monthly minimum wage in Taiwan in 2024 was NT\$27,470

Mid-level manager

Senior executive

- Note 2: The multiplication formula shown in the chart is the Company's salary at that grade /
- Note 3: Salary includes salary, food allowance, transportation allowance, efficiency allowance, and supervisor allowance.

# **Employee Benefits**

Regarding the implementation of benefit policies that employees value, Hua Eng and First Copper jointly formed the "Hua Eng United Employee Welfare Committee." This committee is responsible for reviewing, advancing, and supervising employee welfare projects, planning, managing, and using employee welfare funds, distributing and auditing the expenses for employee welfare projects, and reporting income and expenses, as well as managing other matters related to employee welfare.

Hua Eng United Employee Welfare Committee consists of 11 committee representatives. The employer appoints one ex-officio member, while the Hua Eng employees elect two representatives, the Hua Eng union elects five representatives, and the First Copper union elects three representatives. From among the committee members, one is elected as the chairperson. Except for the ex-officio member, the term of office is two years and members can be re-elected. Employee Welfare Committee meetings are held quarterly. In order to promote proper recreational activities, help employees relieve work pressure, enhance interaction among employees of different plants, foster camaraderie and teamwork, maintain physical fitness, enrich cultural atmosphere, and build cohesion among colleagues, the Company, in addition to existing benefits, also periodically organizes employee mountain climbing, hiking, and various competitions: such as badminton, table tennis, bowling, chess, singing, tug-of-war, and so on. By participating in these team activities and competitions, employees can enjoy a higher quality of leisure life.







Chengcing Lake Hiking and Team-Building Event





Year-End Banquet



# Safety and healthcare

- 1. Regular health checks for employees
- 2. Doctors providing consultation at the factory
- 3. Health workshops
- 4. Infirmary and library facilities
- 5. Uniforms and safety shoes



# Bonuses and holiday benefits

- 1. Employees' remuneration
- 2. Bonuses for special contributions
- 3. Year-end bonus
- 4. Labor Day souvenir
- 5. Gift money for Mid-Autumn Festival
- 6.Birthday gift money for employees



# **Education and** entertainment

- 1. Employee canteen and meal groups
- 2. Subsidies for employee travels
- 3. Recreation subsidies
- 4. Year-end celebrations



# Family care

- 1. Gift money, wall hangings with words of congratulations and flowers for weddings of employees and their children
- 2. Condolence money, wall hangings with words of solace and flowers for funerals of employees, their spouses and children
- 3. Scholarships for employees and their children
- 4. Childbirth gift money for employees and their spouses
- 5. Unpaid parental leave
- 6. Breastfeeding room
- 7. Corporate childcare contract with nearby kindergartens



# Safety and protection

- 1. Labor insurance
- 2. National health insurance
- 3. Group injury insurance for employees
- 4 Pensions and severance pays
- 5. Gold medal for retirement at full age



# **Pension Contributions and Allocations**

To allow our employees to have peace of mind while working and protect their retirement life, Hua Eng has established employee retirement regulations based on the "Labor Standards Act" and the "Labor Pension Act," providing stable pension contributions and payments.

According to the "Labor Standards Act," for those who choose to use the old pension system, 6% of the employee's total monthly salary is appropriated for the employee retirement reserve funds and deposited into a dedicated account at the Taiwan Bank under the Supervisory Committee of Labor Retirement Reserve. Each year, we estimate the retirement pension required for employees who meet the retirement conditions for the upcoming year and make up the shortfall in the reserve to ensure the employees' pension rights.

In accordance with the "Labor Pension Act" (referred to as the new system), for those who choose to apply the new pension system, 6% of the employee's insured salary is appropriated every month to the employee's individual pension account at the Bureau of Labor Insurance.

# Human Rights Protection

Hua Eng complies with relevant regulations, is committed to safeguarding the fundamental human rights of employees, ensures their legal interests, supports the United Nations Universal Declaration of Human Rights and International Labour Organization conventions, and ensures that every employee is treated fairly and with respect. We commit:

# **Human rights protection**

Support and respect the protection of human rights, ensuring that our business partners and suppliers also adhere to the same human rights standards.

## Prohibition of child labor and forced labor

Ensure that neither we nor our business partners and suppliers employ child labor during operations, and absolutely avoid any forms of coercion, forced or compulsory labor, or the use of corporal punishment.

## Respect for freedom of association

Respect the right of employees to organize unions and participate in collective labor negotiations according to laws and conventions.

# Eliminate discrimination and ensure equal employment opportunities

Inclusive of diversity characteristics of all employees, and no employee or job applicant protected by law shall be discriminated against based on any characteristic. Including race, class, language, ideology, religion, party affiliation, place of origin, place of birth, gender, sexual orientation, age, marital status, appearance, features, physical or mental disabilities, or previous union membership.

# **Various Employee Benefit Expenses**

Amount of the year		Hua Eng	
	2022	2023	2024
Meal allowance (NT\$)	5,105,786	4,719,613	6,083,544
Average daily meals headcount	377	364	367
Birthday and retirement gift money (NT\$)	1,537,400	907,004	1,334,900
Allowances for birth, weddings and bereavement (NT\$)	476,000	154,000	369,000
Subsidies for employee travels (NT\$)	1,107,180	991,509	1,091,327
Scholarships for children (NT\$)	288,000	257,000	263,000
Activity subsidies (NT\$)	846,000	840,000	932,994
Total (NT\$)	9,360,366	7,869,126	10,074,765

# Establish a safe and healthy working environment

Comply with occupational safety and health policies, promptly correct or report any potential threats, and promote environmentally friendly technologies. Do not act in a manner that is rude, hostile, violent, intimidating, threatening, or harassing, and oppose corruption, including extortion and bribery.

## Prevention of harassment

Advocate the Act of Gender Equality in Employment to create a harassment-free work environment. Refuse to accept or tolerate sexual harassment, including unwelcome sexual advances, requests for sexual favors, or other unwelcome suggestive language or physical conduct.

# Personal data confidentiality

Protect the personal information of employees, Board members, customers, job applicants, and partners. The collection and use of individual information is limited to legitimate business purposes.

# ccupational Health and Safety

# Occupational Health and Safety Management Policy

Hua Eng, in order to implement the occupational safety and health management policy for a safe and healthy working environment, has promoted and completed the transition to ISO 45001: 2018 certification based on the existing foundation. The occupational safety and health risk control system has been upgraded to include equipment safety management, ensuring a comprehensive occupational safety and health operation management system that displays risk information in real-time. In addition, we are gradually strengthening contractor management and promoting digital courses for training to present relevant information timely.

In terms of management practices, under the premise of worker participation, energy saving and carbon reduction, and environmental protection, the Environment, Safety and Health policy is formulated with the commitment to sustainable business operations.

The significant issue for ISO 45001 in 2024 is the implementation of on-site automatic inspections. In the existing system, relevant items and forms are adjusted according to regulatory requirements to conduct inspections and periodic checks.

# Labor Safety and Accident Prevention Occupational Health and Safety Management (ISO 45001) Implementation Overview

Improving the quality of the work environment, ensuring labor safety, and preventing occupational hazards is the inescapable corporate social responsibility of any enterprise. To this end, Hua Eng proactively obtained OHSAS 18001 Occupational Health and Safety Management Certification in 2011, aiming to reduce on-site occupational hazards, and actively pursued and acquired ISO45001 certification by the end of 2019.

Through a circulation mechanism with stages of safety and health planning, doing, checking and acting (P-D-C-A), we are able to perform comprehensive safety and health management and create a safe and healthy workplace, implementing safety production management. By institutionalizing, documenting, and systematizing, we actively conduct education and training, regulatory review, hazard identification, and risk assessment.

Hua Eng prioritizes on-site work safety and noise pollution prevention from machinery as the foremost items for improvement. Each unit in the factory identifies high, medium, and low-risk levels based on work areas, machines (including fixed equipment and mobile machinery), and related auxiliary equipment. We plan to progressively address these issues through various engineering improvements, administrative management, and individual protective measures. High-risk items are prioritized for improvement according to the planned schedule, with the aim of continuously enhancing the work safety environment and reducing employee hazards.

The SW4 Elevated Water Tower Ladder Safety Project, which involves adding vertical guard rails to the ladder safety cage to reduce gaps and installing a safety lifeline to ensure safe climbing access, has been included in the company's 2024 ISO45001 management program.





# Occupational Safety and Health Management System

Hua Eng has established a safety and health office, staffed with one safety and health supervisor, one health administrator, and one safety and health specialist to implement safety and health management operations.

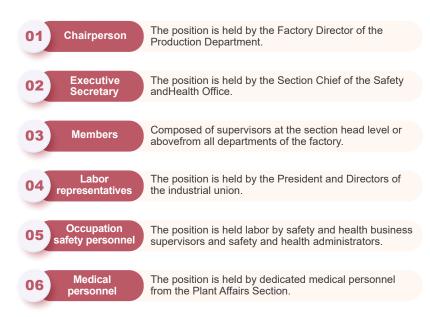
In 2011, Hua Eng completed OHSAS18001 certification to enhance its safety and health management system in accordance with relevant occupational health and safety regulations. In 2020, the Company successfully transitioned to ISO45001:2018 certification through the verification of a third-party organization, DQS, to continuously promote the Occupational Safety and Health Management System.



Workers covered by this management system include all employees, contractors, suppliers, and visitors involved in company activities.

# Labor Safety

Hua Eng has established an Occupational Safety and Health Committee to discuss, coordinate, and make recommendations on labor safety and health-related matters. The organizational structure includes one chairperson (5%), one executive secretary (5%), eleven committee members (55%), seven labor representatives (35%), and two occupational safety personnel (10%). The functions and composition are described as follows:



The functions of the Occupational Safety and Health Committee are to follow the regulatory items stipulated in the Occupational Safety and Health Act. Every three months, the committee conducts a review, and each member provides descriptions on the implementation of occupational safety and health. They review recent work injury incidents and improvement measures, discussing case studies to provide references to other units, thereby reducing accidents and enhancing the safety of employees' operations. Additionally, the committee promotes government safety and health regulations during meetings to raise employees' awareness and understanding of safety and health concepts. This ensures that workers strictly follow relevant safety and health regulations in the work environment and use protective equipment. Safety and health personnel will also conduct irregular safety and health audits.

# **Prevention of Work-related Hazards**

# **General Maintenance of the Working Environment**

Hua Eng implements a comprehensive smoking ban in the office area. In addition to the regular maintenance of the air conditioning system and cooling tower, carbon dioxide levels are regularly tested to ensure the health of the staff. Furthermore, the lighting systems in the plant and office are regularly maintained and measured, with illuminance required to be kept above 300 lumens.

# Operational Environment Maintenance for Key On-site Tasks

For employees involved in production operations who handle controlled substances, we provide Chemical Material Safety Data Sheets (MSDS) at the workplace for reference, helping them understand how to prevent hazards. Additionally, we record and inspect the usage and emission volumes of regulated toxic substances and implement area control operations.

In the dust operation area of the PVC pelletizing process, dust collection equipment is installed at the local dust occurrence points, and the area is confined with partitions. Individual protective masks are provided to employees to avoid contact with small amounts of harmful dust.

# **Employee Safety Maintenance**

When reviewing employee injury incidents over the years, we found that most of them involved cuts, abrasions, and crush injuries occurring during on-site operations. To prevent such accidents from recurring, we have established a dedicated safety and health management unit at the factory. In addition to reviewing matters related to the work environment, safety, and health at the quarterly safety and health committee meetings, we also conduct irregular on-site safety inspections. For equipment with safety concerns, close calls, and abnormal items that may pose a hazard to employees, we issue abnormality notices requiring the responsible supervisors to propose effective corrective measures. These cases are only closed after follow-up verification is completed.

# **Employee Health Maintenance**

We conduct annual regular health checks for employees performing normal operations and those performing special operations, respectively. The regular health checks include additional items and abdominal ultrasound examinations. In the case of any abnormalities, a separate record is created and nursing personnel continuously track and manage these cases.















# Hazard Identification, Risk Assessment, and Incident Investigation

For the purpose of continuous improvement and to systematize the safety and health management activities, Hua Eng has established the "Hazard Identification and Risk Assessment Method" in accordance with ISO 45001:2018 requirements. Annually, we systematically identify hazards related to activities, products, and services within the plant that may impact worker safety and health. These include factors such as chemical, electrical, radiation, temperature, pressure, mechanical, work environment, human, biological, and others, to assess the potential safety and health risks, thereby providing opportunities for safety and health improvements.

By establishing the "Occupational Disaster and Accident Investigation Management Regulations", a comprehensive investigation procedure ensures more efficient accident investigations, confirms facts and circumstances, identifies causes, and determines improvement actions. This is aimed at reducing the likelihood of similar accidents reoccurring in the factory area, thereby improving the deficiencies in the risk control and management system.

# **Reduce Employee Hazards**

According to statistics, employees are most prone to injuries such as cuts, abrasions, and crush injuries in the factory area. Cuts are mainly due to the careless use of knives during cable splicing operations, while abrasions and crush injuries occur when on-site operators are hit or squeezed by cables or machinery during operations. We will continue to propose preventive improvement measures to address the aforementioned issues.

# **Disaster Prevention and Control**

Safety and health management personnel execute and supervise each unit in conducting safety education, safety drills, and toxic disaster drills according to the annual planned items.



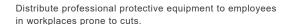




# Prevention and Improvement of Work-related Accidents

In 2023, Hua Eng's production plant conducted improvements on areas prone to occupational hazards. The results are as follows.







Use professional protective equipment on-site as needed.



# Training on Occupational Health and Safety

Hua Eng primarily conducts training and education on safety and health for employees and contractors engaging in activities within the plant area.

# **Employees in the factory**

In addition to general safety and health education and emergency response training, we also provide regular on-the-job training for occupational safety and health management personnel, high-pressure gas specific equipment operators, fixed crane operators, forklift operators, and first aid personnel, primarily through external training institutions.

# Contractor

The Safety and Health Office coordinates with the construction supervisors and contractors to provide training for every worker entering the factory for construction. Through construction meetings, related hazard information is communicated and recorded.





Informing relevant hazards in pre-construction meetings

# **Work-related Injury Statistics**

Hua Eng has established an internal and external inspection management policy to avoid work-related injuries. Irregular monthly audits are conducted for risk factors such as being caught or entangled. When on-site inspections reveal potential disaster risks, corrective actions are taken. Additionally, there are Occupational Injury and Accident Investigation Management Regulations in place. These regulations ensure that in the event of property loss, disaster (accident) occurring within the factory premises or to employees during the work, necessary first aid measures and disaster rescue can be implemented. The causes of accidents are investigated, analyzed, and statistically reviewed, with effective countermeasures taken to prevent similar incidents from happening again.

# **Key Indicators of Work-related Hazards**

	F	Frequency Rate ( F.R.)	Severity Rate ( S.R.)	Frequency- Severity Indicator ( F.S.I.)
	The Company	0	0	0
2022	Industry Average	2.12	60	0.36
	The Company	0	0	0
2023	Industry Average	2.09	44	0.28
2004	The Company	0	0	0
2024	Industry Average	2.38	162	0.62

Note: The above statistics do not include commuting incidents

# **Disabling Injury Frequency Rate**

# Disabling Injury Frequency Rate

(referred to as "Frequency Rate (FR)")

It refers to the total number of incidents of disabling injuries per million working hours. The total number of disability injuries is calculated as: the total number of incidents includes death, total permanent disability, partial permanent disability, and total temporary disability.

Total working hours

## **Disabling Injury Severity Rate**

# Disabling Injury Severity Rate

(referred to as "Severity Rate (SR)")

Refers to the total number of lost days due to disabling injuries per million working hours. Different types of disability injury loss days are calculated according to the description of form filling in the "Occupational Disaster Statistics Online Reporting System."

Total number of lost days due to disabiling injuriesx10<sup>6</sup> SR=

Total working hours

# Frequency-Severity Indicator (FSI)

# Frequency-Severity Indicator (referred to as FSI)

Frequency-  
Severity = 
$$\sqrt{\frac{FRxSR}{1000}}$$

# **Health Promotion Activities**

Hua Eng implemented a plan for the prevention of ergonomic hazards in 2023 by conducting a musculoskeletal symptom questionnaire survey. Out of 121 questionnaires, 21 individuals reported significant pain in certain body parts, with a total of 73 painful areas. The survey mainly included on-site workers, and personal interviews revealed that symptoms were primarily concentrated in the shoulders and lower back, attributed to manual materials handling activities. To address this issue, job analysis will be conducted to provide opportunities for improvement.



# **Contractor Safety Management**

In addition to fulfilling our own corporate social responsibility, the Company extends its requirements to in-plant contractors. To promote the Occupational Safety and Health Management System, the Company establishes a management and communication mechanism with subcontractors to eliminate hazards and occupational health and safety risks. Hua Eng has formulated the "Environment Safety and Health Subcontractor Management Procedures," which regulate safety and health management requirements for contractors entering the plant. Communication and notification of relevant workplace hazards are conducted through engineering meetings to mitigate and prevent related safety and health impacts. In addition to carefully selecting qualified suppliers for various outsourcing projects, before onsite construction personnel enter the plant, their credentials must be verified by Hua Eng's supervisors. Furthermore, a construction safety meeting is held to inform the contractors of the safety and environmental requirements they must adhere to as well as any potential risks. If the contractors have electrical usage needs, the supervisors will assist in arranging and scheduling to ensure safety. When contractors enter the factory, there is strict control over personnel and vehicles, and construction tools are inspected. Besides, the construction supervisor stays updated on the construction status at all times, and safety and health personnel conduct irregular inspections. Furthermore, contractors are required to comply strictly with environmental regulations and implement isolation and safety signage within designated work areas to ensure the safety of on-site workers and environmental maintenance.



05

# **Social Care and Feedback**

p.94-702
2024 SUSTAINABILITY REPORT

Local Community Relationship and Social Participation Management Guidelines: Based on the corporate philosophy of "taking from society and giving back to society," Hua Eng not only implements sustainable operations and takes care of employees, but also actively gives back to local communities. The Company assists and participates in local community initiatives, promoting the development and activities of arts and culture, and fosters good neighborly relations.

Appendix

GRI, SASB Index Limited Assurance Report by CPAs



# Sponsorship of Community Development

Every year, Hua Eng continues to organize community activities with neighboring community development associations and village chiefs:

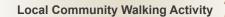


















# **Sponsorship for the Construction and Renovation of Community Temple**











# **Donation for the Installation of Community Intersection Surveillance Cameras**











# Achievements in Active Community Care

- Scholarships To foster mutual understanding, harmony, and co-prosperity between the factory's neighboring residents and Hua Eng's management, scholarships are provided to outstanding students in the Kao-Nan community. From elementary school to Ph.D. programs, as long as academic and conduct grades meet the standards, scholarships will be awarded.
  In 2024, scholarships were sponsored for 100 recipients, with a total amount of NT\$119,000.
- Wuhe Community Greening Project Remove roadside weeds and maintain environmental cleanliness to improve the neighborhood environment and beautification efforts.
- Over the years, the Company has contributed a total of NT\$ 40,000 to support community activities.
- Sponsorship for the Construction of a Warehouse and Renovation of Shande Temple in Wuhe Community

Shande Temple previously used a temporary tin structure to store its palanquin and ceremonial items, but the structure was removed as it occupied local farmland. As a result, the palanquin was temporarily placed in the community activity center, which is frequently used for events, classes, and gatherings. Due to limited space and inconvenience, local residents donated land to Shande Temple, enabling the construction of a warehouse for proper use.

Shande Temple was constructed in May 1990 (34 years ago). The cement roof and decorative cut-and-paste artwork have deteriorated and begun to peel off. As the temple is located in a remote area with few worshippers, donations have been limited and financial resources insufficient, leaving only temporary cement repairs possible. To support the renovation, sponsorship was sought from nearby companies, organizations, and local residents, with a total of NT\$ **80,000** contributed.

Donated NT\$150,000 for the installation of community intersection surveillance cameras to enhance neighborhood safety.

# Amounts for Sponsoring Community Activities Over the Years

Unit: NT\$	2022	2023	2024
	Ţ.	¥	· ·
Community activities	30,000	50,000	40,000
Community care	152,000	123,500	349,000
Total	182,000	173,500	389,000

# Actively Participate in Social Welfare Activities

# Quanyuan Group - Hua Eng's Self-Formed Charity Group

Founded on November 1, 1989, "Quanyuan Group" was established by Ms. Lu Hsing-Mi, who was working in the optical fiber research and development department of Hua Eng at that time, along with several like-minded and enthusiastic colleagues from the Company. With the assistance of former leaders Chang Ming-Hua and Ni Kuang-Hsin, as well as the current leader Huang Chi-Yi and group volunteers, it has grown steadily. As of December 2024, a total of 421 internal publications have been issued, and it continues to attract more colleagues to actively join and participate in social assistance efforts.

Also, because it is a spontaneously organized group, members of Hua Eng's Quanyuan group donate NT\$100 each month. After actively contacting existing social welfare organizations in Taiwan to identify cases in urgent need of assistance in society, the leaders then collect the funds and provide support on a regular or irregular basis.

Over the years, the main recipients of support include "World Vision Taiwan," which helps children from impoverished families, including education and living expenses; "Genesis Social Welfare Foundation," assisting vegetative patients, homeless individuals, and single-parent families facing financial difficulties; and the "Kaohsiung Social Welfare Charity Association," which focuses on emergency relief, including funeral expenses, major medical expenses, and care expenses for solitary elderly individuals without support. The group has also frequently received letters of commendation and appreciation from these organizations.

# Amount of donations to social welfare organizations Unit: NT\$ by the Quanyuan Group over the years

Social welfare organization	2022	2023	2024	
Huashan Social Welfare Foundation	30,000	35,400	30,000	_
World Vision	36,000	36,000	42,000	
Emergency assistance	8,400	5,000	35,000	_
Total	74,400	76,400	107,000	_









# Appendix Index GRI Content Index in accordance with the GRI Standards

# GRI Content Index in accordance with the GRI Standards

General Standards		Page number	Description and remarks
Sonoral Startaards			
GRI 1: Foundation 2021			
GR	RI Content Index	98~100	GRI Content Index in accordance with the GRI Standards
	claration of reporting in accordance with the GRI Standards	01	About this Report
GRI 2: General Disclosure			
The organization and its reporting			
0.4	ganizational details	18~22	Company Profile
Oig	tities included in the organization's sustainability reporting	01	About this Report
	eporting period, frequency and contact person	01	About this Report
	estatements of information	01	No restatements of information, any corrections will be noted in the related sections.
1100	ternal assurance	01	The Company has disclosed and verified on its own, with no external assurance.
Organization activities and worker			The company has disclosed and verified on its own, with no external assurance.
	tivities, value chain and other business relationships	01\33-38\28-31	About this Report, Corporate Governance, Supply Chain Management
	nployee	78-87	Employees of Hua Eng
	orkers who are not employees	78-79	Employees of Hua Eng
Governance	once a wife are not employees	70 70	Employees of Hua Eng
	overnance structure and composition	33-38	Corporate Governance
	mination and selection of the highest governance body	33-38	Corporate Governance
	air of the highest governance body	33-38	Corporate Governance
	le of the highest governance body in overseeing the impact management	33-38	Corporate Governance
	equation of responsibility for managing impacts	33-38	Corporate Governance
	le of the highest governance body in sustainability reporting	33-38	Corporate Governance
	Inflict of interest	33-38	Corporate Governance
	mmunication of critical concerns	33-38	Corporate Governance
	Illective knowledge of the highest governance body	33-38	Corporate Governance
	aluation of the performance of the highest governance body	33-38	Corporate Governance
0.40	emuneration policies		Please refer to the 2024 Annual Report\Corporate Governance Report - Remuneration paid to directors, the general manager and deputy general managers in the most recent year https://www.hegroup.com.tw/index_php?option=module⟨=cht&task=showlist&id=2&index=1#
<b>2-20</b> Pro	ocess to determine remuneration		Please refer to the 2024 Annual Report\Corporate Governance Report - Corporate governance implementation - Composition, responsibilities, and operation of the Remuneration Committee. https://www.hegroup.com.tw/index.php?option=module⟨=cht&task=showlist&id=2&index=1#
<b>2-21</b> Ann	nual total compensation ratio	37	Corporate Governance
Strategy, policies and practices			·
	atement on sustainable development strategy	02`06	Chairman's Message, Sustainable Development Task Force
2-23 Pol	licy commitments	33-38\87\82-92	Corporate Governance, Human Rights Protection, Occupational Health and Safety
<b>2-24</b> Em	nbedding policy commitments	33-38 \ 28-31 \ 88-92	Corporate Governance, Supply Chain Management, Occupational Health and Safety
	ocesses to remediate negative impacts	33-38\39-41	Corporate Governance, Operational Risk management
	echanisms for seeking advice and raising concerns	33-38 \ 45	Corporate Governance, Code of Conduct
	impliance with laws and regulations		There were no major regulatory violations during the reporting period in 2024.
	embership associations	27	External Organizational Participation
Stakeholder engagement			
<b>2-29</b> App	proach to stakeholder engagement	06-14	Communication with Stakeholders
	Illective bargaining agreements	83	No collective bargaining agreements were signed in 2024
GRI 3: Material Topics 2021	- · · · · · ·		<u> </u>
	ocess to determine material topics Disclosure	10-14	Identification and Response of Material Topics
	t of material topics	10-14	Identification and Response of Material Topics
3-3 Mai	anagement of material topics	10-14	Identification and Response of Material Topics



GRI Standards	Disclosures	Page number	Description and remarks
Economic indicators			
GRI 201:2016 Economic Performance			
GRI 3: 3-3 Management of material topics	Business performance	17\32	Operational Development, Economic Performance
201-1	Direct economic value generated and distributed	32	For economic performance and comprehensive financial information, please refer to the 2024 Annual Report and Financial Statementshttps://www.hegroup.com.tw/index.php?option=module⟨=cht&task=showlist&id=67&index=2
201-2	Financial implications and other risks and opportunities due to climate change	39-41	Operational Risk Management
201-4	Financial assistance received from government	33	Economic Performance
GRI 202: Market Presence 2016	•		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	83-85	Happy Workplace, Salary, Benefit, and Care
GRI 204: Procurement Practices 2016			
204-1	Proportion of spending on local suppliers	28-30	Supply Chain Management
GRI 205: Anti-corruption 2016			
205-1	Operations assessed for risks related to corruption	45	Code of Ethical Conduct
205-2	Communication and training about anti-corruption policies and procedures	45	Code of Ethical Conduct
205-3	Confirmed incidents of corruption and actions taken	45	There was no such incident during the reporting period in 2024.
GRI 206: Anticompetitive behavior 2016			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	45	None of the legal actions for anti-competitive behavior, anti-trust, and monopoly practices occurred in 2024.
Environmental Indicator			
GRI 301: Materials 2016			
301-1	Materials used by weight or volume	73	Resource Utilization, Raw Materials Utilization
301-2	Use of Recycled Materials	73 ` 76	Resource Utilization, Waste Control and Management
301-3	Reclaimed products and their packaging materials	73	Resource Utilization
GRI 302: Energy 2016			
302-1	Energy consumption within the organization	71	Energy and Resource Consumption within the Organization
302-3	Energy intensity	64-72	Climate Change and Energy Conservation and Carbon Reduction
302-4	Reduction of energy consumption	64-72	Climate Change and Energy Conservation and Carbon Reduction
GRI 303: Water and Effluents 2018			
303-3	Water withdrawal	75	Water Resource Management
303-4	Water discharge	75	Water Resource Management
303-5	Water consumption	75	Water Resource Management
GRI 305: Emissions 2016			
GRI 3: 3-3 Management of material topics	Climate Change	66	Response to Climate Change
305-1	Direct (Scope 1) GHG emissions	72	Response to Climate Change
305-2	Energy indirect (Scope 2) GHG emissions	72	Response to Climate Change
305-4	GHG Emissions Intensity	72	Response to Climate Change
305-5	Reduction of GHG emissions	72	Response to Climate Change
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	74	Pollution Control
GRI 306: Waste 2020			
306-3	Waste generated	76	Waste Management
306-4	Waste diverted from disposal	76	Waste Management
306-5	Waste directed to disposal	76	Waste Management
GRI 307: Compliance with environmenta	al laws and regulations 2016		
307-1	Violation of environmental laws and regulations	74	Pollution Prevention (Compliance with Laws and Regulations)
GRI 308: Supplier Environmental Assess	sment 2016		
308-1	New suppliers that were screened using environmental criteria	28-30	Supply Chain Management
308-2	Negative environmental impacts in the supply chain and actions taken	28-30	Supply Chain Management



GRI Standards	Disclosures	Page number	Description and remarks
Social indicators			
GRI 401: Employment 2016			
GRI 3: 3-3 Management of material topics	Labor relations	83	Happy Workplace
401-1	New employee hires and employee turnover	78-82	Employees of Hua Eng
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	85	Employee Benefits
401-3	Parental leave	86-87	Human Rights Protection
GRI 402: Labor/Management Relations 2016		87	<u> </u>
402-1	Minimum notice periods regarding operational changes		Human Rights Protection\
GRI 403: Occupational Safety and Health 2018	}	88-93	•
GRI 3: 3-3 Management of material topics	Occupational Health and Safety	88-93	Occupational Health and Safety
403-1	Occupational Safety and Health Management System	88-93	Occupational Health and Safety
403-2	Hazard Identification, Risk Assessment, and Incident Investigation	88-93	Occupational Health and Safety
403-3	Occupational health services	88-93	Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational safety and health	88-93	Occupational Health and Safety
403-5	Worker training on occupational safety and health	88-93	Occupational Health and Safety
403-6	Promotion of worker health	88-93	Occupational Health and Safety
403-7	Prevention and mitigation of occupational safety and health impacts directly linked by business relationships	88-93	Occupational Health and Safety
403-8	Workers covered by an occupational safety and health management system	88-93	Occupational Health and Safety
403-9	Work-related injuries	88-93	Occupational Health and Safety
403-10	Work-related ill health	88-93	Occupational Health and Safety
GRI 404: Training and Education 2016			
404-1	Average hours of training per year per employee	80-81`82	Education and Training, Performance Evaluation
404-3	Percentage of employees receiving regular performance and career development reviews	80-81\82	Education and Training, Performance Evaluation
	Promotion system, employee well-being, employee privacy	75-93	Healthy and Friendly Workplace, Performance Evaluation
GRI 405: GRI 405: Diversity and Equal Opport			, , ,
405-1	Diversity of governance bodies and employees	33-37\78-79	Employee Benefits, Labor Safety
405-2	Ratio of basic salary and remuneration of women to men	85	Happy Workplace
GRI 406: Non-discrimination 2016	·		
406-1	Incidents of discrimination and corrective actions taken	87	Human Rights Protection, none during the reporting period in 2024
GRI 408: Child Labor 2016		-	
408-1	Operations and suppliers at significant risk for incidents of child labor	87	Human Rights Protection, none during the reporting period in 2024
GRI 416: Customer Health and Safety 2016	•	-	
416-1	Assessment of the impact of product or service category on health and safety	47-49\60-61	Introduction of Products and Services, Green Products
416-2	Incidents of non-compliance with regulations concerning the health and safety impacts of products and services		There were no violations during the reporting period in 2024.
GRI 417: Marketing and Labeling 2016			3 , 3,
417-1	Requirements for product and service information and labeling	58	Product Information Labeling
417-2	Incidents of non-compliance with regulations concerning product and service information and labeling		There were no violations during the reporting period in 2024.
417-3	Incidents of non-compliance with marketing communication-related regulations		There were no violations during the reporting period in 2024.
	Green Products	60	Green Products
	Certification Achievements	62	Various Management System Certifications
GRI 418: Customer Privacy 2016		02	
418-1	Substantiated complaints regarding breaches of customer privacy or loss of customer data		There were no violations during the reporting period in 2024.
Social care	Such as social welfare activities, community development, social relationships, etc.	94-97	Social Care and Feedback
Juliai cai e	Outri as social worldes activities, continuinty development, social relationiships, etc.	34-31	Oocial Calc and I Coupack



# SASB Standards Comparison Table

Sustainability Accounting Standards Board, SASB

Disclosure Scope

Hua Eng Wire & Cable Co., Ltd.

Sector

Resource Transformation

Industry

Electrical & Electronic Equipment

# **Disclosures on Topics and Accounting Indicators**

Material Topics	Material Topics Indicator number Disclosures on indicators  Energy Management RT-EE-130a.1 (1) Total energy consumption (2) Percentage of electricity grid volume (3) Percentage of renewable energy source		Description	Report chapters/page	е
Energy Management			118,157 GJ 86.78% 0.00 %	03. Environmental Protection - Response to Climate Change Energy Management	71
Hazardous Waste	RT-EE-150a.1	Hazardous waste generation volume Hazardous waste recycling rate	29.45 tons 0.00 %	03. Environmental Protection- Waste Control and Management	76
Management	RT-EE-150a.2	Number of reportable leakage Reportable leakage volume Reportable recovery volume	0 time 0 kilogram 0 kilogram	03. Environmental Protection- Waste Control and Management	76
Product Safety	RT-EE-250a.1	Number of recalls Number of recalled products	0 time 0 case		101
	RT-EE-250a.2	The total monetary loss due to legal proceedings related to product safety	NT\$0		101
	RT-EE-410a.1	Proportion of revenue from products containing declarable substances under IEC62474	0.00 %	N/A	
Product Lifecycle	RT-EE-410a.2	Proportion of revenue from products meeting Energy Star standards	Not applicable	N/A	
Management	RT-EE-410a.3	Revenue from products related to renewable energy sources and energy efficiency	NT\$0 (No orders in 2024)	02. Products and Services- Green Products PV Cable/ Solar Cable	60-61
Raw material traceability	RT-EE-440a.1	Description of risk management mechanisms related to the use of key raw materials		01. Operations and Governance of Hua Eng-Supply Chain ManagementRisk Management and Control Measures	28-31 41
Business ethics	RT-EE-510a.1	Description of policies or actions to prevent corruption or bribery Description of policies or actions to prevent anticompetitive behavior		01. Operations and Governance of Hua Eng - Internal Control, Risk Management, and Code of Conduct	45
Dusiliess Ellilos	RT-EE-510a.2	Total financial losses resulting from lawsuits related to bribery or corruption.	NT\$0		45
	RT-EE-510a.3	Total financial losses resulting from legal actions related to the regulation of anticompetitive behavior	NT\$0		45



# Activity indicator

Activity indicator	Indicator code	Data disclosure	Report chapters/page numbers	;
Production quantity of each type of products	RT-EE-000.A	Refer to the contents of the report sections	02. Products and Services - Introduction of Products and Services	47-50
Number of employees	RT-EE-000.B	Refer to the contents of the report sections	04. Friendly Workplace - Employees of Hua Eng	78-79

# Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies

Disclosure item	Report sections	Page number	Remark
Paragraph 2 of Article 3 Risk assessment of environmental, social and corporate governance, and establishment of related performance indicators Indicators are based on the material topics identified by management	Operational Risk Management, Identification and Response of Material Topics	6-15	
Paragraph 3 of Article 3 Disclose the content of the report corresponding to the GRI Standards Content Index, and indicate within the report whether each disclosed item has obtained third-party verification or assurance.	Appendix GRI Content Index Appendix Report of the CPAs' Limited Assurance	98-100 103-104	
Paragraph 3 of Article 4 Enhancing the disclosure of sustainability indicators by industry	Appendix SASB Standards Comparison Table	101-102	*The Company belongs to the electrical and cable industry category, which is not subject to the disclosure of enhanced sustainability indicators as mandated by the Taiwan Stock Exchange Corporation. *The Company voluntarily discloses information on relevant indicators in accordance with SASB standards for the electrical and electronic equipment and components industry.
Article 4-1 Special chapter to disclose climate-related information	03. Environmental Protection - Response to Climate Change	66	





### 安侯建業群合會計師事務府 KPMG

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## 會計師有限確信報告

### 華榮電線電纜股份有限公司 公鑒:

本會計師接受華榮電線電纜股份有限公司(以下簡稱「華榮公司」)之委託,對華榮公司 民國一一三年度(2024年度)永續報告書(以下簡稱「報告書」)中所揭露之特定績效指標(以 下簡稱「確信標的資訊」)執行有限確信程序並出具報告。

#### 確信標的資訊與適用基準

華榮公司依據永續會計學則理事會(Sustainability Accounting Standards Board,「SASB」) 發布之Resource Transformation: Electrical & Electronic Equipment所揭露之確信標的資訊及其適用基準詳列於附件一。

#### 管理階層之責任

華榮公司應設定其永續績效和報導目標,包括辨識利害關係人及重大性議題,並依前遙適 用基準編製及允當表達民國一一三年度(2024年度)報告書內所涵蓋之確信標的賣訊,且負責建 立及維持與報告書編製有關之必要內部控制,以確保報告書所報導之確信標的賣訊未存有等因 於舞弊或錯誤之重大不實表達。

#### 會計師之責任

本會計師係依據財團法人中華民國會計研究發展基金會所發布之確信舉則3000號「非屬歷史性財務資訊查核或核閱之確信案件」規劃並執行工作,以對第二段所述之確信標的資訊是否存有重大不實表達出具有限確信報告。另,本會計師執行有限確信時,對與有限確信收閱之內部控制取得必要之瞭解,以設計當時情況下適當之有限確信程序,惟其目的並非對華榮公司民國一一三年度(2024年度)永續報告書之相關內部控制設計或執行之有效性提供任何確信。

#### 獨立性及品質管理規範

本會計部及所隸屬會計師事務所已遵循會計師職業道德規範中有關獨立性及其他道德規範 之規定,該規範之基本原則為正直、公正客觀、專案能力及專案上應有之注意、保密及專案行 為。此外,本會計師所隸屬會計師事務所遵循品質管理準則,維持完備之品質管理制度,包含 與遵循職案道德規範、專業準則及所適用法令相關之書面政策及程序。

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#### 所執行程序之彙總說明

本會計師係針對第二段所述之確信標的資訊執行有限確信工作,主要執行之確信程序包括:

- 取得基萘公司民國一一三年度(2024年度)報告書,並閱讀其內容;
- 紡技華榮公司管理階層及校關員工,以瞭解用以蒐集及產出確信標的資訊之相關作業流程與 資訊系統;
- 基於對上述事項所取得之瞭解,就報告書揭露之特定資訊執行分析性程序,或於必要時檢視 核對相關文件,以獲取足夠及通切之有限確信證據。

上越確信程序儀基於本會計部之專業判斷,包括辨識確信權的資訊可能存有重大錯誤或不 實表達之範圍並評估其潛在風險,設計足夠且適切之確信程序豎評估確信標的資訊之表達。本 會計師相信此項確信工作可對本確信報告之結論提供合理之依據。惟本會計師對於有限確信案 件風險之瞭解及考量低於對合理確信案件者,所執行程序之性貿及時間與適用於合理確信案件 者不同,其範圍亦較小,因此有限確信案件中取得之確信程度明顯依於合理確信案件中取得者。

#### 先天限制

攀蔡公司民國一一三年度(2024年度)報告書內容涵蓋非財務資訊,對於該等資訊之揭露內 客可能涉及華榮公司管理階層之重大判斷、假設與解釋,故不同利客關係人可能對於該等資訊 有不同之解讀。

#### 結論

依據所執行之程序及所獲取之證據,本會計師並未發現第二段所述確信據的資訊有未依適 用之適用基準編製而獲作重大修正之情事。

#### 其他事項

本確信報告出具後,華鎣公司對任何確信權的資訊或適用基準之變更,本會計師將不負號 該等資訊重新執行確信工作之責任。

安侯建業聯合會計師事務所

st 65: 2







事務所地址:高雄市前金區中正四路 211 號 12 棲之 6

民國一一四年八月四日



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附件一:確信標的資訊彙總表

编號	報告書對 應章節	確信標的資訊	適用基準
1	03環境保護	(1)總能源消耗 118,157GJ (2)電網電量百分比 86.78% (3)可再生能源百分比 0.00%	RT-EE-130a.1 (1)Total energy consumed, (2)percentage grid electricity and (3)percentage renewable
2	03環境保護	(1)有客廢棄物產生量 29.45·債 (2)有客廢棄物回收率 0.00%	RT-EE-150a.1 (1)Amount of hazardous waste generated (2)percentage recycled
3	05社會關懷 與回饋	(1)召回次数 0次 (2)召曰產品数 0件	RT-EE-250a.1 (1)Number of recalls issued, (2)total units recalled
4	01華馨的營運與治理	<ul> <li>防觀實膚或賄賂政策或作為的說明</li> <li>■ 故信短營、反食腐 為建立誠信經營企業文化及良好風險控制管理,本公司 訂定「雖信經學管理」、「道德行為準則」及「誠信經 營修業程序及行為指由」等明確原則:於其規章及對外 文件中明示誠信經營之政策,以及董事會與管理階層積 杨節實誠信總營政策之不滿。並於內部營理及商業活動。 中確實執行,並廣泛宣導及源化進德康潔之企業文化未 於談信總營展別,以公平與透明之方式進行商業活動。 ● 訴檢舉營道 在已施行之工作規則中,一再地宣導相關的行為準則, 並訂定「檢舉所載合作執件宣幣相關收職禁止之規定。同 時向各供應商或合作執件宣幣相關收職禁止的政策,並 結構應商簽署臺藻不証者,以赴地相關的結構交易的轉 結。本公司申係營道榜通,於公司剛頁設置「利審關係 人讓通及溝通營道資訊」之事值。提供內、外部關係人 定建議或申訴給力,依利書關係人分頭並沒有專人處理 相關申結信件及應結、於公司剛頁設置「預審關係 人達通營道、進過勞資會議查接對話、並訂定「員工申 訴處理辦法」及溝通信補。 為防範內穩定易,避免資訊不當沒滿,確保對外界督表 資訊之一致性與正確性,本公司董事、經理人及一知為重 責訊之一致性與正確性,本公司董事</li> <li>與實理人類,如為查 大訊息素不得沒寡格人,亦不得被酌或義業負個人職榜 大訊息素不得沒寡格人,亦不得被酌或義業負個人職榜 大訊息素不得沒寡格人,亦不得被酌或義業負個人職榜</li> </ul>	RT-EE-510a.1  Description of policies and practices fo prevention of:  (1)corruption and bribery and  (2)anti-competitive behaviour

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編號	報告書對 應章節	確信機的資訊	適用基準
	30 de H	不相關之公司未公閱重夫資訊,以落實防範內線交易之 管理作業。 ■ 行為準則教育訓練 2024年11月於總公司及高档廠進行"誠信經營守則、 誠信經營作業程序及行為指南、進德行為單則檢擊作業 辦法,員工申訴處理辦法"政策宣導1.5小時課程之教 育訓練,受訓人員包含課長、經〔副〕理級主營。 助 就反使導行為政策或作為的說明 本公司基於公爭、城信經營作業程序及行為指向。 第一次公司基於公爭、城信經營作業程序及行為指向。 對本公司人員於執行業務過程,為獲得或維持利益,或 接或問接提供、改受、承诺或要求任何為指向。明 對本公司方建立「誠信經營作業程序及行為指向」。 未公司方建立「誠信經營作業程序及行為指向」。 本公司方建立「誠信經營作業程序及行為指向」。 本公司方建立「誠信經營作業程序及行為指向」。 本公司方建立「誠信經營作業程序及行為指、 本公司方建立「誠信經營作業程序及行為指、 本公司方建立「誠信經營作業程序及行為指、 本公司方建立「誠信經營作業程序及行為。 本公司方建立「誠信經營作業程序及行為 本公司方建立「誠信經營作業程序及行為 、	
5	05社會關懷 與回饋	贿赂或贪腐相關法律訴訟等致的財物損失總額為 新台幣9元	RT-EE-510a.2 Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption

